



Railtalk Magazine *Xtra*

Issue 230x
November 2025
ISSN 1756 - 5030

Contact Us

Editor

david@railtalkmagazine.co.uk

Content Submissions

entries@railtalk.net

Technical & Subscription Support

admin@railtalk.net

Content

Pg 2 - Welcome

Pg 4 - Pictures

Pg 60 - World News

Pg 71 - From the Archives

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 230Xtra

In the news this month, are the Swiss being too strict on freight wagons heading through their country, or have they a right to be cautious, as the Swiss federal transport office BAV has issued a further amendment to the safety rules governing wagons using the Swiss main line network. It comes amid ongoing tension over the safety rules governing the condition and maintenance of wagon wheels and brakes in the wake of the August 2023 freight train derailment in the Gotthard Base Tunnel.....

In September 2025, the Federal Office of Transport (FOT) ordered measures to ensure the safety of rail freight. Based on new findings, it has now adjusted these measures in two areas.

Rail freight should remain safe in the future

In its order of September 11th, 2025, the FOT established additional measures to guarantee the safety of rail freight. This step was taken based on the report published in June 2025, in which the independent Swiss Transportation Safety Investigation Board (STSB) identified a systematic risk of further wheel fractures following the accident in the Gotthard Base Tunnel. Based on the STSB's findings and in consultation with stakeholders, it was essential for the FOT to develop and adopt measures very quickly. The FOT explicitly stated in its September order that adjustments to the ordered measures are conceivable if new information becomes available.

Distance travelled is the determining factor

Based on intensive dialogue with stakeholders, the Federal Office of Transport (FOT) amended and further developed the order on October 23rd: The requirements for wagon technical inspections are now based exclusively on the distance travelled. In the meantime, new data on the average mileage of freight wagons has become available, and it is already legally stipulated that wagon owners must know the condition of their wagons. For these reasons, the additional deadline provided for in the September order can be waived.

Implementation deadline for a measure extended

The FOT had already made an initial adjustment on October 9th: The implementation deadline for the ordered wagon technical inspections was extended by one year to the end of 2026. This was because, following the order of September 11th, further discussions with the industry yielded new insights into the implementation options for the measures. The bodies responsible for the maintenance of freight wagons (ECM) have indicated that a stay in a stationary workshop is mandatory for the initial technical inspection of a wagon.

Apart from the developments described above, the Federal Office of Transport (FOT) maintains all measures ordered as of September 11th, 2025 (technical inspections of wagons, higher minimum diameter for certain wheels, mandatory action after overheating, sound test), including the implementation deadlines. No further adjustments are currently planned.

FOT advocates a European solution

The FOT continues to advocate for a pan-European solution with the broadest possible support within the industry. Since the European Union Agency for Railways (ERA) has not yet responded to the recommendations of the Swiss Transportation Safety Investigation Board (SUST), the FOT, in consultation with stakeholders, has decided to take action itself as a first step in the interest of safety. It remains in contact with European bodies to find internationally coordinated solutions as soon as possible.

Until next month...

David

This Page

DB Fernverkehr 'Rabbit' Class 218.497 has just backed onto train No. IC2214 at Itzehoe on October 21st. The diesel will work the train through to it's destination at Westerland (Sylt). *Andy Pratt*

Front Cover

On September 20th, Class 751.207 arrives at Brno dolni nadrazi with stock for a 'Grumpy Railtour' charter.

Kevin McCormick





CD Goggle Class 754.075 stands at Luhacovice having arrived with a service from Praha hl.n. on September 21st. *Andy*

Terms & Conditions

Railtalk Magazine is a free monthly online digital magazine (e-mag), provided in PDF format. we will be happy to provide details of respective owners once permission has been granted to pass on such information.

Railtalk Magazine takes no responsibility for any information provided or printed in this magazine. Railtalk Magazine is published by

Best efforts are made at the point of going to publish, to effect all information is correct, HAD-PRINT a trading name of HAD-IT LIMITED.

however no guarantees are given or implied. HAD-PRINT

All content is © copyright either Railtalk Magazine or it's respective owners. All items are credited to their respective owners and no parts of the magazine should be reproduced without first obtaining permission. In cases where ownership is unclear, please contact the editorial team and

Unit 2-4, France Ind. Complex, Vivars Way, Canal Road, Selby North Yorkshire YO8 8BE

info@had-print.co.uk | 01757 600211

With Thanks

Once again many thanks to the many people who have contributed, it really makes our task of putting these magazines together a joy when we see so many great photos.

These issues wouldn't be possible without contributions from:

Michael J Alderdice, John Alsop, Steve Andrews, Ray Anslow, Mark Armstrong, John Balaam, Brian Battersby, Steven Beesley, Barry Beeston, Mark Bennett, Michael Bennett, Tom Blanpain, Ben Bucki, Ian Callander, Keith Chapman, Steve Chapman, Julian Churchill, Russell Clarke, Nick Clemson, Keith Davies, Brian Dobbs, Derek Elston, Eddie Emmott,

Mark Enderby, Colin Gildersleve, Vernon Goodey, John Goodrich, Greig Gibson, Carl Grocott, Richard Hargreaves, Dave Harris, James Haywood, Brian Hewertson, Paul Hewertson, Stuart Hillis, David Hollowood, Colin Irwin, John Johnson, Richard Jones, Anton Kendall, Colin Kennington, Ken Livermore, Mathijs Kok, David Lindsell, Barry Longson, Michael Lynam, Kevin McCormick, Phil Martin, David Mead, Chris Morrison, Ken Mumford, Alan Naylor, Gerald Nicholl, Jeff Nicholls, Chris Perkins, Mark Pichowicz, Colin Pidgeon, Neil Pugh, Andy Pratt, Andre Pronk, Alan Rigby, Charlie Robbins,

Bryan Roberts, Barry Robinson, Dennis Rowland, Tim Saunders, Neil Scarlett, Paul Senior, Alan Sinclair, John Sloane, Laurence Sly, Lee Stanford, Steve Stepney, Steven Thompson, Mark Torkington, Brian Turner, Allison Twycross, Gerard van Vliet, David Wood, Leuan Wood, Shep Woolley, Erik de Zeeuw and the guys at RailUK.

Steel mill dust out, plastic granulate in – reliably, sustainably and efficiently by rail. Together with LogServ, ÖBB Rail Cargo Group (RCG) uses the innovative MOBILER system to create a seamless logistics solution between Linz, Duisburg, Freiberg and Fürstenwalde. voestalpine AG is a leading global steel and technology group. Since 2007, its logistics subsidiary LogServ has relied on RCG's logistics solutions to handle the transport of steel mill dust from Linz to Germany for disposal, while plastic granulate returns from Fürstenwalde to voestalpine – used as a sustainable alternative to coal or coke in the blast furnace process.

Smooth transfer between truck and wagon

In Linz, the MOBILER bulk containers are filled directly at an automated facility. Built-in weighing technology ensures each container reaches its target weight before the system automatically switches to the next. On the way to the carrier wagon, the containers pass a

calibrated scale and all required shipping documents are generated automatically. They are then transferred to the RCG carrier wagons, ready for environmentally friendly onward transport by train to Duisburg or Freiberg – either via single wagonload or the TransFER Linz–Duisburg–Wels.

A closed-loop logistics solution

At the destination, the containers are tipped backward for unloading. The empty containers are then transported by rail to Fürstenwalde, where they are filled with plastic granulate and reloaded for the return trip to Linz in single wagonloads. The result is a seamless logistics cycle that runs efficiently thanks to clearly defined processes and close coordination between all parties involved. Despite having its own connecting sidings, voestalpine deliberately relies on the flexibility of combining rail and truck, using the advantages of both modes of transport. MOBILER closes the gap between the track and loading

point – whether a siding is available or not.

Everything from a single source

Each year, around 70,000 tonnes of steel mill dust and 25,000 tonnes of plastic granulate are transported in this way. RCG provides the complete service package – from equipment to traction. LogServ handles the first mile with its own MOBILER trucks, while RCG takes care of the last mile in Germany. This long-standing partnership shows how modern industrial logistics works today: efficiently, reliably and sustainably.

About LogServ

Logistik Service GmbH (LogServ) was founded in 2001 as a subsidiary of voestalpine Stahl GmbH. As a

strategic partner to the industry, LogServ offers tailor-made logistics solutions across the entire supply chain. Sustainability is not just a goal, but a daily commitment – covering ecological, social and economic aspects. With its broad expertise, LogServ takes responsibility for the future of industrial logistics.



RCG launches operations in Belgium

ÖBB Rail Cargo Group (RCG) has received the Single Safety Certificate from the European Union Agency for Railways (ERA) for the Netherlands, Belgium and the German border area. This marks the official start of rail operations in Belgium.

The certificate confirms that RCG meets all legal and operational safety requirements for freight transport. With the expansion into Belgium and neighbouring German routes, RCG's production becomes more flexible and efficient – a clear benefit for both international and regional customers.

First train arrives in Zeebrugge

On October 14th, a major milestone was reached: the first RCG train, operating under its own licence and traction, arrived at the port of Zeebrugge.

With this step, Belgium is now officially integrated into RCG's production network. Customers and partners can now benefit from TransFER connections and additional sustainable transport solutions across the Benelux region.

Strengthening presence in Western Europe

Since 2024, RCG has been active in the Netherlands with its own carrier subsidiary, significantly strengthening its international production capabilities in Western Europe. The newly obtained safety certificate for Belgium marks another milestone in this development: RCG continues to expand its presence and offers seamless cross-border logistics solutions from a single source.



Local expertise for sustainable growth

To support operations in Belgium, RCG is building a local team. The company is currently recruiting, among others, train drivers with language skills in French, Dutch and German as well as a team lead for the Antwerp operations site. Employment is handled under Belgian labour law via the Dutch carrier subsidiary – no additional branch office in Belgium is planned.

Digital platform for pallet exchange: RCG relies on PCT Online

Digital, transparent, cross-border: with the new PCT Online platform, ÖBB Rail Cargo Group (RCG) is taking pallet exchange to the next level. From now on, exchange processes can be managed via the Pallet Control Tower (PCT) solution – either through a browser or conveniently via app.

The start of the cooperation with Pallet Control Tower (PCT) in summer 2025 marked the beginning of a new era in global load carrier management: the PCT Online platform enables the digital exchange, purchase and sale of EUR pallets and reusable transport items (RTIs) – standardised, transparent and across national borders. The Dutch company PCT brings the technological expertise, while RCG provides the logistical implementation power: together, the cooperation partners are setting new standards in digital load carrier exchange.

RCG: bridging technology and practice

While PCT provides the digital infrastructure for international pallet and RTI exchange, RCG plays a key role as a strategic partner by integrating PCT Online into

its network and making it accessible to partners and customers. This creates the foundation for widespread adoption of digital processes in load carrier exchange – helping customers make their supply chains more efficient, transparent, and sustainable.

Simple, efficient and ready to use

PCT Online is both simple and user-friendly: the web-based platform is accessible via browser or conveniently via app. Registration is free of charge. This not only digitalises the exchange of load carriers but also standardises it – a crucial step toward modern and resource-efficient logistics processes.

The benefits are clear. The digital solution reduces organisational effort and lowers costs. Partners can expand their service portfolio without additional investment, while customers benefit from a consistent and reliable service. Complex exchange processes no longer need to be managed individually – they are handled through a unified digital solution.



Czech
Republic

On September 22nd, OBB Class 1216.228 arrives
at Brno hl.n. with a Praha - Graz railjet service.
Andy



Czech Republic

On September 20th, Class 751.207 with a 'Grumpy Railtours' charter is passed by RegioFox Class 847.032 heading to Tisnov at Veselíčko. *Kevin McCormick*

A rather forlorn looking Class 752.080 is seen at Brno dolni nadrazi on September 20th. *Kevin McCormick*

Class 771.701 is seen at Brno dolni nadrazi on September 20th. *Kevin McCormick*



Czech Republic

On September 20th, Class 721.230 is seen at Brno dolni nadrazi, this loco would work part of the 'Grumpy Railtours' charter the following day. *Kevin McCormick*

CD Cargo Class 744.124 works a container train through Brno dolni nadrazi on September 20th. *Kevin McCormick*

On September 19th, Brno trams Nos. 1130 and 1084 are seen at Komárov. *Kevin McCormick*



Czech
Republic

CD Class 754.016 runs round its stock at Brno hl.n. on September 21st. *Andy*



Czech
Republic

CD Vectron Class 193.686 stands at Brno hl.n. on
September 20th with Eurocity train No. EC272
to Praha hl.n. *Andy*







NEW PRAGUE TRAMS FROM ŠKODA GROUP GET HOMOLOGATION IN JUST 16 MONTHS FROM PRODUCTION START

The Škoda ForCity Plus 52T trams designed for Prague have successfully passed the type approval and homologation process. The latest generation of fully low-floor trams from Škoda passed all technical tests and covered the required 20,000 kilometres without passengers and another 20,000 kilometres with passengers. This brings them closer to being handed over to the Prague Public Transit Company (DPP) and put into regular service.

There are now 13 Škoda ForCity Plus 52T trams at the DPP's Hloubětín depot, and the remaining seven are in an advanced stage of production. According to the contract, the Škoda Group will deliver them by the beginning of December this year at the latest, just two years after the contract was signed. The vehicles themselves were approved in just 22 months. Before being put into regular service, each vehicle must obtain a certificate of suitability from the Czech Railway Authority.

The Škoda ForCity Plus 52T trams represent the latest generation of low-floor urban vehicles developed for Prague. They offer a fully environmentally friendly air-conditioned interior, a modern information system, new ergonomic seats, but above all a completely new electromechanical brake, which ensures quieter operation, lower maintenance requirements and greater braking precision. In addition, the vehicles are equipped with an anti-collision system with the LiDAR technology, energy-efficient LED lighting, and advanced regenerative braking system, which allows energy to be fed back into the grid, contributing to savings in tram fleet operating costs.

“Travelling around Prague in more comfortable and safer trams is now a step closer to reality, as the successful approval is a key step towards completing the entire first series of Škoda ForCity Plus 52T trams. We are very honoured to supply trams for

our capital city and are pleased that production and deliveries are gradually being completed on schedule and without complications. It is a remarkable achievement by our team to have obtained vehicle approval just 16 months after the start of production,” says Petr Novotný, CEO of Škoda Group.

“We have successfully completed the homologation process for the new Škoda ForCity Plus 52T tram model. I greatly appreciate that the entire project is running according to schedule, which is a tremendous achievement for new vehicle deliveries these days. Before we can put the new Škoda ForCity Plus 52T trams into regular service, we must perform mandatory test runs and technical safety tests on each newly delivered vehicle, and the manufacturer must then remedy any deficiencies found.

We need to obtain a certificate of conformity for each vehicle from the Czech Railway Authority, and they must be transferred to DPP's ownership by contract. At the same time, our drivers are being trained on the new type of tram. I expect that we will start regular operation with the first vehicles in about three weeks, in accordance with the previously announced schedule,” says Jan Šurovský, Vice-Chairman of the Board of Directors and Technical Director of DPP – Povrch.

Adherence to the schedule and rapid implementation have accompanied the Prague Škoda ForCity Plus 52T tram project from the very beginning. The project was launched in December 2023 with the signing of a framework agreement between Škoda Group and Prague Public Transit Company. Subsequently, in January 2024, the public was able to see for the first time what the new tram would look like, including its modern design and technical solutions.



