



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 224Xtra

Whenever I visit stations outside of the UK, the majority of them are clean, pleasant and well maintained, even the smaller ones. Well I have been impressed that although DB in Germany is trying to save money in order to reduce its debt, there is still the passion for keeping stations clean as

DB starts spring cleaning at hundreds of stations
Deep cleaning in around 700 stations • Future stations benefit particularly • DB will invest a total of more than 100 million euros in cleanliness at its stations in 2025 • The sense of security among travellers and station visitors will improve

Deutsche Bahn (DB) is launching a comprehensive cleaning campaign in April at more than 100 future stations and around 600 other stations across Germany. Hundreds of DB employees are on a massive mission, tackling platforms, stairs, tunnels, elevator shafts, glass surfaces, control panels on vending machines and elevators, furniture, and displaycases. The laborious removal of graffiti and chewing gum is also part of the effort. The goal: to visibly improve the appearance of the stations.

Ralf Thieme, Member of the Board of Management for Passenger Stations at DB InfraGO AG: "Once a year, a major clean-up is necessary – this applies to train stations as much as to our living rooms. Our travellers and station visitors want clean stations. We are investing more than 100 million euros in this this year. And it's money well spent. Our surveys show that where things are clean and well-maintained, our passengers are happy to board the train."

Spring cleaning will take place nationwide over the next ten weeks. Many cities and municipalities, including Dresden, Erfurt, Saarbrücken, and Wiesbaden, are participating and simultaneously cleaning the area around the stations.

Passenger surveys show that the sense of safety increases when the station is clean.

One focus of the major cleaning campaign is the more than 100 future stations nationwide that DB modernized last year.

What are stations of the future?
DB is modernizing its stations of the future in a holistic and clear quality standard, with attractive design, improved comfort through more weather protection and new waiting furniture, better passenger information, greater accessibility, and modern lighting. They are as accessible and attractive as possible for passengers. Stations of the future are exemplary of the success of DB's S3 renovation program: DB is developing stations of the future quickly and according to high standards.

In 2024, DB converted 113 stations into stations of the future. In 2025, the stations of the future will go into series production: another 100 will follow this year. DB is modernizing with consistent design concepts along entire lines and routes, including stations on the Hamburg-Berlin line, which will be completely renovated in 2025. In addition to the stations of the future, DB will modernize hundreds more stations across Germany in 2025

Until next month...
David

This Page

Slovenian DMU No. 713.103 working train No. LP3209 from Ljubljana to Črnomelj has just departed the halt at Otovec on March 19th. [Thomas Niederl](#)

Front Cover

SBB Cargo Xload Class 193.458 'Wasserturm Mannheim' is seen near Valburg on April 3rd working a Rail Hub Milano, Melzo (Hannibal/Contship) to Botlekterminal, Rotterdam (C.RO Ports) intermodal. [Erik de Zeeuw](#)



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Partnership with ERR extended: Trust and sustainability on the rails

ÖBB Rail Cargo Group (RCG) and ERR European Rail Rent are banking on continuity: in 2024, the companies extended their partnership – keeping 500 tried-and-tested Shimmns wagons reliably on the rails.

The partnership between RCG and ERR is a prime example of long-term cooperation and mutual trust. The two companies have worked hand in hand for many years and have continued to develop their collaboration to serve the needs of the industry in freight transport efficiently and with high quality.

One example of this is the Shimmns wagons, which are specially optimised for the sustainable transport of coils – coiled steel or metal strip. 500 Shimmns, which are provided by ERR, are permanently available

to well-known steel customers in Austria and Europe. By extending their cooperation, both partners are demonstrating their reliability and their ability to respond jointly to constantly changing market requirements.

More rail – less CO₂

The steel industry is increasingly focusing on sustainability – not only in production, but also in transport. Shimmns wagons are therefore making an important contribution to shifting steel transport from road to environmentally friendly rail. This means lower emissions, more efficient logistics chains and an important contribution to the green transformation of the industry. The ongoing cooperation and joint commitment of ERR and RCG thus contribute to the goal of a sustainable future.

Broad wagon portfolio for strong industries

The partnership between RCG and ERR has a long tradition: in addition to the Shimmns wagons, RCG already uses tank wagons, container wagons, open freight wagons, bulk freight wagons and special wagons for the transport of mineral oil. The continuous expansion of the portfolio reflects the efforts of both companies to continuously develop innovative and reliable solutions for the different industries. The common goal: efficient, reliable and environmentally friendly logistics solutions for the industry of tomorrow.



TransFER Salzburg–Augsburg extended to Ulm

ÖBB Rail Cargo Group (RCG) is expanding its existing TransFER Salzburg–Augsburg to include a further destination: Ulm. This makes the TransFER an even more efficient connection between Austria and Southern Germany.

The TransFER Salzburg–Augsburg–Ulm now operates with three round trips per week instead of two, one of which has been extended to Ulm. This expansion strengthens the link between Southern Germany and RCG's international TransNET, while improving conventional single wagonload services for customers in various industries. It not only facilitates the flow of goods between the two regions, but also strengthens supply chains of numerous companies in Central and South-Eastern Europe. Dangerous goods in accordance with RID can also be transported. RCG offers efficient end-to-end logistics solutions – from transshipment and state-of-the-art warehousing to professional customs clearance.

Direct connection from Salzburg via Augsburg to Ulm

Rail-based antenna connections bring goods from all over Austria to Salzburg, where the TransFER is assembled. The main leg then continues to Augsburg and Ulm – with a continuous connection in the reverse direction back to Salzburg. In Ulm, goods can either be delivered directly to customers via their own sidings, or – if no rail access is available – via the nearby transshipment hub in Ummendorf for collection and delivery.

Transshipment hub Ummendorf: Efficient handling and flexible distribution

The hub in Ummendorf is ideally equipped for the transshipment between rail and road. A wide variety of goods – with the exception of containers and round timber – are handled efficiently on approximately 2,000 metres of track. Handling takes place both under cover and in open areas. Specialised handling is

available for products such as paper rolls, heavy plate and coils. Storage is provided in an area of around 5,000 square metres. Road transport is available for the first and last mile to ensure seamless delivery and collection to and from end customers. This creates a highly flexible and tailor-made solution: while customers with their own siding can be supplied directly via Ulm, the Ummendorf hub handles distribution for companies without a direct rail connection.



Special prize at the Energy Globe Award

Rail transport causes significantly fewer emissions than road transport – however, standard market tools are only able to calculate the actual extent of the savings on the basis of average values. With the MEILS emissions calculator, the ÖBB Rail Cargo Group (RCG) has succeeded in calculating the emissions values precisely and separately for each rail transport operation. It represents a milestone in the transition to sustainable transport – this was also the opinion of the jury of the prestigious Energy Globe Award, which presented the RCG with a special prize for this achievement on March 27th.

What distinguishes the MEILS project?

MEILS stands for “Mapping Environmental Impacts of Logistics Solutions”. The project therefore aims to quantify the positive effects of rail transport on the environment. The tool collects data on all transport operations handled by RCG and collates it to calculate the emissions. In addition to the specific cargo

mass, the calculation also takes the type of traction actually used and the exact route into account. Finally, a TÜV-certified certificate shows the emissions for all consignments in an individually defined period and compares them against the value that would have been generated transporting them by road. This document serves as proof for RCG customers of the sustainability report and as confirmation of their unavoidable emissions in the market being offset.

A benefit for RCG customers and society

In addition to the RCG customers who benefit from this advanced calculation technology, the project has a positive effect on society as a whole: it makes the environmental impact of transport modes visible and thus serves to raise awareness. With the use of actual consignment-specific data, RCG is once again able to position itself as an international pioneer.

The year 2024 was extremely challenging for the entire European rail freight market. Acute decline of commodity volumes traditionally transported by railway continued and many of large carriers across the EU report massive losses, staff reduction and issues with liquidity. Despite further growth in transport performance of ČD Cargo branches and subsidiaries abroad, the total volume of transport decreased to 56.7 million of tonnes in 2024. “The decrease in volumes occurred above all on the domestic transport market, particularly as a consequence of gradual decline in transport of lignite to power stations and heating plants. In the field of metallurgical industry, essential reduction in production of Liberty Ostrava was crucial, and lower demand was also for transport of timber by railway,” comments Tomáš Tóth, chairman of the Board of ČD Cargo, as

ČD Cargo was reacting continuously to the performance decline and started its transformation in time with the aim to adapt itself to the new reality and prepare for the future. “The change in the structure of transported commodities and the overall decline in performance on the rail freight market in the Czech Republic leads us to inevitable reduction in capacities for which we don’t have use. We systematically lower the numbers of freight wagons, locomotives, and also employees. A fundamental change is also happening in the product of Single Wagon Loads, which is economically no longer sustainable in its current form,” continues Tomáš Tóth.

The freight transport segment itself registered a loss of CZK 945 million. “The economic results were negatively influenced above all by transactions related to the ongoing process of downsizing the company – reserves for severance payments to employees and one-time revaluation of the assets, ie redundant rolling stock,” explains Tomáš Tóth. In total, these accounting transactions exceeded the amount of one billion Czech crowns. In case of asset revaluation, it means no real expenditure, but a necessary accounting adjustment which supports transparent management and long-term sustainability of the company.

Photo: ©CD Cargo



Alstom announces an investment plan of over 150 million euro to increase production capacity at its sites in France

Alstom, global leader in smart and sustainable mobility, announces an unprecedented investment plan of more than 150 million euro at its French sites to meet the growing demand of the French and international rail market, particularly for very high-speed trains.

“The very high-speed market is currently experiencing strong growth and Alstom is delighted to see the growing interest in the Avelia Horizon double-deck high-speed train, a truly unique offering on the market”, said Frédéric Wiscart, President of Alstom France. “This unprecedented programme for the Group will enable us to meet our current commitments and strengthen Alstom’s industrial base with innovative technologies stemming from Industry 4.0 to better serve customers”.

Responding to market demand

To better meet the growing demand from the French and international markets for its Avelia very high-speed train platform and deliver on its ongoing commitments, the Alstom Group will increase its production capacity and mobilise its industrial base.

