



Railtalk Magazine *Xtra*

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Submissions & Contributions

Railtalk Magazine Xtra, a magazine written by the Enthusiast for the Enthusiast. So why not join the team. We are always looking for talented photographers and writers to join us at Railtalk. Be it though pictorial submissions or via a written article featuring an event or railtour, we greatly appreciate any contributions to the magazine however big or small.

Photographic Contributions

All Photographic contributions should to be sent to us via email, post or via the members section page on our website. Contact addresses are provided above.

All images should be provided at a resolution of at least 2400px x 1700px at 240dpi.

Welcome to Issue 223Xtra

Some sad news regarding freight carried by rail across Europe with DB Cargo laying off 5,000 employees.....

The sharp decline in rail freight transport across Europe has been confirmed by other data. One of the largest rail freight carriers in Europe, DB Cargo, reported an operating loss of 357 million euros last year and will gradually lay off five thousand people due to a further drop in demand. The state-owned Deutsche Bahn group announced its freight transport results last week. The carrier also announced that it would gradually eliminate 5,000 jobs. The volume of goods transported fell by 9% year-on-year to 180 million tonnes last year, or by 7.9% in tonne-kilometres. DB boss Richard Lutz said during the presentation of financial results that German railways are facing the biggest crisis since the 1990s. DB Cargo must return to profit by 2026. This is a condition of the European Commission, according to which Germany is no longer allowed to remediate the carrier's losses from its budget, because they disadvantage private competition. The company wants to downsize and focus on more profitable contracts. The dismissal of 5,000 people means that every sixth employee will leave the company.

The poor situation on the rail freight market is also evidenced by recent operational data from the Czech carrier association ŽESNAD.cz. The largest domestic carrier in the industry, ČD Cargo, is also addressing the problems. Its chairman of the board, Tomáš Tóth, confirmed the bad situation in the latest issue of the company magazine Cargovák . "I therefore openly say that ČD Cargo is not doing well at the moment and it is not enough to just state that they are doing much worse in other countries. The situation is bad, but not unsolvable, which is why I have now 'switched' the company to crisis management," said Tóth.

He opened negotiations with customers about price increases for a number of transports. " Especially for less profitable transports, we are talking about a possible price increase. However, here we are increasingly encountering the limits of the market environment," added Tóth. That is why there is a real risk of further loss of orders. At the same time, the company has begun to significantly address costs.

"We are cutting investments and all unnecessary costs. We have limited all marketing campaigns and purchases of consumables, including seemingly small things such as mobile phones. We are looking for savings at all levels, including the general directorate. Rationalization measures are already in full swing here ,” added Tóth. The company had previously announced that it would lay off some people.

The decline in European industrial production is increasingly being felt by rail freight carriers in the Czech Republic. In February, the transport of goods and raw materials by Czech railways recorded one of the largest year-on-year declines in the last decade. In February, Czech rail carriers reported a total of 2.388 billion gross tonne kilometres (gtkm). This is the product of the weight of goods transported and the kilometres travelled. This is a year-on-year decrease of 10.5% compared to last February. Freight transport on Czech railways recorded a greater year-on-year decrease only in September last year.

"All commodities are falling, the exception is combined transport," said Oldřich Sládek, executive director of the ŽESNAD.cz association of railway freight carriers.

Combined transport primarily means the transport of goods in containers. Metrans Rail has long been the strongest in this. In February, on the other hand, it was one of the few carriers to record an increase in performance by more than a tenth. Containers are mainly consumer goods from Asia that are sent to the Czech Republic. Metrans Rail is now the second largest freight carrier on Czech railways with a share of over 12% in total performance. Rail freight transport has been going through very tough times in the last two years, with performance declining. The problem is Europe-wide, with virtually all countries reporting a decline. In the case of the Czech Republic, the problem was exacerbated by the suspension of production at Liberty in Ostrava. Carriers are reacting differently to the decline in demand for the transport of goods; most companies have begun to gradually lay off staff or stop recruiting new employees. ČD Cargo will lay off 420 people. We are transporting less coal and wood, management explains.

Until next month... **David**

This Page

RhB No. 642 propels the 12:07 to Chur away from St. Moritz on March 20th. [Andy Pratt](#)

Front Cover

SNCB No. 1866 stands on the blocks at Paris Gare du Nord having recently arrived with Ouigo Train Classique No. 50, the 07:39 from Bruxelles Midi on March 17th.

[Andy Pratt](#)





ONCF No. 424 approaches Sidi Harazem whilst hauling train No. V20000, 11:35 Oujda - Tanger on February 5th. *Laurence Sly*

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The main workshop to overhaul electric locos is located in Linz. For the shunting yards in Linz, (the Zentralverschiebebahnhof) there are 10 shunting engines of Class 1064. No. 009 was overhauled in Linz and after finishing the work, the loco was tested several times on the local freight trains to the Czech border at Summerau before it will head to Vienna. We see here Class 1064.009 between Summerau and Freistadt with some empty ballast wagons heading for Freistadt. *Thomas Niederl*



Class 2016.012 with freight train No. 72162 passes the ruins of Perwarth castle on the line between Wieselburg and Gresten. Today, there is freight traffic only on this section. The line opened originally as a narrow gauge line, but freight traffic increased because at Gresten, the terminus station, a manufacturer of steel profiles opened and expanded. In the 1990s passenger services were withdrawn to increase capacity for freight and in 1997 the line was rebuilt to standard gauge. *Thomas Niederl*









Austria

Non-stop connection for intermodal flows of goods between Vienna and Duisburg – efficient, plannable and with ideal connection options. With the new TransFER Vienna–Duisburg, ÖBB Rail Cargo Group (RCG) now connects two important logistics hubs in Austria and Germany – with a fixed timetable, attractive transit times and direct antenna connections to Hungary and Italy as well as within Austria. Containers from 20 to 45 feet, 25 and 45 ft swap bodies, cranable trailers and dangerous goods can be transported.

Vienna and Duisburg: key positions in rail freight transport

Vienna is one of the central hubs for international rail freight. Its strategic location provides an optimal link between Western, Central and South-Eastern Europe. Duisburg is Europe's largest inland port and one of the most important rail ports for intermodal transport – especially as a gateway for transport to and from Asia.

More capacity for optimised traffic flows

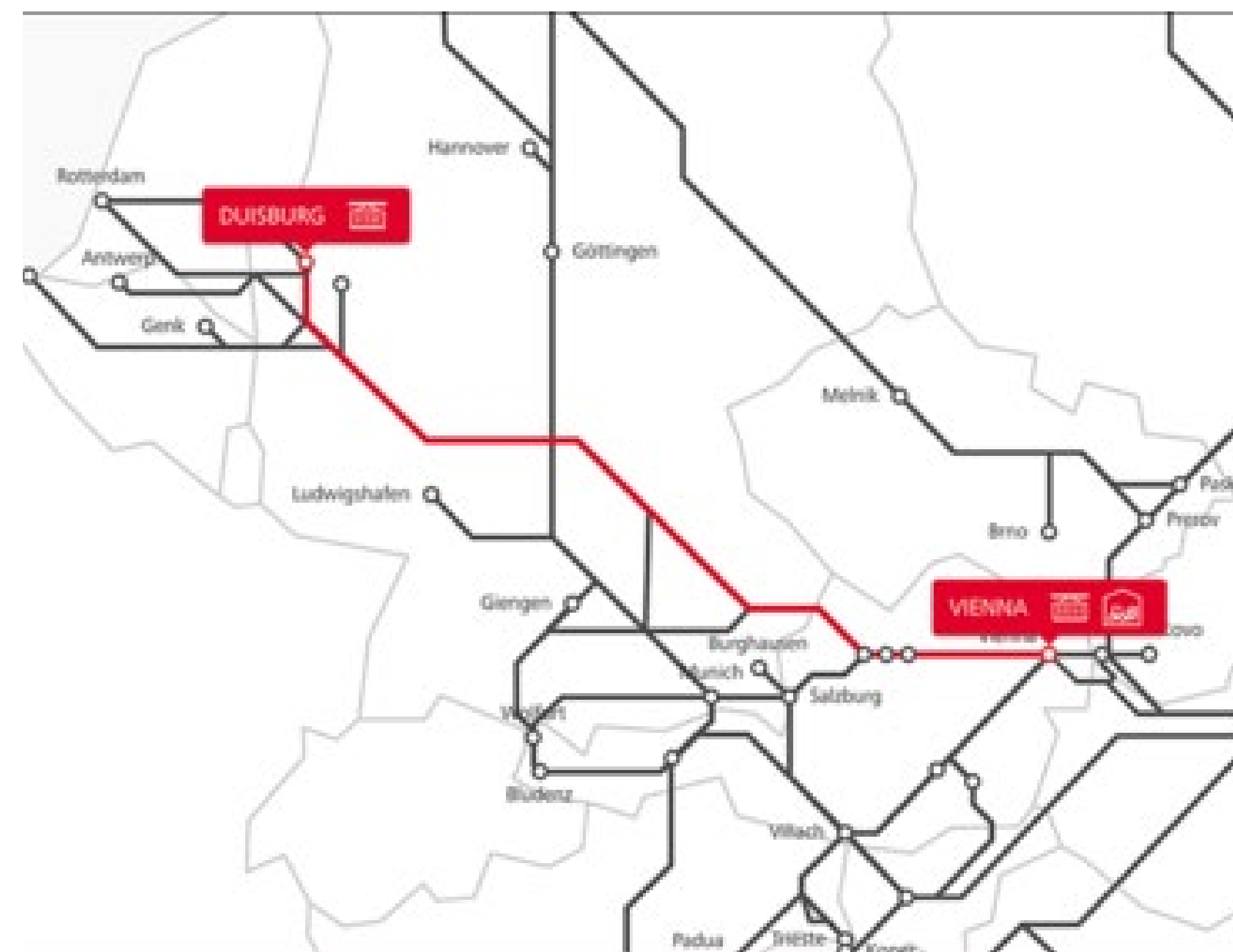
With the new TransFER, RCG is relieving the heavily frequented TransFER Budapest–Duisburg with two weekly round trips. This creates additional capacity, which reduces bottlenecks and opens up more

transport options. For customers, this means optimised use of transport resources and greater planning reliability. In addition, the TransFER Vienna–Duisburg can be optimally combined with the existing connections TransFER Budapest–Duisburg, TransFER Wels–Vienna–Budapest and TransFER Budapest–Istanbul – for example, a transshipment in Vienna enables a seamless onward journey to Budapest and onwards to Turkey. There is also a link to all Austrian terminals from Vienna.

Efficient connections in all directions
Thanks to perfectly coordinated connections between Vienna and

Budapest and between Vienna and Verona, there are efficient transport options to the South-Eastern and Western European markets as well as an efficient triangular service between Vienna, Budapest and Duisburg. In this way, the new TransFER not only provides a direct non-stop connection between Vienna and Duisburg, but also offers customised connection options:

- Austria: Direct antenna connection to Austrian terminals
- Hungary to Turkey: Perfect connection to Budapest (BILK terminal) and onward to Istanbul (Halkali terminal)
- Italy: Direct connection to the terminal Verona (Sona terminal)



TransFER Sopron–Istanbul and more Turkey updates

Turkey is a central logistics hub and forms the trade bridge between Europe and Asia. That's precisely where the ÖBB Rail Cargo Group (RCG) comes in with its offer. A key innovation: TransFER Sladkovicovo–Istanbul has been switched to Sopron–Istanbul. This means even more advantages for customers.