In June of the same year, Škoda Group began production, with the first cars seeing the light of day in early 2025. This April, homologation began without passengers, and in June with passengers.

In September 2025, all cars successfully met the requirement of 20,000 kilometres of passenger mileage, completing the operational reliability verification process. Now, in October 2025, the trams have obtained type approval and operational certification.

Each individual tram will also receive a certificate of suitability issued by the Railway Authority. After that, the specific vehicle can be put into regular passenger service.

The new Prague tram is the result of close cooperation between Škoda Group and Prague Public Transit Company. The project builds on the long-term partnership between the two companies. Clear evidence of this is the mileage of the previous tram model delivered.

To date, the fleet of 250 ForCity Alfa 15T trams has travelled almost 150 million kilometres. Under the framework agreement, Škoda can supply up to 200 trams. Next year, another 20 will be added to this year's 20, and the transport company can exercise an option on the remaining 140.

Eurostar chooses Alstom for 30 Avelia Horizon very high-speed trains

The SNCF Voyageurs Board of Directors has approved an additional order for 30 new-generation Avelia Horizon very high-speed trains for close to 1.4 billion euros[1], as well as options for up to 20 additional trains. First deliveries are scheduled for 2031.

This order concerns the four-voltage version of this very high-speed train, which meets the needs of European traffic. The international trainsets will operate on the rail networks of five countries under the Eurostar banner: Germany, Belgium, France, the Netherlands and the United Kingdom, as far as London (St. Pancras International railway station) via the Channel Tunnel – a first for a double-deck high-speed train.

“By choosing Avelia Horizon to renew its fleet, Eurostar is confirming its desire to combine technological performance, energy efficiency and passenger comfort. This new-generation train, designed to meet the demands of international very high-speed traffic, embodies our vision of sustainable and competitive European mobility,” said Henri Poupert-Lafarge, Chief Executive Officer of Alstom.

This third optional tranche of the framework contract between SNCF Voyageurs and Alstom adds to the 115 trains already ordered by SNCF Voyageurs, including 100 for commercial operation in France and 15 for commercial operation in Europe.

Avelia Horizon: Alstom’s very high-speed train combining performance, energy efficiency and comfort

Benefitting from more than 40 years’ expertise in very high-speed, Avelia Horizon, developed as part of an innovation partnership between SNCF Voyageurs and Alstom, embodies a new era in rail transport. This very high-speed train is Alstom’s latest double-deck generation, capable of reaching speeds of over 300 km/h, while offering exceptional capacity and comfort, and unrivalled operational flexibility.

Equipped with two compact, high-performance power cars and nine articulated double-deck cars, the Avelia Horizon train can comfortably accommodate more than 1,000 passengers (in multiple units), while travelling at a maximum speed of 320 km/h.

Designed for sustainable performance, this new train consumes 20% less energy than the previous generation, thanks to its advanced aerodynamic design and optimised traction.

Maintenance costs for the Avelia Horizon train have been reduced by 30% compared to the previous generation. Many components have been redesigned to simplify and space out maintenance operations, thereby reducing costs and downtime. Predictive maintenance has been integrated into the design from the outset, with a remote diagnostics system to anticipate maintenance operations and increase reliability.

Thanks to these improvements, combined with the largest seating capacity on the market, Avelia Horizon offers a significant reduction in operating costs per seat, while guaranteeing a high level of comfort and service.

A train designed and manufactured in France

“The success of this major programme is based on the commitment of all the French sites involved in the Avelia Horizon product. Thanks to the involvement of ten national sites, we are once again demonstrating the excellence of French rail know-how and our ability to meet the challenges of sustainable mobility in Europe,” emphasised Frédéric Wiscart, President of Alstom France.

To better meet the growing demand from the French and international markets for



its Avelia very high-speed train platform, Alstom has announced an investment of €150 million to increase the Group’s production capacity at several French sites.

Ten of Alstom’s 14 French sites will be involved in this project:

- Belfort, for power cars ;
- La Rochelle, for passenger cars and project management;
- Villeurbanne, for the control-command computers system, the passenger information system and on-board equipment;
- Ornans, for the motors;
- Le Creusot, for the bogies;
- Tarbes, for traction and electrical cabinets;
- Toulouse Electrical Development Centre,

for electrical circuits;

- Petit-Quevilly, for transformers;
- Saint-Ouen, for design and signalling;
- and Valenciennes’ Components Development Site for interiors.

Alstom’s Avelia range of high-speed trains covers maximum operating speeds of between 200 km/h and 350 km/h. A wide variety of configurations and architectures are available to best meet customer needs: single or double-deck trains, concentrated or distributed traction, articulated or non-articulated architecture, tilting or non-tilting trains. Drawing on a complete range of high-speed solutions, Avelia trains represent the broadest offering on the market.

More than 1,000 Avelia trains operate in 25 countries, crossing 22 borders.

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

[1] This contract was booked in the third quarter of Alstom’s 2025/26 financial year.

MF19, Alstom's new-generation metro, welcomes its first passengers on Line 10 of the Paris metro

On October 16th, Alstom, global leader in smart and sustainable mobility, celebrated the commissioning of the very first MF19 metro on Line 10 of the Paris metro, in partnership with Île-de-France Mobilités and RATP. The arrival of this new rolling stock, designed and manufactured by Alstom, represents a major step forward for mobility in the Île-de-France region.

A major project for the Paris metro

Financed 100% by Île-de-France Mobilités and operated by RATP, the MF19 metro will replace the existing rolling stock on lines 10, 7bis, 3bis, 13, 12, 8, 3 and 7 of the Paris metro. Line 10 is the first to be equipped with this new-generation metro.

“Today we are witnessing a historic moment for public transport in the Île-de-France region: MF19 will revolutionise the daily lives of passengers and transform the Paris metro over the long term. All the Alstom employees who have worked on this project can be proud of this success, which is the result of a close collaboration with Île-de-France Mobilités and RATP,” said Frédéric Wiscart, President, Alstom France.

A metro designed for passenger comfort

A real concentrate of technology, MF19 offers passengers a bunch of features to improve their journeys:

- **Comfort:** cooled ventilation, ergonomic and comfortable seats, USB ports, carefully designed lighting environment with 100% LED lighting.
- **Space:** integral “boa” intercommunication, allowing passengers to move from one end of the train to the other; two modular configurations, a “comfort” version and a “capacity” version, adapted to the ridership and traffic of each line.
- **Accessibility:** reserved spaces for people with reduced mobility, audible and visual passenger information, widened doors.
- **Passenger information:** numerous real-time information screens showing the name of the next station, as well as practical

information (connections, disruptions, exits, etc.).

- Enhanced security thanks to video protection.

A metro designed from the beginning to meet the needs of the different lines MF19 offers a high level of adaptability and modularity to suit the needs, constraints and developments of eight Paris metro lines.

From the outset, all the configurations envisaged were developed. MF19 can be fitted with 4 or 5 cars and measure between 61 and 77.5 m depending on the length of the platforms. It is also available with automatic driving or a driver's cab.

The metros are also designed to be configurable according to capacity requirements (with more or fewer seats).

In addition, the configurations and fittings have been designed to be reversible in order to adapt to changes on the lines. For example, the driver's cab can be replaced by an automatic cab, and trains can be converted from a short to a long version – and vice versa.

A latest-generation on-board speed control system to accompany MF19

In order to upgrade the line and bring the MF19 into service, Alstom's on-board speed control system, which meets RATP Octys standards, has been successfully deployed on Line 10. Developed in partnership with RATP, this system, based on CBTC[1] technology, provides location and speed control functions while meeting the highest safety standards.

The deployment on Line 10 is part of a wider strategy developed by RATP to equip other lines. RATP has also awarded Alstom the contract to equip lines 7bis and 3bis of the Paris metro with this on-board technology.



Lines 5, 6, 9 and 11 are already equipped with the Octys solution developed by Alstom for RATP.

An ambitious project mobilising Alstom's French expertise

2,300 Alstom employees, including 700 engineers, are working on the MF19 project. Eight Alstom sites in France participate in the design and manufacture of the rolling stock :

- The Valenciennes-Petite Forêt and Crespins sites are in charge of studies, design, train assembly, testing/validation and homologation;
- the Crespins and Le Creusot sites produce the bogies;
- Ornans, the engines;

- Tarbes, the traction chains;
- Toulouse, development of electrical harnesses;
- Villeurbanne, on-board electronics;
- and Aix-en-Provence, IT security.

Production and delivery of the trains are continuing according to the schedule requested by Île-de-France Mobilités and RATP. A new production line was recently opened at Alstom's Valenciennes site to keep pace with the increase in production rates. Alstom teams are also working with RATP to bring MF19 into service on its various lines.

Finally, Alstom's sites in Aix-en-Provence, Saint-Ouen and Villeurbanne are contributing to the development and deployment of the

on-board solution for RATP's Octys program. MF19 metros are part of Alstom's market-leading Metropolis metro solutions, designed to help cities breathe for over 60 years. More than 80 customers worldwide operate metros manufactured by Alstom.

ALSTOM™ and Metropolis™ are protected trademarks of the Alstom Group.

[1] Communication-Based Train Control

Modern railway infrastructure in Bavaria: DB InfraGO is investing additionally in a statewide renovation program.

More than four billion euros for the renewal of around 500 kilometres of track and over 200 switches, as well as new construction and expansion throughout Bavaria next year

In addition to the renovation measures already implemented in 2025 on the Werdenfels network and in the Upper Palatinate, DB InfraGO will renew around 500 kilometres of track and over 200 switches in Bavaria next year. Among others, the Munich S-Bahn will benefit from additional renovation work on lines S2, S4 and S7, as will the Allgäu network.

Dr. Philipp Nagl, CEO of DB InfraGO AG: “DB InfraGO is investing an additional 10 percent in Bavaria for these works. Together with the comprehensive renovations and the new construction and expansion program

for lines and stations, this means that over four billion euros will flow into Bavaria’s rail infrastructure in 2026. We know that the numerous construction sites next year will require a great deal of patience from passengers and ask for their understanding. At the same time, we want to avoid any long-term disruptions to rail services. These additional measures are made possible by the stable financing situation from the special fund for infrastructure and climate neutrality.”

Christian Bernreiter, Bavarian State Minister for Housing, Construction and Transport: “It’s good news that Deutsche Bahn is investing more money in the Bavarian rail network. It’s also desperately needed!



The railway must make progress with new construction projects and urgently invest in the maintenance and modernization of the infrastructure. Crucially, the focus shouldn’t be solely on high-speed corridors.

Progress on advanced projects like the electrification of the Franconian-Saxon Main Line and, more generally, on branch lines in rural areas is equally important. The federal government has set the right course with the special fund.

I’m delighted that Deutsche Bahn will now use it to tackle the construction projects in Bavaria!”

Rail Unit GmbH Relies on Flexibility – First EuroDual from ELP

Rail Unit GmbH and European Loc Pool (ELP) have entered a new partnership. By signing a Full-Service Leasing agreement for a EuroDual locomotive, Rail Unit is expanding its fleet with a powerful hybrid locomotive, paving the way for greater flexibility, efficiency, and sustainability in Freight transport. For Rail Unit GmbH, the versatility of the EuroDual was the decisive factor in their choice.

“For us, the flexibility of the EuroDual plays a major and decisive role. Knowing that we are no longer dependent on third parties or need to change locomotives to operate on non-electrified lines or sidings is crucial for us. This allows us to meet our customers’ requirements at any time,” explains Ceyhun Celep, Managing Director of Rail Unit GmbH. The EuroDual combines an electric power output of up to 6.2 megawatts with a diesel power output of 2.8 megawatts and a tractive effort of 500 kilonewtons in both electric and diesel modes. This enables operation on both electrified and non-electrified lines

without restrictions while reducing the need for additional locomotive changes.

“If you want to act flexibly at any time to meet customer requirements, the EuroDual is almost without alternative. Knowing that you have a locomotive that is both a full-fledged electric and a full-fledged diesel locomotive is very reassuring and increases our anticipation for its deployment,” Celep adds.

Rail Unit highly values its collaboration with European Loc Pool.

“We can only express praise for our cooperation with ELP. It is very reassuring to have a reliable and trustworthy partner by our side.”

ELP also expresses enthusiasm about welcoming a new customer.

“With Rail Unit, we gain an innovative company that shares our values of flexibility, reliability, and sustainability. We are proud to support them in their growth with a

EuroDual locomotive,” says Willem Goosen, CEO of European Loc Pool.

The locomotive will enter service in September 2026 and will operate on all national routes in Germany.

More about Rail Unit GmbH

Founded in 2021 and headquartered in Berlin, Rail Unit GmbH provides comprehensive personnel services for the railway sector. As a future railway undertaking, Rail Unit offers highly qualified and rapidly deployable railway staff, including train drivers for freight and passenger transport, wagon inspectors, work train supervisors, shunting attendants, and instructors.

With over 200 employees and more than 40 clients, Rail Unit operates throughout Germany. The company is characterised by high flexibility, short decision-making processes, and fair conditions. Its mission: to provide long-term added value to the railway sector through practical expertise

and reliable support – by railway professionals, for railway professionals.

More about the Hybrid Locomotives

European Loc Pool focuses on innovative six-axle hybrid locomotives with up to 2.8 MW diesel power, 9 MW electric power, and 500 kN tractive effort. All locomotives are equipped as standard with ETCS Baseline 3 for operation on category 2 lines. The first ELP EuroDual locomotives have been in operation on the German rail network since April 2020. They enable operation on both electrified and non-electrified routes, as well as in last-mile and shunting service. All Dual locomotives are equipped with remote control. Since mid-2023, ELP’s second-generation hybrid multi-system locomotive, the Euro9000, has been operating across



European corridors. As the “launch customer”, European Loc Pool ordered the first ten Euro9000 locomotives from Stadler in May 2019. The first version, with 1.9 MW diesel and 9 MW electric power output and 500 kN tractive effort, operates in Germany, Austria, the Netherlands, Italy, Belgium, and Switzerland. The locomotive’s operational area will subsequently expand to additional countries and corridors.

25 years of ICE trains to the Netherlands: Around 30 million ICE passengers between Germany and the Netherlands since 2000

A quarter of a century of ICE service between Germany and the Netherlands: Deutsche Bahn (DB) and NS International celebrated the 25th anniversary of German-Dutch cooperation on October 30th with a joint event in Amersfoort, Netherlands.

Climate-friendly train travel between Germany and the Netherlands is proving very popular: around 30 million passengers have travelled on ICE trains between the two countries since services began in November 2000. The partners are celebrating this anniversary with a special ticket offer: 25,000 additional saver and super saver fares for Europe, starting at €19.99, are available until mid-November for journeys between Germany and the Netherlands.

Stefanie Berk, Board Member for Marketing & Sales at DB Long-Distance: “30 million passengers in 25 years of ICE service between the two neighbouring countries demonstrate that climate-friendly rail travel, even across national borders, is increasingly becoming the first choice. With state-of-the-art vehicles like the ICE 3neo, which now also runs between the capital cities of Berlin and Amsterdam, travel within Europe becomes even more comfortable for our passengers, giving the booming international long-distance transport sector a further boost.”