To this end, Alstom is announcing a plan to accelerate its investments, including a 150-million-euro package to increase the Group’s production capacity at several French sites:

- Part of this investment (20%) will go directly towards opening a new assembly line for Avelia very high-speed trains at Alstom’s Valenciennes Petite-Forêt site, a first for this site in the North of France.
- This investment plan will also make it possible to double the carbody shell and

assembly lines for the Avelia very high-speed trains at Alstom’s La Rochelle site.

- These new production lines will make the most of our Lean manufacturing innovations, for improved performance and ergonomics.
- In addition, we will continue our investments in digitalisation and simulation, for example with the ‘TrainLab’ in La Rochelle which helps reduce the testing time for new trains.
- Alstom will also be investing in the industrial capacity of the Belfort site by constructing a new building to prepare for the commercial launch of very high-speed trains. With a length of 250 metres, this new building will be able to accommodate a complete Avelia Horizon trainset.
- Investments are also planned at sites manufacturing components for Avelia very high-speed trains, such as Petit Quevilly,

Ornans, Tarbes, and Le Creusot, including with robotisation and advanced welding technology.

- Alstom is also investing in its supply chain to help its suppliers support the Group’s growth.

These investments will be accompanied by the hiring of at least 1,000 people in France in 2025. These hirings and the investments in Alstom’s capacity in France will also generate or secure more than 2,500 jobs with Alstom’s French suppliers.

Avelia Horizon, the world’s only double-deck very high-speed train

Drawing on more than 40 years’ experience in high-speed commercial service, Alstom’s Avelia Horizon very high-speed train is the latest generation of double-deck trains

capable of operating at speeds of 300 kph. It offers great operational flexibility and guarantees high levels of safety and passenger experience. It comprises two innovative short-length power cars, combining high performance and compactness, and articulated double-deck passenger cars. With the largest seating capacity on the market, Avelia Horizon offers a very high level of service and comfort, while considerably reducing operating costs per seat. Preventive maintenance costs have been cut by 30%, thanks in particular to the optimisation of the bogies.

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Bye bye CO2: Eight customised hybrid metre-gauge multiple units built by Stadler for southern France

Sustainable rail transport is on the horizon for the Chemins de fer de Provence (CP), following the contract signing by Région Sud and Stadler for the delivery of eight hybrid-powered multiple units. The vehicles, customised for CP’s narrow-gauge network, feature battery technology, reducing CO2 emissions by up to 77 per cent. They will be manufactured in Bussnang.

The French railway company Chemins de fer de Provence (CP) and Stadler are paving the way for more environmentally friendly railway operations between Nice and Digne-les-Bains. The two companies have signed a contract for the delivery of eight two-car metre-gauge multiple units. This is one of Stadler’s largest orders for the French market.

The vehicles are replacing CP’s diesel legacy fleet and are equipped with a hybrid drive. The more environmentally friendly trains will be used on the 150-kilometre-long narrow-gauge line between Nice and Digne-les-Bains in the urban area of Nice. The metre-gauge multiple units run on battery power, while the hybrid drive comprises battery and a biodiesel-powered engine for use in rural areas. The hybrid drive significantly reduces CO2 emissions by up to 77 per cent compared to a diesel vehicle. A charging station for the battery is being built in Nice.

The customised trains are 40 metres long and can carry around 180 passengers. They are manufactured at the Stadler plant in Bussnang in northeast Switzerland.

“Stadler is delighted with the order from Chemins de fer de Provence and very pleased to be building customised metre-gauge multiple units for this client. We are proud to be able to make a significant contribution to environmentally friendly mobility on this route in the Région Sud with the hybrid drive,” says Ansgar Brockmeyer, Head of Marketing & Sales at Stadler. “Passengers can look forward to travelling on state-of-the-art, comfortable trains, which take them to their destination in a more sustainable way.”



Alstom equips S-Bahn Hamburg for digital rail operations



The S-Bahn trains will be equipped with the European Train Control System (ETCS) and modern ATO technology for automated train operations.

Alstom, a global leader in smart and sustainable mobility, has signed a contract with S-Bahn Hamburg for a technology upgrade of 82 S-Bahn trains of type BR 490.

The S-Bahn trains will be equipped with the European Train Control System (ETCS)[1] and modern ATO[2] technology for automated train operations. This involves semi-automatic train operation with GoA2[3]. The contract value exceeds 60 million euros[4].

Alstom will equip four prototype vehicles with ETCS Onvia units and ATO technology by 2029 and re-homologate them. This work will be carried out at Alstom's Hennigsdorf

location. The contract also includes the delivery of the technical equipment for the retrofit of the remaining 78 trains.

Additionally, Alstom will support the serial retrofitting process, which will be carried out by Deutsche Bahn. The 82 S-Bahn trains are part of the first batch of BR 490 trains ordered in 2013. Sixty-four S-Bahn trains from the second batch are from the start equipped with ETCS and ATO in the factory. In the future, the entire BR 490 fleet of the Hamburg S-Bahn will be ready for digital rail operations.

"The combination of digitalisation and automation is the key to more green mobility on rail. It allows shorter headways and higher passenger numbers while at the same time reducing energy consumption. This way, climate protection and the mobility shift to

rail go hand in hand," says Tim Dawidowsky, President of the Central and Northern Europe region, Alstom. "With this project, the Hamburg S-Bahn is making an important contribution to the digitalisation of rail in Germany. Alstom supports this effort with expertise, experience, and cutting-edge technology."

Jan Schröder, Chairman of the Management Board of S-Bahn Hamburg, said: "With the full digitalisation of S-Bahn Hamburg, we are setting new standards for the future of rail. I am pleased that we were able to secure a strong partner like Alstom for the retrofit of the last 82 vehicles. The full digitalisation of the fleet is a milestone for increased capacity, better quality, and much higher efficiency in S-Bahn operations. My special thanks go to the city of Hamburg and the Authority for Transport and Mobility Transition for their

strong commitment to S-Bahn Hamburg."

Global leader in digitalisation

With over 120 ETCS projects worldwide, around 24,800 Onvia Cab onboard units in over 200 vehicle types, and more than 13,300 kilometers of equipped tracks, Alstom is a global leader in the digitalisation of rail transport. Onvia Cab 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.

In Germany, for instance, Alstom is equipping 215 S-Bahn trains and 118 regional trains with ETCS and ATO for the flagship project Digital Node Stuttgart.

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[1] ETCS (European Train Control System)

[2] ATO (Automated Train Operation)

[3] GoA (Grade of Automation) GoA2 stands for semi-automated train operations with driver on board.

[4] Order intake in Fiscal Year 2024/25. Fiscal Year 2024/25 ended 31.03.2025.

Image: DB Regio In Hamburg ©Deutsche Bahn AG | Oliver Lang

Stadler supplies 19 FLIRT Akku vehicles for the Central Thuringia battery network

The planned deployment of the FLIRT Akku vehicles is a major step towards the decarbonisation of local rail passenger transport in Thuringia. This order is part of a new DB Regio transport contract that runs from December 2028 to December 2043 and covers an annual service volume of around 3.6 million timetabled kilometres. The new battery-electric vehicles can bridge sections of up to 80 kilometres without overhead lines by using the energy stored during overhead line operation. This enables a significant reduction in CO2 emissions and contributes to locally emission-free operation.

Christine Singer, Chairwoman of the Regional Management of DB Regio Südost: “Winning the contract is an important milestone for us and, together with our partners in local public transport, we are making an active contribution to the mobility transition. We are delighted to be going into operation with these modern, comfortable and environmentally friendly battery-electric vehicles.”

Jure Mikolčić, CEO of Stadler Division Germany: “DB Regio has ordered 19 FLIRT Akku multiple-unit trains for use in Thuringia and we are delighted that the first battery-powered trains for the green heart of Germany will come from Stadler. We are thus making a joint contribution to environmentally friendly mobility.”

Modern equipment and a high level of comfort

The new FLIRT Akku vehicles not only offer more seats, but also barrier-free boarding, generous seat spacing, Wi-Fi, video surveillance and modern electronic passenger information. With 160 seating options in the vehicles in the form of 148 fixed seats and 12 leaning aids as well as separate folding seat-free areas for bicycles, wheelchairs and pushchairs, passengers are offered a high level of comfort.

Pioneering design for Thuringia

For the first time in Thuringia, a binding interior and exterior design was specified

for the vehicles, which will gradually be used in other parts of Thuringia to make local rail passenger transport recognisable.

Stadler further expands market leadership

Stadler has established itself as the market leader in the field of alternative drive technologies. In Europe alone, 50 per cent of all rail vehicles with alternative drive systems come from Stadler. The company has made significant progress in the development and implementation of battery-powered trains. These trains offer an environmentally friendly alternative to conventional diesel drives and are



particularly suitable for routes that are partially non-electrified. Stadler has further expanded its leading position with several successful projects and orders, such as the

delivery of 44 FLIRT Akku trains to DB Regio for use on the Palatinate network and a total of 151 FLIRT Akku trains in Germany.

Deutsche Bahn completes sale of logistics subsidiary DB Schenker to DSV

Deutsche Bahn AG (DB) has completed the sale of its logistics subsidiary DB Schenker to the Danish transport and logistics group DSV for an enterprise value of €14.3 billion.

This represents an important step for DB to focus on its core business. The proceeds from the sale will remain entirely within the DB Group and significantly reduce its debt. The sales process proceeded according to plan and was successfully completed ahead of schedule. In recent weeks, DSV received the final approvals for the acquisition of DB Schenker from the antitrust authorities of the European Union and the United States. DSV's stated goal is to create one of the world's leading companies in the transport and logistics industry. As the new owner, DSV has announced investments of

approximately one billion euros in Germany over the next three to five years.

Dr. Richard Lutz, CEO of DB: “We have completed the largest transaction in the history of Deutsche Bahn and in the history of the logistics industry. For DB, the Schenker sale means less complexity and full concentration on our core business, which we will fundamentally restructure over the next three years in the three dimensions of infrastructure, operations, and profitability. With DSV, DB Schenker gains a new owner that promises a unique market position and international growth prospects.”

Jens Lund, CEO of DSV A/S: “With the completion of the acquisition of Schenker, we have reached a milestone in DSV's history.

