Railtalk Magazine *Xtra*

Issue 208x
January 2024
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 72 - World News

Pg 80 - 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 208Xtra

Welcome to 2024 and a Happy New Year from all of us at Railtalk Magazine. In the news this month, and if you didn't already know, then the Euro 2024 football championships are taking place in Germany this year, this is followed by the Olympics in France therefore meaning that summer getaways from June till early September are going to be a headache.

However, I was impressed with the additional services and offers that DB have implemented during the football and here in the UK, I wondered what we would do and how we would cope?. Have a look at this from DB.....

At Deutsche Bahn (DB), all signals point to football: With special offers and more trains around the European Championship games, all fans and the 24 national teams can travel in a climate-friendly way at the upcoming UEFA EURO 2024™. Around match days, DB will offer almost 10,000 additional seats per day on the ICE and Intercity trains.

Dr. Michael Peterson, DB board member for long-distance passenger transport: "UEFA wants to host a climate-friendly European Football Championship in Germany in 2024. We look forward to supporting UEFA EURO 2024™ as a strong partner. Major climate-friendly events can only be held by train. The arrival and departure of people is responsible for up to 80 percent of the emissions at such events. For the sustainable European Championship, everything that can roll will roll for us in the coming year - and that's a lot. This year alone we have received three brand-new ICE trains every month."

With the DB Ticket EURO 2024 for 29.90 euros to UEFA EURO 2024™

Anyone who has a ticket to a game and is traveling within Germany can purchase discounted tickets for the outward and return journey. These cost 29.90 euros per trip and can be booked from January 17th via bahn.de/db-fussball-ticket .

For the first time, there is also a special offer for ticket holders from other European countries: you can purchase a 25 percent discounted Interrail pass for UEFA EURO 2024™, which allows you to travel there and back to Germany from 32 countries.

Customers can choose between a different number of travel days, on which the pass can be used for any number of trips within Germany in addition to arrival and departure. The Interrail Pass EURO 2024 can also be purchased from January 17th. Further information can be found in the UEFA Event Guide from December 2nd: uefa.com/euro2024/event-guide

10,000 additional seats per day

The DB expects tens of thousands of additional travelers on the trains to the venues. As part of its "Strong Rail" strategy, the DB set the course for fleet expansion at an early stage. It can now rely on a modern ICE fleet, which will grow to over 400 vehicles in the coming months. The DB is significantly expanding the timetable offering during the tournament period. For example, it uses longer ICE trains and offers trains on additional service days. In addition, 14 EM special trains will run every day. 10,000 additional seats are already planned into the schedule for the games. The offer will be supplemented by further additional trips once the results of the EURO draw for the group phase have been determined and it is clear on which connections additional capacity is needed. Further special trains will be planned at short notice for the final round.

The additional capacity is primarily intended for late evening and overnight connections in order to offer many travel options for departure from the games. During the tournament period, DB will almost double the travel options after 11 p.m. from the 10 game locations to the 20 most heavily frequented long-distance transport stops.

Having personally been at Manchester when there is an event on and there's no additional services, I am remembering how good we were when the 'Tour de France' came to the UK and all those additional services. But things change and not for the better.....

Until next month... **David**

This Page

CP Class 1400 No. 1427 approaches Covelinhas whilst hauling train No. IR868 13:08 Pocinho - Porto Campanha. *Laurence Sly*

Front Cover

HSL's Class 151.138-5 hauls a southbound rake of tanks through Merseburg. *Anton Kendall*

CP Class 1400 No. 1461 approaches Tua whilst hauling train No. IR876 17:14 Pocinho - Porto SB. *Laurence Sly*

Terms & Conditions

Railtalk Magazine is a free monthly online digital magazine (e-mag), provided in PDF format.

Railtalk Magazine takes no responsibility for any information provided or printed in this magazine. Best efforts are made at the point of going to publish, to effect all information is correct, however no guarantees are given or implied.

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 we will be happy to provide details of respective owners once permission has been granted to pass on such information.