Turkey is essential for intermodal trade between Europe and Asia. Istanbul plays a central role as a hub for transport to the STAN countries and onwards to China. That's why RCG is continuously optimising its services – as with the switch over of TransFER Sladkovicovo–Istanbul to Sopron–Istanbul. This doubles the frequency to two round trips per week with customers benefiting from even better planning, optimised first and last mile organisation throughout Eastern Europe and expanded storage and handling options.

Numerous connections to and from Turkey

In addition to switching to TransFER Sopron–Istanbul, existing connections have also been optimised to guarantee even more capacity, better planning and faster transit times.

- TransFER Budapest–Istanbul: This TransFER now runs five times instead of just four times a week and offers even more capacity and planning security with fixed timetables. Zeebrugge, Ludwigshafen, Duisburg, Wels, Vienna and Budapest are also connected via antenna links.

- TransFER Curtici–Tekirdag: The timetable has been optimised, enabling customers to plan their schedules more easily and reliably. Thanks to its direct connection to the Port of Tekirdag, this route remains a key hub for transit traffic between Europe and Asia.

- TransFER Genk–Curtici: RCG also offers flexible transport options between Belgium and Romania with five round trips per week between Genk and Curtici and shorter transit times for transports to Turkey.

Breitenfeld Edelstahl: Heavyweights on track

Breitenfeld Edelstahl AG relies on sustainable rail transport – together with ÖBB Rail Cargo Group (RCG), its massive stainless steel ingots roll from Mitterdorf-Veitsch to Italy. It started with one block per transport – now the 200 mark has been reached.

Breitenfeld Edelstahl AG has been using rail as a sustainable means of transport for years. Since 2022, the massive stainless steel ingots have been transported on specially developed loading frames that are operated together with RCG. These steel blocks roll from Mitterdorf-Veitsch to Italy – an important step for the company's environmentally friendly logistics. Now a new milestone has been reached: more than 200 steel ingots have been successfully transported by rail. Prior to cooperating with RCG, the steel ingots were transported exclusively by truck. The switch to rail has already saved 347 tonnes of CO₂. Breitenfeld Edelstahl AG plans to further increase the share of rail transport in the future – a clear commitment to even more sustainability.

From the foundry to the finishing line

The stainless steel ingots, each weighing more than 40 tonnes, are transported on specially developed

loading frames that are provided and maintained by Breitenfeld Edelstahl AG. Wagons of the type Sgmmns are used.

200 steel ingots and no end in sight

Since 2022, a total of 10,000 tonnes of stainless steel ingots have been transported – and the trend is upwards. Together with RCG, Breitenfeld Edelstahl AG is planning to equip more wagons with loading frames and to further expand transport capacities between Austria and Italy. Regular wagon rotations ensure the supply of the Italian industry. It is also planned to supply other markets of Breitenfeld Edelstahl AG by rail.

About Breitenfeld Edelstahl AG

For more than 80 years, the Austrian company Breitenfeld Edelstahl has been producing high-quality stainless steel in an electric arc furnace with a low-emission melting process. The company's strategy is based on sustainability – in both production and logistics. With RCG as a reliable partner, Breitenfeld relies on rail transport to actively reduce emissions.

Stadler delivers SMILE high-speed trains to WESTbahn

On March 12th, Stadler and WESTbahn announced the signing of a contract for the delivery of three SMILE high-speed trains. Set to operate on the Vienna - Graz - Klagenfurt - Villach route from March 2026, these highly comfortable, tried-and-tested trains will significantly enhance the passenger experience. They will be built in Bussnang, Switzerland.

The SMILE will be the first high-speed train from Stadler in Austria and is able to reach speeds of up to 250 km/h. These three new trains set to run on the Vienna - Graz - Klagenfurt - Villach route represent the expansion of the WESTbahn network, demonstrating the important role that Stadler is playing to improve rail travel in the country.

The trains offer the following to enhance passenger comfort:

- Low-floor and barrier-free
- Light, airy, open design
- Air-conditioned pressure-resistant passenger compartments and driver's cab
- Accessible toilet in each carriage
- Step-free access
- Dedicated areas for bicycles
- Comfortable adjustable seats available in all classes
- Free WiFi
- USB ports and plug sockets at every seat

The order of 11-car high-speed train sees WESTbahn modernising its fleet and setting a new standard for sustainable rail travel. Able to travel at much higher speeds than previous trains operating in Austria, the SMILE trains are designed for cross-border

rail routes.

Commissioning by WESTbahn as early as March

The three SMILE trains will be integrated into WESTbahn's regular passenger service from March 2026, less than two years after the contract is signed, and will expand the existing KISS double-decker service.

Commissioning normally takes four to five years. "We are delighted to have an innovative and forward-looking partner in WESTbahn, and together, be able to deploy state-of-the-art high-speed trains within a very short space of time. The SMILE trains feature the most innovative technologies, high energy efficiency and maximum passenger comfort," says Christian Dieward, Managing Director of Stadler Austria.

Technical data of the new SMILE trains

- Length: 202 m
- Number of carriages: 11
- Maximum speed: 250 km/h
- Maximum acceleration: 0.77 m/s²
- Track gauge: 1,435 mm
- Drive: Electric, multi-system vehicle (15 kV AC, 25 kV AC, 3 kV DC)
- Low-floor access: For platform heights of 55 cm and 76

- Air-sprung drive and bogies
- Redundant drive equipment with four traction converters for four motorised bogies
- TSI authorisation with network access for Switzerland, Germany, Italy and Austria







WORLD'S LONGEST TRAM IS PRODUCED BY ŠKODA GROUP IN PILSEN

Pilsen is home to Škoda Group, one of Europe's leading manufacturers of public transport vehicles—and it's also the birthplace of the longest tram in the world. A total of twelve nearly 60-metre-long trams are being produced here, and now the first Škoda ForCity Smart 38T from series production is ready to depart for the Rhine-Neckar metropolitan area. This unique vehicle is part of a fully modular fleet designed to meet the diverse demands of German operator Rhein-Neckar-Verkehr GmbH (rnv), which provides public transport in Mannheim, Heidelberg, and Ludwigshafen.

“The longest tram in the world (Škoda ForCity Smart 38T) is a result of close collaboration with rnv to create a vehicle that meets the complex demands of both urban and regional transport. Its modular design, high capacity, and passenger-friendly features make it a key element in shaping the future of mobility in the Rhine-Neckar region. With more than 20% of its components sourced from Germany, this project also highlights strong European cooperation in sustainable public transport,” stated Jan Christoph Harder, President Region West & North Škoda Group.

To put things into perspective, Škoda ForCity Smart 38T tram is almost double the length of the blue whale, the longest animal in the world. Inside, 72.4 km of cables power its advanced systems, ensuring smooth and reliable operation.

And with a capacity for up to 368 passengers, it's a true game-changer in urban mobility—offering plenty of space for commuters while maintaining a smooth and comfortable ride. Building a tram of this scale takes time—each Škoda 38T requires 18 weeks to produce, while its smaller counterpart, the 30m Škoda 36T is completed in 9 weeks.

A New Era of Public Transport

The Škoda 38T is part of a large-scale contract with rnv, covering 114 trams in three sizes:

- 30m Škoda 36T
- 40m Škoda 37T
- 60m Škoda 38T

These trams are built for adaptability—with the ability to couple into formations up to 80 metres, they are ideal for varying passenger needs. If all 114 trams were lined up, they would stretch an incredible 4.2 km. Each tram is a showcase of European engineering, built from hundreds of thousands of parts

sourced from 214 suppliers across Europe.

From Finland to Pilsen, and Beyond

The journey of each tram begins in Otanmäki, Finland, where the rough car bodies are produced, before final assembly takes place at Škoda Group's facility in Pilsen, Czech Republic.

Designed for both tram and railway operations across three federal states, these trams run on a 1,000 mm gauge and reach a top speed of 80 km/h. Their low-floor, bi-directional design ensures smooth rides, while barrier-free access, dedicated spaces for wheelchair users and parents with prams, and extra-wide double doors make boarding effortless. Equipped with the latest passenger information systems and onboard cameras, they set a new standard for comfort, efficiency, and safety.

With the first Škoda 38T now heading to Germany, the future of public transport is not just longer—it's smarter.



Alstom and CZ Loko have signed a contract for the supply of 50 Onvia Cab onboard ETCS units

Alstom, global leader in smart and sustainable mobility, has signed a contract with CZ Loko, manufacturer of diesel-electric shunting locomotives, for the supply of 50 Onvia Cab ETCS on-board units over the next two years. The total value of the contract reaches EUR 9 million. The installation of the onboard part of ETCS will start in March 2025.

By signing the contract, Alstom commits to supply 50 Onvia Cab units over the next two years for the MUV 75, a special purpose double-axle vehicle designed for railway line maintenance. The installation of the units will support rail transport safety and will also enable the maintenance cars to fully meet current security requirements.

The vehicles will be delivered by CZ Loko to the Railway Administration (Správa železnic).

“The contract is a continuation of our long-term cooperation with CZ Loko and at the same time confirms our position as a leader in the installation of ETCS on-board units. Currently, Alstom solutions account for over 80% of ETCS onboard unit installations in the Czech Republic. With tens of thousands of installations, Onvia Cab solutions are proven, reliable and very flexible,” says Dan Kurucz, Managing Director of Alstom Czech Republic.

Onvia Cab is a modern onboard European Train Control System (ETCS) unit developed by Alstom. It is designed for installation and integration on all types of new trains as well as for retrofitting existing vehicles. Onvia Cab is compatible with the latest, TSI 2023 standard at Baseline 3 level ensuring compatibility and compliance. As the global leader in ETCS onboard technology, Alstom has supplied 70% of ERTMS-equipped trains in Europe and there are more than 25,000 onboard units in operation worldwide on

more than 200 vehicle types. Alstom has over 30 years of experience with top-level systems that meet modern interoperability requirements. Its solutions are built on outstanding technical quality and a flexible design, making them suitable for all types of rolling stock across various project scales, from local to international.

In the Czech Republic, the exclusive operation of the European train control system commenced in January 2025. It currently monitors a total of 622 kilometres of main railway lines with absolute safety assurance and an operational availability of 99.2%. Alstom is the country's largest supplier of the mobile (onboard) ETCS unit.

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ŠKODA GROUP TO OVERHAUL NIM EXPRESS TRAINS FOR DB REGIO

Škoda Group has signed a contract with DB Regio to overhaul up to six double-decker NIM Express trains operating on the busy high-speed route between Nuremberg and Munich. Each of these modern trains having covered nearly 1.5 million kilometres, they will undergo a comprehensive overhaul at Škoda Group's facility in Šumperk, Czech Republic.

The contractual option includes testing and the overhaul of a sixth train. Work is scheduled to start in Q3 2025 and to be completed by August 2028.

The NIM Express train sets are designed to offer passengers a high level of comfort while ensuring efficient and sustainable operation. Each train consists of one steering coach, four intermediate coaches, one end coach and a powerful Škoda 109E locomotive. This composition ensures efficient operation on the busy Nuremberg–Munich route, with passengers enjoying a comfortable and reliable travel experience. The overhaul will cover a wide range of technical revisions and maintenance work to maximise reliability and passenger satisfaction.

“We are proud to support DB Regio with this important overhaul project, ensuring that the NIM Express trains continue to operate with maximum efficiency and

comfort for passengers. Our expertise in rail vehicle modernisation enables us to deliver high-quality solutions that meet the needs of both operators and passengers,” said Jan Christoph Harder, President Region West & North at Škoda Group.