We have worked hard towards completing the transaction, and I am delighted to welcome our new colleagues to DSV. With this acquisition, we are a global market leader in the transport and logistics industry, at a time when global supply chains are more in focus than ever and our customers need a reliable and agile global network of services and products. By combining the two companies, we are creating a unique, flexible platform for long-term growth. This will benefit our customers, employees, shareholders, and all our stakeholders.”

Jochen Thewes, CEO of Schenker AG: “Today marks the end of the most successful era in Schenker's more than 150-year history. We look back with great pride on the outstanding results we have achieved in recent years

under our owner, Deutsche Bahn. With DSV, we now have the opportunity to build the world's largest logistics group. We look forward to working together on this great vision and are committed to a responsible, collaborative partnership.”

In December 2023, DB initiated the open, transparent, and non-discriminatory process for the sale of DB Schenker in accordance with the requirements of EU law. In the competitive sales process, DSV prevailed with the offer that was clearly most economically advantageous for Deutsche Bahn AG. DSV and Deutsche Bahn signed the sale agreement in September 2024. DB had already completed the sale of its European local transport subsidiary DB Arriva in the summer of 2024.

About DB Schenker

With approximately 71,100 employees at over 1,850 locations in more than 130 countries, DB Schenker is one of the world's leading logistics service providers. The company offers land transport, air and ocean freight, as well as comprehensive logistics solutions and global supply chain management from a single source. With the goal of a sustainable future for the logistics industry, the company continuously invests in innovative transport solutions, renewable energies, and low-emission products for its customers.

Siemens Mobility builds emission-free hydrogen-powered trains for Südostbayernbahn

Siemens Mobility has started production of the hydrogen-powered trains that will begin operating on the Südostbayernbahn network in late 2026. The order is for three 2-car Mireo Plus H trains. Ordered by the state of Bavaria, the ultra-modern hydrogen trains will replace diesel trains currently operating from the network's Mühldorf hub and significantly reduce CO2 emissions as well as noise and exhaust gas in the region. The new trains will feature nine spaces for bicycles, special high-frequency-permeable windows for improved mobile phone reception, and comfortable car access thanks to their low-floor design. Equipped with the European Train Control System (ETCS), the Mireo Plus H ensures maximum operational safety and efficiency. Along with the series contract, Siemens Mobility was also awarded a service contract for the trains' hydrogen supply system.

The hydrogen trains will serve eight stations on the Mühldorf (Upper Bavaria) – Tüßling

– Burghausen non-electrified route, which is 32.3 kilometres long. Deutsche Bahn (DB) will build an electrolysis plant in Mühldorf that will be 100-percent powered by green electricity.

Andre Rodenbeck, CEO Rolling Stock at Siemens Mobility: “We are proud to be delivering Mireo Plus H hydrogen trains to Deutsche Bahn and thus enabling emission-free mobility in our home region. Our hydrogen trains feature mature technology, high energy efficiency, strong drive power, long operating range, and low noise levels.” “Hydrogen trains are an important building block for DB on its path to achieving climate neutrality,” said Cornelia Würtz, Managing Director of DB RegioNetzVerkehrs GmbH. “By introducing the Mireo Plus H, we are helping drive the climate-friendly rail transport transition at Südostbayernbahn.”

The Mireo Plus H is a state-of-the-art hydrogen train based on Siemens Mobility's

proven regional train platform, which is available with electric, battery, or hydrogen-powered drives. On the hydrogen-powered variant, a roof-mounted fuel cell and lithium-ion batteries installed beneath the car floor ensure operation completely free of CO2 emissions. With its hydrogen supply system and electric drive, the train has a high drive power of 1.7 MW that enables it to accelerate up to 1.1 m/s² and reach a top speed of 140 km/h. The train has a range of up to 1,200 kilometres on a single tank of fuel, depending on factors such as the route topography and driving style. The trains also have impressively low lifecycle costs and a rapid fuelling function that allows refuelling in approximately 15 minutes, depending on the fuelling station.

The Mireo design, based on an integrated lightweight aluminium structure, is energy-saving and environmentally friendly. The train's improved aerodynamics, energy-efficient components and intelligent



onboard network management system also help reduce resources and emissions. Hydrogen trains are acknowledged as an environmentally friendly alternative to conventional diesel trains and offer several advantages:

- Environmental friendliness: Hydrogen trains only emit water vapour during operation and no harmful emissions such as carbon dioxide (CO₂) or nitrogen oxides (NO₂), helping to reduce air pollution and combat climate change.

- Flexibility: Hydrogen trains can operate on non-electrified railway lines since they convert their tanked hydrogen into electrical energy using on-board fuel cells and needn't rely on overhead contact lines or other power sources. A two-car Mireo Plus H train has a range of up to 1,200 kilometres on a single tank of hydrogen.
- Noise reduction: Hydrogen trains are quieter than conventional diesel trains since they are electrically powered and produce less mechanical noise.

Concentration on core business: Stores remain, DB dissolves ServiceStore DB brand

Retail specialists take over the approximately 200 shops for travel supplies at train stations and continue to run them as innovative, new concepts under their own name
DB restructuring program S3 takes effect

Deutsche Bahn (DB) is discontinuing its “ServiceStore DB” brand for travel convenience stores at train stations. The stores, which are primarily located at smaller and medium-sized stations, will continue to operate under the brand names of their respective operators. For travellers and visitors, this means that the stores will remain and will continue to be modernized. At the same time, with this step, DB is focusing its station-related capacities on its core business: the holistic development of train stations into “stations of the future,” the renovation of technical and structural facilities, and the improvement of passenger information.

“We want the best for our customers and, at the same time, advance DB's restructuring course. That's why we're placing the approximately 200 stores in the hands of specialists. This will provide a boost to investment and innovation in passenger service and make our stations, and thus rail travel, even more attractive,” said Ralf Thieme, Member of the Board of Management for Passenger Stations at DB InfraGO.

The “ServiceStores DB” concept was originally intended to provide space for small kiosk providers to operate a comprehensive range of passenger services at the station with uniform, high-quality standards. However, the majority of these businesses were taken over by a few market leaders with their own expertise in passenger needs. Therefore, DB is now paving the way for the contract partners to continue operating the stores under their own brands, make the necessary investments in modernization, and implement their own new, innovative concepts. This benefits both passengers and station visitors. The staff at the ServiceStores DB are employees of the respective operators. The ServiceStore DB brand will be discontinued by the end of 2026.

DB has launched “S3,” a comprehensive program for the structural restructuring of the Group over the next three years. This also means concentrating on its core business. By the end of 2027, DB will restructure the Group in three areas: infrastructure, railway operations, and profitability. For train stations, this means the focus is entirely on holistic modernization



and creating more attractive, clean, and safe stations with a high quality of stay for travellers. To this end, DB will develop around 100 stations per year into Stations of the Future by 2027.

With the restructuring program, DB is creating a stable basis for the continued growth of Strong Rail and for stations as attractive hubs for modern mobility.

HHPI Signs for 9th EuroDual from ELP – Powerful Partnership Continues

Heavy Haul Power International GmbH (HHPI) and European Loc Pool (ELP) are continuing their long-standing partnership. With the signing of a new leasing agreement for another EuroDual locomotive, HHPI's fleet will grow to a total of nine powerful machines from ELP. This marks another consistent step for a company that has focused on strength, efficiency, and reliability in rail freight transport since its founding.

Where HHPI once relied on heavy diesel locomotives like the Class 66, today the company prioritizes efficiency and flexibility, consistently shifting its transport operations to a more sustainable rail-based model. The EuroDual locomotive has established itself as an indispensable backbone for HHPI's block train operations. Its unique combination of up to 6.2 megawatts of electric power and 2.8 megawatts of diesel power for non-electrified sections enables a tractive effort of 500 kilonewtons in both electric and diesel modes, allowing the company to move even the heaviest loads efficiently and flexibly. HHPI offers block train solutions in which locomotive and wagon sets operate as a fixed system. The EuroDual fits seamlessly into this concept, creating independence from additional shunting or route locomotives.

“The EuroDual impresses us every day. Its performance both across the network and on main corridors is outstanding and gives us operational security. At the same time, it supports our strategy of largely phasing out pure diesel operations in the future,” explains Thomas Schöfbauer, Managing Director of HHPI. “With this ninth locomotive, we are preparing for further growth and the increasing demands of our customers.”

The EuroDuals are primarily used by HHPI on key heavy freight corridors in Germany and beyond. Thanks to their high tractive power and operational versatility, HHPI can also handle demanding logistic tasks on partially electrified routes without compromising on economic efficiency. This capability is made

possible by the dual drive – a true unique selling point in the market.

“Tractive power, sustainability, and energy efficiency are not separate factors for us, but closely intertwined. For us, the EuroDual stands as a synonym for these values. Its flexibility is the decisive building block for a sustainable logistics model,” Schöfbauer adds. “The decision for another locomotive was easy because we know the reliability and quality from years of experience.”

Thanks to European Loc Pool's full-service leasing model, HHPI not only gains access to cutting-edge technology but also benefits from a comprehensive service package. All maintenance and servicing activities are fully covered, allowing HHPI to focus entirely on its core business. The collaboration is characterized by trust, technical expertise, and a shared commitment to innovation.

“We know what we have in ELP. The locomotives fully meet our requirements, and the collaboration is always on an equal footing. This is exactly how modern leasing should work,” Schöfbauer summarizes.



Leidenschaft für Zugkraft

Passion for Traction

Willem Goosen, CEO of European Loc Pool, is pleased with the continued trust: “HHPI was one of our first customers and remains a close partner to this day. Their decision to opt for another EuroDual underlines the long-term success of our collaboration. We look

forward to achieving many more milestones together.”

With the addition of its ninth EuroDual, HHPI once again proves that it is one of the pace setters in heavy rail freight. The combination of technical excellence, a clear strategy, and

strong partnerships makes the company a role model for modern rail freight logistics in Europe. The locomotive will be delivered to HHPI in September this year.