Heike Luiten, Director of NS International: “These new trains represent a significant improvement for travellers in terms of comfort and reliability. Recently, train passengers have repeatedly experienced disruptions due to malfunctions on older trains. We look forward to welcoming passengers on board and transporting them to their destinations sustainably and comfortably. The introduction of ICE trains to Berlin also marks a special moment: the ICE has been connecting the Netherlands and Germany for 25 years. All daytime services from the Netherlands to Germany are now operated with the ICE, meaning that in addition to the routes to Frankfurt and Munich, we now also offer all trains to Berlin with the ICE.”

In early November 2000, a direct ICE International service between Cologne and Amsterdam was launched. The use of multi-system ICE trains, compatible with the different electrical and signalling systems in both countries, eliminated the previously necessary and time-consuming locomotive change at the border



in Emmerich. The first ICE between Amsterdam and Frankfurt ran in December 2002 via the then-new Cologne-Rhine/Main high-speed line. The journey time between Frankfurt and Amsterdam dropped to under four hours – 80 minutes faster than before. Since then, cross-border long-distance rail services between the two neighboring countries have developed extremely well: Trains now run between Frankfurt and Amsterdam up to eight times a day in each direction, every two hours.

Over the years, further ICE connections have been added: Amsterdam can now be reached directly by ICE from Frankfurt/Main, Cologne, Düsseldorf, Munich, Stuttgart and, more recently, Berlin and Hanover.

On the rolling stock front, another milestone in international long-distance rail travel followed in June 2024, coinciding with the start of the European Football

Championship: Deutsche Bahn (DB) deployed the newest flagship of its ICE fleet, the ICE 3neo, for the first time on routes to and from Frankfurt (Main) to the Netherlands and Belgium. These state-of-the-art and innovative trains gradually replaced the predecessor series, which had become increasingly prone to malfunctions. The ICE 3neo is characterized by exceptional reliability: train cancellations due to vehicle malfunctions have been significantly reduced on the Frankfurt-Brussels and Frankfurt-Amsterdam routes since its introduction.

The switch to the modern ICE 3neo train between Berlin and Amsterdam is being implemented gradually: The first ICE service between Berlin and Amsterdam ran on September 24th. Since mid-October, two-thirds of the connections have already been offered with ICE comfort. From November 1st, all direct trains on this route will operate as ICEs, completely replacing the aging Intercity

trains. The Berlin-Amsterdam connection runs six times daily in each direction, every two hours, with a journey time of approximately six hours. Additionally, one train per day in each direction runs between Hanover and Amsterdam.

All ICE trains also stop in Osnabrück, where Bremen and Hamburg, for example, can be conveniently connected via a transfer.

Germany

DB Cargo train drivers experience steelworks up close: factory visit to voestalpine in Linz



Rail connects – How train drivers learn about the importance of their transport services for the local steel industry.

Around 40 train drivers from DB Cargo were given an exclusive insight into steel production at voestalpine in Linz. Directly on the factory tracks, travelling in true steel tradition with the historic steam locomotive 'Dora', the tour took them across the extensive factory premises: from the delivery of raw materials to the imposing blast furnaces and the state-of-the-art rolling mills.

Experience steel production, strengthen cooperation

The aim of this unusual factory tour was to raise awareness of the close connection between industrial production and rail transport. DB Cargo's transport services are an essential part of voestalpine's supply chains: they ensure a continuous supply of raw materials to the production facilities and guarantee that high-quality steel is reliably delivered to customers throughout Europe – especially in the automotive industry.

The day not only offered exciting impressions, but also provided an opportunity for personal exchange. In dialogue with CargoServ, voestalpine's own railway transport company, the long-standing cooperation was deepened. Both companies

jointly manage the complex supply chains of steel production and demonstrate how partnership-based logistics works in practice.

Markus Schinko, Managing Director of LogServ and CargoServ, emphasised: 'Rail transport is a key success factor for our production and for a sustainable steel industry. Our cooperation with DB Cargo is based on partnership and innovation. With this event, we want to show how crucial the work of train drivers is for our daily operations.'

The campaign was also very well received at DB Cargo. Katja Sander, Head of BU Steel, said: 'The direct insight into production gives our employees an even better understanding of the importance of their transport operations. This creates identification and motivation.'

With this factory tour, voestalpine is sending a strong signal about the importance of environmentally friendly rail transport and its close cooperation with DB Cargo. Both are crucial for a future-oriented and sustainable steel industry.

Stadler to supply modern FLIRT XL multiple units for the Rhine-Ruhr S-Bahn

The Rhine-Ruhr Transport Association (VRR) has awarded VIAS Rail GmbH the contract to operate lines S 5, S 8 and RE 41. Stadler will supply a total of 36 modern FLIRT XL multiple units for use on these routes, which have been specially designed to meet the requirements of the Rhine-Ruhr S-Bahn network.

The new three-car trains are characterised by a high level of comfort, accessibility and capacity. With a length of around 70 metres and 180 seats, they offer significantly more space than the trains previously used. Six extra-wide doors on each side of the vehicle, so-called crowding spaces, and spacious multi-purpose areas enable passengers to board and alight quickly and offer sufficient space for wheelchair users, bicycles, prams and luggage. All vehicles are also equipped with toilets.

"We are proud that our FLIRT XL vehicles are contributing to the modernisation and increased attractiveness of local transport in the VRR," says Jure Mikolčić, CEO of Stadler Division Germany.

"The vehicles combine innovative technology with a well-thought-out design and meet the highest standards of comfort and efficiency."

The vehicles will be delivered in the familiar green and white design of the Rhine-Ruhr S-Bahn and will be operated, serviced and maintained by

VIAS. Financing will be provided through the proven VRR financing model, under which the vehicles will become the property of VRR.

"We are pleased that starting in December 2029, we will be able to offer our passengers an attractive and comfortable travel option with the modern FLIRT XL railcars," says Thomas Esser, member of the VIAS management team. "Even today, we are one of the largest operators of Stadler FLIRT vehicles. The new trains will be an excellent addition to our fleet."

The S 5 and S 8 lines are scheduled to start operating in December 2029, and the RE 41 line in December 2030. The transport contract will run for 15 years until December 2044.

With this delivery, Stadler once again underlines its role as a reliable partner for sustainable mobility solutions in local public transport.

FLIRT – comfortable and reliable

With over 2,800 units sold worldwide, Stadler's FLIRT (Fast Light Innovative Regional Train) is one of Stadler's bestsellers. The FLIRT impresses with its high flexibility, energy efficiency and adaptability to different areas of application. Thanks to its modular design, the train can be optimally adapted to the requirements of operators and route networks.



Germany

MEGA trailers, MEGA advantages - DB Cargo FLS expands its fleet

MEGA trailers, MEGA advantages - DB Cargo FLS expands its fleet 200 new trailers, including 100 MEGA trailers, increase loading volume, safety and efficiency for intermodal transport in Europe.

Red trailers, more space, full loads - DB Cargo Full Load Solutions is now on the roads and rails of Europe with 200 new trailers. Particularly striking: 100 MEGA trailers that transport bulky goods with ease, reduce costs and increase safety. Efficient, sustainable and reliable - that's how modern logistics works.

Full Load Solutions (FLS) has invested in its fleet and significantly expanded it: with 200 new trailers, 100 of which are MEGA trailers, we are increasing capacity, versatility and safety in transport.

The MEGA trailers offer around 100 cubic meters of loading volume and an interior height of three meters. The lifting roof enables the transportation of particularly bulky goods. Fewer journeys mean lower costs, lower fuel consumption and reduced CO₂ emissions - a clear benefit for our customers and the environment.

MEGA trailers offer around 100 cubic meters of loading volume. Safety has also been optimized: The trailers are equipped with

modern load securing systems and, instead of the conventional clamping beams, additional belt loops that also secure the rear load.

The "Angles Morts" sign ensures greater safety when turning and allows use in France without restriction. The trailers are equipped with ADR signs, as well as 3 label pockets on both sides and at the rear for the transportation of hazardous materials. They are also suitable for transporting waste and are Code XL certified as standard.

"A versatile fleet is central to our intermodal business. It helps us to better meet the needs of our customers throughout Europe," says Christian Jeck, Head of DB Cargo Full Load Solutions (Transa Spedition).

The MEGA trailers have been in use on DB Cargo FLS's international road and intermodal connections since February - including for the paper industry on the routes from Sweden to Germany and Italy. With a total of 450 trailers, DB Cargo FLS is setting standards for high-performance, safe and sustainable logistics.



DB Cargo Scandinavia – Strong railways for greater security of supply in Denmark



DB Cargo is strengthening Denmark's resilience with innovative logistics concepts and effective emergency prevention

When it comes to security of supply and crisis prevention in Denmark, DB Cargo Scandinavia – a subsidiary of DB Cargo – plays a key role in Dansk Industri's (DI) Transport "Preparedness Initiative", the company ensures that goods continue to flow reliably even in difficult times. With its strong network in Denmark and Sweden DB Cargo Scandinavia ensures that factories can continue to produce and ports remain at full capacity.

From single wagons to complete block trains, the company covers the entire transport chain. Modern multi-system electric locomotives and HVO-certified diesel locomotives enable large quantities of goods to be moved in a climate-friendly and reliable manner – even under challenging conditions.

Coronavirus pandemic highlighted the central importance of the transport sector in times of crisis

The corona pandemic demonstrated that the transport sector plays a crucial role in maintaining essential supplies in challenging environments. Transportation and logistics are therefore an integral part of Denmark's crisis preparedness.

As representative of DB Cargo Scandinavia on the board of DI Transport, Oliver Gesche, Managing Director Finance DB Cargo Scandinavia, actively contributed to the development of DI Transport's Preparedness Initiative. The focus has been on highlighting the positive role the entire transport sector can play in Denmark's preparedness today—whether critical infrastructure or supply chains are disrupted, or a climate disaster occurs. The initiative aims to facilitate constructive dialogue within the political sphere and to strengthen cooperation, thereby making optimal use of existing resources and expertise to improve resilience.

Cooperation for sustainable solutions

In addition to crisis prevention, DB Cargo Scandinavia is focusing on future viability. Together with authorities and industry partners, the company is driving forward the decarbonisation of rail freight transport and the expansion of climate-friendly transport corridors. One example is the port of Hirtshals, where the 'Greenport Scandinavia' project is creating a sustainable infrastructure. In future, CO₂e will be transported here safely and in an environmentally friendly manner.

The commitment in Scandinavia demonstrates how DB Cargo also secures rail transport in Europe on a supraregional level with strong networks.

Germany

Alpha Trains expands locomotive fleet with 15 Vectron Dual Mode from Siemens



Alpha Trains, a leading private lessor of rolling stock in Continental Europe, has ordered 15 additional Vectron Dual Mode (VDM) locomotives from Siemens Mobility, continuing the successful collaboration between the two companies. The order is part of the framework agreement signed in July 2024. The service contract signed between Alpha Trains and Siemens Mobility in 2023 also covers the maintenance of the newly ordered Vectron locomotives. The new Vectron Dual Mode locomotives are intended for use in Germany and Austria and will complement Alpha Trains' existing fleet of Vectron AC, MS, and Vectron Dual Mode models.

“The decision to expand our Vectron fleet again is a logical step towards the future. Our customers are looking for intelligent and sustainable solutions – and that’s

exactly what dual-mode locomotives offer. They provide the necessary operational flexibility on a wide variety of routes and significantly reduce emissions by replacing older generation diesel engines with modern, more environmentally friendly technology,” says Vincent Pouyet, Managing Director Locomotives at Alpha Trains.

“We are delighted that Alpha Trains is once again relying on Siemens Mobility and has ordered 15 additional Vectron Dual Mode locomotives,” says Andre Rodenbeck, CEO Rolling Stock at Siemens Mobility. “With its modular design and flexibility on electrified and non-electrified lines, the Vectron Dual Mode is an ideal addition to Alpha Trains’ fleet.

With more than 2,800 Vectron locomotives

sold to date, our customers’ confidence in the Vectron’s performance is clearly evident.”

The Vectron Dual Mode locomotive combines the advantages of a diesel locomotive with those of an electric locomotive. It can be used on both electrified and non-electrified track sections, reducing operational effort and increasing efficiency. This avoids locomotive changes and contributes significantly to promoting more sustainable rail transport. With a maximum power at the wheel of 2.4 megawatts in electric mode and 2 megawatts in diesel mode, the ordered locomotives can perform freight transport services at speeds of up to 160 km/h. The locomotives will be produced at the Siemens Mobility plant in Munich-Allach.

New alliance for rail growth DB Cargo transfers part of Transfesa Logistics to Boluda Shipping

New alliance for sustainable growth

As part of the transformation of the DB Group, DB Cargo and Boluda Shipping have reached a groundbreaking agreement: DB Cargo, the majority shareholder of Transfesa Logistics, is transferring part of the Spanish subsidiary’s business activities to Boluda Shipping. The transaction is expected to be completed before the end of 2025, subject to approval by the relevant authorities.

The aim of this strategic decision is to clearly align the activities of Transfesa Logistics: in future, DB Cargo will focus more strongly on the automotive sector and international freight transport between the Iberian Peninsula and the rest of Europe.

Boluda Shipping takes over rail activities

The remaining rail-related transport and logistics services in Spain will be taken over by Boluda Shipping, a global provider of maritime and intermodal logistics with a presence in Europe, Africa and Latin America. For customers, the reorganisation means the stable continuation of all services and additional growth opportunities.

‘This agreement creates clear growth opportunities for our Spanish subsidiary and is part of DB Cargo’s strategic realignment,’ explains Martina Niemann, CFO of DB Cargo AG. Idoia Galindo, CEO of Transfesa Logistics, also emphasises: ‘Transfesa’s activities will continue under the umbrella of two strong groups – a solution that opens up new opportunities for sustainable development and improved services.’

Ignacio Boluda, Executive Chairman of Boluda Shipping, also emphasises: ‘With this integration, we are strengthening our door-to-door logistics solutions, promoting green corridors and driving forward the decarbonisation of supply chains.’



New perspectives for Multi Hub Westfalen



New perspectives for Multi Hub Westfalen: METRANS and the city of Hamm plan further development of the shunting yard

METRANS Deutschland GmbH wants to become a new shareholder in the Development Agency for Sustainable Freight Transport (EANG) in Hamm. The railway subsidiary of Hamburger Hafen und Logistik AG (HHLA) plans to acquire 27 percent of the shares in EANG – a clear signal for the further development of Multi Hub Westfalen, one of the most important projects in the city of Hamm.

The city of Hamm and METRANS signed a memorandum of understanding (MoU) to this effect, thereby confirming their joint intention to expand the former shunting yard into a modern logistics hub with

European reach. The location offers ideal conditions for an intermodal terminal with connections to rail, road, and waterways.

Marc Herter, Mayor of Hamm: “With METRANS’ acquisition of the shares and its commitment to Hamm, we are setting the course for sustainable growth and new value creation. The Multi Hub Westfalen will be a key hub for climate-friendly logistics of the future.”

Hamm benefits from its central location with direct east-west and north-south connections as well as its proximity to sea and inland ports. “HHLA and METRANS are capable of sustainable logistics and rail – they are demonstrating this throughout Europe. Their commitment in Hamm is a gain for the entire region,” emphasizes Herter.

Peter Kiss, CEO of METRANS: “Our goal is to work with the city to develop Hamm as a western hub terminal in our European network. The location offers great potential as a central hub along the north-south and west-east axes in Europe. This will enable us to strengthen this region’s connections to Europe’s largest seaports and economic hubs – while also making an important contribution to promoting sustainable freight transport.”