The work will include overhauling bogies, doors, traction converters, motors and wheelsets, and final testing. Additionally, the contract includes transportation of the trains, the supply of long-lead spare parts, and the possibility of additional work as required.

Škoda Group's facility in Šumperk, known for its expertise in rolling stock maintenance and modernisation, will ensure that the NIM Express fleet continues to provide a high-quality service for passengers. The comprehensive overhaul will extend the lifecycle of these trains, contributing to more sustainable rail operations.



New two-storey station will be built under main station

Správa železnic has presented to the public the future shape of the new railway lines in the Prague railway node. From the feasibility study, the Central Commission of the Ministry of Transport selected a variant with two separate routes in tunnels and a two-storey central station under the main station. In addition, it added four more underground stops. Suburban trains in the metropolis are used by more and more passengers. This should also be considered when planning future railway lines. Správa železnic therefore commissioned a feasibility study several years ago, which addresses the future shape of the Prague railway node.

“The Central Commission of the Ministry of Transport has selected the most suitable variant within which two tunnel routes of 10.6 kilometres and five new stations will be built in the centre of Prague. The tunnels intersect on two levels in the central station under the main station. One will run under the existing pedestrian underpasses to the platforms, the second one will be one level lower. Both parts of the station will be connected by a tunnel with escalators, the vestibules will be located at the Winston Churchill Square and in the new main station check-in hall,” says Minister of Transport Martin

Kupka. The capacity of each tunnel will be up to 16 trains per hour in each direction. “There will be underground stops in Karlín, Václavské náměstí and Karlovo náměstí and also a partially recessed stop in Florenc. The new routes will help separate long-distance and regional transport. This will maintain the comfort of travelling, in addition to minimal impact on the environment. The estimated total cost of this option is 185 billion crowns,” explains Pavel Paidar, Director of Construction Planning Department of Správa železnic.

The approved plan will now be included in the strategic transport plans and Správa železnic will cooperate with state institutions and local government in its preparation. There will also be modifications to territorial development principles and zoning plans. “The project brings new railway capacity right in the city centre, including several stops that will shorten the walking distance for passengers. The result will be not only a higher attractiveness of railway transport, but also the release of the busiest sections of public transport in the centre. At the same time, the enhanced railway will take some traffic off the roads. Fewer cars in the city means fewer emissions, less noise and a significantly improved environment,” says Zdeněk Hřib, First Deputy Mayor

of Capital City of Prague for Transport Sector.

“The biggest transport problem in Prague is not the transport in Prague itself, but the transport in the metropolitan region. Prague's modal split is highly in favour of public transport, but what is crushing Prague is regional transport, where supply and capacity is insufficient. For various historical reasons, Prague's regional and urban transport is not sufficiently connected, and therefore the project of the Prague railway node is a major breakthrough and a solution to Prague's largest transport problem. We are grateful to the Ministry of Transport and Správa železnic for the work they have done and for the correction of the current situation,” states Deputy Mayor of the Capital City of Prague Petr Hlaváček.

The feasibility study of the Prague railway node dealt with three basic designs and additionally two modifications of one of them. One alternative option included two large stations under the main station and Václavské náměstí Square, between which trains would use a common four-track section. The second envisaged one central station called Opera. The original solution of the selected variant was based on faster service with fewer stops.

France

SNCB Class 1800 No. 1866 awaits departure from Bruxelles Midi on March 17th with Ouigo Train Classique No. 50, 07:39 to Paris Gare du Nord. *Andy Pratt*



France

SNCF TER Grand Est No. 22301 departs Sélestat on March 19th
with the 08:03 service to Saverne, train No. 832012. *Andy Pratt*



France

SNCB No. 15055 basks in the sun at St-Just-en Chaussée having just arrived with train TER train No. 848513, the 11:06 from Paris Gare du Nord, before returning to the capital with train TER No. 848518 at 12:53 on March 17th. *Andy Pratt*





Alstom to supply Strasbourg with 27 additional trams

Alstom, global leader in smart and sustainable mobility, will supply the Eurométropole de Strasbourg and the Compagnie des Transports Strasbourgeois (CTS) with 27 new-generation Citadis trams that will reinforce CTS fleet from 2026.

This additional order testifies to the renewed confidence of the Eurométropole de Strasbourg and CTS in this innovative, eco-designed tram. This order is part of the 8-year framework agreement signed in April 2023 between Eurométropole de Strasbourg and Alstom, worth a maximum of 250 million euro. An initial batch of 12 trams was ordered in 2023 and will be delivered progressively from spring 2025.

“We are delighted with this additional order for new-generation Citadis trams. We would like to thank the Eurométropole de Strasbourg and CTS for their confidence in our ability to meet the growing need for sustainable and innovative mobility in the European capital”, says Frédéric Wiscart, President of Alstom France.

A concentrate of innovations for the well-being of travellers
With a length of 45 metres and a width of

2.40 m, the new trams have 8 double doors measuring 1.30 m on each side, including at the ends, to make it easier for passengers to get on and off. They have a capacity of 286 passengers and are equipped with fully glazed doors, enhancing passenger comfort and safety. In compliance with the PRM (People with Reduced Mobility) regulation, the trams have door opening buttons at the right height, wider seats and areas reserved for wheelchair users and pushchairs.

To help people with reduced mobility, the new trams also offer:

- 100% full low-floor access, for great on-board fluidity;
- Signature lighting throughout the entire vehicle, both inside and out, notably for better visualization of the opening and closing of the doors, and helping passengers, including PRM, to locate the doors;
- Loudspeakers for visually and hearing-impaired passengers on board as well as acoustic signal to indicate the doors position. For a comfortable and safe journey, the trams are air-conditioned and equipped with a dynamic passenger information system and a video protection system.

These cross-border trams will be

homologated in accordance with BOStrab, the German federal decree for the construction and operation of trams in Germany.

Energy-efficient, environmentally-friendly trams offering optimum availability
At the same time as providing an enhanced level of service and comfort for passengers, these Citadis trams will reduce energy consumption by 25% compared with current rolling stock, thanks to new engines, efficient management of climate comfort and 100% LED lighting. These trams are eco-designed, 95% recyclable and 98% reusable.

The new trams have been designed to achieve a 16% reduction in preventive maintenance operations over their 30 years of commercial service. Maintenance considerations have been integrated through a streamlined selection of spare part references, facilitated by eco-design principles, as well as enhanced accessibility of components to simplify maintenance.

Trams designed and assembled in France
Ten of Alstom’s sixteen sites in France are involved in the manufacture of these Citadis trams:



- La Rochelle, for design and assembly;
- Le Creusot, for bogies;
- Ornans, for engines;
- Villeurbanne, for on-board electronics and cyber security;
- Aix-en-Provence, for tacho centres;
- Tarbes, for electrical equipment;
- Alstom IBRE (Sens), for brake discs;
- Alstom Flertex (Gennevilliers and Saint-Florentin), for brake linings;
- Valenciennes, for spare parts;
- and Saint-Ouen, for design and after-sales service.

Alstom’s Citadis tram portfolio benefits from the feedback of more than 3,000 trams already ordered in 70 cities and 20 countries around the world. Citadis trams have already covered more than 1 billion kilometres and carried 10 billion passengers since the first train set entered service in 2000.

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Image: Model of the Citadis tramway, which will run on the Compagnie des Transports Strasbourgeois network © ALSTOM SA 2024.

20 years of DB Cargo France: a milestone in rail freight transport

DB Cargo France celebrates two decades of success and innovation with a new slogan and strategy.

DB Cargo France is celebrating a special anniversary this year: 20 years of success in rail freight transport. Founded in January 2005 as Euro Cargo Rail (ECR) by the English Welsh & Scottish Railway, the company became part of the DB Group in November 2007. Since then, DB Cargo France has developed into one of the leading private rail freight operators in France.

To mark its anniversary, DB Cargo France not only presented a new slogan, but also a clear vision for the future.

The new slogan ‘Facilitez-vous le fret ferroviaire’ - which translates as ‘Simplify rail freight transport for yourself’ - emphasises the company’s commitment to making rail freight transport more efficient and accessible.

With this anniversary, DB Cargo France not only looks back on two decades of success, but also to a promising future in which the company will continue to play a key role in rail freight transport.



CAF to supply 19 Urbos trams to the French city of Tours

CAF has signed a contract with the Syndicat des Mobilités de Touraine (Tours) to supply the new fleet for the upcoming Line 2 of the city's tram network, which will link the communes of La Riche and Chambray lès-Tours. This contract covers the supply of 19 Urbos trams together with the necessary depot parts and special tools. The new trams will be similar in design to those currently operating on Line 1 of this network. They will have a low floor for easy accessibility, a length of 42 metres, and a passenger capacity of up to 280. Designed with passenger safety and comfort in mind, each new tram will feature multi-purpose areas with ample space for prams, bicycles, and wheelchairs.

They will also be tailored to the specifications of the Tours tram network, enabling them to serve both the new Line 2 and the existing

Line 1. The trams will be equipped with on-board energy storage modules that will allow them to run completely autonomously without the need for the overhead wire, in particular, on the approximately 2 km long section between the Tours railway station and Choiseul Square, in the historic centre of the city. This solution provides an optimal alternative to traditional catenary solutions, preserving the urban landscape while reducing infrastructure costs.

Renowned for its Gothic architecture and as the gateway to the Loire Valley and its famous castles, the medieval city of Tours has recently launched the construction of the second line of its tram network. The new line will span 12.5 km and feature 22 stations, with service scheduled to begin in 2028. One of the objectives of this project is

to enhance intermodality between the two tram lines and the bus lines, while at the same time promoting active modes of transport such as cycling and walking through the creation of cycle lanes and spacious pedestrian areas. This extension of the tram network will increase transport options and strengthen cohesion between the various metropolitan areas. In particular, this new infrastructure will connect two hospitals, schools and university facilities for some 30,000 students, as well as a variety of cultural, sports and leisure facilities along its route. Having been the preferred option of the Montpellier and Marseille conurbations, CAF has achieved new commercial success for its Urbos range on the French market, driven by the current favourable economic climate for public transport development in both France and across Europe.



Alstom to supply new trams for Le Havre, in France

Alstom, global leader in smart and sustainable mobility, has been chosen by Le Havre Seine Métropole to supply the new trams for the extension of its tramway network. The first order will comprise 8 Citadis trams of the latest generation. The first deliveries will take place in 2027, when the new line C will enter service.

“Alstom is very proud to be supplying the new trams for Le Havre Métropole and to be taking part in strengthening the urban transport offer, with greener and more innovative solutions. These new energy-efficient Citadis trams will also provide greater comfort for passengers. We would like to thank Le Havre Seine Métropole for their renewed confidence in our latest generation tramway solutions”, said Frédéric Wiscart, President of Alstom France.

A concentrate of innovations for the well-being of all travellers

With a length of 33 metres and a width of 2.40 m, the new trams have a capacity of 206 passengers and are equipped with fully glazed doors, enhancing passenger comfort and safety. In compliance with the PRM (People with Reduced Mobility) regulation, the trams have door opening buttons at the right height, wider seats and areas reserved for wheelchair users and pushchairs.

To help people with reduced mobility, the new trams also offer:

- 100% full low-floor access, for great on-board fluidity;
- Signature lighting throughout the entire vehicle, both inside and out, notably for better visualization of the opening and closing of the doors, and helping passengers, including PRM, to locate the doors;
- Loudspeakers for visually and hearing-impaired passengers on board as well as acoustic signal to indicate the doors position.

For a comfortable and safe journey, the trams are air-conditioned and equipped with a dynamic passenger information system and a video protection system.