BBL Logistik Signs for Two More Euro9000 Locomotives – A Milestone in a Successful Partnership

BBL Logistik GmbH and European Loc Pool (ELP) are continuing their successful collaboration and strategically expanding their fleet. With the signing of a new leasing agreement for two additional Euro9000 locomotives, BBL reaches another milestone: the fleet now includes a total of nine locomotives from ELP (five EuroDual and now four Euro9000 locomotives). This makes the company not only one of ELP's most loyal but also one of its largest customers. The decision underscores the joint ambition to make rail freight in Europe more efficient, sustainable, and high-performing. The Euro9000 is the flagship among modern six-axle hybrid locomotives, combining maximum traction power with ultimate flexibility. With an electric power output of 9 megawatts, an additional diesel engine providing up to 1.9 megawatts, and an impressive tractive effort of 500 kilonewtons, it is ideally suited for cross-border operations along challenging European corridors.

“We are once again opting for the Euro9000 because it sets new standards in terms of traction, flexibility, and efficiency,” says Jens Ziese, Managing Director of BBL Logistik GmbH. “With the EuroDual, we have already achieved excellent results on both electrified and non-electrified routes. The Euro9000 takes it a step further with its multisystem capabilities. This performance is a true gamechanger, especially for our complex construction train operations.”

The new locomotives will be deployed primarily in heavy railway construction transport, particularly for supplying non-electrified construction sites, where reliable traction and a strong dual power system are critical. Thanks to the seamless combination of high-performance electric traction and a powerful diesel engine, non-electrified route sections can be operated just as efficiently as main lines. This is especially important for BBL, whose core business includes logistics for construction sites and the supply and removal of materials for railway construction

projects.

“For us, sustainability, energy efficiency, and operational flexibility are not just buzzwords but daily requirements,” adds Thomas Gritzka, also Managing Director at BBL. “The Euro9000 brings all of this together in one machine and perfectly aligns with our strategy. High tractive power was a key decision-making factor for us – but also the ability to operate internationally without switching traction types.”

European Loc Pool's full-service leasing model not only delivers state-of-the-art locomotives but also includes complete maintenance and support throughout the lease term. For BBL, this translates into maximum availability, high planning reliability, and predictable cost structures – all decisive factors in a dynamic logistics market. “We expect reliability, innovation, and a deep understanding of our needs from a leasing partner – and that's exactly what ELP delivers,” Ziese continues. “The partnership-based communication, technical support, and long-term orientation of our collaboration are invaluable to us.”

Emiel Knarren, Chief Commercial Officer at ELP, emphasizes: “BBL is a partner who shares our vision – powerful, future-proof solutions for rail freight transport. The decision to opt for two more Euro9000 locomotives confirms

their trust in our concept and motivates us to continue offering the best solutions for our customers. We are proud to walk this path together.”

With the deployment of the Euro9000, BBL once again proves to be an innovation leader in the industry. Together with ELP, they are actively shaping the transformation of European rail freight – with foresight,

responsibility, and technical excellence. The locomotives will be delivered to the company in May 2025.

About BBL

BBL Logistik GmbH is a nationwide rail transport company headquartered in Hanover, with branches in Hersbruck, Frankfurt/Main, Mülheim, Ludwigshafen, Lübeck, and a maintenance facility in

Oebisfelde. The company specializes in the logistical supply and removal for railway construction sites, construction site logistics, and the transport of track construction materials, construction machinery, and various other goods.



Leidenschaft für Zugkraft

Passion for Traction

Turnaround initiated: DB InfraGO presents new status report



Overall rating for all facilities and stations has improved slightly

More than 380,000 facilities evaluated according to school grading logic

Network scores 3.00, stations improve to 3.03

For the first time in years, the condition of Germany's railway infrastructure has not deteriorated further. This is demonstrated by the new InfraGO 2024 Condition Report. All bridges, tunnels, supporting structures, tracks, switches, level crossings, signal boxes, overhead lines, and station infrastructure facilities were examined and evaluated using the school-grade system. The condition rating for the entire rail network improved from 3.03 to 3.00 compared to the previous year, with the area network beyond the main corridors performing better than the heavily used sections with a condition rating of 2.96. The condition rating for the stations improved from 3.09 to 3.03.

Dr. Philipp Nagl, CEO of DB InfraGO AG : "This hasn't happened for many years: We have stopped the deterioration of our infrastructure. The new condition report clearly shows that last year's record construction

volume of €19.6 billion was well invested. Now it's important to consolidate these funds over the long term – only then can a true turnaround be achieved. Because despite our current success, many of our facilities and stations are still in poor condition. We have to improve them to convince customers to use the railway. This can only be achieved if we can consistently pursue our renovation course. The approved special fund offers a unique opportunity for this."

Since its launch in January 2024, DB InfraGO, in close coordination with the federal government, has prioritized investments in and maintenance of the existing network. The clear goal: to halt the aging of the railway and reverse the trend. The InfraGO condition report, for which more than 380,000 infrastructure assets were assessed, is showing initial results. The improved condition rating for the rail network is primarily due to new tracks and switches; the so-called superstructure is one of the sections particularly relevant to punctuality. On the Riedbahn line between Frankfurt/Main and Mannheim alone, the general renovation improved the condition rating for tracks, switches, signal boxes, and level crossings from 4.20 to 1.52. DB InfraGO was also

able to improve the condition rating at the 113 completed future stations through a large number of new facilities and the upgrading of the existing asset portfolio.

Last year, DB InfraGO renewed and modernized a total of around 2,000 kilometres of track, 1,800 switches, and 120 bridges covering approximately 35,000 square meters, as well as 3,500 control and safety technology actuators. This public-spirited company also carried out construction work at more than 870 stations. This included, among other things, the renewal or replacement of more than 200 escalators and elevators, the conversion of approximately 150 platforms to make them barrier-free, and the replacement of 1,600 monitors and passenger information displays. At the same time, the concept of "future stations" was established with the implementation of these measures at 113 stations. There is still an urgent need for action to modernize control and signalling technology. Interlocking systems only achieve a rating of 4.12. Every second of the approximately 4,000 interlocking systems is in need of renovation. Therefore, DB will replace 200 outdated interlocking systems with modern technology in the coming years. Overall, almost 17 percent of the rail

network's systems require renovation, and around 35 percent require repair. This is also reflected in the regional assessment of the condition of the infrastructure. The eastern German states, which have already invested extensively in modernizing the rail network since reunification, achieved better condition ratings than the states in the rest of Germany. At the stations, there is a particular need for action in the reception buildings, information and telecommunications technology systems, and elevators. To ensure a stable and efficient infrastructure in the long term, further, targeted investments are therefore necessary.

The condition report provides DB InfraGO with a key basis for determining and effectively managing maintenance and renewal needs. This public-benefit company is responsible for the operation, maintenance, and further development of Europe's largest rail network, with over 34,000 kilometres of track, as well as for the design and operation of approximately 5,400 stations nationwide. Infrastructure renovation is one of three pillars of the S3 restructuring program to get the railway back on track. It forms the basis for improving operational quality and punctuality, as well as the Group's economic recovery.



Germany

BSAS Eisenbahnverkehrs GmbH & CO. KG Stadler Eurodual Class 159.210 approaches Steinbach am Wald with Gera to Vohburg tank. The huge bark beetle catastrophe in the Franconian Forest is the result of spruce monocultures and global warming.
Erik de Zeeuw











India



On April 5th, WDP No. 15506 departs Abohar, having run around its train from Bathinda to Fazilka. *Mark Torkington*







Netherlands

On March 15th, NS VIRN No. 49407 working train No. IC3965 is seen near Bovenkarspel Flora. *Thomas Niederl*







Norway

At the end of its 1012 km journey, train No. 93 stands at Stockholm C on April 14th behind SJ Rv6 No. 1400. The train departed Narvik at 15:11 the previous day and is scheduled to take 19 hours and 2 mins to complete the journey. The train conveys a portion from Luleå C which is attached at Boden C. The loco from Luleå then works the train forward to Stockholm. *Andy Pratt*



Norway

VY operated No. 73043 is waiting to depart Oslo S on April 10th with train No. IC141, the 15:45 to Göteborg Central. Although they have been in service 25 years now, the units still have a futuristic look to them. *Andy Pratt*



SJ Nord operated Di4 No. 4.651 enters Trondheim Sentral station with the stock for train No. 471, the 07:49 to Bodø on April 11th. Following a period of loco shortages, the day train only started running throughout the previous week. Before that it was only running to Mo i Rana where the loco ran round before heading back south. The night train between Trondheim and Bodø remains suspended indefinitely. *Andy Pratt*





SJ Nord's No. 4.651 has just arrived at Bodø after it's 9h 55min, 729km run from Trondheim on April 11th. The loco has pushed its train back in order to run round ready for its return to Trondheim the next day. *Andy Pratt*





Norway

On April 10th, VY operated EL No. 18.2254 has recently arrived at Oslo S with train No. 62, the 08:08 from Bergen. *Andy Pratt*



Norway



SJ Rc6 No. 1386 departs Oslo Sentral with train No. IC674, the 14:36 to Stockholm Central on April 10th.
Andy Pratt

































VR FleetCare modernises SJ's X40 electric trains in Oulu

A major rolling stock project is underway at VR FleetCare's Oulu project centre as SJ's double-decker X40 electric trains are visiting Finland for modernisation. During the project, the X40 trains will be refurbished inside and out, extending their life cycle by 15-20 years. The contract is multiannual, and the first train returned from Oulu to Sweden in late 2024 and started passenger service in early 2025. The last modernised train is scheduled to return to passenger service in early 2028. FleetCare will modernise a total of 27 X40 trains for SJ at the Oulu project centre.

New paint shop to ensure high quality

During the modernisation, the trains will undergo a major refurbishment, with a new commercial look, improved accessibility, and a more comfortable interior with new surface and layout solutions. VR FleetCare has invested nearly 10 million euros in a new paint shop and facility improvements at its Oulu project centre, as part of new fleet projects. SJ's X40 trains are the first to undergo surface treatment in Oulu, where they will be thoroughly inspected, possible corrosion damage will be repaired, and the surfaces will be patched and smoothed before being given a new, grey and metallic topcoat with black and green details. The new look is carried through to the interior in the form of refined details. All seat frames are painted, seat cushions are replaced and upholstered, tables are replaced, and some walls are foiled to make the trains more comfortable.

Investing in travel comfort

Improving travel comfort is the main objective of modernisation. So, everything that is done to the train is aimed at making the journey more comfortable. When the trains arrive in Oulu, the wagons are first thoroughly cleaned. All interior surfaces are cleaned, floors are sanded and waxed, and the air conditioning is fumigated and disinfected. This ensures a clean environment and fresh air quality for passengers.