Railtalk Magazine is published by HAD-PRINT a trading name of HAD-IT LIMITED.

HAD-PRINT
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 this magazine together a joy when we see so many great photos.

These issues wouldn't be possible without contributions from:
Ken Abram, Michael J Alderdice, John Alsop, Steve Andrews, Ray Anslow, Mark Armstrong, John Balaam, Brian Battersby, Mark Bearton, Steven Beesley, Tom Blanpain, Mark Bennett, Michael Bennett, 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, Stuart Hillis, David Hollowood, Keith Hookham, Derek Hopkins, 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, Alan Naylor, Gerald Nicholl, Jeff Nicholls, Dave Peel, Chris Perkins, Mark Pichowicz, Colin Pidgeon, Neil Pugh, Andy Pratt, Andre Pronk, Alan Rigby, Charlie Robbins, Bryan Roberts, Dennis Rowland, Tim Saunders, Neil Scarlett, Paul Senior, Alan Sinclair, John Sloane, Laurence Sly, Lee Stanford, Steve Stepney, Allison Twycross, Steven Thompson, Mark Torkington, Brian Turner, Gerard van Vliet, David Wood, Leuan Wood, Shep Woolley, Erik de Zeeuw

Australia

Alstom wins a contract worth around 900 million euro to maintain VLocity and Classic fleet for the next decade in Victoria, Australia

Alstom wins around 900 million euro tender to maintain the VLocity and Classic train fleet for the next decade in Victoria, Australia

Over 300 jobs currently supporting fleet servicing across Victoria, Australia with creation of new jobs in the local rail industry over the contract term

Alstom will deliver increased reliability and availability of VLocity and Classic fleet, significant fuel savings and a new fleet control centre

On December 21st, Alstom, global leader in smart and sustainable mobility, has been announced as the successful bidder for a contract worth around 900 million euro to maintain the regional rolling stock VLocity and Classic fleets in Victoria, Australia for the next decade.

The VLocity train fleet, which is built by Alstom at its Dandenong manufacturing site in Melbourne, Australia will be maintained alongside the Classic fleet out of West Melbourne, South Dynon and Ballarat East sites securing hundreds of Victorian jobs for the next decade.

“Our association with VLocity goes back to 2003. On the twentieth year of that association, I am humbled by the trust placed in us by the Victorian Government to continue the privilege of servicing VLocity trains for the next decade,” said Pascal Dupond, Alstom’s Managing Director, Australia and New Zealand.

The award of the contract to Alstom locks in a number of benefits for the local economy. This includes 98% of labour based in Victoria servicing the VLocity and Classic fleet with 69% of maintenance materials supplied by local Victorian suppliers.
Alstom have also committed to a 6% spend with 40 local social benefit suppliers over the life of the contract.

“We will establish a fleet control centre in South Dynon, based on Alstom’s UK Voyager Control Centre which will further improve reliability and availability of the fleet. Local suppliers across Victoria will also play an important part in supplying parts, overhauls, repairs, preventative maintenance and wheel turning; the impact to the rail supply chain in Victoria will be profound”, Mr Dupond added.

Additional predictive maintenance technology that Alstom will bring to the contract will also result in a reduction of fuel costs and carbon emissions from the VLocity and Classic Fleet.

“VLocity is without doubt a jewel in the crown of Victoria’s rail fleet. The technology, local knowhow, innovation and excellence that Alstom brings will enable the VLocity and Classic fleet to shine and continue to serve Victoria’s regions throughout this decade and into the next,” Mr Dupond concluded.