Energy-efficient, environmentally-friendly trams offering optimum availability

At the same time as providing an enhanced level of service and comfort for passengers, these Citadis trams will reduce energy consumption by 25% compared with current rolling stock, thanks to new engines, efficient management of climate comfort and 100% LED lighting. These trams are eco-designed, 95% recyclable and 98% reusable. The new Citadis trams have been designed to achieve a 16% reduction in preventive maintenance operations over their 30 years of commercial service.

Maintenance considerations have been integrated through a streamlined selection of spare part references, facilitated by eco-design principles, as well as enhanced accessibility of components to simplify maintenance.

Trams designed and assembled in France

Ten of Alstom's sixteen sites in France are involved in the manufacture of these Citadis trams:

- La Rochelle, for design and assembly;
- Le Creusot, for bogies;
- Ornans, for engines;
- Villeurbanne, for on-board electronics and cyber security;
- Aix-en-Provence, for tachograph centres;
- Tarbes, for electrical equipment;
- Alstom IBRE (Sens), for brake discs;
- Alstom Flertex (Gennevilliers and Saint-Florentin), for brake linings;
- Valenciennes, for spare parts;
- and Saint-Ouen, for design and after-sales service.

Alstom's Citadis tram portfolio benefits from the feedback of more than 3,000 trams already ordered in 70 cities and 20 countries around the world. Citadis trams



have already covered more than 1 billion kilometres and carried 10 billion passengers since the first train set entered service in 2000.

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[1] 'Le Havre Seine Métropole' is the official name of an intercommunal structure, centred on the city of Le Havre

Image: Model of the Citadis tramway, which will run on the new line C of the Le Havre Seine Métropole tram network © ALSTOM SA 2023.

Germany

DB Regio Class 218.429 departs Friedrichshafen Stadt on February 23rd with train No. RE3060, the 14:45 to Basel Bad. *Andy Pratt*





Germany

Focus on Liquids and Bulk

Efficient rail logistics for chemicals, mineral oil and bulk ware – safe and sustainable transports throughout Europe.

The logistics industry is changing – and DB Cargo is actively shaping this change. As a reliable partner, we focus on sustainable, efficient and customer-orientated solutions. Our new business logic strengthens our specialisation in various industries. We are introducing the business unit Liquids and Bulk, one of the four business units in the Rail Logistics division (Management Board member Pierre Timmermans).

Liquids and Bulk (chemicals, mineral oil and bulk ware)

The business unit Liquids and Bulk specialises in Europe-wide transport and logistics solutions for the chemical and mineral oil industry as well as for the building materials and fertiliser industry. It designs and realises

integrated logistics solutions with rail at their heart from a single source.

Our hazardous goods experts in the chemical and mineral oil sectors, who have been operating as DB Cargo BTT GmbH since 1989 and today ensure smooth transport with 150 employees at the Mainz, Düsseldorf, Halle and Hamburg sites, form part of the new business unit. In 2023, more than 11,000 block train shipments, almost 250,000 single wagonload consignments and 70,000 containers in CT networks were transported for DB Cargo BTT's customers. Innovative rail logistics solutions for future topics, such as hydrogen logistics or the transport of CO2 as part of Carbon Capture Utilisation and Storage, are also part of the range of services.

Bulk transports include large-volume bulk ware that is predestined for rail transport. With special freight wagons, this part of the new business unit Liquids and Bulk offers Europe-wide solutions for the fertiliser



industry, the building materials sector and the energy industry. This connects our customers' production sites with harbours, power plants and transshipment points.

In total, Liquids and Bulk owns and manages over 7,500 freight wagons, 700 tank containers and over 90 locomotives, including leased EuroDual dual-mode locomotives.

Four women, one mission: How DB Cargo Czechia manages combined transport

Female experts in the Control Tower coordinate 825 trains and 371,000 tons of freight every year - with precision and vision

Logistics is no longer a purely male domain - as DB Cargo Czechia impressively demonstrates. Four women in the Control Tower manage combined transport along the Baltic-Adriatic Corridor and ensure that everything runs smoothly.

Tereza Sabevová, Iryna Presniakova, Michaela Kohutová and Anna-Marie Tomšíková control the train movements along the Baltic-Adriatic Corridor on a daily basis and guarantee trouble-free implementation.

825 trains and 371,000 tonnes of freight annually

The past year illustrates the dimensions of this task: 825 trains transported over 371,000 tons of freight through central European logistics hubs.

The connections cover important terminals such as Lodz, Brwinow, Slawkow, Paskov, Vienna South, Villach, Manopello, Turin, Nola, Fiorenzuola and Parma.

The work in the Control Tower goes far beyond simply monitoring train movements. In addition to real-time tracking of transports, the core tasks include terminal and order management as well as wagon scheduling. This ensures that all processes are coordinated and that even last-minute changes can be implemented efficiently.

DB Cargo Czechia offers flexible, industry-independent solutions and focuses on continuous optimization. The precise control of combined transport helps to make the transport chain reliable and sustainable.



DB Cargo and Bosch subsidiaries develop fully automated shunting locomotive for series production

As Europe's largest freight railway, DB Cargo AG is consistently driving forward digitalization and automation in rail freight transport. An important step in this direction is the automation of shunting operations in train formation yards. This is where freight trains are broken up, wagons are sorted, and assembled into new trains. The shunting locomotives required for this purpose are still largely manually controlled. In the future, fully automated "shunting locomotives" will be used for this purpose.

Their automation technology is now being developed to series production readiness in collaboration with the two Bosch subsidiaries Bosch Engineering GmbH and ITK Engineering GmbH, two other strong industrial partners. This technology will enable trains to be assembled more efficiently for onward transport in the future.

This strengthens the competitiveness of single-wagon transport and is a decisive advantage for shifting more traffic to environmentally friendly rail.

Dr. Sigrid Nikutta, Member of the Board of Management for Freight Transport at Deutsche Bahn AG and Chairwoman of the Board of Management of DB Cargo AG: "With the development of the fully automated push-pull locomotive, we are opening another chapter in the digitalization and automation of rail freight transport. This creates greater profitability for DB Cargo and improves operational quality – and thus fully contributes to the DB Group's S3 restructuring program. Our customers will benefit from faster and more flexible handling of their transports."

Dr.-Ing. Frank Schmidt, Managing Director of ITK Engineering GmbH and Bosch

Engineering GmbH: "With the first series development of a fully automated rail vehicle in the mainline railway sector, this project represents an important milestone on the road to automated train operation. Intelligent software is a core element for this automation step. We are pleased to contribute our expertise in software and systems development for rail vehicles."

The first steps toward introducing the fully automated locomotive have already been successfully completed with a prototype at the Munich North marshalling yard. The fully automated push-pull locomotive is expected to receive approval from the Federal Railway Authority at the end of 2027. It is planned to be deployed at DB Cargo's large train formation yards in Germany starting in 2028.

DB Cargo has commissioned Bosch Engineering GmbH and ITK Engineering



GmbH, both wholly owned subsidiaries of Robert Bosch GmbH, for the series development of the fully automatic push-pull locomotive. Bosch Engineering is developing an automation unit for fully automatic push-pull operation, including sensors and algorithms for environmental detection. ITK is responsible for developing the operator workstation on the infrastructure side, which implements the input and management of

driving orders and transmits them to the push-pull locomotive. The partnership runs until October 2027.

The "Fully Automatic Push-Pull Locomotive" project is funded by the Federal Ministry for Digital and Transport (BMDV) through the Future of Rail Freight Transport program.

Deutsche Bahn on course for restructuring: Losses significantly reduced in 2024

After a challenging year, Deutsche Bahn (DB) closed the 2024 financial year with an operating loss (adjusted EBIT) of minus €333 million. Compared to the previous year, the loss was significantly reduced by around €1.8 billion, partly due to compensation payments from the federal government for infrastructure maintenance measures. The annual result after interest and income taxes was minus €1.8 billion (2023: -€2.7 billion). Revenue remained at the previous year's level at €26.2 billion (plus 0.4 percent).

All figures for the 2024 financial year refer to DB without the logistics subsidiary DB Schenker, which is about to be sold, and the European local transport subsidiary DB Arriva, which was sold in May 2024.

The DB Group's economic performance in 2024 was primarily impacted by the poor condition of its infrastructure. Operational

quality, with punctuality in long-distance traffic of 62.5 percent (2023: 64.0 percent), led to additional burdens on earnings. The strikes by the train drivers' union GDL in the first quarter of 2024 and the weak economy, particularly in rail freight transport, also had a negative impact. Around 1.9 billion passengers used DB trains in 2024 – an increase of 1.6 percent over the previous year. Rail passenger transport volume increased by 2.1 percent to around 85 billion passenger-kilometres, driven by the Deutschlandticket (Germany Ticket) in regional transport.

Since the second half of 2024, DB has been implementing the overall S3 program for the structural restructuring of infrastructure, operations and profitability until 2027, with the aim of restoring the efficiency of the railway, significantly improving the customer experience and returning to profitability.

"Deutsche Bahn is facing the biggest crisis since the railway reform. In key areas, we are far from achieving our goals and what our customers expect from us," said CEO Dr. Richard Lutz. "To overcome this crisis, we have launched S3, a comprehensive program to rehabilitate our infrastructure, operations, and profitability. The initial results show: bold, new approaches and disciplined implementation are paying off."

The rehabilitation of the Riedbahn was successful, and for the first time, we were able to halt the further deterioration of the facilities. This has initiated the turnaround." Based on significantly increased federal funding, DB invested a record sum of approximately €18.2 billion in 2024, primarily in infrastructure. Self-financed net investments in the integrated rail system increased by 11.3 percent year-on-year to a total of €5.9 billion.

Results in core business

In December 2024, the infrastructure company DB InfraGO completed the first major overhaul of the heavily used rail network on schedule with the complete overhaul of the Riedbahn line between Frankfurt and Mannheim. Operating performance on the German rail network declined slightly by 1.3 percent to 1.1 billion track-kilometers, primarily due to massive construction activity. InfraGO's revenue increased slightly by 4 percent year-on-year to approximately €8.1 billion. Due to increased federal funding, adjusted EBIT in 2024 is positive again at €226 million (2023: approximately €-1.2 billion).

In long-distance transport, lower punctuality caused by the disruption-prone infrastructure, construction-related restrictions, and strikes led to a 3 percent drop in transport performance (44.1

billion passenger kilometres) compared to the previous year. Revenue fell by around €50 million year-on-year. Despite countermeasures, the operating loss increased from €43 million in 2023 to €96 million. The long-distance fleet was further modernized in 2024, including the delivery of the last of a total of 137 new ICE 4 trains.

Customer satisfaction remained stable despite the difficult operating conditions.



Hungary

▶ MAV M41 No. 418.103 departs Békéscsaba on March 29th with train No. 7723, the 15:47 to Szeged. Still part of the regular operational fleet, the loco sports a retro paint job and retains its original M41 number on the front. It's a regular attendee at the various MAV Retro events organised throughout the year.

Andy Pratt

▶ MAV Class 480.020 has just arrived at Budapest Nyugati with train No. 707, the 06:44 from Szeged on March 29th. *Andy Pratt*

▶ MAV V43 Class 431.228 is ready for the right away at Budapest Nyugati station on a damp March 29th with train No. 732, the 09:50 to Szeged. *Andy Pratt*



Hungary

Carrying its original number V63.056, MAV Class 630.056 arrives at journey's end, platform 4 Keleti station, with train No. 823, the 16:00 Kaposvar - Budapest on March 29th.