At its constituent meeting on November 3, the Hamm City Council will have the opportunity to approve the planned change of shareholders – and thus set the course for the future of the project.

Photo: © Andreas G. Mantler

DB Cargo Polska and Alstom sign letter of intent for a locomotive service center in Rybnik



New center will increase service capacities, shorten maintenance times and ensure reliable locomotive operation for customers.

DB Cargo Polska will continue to expand its service expertise and has signed a joint letter of intent with Alstom to create of a modern service center for locomotives in Rybnik.

The new service centre will complement the maintenance capacities of the Alstom site in Toruń and enable efficient and timely maintenance of Traxx locomotives as well as other diesel and electric locomotives. “With the start of this cooperation, we are sending a strong signal for international collaboration. Poland continues to gain importance on the European railroad map,” explains Marek Staszek, CEO of DB Cargo Polska.

Customer benefits:

“With our service center in Rybnik, we ensure maximum availability, fast maintenance and reliable planning for our customers - all from a single source.”

The service offer includes:

- Maintenance and overhaul of diesel and electric locomotives and track equipment
- Modern service stations for short downtimes
- Energy-efficient and sustainable solutions to support long-term investment goals
- Personal contact person on site for fast response times

Beata Rusinowicz, Managing Director of Alstom in Poland, adds: “With the new service center, we are jointly responding to the increasing demand for comprehensive maintenance services. This creates a powerful partnership that passes on the benefits directly to the rail operators.”

The 750mm gauge Rügenische Kleinbahn, known affectionately as Racing Roland runs across the island of Rügen from Lauterbach Mole to Göhren via Putbus and Linz. The island is situated in the top north east corner of Germany. On October 18th, 0-8-0T No. 99.4011 waits to depart Sellin Ost station with train No. 102, the 09:53 from Göhren to Lauterbach Mole. *Andy Pratt*



Germany

The railway line between Putbus and Lauterbach Mole on the island of Rügen in Germany is laid to dual 750mm narrow and 1435mm standard gauges. Trains alternate between narrow gauge steam one hour and standard gauge railcar the next. There is no run round loop at Lauterbach Mole so the steam workings attach a diesel to the rear at Putbus to drag the train back. These images taken on October 17th show the railcar working and the RükB steam working at Lauterbach Mole. *Andy Pratt*



Germany

DB Class 101.139 stands at Rostock Hbf on the rear of train No. IC 2260, the 08:38 from Hamburg Hbf on October 19th. Diverted from it's regular route via Schwerin due to long term engineering works, the electric will have worked the train from Hamburg to Lübeck and then been dragged dead on the rear to Rostock over the diesel line between Lübeck and Bad Kleinen. *Andy Pratt*



Germany

DB Class 218.330 'Konrad' is ready to depart Hamburg-Altona on October 21st with train No. RE11014, the 11:35 to Westerland (Sylt).. *Andy Pratt*









Leipziger Dampf KulTour

www.ldk-leipzig.de















CP No. 2627 is pictured at Porto Campanha on September 13th with an IC service to Valencia.
Steve Chapman





After unfortunately being involved in a fatal accident, No. 1415 and its train was taken out of service at Regua. It is seen here shunting the stock of its cancelled train, passing plinthe steam loco E1. *Steve Chapman*



Portugal

CP No. 1436 adds a splash of colour to a grey and wet autumnal morning at Régua on October 31st while waiting to shunt the stock for train No. IR864 the 10:35 to Porto-São Bento into platform 1. *Andy Pratt*



CP No. 5616 passes through Ermesinde station on November 1st at the head of train No. IC722, the 14:06 Braga - Lisboa Santa Apolonia.
Andy Pratt



CP Class 1400 No. 1427 departs Ermesinde on November 1st with train No. IR871, the 15:20 Porto-São Bento - Régua.
Andy Pratt



Portugal



▶ No. 2603 is seen arriving at Porto Sao Bento with an unidentified passenger service on September 11th. *Steve Chapman*

▶ CP Class 1400 No. 1413 arrives at Porto Sao Bento on September 12th with the 06:46 service from Regua. *Steve Chapman*

▶ No. 5606 is pictured at Porto Campanha on September 11th with a Braga to Lisboa IC service. *Steve Chapman*



Portugal

Alfa Pendular No. 4010 departs Aveiro on September 15th heading north and passing the decoratively tiled former station building.
Steve Chapman





No. 1438 is pictured arriving at Regua with the 13:10 Pocinho to Porto Campanha service on September 13th. *Steve Chapman*

CP Class 1400 Nos. 1413 and 1424 are about to double-head the 19:20 service from Sao Bento to Regua on September 12th. *Steve Chapman*

No. 1424 is seen on arrival at Porto Sao Bento on September 15th with the 06:46 from Regua. *Steve Chapman*





Slovakia

ZSSK Vectron Class 193.131 heads non stop through Leopoldov
on September 22nd with a service to Bratislava hl.st.
Kevin McCormick





▶ ZSSK Class 757.015 stands at Trnava with train No. R749 13:01 Bratislava-Nové Mesto to Prievidza on September 22nd. *Kevin McCormick*

▶ ZSSK Class 361.129 arrives at Trenčín on September 22nd with train No. R718 Žilina to Bratislava hl. st. *Kevin McCormick*

▶ On September 22nd, Class 757.002 with train No. R748 12:16 Prievidza to Bratislava-Nové Mesto is seen at Trnava. *Kevin McCormick*











On September 23rd, Class 721.065 is seen shunting coaches at Kosice. *Andy*

ZSSK Class 812.023 arrives into Kosice with a terminating service on September 23rd. *Andy*

On September 23rd, only weeks before its terrible accident which would see it almost totally destroyed, Class 757.005 is seen running light engine through Kosice. *Andy*







▶ ZSSK Cargo Class 751.126 is seen stabled on Plešivec depot on October 4th. *Andy Pratt*

▶ ZSSK Cargo Class 751.123 and 751.046 are seen stabled on Plešivec depot on October 4th. *Andy Pratt*

▶ On October 4th, ZSSK Cargo Čmeliak Class 770.092 pauses at Rožňava station while working train No. Os31224, the Detska Železnica Košice charter to Plešivec where it was overtaken by ZSSK Goggle Class 757.011 working train No. R914, the 09:22 Košice - Zvolen os. st. *Andy Pratt*





▶ ZSSK Cargo Class 751.206 is seen stabled on Plešivec depot on October 4th. *Andy Pratt*

▶ ZSSK Cargo Class 751.082 is seen stabled on Plešivec depot on October 4th. *Andy Pratt*

▶ ZSSK Cargo Class 736.021 is seen stabled on Plešivec depot on October 4th. *Andy Pratt*





▶ ZSSK Cargo Class 736.020 is seen stabled on Plešivec depot on October 4th. *Andy Pratt*

▶ ZSSK Cargo Class 736.020 is seen stabled on Plešivec depot on October 4th. *Andy Pratt*

▶ ZSSK Cargo Class 736.024 and 736.002 are seen stabled on Plešivec depot on October 4th. *Andy Pratt*



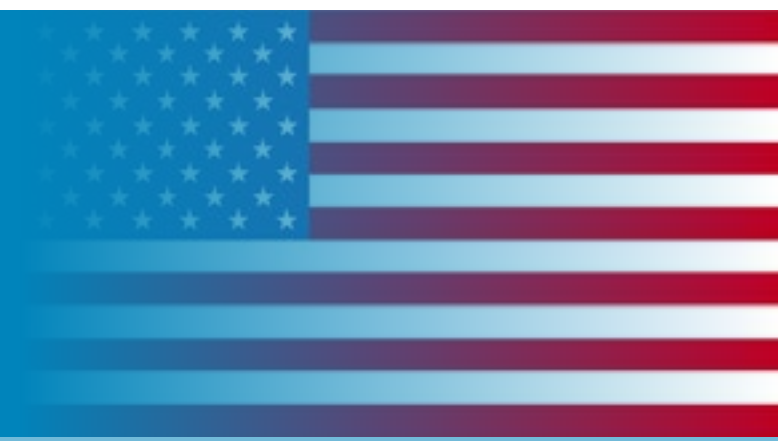








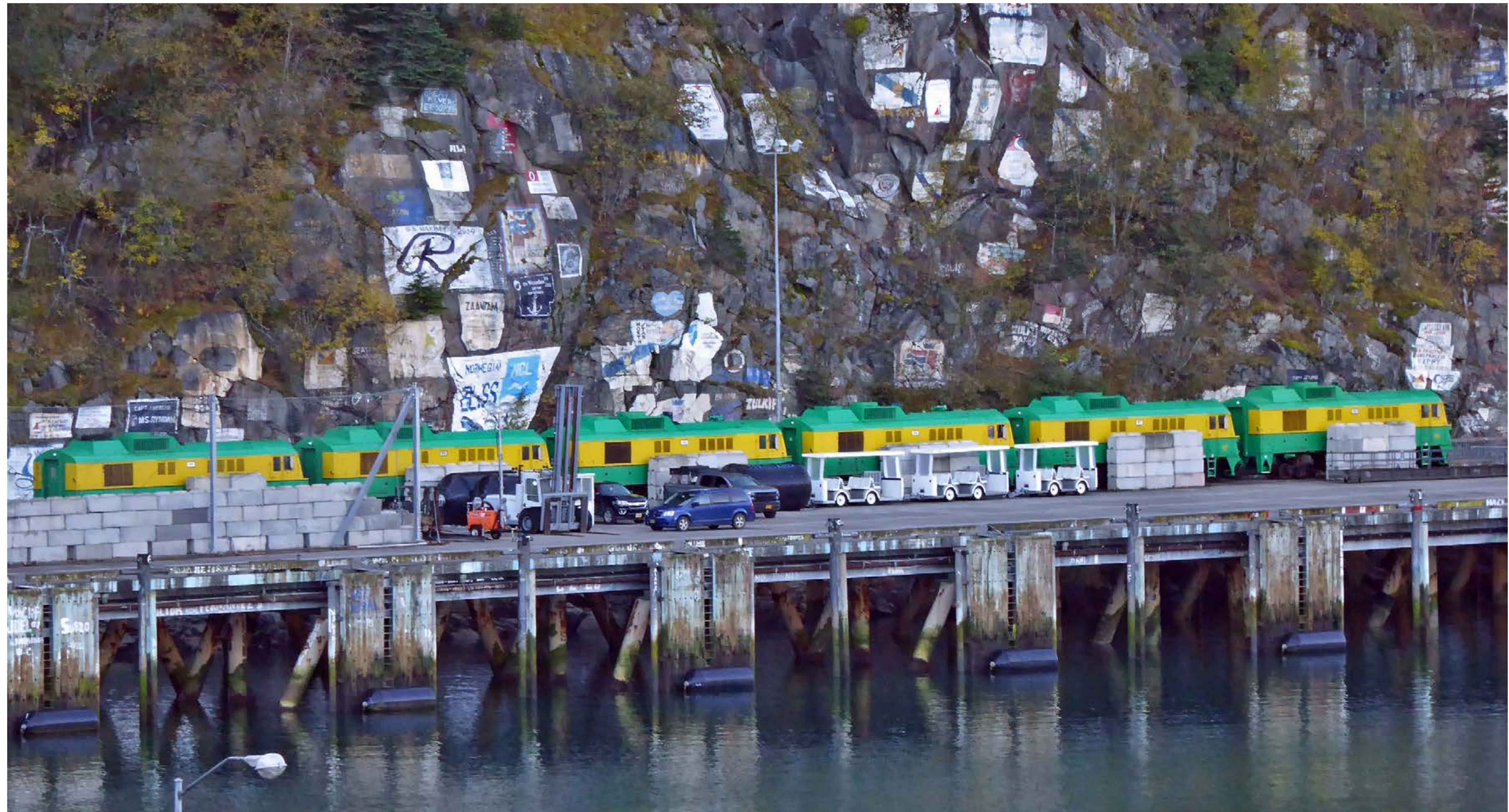
U.S.A.



On the White Pass & Yukon Railroad (WP&YR) at Skagway Alaska, stored General Electric locomotives built between 1954 - 1966 are seen in the railroad siding along with other equipment. Many of the class have been offered for sale since 2022. *Michael Lynam*

WPYR No. 3005, a National Railway Equipment Co (NREC) model E3000 CC DC new in 2020, is seen at the railroad dock adjacent to a cruise ship berth, waiting to depart with a tourist train to WhitePass Summit, on the Alaska / Canadian border. *Michael Lynam*

WPYRs first engine No. 52 originally No. 2, a 2-6-0 loco built by Brooks Locomotive in 1881. The loco was damaged by fire in 1971. Following a cosmetic and a few minor repairs, it was moved to its current position in the town centre at Skagway. Following asbestos removal it is intended to become a restoration project! *Michael Lynam*



▶ On the White Pass & Yukon Railroad (WP&YR) No. 3002 in the traditional green livery, a National Railway Equipment Co (NREC) model E3000 CC DC which was completed to Qube Holdings of Australia, but not delivered and sold to the WPYR in 2020, is seen crossing the replacement steel bridge, built in 1969 to replace the original cantilever bridge before entering a new 675 metre long tunnel. The Railroad has climbed 2613 feet at this point from leaving Skagway. *Michael Lynam*

▶ WPYR No. 104 built by the Montreal Locomotive Works in May 1969 is seen at Skagway depot. *Michael Lynam*

▶ WPYR No. 3005, a National Railway Equipment Co (NREC) model E3000 CC DC new in 2020 is seen in the town centre at Skagway, having arrived back from White Pass Summit before reversing its train into the railroad dock. *Michael Lynam*



U.K.

Millions of passengers in South East England have benefited from an Alstom-facilitated £100 million train upgrade project – the biggest in the UK – with the final unit having rolled off the production line. The 304th Electrostar train in the scheme – known as Project Aurora – rounds off the programme which has completed on-time and on-budget over the past five years at Southern’s Selhurst depot in South London. It has brought reliability and onboard benefits for passengers on franchises operated by Govia Thameslink Railway (GTR): Southern, Gatwick Express, Great Northern and Southeastern.

As the UK’s leading supplier of new trains and train services, Alstom provided technical specification, design work and materials for Project Aurora.

Steve Harvey, Services Director UK and Ireland at Alstom, said: “Aurora marks a landmark achievement for UK rail, and I’m immensely proud of Alstom’s pivotal role in delivering this transformation. Our commitment continues as we provide ongoing support for this significant fleet, which we’ve serviced for over 20 years since its introduction.

He added: “Completing the country’s largest fleet upgrade on time and on budget is a true testament to the dedication and expertise of our teams. The enhancements to our Derby-built Electrostar trains will make a meaningful difference to passengers’ journeys every single day.”

The award-winning works were funded by rolling stock company Porterbrook, the UK’s leading rolling stock financier and asset management company, and completed by a dedicated team of Southern engineers who have been busy installing plug sockets, information screens, LED lighting, improved WiFi and a new digital ‘backbone’ to the train. The latter has helped speed up the repairs process meaning trains spend less time out of service. With more trains added to the scope mid-scheme, Aurora became one of the largest fleet upgrades, with 1,222 carriages completed in time for the modern railway’s bicentenary. With the final train – Southern’s No. 387305 – now completed and back on the rails serving customers in London, Sussex, Surrey, Hampshire and Kent, staff were treated to a celebration event on October 14th to mark their past five years of

dedication to the project.