Nos. CBH120 and Q4011 are seen with empty grain hoppers of different types passing Herne Hill in the Swan Valley area of Perth. *Colin Gildersleve*

Aurizon's Nos. P2509 and P2501 pass through the Swan Valley with loaded grain enroute for the CBH grain terminal at Kwinana.
Colin Gildersleve

Commonwealth Bulk Handling Group's Nos. CBH014 and CBH010 round the curve at Kenwick with empty grain hoppers from Kwinana. *Colin Gildersleve*

At the village of Berg im Drautal on the line between Spittal-Millstättersee - Innichen, OBB EMU Class 4024.066 calls with train No. S4236 on November 29th. *Thomas Niederl*

Austria

OBB Class 4746.047 working train No. S4221 is seen on its way towards Lienz near Berg im Drautal on November 29th. *Thomas Niederl*

Train No. IC533 ‘Lienzer Dolomiten’ which in the 2023 timetable consisted predominantly of Hungarian carriages and was to change in the December timetable is seen not far from the Church of Saint Athanasius near Berg with Class 1116.059 in charge on November 29th. *Thomas Niederl*

The annual Christmas trains on the heritage Steyrtalbahn sees Class 298.53 with the 11:30 departure from Steyr Lokalbahn to Grünburg on December 17th, seen here between Pergern and Neuzeug.
Thomas Niederl

With the December timetable change, train No. IC533 to Lienz became a Railjet. However, the ÖBB is currently struggling with various problems with the fleet and so there were not enough Railjet sets available for the first few weeks. The majority of the Railjet services from Vienna towards Villach and Lienz were therefore hauled by classic trains, which made the photographers very happy. Here Class 1144.245 with train No. RJ533 arrives at Unzmarkt on December 19th. *Thomas Niederl*

On December 29th, Railjet train No. RJ535 is seen with classic coaches and hauled by Class 1144.021. The train is seen near the halt at St. Georgen ob Judenburg. *Thomas Niederl*

Austria

MOBILER meets MFD Rail: Hire up to 600 MML underframes

The Rail Cargo Group (RCG) have concluded a framework agreement with the Swiss wagon hire company MFD Rail. In the future, 600 additional container carrier wagons will contribute to transferring even more goods from road to rail.
Multimodal logistics, MML for short, is becoming increasingly popular. At RCG, the combination of various modes of transport, made possible by diverse handling techniques, is highly valued. Europe's leading rail logistics specialist develops customised end-to-end logistics solutions in which the goods travel most of the route by rail in an environmentally friendly manner and the first and last mile flexibly by road.

Ready for the Waste Management Act and more
The wagon hire company MFD Rail is actively involved in reducing greenhouse gas emissions and professes to transition to CO2-free transport. The rented container carrier wagons from MFD Rail are specially tailored to RCG's needs and were designed for use with the MOBILER configuration. In combination with the hydraulic lifting system of the MOBILER, goods can be transferred between train and truck completely without a crane or siding. The innovative logistics solution is used last but not least for environmentally friendly transport of waste by rail. In 2023, over 200,000 tons of waste have already been contractually fixed according to the amended Waste Management Act and thus sustainably transferred to environmentally friendly rail transport. In 2024, this number is expected to be significantly higher.

The first tranche is ready for use
The first 100 newly produced container carrier wagons have already arrived and are being used in various of areas of waste disposal logistics. The next tranche is planned for 2024 and includes 100 more especially branded container carrier wagons that will be delivered to RCG in the first half of the year. By providing state-of-the-art multimodal underframes, MFD significantly contributes to upgrading RCG's flexible logistics services and thus laying the foundation for a long-term partnership.

Jubilee of the Turkish subsidiary

20 years of successful railway logistics
Rail Cargo Logistics, the Turkish freight transport subsidiary of ÖBB Rail Cargo Group (RCG), recently celebrated its 20th anniversary. Customers from different sectors and forwarding companies, service providers and representatives of the Austrian Consulate and Advantage Austria Istanbul were invited. The General Consul of Istanbul, Josef Saiger and his wife, Brigitte Saiger, were among the honoured guests. 20 years of successful railway logistics deserve to be celebrated – and in the course of this, great thanks are due to all of the stakeholders for this milestone.

Event on the Bosporus
Around 120 guests accepted the invitation to the Portaxe Shine venue in Baltalimani on the banks of the Bosporus. After welcome speeches from RCG board member Christoph Grasl and managing directors Murat Hürmen and Ercüment Gücüyener, the guests were able to not only talk about industry-related topics in a celebratory atmosphere but also enjoy a performance of the Turkish folk dance Zeybek and a violin show.