Andy Pratt

With recently applied MAV corporate vinyls, Vectron Class 193.723 stands on the blocks at Budapest Keleti on March 29th. *Andy Pratt*

MAVM41 Class 418.171 is ready to depart Szeged with its 2 coach load to Békéscsaba, train No. 7734 at 13:28 on March 29th. *Andy Pratt*



Italy

FS Class 652.097 stands at Tirano station ready to depart with a freight towards Milano on March 20th.
Andy Pratt







Alstom will supply 18 Avelia Horizon trains for Morocco's high-speed rail expansion

Alstom, a global leader in smart and sustainable mobility, has signed a contract with the Moroccan National Railway Office (ONCF), financed by the French Treasury at value of €781 million, to supply 18 Avelia Horizon very high-speed trains. This order has been recorded in Alstom's Q4 2024/2025 fiscal year.

The extension of the high-speed line to Marrakech will enhance connectivity for travellers. Alstom's new

double-decker Avelia Horizon trains will significantly reduce travel time between Tangier and Marrakech while minimizing the carbon footprint.

Benefiting from over 40 years of experience of high-speed trains in commercial services, Alstom's Avelia Horizon very high-speed train is the latest generation of double-deck train in the world capable of operating at speeds exceeding 300 km/h. It offers great operational

flexibility and ensures a unique passenger experience. The train consists of two innovative, shorter power cars that combine high performance and compactness, along with two-level articulated cars.

Avelia Horizon allows for reduced operating costs. The train features a lower number of bogies, which account for 30% of maintenance costs. With the highest seating capacity on the market, Avelia Horizon provides an

exceptional level of service and comfort, significantly reducing total cost of ownership per seat.

ALSTOM™, Avelia Horizon™, Avelia™ are registered trademarks of the Alstom Group.















On March 5th, NS VIRM (Verlengt InterRegio Materieel) No. 9556 working train No. 3544 Den Haag - Dordrecht is seen in Delft. This train has been liveried as a 'Green Train' for several years to draw attention to the fact that NS only uses ECO generated electricity. *Gerard van Vliet*

























Wengeralpbahn loco No. 42 gets ready to propel the 08:42 departure out of Lauterbrunnen on March 22nd. The 800mm gauge rack railway is electrified at 1500V DC and the loco will work a shuttle service as far as Wengen. Other trains on the small network are operated by units. *Andy Pratt*



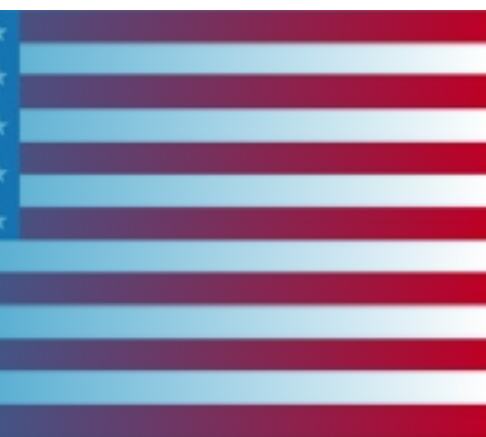


U.S.A.

Norfolk Southern GP38s Nos. 5645 and 5608 lead one wagon along the street level running in Hackensack, New Jersey on March 6th. *Mark Torkington*



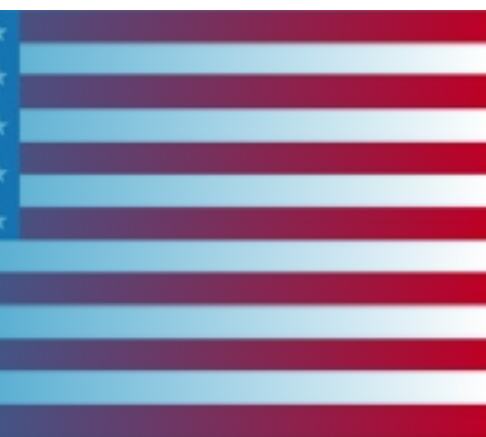
U.S.A.



Painted in 'heritage' Erie Railroad colours, NJTs No. 4519 heads towards Spring Valley along the appropriately named Railroad Avenue in Hackensack, New Jersey on March 6th. *Mark Torkington*



U.S.A.



Conrail 'heritage' unit No. 4208 pauses at Ridgewood with an NJT service on March 6th. *Mark Torkington*

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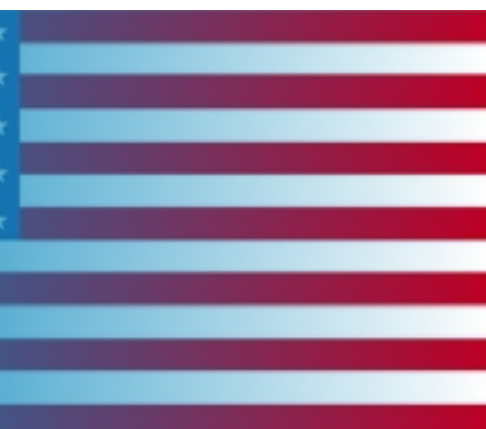




GP40 No. 4203 stands awaiting departure time with an NJT service at Hoboken Terminal on March 6th.
Mark Torkington



U.S.A.



Nos. 4911 (an F40) and 4217 (a GP40) rest after arrival at Hoboken Terminal on March 7th. *Mark Torkington*



U.S.A.

Amtrak's No. 711 passes Cold Spring on the Hudson River with North East Regional train No. 236 to New York Penn on March 8th. *Mark Torkington*



U.S.A.

Metro North's No. 207 arrives into Croton Harmon
on March 7th. *Mark Torkington*

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CT Rail No. 6710 approaches Windsor Locks station with a Hartford Line service from Springfield to New Haven on March 9th. *Mark Torkington*



Poland

Alstom to modernise rail traffic control system on the Poznan freight bypass in Poland

Alstom will be the supplier of rail traffic control and management systems for the planned modernisation of the Poznań freight bypass

The new traffic control devices will increase the capacity of railway lines no. 395 and 352, which are a key section of Poland's freight transport route

The use of modern computer railway traffic control devices will enable remote and automated traffic control on the modernised sections of the Poznań freight bypass

Alstom, global leader in smart and sustainable mobility, will deliver rail traffic control systems for the Poznań freight bypass. The works will be carried out under a contract signed by Alstom with Krakowskie Zakłady Automatyki S.A.

The scope of the contract includes the delivery of railway traffic control devices at stations and in the Poznań Franowo Local Control Centre, as well as the reconstruction of railway traffic control devices in the Poznań IV Local Control Centre.

Additionally, Alstom will deliver new and modernise existing line devices, including line block devices and devices at rail-road crossings. The works contracted by Alstom are part of large-scale investments on railway lines no. 395 and 352. They include, among others, the modernisation of approximately 70 km of tracks and the creation of new railway stations in the districts of Poznań, as well as the reconstruction of tracks and the traction network. The aim is to improve and increase the capacity on one of the key sections of the freight transport route in Poland.

“The modernisation of the Poznań freight bypass is another infrastructural project of significant importance for the Polish railways. As one of the largest manufacturers of railway control systems and devices in Europe, we have unique competences, and many years of experience gained on the domestic and international market. We are pleased that, in such a complex investment project as the modernisation of the Poznań freight bypass, our partners see the key role of technologies and solutions which are constantly developed by our team with modern and sustainable mobility in mind” emphasises Adam Juretko, Managing Director of the Alstom Katowice site in Poland.

“The modernization of the Poznań Freight Bypass is a project of great importance for the development of the entire Wielkopolska region, and in particular Poznań and its surroundings, which will bring many benefits not only to the residents but also to the entire transport system in this region. I am very glad that we will be able to carry out this task together and that thanks to the use of Alstom devices, rail traffic will be safer and more efficient” - added Paweł Mentel, President of Krakowskie Zakłady Automatyki S.A.

One of the effects of the investment will be obtaining comfortable conditions at workstations by the PKP Polskie Linie Kolejowe staff. The use of modern computer devices will allow for remote and automated traffic control on the modernised sections, self-diagnostics, damage registration and facilitation of the operation of railway control devices, which will be automated and secured in computer systems. This will also contribute to increasing the railway safety factor in the larger Poznań agglomeration.

Alstom's experience in the Polish market includes the first implementation of the ERTMS level 2 system, the construction of the ERTMS level 2 system on ten PKP PLK railway lines, the construction of a control centre for the Warsaw Metro, the construction of over 30 centralised rail traffic control (CTC) systems, the equipment of over 220 stations with computerised interlocking systems and the modernisation of over 1,700 level crossing signalling systems.

Eurostar

Eurostar Response to IPEX Independent Capacity Assessment of Temple Mills Depot, Commissioned by the Office of Road and Rail

On March 31st, Eurostar welcomed the independent study by the Office of Road and Rail. It confirms what Eurostar has said all along: the Temple Mills depot is effectively almost full for major maintenance work and would require investment to meet the growing demands of international rail.

The options presented in the report could help create some capacity, but this would not be enough to accommodate the stated ambitions of any single operator. This includes the three organisations who have applied to the regulator and the needs of Eurostar itself.

Eurostar has complied fully with the regulatory process and will continue to do so. This is in advance of any train orders being placed – and years ahead of those trains being built and needing to access Temple Mills.

Eurostar believes the conversation now needs to move beyond the inadequate space within the existing depot to look at the bigger picture. Capacity constraints have always been a challenge – whether in stations, at the borders or on-board trains. For 30 years, Eurostar has successfully found new solutions, working closely with stakeholders, and always with our customers in mind.

Demand for international rail and sustainable travel is at an all-time high, which is a hugely positive story for European connections and the planet. Eurostar is once again accelerating sustainable growth by aiming to reach 30 million passengers and will invest close to €2bn in up to 50 new trains for customers to enjoy.

Eurostar is willing to invest once again in new maintenance capacity and in many other areas to help deliver ambitious growth plans. Other operators should consider investing in the system as well.

Eurostar welcomes the opportunity for discussion with government and the regulator to create an ambitious framework to unlock this private investment and deliver the economic growth, stronger connections and sustainable contribution which this historic moment for international rail travel promises to deliver.

Sweden

In Sweden, Alstom grows its Motala site expertise in maintenance and secures an eight-years full service contract with Alpha Trains

Alstom, global leader in smart and sustainable mobility, is expanding its presence in Motala by establishing a dedicated centre of expertise for comprehensive Traxx Universal locomotives maintenance. This new centre brings together Alstom's maintenance expertise under one roof, from routine servicing to extensive repairs, wheelset and bogie work, as well as signalling systems.

"With this initiative, we are reinforcing our position as a one-stop provider for locomotive maintenance. We can now offer maintenance and upgrades for Traxx locomotives from both the Nordics and the rest of Europe, all under one roof," says Per Stridsman, responsible for Traxx maintenance in Motala.

Alstom's series of Traxx Universal locomotives are used in both freight and passenger traffic. They have a modular construction with high reliability and energy efficiency, and are designed to significantly reduce carbon dioxide emissions.

"We are seeing a strong demand for Traxx locomotives and maintenance services, both in the Nordic region and across Europe. By bringing together our expertise in Motala, we can offer an efficient and flexible solution," says Mikael Granberg, Head of Rolling Stock Maintenance Nordics.

An eight-year full-service contract with Alpha trains

The full-service agreement with Alpha Trains, Europe's leading leasing company for locomotives and trains, is a contract over eight years for ten Traxx Universal locomotives. The contract covers preventive and corrective maintenance at the Motala workshop, plus support from a mobile team for field repairs and a hotline for drivers seeking technical assistance, ensuring the highest availability. This is Alstom's first service contract in the locomotive segment in Sweden.