The fluorescent lighting on the train will be replaced by LED lighting. The new lighting solution is not only more energy efficient, but it also improves visibility and the overall atmosphere on board. The cab roof lights will also be replaced. At the customer's request, the layout of the first and second class of X40 coaches will be modified. These changes have been made with the passengers and train crew in mind. For example, in first class, the seats facing each other are removed and replaced by seats side by side. This solution provides more legroom in each seat. The new layout also allows for smoother cleaning.

On the Linköping-Stockholm-Uppsala-Gävle route, commuters are the largest group of passengers on the X40 trains, so special attention has been paid to working conditions on board. In the first class, space dividers have been added to separate the workstations from the rest of the cabin and to provide a more relaxed working environment. The second class is also more comfortable thanks to larger desks and relocated sockets. USB-A and USB-C charging facilities have been added to the sockets, improving the travelling experience over the life of the train.

The train's toilets will get a facelift as part of the modernisation: the toilets will be fitted with a new mirror, soap dispenser and handles, among other things. The washbasin will be refurbished, and the wall will be foiled.

Achievable X40

Accessibility has been one of the main factors guiding the design. Good accessibility considers the different types of passengers and enables a more comfortable journey for all. Accessibility on the X40 fleet has been improved by renewing all signage and markings, both indoors and outdoors.

Seat numbering has been implemented on the armrests of the seats and on the edge of the luggage racks.

The Passenger Information System (PIS) will also be updated. The PIS provides passengers with information about their journey, such as timetable, stops and services on board.

During the modernisation, the old PIS displays will be removed and replaced by new displays. The number of displays will be increased by also installing displays in the front of the train and all displays will be placed in more accessible locations.



Alstom wins contract to deliver high-capacity driverless signalling system for Taichung Blue Line metro in Taiwan

Alstom, a global leader in smart and sustainable mobility, has been awarded a contract worth €159 million^[1] to provide high-capacity driverless signalling system for the upcoming Taichung Blue Line metro (MRT), a milestone project set to transform public transport across the city and beyond.

Alstom is part of a strategic international consortium chosen by the Rapid Transit System Bureau of Taichung City Government to deliver a complete metro system for what will become Taichung's second fully-fledged MRT line, working with Singapore Technologies Engineering (STE), CTCI and Hyundai Rotem Company.

As the signalling consortium partner, Alstom will provide its Urbalis CBTC^[1] system, the same successful platform already in operation on Taichung's Green Line. The system will enable Blue Line trains to operate more

frequently and precisely, even at peak times, with shorter waiting times. It will help to absorb the rising ridership as the city continues to expand. The system maximises network capacity by allowing shorter headways, down to 90 seconds, which increases the frequency of trains and reduces commute time.

Spanning 24.8 kilometres and comprising 20 stations, the Taichung Blue Line will link Taichung Port in the west with Taiwan Railway's Taichung Station in the east, thereby creating a major connection between the present Green Line and the future Orange Line. Supporting the Blue Line project with Alstom's technology contributes to fulfilling the long-term goal of the government to create an integrated, multimodal transit system for one of Taiwan's fastest-expanding metropolitan areas.

Toby Tiberghien, Managing Director of Alstom, East

Asia, said: "Following the success of the Green Line, which began revenue service in 2021, we are honoured to continue our journey in Taichung with the new Blue Line. Our Urbalis solution will deliver an efficient and reliable driverless signalling system through a high-quality solution and service excellence, supporting our commitment to build a better connected future for the city."

With over 40 years of active presence in Taiwan, Alstom has delivered signalling systems to the Taipei Metro line and continues to play a leading role in contributing to Taiwan's future of public transport, from automated metros to next-generation trams. Today, in addition to Taichung's Green Line signalling system in revenue service, Alstom also supplies the Urbalis Forward signalling solution in Taiwan for Taipei Wanda Phase 1, Phase 2 and Taipei Circular Line Phase 2 lines in

construction, as well as 35 Metropolis metro trainsets for the Wanda-Zhonghe-Shulin Line.

With over 30 years of expertise in CBTC and the successful equipping of over 190 metro lines across 32 countries, Alstom stands as a formidable leader in the mass transit market. Our advanced Urbalis and Onvia technology positions us at the forefront of automation solutions for both urban and mainline rail systems.

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^[1] Communication Based Train Control

Alstom to supply 35 electric Coradia Stream interregional trains and associated maintenance in Bulgaria for €600 million

Alstom, global leader in smart and sustainable mobility, leads the BULEMU consortium that has signed a contract with the Ministry of Transport and Communications of Bulgaria, for the delivery of 35 electric Coradia Stream interregional trains including 15 years of maintenance. The total value of the contract amounts to €720 million, of which Alstom's share is €600 million. The BULEMU consortium is formed by Alstom and the local company RVP Invest, which will provide the maintenance facility. The 35 inter-regional EMUs trains will be the first provided by Alstom for passenger operation in Bulgaria and the first electric interregional trains purchased in the country in the last 20 years. The EMUs will be used to service passenger and intercity trains with journey times of up to 4-5 hours.

"The new electric interregional Coradia Stream trains for Bulgaria will contribute to more modern and sustainable transportation in the country – in line with our ambition to lead the way towards greener and smarter mobility worldwide. I am delighted that our Coradia interregional trains, appreciated in so many European countries, will run in Bulgaria as well. This contract completes the portfolio of Alstom solutions in this country, from

signalling and infrastructure projects to passenger trains and maintenance capabilities," said Gian Luca Erbacci, President of Alstom Europe.

"These trains will enable the implementation of the state policy in the field of passenger rail transport, which aims to attract more passengers through a more regular service with an increased quality and comfort of service as well as reduced emissions," said Grozdan Karadjov, Deputy Prime Minister and Minister of Transport and Communications in Bulgaria.

Developed specifically for the European market, Coradia Stream interregional trains are equipped with the ERTMS Level 2^[1] traffic control system and comply with both European standards (EN) as well as Technical Specifications for Interoperability (TSIs), being capable of operating under all the main European power supply systems. The maximum speed of the trains will be 160 km/h. Each train will have six cars, a total capacity of over 320 seats and 100% low floor, ensuring easy access for all passengers. There will be two entry doors on each side of the middle cars and one door on each side of the

end cars. The passenger information system will include both audio and dynamic visual displays. Each car in the train will be equipped with large luggage racks. These Coradia Stream interregional trains will also be equipped with a digital passenger counting system with high-precision sensors, as well as sockets for charging of electronic devices. Each train will have four modern controlled emission toilets, evenly distributed along the entire length of the train, with one designed for people with reduced mobility. There will be designated spaces for bicycles and strollers. The final configuration, colours and finishes will be fully customised according to the requirements of the Contracting Authority during the design stage. The train is part of Alstom's Coradia range of regional trains, which have demonstrated efficient and reliable performance in operation throughout Europe for over thirty years. To date, Alstom has sold over 4,000 Coradia regional trains worldwide. Several European countries, including Denmark, France, Germany, the Netherlands and Spain, already benefit from their performance and comfort.

Together with RVP Invest, Alstom will ensure the

trains for Bulgaria operate safely and reliably through comprehensive maintenance services. The maintenance programme includes preventive maintenance activities, scheduled repairs and overhauls, as well as emergency repairs over a period of 15 years. Alstom's FlexCare portfolio of solutions takes rail assets to the next level with tailored and flexible services for every stage of their lifecycle. From train operations and maintenance to parts supply, overhauls, and modernisation, Alstom supports asset owners in achieving the highest fleet performance. In Bulgaria, Alstom is providing maintenance services to the fleet of the national passenger rail operator BDZ, as well as railway infrastructure modernisation in several ongoing projects, of which one is already completed and in warranty phase.

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^[1] European Rail Traffic Management System is one of the largest adoptions of digital technology in rail, aiming at replacing the different national train control and command systems in Europe. With ETCS Level 2, data is transmitted by radio to the train using GSM-R.



Alstom starts construction of new depot for the maintenance of FGC trains connecting with Barcelona airport

Alstom will carry out the maintenance of the Coradia Stream trains for FGC for a period of 15 years in this new depot, situated on the same land as the Santa Perpètua de Mogoda factory

On April 9th, FGC President Carles Ruiz Novella and FGC General Manager Alicia Valle Cantalejo visited the Alstom facilities in Santa Perpètua de Mogoda. They were accompanied by Alstom Europe's President Gian Luca Erbacci and Alstom Spain and Portugal's Managing Director Leopoldo Maestu. The visit marked the start of construction of Alstom's depot for maintaining the ten trains that will operate between Barcelona and Josep Tarradellas Barcelona-El Prat Airport starting late next year through early 2027.

Alstom's new depot will handle the maintenance of the trains for 15 years. Spanning 3,500 m², it will feature two maintenance tracks, auxiliary workshops, a warehouse, workers' quarters, and project offices. The facility, to be built by Comsa, will also include an auxiliary services workshop and a rail connection to the Adif railway network.

The project covers 12 hectares, corresponding mainly to the construction of a road access, the access railway track, the track yard, workshop and separation of accesses and segregation of the factory. Additional work involves a third auxiliary track with the wheel turning equipment, the train washing tunnel and a traction substation for the new track sections.

FGC President, Carles Ruiz Novella, highlighted that "with the start of work on the new maintenance depot, together with Alstom, we are taking a step forward in advancing this new service". Ruiz assured that "the connection with Ferrocarrils between Barcelona and Barcelona-El Prat Airport will significantly improve sustainable mobility in the area surrounding the Airport and reduce the journey time from the centre of Barcelona to terminals 1 and 2 of the Airport". Along these lines, he stressed that "the new service will place us alongside the best airports in the world in terms of rail accessibility".

"It is always a pleasure to inaugurate new depots and projects, showing our commitment to Catalonia. With more than 1,100 direct employees, Alstom's industrial site in Barcelona is a global benchmark, not only for its operational excellence, but also for its commitment to sustainability, flexibility and its ability to diversify and take on new challenges. This new Alstom depot in

Catalonia, which will maintain the new FGC fleet, is an example of our local maintenance capability and our proximity to our customers." said Leopoldo Maestu, President and CEO of Alstom Spain and Portugal.