At its peak, two trains were fully upgraded and returned into passenger service each week. All 304 trains required:

- 280 km of wiring
- 39,000 LED lighting tubes
- 36,000 power sockets (each with two USB sockets)
- 2.8 million fixings and fastenings

The trains now feature plug and dual USB sockets at every seat, enhanced passenger information screens, with new digital screens at the end of each carriage, energy saving LED lighting and new technology to count the number of passengers on a train. The latter can be used to adjust and develop timetables to give people better services. Behind the scenes, smart on-board data recorders and updates to the Train Data Network allow for improved remote monitoring of the train’s operational systems, which helps reliability and reduces the time trains spend out of service for maintenance or repair, as engineers can diagnose faults before the train’s arrival. Forward-facing and track debris CCTV has also been installed on every train with the ability to remotely



live stream and download images which aid in incident analysis and reducing future delays. Project Aurora won the Fleet Achievement of the Year award at the National Rail Awards in 2023 for its efficiency, especially with such a huge scope of carriages to complete. GTR has the UK’s biggest fleet of Electrostars, operating between London, Surrey, Sussex and the south coast. The trains, all built at Alstom’s Derby Litchurch Lane Works, also run on Great Northern and Gatwick Express routes.

Photo: © Colleagues from Alstom, Govia Thameslink Railway and Porterbrook celebrate the successful completion of Project Aurora

U.K.

Arriva Group acquires RTS Infrastructure to enhance its UK rail portfolio

Arriva Group has announced it’s concluded a deal to acquire RTS Infrastructure, marking its entry into the UK rail infrastructure construction market and significantly expanding its train maintenance capability, with the addition of a depot near Leeds, complementing the existing Arriva Train Care business offering. The acquisition will broaden Arriva’s service offering to existing and new clients and further diversify the Group’s UK Trains business division, supporting long-term growth through a broader revenue mix. As part of the deal, Arriva will take over RTS Infrastructure’s existing maintenance and design and build contracts, enhancing its order book and positioning the Group for further growth. The deal also includes the lease of a modern rail maintenance facility located near Leeds Station, which will become a key part of Arriva’s national network of depots, expanding its overnight rail vehicle servicing capacity and reinforcing the Group’s ability to deliver high-quality, reliable services for rail operators across

the UK. RTS Infrastructure is based in Leeds and delivers rail depot servicing and infrastructure works such as platform upgrades and track alterations across the UK. The company holds a Network Rail Principal Contractor Licence, unlocking a completely new service offering for Arriva and allowing it to provide additional services to existing and new clients.

Amanda Furlong, Managing Director of Arriva UK Trains and member of the Arriva Executive Committee, said: “This acquisition is an important investment for the Arriva Group and underlines our commitment to the UK rail industry, building our position within it. RTS Infrastructure not only strengthens our depot capacity, but brings valuable construction and infrastructure capability in-house and enhances our competitiveness in the rail sector. This deal is crucial to our strategy to diversify in the UK rail market and operate more flexibly in a changing policy and commercial environment.”

Paul Hutchings, Managing Director of Arriva Rail Services, added: “RTS Infrastructure is a great fit for our UK rail business, bringing an expanded depot footprint and new opportunities to deliver design and construction services. With a skilled team and strong order book, the acquisition will help us better serve new and existing clients.”

RTS Infrastructure currently provides supporting services for a range of customers in the rail sector, including Network Rail, TOCs (Train Operating Companies) and OEMs (Original Equipment Manufacturers).

Chris Reid, Managing Director of RTS Infrastructure, said: “We’re thrilled to be joining Arriva Group. We’ve built a successful business over 15 years, delivering high quality infrastructure and depot operations to the UK rail sector and servicing major clients, winning national frameworks and employing an incredibly skilled and

dedicated team. Becoming part of Arriva will allow us to expand and enhance the services we offer our customers, backed by the strength, scale, and expertise of a pan-European organisation with its established and diverse UK rail portfolio. Our staff will also benefit from being part of the Group, with all the opportunities that will bring for future careers.”

The acquisition forms part of Arriva’s broader European growth strategy, which includes recent investments in fleet, infrastructure and digital innovation to make public transport a more attractive and sustainable option. The deal enhances RTS’s delivery capabilities and boosts growth and employment potential with Arriva’s broader portfolio. Arriva is committed to delivering stability and continuity throughout the acquisition and business integration process. All RTS Infrastructure’s employee roles and customer agreements will be unaffected by the transaction.

Spain



Alstom and Catalan operator FGC reveal the first train for the new express link to Barcelona-El Prat Airport

The President of the Government of Catalonia, Salvador Illa; the Catalan Minister for Territory, Silvia Paneque i Sureda; the President of Ferrocarrils de la Generalitat de Catalunya (FGC), Carles Ruiz Novella; and the President of Alstom Spain and Portugal, Leopoldo Maestu Miedes, have presented the first of ten electric trains that will connect Barcelona city centre with El Prat Airport. These trains, operated by FGC Mobilitat, will begin service between late 2026 and early 2027. The new trains will link the city centre with both terminals of Barcelona-El Prat Airport, running every 15 minutes, with a journey time of just over 20 minutes. The new line, currently under construction, will span 22.7 kilometres and include nine stations: Sant Andreu, Sagrera, El Clot, Passeig de Gràcia, Sants, Bellvitge, El Prat, Airport T-2, and Airport T-1.

Static and dynamic tests are currently being carried out at Alstom's industrial site in Santa Perpètua de Mogoda. The validation tests required for certification, which will take place on the General Interest Railway Network, will include traction, braking, dynamic behaviour, signalling, and telecommunications, among other checks.

Designed for the specific needs of airport journeys

The new trains, developed and manufactured at Alstom's industrial site in Santa Perpètua de Mogoda (Barcelona), are designed to provide rapid connections between Barcelona and Josep Tarradellas Barcelona-El Prat Airport. They have been tailored for airport travel, offering ample luggage space and wider corridors to facilitate accessibility. The trains will also feature advanced signalling, safety, and passenger information systems to ensure the highest levels of safety and the best on-board experience. Each five-car Coradia Stream train will feature 10 doors on each side (20 in total), with 202 seats (197 fixed, 7 folding and 2 PMR), accommodating up to 656 passengers. In addition to audible signals for door operations, a lighting system—green for opening and red for closing—will assist hearing-impaired passengers in identifying these actions.

Each train will be equipped with 20 panoramic screens displaying service information (four per car) and nine panoramic screens for airport information, providing

data on flight departures and arrivals. All cars will include multiple luggage storage spaces. For passengers on the platforms, the trains will be equipped with 12 exterior LED screens: two front screens (located at the top of each car) and 10 side screens. The trains will be fully accessible, with step-free access from the platform and an automatic ramp at the doors near the reduced mobility area. Each train will include two reserved spaces for people with reduced mobility, adapted toilets, and two multifunctional spaces for bicycles, trolleys, etc. The PRM area will be located in the second car, which will also house an accessible toilet with an electrically operated door. In line with Alstom's strategy and FGC's commitment to promoting sustainable mobility, the new trains have been developed using eco-design principles: careful selection of raw materials, traction systems, energy efficiency, and recyclability at the end of their life. Ergonomic design, accessibility, low life-cycle costs, and fleet reliability will contribute to making these trains an attractive and sustainable option for public transport, significantly reducing road congestion and CO₂ emissions.

A new maintenance depot

Last April, construction began on Alstom's new depot, located on the same site as the Santa Perpètua de Mogoda factory, which 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 will also include an auxiliary services workshop and a rail connection to the Adif railway network.

The maintenance facilities project covers 12 hectares, mainly for the construction of 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 wheel-turning equipment, a train washing tunnel, and a traction substation for the new track sections. The depot is expected to be completed by spring 2026.

Alstom™ and Coradia Stream™ are protected trademarks of the Alstom Group.

Sweden



In Sweden, Alstom is awarded a new maintenance contract for 62 Mälartåg trains



Alstom, a global leader in smart and sustainable mobility, has been awarded a comprehensive maintenance contract for Mälartåg commuter trains. It marks an important milestone in delivering robust and efficient solutions for Swedish rail transport. The agreement covers the maintenance of the entire Mälartåg fleet consisting of a total of 62 trains for up to ten years, providing long-term stability for the region's rail traffic. The takeover of operations will occur in December 2026. Yet, preparations will begin shortly to ensure a smooth start-up.

Maintenance will be carried out at Mälartåg's workshops in Eskilstuna, Tillberga, and Stockholm, as well as at Alstom's own purpose-built facility in Västerås. Alstom will implement its proven maintenance processes, which received top scores in the tender evaluation where Alstom and VR received the top rating for maintenance and asset management. Alstom will leverage its Maintenance Performance Centre (MPC), which develops specialised expertise and advanced maintenance competence deployed across the Nordics to serve several fleets, enhancing collaboration and improving maintenance execution.

“With the combination of Mälartåg's state-of-the-art workshop in Eskilstuna and our own recently expanded facility in Västerås, we can offer the market strong and robust maintenance solutions for all types of rolling stock. We are very pleased with the trust placed in us by Mälartåg and, together with VR, we are confident in our ability to contribute to efficient and sustainable rail traffic in the region,” says Mikael Granberg, Rolling Stock Maintenance Director at Alstom Sweden.

“Our shared goal is for passengers to experience safe and punctual service. By combining our operational experience with Alstom's maintenance expertise, we ensure high availability and quality in Mälardalen's rail traffic,” says Haris Habul, Division Director for Trains at VR.

Photo: © Alstom's services for rolling stock maintenance are tailored to customer needs and operational requirements



Alstom starts production on ten new Elizabeth line trains at Derby Litchurch Lane Works

Elizabeth line customers in London are closer to getting more brand new trains, as construction has begun by Alstom on the first of an additional ten to be introduced to the network. These new trains are being built at Alstom's historic Litchurch Lane Works in Derby to support both increasing demand for the hugely popular line and the Government's growth agenda.

Since opening in 2022, the Elizabeth line has had a transformational effect on travel in London and quickly become the UK's single busiest railway service, with an average of 800,000 journeys now made on the service each day.

Capacity increase

The new trains – which were ordered with UK Government funding – will allow Transport for London (TfL) to increase capacity on the existing line, further driving the economy by boosting connections and serving HS2's new Old Oak Common station in the future. Heidi Alexander MP, Secretary of State for Transport, visited Alstom's Derby site on Monday October 27th and said: "Thanks to over £220 million in Government funding, TfL's order for new Elizabeth line trains is a shining example of how public investment in our railways delivers for communities across the country, supporting more than 1,000 skilled jobs and ensuring London's transport network keeps pace with growing demand."

She added: "This is a clear demonstration of our Plan for Change promise to build a modern, accessible and sustainable railway that drives economic growth, cuts journey times and brings countless opportunities to people both in the capital and beyond."

The additional Class 345 Aventra electric multiple units (EMUs) are being built by Alstom at its Derby Litchurch Lane Works, one of the world's largest rolling stock factories, and the only UK facility that handles the end-to-end process of train manufacturing.

The factory was opened by the Midland Railway in 1876 and the city of Derby has been building trains continually since 1839. Prior to work commencing on the new trains, Alstom hosted The Greatest Gathering – the world's largest-ever railway festival – to celebrate 200 years of the modern railway. Over three days in August, Alstom welcomed 40,000 visitors to its Litchurch Lane Works, which also marked the first time in almost 50 years that the site had opened to the public.

Rob Whyte, Managing Director UK and Ireland at Alstom, said: "Our historic Derby Litchurch Lane Works are crucial to the country's economic growth, being the only UK factory where you can design, engineer, build and test a train from scratch for both domestic and export markets. Therefore, not only will these new Aventra trains enable Transport for London to continue successfully operating the Elizabeth line as passenger demand grows, they continue to support high-value manufacturing and supply chain jobs in the East Midlands and across the UK."

He added: "We look forward to our new Elizabeth line trains joining the existing fleet, which are maintained by us around-the-clock at our state-of-the-art depot at Old Oak Common."

Economic growth

The £220.5 million contract to build ten new Elizabeth line trains demonstrates how investment in London's transport infrastructure boosts economic growth across the country. As part of the order, almost 40 British companies are being supported, totalling more than 1,000 employees.

David Shore, Managing Director at Time 24, said: "We are absolutely delighted to be awarded the contract to provide the wiring for the ten new nine-car Aventra trains. Alstom are manufacturing in Derby for Transport for London. This comes at a time when the new rolling stock market in the

UK had been quiet, and it has allowed us to create jobs and invest back in the business. We are proud to be involved in what has become the single busiest railway service in the UK – the Elizabeth line."

TfL has a long-standing role as a national engine of growth and has spent more than £12 billion with more than 3,000 UK suppliers over the last two years. This has supported more than £11 billion in total Gross Value Added and 100,000 full time jobs each year.

Evaluation report

A new Elizabeth line evaluation report has revealed the extent to which the public have embraced the city's new railway line since it opened, and its positive impact on housebuilding and employment. Since the line welcomed its first passengers, an additional 71,000 trips are estimated to have been made across London's transport network each weekday.* In Abbey Wood, in London's southeast, an estimated 16% of trips on public transport beginning in this area wouldn't have occurred without the Elizabeth line.

Andy Lord, Commissioner at Transport for London, said: "The start of production of ten new trains in Derby is testament to the popularity and success of the Elizabeth line and shows how it is driving growth well beyond London, boosting employment and powering industry across the UK. This new report also illustrates the extent to which the line is driving up public transport use in London, speeding up travel on the network and driving regeneration through homebuilding."

Customers have also benefitted from an 11% drop in step-free journey times, based on average public transport journeys.** All Elizabeth line stations between Paddington and Woolwich have step-free access from street to train, and all other stations are step-free from street to platform.



Seb Dance, Deputy Mayor of London for Transport, said: "The Elizabeth line shows how quality transport infrastructure can unlock opportunities for people and places across the country, and this vital work in Derby makes clear that investing in the capital's transport network doesn't just benefit Londoners but drives wider economic growth across the country."

He added: "With the Government committed to growth and green-lighting a record number of major infrastructure projects in its first year, the Mayor and I look forward to working hand in hand with them to unleash the full potential of our transport network as we continue building a more prosperous London for everyone."

New jobs and homes

The Mayor's Transport Strategy outlines that London needs an additional 65,000 new homes each year to meet demand, plus around 1.3 million more jobs by 2041. Increased connectivity has shown Elizabeth line stations to be prime locations for development. As of October 2024, 70,500 housing units are planned within one kilometre of Elizabeth line stations – with Canary Wharf, Stratford, Romford, Southall and Acton Main Line seeing the highest concentrations. Between 2022 and 2023, 125,000 new jobs were registered within one kilometre of an Elizabeth line station.

Reflecting on manufacturing commencing on the new Elizabeth line trains, Claire Ward, Mayor of the East Midlands, said: "This is brilliant news for Alstom, Derby and the wider East Midlands, securing jobs for the future, rooted in our communities."

She added: "Derby's Litchurch Lane Works recently hosted The Greatest Gathering as part of Railway 200, proving its status as a national centre for rail innovation and pride – something which is further reinforced by this latest manufacturing contract."

Once complete, the ten new Class 345 Aventra trains will join the existing 70 nine-car fleet. These trains are maintained around-the-clock by Alstom at its Old Oak Common Depot in West London, which opened in 2018.