"By expanding our service network with a trusted partner like Alstom, we ensure that our customers benefit from maximum reliability and reduced downtime. This strategic collaboration between Alpha Trains and Alstom underlines our commitment to sustainable and efficient transport solutions across Europe," says Vincent Pouyet, Managing Director Locomotives, Alpha Trains.



Investing in the Motala site

The Motala site is equipped with both traditional and advanced technologies. As part of this initiative, Alstom is investing in a wheel press for changing and maintaining locomotive wheelsets and upgrading the bogie line. Maintenance of cutting-edge signalling systems is also included in the comprehensive service package. The Motala site already collaborates closely with Alstom's other facilities in the Nordic countries, Germany, and the rest of Europe.

"This investment in Motala strengthens both local industry and the European railway sector as a whole. By consolidating specialist expertise in Traxx locomotive maintenance, we help make rail travel and freight

transport even more sustainable and competitive, which is a key element of our long-term strategy," says Maria Signal Martebo, Managing Director, Alstom Sweden.

Alstom is the largest supplier to the Swedish train market, with over a thousand trains delivered to the Swedish railways and several major maintenance contracts. Alstom also leads the implementation of the ERTMS[1] signalling system in Sweden, both onboard and along the tracks.

Alstom is the market leader in rail services, supporting customers over the entire asset lifecycle with the broadest portfolio of service solutions. Alstom's FlexCare Perform maintenance services are tailored to customer needs

and operational requirements, from technical support with spares to fully outsourced maintenance solutions. Alstom maintains over 35,500 vehicles worldwide, including over 2,450 locomotives and 270 powerheads, and is a trusted partner for servicing both Alstom and non-Alstom rail assets.

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[1] European Rail Traffic Management System

Photo: Alstom Motala - Maintenance of Traxx locomotives for Alpha Trains. © ALSTOM SA 2025. Henrik Oremán

Alstom signs contract to deliver 30 Traxx electric locomotives in Slovenia

Alstom, global leader in smart and sustainable mobility, and SŽ – Tovornipromet (Slovenian Railways – Freight Transport) have signed a contract for the delivery of 30 four-axle Traxx Universal multisystem electric locomotives, exceeding €150 million. The locomotives will be used for freight operation in Slovenia, Germany, Austria, Czechia, Slovakia, Hungary, Croatia and Serbia. “Alstom’s state-of-the-art electric locomotives will significantly contribute to the country’s journey towards sustainable mobility. The new locomotives will boost freight operations in Slovenia thanks to their energy efficiency and good maintainability. This order reinforces Alstom’s presence in Central and Eastern Europe,” said Frederique Kalb, Alstom Managing Director for Central and Eastern Europe cluster.

The locomotives will be equipped with Alstom’s cutting edge onboard ERTMS system, Onvia Cab, for optimal efficiency and high levels of safety and security, while ensuring full interoperability. The locomotives are designed for cross-border freight operations within Central and Eastern Europe. The Traxx locomotives to be delivered to Slovenian Railways are designed to haul

very heavy trains in conjunction with Slovenian Railways’ existing fleet of locomotives.

Traxx Universal locomotives offer a flexible design based on a robust, modular platform approach compatible with many applications (single or multi-country freight and passenger transport) and available in various configurations (AC, DC and multi-system). This product delivers increased operational performance and reliability with higher energy efficiency and extended maintenance intervals to improve its availability.

Since 2000, more than 6,000 Alstom locomotives have been ordered and used in many European countries, as well as in Asia, North America, and Africa. Alstom is also the leading locomotive maintainer, and maintains over 2,450 locomotives worldwide, including almost 600 Traxx locomotives. As the global leader in ETCS onboard technology, Alstom has supplied 70% of ERTMS-equipped trains in Europe and installed over 25,000 onboard units on more than 200 vehicle types worldwide. ALSTOM™, Traxx Universal™, Onvia™ and Onvia Cab™ are protected trademarks of the Alstom Group.



Alstom wins another contract for the delivery of Traxx Universal locomotives for CLIP Intermodal

Alstom, global leader in smart and sustainable mobility, has signed a contract with CLIP Intermodal for the delivery of third-generation Traxx multi-system locomotives. The order will include five locomotives which will be homologated in the European corridor covering Poland, Germany, Austria, Czechia, Slovakia, and Hungary. The rolling stock will be manufactured at the Alstom site in Kassel, Germany, while the locomotive car body shells will be produced at the Alstom site in Wrocław, Poland. This is another contract carried out by Alstom for CLIP Intermodal, part of CLIP Group. In the first quarter of 2024, both companies signed contracts for the delivery of 13 Traxx multi-system locomotives.

The rolling stock covered by these orders will be homologated for operation in Poland, Germany, Belgium, Luxembourg, Austria, and France. In addition to the rolling stock production, the contracts also include two years of preventive maintenance services during the

warranty period.

“The purchase of additional 5 Traxx 3 MS locomotives is another step towards strengthening CLIP Intermodal’s position on the European market. This step is a natural consequence of the company’s dynamic development, which included the expansion of the Intermodal Terminal in Swarzędz. Thanks to the new locomotives, the company will be able to even more effectively achieve its objectives related to the development of sustainable intermodal transport, contributing to the reduction of greenhouse gas emissions and improving traffic safety” - emphasises Agnieszka Hipś, President of the Management Board of CLIP Group S.A.

The third-generation Traxx Universal multi-system locomotives are characterised by high operational efficiency, reliability, energy efficiency and accessible service. They are designed to handle heavier loads

compared to other locomotives in the same class. Their design is based on a proven, modular platform used in passenger and freight transport, in domestic and cross-border transport, available in various configurations (AC, DC, multi-system). The locomotives have been approved in 20 countries, covering a total annual distance of more than 300 million kilometres.

“Alstom’s modern solutions have been supporting efficient and environmentally friendly intermodal transport for many years. We are pleased with this additional contract for Traxx locomotives that will serve both in domestic and international rail transport. We are convinced that the Traxx locomotives will strengthen the position of CLIP Intermodal and allow for its further dynamic development in low-emission European transport corridors,” emphasises Beata Rusinowicz, the Managing Director of Alstom in Poland, Ukraine and the Baltic States.

The units ordered by Clip Group can reach a top speed of 160 km per hour and will be equipped with Alstom’s Onvia Cab™ signalling system, the leading ETCS onboard solution for the European Train Control System (ETCS). This system offers the most extensive coverage across various countries and lines, both in ETCS as well as for legacy system operation.

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Sweden

Alstom strengthens its presence in northern Sweden with new SJ contract for night train maintenance

Alstom, global leader in smart and sustainable mobility, has assigned a new contract with SJ for the maintenance of night trains. The contract runs for two years and includes maintenance work at depots in Luleå and Stockholm. This is an important step in Alstom's long-term commitment in northern Sweden through increased investment and recruitment of maintenance employees. The contract covers 75 carriages and 12 RC6 locomotives used on night train routes Stockholm-Umeå-Luleå-Narvik. Alstom has been responsible for night train maintenance since 2013, improving availability and delivering higher operational quality over the years.

"We are excited to expand and grow in northern Sweden, both in terms of depot staff and administrative personnel," says Lisa Harlin, Head of the North Business Area at Alstom in Sweden.

The new contract aligns with Alstom's long-term strategy for northern Sweden, where the company has also recently signed a ten-year full maintenance contract for Norrtåg's fleet. To accommodate growing maintenance needs, Alstom is upgrading its Luleå depot and investing in advanced data-driven asset management solutions, which will be integrated with our Sweden-based Maintenance Performance Centre.

"Working with these vehicles requires a special type of experience and problem-solving. Our unique competence lies in our extensive track record in maintenance and dedicated employees," says Lisa Harlin.

Alstom is the largest supplier to the Swedish train market, with over a thousand trains delivered to the Swedish railways and several major maintenance contracts. Alstom also

leads the implementation of the European Railway Traffic Management System (ERTMS) signalling system in Sweden, both onboard and along the tracks. Alstom is also the market leader in rail services, supporting customers over the entire asset lifecycle with the broadest portfolio of service solutions. Alstom's FlexCare Perform maintenance services are tailored to customer needs and operational requirements, from technical support with spares to fully outsourced maintenance solutions. Alstom maintains over 35,500 vehicles worldwide and is a trusted partner for servicing both Alstom and non-Alstom rail assets.

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Photo: SJ night train in Sweden © ALSTOM SA



Sweden

Wabtec to Acquire Dellner Couplers

On March 18th, Wabtec Corporation (NYSE: WAB) announced a definitive agreement to acquire Dellner Couplers, a global leader in highly engineered safety-critical train connection systems and services for passenger rail rolling stock. The acquisition brings highly attractive and complementary technologies to Wabtec and positions the Company for accelerated, profitable growth, while strengthening its portfolio of mission critical passenger rail systems.

"Dellner Couplers provides significant synergies by complementing our core Transit systems portfolio, servicing a joint customer base, and leveraging our strong service capabilities," said Rafael Santana, President and CEO of Wabtec. "This acquisition aligns very well with our stated growth strategies to accelerate the innovation of scalable technologies, expand high margin recurring revenues, and to drive improved operational performance."

Sweden-based Dellner Couplers brings an 84-year legacy of innovation in train connection systems, which positioned the company as an industry leader in manufacturing and servicing of couplers for the transit rail industry. It has a global installed base of approximately 100,000 couplers and 12,500 gangways. Dellner Couplers provides an extensive offering in train connection systems, with production, assembly and aftermarket services facilities in 13 countries serving over 200 customers.

"This acquisition will significantly enhance the capabilities of our Transit business, allowing us to provide an attractive offering for customers and opening further opportunities for expansion," said Pascal Schweitzer, President of Wabtec Transit. "The strength of Dellner Couplers' portfolio of products and services, along with the management team's track record of delivering industry-leading financial results will accelerate our long-term profitable growth strategy."

Wabtec is acquiring Dellner Couplers for \$960 million in cash, financed through cash on hand and short-term debt. The acquisition is anticipated to provide immediate shareholder value with an accretive growth profile, accretive Adjusted EBIT margins, accretive Adjusted EPS in the first year of ownership and accretive return on invested capital (ROIC) over time.

The purchase price reflects an estimated multiple of 12.5x projected 2025 EBITDA adjusted for transaction costs and projected run-rate cost synergies of \$22 million which we expect to be realized over a three-year period.

Dellner Couplers is expected to generate approximately \$250 million of revenue in 2025 and expected growth that will exceed the Company's average growth over the next five years. The transaction is subject to customary closing conditions and regulatory approvals.

This strategic acquisition strengthens Wabtec's Transit product and services portfolio serving a stable and growing underlying passenger rail market that is driven by sustainable megatrends. It builds upon the Company's leadership position in this large, expanding, and resilient addressable market.

The addition of Dellner Couplers aligns with the Company's long-term vision of driving innovation, productivity, safety and reliability for passenger rail on a global scale.

India



Alstom delivers the 500th electric locomotive for Indian Railways from its Madhepura site

Alstom, a global leader in smart and sustainable mobility, has successfully delivered 500 electric locomotives to Indian Railways. This milestone underscores Alstom's commitment to supporting the modernisation of India's rail infrastructure and its contribution to the nation's ambitious freight transportation goals.

The 500th fully India-made Prima T8 WAG12B e-locomotive was flagged off from Alstom's world-class manufacturing facility in Madhepura, Bihar, in the presence of key dignitaries from Indian Railways Mr. Manish Kumar, Chief Administrative Officer and senior officials from Alstom at an event marking this project milestone.