Market leaders in Turkey
The Turkish RCG subsidiary was founded in 2003 in Istanbul under the name Express-Interfracht in partnership with majority shareholdings. It has been a one hundred percent subsidiary of the Rail Cargo Group since 2008. The company was renamed Rail Cargo Logistics ten years ago. Today, the railway logistics specialist is the market leader in the conventional and combined rail transport sector focusing on end-to-end services. They don't focus only on the Turkish market but also on the transport of transit goods in the CIS countries.

Components for rail on track

For Track Tec, the leading supplier of track superstructure materials, ÖBB Rail Cargo Group (RCG) transports concrete sleepers for the Romanian railway infrastructure. In addition to classic goods such as building and raw materials, agricultural products or steel and cars, RCG also transports components for the railway infrastructure. Track Tec Group is a leading international provider of solutions for railway infrastructure and the main producer of elements dedicated to railway infrastructure. Since June 2023, RCG has been transporting concrete sleepers for Track Tec for infrastructure renovations; on a route of 1,650 kilometres from Poland via the Czech Republic, Slovakia, and Hungary to Romania. By December 2024, it is planned to handle more than 80 trains – equivalent to up to seven trains per month – each train is 27 wagons long and comprises around 1,500 net tonnes. RCG handles the main run with its own carrier subsidiaries in the respective countries. Partner railway undertakings take care of the first and last mile.

Logistics solutions for building materials
RCG develops and realises special logistics solutions for the delivery and removal of building materials, including storage, silo, and road logistics. When developing a demand-oriented construction site logistics concept, the optimal combination of different modes of transport is just as much a matter as the implementation of end-to-end logistics. The RCG experts know the needs of the companies carrying out the construction work and thus create an optimal interface between construction progress and transport.

Czech Republic

In what was a very brief period of sunshine, ELL Class 193.934-7 heads a westbound grain train round the curves at Brandys nad Orlici.
Anton Kendall

Czech Republic

Not only Masaryk Railway Station, Smíchov and Královo Pole. Construction boom on Czech railway continues

The year 2024 will be marked by reconstruction of large stations on the Czech railway network. Správa železnic will have a budget of CZK 57.5 billion next year. In addition to the reconstruction of the Masaryk and Smíchov railway stations in the capital city, a complete modernisation of the railway station Brno-Královo Pole will also begin. However, construction will also begin in several other places across the country, with thirty new constructions starting. The design of high-speed lines will also proceed to the next stage of preparation; 100 km of new lines will be worked on.

“Next year’s budget will allow us to maintain the high pace of rail modernisation. The preparation of high-speed lines or the installation of the European Train Control System (ETCS) will also continue at a fast pace,” says the Minister of Transport Martin Kupka and adds: “Shortly after the New Year, we will start key constructions in the Prague railway junction, which will bring significantly higher comfort of travelling, including comfortable transfer to other modes of transport. The Masaryk and Smíchov railway stations, as well as the busy station in Královo Pole in Brno, will completely change their appearance.”

“At the beginning of next year, we will complete major renovations of several of the most important station buildings. The renovation of the interiors of the historic Fanta building at the Prague Main Station will be completed, same as works in České Budějovice and Plzeň will also be finished. On the other hand, the restoration of another listed building, the main station in Pardubice, will be fully underway,” adds the Director General of Správa železnic Jiří Svoboda.

He adds that the inhabitants of the city will appreciate the completion of the extensive reconstruction of the local railway junction and the opening of the new stop Pardubice centrum.

Constructions to be launched in 2024

In addition to the above-mentioned constructions, the reconstruction of the corridor section from Lipník nad Bečvou to Drahotuše will also begin. In western Bohemia, the construction of a new line from Plzeň to Stod and the modernisation of the existing line between Plzeň, Nýřany and Chotěšov will enter the implementation phase. Furthermore, the total reconstruction of the main station in Hradec Králové will start, in East Bohemia the electrification and reconstruction of the line from Týniště nad Orlicí to Solnice will be an important event. Construction work is expected on the section of the Ore Mountains Mainline between Kyjice and Chomutov. The railway stations in Chrastava and Hrádek nad Nisou in the Liberec region will undergo complete renovation.