* Extra trips is based on an estimation of weekdays only on London's transport network, based on taps in and out on all parts of the network, including TfL transport modes and London's National Rail network
** Customer journey time is weighted by customers' perceptions on the waiting times, on-train time and any actual delays

Photo: © Construction of ten new trains for London's Elizabeth line is now underway by Alstom in Derby

Czech Republic

Whilst operating a 'Grumpy Railtours' trip, Class 751 207 runs round its train at Humpolec on September 20th. *Kevin McCormick*



Finland

FOUR YEARS OF DEVELOPMENT IN TAMPERE

What began four years ago as a vision of a connected and automated depot has now evolved into a fully functional ecosystem ready for cities across Europe. Smart Depot by Škoda Group combines artificial intelligence, digitalised maintenance and autonomous vehicle movement into one integrated solution that transforms a conventional depot into a multifunctional centre of urban mobility. Developed and tested in the Finnish city of Tampere, the technology brings to tram depots automated movement, condition monitoring via a digital twin, and AI-based visual inspection. Smart Depot represents a path towards fully digital maintenance – combining safety, efficiency and economic sustainability.

“Smart Depot builds on our proven rail vehicle systems and transfers them into the depot environment. It interconnects all key processes – from the moment a vehicle enters the depot to its dispatch back into service. Our aim is to increase maintenance efficiency, relieve staff of routine tasks and give operators accurate data for decision-making. It is a tangible step towards a fully digital and autonomous operation,” said Jiří Liberda, Digital Managing Director at Škoda Group.

Automated depot — from shunting to visual inspection

The Smart Depot system enables fully automated tram movements within the depot — from parking and washing to transfers to maintenance tracks. Thanks to a high degree of integration, the control of all activities is fully centralised. Key system functions include:

- Autonomous shunting and parking – trams move within the depot without a driver, precisely according to predefined scenarios; the core of this functionality is Škoda’s ACS anti-collision system
- AI visual inspection – automatic inspection of bogies, roofs and bodywork with detection of damage and contamination
- Digital twin and predictive diagnostics – continuous condition monitoring and predictive maintenance
- Fleet Management & Depot Management System – a unified data platform linking vehicles, infrastructure and service processes

Pilot operation in Tampere

Smart Depot is currently in a pilot phase in live operation. Škoda Group is progressively expanding its functionality to offer customers a complete solution — from architectural design and integration with local infrastructure and vehicles, to staff training and long-term operational support.

“In Tampere we have ideal conditions — a functioning tram

system, an openness to innovation and partners who share our vision of autonomous mobility. Our technology is now maturing to a stage where it is ready for wide commercial deployment. The average return on investment is around four years depending on the project, while the AI visual inspection system typically pays back in about 1.5 years,” added Jiří Liberda.

The project is implemented in cooperation with the City of Tampere, Tampere University and GIM Robotics, and is partly funded through the OptiPEX programme in partnership with the Technical Research Centre VTT.

Lyyli Living Lab — an incubator for the future

Škoda Group has been working with the Tampere tram operator Tampereen Ratikka on the development and testing of digital technologies since 2021. For this purpose, Lyyli Living Lab was created in cooperation with other organisations — a development and testing environment for intelligent urban mobility. A key role is played by the Lyyli tram (one of the Škoda Smart Artic X34 vehicles), which serves as a mobile test platform for installing new systems and obtaining immediate feedback from real operation. Škoda Group at the backbone of Tampere’s public transport The city of Tampere operates one of the youngest tram networks in Europe — services have been running since 2021 and from the very beginning they have been provided exclusively by three-section Škoda Smart Artic X34 trams. To date, a total of 35 vehicles have been delivered or ordered. In addition, Tampereen Raitiotie Oy has ordered additional modules to extend 19 of these trams by 10 metres, increasing passenger capacity by roughly 30% by mid-2028.



Italy: the first narrow-gauge battery-powered train for Europe

Stadler and the Italian railway company Ferrovie Appulo Lucane (FAL) have unveiled the first tailor-made battery-powered narrow-gauge electric train, a world first in the European railway sector. Being presented at the EXPO Ferroviaria in Milan, the new trains, commissioned by FAL, will save a total of over 1,300 tonnes of CO2 per year.

This innovation consolidates Stadler's position as a world leader in green technology. "This is the first narrow-gauge electric train powered entirely by batteries in Italy and Europe. It is 100% green and will change the future of sustainable mobility in Basilicata," explains Maurizio Oberti, Sales Director for the Italian market at Stadler. "We are very proud to take our innovative green technology to the Italian market, which will promote sustainability in the Municipality of Matera and the Basilicata Region and help it achieve net zero."

We would like to thank FAL for the trust they have placed in us and for the excellent collaboration established within the project. "Ferrovie Appulo Lucane confirms its status as a public company capable of investing in the future and innovation and of honouring its commitments," says the General Manager of Ferrovie Appulo Lucane, Stefano Di Bello. "Two years ago, at EXPO Ferroviaria, together with the Minister of Transport, Matteo Salvini, we presented what was then just a futuristic project. Today, we already have the first of seven trains that will enter service on the Altamura – Matera line by the end of 2026. Thanks to the synergy between FAL, the Ministry of Transport, the Basilicata Region, and the Municipality of Matera, we have made a total investment of €63 million, partly from the National Recovery and Resilience Plan (PNRR), partly from the PNRR Complementary Fund, and partly from the PON-PAC 2014-2020. Following a public tender procedure of Community relevance, FAL has entrusted Stadler with the construction of the trains."

"The goal," adds Vittorio Zizza, President of Ferrovie Appulo Lucane, "is to decarbonise the railway service on the Altamura – Matera line. FAL has been a strongly "green" company for years. This is one of the reasons why the livery we have chosen for TREEN (which is a registered trademark of FAL) reflects the idea of sustainability and care for the environment. With this project, we have demonstrated our commitment to eco-sustainable mobility, thanks in part to the foresight of the Basilicata Region, which has always encouraged and supported us in these courageous and innovative investments."

The new trains, manufactured entirely at Stadler's headquarters in Bussnang (Switzerland) and will expand FAL's current fleet. Today, the first train in the new series was officially unveiled to the public at the EXPO Ferroviaria, the international exhibition railway industry in Milan.

The Municipality of Matera and the Basilicata Region wished to start operating new environmentally-friendly trains, signing a contract with Stadler for the design and supply of a total of seven tailor-made, battery-powered, narrow-gauge electric trains in 2023 and 2024. Before entering service, the new battery-powered electric trains will undergo a series of rigorous tests to comply with the guidelines set out by Italy's National Agency for the Safety of Railways and Road and Motorway Infrastructure (ANSFISA).

Saving of more than 1,300 tonnes of CO2

Compared to the equivalent number of diesel trains, the seven new battery-powered vehicles will save a total of over 1,300 tonnes of CO2 per year, equating to 650 flights from Zurich to Thailand. Sustainability is reflected in all the features and functionalities of the new trains: from the innovative battery propulsion system to the environmentally-friendly LED interior lighting system, updated to the latest energy standards and in line with the technical specifications required by FAL. Seat upholstery is made from recycled materials and there is a dedicated area for e-bikes. All this is integrated into a new iconic design, created with FAL, to communicate the strong link with the environment and the transition to new green trains.

Powerful battery traction

The new zero-emission electric trains are fitted with high-performance battery-powered electric propulsion, located above the motor bogie to ensure excellent grip and optimal traction in all weather and operating conditions. The batteries have a high specific energy and allow for short charging times and considerable operating autonomy.

Passengers will also benefit from comfortable, functional and bright interiors, large panoramic windows and low-floor access, enabling people with reduced mobility to board easily.



Poland

Škoda Group, together with Polish company SAATZ and the municipal transport operator in Wrocław (MPK Wrocław), has launched a project to equip 31 Škoda trams with Škoda's advanced anti-collision system ACS. The project covers retrofitting Škoda 19T trams, which have been operating in the capital of Lower Silesia since 2006. Collisions represent a major issue in urban public transport, posing not only safety risks for passengers and other road users but also generating high repair costs for operators and third parties. The implementation of the anti-collision system will therefore enhance safety, reduce operating costs, and act as an important enabler for the development of smart cities and the gradual integration of autonomous technologies into urban mobility.

"Wrocław's project demonstrates that our technology can be applied across the full spectrum of transport solutions. The anti-collision system is a key step on the road to transport incorporating elements of autonomous operation, and Wrocław will now join the ranks of cities using cutting-edge technology to increase tram safety," said Jan Hušák, Technical Director Digital at Škoda Group.

"For every urban transport operator, the safety of passengers and pedestrians is a key priority. That is why we see investing in new assistance technologies in our vehicles as a natural step. We are pleased that by equipping the Škoda 19T trams with the ACS collision avoidance system, MPK Wrocław is setting a direction for the development of this technology in Poland. We believe that this solution will significantly improve travel comfort and safety, as well as support drivers in their daily work," stated Witold Woźny, CEO of MPK Wrocław.

"Saatz is a company that specializes in major repairs and modernization of trams, so we have extensive knowledge about various tram components, including collision avoidance systems. We believe that the ACS developed by Skoda Digital is a very good and efficient system, and we are therefore pleased that MPK Wrocław chose this system for installation on the Skoda 19T trams we are currently modernizing. The system installation details, which we agreed with Skoda Digital engineers and for which we are responsible, will ensure proper system operation. We are pleased that, thanks to the decision of the MPK Wrocław, the Škoda 19T trams we modernized will be collision-

free, thus retaining the characteristics of renewed trams for much longer," commented Jarosław Lazurko, CEO of SAATZ.

Škoda Group's anti-collision system combines LiDAR technology, cameras and advanced localisation through HD maps and odometry. It creates a "virtual tunnel" in front of the tram and detects both static and dynamic obstacles in real time. LiDAR scans the surroundings up to 100 metres ahead, the IMU unit ensures precise alignment with the track profile, and the ADAS camera provides a detailed 2D image. The driver is alerted in good time, and if necessary, the system automatically activates emergency braking. Škoda's award-winning anti-collision system, recognized for its technical innovation, is already successfully operating on trams in Tampere (Finland) and Olomouc (Czech Republic). It will also be installed on new trams for Prague (Czech Republic), Bergamo (Italy), and the German operator rnv. A key advantage of the system is that it does not require new vehicles – it can be retrofitted to existing fleets and upgraded as needed. The system is also one of the flagship

products within Škoda Group's broader digital ecosystem, which includes the comprehensive digitalisation of transport companies, such as the automation of depot operations, representing another step towards safer and more efficient public transport.

Škoda trams as mobile data hubs

Digitalisation of rail transport does not stop at anti-collision systems. Trams are evolving into mobile data hubs that monitor their

technical condition, energy consumption, location, and passenger load, transmitting this information in real time to central systems. Predictive maintenance based on operational data helps prevent failures, reduce downtime, and optimise fleet utilisation. Škoda Group's vision thus brings together hardware and advanced software, harnessing data and artificial intelligence to enhance the safety, reliability and efficiency of urban transport, while also helping cities better plan their future development.



New Zealand

KiwiRail's EF class locomotive has received international recognition for its distinctive engineering significance and enduring contribution to New Zealand's rail infrastructure. The Institute of Mechanical Engineers (IMechE) formally recognised KiwiRail's EF class locomotives with an Engineering Heritage Award at a ceremony in Palmerston North on October 24th.

"Designed in the 1980s to meet a unique requirement for a heavy-duty electric locomotive powered by renewable energy, the EF class represents a fusion of local need

and UK engineering expertise," said Chair of IMechE's International Strategy Board Dr Vinesh Thiruchelvam.

In 2018, KiwiRail's shareholding Ministers, including now Rail Minister Winston Peters, provided a \$35 million Government investment, which along with additional funding from KiwiRail's rolling stock programme, has allowed all 15 EFs to be upgraded and their lives extended for another decade. Upgrades to some of the locomotive's aging electronic systems was undertaken by Waikato-based Loop Technologies.

Electric locomotive fleet's significance honoured

KiwiRail Chief Metro and Capital Programme Officer David Gordon says the EF fleet's robust design, along with a strong commitment to maintenance, has enabled KiwiRail to extend the service life to over four decades. "The expansion reflects KiwiRail's confidence in the environmental and operational benefits of the upgraded fleet, including significant carbon reduction." Refurbished in KiwiRail's Hutt Workshops and recommissioned in our Palmerston North depot, the locomotives have undergone several changes, including an upgrade to the regenerative brake system which

returns electricity to the national grid. Work on 12 EFs is complete, with the full fleet to be completed in late 2025. The Engineering Heritage Award, established in 1984 by the IMechE, recognises excellence in mechanical engineering and highlights significant engineering achievements that have shaped society. To commemorate the recognition, a copy of the award plaque will be mounted onto each EF loco. The plaque was presented in person by Dr Vinesh Thiruchelvam to KiwiRail General Manager Engineering & Asset Services Ben Taylor.

Chile

Alstom celebrates 50 years working with the Santiago Metro, from the first trains to the most modern ones

Alstom, a global leader in smart and sustainable mobility, is marking the 50th birthday of Santiago Metro. Alstom has been a part of the system since its inception, delivering the first trains that brought the system to life and today benefit 2.5 million passengers every day. Over the years, Alstom has helped build trains and technology that power 75% of Metro's rolling stock, including for Line 1, 2, 4, 4a and 5. Alstom proudly built the NS-16, the first and only trains assembled in Chile. In addition to rolling stock, Alstom has provided Metro with a global solution, supplying various signalling systems on lines 1, 2, 4, and 5, as well as maintenance services.

"Over the years, Alstom has demonstrated comprehensive expertise in rail transport and a deep commitment to Chile and its Chilean citizens. From day one, our goal

has been to provide mobility solutions that improve the quality of life and safety of millions of passengers," says Denis Girault, Managing Director of Alstom in Chile.

As it celebrates this milestone, Alstom is also looking towards the future. Our company is developing 37 automatic trains for the upcoming Line 7, a project that will benefit 1.6 million people. The trains, which are being manufactured in Taubaté (Brazil), will be the most technologically advanced in Santiago and country, and are expected to begin operation in 2028. The company's connection with the Santiago Metro is reflected not only in its projects, but also in the people who have made them possible over these 50 years of working together. This includes Jean-Pierre Curial, one of the French pioneers who came to Chile to launch the NS74 trains.

Curial recalls: "My contribution was to provide trains for passenger transport, and the better this is done, the greater the customer satisfaction. That has been a very important aspect of my work: seeing the customer satisfied, that's what matters. My legacy to my team is that you must be transparent and supportive. If you have a technical note to fix a fault, you shouldn't keep it in your pocket, but put it on a shared table so that everyone can access it. When someone asks you for advice, you must make sure that they have understood what you wanted to convey. It's about values and teamwork, which is very important."

Cristian Caimanque, an electronic civil engineer who joined Alstom in 2015 and is currently Interface Manager for Line 7, Alstom's latest project with Santiago Metro, says that "Alstom is a company that retains people who

are passionate about what they do, and I really like that. It's a place where you can develop your skills and contribute to building something big, something important for the mobility". Regarding Alstom's relationship with Metro, he says that "Metro is a demanding customer, and Alstom responds to those demands in a unique way, based on 50 years of relationship and deep customer knowledge. Based on my experience, it has been a symbiosis in which we have both provided feedback to each other and grown together." With these shared stories, from the past and the future, Alstom reaffirms its commitment to the sustainable development of urban transport in Santiago, looking ahead to the next 50 years with the same dedication to innovation, operational excellence, and the satisfaction and safety of passengers.