The delegation visited Alstom's facilities to observe the progress in the manufacturing of the trains that will connect Barcelona-El Prat Airport. Specifically, they visited the two cars from the first train that are in a more advanced stage of manufacture: an intermediate vehicle and a vehicle with a driver's cab.

The Coradia Stream trains, with a total capacity of 656 passengers, will be accessible, without access steps from the platform, and will have an automatic ramp at the doors near the reduced mobility area. In each train, there will be 20 panoramic screens dedicated to train information and nine screens, also panoramic, dedicated to airport information, with information on flight departures and arrivals. In addition, all vehicles will have multiple luggage storage spaces.

The new FGC service will link the centre of the Catalan capital with the two terminals of Barcelona-El Prat Airport, with a frequency of every 15 minutes and a journey time of just over 20 minutes (between Passeig de Gràcia station and T-1). The new line, currently under construction, will be 22.7 kilometres long and have a total of 9 stations: Sant Andreu, Sagrera, El Clot, Passeig de Gràcia, Sants, Bellvitge, El Prat, Airport T-2 and Airport T-1."

With over 150 years of presence in Catalonia, Alstom is one of the main players in the sustainable mobility sector in the Region. With more than 1,500 employees in Catalonia, Alstom has industrial and technological presence for all the activities related to railway mobility, including the only Rolling stock manufacturing site in Catalonia, signalling engineering sites, services activities, R&D, electrification and turnkey projects.

Image: New maintenance depot Santa Perpetua ©Alstom



Italy

Stadler sells over 100 tailor made trains in Italy

The Italian railway operator Ferrovie della Calabria has ordered three new tailor made diesel-electric metre-gauge multiple units from Stadler. Signed at the end of March, this new contract means that Stadler has sold more than 100 tailor made trains in Italy, consolidating its position as a market leader for customised vehicles.

Ferrovie della Calabria (FdC) and Stadler signed a contract for the delivery of three diesel-electric metre-gauge multiple units at the end of March. This new order brings the total number of multiple units ordered by FdC to 12, including the nine hydrogen-powered ordered over the last two years. Improving the overall efficiency and sustainability of the regional transport in Calabria, the new fleet of trains will serve the Cosenza – Catanzaro route. They will be manufactured at Stadler's headquarters in Bussnang and will enter commercial service at the beginning of 2027.

A unique product portfolio

The customised metre-gauge multiple units have been especially developed for the Italian market to meet specific requirements. For example, the trains are smaller and have a low axle weight, so that they can pass through tunnels and travel on lines operated by different railway operators. The trains feature different variants and configurations, including rack and pinion

drives, as well as other drive systems, including diesel-electric, battery and hydrogen power. This demonstrates the leading role Stadler plays not just in the field of tailor made vehicles, but also for alternative drive systems.

Great success on the Italian market

Stadler's first breakthrough in the tailor made sector in Italy was in 2007 with the signing of the first framework agreement with FdC. This was for the supply of diesel-electric metre-gauge trains with rack and pinion drive. Based on this first project, Stadler has since developed further variants for the railway operators Ferrovie Appulo Lucane (FAL) in Apulia and Basilicata, Azienda Regionale Sarda Trasporti (ARST) in Sardinia and Società Subalpina di Imprese Ferroviarie (SSIF) in Piedmont.

Maurizio Oberti, Stadler's Marketing & Sales Director for Italy, says: "I am delighted that we have sold more than 100 tailor made trains in Italy and can further expand our presence in this important market. This is a great milestone and I would like to congratulate the entire Stadler team. These projects are particularly complex and require intensive collaboration with our customers as well as specific expertise and teamwork."

Photo: Metre gauge multiple unit ©Stadler



Norway

On April 10th, the 13:00 Flytoget service departs Oslo Lufthavn Gardermoen on its short journey to Oslo City Centre. The Airport Express service costs almost double the price of the regular commuter train for a journey just 4 minutes faster. *Andy Pratt*



Slovakia

Stadler expands its presence in Slovakia with new KISS trains

New state-of-the-art electric double-decker KISS units will see Stadler's presence in Slovakia increase two-fold

Železničná spoločnosť Slovensko (ZSSK) and Stadler have signed a contract for the delivery of up to four additional trains for its regional rail transport system. The contract can exceed up to EUR 100 million.

On April 30th 2025, Železničná spoločnosť Slovensko (ZSSK) ordered up to four KISS double-deck trains from Stadler. The first vehicle is scheduled to enter service at the end of 2026, while the second will be introduced in 2027. The train will run on the railway line between Bratislava and Žilina. The contract includes an option to purchase two additional trains. "Stadler trains have been running successfully in Slovakia for more than a year. I am pleased that we will once again deliver state-of-the-art KISS units to Slovak Railways. Thanks to their innovative design, these vehicles will offer the highest level of comfort and significantly increase capacity in regional and intercity passenger transport.

The lightweight aluminium construction means lower operating and maintenance costs throughout their entire life cycle, ensuring cost-effective operations for the client," said Dr. Ansgar Brockmeyer, Executive Vice President Sales and Marketing at Stadler.

"Fleet renewal is a pillar of our vision for modern and sustainable transport. Thanks to today's signing, we will bring innovative units to Slovak railways that will not only increase passenger comfort and satisfaction but also reduce energy consumption to 12 kWh per train kilometer and save dozens of tons of emissions annually. They have become a symbol of ecological solutions that improve quality of life and elevate rail transport to a new level. Our ambition is to keep Slovakia moving — ecologically, efficiently, and with pride on a European level," said Peter Helexa, CEO of ZSSK.

Swiss technology and added value for the region

"Slovakia is yet another country in Central Europe that has been steadily increasing the number of Stadler trains operating on its rail network. I am delighted that we are continuing to strengthen Stadler's market share in the region, which we believe has potential for further growth," said Zdeněk Majer, Chairman of the Supervisory Board at Stadler Prague, at the signing ceremony. As with the units previously delivered to ZSSK, the new vehicles will be designed by Stadler Prague — Stadler's engineering office, which currently employs over 250 engineers and designers. Manufacturing will take place at the Stadler Polska plant in Siedlce.

The KISS train for ZSSK

The new KISS trains are 155.9 metres long, with a



total of 611 seats, including 30 first-class seats in the Comfort section. The units combine high power with rapid acceleration and reach a maximum speed of 160 kilometres per hour. They are fully accessible to wheelchair users and are fitted with four toilets, including one for passengers with reduced mobility. Multifunctional areas provide dedicated seating for wheelchair users and ample space for bicycles, push-chairs, and luggage. Both the passenger compartments and driver's cabs are fully air-conditioned. Passengers will benefit from a modern passenger information system and on-board Wi-Fi — essential features of contemporary railway travel. Advanced technology includes internal and external

surveillance cameras, as well as roof-mounted cameras to monitor the pantograph for safe operation. The trains are also fitted with certified energy monitoring systems. Stadler delivered four KISS trains to Slovak Railways in 2023 for regional lines in western Slovakia, operating between Bratislava and Nové Zámky and Bratislava and Trenčín or Púchov.

This latest order will see the number of Stadler KISS trains double in Slovakia. In years 2001, 2003 and 2021, the manufacturer also supplied to Slovakia multifunctional electric units for the narrow-gauge lines in the High Tatras.

Turkey

Alstom signs contract with RESA Yapi Elektromekanik A.S. to supply the first Rigid Overhead Catenary System for Türkiye's new high-speed line

Alstom, global leader in smart and sustainable mobility, has signed an agreement with RESA Yapi Elektromekanik A.S. to supply the Rigid Overhead Catenary System (ROCS) for a section of Türkiye's new high-speed railway line between Halkali and Kapikule. The line will be part of the Trans-European Transport Network (TEN-T), 153 km of integrated and sustainable transport backbone strategic for the socio-economic development of the entire European Union. Once completed, it will reduce the pressure on local transport systems with an 80% increase in passengers and 45% increase in freight, facilitating exchange between the two areas of the Istanbul region. Alstom will provide the aerial feeding system along the TBM tunnel, a double-track tunnel of

approximately 7 km each (14 km total) and 8.3 meters in diameter, which will pass under residential areas and Lake Küçükçekmece. This project represents the first Rigid Overhead Catenary System application for a high-speed line in Türkiye. The Alstom site in Valmadrera (Lecco) will be responsible for the design, production and supply of the ROCS components, with Alstom Algeria participating for the catenary installation design of the line.

"We are proud to supply the first Rigid Overhead Catenary System for Türkiye's new high-speed line," said Edoardo Gino, Alstom Valmadrera Site Director. "This contract demonstrates not only the excellence and innovative

approach of our site but also recognises our commitment to modernising rail infrastructure globally, supporting to bring Europe even closer to the rest of the world."

Alstom's ROCS is an efficient and cost-effective solution for rigid overhead catenary, particularly suitable for confined spaces and tunnel retrofits. It features an aluminum conductor profile paired with a copper contact wire, ensuring both ease of installation and low maintenance. The compact design not only offers high performance but also enhances fire resistance. ROCS integrates easily with existing lines and accommodates different supply voltages, making it a versatile choice for a wide range of applications.

For more than a century, Alstom in Valmadrera (Lecco) has specialised in the production of materials for the electrification of the main railway, metro and tram lines, exported not only in Italy, but all over the world. The site manufactures catenaries and components for electrification, clamps for substations and power distribution lines, rigid catenaries for aerial feeding systems, third rails for metro lines and APS (ground dynamic feeding system) for tramway lines, as well as electrical feeding for overhead cranes.

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Italy

FS Group: plan to launch a new High-Speed link between London and Paris

FS Italiane Group have announced a plan to launch a new high-speed rail service connecting London and Paris by 2029. With a planned investment of EUR 1 billion, the new link is part of the objectives of the 2025-2029 Strategic Plan, which places the extension of high-speed connections in Europe among the FS Group's priorities. In recent days, a Memorandum of Understanding (MoU) was signed between the FS Group and Evolyn - a Spanish company, led by Cosmen family, with solid experience in the management and expansion of mobility projects - to further strengthen the European high-speed rail leadership project.