In the Highlands, work will get into full swing in Vlkov u Tišnova and the connecting section to Křižanov and also between Přibyslav and Pohled. In the same region we will start the modernisation of the station Jihlava město. In Moravia, we should mention the reconstruction of Kyjov station and the section between Brno’s Židenice and Černovice. In terms of numbers, the reconstruction of 59 km of lines will begin anew, and work will continue on another 39 km. 89 kilometres of modernised lines will be completed this year.

Repairs and maintenance

CZK 20 billion will be spent on repairs and maintenance of the lines next year as well as this year. The biggest project will be the total renewal of the Šumava line from Nová Pec to Černý Kříž. Cyclical maintenance of the line Praha-Hostivař – Votice and the overhead contact line between Lysá nad Labem and Stará Boleslav will also be important, thanks to which it will be possible to prevent possible malfunction. The lines from Olomouc to Prostějov and from Poříčany to Nymburk will undergo a complete reconstruction.

Station buildings

Správa železnic is currently reconstructing 65 station buildings. In 2024, the buildings, for example, in Ostrava-Vítkovice, Lovosice, Jaroměř, Bečov nad Teplou, Čáslav, Jihlava, Hlinsko v Čechách and Ústí nad Labem-Střekov will be completely renovated. A completely new building will be built at the main station in Mladá Boleslav.

ETCS

Installation of the European Train Control System (ETCS) continues. This year the lines of Ústí nad Orlicí – Lichkov, Beroun – Plzeň – Cheb and Přerov – Česká Třebová were equipped with it, the system is currently on 903 kilometres of lines. Next year, installation will begin in the sections Pardubice – Hradec Králové, Praha – Milovice and Votice – České Budějovice.

High-speed lines preparation

The preparation of high-speed lines (HSL) will continue at the same pace as this year. Of the planned 700 km, a full half of the future network is already being designed. Next year, it is expected that design work will start on more than 100 km of high-speed lines.

This year Správa železnic completed the documentation for zoning decision for the section of the VRT Jižní Morava (HSL South Moravia) between Modřice and Šakvice. It remains to complete the same documentation for the extension of this section to Rakvice. The preparation of both sections of the VRT Moravská brána (HSL Moravian Gate) between Prosenice and Ostrava has progressed, where the design is reaching its final stage.

On the line from Prague to Dresden, we are designing the section Prague – exit Lovosice as well as the Czech part of the cross-border Krušnohorský tunel (Ore Mountains Tunnel).

Further preparation is limited by the update of the Principles of Territorial Development of individual regions. They should decide on the reserves for HSL routes next year.

The councils of the South Moravian and Moravian-Silesian Regions will also decide on the stabilisation of the HSL corridors. This will affect the preparation of the lines in the Highlands (Vysočina) and South Moravia and the cross-border section from Bohumín to Poland.

Balance of the current construction season

Improved traffic flow on the corridors was contributed to this year’s completion of the reconstruction of line sections Velim – Poříčany, Soběslav – Doubí u Tábora, Sudoměřice u Tábora – Votice, Praha-Smíchov – Praha-Radotín, Brandýs nad Orlicí – Ústí nad Orlicí, another part of the Přerov junction and the construction of barrier-free access to the platform in Roudnice nad Labem as well.

Work between Dětmarovice, Petrovice u Karviné and the state border with Poland is also coming to an end. The builders also report that work is finished in the section Děčín východ – Děčín-Prostřední Žleb, in Pilsen between the main railway station and Koterov, then in Semily and Rožnov pod Radhoštěm.

The end of the year is also marked by a number of renovated buildings. Work has already been completed in Písek, and is nearing completion in Světlá nad Sázavou, in Karviná main station, Kravaře ve Slezsku a Sokolnice-Telnice.