As part of its contract worth €3.5 billion, Alstom is supplying 800 high-powered double-section Prima T8 locomotives of 12,000 HP (9 MW) for freight service. Designated by Indian Railways as WAG-12B, these locomotives are capable of hauling ~6,000 tonne rakes at a top speed of 120 kph. To ensure high availability of India's most advanced freight locomotives and reduce maintenance cost, Alstom has also built two ultramodern state-of-the-art maintenance depots at Saharanpur and Nagpur, using predictive technologies.

Commenting on the milestone, Olivier Loison, Managing Director, Alstom India, said, "Our WAG 12B electric locomotives powered by cutting-edge technology are fully manufactured in India and provide enhanced speed, efficiency, and reliability of freight haulage across the country. The delivery of our 500th e-loco underscores our commitment to modernise India's railway infrastructure especially for freight, thereby driving economic growth." The WAG-12B locomotives are being built at one of India's largest integrated greenfield manufacturing facilities at Madhepura (Bihar), under a Joint Venture between Alstom and Indian Railways. This is the largest Foreign Direct Investment project in the Indian railway sector. The facility has an installed production capacity of 120 locomotives per annum and Alstom has progressively achieved near 90% localisation.

This project is a prime example of the 'Make in India' initiative, with more than 85 per cent of the components sourced locally, reinforcing India's local manufacturing capabilities. The project has placed India among an elite group of nations capable of producing high-horsepower locomotives domestically while fostering

technological expertise within the country. Some of the key commodities moved over more than 120 million kilometres by these e-locoms include - coal, cement, food grains, fertilisers, petrochemical products, minerals, and posts/ parcels, across entire geographical boundaries of the nation.

Equipped with Insulated Gate Bipolar Transistors (IGBT) based propulsion technology, these e-Locos have

considerable savings in energy consumption with the use of regenerative braking. The technology is also helpful towards making the acceleration process more efficient by reducing the heat generation and traction noise.

Additionally, it will not only bring down operational costs, but also reduce the congestion faced by Indian Railways.

Alstom has been associated with India's progress for over 100 years. As the leading multinational sustainable mobility provider in India, Alstom offers 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.



Brazil



Alstom celebrates 10 years of its rolling stock factory in Taubaté

Alstom, a global leader in smart and sustainable mobility, celebrates the historic milestone of 10 years of operation of its rolling stock plant in Taubaté, in the state of São Paulo. This moment reflects the company's ongoing commitment to innovation, operational excellence and the development of the railway sector in Brazil and worldwide, consolidating its leading role over almost seven decades of operations in the country.

"Celebrating ten years of building trains in our Taubaté plant reaffirms Alstom's commitment to Brazil and to delivering mobility solutions that connect people and transform cities. This achievement reflects our capacity for innovation and operational excellence and the dedicated work of a highly qualified team committed to meeting local and global demands with quality and sustainability," says Suely Sola, general director of Alstom Brazil.

Opened in 2015, Alstom's facility in Taubaté is a center of excellence in the production of stainless-steel train car and is strategically located in an industrial hub, and close to the Port of Santos, the largest port complex in Latin America. The plant produced 27 Citadis cars for

the Rio de Janeiro Tram, which were manufactured in record time for the 2016 Olympics in Brazil. The project was the second in the world to have a 100% catenary-free system. After the conclusion of the VLT contract, the plant also produced the NS16 cars for the Santiago Metro in Chile. In November 2022, following the signing of six national and international contracts, Alstom invested R\$100 million to expand the site, as part of the company's growth strategy. Since then, more than 170 trains (over 940 cars) have been or are being produced by Alstom in Taubaté for these contracts, for the cities of São Paulo (Brazil), Santiago (Chile), Taipei (Taiwan) and Bucharest (Romania), highlighting the facility's ability to contribute to mobility at a global level. In recent years, the plant has been responsible for producing trains for various transport systems, including:

- Lines 8 and 9 of the São Paulo Metropolitan Train Network: supply of 36 Metropolis trains, each with eight cars, with doors and corridors that offer excellent passenger flow and accessibility, for the modernization of the network, under contract with ViaMobilidade.
- Line 6-Orange of the São Paulo Metro: production of

22 Metropolis trains, each with six cars, for the University Line (LinhaUni), under contract with the Acciona Group concessionaire, for the expansion of the metro system in the capital of São Paulo.

- Line 7 of the Santiago Metro, Chile: production of 37 Metropolis trains with 5 cars each for the new metro line in the Chilean capital.
- Extension of Phase 2 of Line 7 of the Taipei Metro, Taiwan: manufacture of 35 Metropolis trains, each with four cars, equipped with the CBTC Urbalis 400 signaling system, SCADA and safety doors on the platforms, for the Clara Green Line (LG) or Wanda Zhonghe Shulin (Wanda).
- Phase two of the Taipei Circular Line, Taiwan: The Taubaté plant will produce 29 trains, totaling 116 cars.
- Bucharest Metro Line 5, Romania: production of 13 trains, totaling 78 cars, for the expansion of the city's underground transport system.

In addition to investing in the industrial unit to meet current projects, the company entered into a partnership with the National Industrial Training Service – SENAI Taubaté to train 500 professionals to work directly in

the production of the new trains. The factory currently generates more than 600 direct jobs and around 400 indirect jobs.

Alstom Brazil

Alstom is the leader in rail mobility in the Brazilian market and the protagonist of great moments in the rail sector, such as the construction of the first passenger train factory in the country and the largest export agreement in the Brazilian rail sector for the supply of cars for the metros of Santiago, Chile, and New York, United States, signed in July 2002. In 2014, the company participated in the largest project in history of suburban trains in South Africa. More recently, Alstom's contribution to the rail transport sector is proven by products and services delivered to the main passenger operators in the country, such as São Paulo (SP), Rio de Janeiro (RJ), Porto Alegre (RS), Fortaleza (CE), Recife (PE) and Brasília (DF), in addition to the Rio de Janeiro tramway.

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U.K.



DB Cargo UK wins royal assignment



Exclusive train journeys for the British royal family - DB Cargo UK continues a 30-year tradition

DB Cargo UK has been awarded a new contract by His Majesty King Charles III to operate and maintain the Royal Train. This award marks over 30 years of continuous service to the Royal Family since the privatisation of rail transport.

Andrea Rossi, CEO DB Cargo UK, said: 'It is a great honour for our company to be trusted to transport members of the Royal Family safely and reliably across the UK rail network. The Royal Train is a special highlight on the rails that we hope to see more of in the coming years, especially in light of His Majesty's commitment to sustainability and environmental protection.'

The royal coat of arms and nameplates are currently being adapted on the Queen's Messenger 67 005, which will be called the King's Messenger in future. The Royal

Sovereign 67 006 will also receive a new coat of arms, but will retain its name.

The Royal Train provides exclusive transport for the British monarch, his family and the royal court. The train currently consists of two locomotives and nine carriages, which are painted in royal purple.

It is also used for other heads of state, but is not available for private use.

DB Cargo UK is proud to continue this special tradition and ensure that the Royal Family can travel in safety and comfort.



The Matterhorn Gotthard Railway and Stadler present the world fastest rack-and-pinion railway

The Matterhorn Gotthard Railway (MGBahn) and Stadler has proudly unveiled the world’s fastest rack-and-pinion railway. This achievement is made possible by a newly developed braking system, allowing the cogwheel trains to descend the Andermatt - Göschenen route at unprecedented speeds. Developed as part of an innovative project, this state-of-the-art system ensures passengers enjoy faster and more punctual connections.

An innovative collaboration between Matterhorn Gotthard Railway (MGBahn) and Stadler has led to the development of the new “v+” rack-and-pinion braking system. In Andermatt, the two partners unveiled the first Stadler ORION multiple-unit train equipped with this cutting-edge technology to the public. The vehicle fitted with the new braking system is now in operation on the Andermatt - Göschenen line (Canton of Uri), which features a gradient of 181%. The new system allows trains to travel downhill at

speeds of up to 30 km/h, significantly faster than before. Additionally, the enhanced braking force ensures the train can come to a standstill within the required specifications. Previously, ORION multiple units were limited to downhill speeds of 21 km/h on rack-and-pinion tracks with the same gradient, as per railway ordinance requirements.

Thanks to the new braking system, the cogwheel trains now reach their destination faster, enhancing punctuality, reliability, and operational stability. Passengers benefit from a 4-minute reduction in journey times (from the current 15 minutes). Consequently, MGBahn can operate the half-hourly service on the Andermatt - Göschenen section with just one vehicle in rotation instead of two.

For now, the time savings will be used to stabilize the timetable and ensure better connections.

“The new rack-and-pinion braking system

offers significant added value for both railway operators and passengers. This innovative system enables shorter journey times, more efficient intervals, and consequently, more stable timetables. From now on, other rack railways can also benefit from and use the new innovative braking system for new purchases,” explains Christoph Leiterer, Head of Engineering for the area Tailor Made at Stadler. “Today, we celebrate innovation. A heartfelt thank you to MGBahn for their outstanding collaboration.”

One project, two specialists

“v+” stands for “higher speed.” The new rack-and-pinion braking system is the result of the initiative between MGBahn and Stadler. The project’s goal was to leverage existing technologies to meet the demands of railway operators and passengers for higher frequencies and more punctual trains. One of the latest multiple-unit trains supplied by Stadler to MGBahn served as the prototype for this project. The innovation was



spearheaded by MGBahn and developed in partnership with Stadler. The federal government provided financial support, and the Federal Office of Transport (FOT) granted authorization.

Ivan Pfammatter, Head of Rolling Stock & Traction at MGBahn, says he is very satisfied with the result of the project: “Our ambition and the associated goals have been realised - we will be travelling faster in the future, guests will benefit from faster and more stable connections and the new technology will enable us to make noticeable operational

upgrades.”

Following the successful commissioning of the new rack-and-pinion braking system, MGBahn has decided to equip the 25 newly ordered ORION multiple-unit trains, set for delivery starting in 2026, directly with the new “v+” technology. Additionally, the existing fleet of 11 ORION multiple unit trains will be retrofitted with this advanced braking system.



Vale and Wabtec Finalize Locomotive Purchase Agreement

Vale have announced an agreement with Wabtec Corporation (NYSE:WAB) to acquire 50 new Evolution Series Locomotives for Vitória a Minas Railroad (EFVM) and Carajás Railroad (EFC). The order is a major step in Vale’s fleet modernization initiative and decarbonization program to improve the efficiency and reduce emission of its rail operations. Wabtec will manufacture the locomotives at its plant in Contagem, Brazil with deliveries starting in 2026.

“Vale has chosen locomotives that have consolidated performance in the market and are aligned with the company’s focus on sustainability, efficiency and safety,” said Carlos Medeiros, Vice President of Operations at Vale. “The renewal and modernization plan for the EFVM and EFC fleet is premised on contributing to the future of decarbonization in the rail sector.”

Vale’s fleet renewal plan features the addition of 36 Wabtec EVOBBW locomotives for EFVM, and 14 Wabtec ES58ACi locomotives for EFC. These locomotives are among the most modern on the market and will be able to operate with higher blend of biodiesel, which will lower greenhouse emissions. Vale and Wabtec plan to conduct tests to assess the possibility of increasing this biodiesel percentage in the future.