Bulgaria

ŠKODA GROUP UNVEILS NEW METRO TRAIN FOR SOFIA

On October 1st, Škoda Group, a leading European supplier of zero-emission mobility solutions, officially unveiled a four-car metro train for the Bulgarian capital Sofia at its production site in Pilsen. The train is part of a contract with the local operator Metrolin EAD for the delivery of eight state-of-the-art metro trains. The project builds on Škoda Group's long tradition of supplying vehicles for public transport in Bulgaria – since 2010 the group has delivered 210 trolleybuses to five Bulgarian cities. It also represents an important step forward in cooperation between the Czech rail industry and Bulgaria in the field of public transport modernisation. The contract, worth nearly EUR 66 million (CZK 1.6 billion), covers the production of eight four-car metro train, which are being manufactured at Škoda Group's sites in Pilsen and Ostrava.

"The unveiling of the new metro train shows that the project is progressing according to plan. The first vehicle will be transported to Sofia in November, and we aim to complete the entire order in the first half of next

year. We are proud to contribute to the modernisation of public transport in the Bulgarian capital and to provide passengers with greater comfort and capacity thanks to the new metro trains," said Zdeněk Sváta, Member of the Board of Directors and COO of Škoda Group.

The most modern metro trains from Škoda Group

Sofia's metro carries around 400,000 passengers daily, and soon they will be able to travel on the new 80-metre metro trains built by Škoda Group. As the metro in Sofia partly operates above ground, the vehicle design has been adapted accordingly. The new vehicles will feature powerful air-conditioning tailored to the city's warm climate, ensuring a comfortable ride even during the hottest summer months. Accessibility is guaranteed with two dedicated spaces for wheelchair users, offering barrier-free and convenient travel for all passengers. The metro trains will be equipped with an automatic speed control system, which regulates speed and prevents

vehicles from bunching too closely together, ensuring safe operation. They will be powered by three-phase asynchronous traction motors and feature regenerative braking, feeding recovered energy back into the grid. Sofia's metro runs on the standard gauge of 1,435 mm and is powered by a third rail with a DC voltage of 750 ± 250 V. The new metro trains have a maximum design speed of 90 km/h.

Current production status and project timeline

- First metro: undergoing type and test runs at the Velim test circuit
- Second metro: completed and undergoing Factory Acceptance Testing (FAT)
- Third and fourth metro: currently in production
- Transport of the first metro to Sofia: planned for early November 2025
- Completion of all metro trains: expected March–April 2026

Comfort and sustainable urban mobility
Modern design and advanced technology

ensure low energy consumption and reduced operating costs. Regenerative braking allows efficient energy use and lowers the environmental footprint of operations. With fully air-conditioned interiors, spacious walk-through cars and barrier-free access, the new trains will meet the highest standards of passenger comfort in urban transport.

Sofia Metro

Sofia's metro, opened in 1998, is one of the youngest metro systems in Europe. It currently operates four lines with a network length of more than 52 km and over 50 stations. Carrying around 400,000 passengers every day, it is the backbone of public transport for the Bulgarian capital, home to 1.3 million residents. The new Škoda Group trains will be deployed primarily on lines 1, 2 and 4, helping to shorten intervals and offer greater capacity and significantly improved passenger comfort in air-conditioned cars adapted to local conditions.



Key technical parameters of the Sofia metro trains

- Train length: four-car set, approx. 80 m
- Maximum design speed: 90 km/h
- Power supply: 750 V DC from third rail
- Track gauge: 1,435 mm
- Traction: three-phase asynchronous motors with regenerative braking
- Air-conditioning: high-capacity system adapted to Sofia's warm climate and partial above-ground operation
- Accessibility: barrier-free boarding, two spaces for wheelchair users
- Safety: automatic speed control and modern braking systems
- Capacity: more than 580 passengers (approx. 120 seated)
- Boarding: four double-leaf doors on each side of every car for quick passenger exchange

Finland

Stadler to deliver up to 183 Tango Nordic trams for the Helsinki Metropolitan Area

Pääkaupunkiseudun Kaupunkiliikenne Oy, the public transport operator for the Helsinki Metropolitan Area, has awarded Stadler a contract for 63 state-of-the-art Tango Nordic trams, with an option for up to 120 additional vehicles. This landmark agreement marks Stadler's first tram order in Finland and strengthens its presence in the country and the Nordic region. The new trams feature a modern design, increased seating capacity, and enhanced passenger comfort. The contract includes maintenance services for over 30 years. These services encompass in addition to technical support, also spare parts supply, the establishment of a local warehouse, and the development of an efficient logistics system.

"We are convinced that the type of tram, that we selected is the best possible for the demanding conditions of Helsinki," says Eetu Kinnunen, Chairperson of the board of directors of Kaupunkiliikenne Oy.

Sustainable mobility for the future

"The Helsinki Metropolitan Area has a tradition of trams that have defined urban mobility through the decades. We are honoured that the Stadler Tango Nordic has been selected to carry this legacy forward and help shape the future of public transport in this region," emphasizes Ansgar Brockmeyer, Executive Vice President Sales & Marketing at Stadler. "Passengers can look forward to a comfortable, modern tram that meets the highest standards."

The Tango Nordic trams are based on Stadler's proven Tango platform and have been tailored to meet the specific needs of Helsinki's urban environment. Representing a new generation of sustainable and efficient public transport, the vehicles offer a smooth and comfortable ride while ensuring operational efficiency.

Designed with energy efficiency in mind, the trams feature lightweight construction and advanced systems for optimized driving. Their long service life and use of durable materials help minimize environmental impact throughout the trams' lifecycle. Incorporating cutting-edge technologies and sustainable materials, including zero-emission steel and components with high recycled content, the trams support climate neutrality while increasing passenger capacity. This enables operators

to reduce fleet size, lowering both operating costs and emissions.

Seamless integration with the cityscape

The Tango Nordic trams will replace the iconic Valmet vehicles from the 1970s and 1980s and support the launch of newly constructed tram lines. They will play a key role in expanding and modernizing the region's tram network. To ensure harmonious integration into Helsinki's urban landscape, the tram design was developed in collaboration with Aivan, a leading Nordic design and innovation studio. The result is a vehicle that reflects the architectural character and visual identity of the city.

Stadler: a trusted partner in Finland and the Nordic Region

With its latest order for Pääkaupunkiseudun Kaupunkiliikenne Oy, Stadler continues its success story in the region. Stadler has delivered over 350 vehicles across the Nordic Region, including more than 100 trains and locomotives to Finland. The company supports its customers through long-term service agreements designed to ensure reliability and lifecycle efficiency. In Finland, Stadler provides technical support and spare parts to customers such as VR Fleetcare Oy. Warranty services are offered for DR19 shunting locomotives and Sm7 FLIRT trains. Stadler also supplies spare parts to the Finnish market and operates service locations in Helsinki, Tampere, Oulu, and Pieksämäki. Across the Nordic region, Stadler Service employs over 620 people, operates 12 service sites, and maintains 377 vehicles. This strong regional presence, backed by decades of experience, enables Stadler to meet the unique climate and infrastructure challenges of Nordics and deliver reliable long-term service to its customers.



Australia

Alstom begins maintenance operation at the Maidstone tram depot as Melbourne's first Next Generation Tram arrives for testing



Photo: © A major milestone for Melbourne's tram network with the official opening of the new Maidstone Tram Depot

Alstom, global leader in smart and sustainable mobility, today marked a major milestone for Melbourne's tram network with the official opening of the new Maidstone tram depot and the arrival of the first next-generation G Class Tram manufactured from Alstom's Dandenong site.

"Today is about more than opening a facility — it's about supporting the future of Melbourne's tram network. Maidstone is a state of the art depot that will keep the G Class fleet running safely and reliably for the next 15 years. Built in Dandenong by our skilled local team, these trams combine Alstom's global technology with Victorian know how to deliver accessible, energy efficient journeys for passengers," said Pascal Dupond, Alstom Australia and New Zealand Managing Director.

A more inclusive and sustainable transport experience for the largest tram network in the world

Melbourne operates the largest operational tram network in the world, and Alstom's Dandenong facility - which has built over 75% of Melbourne's trams, is one of the world's leading hubs of tram building expertise and skill. The G Class tram program continues this legacy, combining global Alstom technology with Victorian know how.

The new trams feature a low floor design, dedicated mobility spaces, priority seating, hearing loops, improved real time passenger information and more energy-efficient design – delivering a more inclusive and sustainable transport experience.

Manufactured in Victoria with a target of at least 65% local content, the program supports up to 1,900 local jobs across manufacturing, construction and the supply chain. The Maidstone facility itself will support over 40 full time Alstom employees.

Elliot Rushworth, an Alstom technician based at Maidstone who has been driving the tram in testing at the facility said: "I just love trams. They're clean and quiet. I enjoy driving them, doing the maintenance, and now building a team to kick off this maintenance program is very exciting. I'm proud to be part of this project that is supporting so many local jobs."

Innovative technology and operation at Maidstone

Maidstone is more than a tram depot. It's a showcase of advanced technology designed to keep Melbourne's tram network safe, efficient and future-ready. Key systems include:

Automated vehicle inspection system (AVIS): a cutting-edge tram scanner that captures precise measurements as trams pass through, ensuring safety and performance standards are met in real time.

- Depot protection & personnel safety (DDPS): a critical safety system that protects workers on maintenance roads by preventing tram movements while personnel are working on or near a tram.
- Digital monitoring tools: real-time data systems to track tram health, maintenance schedules and operational readiness.
- Energy-efficient and sustainable infrastructure: incorporates LED lighting, rainwater harvesting, adaptive reuse and recycled materials to reduce environmental impact.

These innovations make Maidstone one of the world's most advanced tram facilities supporting the world's largest tram network with world-class technology.

ALSTOM™ is a protected trademark of the Alstom Group.

Sicily



Stadler to build first hydrogen trains for Sicily

Stadler expands its presence in Italy and signs first contract with Ferrovie Circumetnea (FCE) for the design and supply of two narrow-gauge hydrogen-powered trains. The new vehicles will contribute to sustainable rail transport and will run through the volcanic landscapes of Mount Etna.

“It is a great pleasure for us to realise this project and build the first two narrow-gauge hydrogen-powered trains for Sicily. The trains ordered by FCE will contribute to the decarbonisation of Italian rail transport in a new region and expand Stadler’s presence in the Italian market. We thank FCE for the trust they have placed in us and for joining us as part of the Italian Green Technology Team”, said Maurizio Oberti, Stadler’s Sales & Marketing Director for Italy.

At EXPO Ferroviaria, an international trade fair dedicated to the railway industry held recently in Milan, Stadler and the transport company Ferrovie Circumetnea (FCE) signed the first contract for the design and supply of two narrow-gauge hydrogen-powered trains. The agreement signed following the award of the public tender launched by FCE provides for the possibility of supplying a further 13 vehicles of the same type. The supply of the first two trains also includes five years of full service and technical spare parts.

Technical features of the new trains

The new hydrogen-powered vehicles will be designed and built at Stadler’s headquarters in Bussnang, in the canton of Thurgau, Switzerland.

Each hydrogen train consists of two passenger coaches and a central “Power Pack” unit containing the fuel cells and hydrogen tanks.

The trains have 87 seats and can carry a total of 147 passengers. The train also has a low-floor access to allow passengers with reduced mobility and elderly people to easily get on board. It is equipped with a universal PRM toilet and areas for passengers with bicycles and/or pushchairs. The particularly low axle load of less than 11 tons per axle allows the trains to run on the entire narrow-gauge network operated by FCE.

The trains will run along Etna Nature Park

Particular attention has been paid to the traction system, considering the steep gradients that characterise the Circumetnea line. The static converters and traction batteries are positioned above the motor bogies to ensure excellent grip and optimal traction effort in all weather conditions. The new trains are intended to run on the Paternò - Randazzo route, which winds through the Etna Nature Park.

19 hydrogen trains for the Italian market

The new order from FCE brings the total number of Stadler narrow-gauge hydrogen trains for the Italian market to 19. The trains were ordered by three different customers in three regions of Italy: 8 vehicles from ARST (Sardinia region) and 9 from FdC (Calabria region). These are the world’s first tailor-made narrow-gauge trains powered by hydrogen and fuel cells.



Brazil



Vale and Wabtec Sign Agreement to Test Ethanol Use in Locomotives on the Vitória-Minas Railway



Vale and locomotive manufacturer Wabtec Corporation have announced a partnership to study a dual-fuel engine capable of running on both diesel and a diesel-ethanol blend. The studies will initially be conducted in laboratories to validate the concept and evaluate performance, emissions reduction, and ethanol/diesel substitution rate. The tests are expected to run through 2027 to assess future application in the Vitória-Minas Railway (EFVM) fleet.

The agreement to use ethanol, a renewable fuel that replaces fossil diesel consumption, is part of a series of joint initiatives with Wabtec to advance Vale’s rail decarbonization program. In January, the companies announced an agreement to purchase 50 locomotives equipped with Evolution Series engines capable of operating with up to a 25-percent biodiesel blend. In the coming years, Vale and Wabtec will conduct a series of tests aiming to further increase this percentage.

“Innovative initiatives like these, aimed at adopting alternative fuels in our locomotives, are part of Vale’s commitment to accelerating the decarbonization of our rail network,” said Carlos Medeiros, Vice President of Operations of Vale. “In 2024, Vale’s rail network accounted for 14% of the company’s carbon emissions”. “For the first time, Wabtec will use ethanol as an energy source in a locomotive, a milestone in the global rail

industry. We are committed to developing technological solutions that accelerate the transition to more efficient and sustainable transportation,” said Danilo Miyasato, President and Regional Leader of Wabtec LATAM.

Net Zero

In 2020, Vale announced its goal to reduce direct and indirect emissions (Scopes 1 and 2) by 33% by 2030. This is another step toward achieving net zero carbon emissions by 2050, in line with the Paris Agreement’s ambition to limit global warming to below 2°C by the end of the century. The company also committed to reducing net emissions from its value chain (Scope 3) by 15% by 2035.

About Vale

Vale is a global mining company that exists to improve life and transform the future together. One of the world’s largest producers of iron ore and nickel, and a significant copper producer, Vale is headquartered in Brazil and operates globally. Its operations include integrated logistics systems, with approximately 2,000 kilometers of railways, maritime terminals, and 10 ports around the world. Vale aims to be recognized by society as a benchmark in safety, the best and most reliable operator, a talent-driven organization, a leader in sustainable mining, and a reference in value creation and sharing.

Turkey

Akdoğan Train Cargo chooses Siemens Mobility – Vectron goes Türkiye

The Turkish logistics company Akdoğan Train Cargo has ordered five state-of-the-art Vectron MS multisystem electric locomotives from Siemens Mobility, including the XLoad equipment package. The Vectron MS is designed for a speed of up to 200 km/h and for operation under multiple railway electrification systems. The order also includes a ten-year full-service contract, with options to extend the term by up to two years and to purchase five additional Vectron MS locomotives. Akdoğan Train Cargo will deploy the locomotives for cross-border freight transport in Eastern, South-Eastern, and Central Europe, including Germany, Austria, Poland, the Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Slovenia, Croatia, and Serbia, as well as for domestic operations in Türkiye. Delivery to Akdoğan Train Cargo is scheduled to begin at the end of 2027.