At the same time, the implementation of the railway project to the airport continues. Modernisation of sections is in full swing at Praha-Bubny – Praha-Výstaviště and Kladno – Kladno-Ostrovec. The tender for the construction Praha-Ruzyně – Kladno is about to be announced. From 2025 onwards, it is planned to rebuild three sections between the new stop Praha-Výstaviště and the station Praha-Ruzyně, to build a completely new line from Praha-Ruzyně to Václav Havel Airport and to build a new station directly at the airport.

Czech Republic

CD's Skoda built Class 380.009-1 heads east near Brandys nad Orlici with a Slovakia bound Eurocity service. *Anton Kendall*

Czech Republic

Formerly with SNCB, IDS Class 365.001-7 heads a rake of coal wagons through the rain at Brandys nad Orlici. *Anton Kendall*

Czech Republic

CD Class 371.005-0 skirts the banks of river just south of Usti nad Labem. *Anton Kendall*

Czech Republic

Unipetrol/ORLEN Vectron Class 383.058-5 rounds the curves just east of Brandys nad Orlici with a westbound tank train. *Anton Kendall*

Czech Republic

TSS locos Class 742.533-3 and 742.521-8 head an engineers train eastbound through Brandys nad Orlici. *Anton Kendall*

Czech Republic

Former ZSSK Cargo Class 751.036-5 hauls a delivery run of new GATX container flats near Brandys nad Orlici. *Anton Kendall*

Czech Republic

In heavy rain, Goggles Class 750.199-2 heads a short OHLE train near Brandys nad Orlici.
Anton Kendall

Denmark

An unidentified preserved DMU is seen working a Xmas special at Copenhagen on December 9th. *Mark Enderby*

Denmark

On December 5th, No. ET4536 and IC3 No. 5010 are seen at Copenhagen. *Mark Enderby*

DB No. EG3110 heads a freight through Vesterboro on December 9th. *Mark Enderby*

DSB Vectron No. 3228 is seen departing Copenhagen on December 5th. *Mark Enderby*

France

Alstom to supply new trams for the Lille European Metropolitan Area

The Lille European Metropolitan Area has chosen Alstom to supply its new trams to replace existing rolling stock on the historic 'Mongy' line, which links the cities of Lille, Roubaix and Tourcoing

The 124 million euro contract includes an order for 30 Citadis trams

Alstom has been chosen by the Métropole Européenne de Lille (MEL) to supply the new trams for Line R and Line T of the Lille tramway network. An initial order includes 24 Citadis trams, with the possibility of adding a further 6. The first deliveries will take place in early 2026, with entry into service scheduled for mid-2026.

A concentration of innovations for the well-being of travellers

With a length of 32.40 metres and a width of 2.40 metres, MEL's new trams have a metric gauge. They have 4 double doors on each side to make it easier for passengers to get on and off. They have a minimum capacity of 196 passengers.

In compliance with the PMR (Persons with Reduced Mobility) legislation, the trams have door opening buttons at the right level, wider seats and areas reserved for wheelchair users and pushchairs.

For a comfortable journey in total safety, the Citadis trams are air-conditioned and equipped with a dynamicpassenger information system and a video protection system.

Energy-efficient and environmentally-friendly trams

These trams are energy-efficient, thanks to new motorisation, efficient management of inside temperature and 100% LED lighting. The trams are eco-designed, 95% recyclable and 99% reusable.

Trams offering optimum availability

Maintainability requirements have already been taken into account with a reduced number of spare part references, improved accessibility of components and sensors distributed throughout the tram to enable remote diagnosis of the equipment, thus making it possible to anticipate and therefore optimise downtime periods and offering optimum availability for the operator.

The contribution of Alstom French sites to the Lille tramway contract

Several Alstom sites in France are involved in the production of these Citadis trams, including :

- La Rochelle, for design and assembly;
- Villeurbanne, for on-board electronics and cyber security;
- Aix-en-Provence, for tacho centres

To date, Alstom has sold more than 3,200 Citadis trams to 70 cities in 20 countries around the world (including 26 cities in France). Citadis trams have covered more than 1 billion kilometres and carried 10 billion passengers since the first tram entered service in 2000.