“This investment is a decisive step forward in FS Group's vision of building a more integrated, competitive and sustainable European rail network, in line with the objectives of the 2025-2029 Strategic Plan, which places an increasing focus on passenger transport abroad to accelerate FS Group's international development”, stated Stefano Antonio Donnarumma, FS Group Chief Executive Officer and General Manager. “High-speed rail networks are the backbone of efficient and environmentally

friendly mobility, and by expanding our presence on key corridors, we are not just investing in infrastructure and innovation, but also in the future of European transport. More competition will help to create a more efficient and customer-oriented industry, offering a real alternative to air travel”.

The aim is to increase rail competitiveness between London and Paris, and the new link will be served with trainsets inspired by the Frecciarossa, Made in Italy top-of-the-range class, in terms of energy efficiency, comfort and service quality.

The announcement comes after confirmation from the UK's Office of Rail and Road (ORR) on the possibility for access to the Temple Mills maintenance depot, allowing the entry of a new operator between London and Paris. The consolidated presence of Ferrovie dello Stato Italiane both in France, with Trenitalia France, and in the United Kingdom, with Trenitalia UK, offers an important competitive advantage to enter this strategic corridor. As such, the Group will be able to offer travellers a greater

range of products, an increasingly high-quality service and simplified ticketing, taking advantage of an already well-known brand. After obtaining the necessary licences and permits in France, FS Group is working with the main stakeholders to manage all regulatory and operational aspects. Technical assessments are currently under-way to ensure an optimal integration of the new high-speed services through the Eurotunnel and the railway networks of France and the UK. Moreover, operational planning of additional capacity at St. Pancras station is already at an advanced stage, while possible funding options are being evaluated.

The official service launch will be based according to infrastructure works completion and technical authorisations, and will mark the beginning of a new era of competition and accessibility in the European high-speed rail landscape.

FS Group in France and the UK

In France, FS Group has been the first alternative operator on the high-speed network since 2021, with

the Frecciarossa Milan-Paris connection reactivated on 1 April, after the landslide interruption in the Maurienne valley, with the shuttle services between Paris and Lyon and, from 15 June 2025, with the Frecciarossa connection between Paris and Marseilles.

With over three million passengers served and a 98% satisfaction rate, Ferrovie dello Stato Italiane is committed to strengthening and expanding its existing corridors to further improve connectivity and service availability. FS Group also has an established presence in the UK, where it has been present since 2017 with the acquisition of c2c, and is also a key partner of Avanti West Coast with a 30% stake in the joint venture with FirstGroup. Through the latter, it is actively working with government and institutions to develop and promote the HS2 project. In addition to the London-Paris link, FS Group is studying further opportunities for expansion of high-speed rail in Europe. Evaluations are under-way for possible extensions of the London-Paris service via Lille, Ashford, Lyon, Marseilles and Milan.

Sweden

Northrail's first new DE 18 arrives in Sweden for Dynamic Test Runs

Vossloh Rolling Stock has delivered the first of Northrail's future new DE 18 locomotives to Sweden where it will undergo dynamic test runs in order to obtain homologation and approval for Sweden and later on also for Norway. The locomotive, equipped with the latest Stage V engine technology, arrived in Sweden on April 12th and marks the start of a broader establishment of Northrail in the Swedish market.

Northrail has ordered a total of ten DE 18 locomotives from Vossloh Rolling Stock, with an option for ten more. The DE 18 is a powerful diesel-electric mid cab locomotive for heavy shunting and line services. The locomotive type is designed to meet the future needs of freight transportation - with high performance, fuel-efficient operation and greatly reduced emissions.

The DE 18 is certified to run on renewable HVO fuel, enabling up to 90% reduction in CO₂ emissions compared to conventional diesel locomotives.

“We see a clear demand for strong modern and low-emission locomotives in Sweden. With the DE 18 we can offer a future-proof solution that combines power, flexibility and sustainability”, says Michael Trentzsch, Chief Investment Officer and Chief Commercial Officer at Northrail AG.

The locomotive now delivered will undergo technical adaptation for the Swedish market, including installation of the European signalling system ETCS, as well as the local Swedish train control system ATC-2. The first dynamic tests will take place in 2025 and the initial J5 approval is expected in early

2026.

Henrik M. Egeter, Spokesman of the Management Board from Vossloh Rolling Stock, adds: “We are glad to be able to support our long lasting customer Northrail and the Scandinavian railway industry with sustainable and efficient solutions. That's why we're equipping the DE 18 locomotive with a climate-friendly performance package that delivers strong traction and reliable ease of use. Northrail sees Sweden as a long-term market. The DE 18 locomotive is built to be used both in Sweden and Norway. It is suitable for shunting and, as one of the strongest mid-cab locomotives in Europe, also for freight traffic on main lines.



France

A more comfortable journey through the Alps: Stadler delivers first train for the Mont Blanc Express

Stadler has delivered the first of seven metre-gauge trains to Transports de Martigny et Régions (TMR) and the French state railway SNCF. Built in Bussnang, Thurgau, trains will be introduced into passenger service from mid-2026, and operate on the historic Mont Blanc Express route between Martigny (CH) and St-Gervais (FR).

The delivery of the first train marks the start of the next chapter in cross-border rail transport in the Mont-Blanc region. This customised vehicle has been manufactured at Stadler's factory in Bussnang (TG) and handed over to Transports de Martigny et Régions (TMR) and the French state railway SNCF in Martigny on 24 April 2025. The two operating companies of the Mont-Blanc Express will put the seven trains into operation from mid-2026. They will replace the legacy fleet, improving comfort and the overall passenger experience on the historic route between Martigny in Switzerland and St-Gervais-les-Bains-le-Fayet in France, at the foot of Mont Blanc.

From Bussnang to Martigny by rail

"We transported the first vehicle by rail from the Stadler factory in Bussnang (TG) to Martigny (VS) on a low-loader wagon in an environmentally friendly way," explains

Frédéric Evequoz, Sales Manager for customised vehicles at Stadler. In Martigny, the specialists then reloaded the train onto a lorry and put it on the narrow-gauge line.

"The train will now be transferred to the TMR workshop in Vernayaz, where it will be prepared for commissioning and for the process to authorise operation on the Swiss and French rail networks," continues Frédéric Evequoz.

Customised, comfortable and energy-efficient

The new Beh 4/8 trains can be combined in a modular fashion. This allows multiple units to be used, thereby increasing capacity during periods of high passenger volume. The large panoramic windows on the new trains offer passengers fantastic views of the spectacular Alpine landscape.

Other features of the train:

- Cogwheel and adhesion operation: The trains are designed for combined use on cogwheel and adhesion lines. They can also run in double traction on the cogwheel section, ie with two trains coupled together. This increases efficiency and flexibility.
- Accessibility: The trains are fully compliant with the Swiss Disability Discrimination Act

(BehiG) and enable seamless boarding for passengers with reduced mobility.

- Energy-efficient: Modern consumption control systems ensure environmentally-friendly operation. For example, braking energy is converted into electrical energy and fed back into the grid.
- Environmentally-friendly: The vehicles meet the highest ecological standards.

Among other things, they feature energy-efficient air conditioning systems. Cross-border project for a superior travel experience

The modernisation of the fleet is part of the public transport strategy for the Mont Blanc region. The project is supported by the Swiss Confederation, the canton of Valais and the French Région Auvergne-Rhône-Alpes (AURA). The cost of the seven new trains is CHF 76 million. All seven trains will be delivered by autumn 2025 and gradually introduced into service from mid-2026.



"We are delighted that we can help improve passenger comfort on the spectacular railway line between Valais and Haute-Savoie with our trains. The new vehicles signify a commitment to modern and environmentally friendly travel, cross-border cooperation and technological innovation in the Alpine region," says Frédéric Evequoz.

Martigny in the canton of Valais with St-Gervais-les-Bains in the French region of Auvergne-Rhône-Alpes for more than a hundred years. TMR operates the section on the Swiss side up to the border at Le Châtelard, while SNCF is responsible for operations in France.

Photo: ©TMR – Studio54

The Mont-Blanc Express has been connecting

Sweden

Stockholm – Rail maintenance at high speed

Vossloh uses modern grinding technology in Stockholm. In future, the tracks of the Stockholm metro will be maintained using high-speed grinding technology. A special machine developed by Vossloh will remove damage to the rails. This increases their service life and allows trains to run more quietly.

Strukton Rail AB, service provider for the maintenance of the Stockholm Tunnelbana rail network, and Vossloh have signed a contract on this. It is initially valid for two years from August and can be extended for a further six

years.

High Speed Grinding (HSG) removes corrugations, slip waves and other signs of wear on the tracks. This preventive maintenance avoids major damage and the premature, costly replacement of rails. The HSG-city grinding machine developed by Vossloh is the fastest grinding machine for urban transport systems on the market.

"The HSG-city is already in use in many cities around the world," says Jonas Ivenäs, Deputy Managing Director at Vossloh Rail Services Scandinavia. "I am very pleased that we can now also contribute to an improved ride experience and more cost-effective operation of the network in the Stockholm metro."

The HSG-city grinding machine can be pulled or pushed along the tracks by a locomotive and grinds the rails while traveling at speeds of up to 60 kilometers per hour.

That makes it possible to "swim with the traffic" without interruptions in the timetable. In Stockholm, the HSG-city will be used at night during service breaks.

The Stockholm metro network has around 110 kilometres of double track. The contract with Vossloh also covers the maintenance of switches.

Technological revolution on the railway: AŽD is the first company in Europe to present an autonomous train with passengers in real operation

On April 6th, AŽD, in cooperation with the Railway Administration, demonstrated to the public its 100% technological readiness for the commencement of regular operation of the first autonomous train with passengers on a railway line in Europe, which is operated by a Czech-made vehicle. The autonomous train will run on the line Kopidlno - Dolní Bousov.

Autonomous trains are not new in the world, passengers know them for example from airport terminals or urban transport systems, where they move in closed corridors protected by fences or tunnels. However, the deployment of an autonomous train in an open landscape, where level crossings are located and traffic can be affected by unexpected situations, is a breakthrough innovation in Europe. This project demonstrates that autonomous driving technology can meet the challenges of normal rail traffic even in an unprotected environment.