“We are proud to support Vale and our customers with advanced technologies that reduce CO2 emissions and promote operational efficiency,” said Danilo Miyasato, Wabtec LATAM President and Regional Leader. “Wabtec is at the forefront of innovation and committed to decarbonization and greater efficiency in the rail sector. We are investing in innovative and sustainable technologies and in the development of engines that

use alternative fuels, for a future of zero-emission rail transport.”

Operational Efficiency and Emission Reduction

The Evolution Series family of locomotives are equipped with advanced diesel engine technology. This engine provides significant gains in operational efficiency through fuel savings, longer maintenance intervals, and lower operating costs. The AC traction motors also improve the hauling capacity by more than 50 percent. Already in operation on the Carajás Railroad, this model will now become part of the Vitória a Minas Railroad fleet. This model also allows for advances in the EFVM decarbonization program. Compared to FDL engine, the Evolution Series model provides reductions in fuel consumption and CO2 emissions. It also enables the transition to alternative fuels in the future. Finally, with

wider cabs, these locomotives ensure greater ergonomics and comfort, as well as an easily accessible location for on-board systems, facilitating improved maintenance.

About Vale

Vale is a global mining company that exists to improve life and transform the future together. One of the world’s largest producers of iron ore and nickel, and an important producer of copper, Vale is headquartered in Brazil and has global operations. Its operations include integrated logistics systems, including approximately 2,000 kilometres of railways, maritime terminals and 10 ports distributed around the world. Vale aspires to be recognized by society as a reference in safety, the best operator and the most reliable, a talent-oriented organization, a leader in sustainable mining, and a reference in creating and sharing value.

Koleje Mazowieckie and Stadler with another contract for 14 more FLIRT electric trains

The Polish regional railway Koleje Mazowieckie and Stadler have signed an agreement for 14 FLIRT electric multiple units (EMUs). This development marks another step in the rail operator's commitment to enhance passenger safety and comfort across the Mazovia region. This latest order will see Stadler supply Koleje Mazowieckie with a total of 64 state-of-the-art FLIRT trains over the next few years.

The agreement is the third of four executive contracts set out in the framework agreement signed in June last year. The first units from this batch are expected to be delivered within 24 months. In addition to train deliveries, it includes an 18-year maintenance contract.

Modern rolling stock as a driver of regional growth

«Thanks to funds obtained from the European Funds for Mazovia 2021-2027 program, we are signing another executive contract. Including the contracts already signed, Koleje Mazowieckie will acquire 64 five-car FLIRT electric multiple units. Our goal for the coming years is to purchase as many as 75 of these vehicles. This is not only an investment in modern rolling stock but also in the future of the entire region. Modern trains significantly improve the travel experience of the passengers who use our services. As one of the most modern regional operators in Poland, we strive to maintain the highest standards.» says Robert Stępień, CEO of Koleje Mazowieckie.

Stadler will supply Mazovia's railway operator with the latest generation of FLIRT electric trains. The lightweight aluminum used for these vehicles means that they are both energy efficient and cost efficient, which is critical to their long-term operation.

«The new five-car FLIRT trainsets make use of modern technologies to reduce energy consumption and, consequently, lower operational costs. This is extremely important, as governments around the



world strive to achieve net zero. We are very pleased to sign yet another agreement with Stadler Polska. To date, our cooperation has been very successful, and once again, I am convinced that the vehicles will be manufactured to the highest standards and delivered on schedule.» comments Czesław Sulima, board member and operations director of Koleje Mazowieckie.

From Mazovia, for Mazovia – Stadler creates 200 jobs

Koleje Mazowieckie already operates a total of 71 FLIRT trains – 10 purchased under a 2006 contract and 61 as part of a framework agreement from 2018. In 2024, the operator ordered an additional 50 trains, which are currently being produced. All units are being

manufactured at Stadler Polska's plant in Siedlce, working closely with local suppliers and partners.

Radosław Banach, CEO of Stadler Polska, highlights the importance of the new contract for the company's growth: «I am very pleased with the agreement with Koleje Mazowieckie for another 14 vehicles. The Masovian operator has been a key client and partner for us since the beginning of our operations in Poland. Thanks to orders from KM, we increase employment at our Siedlce plant by another 200 people. This is also great news for our suppliers and partners, who will work with us to fulfill this order. We are delighted that our Siedlce plant, producing here in Mazovia, can make

a significant contribution to improving rail travel in the region.»

FLIRT – comfortable and reliable

FLIRT is a best-selling model from Stadler, with over 2,750 units sold worldwide. The FLIRT trains for Koleje Mazowieckie feature a lightweight aluminum structure with low energy consumption. Spacious entrances enable passengers to get on and off quickly, and generously proportioned low-floor areas make them easily accessible for wheelchair users, cyclists, and passengers with pushchairs or luggage. Each train has efficient air conditioning, external and internal monitoring, an audiovisual passenger information system, wireless internet access and modern toilets.

To enhance safety, the trains are fitted with defibrillators and intercoms allowing direct contact with the driver in case of emergencies.

The five-car train can carry 600 passengers including 279 seated. It reaches a maximum speed of 160 km/h and is equipped with ETCS Level 2 systems, meeting TSI standards and collision safety requirements (EN 15227).

The new trains will operate on all routes served by Koleje Mazowieckie – i.e. to Siedlce, Łowicz, Skierniewice, Radom and Działdowo.

Railcare successfully cleans a new railway tunnel in Sweden using its battery-powered vacuum machine

Work on the Varberg Tunnel, managed by Implenia for Trafikverket, is entering its final phase near Gothenburg. A key step in preparing for the commencement of train operations is the removal of construction dust and dirt from the tunnel. Railcare has been contracted to ensure a smooth, efficient, and sustainable cleaning process with its battery-powered vacuum machine.

The Varberg Tunnel, part of the West Coast Line extension, is nearing completion after several years of construction. Spanning approximately three kilometres beneath the centre of Varberg, it is scheduled to open in summer 2025. In this final phase, Trafikverket is focusing on fine-tuning the environment and ensuring it is clean and safe for future train traffic.

Railcare is playing a vital role in the Varberg Tunnel project by utilising its battery-powered vacuum machine to remove construction dust and fine particles from the macadam and walkways within the railway tunnel. This machine is the largest of its kind in the world and enables emission-free cleaning, making it particularly effective in tunnel environments where ventilation and air quality are crucial.

“It is a fantastic opportunity to contribute to such an important project as the Varberg Tunnel. Our vacuum machine excels in hard-to-reach places. In addition to tunnels, we can also effectively use it in bridges and railway yards,” says Per Nilsson, Project Manager at Railcare.

After the cleaning is complete, the final work in the tunnel will proceed for the planned start of traffic in July 2025. With the Varberg Tunnel in operation, travel along the West Coast Line will be smoother and more efficient, benefiting both freight and passenger traffic on this route.



From the Archives

Mallet No. 442.55 stands on the
quayside at Massawa port on October
23rd 2009. *John Sloane*

Eritrea

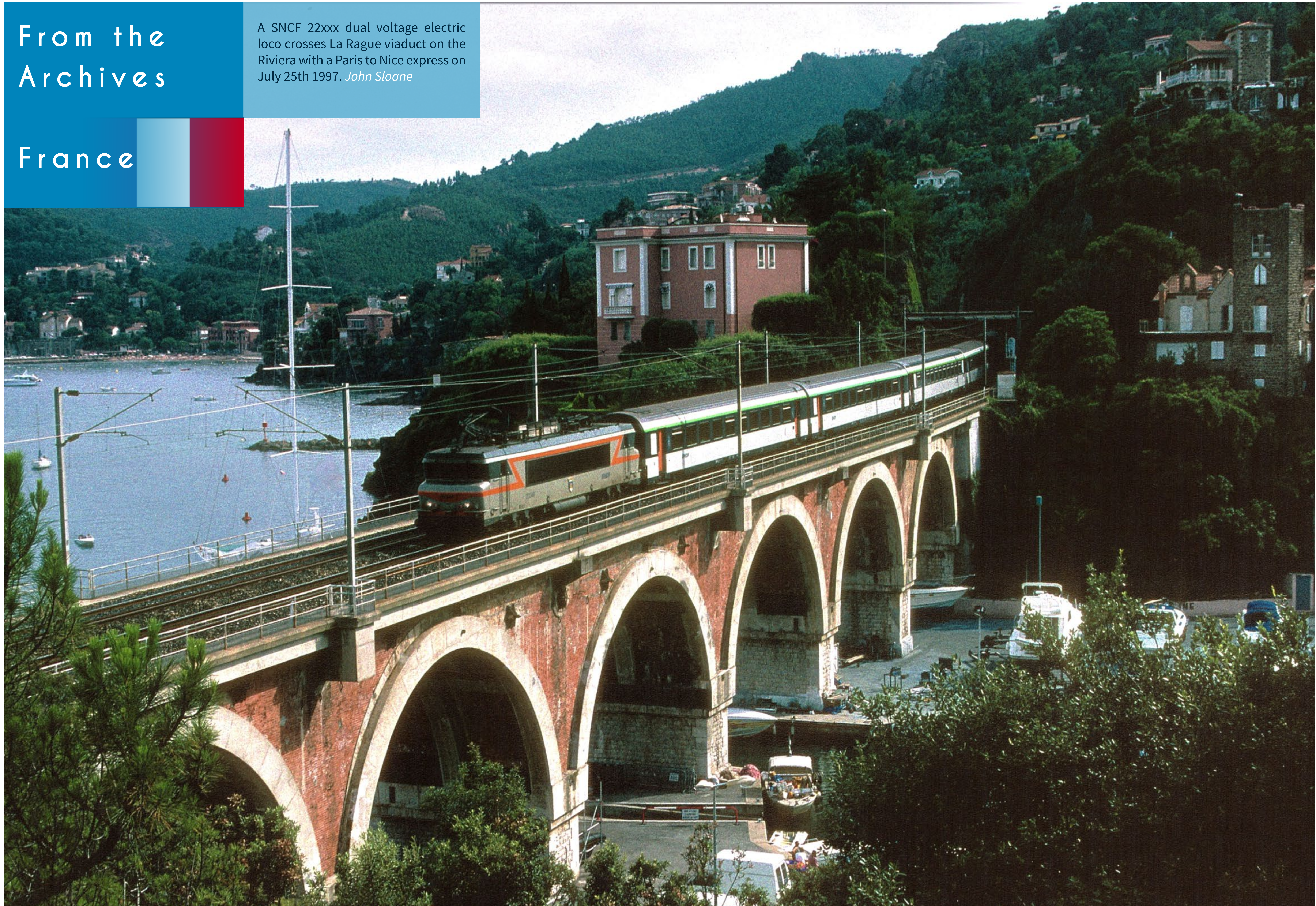
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From the
Archives

A SNCF 22xxx dual voltage electric loco crosses La Rague viaduct on the Riviera with a Paris to Nice express on July 25th 1997. *John Sloane*

France



From the
Archives

Germany

DB Class 103.227 heads a northbound express
at Koln on November 3rd 2000.

John Sloane



From the
Archives

Indonesia

O&K built Mallet 0-4-4-0T No. 10 stands between trips into the plantations at Bah Jambi palm oil mill on April 3rd 1985. *John Sloane*

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From the Archives

Italy

One of the original FS Pendolinos, No. 450.005 calls at Bologna Centrale with a service to Rome on August 31st 1989. *John Sloane*

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From the Archives

On October 28th diesels No. 1808, Nohab
No. 1604 and 1803 rest in the stalls of
Luxembourg roundhouse. *John Sloane*

Luxembourg



From the Archives

A Class 25 'Condenser' loco stands at Beaconsfield shed, Kimberley on October 19th 1973. *John Sloane*

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South Africa