“We are very pleased to welcome Akdoğan Train Cargo as the first Turkish customer choosing the Vectron locomotives,” says Andre Rodenbeck, CEO Rolling Stock at Siemens Mobility. “The introduction of the Vectron in Türkiye marks a significant milestone for our locomotive platform and sends a strong signal for European-Turkish freight transport. With Railcover and Railigent X, we are providing a powerful full-service package that uses real-time data analysis and AI-based maintenance to ensure maximum availability and long-term operational reliability.”

For international deployment, the new locomotives will be equipped with the European Train Control System (ETCS) Baseline 3, as well as the relevant national train protection systems. The XLoad package improves the locomotive’s traction capabilities to increase its hauling capacity.

“We are proud to be the first company in Türkiye to introduce the Siemens Vectron MS locomotives with XLoad into our fleet. With their multi-system capabilities, the Vectron locomotives will allow us to seamlessly connect our domestic network with cross-border freight corridors across Europe. This investment strengthens our ambition to provide reliable, sustainable, and efficient rail transport solutions for our customers. Running corridors seamlessly across the EU with Siemens Vectron MS with XLOAD will reinforce not only green transportation but also will create new opportunities,” says Mustafa Pekmezcan, General Manager of Akdoğan Train Cargo.

To date, Siemens Mobility has sold more than 2,800 Vectron locomotives to over 100 customers with maximum speeds of up to 230 km/h. The more than 1,900 locomotives currently in operation have collectively accumulated over 1.2 billion fleet kilometres in service. Locomotives based on the Vectron platform have been approved for operation in 20 European countries.



Hungary

Milestone in Szolnok: Stadler manufactures its 6000th car body in Hungary



Stadler’s car body factory in Szolnok has reached another important milestone: the 6000th car body was delivered in October. Operating since 2009, the factory has become the Stadler Group’s largest car body manufacturing center in Central and Eastern Europe and plays a key role in the international manufacturing and supply network.

The development of the Szolnok factory is remarkable. The plant, originally designed to produce 200 car bodies per year and employ 200 people, has grown over the past 15 years to become one of the most modern railway vehicle manufacturing facilities in the Central and Eastern European region. Stadler has invested a total of €200 million in the Szolnok plant to date, where, thanks to the latest developments, the production of double-decker car bodies has started at the end of 2024, creating further jobs in the region. In October 2025, employees at the plant celebrated the production and delivery of the 6000th car body. This milestone not only marks a peak in production, but also the beginning of a new chapter. The next 1000 car bodies manufactured in Szolnok will include components for the GYSEV FLIRT InterCity trains destined for the Hungarian market. The first trains are expected to be delivered in the last quarter of 2027, with

the entire fleet entering service by early 2028. The five-car, dual-current vehicles will be able to operate not only in Hungary but also in Austria. The order is of particular significance: Hungary last purchased new InterCity trains 30 years ago.

Trains equipped with car bodies from the Szolnok plant currently operate in 14 countries, including the United States, Great Britain, Spain, Italy, Norway, Germany, and the Netherlands, further strengthening the international reputation of Hungarian-made products.

Stadler is not only present in Hungary as an employer, but also plays a key role in Hungarian rail transport with its vehicles. MÁV and GYSEV currently operate 143 FLIRT and 40 KISS multiple units, as well as 12 Citylink tram-trains. These vehicles travel around 35 million kilometres per year – one-third of MÁV’s total annual mileage – meaning that half of Hungarian passengers now travel on modern trains manufactured by Stadler.

U.S.A.

More Citylink for Utah – made in Utah

Utah Transit Authority (UTA) orders 20 more Stadler Citylink light rail vehicles. This fulfills an option from the base order of 20 vehicles placed in the fall of 2024. The trains are tailored for the UTA TRAX service in and around Salt Lake City. Stadler is set to build the vehicles at its Salt Lake City manufacturing site – proudly built in Utah for Utah. The design of the new TRAX trains was presented to the public at Utah Transportation Conference recently. Utah Transit Authority (UTA) has announced the purchase of 20 additional Citylink light rail vehicles, following the base order of 20 vehicles placed just one year ago. These state-of-the-art trains are custom designed for UTA's TRAX service, serving Salt Lake City and surrounding communities. True to its commitment to local investment, Stadler will manufacture the vehicles at its Salt Lake City facility—proudly built in Utah, for Utah.

TRAX Contract Grows

The UTA Board of Trustees approved the fleet expansion as part of the agency's ambitious "TRAX Forward" project, a long-term initiative to enhance and expand transit service across the region over the next decade. UTA selected Stadler—a global leader in passenger rail manufacturing—as its vehicle supplier for the TRAX service in 2024. The company's U.S. headquarters and manufacturing operations are based in Salt Lake City, making this order a milestone: the first Stadler-built light rail vehicles to operate in Utah, the company's American home. The original \$129 million contract, partially funded by a Federal Transit Administration grant, included 20 Citylink vehicles, with options for up to 60 more. With this latest order, UTA has now exercised 20 of those options, bringing the total number of vehicles on order to 40.

"Following a competitive selection process, UTA is proud to partner with Stadler to deliver the next generation of UTA's light rail vehicles," said UTA Executive Director Jay Fox. "Stadler's Utah-based facility gives us the rare advantage of working directly with our manufacturer to refine and optimize vehicle performance during production. These low-floor, fully accessible TRAX cars will enhance the customer experience, improve comfort, and support our growing ridership. As we look ahead to the future of TRAX, these new vehicles position UTA to serve Utah's expanding communities for many years to come."

Passenger-Friendly Design

Stadler's Citylink vehicles are known for their versatility and passenger-friendly design. Featuring a low-floor layout, they offer easy boarding for all riders, including those with mobility challenges. With more than 800 units sold across Europe since 2003, the Citylink platform is Stadler's most advanced light rail solution—delivering low vibration, high reliability, and proven performance.

"UTA's decision to expand its fleet with additional Stadler trains reflects the strength of our local partnership," said Martin Ritter, CEO of Stadler US Inc. "These vehicles represent a new era of modern, forward-thinking infrastructure and contribute to Salt Lake City's vision of becoming a leader in urban transit innovation." Stadler established its U.S. base in Salt Lake City in 2016, bringing its European expertise to North America. Today, the company employs more than 600 people at its recently expanded Utah facility, with continued growth expected as demand for Stadler's rail solutions expands nationwide.



Lithuania

First FLIRT train from Stadler for Lithuania unveiled in Vilnius

Lazauskas, CEO of the LTG Group.

The new electric train, manufactured at Stadler Polska plant in Siedlce, is designed to operate on electrified railway lines. By 2026, 731 kilometres of track in Lithuania will be electrified — about 28 percent of the national railway network. On these sections, electric trains running the popular Vilnius–Klaipėda route will be able to reach speeds of up to 160 km/h. Sustainable travel in other directions will be ensured by battery-powered rolling stock, which will use the contact network for part of the route and battery power for the remainder. Battery-powered trains will operate on the Kaunas–Šiauliai and Vilnius–Marcinkonys (via Varėna) routes.

A comfortable journey for all passengers

Radosław Banach, CEO of Stadler Polska, noted: "The train presented today is part of the well-known and widely acclaimed FLIRT family, with over 3,000 units sold worldwide. The LTG Link version was developed with functionality and passenger comfort in mind, specifically tailored to the needs of Lithuanian travellers. We are confident that passengers in Lithuania will appreciate its comfort, reliability, and quality."

The new electric trains will be more spacious — offering around 200 seats — and fully accessible for passengers with disabilities and individual needs. The seating layout allows passengers to travel comfortably in their wheelchairs or transfer to adjacent seats next to fixed tables, with space provided for accompanying persons. The passenger compartment layout was developed in consultation with organizations representing people with mobility impairments during the design phase.

Low-floor access will make boarding easier for elderly passengers, parents with strollers, and families with young children. The interior has no steps, ensuring easy

movement throughout the train. For additional comfort, the train is carpeted to reduce noise. "We will be traveling on these trains for decades to come, so we paid great attention to comfort and ergonomics. By adding new trains to our fleet, we are offering passengers a new level of travel culture and comfort — and we hope that even more residents and visitors will choose rail travel," said K. Meidė, CEO of LTG Link.

Smart features for a modern travel experience

For the first time in several years, a bistro area will return to Lithuanian trains, allowing passengers to purchase hot food and drinks on board. Travel will also become more convenient for cycling enthusiasts: depending on demand and the season, the train will be able to accommodate up to 30 bicycles. During the colder months, most of these spaces will be converted into additional passenger seating, although at least four bicycle spaces will remain available year-round. Recognizing that many passengers work while traveling, each ergonomic seat will include a power outlet, individual lighting, and a table suitable for laptops, while the seats themselves feature adjustable backrests for added comfort.

Once these new units join the existing fleet, the oldest diesel trains operating on the Vilnius–Turmantas route will be gradually phased out and replaced with modern rolling stock. The new electric train was delivered to the Vilnius Intermodal Terminal a few weeks ago. Shortly after arrival, its carriages were placed on bogies and assembled into a complete unit. Static tests are scheduled to begin at the end of October, with test rides for passengers planned for next year.

The train will now undergo comprehensive testing on Lithuania's railway infrastructure to obtain all necessary certifications.

On October 28th, LTG Link and Stadler presented a new FLIRT electric train at Vilnius railway station, marking a new stage in the history of Lithuanian railways – a greener, quieter, and more comfortable way to travel. The new train has been produced under the contract signed in June 2023 for the delivery of 15 vehicles, 9 electric and 6 battery-powered units – for LTG Link, the passenger transport company of the LTG Group.

New chapter of the history of Lithuania's railways

Transport and Communications Minister Juras Taminskas, who attended the unveiling ceremony, emphasized that this new electric train marks a new stage in the history of Lithuania's railways.

"With the renewal of Lithuania's train fleet, we are confidently stepping into a new era of passenger rail transport. I am delighted that soon passengers across the country – from cities to regions – will be travelling on modern Swiss electric trains. Ultimately, our focus is on creating a rail system that responds to every passenger's needs and ensures comfort, inclusivity, and quality for all," said Juras Taminskas, Minister of Transport and Communications of Lithuania.

The new trains from Stadler will not only significantly expand the existing fleet but also ensure cleaner and more efficient rail transport by optimizing operating costs, reducing dependence on fossil fuels, and contributing to the sustainability of the national transport system.

"These trains are not just an investment in modern and comfortable passenger transport — they represent an important step toward a more sustainable Lithuania. Lower emissions, lower costs, and greater efficiency are improvements that both passengers and the entire transport system will experience very soon," said Egidijus

From the
Archives

Belgium

No. 5936 was built by Cockeril in 1955 and it sits at the head of a line of other 59's at Merelbeke shed at Ghent on June 11th 1994. *John Sloane*

www.railtalkmagazine.co.uk 71



From the Archives

No. 7502 rests inside the repair workshop at Antwerp Dam shed on June 11th 1994. *John Sloane*

Belgium



From the Archives

France

SNCF No. BB-4762 engages in some shunting at Limoges on April 12th 1979. *John Sloane*

www.railtalkmagazine.co.uk

73



From the Archives

On March 15th 1976, ZB Class No. 76 prepares to leave Dabhoi Junction on the extensive 2ft gauge system in that area.
John Sloane

India



From the
Archives

No. 341.1065 is seen at Taranto with a train to
Bari on April 10th 1974. *John Sloane*

Italy

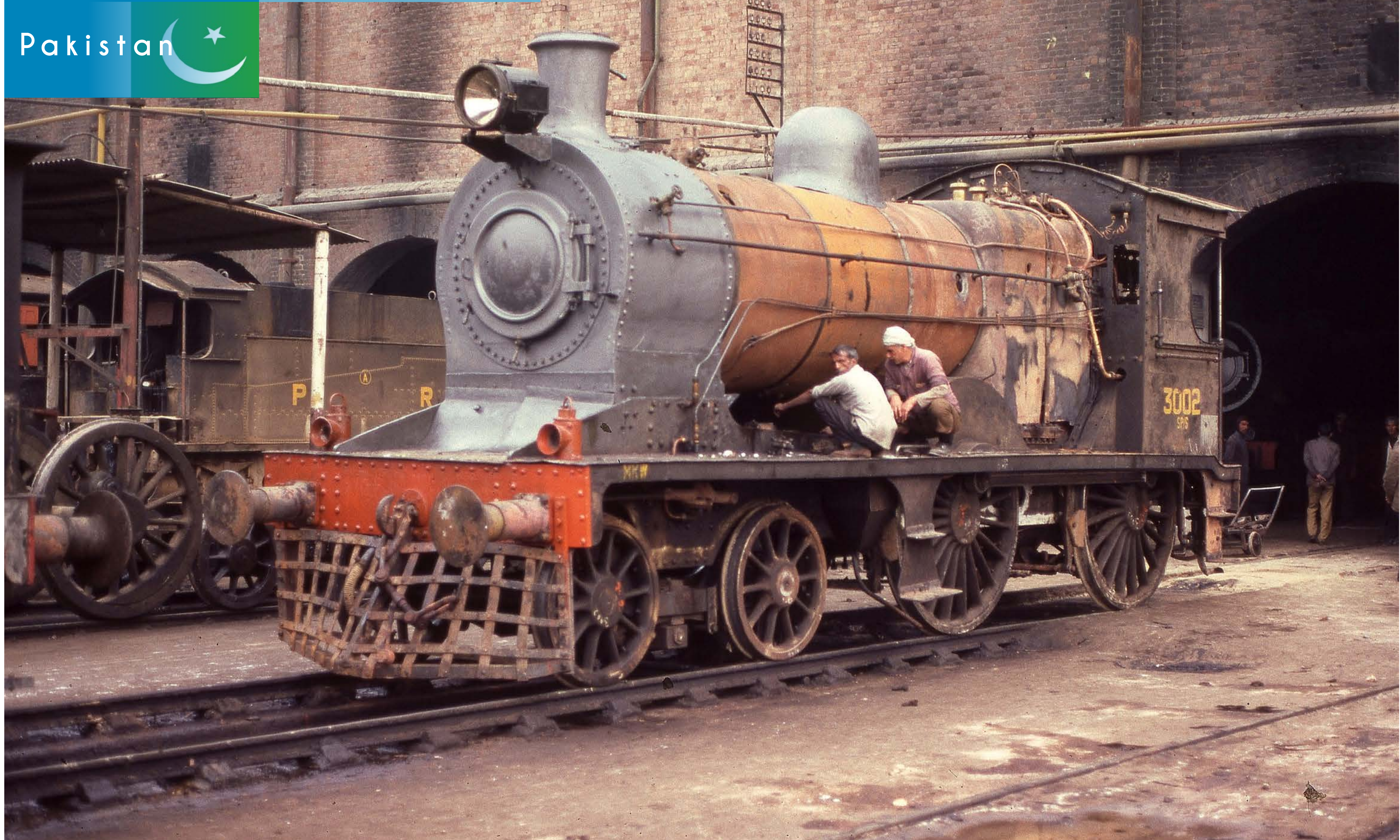


From the Archives

Pakistan 

No. 3002 is seen under overhaul at Moghalpura Works in Lahore on February 13th 1980. *John Sloane*

www.railtalkmagazine.co.uk 76



From the Archives

Poland

Pt47-74 brews up at Klodzko station prior to departing with a train to Wroclow on March 15th 1984. *John Sloane*

www.railtalkmagazine.co.uk 77