“The operation of the autonomous railway line in the open landscape was preceded by years of intensive development, innovations and significant investments in Czech technologies developed by our R&D (Technika plant), as well as cooperation with the Railway Administration in order to fully secure the entire railway line via data interconnection between their terminals

Kopidlno and Dolní Bousov. This means that both the EDITA vehicle (Experimental Rail Vehicle for Innovative Technologies of AŽD) and the infrastructure of the railway line are equipped with a number of highly sophisticated systems with artificial intelligence and the ability to learn in the DIGITAL 4.0 version,” explains Zdeněk Chrdle, CEO of AŽD.

The line Kopidlno - Dolní Bousov (23,991 km long) is operationally controlled by the dispatcher of the Railway Administration from the railway station Kopidlno with a standby control centre located in the Competence Centre Dětenice. The whole system is still in the process of improvement and at the same time intensive work is being carried out in the legislative field with the aim of achieving the codification of autonomous railway operation in the Czech Republic as a possible way of its operation.

The autonomous train EDITA 811.111, i.e. Experimental Rail Vehicle for Innovative Technologies of AŽD, was constructed by modernization of the 810.111 railcar. Passengers will travel from April 5th in the trailer carriage of the 010 series, which has undergone a demanding

reconstruction. It is equipped with VDUs showing online transmissions from cameras and lidar sensors installed on the drive vehicle, which take detailed pictures of the surroundings, measure distances and map the terrain. This allows passengers to see in real time the data necessary for the autonomous operation of the control systems, which are evaluated by the moving train. During full autonomous operation, the driver will not control the train from the board, but will supervise its safety from a supervisory workplace. In case of any problem, he will be able to intervene at any time and stop the train immediately with the emergency button. However, this is preceded by the need to complete the legislation necessary for regular autonomous operation. This must be newly defined. AŽD will continue to work very intensively with the relevant authorities, institutions and partners on this. Therefore, the driver will still be present at the board for the first runs. Interested persons will be able to see the technological solution and the interior of the experimental train during the train's turn at the terminal stations of the Railway Administration - in Kopidlno and Dolní Bousov.

“I'm glad we helped to put the autonomous train project into practice. The topic of innovation is absolutely crucial

for the future of the Czech railway. Our sophisticated traffic management systems controlled through central dispatcher's centres are proof that we take it seriously. I must also mention the leading role of the Railway Administration in the implementation of ETCS. I am not afraid to say that in this respect we are setting an ambitious pace throughout the Europe,” says Jiří Svoboda, Director General of the Railway Administration. “In the future, passengers will probably take some time to get used to the fact that no one will be sitting at the driver's seat and everything will be decided by super-fast and fail-safe computers with artificial intelligence and the ability to learn, using cameras, lidars, other sensors and communication with the open line section, which together can see much more than the driver himself and never succumb to fatigue,” describes Zdeněk Chrdle. The development of autonomous technologies is progressing at a dynamic pace at AŽD and could be installed in standard railway vehicles operating on conventional lines in the near future. AŽD plans to turn its Plum railways (Čížkovice - Obrnice), where it provides daily train operation within the line U10 of the Transport of the Ústí nad Labem Region, into a fully autonomous railway by 2030.

Stadler wins signalling contract for further expansion of the Bergen light-rail

Stadler has been awarded the contract for the delivery of signalling technology as part of the expansion of the Bybanen light rail system in Bergen, Norway. The client is the state-owned project organization Bybanen Utbygging, a subsidiary of the Vestland fylkeskommune.

Stadler has secured a significant contract in the field of signalling. The project includes the planning, delivery, and implementation of signalling technology for several planned extension phases of the Bergen tram network, heading toward the northern suburbs of Åsane and westward toward Loddefjord. The total volume of the contract amounts to approximately 50 million euros. Initially, the

contractual scope covers the first extension phase toward Åsane, with additional phases agreed upon as options. Stadler prevailed over renowned competitors in a public tender process. Key deciding factors were Stadler's proven technology, system adaptability, and the trust placed in Stadler as a reliable and globally connected partner.

Long-Term Partnership and Proven Technology

Stadler has been a key partner of the Bergen tramway project for many years. As early as 2007, twelve Variobahn trams were ordered from Stadler. Starting in 2008, Stadler Signalling was involved in the implementation of several line sections,

initially as a supplier of vehicle equipment and associated trackside components. From the second construction phase onward, Stadler took over full responsibility for the entire signalling system. The stability of the system and the close, cooperative partnership with Bybanen Utbygging have proven their value multiple times over the years.

Modern, Tailor-Made Signalling Solution for Norway

By awarding this contract, Bybanen is opting for a high-performance, future-proof signalling solution in the areas of train signalling systems, train control, and control center technology — all at Safety Integrity

Level (SIL) 2, with individual components meeting the highest safety and reliability standard, SIL 4. For this purpose, Stadler will deliver, among other things:

- Train signalling systems with track circuits or wheel sensors
- Train protection systems for both the line and rolling stock
- Technology for train identification

In addition, signals and switch point heaters will be supplied, as well as a fully equipped control center with multiple operator workstations and training consoles, including comprehensive simulation of the entire system. Stadler manufactures nearly all components of this solution at its

signalling site in Braunschweig. The project is scheduled to begin on September 1st, 2025.

“We are delighted by the continued trust placed in us by Bybanen Utbygging. This contract award not only confirms the high availability and reliability of our technology, but also highlights the scalability and future readiness of our system — designed to meet the long-term demands of modern urban infrastructure projects,” says Albrecht Teich, Managing Director Signalling Germany.

From the Archives

Former General Roca sharknosed
Baldwin 1953 diesel No. 5037 stands
at Buenos Aires Constitution station
on October 30th 2004. *John Sloane*

Argentina



From the
Archives

Czech
Republic

CSD Class E499.101 is seen at Praha
hl.n. on December 3rd 1976.

John Sloane

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From the
Archives

France

A clean looking SNCF BB No. 12042 stands at
Rheims depot on June 5th 1971. *John Sloane*

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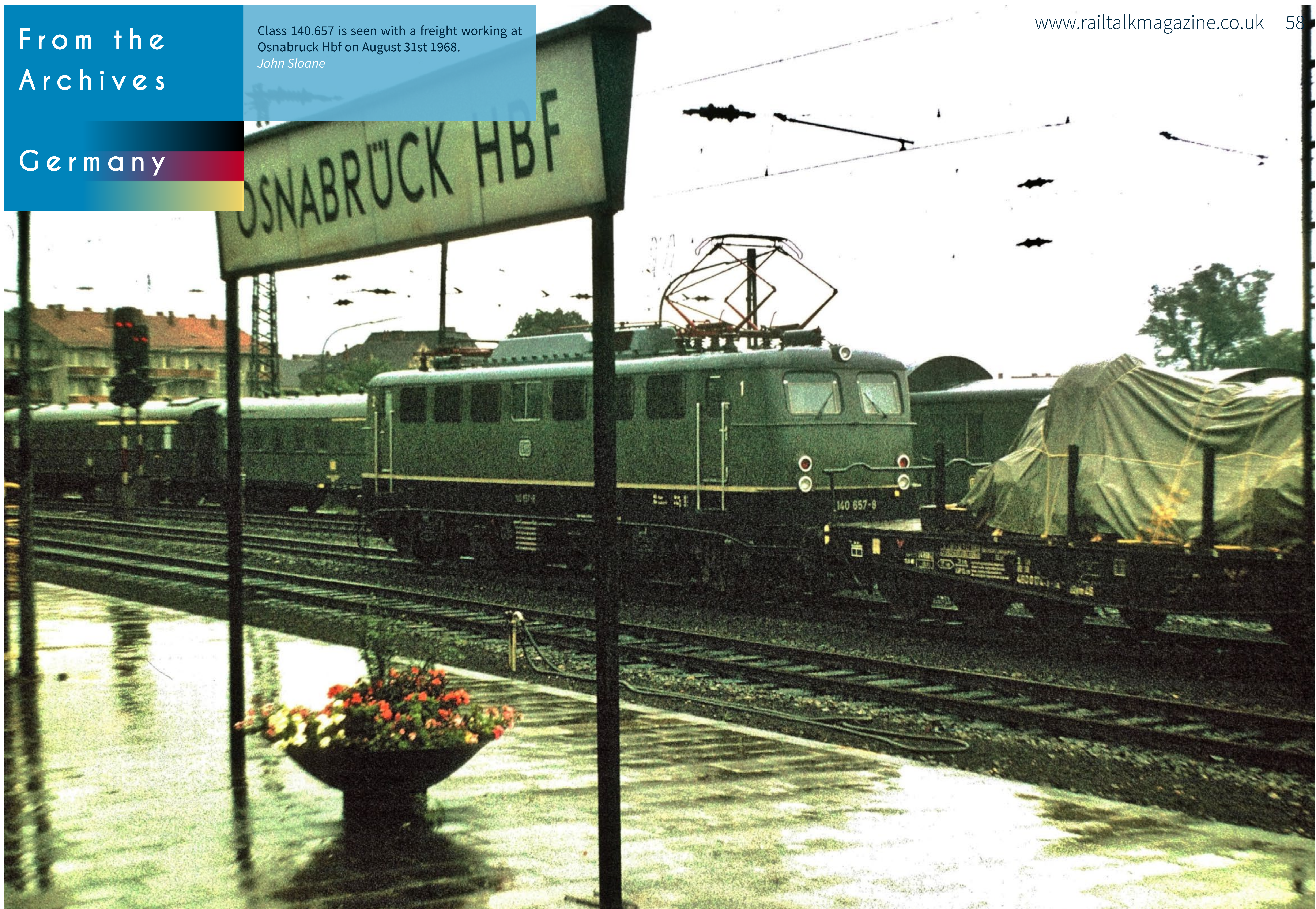
From the
Archives

Germany

Class 140.657 is seen with a freight working at
Osnabrück Hbf on August 31st 1968.

John Sloane

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From the Archives

Malayan Railways steam loco No. 564.36
'Temerloh' is seen at Kuala Lumpur shed
on February 12th 1980. *John Sloane*



From the
Archives

Thailand

RSR No. 4008 is seen on arrival at Bangkok
Hua Lampang station on March 20th 1989.
John Sloane



From the
Archives

Thailand

Thai Railways, Japanese built 2-8-2 No. 962
is seen at Haad Yai Yard on April 15th 1981.
John Sloane

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