Image: Artist's view of the future Lille trams, which will run on the historic Mongy line (Non-contractual design for illustration purposes only ©Alstom Advanced & Creative Design)

MEG's EuroDual Class 159.225-2 heads south through Merseburg. *Anton Kendall*

Looking a little tired in its K+S livery, DB Cargo Class 185.152-6 heads an empty cartic train southbound through Gemünden am Main. *Anton Kendall*

Germany

Siemens Mobility supplies 75 Mireo trains for Leipzig and the surrounding region

Major order for 75 regional trains: 41 three-car Mireo trains, 18 four-car Mireos, and 16 battery-powered Mireo Plus B trains

MDSB 2025+ project with Leipzig hub

Planned start of operations in December 2026

Order volume of approximately €500 million

Largest Mireo order to date for Siemens Mobility

Siemens Mobility has won an order for the delivery of 75 Mireo trains for the "Central German S-Bahn Network 2025+" (MDSB 2025+) project with an order volume of approximately €500 million. All in all, 41 three-car Mireo trains were ordered by the operators of Die Länderbahn DLB, and 18 four-car Mireo trains as well as 16 two-car battery-powered Mireo Plus B trains by DB Regio AG.

Joint commissioning bodies for the overall MDSB 2025+ network are the Zweckverband für den Nahverkehrsraum Leipzig (ZVNL) in cooperation with the special-purpose Saxon transportation associations Verkehrsverbund Mittelsachsen (ZVMS) and Verkehrsverbund Vogtland (ZVV) as well as the Thuringian Ministry of Infrastructure and Agriculture (TMIL) and the Ministry of Infrastructure and Digital Affairs (MID) of the state of Saxony-Anhalt.

"The ZVNL and its partners in the Central German S-Bahn network have high expectations for the use of these modern, environmentally friendly vehicles. We are hoping for a high level of acceptance, which will be reflected in rising passenger numbers," says Kai Emanuel, Chairman of the ZVNL association.

"Our Mireo train is a proven success model that contributes to a high level of passenger comfort and satisfaction. We are delighted to have received the order for 75 Mireo trains for the Central German S-Bahn Network. It is our largest Mireo order to date," said Gerhard Greiter, CEO North East and Eastern Europe at Siemens Mobility.

"The Leipzig transport hub is one of the most important in the Central German metropolitan region. With the delivery of the Mireo trains, we are enabling greater flexibility for public transport in Central Germany, higher capacity per train and more comfort for passengers. This order marks a further step towards achieving a transition in rail transport: By offering more space, better equipment and features, and higher operating frequency, rail transport is becoming more and more attractive."

The trains will cover a total of 10.6 million train kilometres a year in the MDSB network, and will operate on the following lines when operations start as planned in 2026:

4-car Mireo trains:

- S 4: Torgau – Eilenburg – Taucha – Leipzig Hbf. (lower level) – Oschatz – Riesa
- S 6: Leipzig-Stötteritz – Leipzig Hbf. (lower level) – Leipzig-Messe – Naumburg
- S 10: Schkeuditz – Leipzig Hbf. (upper level)

3-car Mireo trains:

- S 3: Geithain – Borna – Leipzig Hbf. (lower level) – Schkeuditz – Halle (S.) – Halle-Nietleben
- S 5: Halle-Trotha – Halle (S.) – Flughafen Leipzig/Halle – Leipzig Hbf. (lower level) – Altenburg – Gößnitz – Glauchau/Werdau – Zwickau
- S 5x: Halle-Trotha – Halle (S.) – Flughafen Leipzig/Halle – Leipzig Hbf. (lower level) – Altenburg – Werdau – Zwickau/Plauen

2-car Mireo Plus B battery-powered trains:

- S1: Leipzig- Miltitzer Allee - Leipzig Hbf. (lower level) – Leipzig Stötteritz –Borsdorf – Grimma – Döbeln

The new trains

The new trains offer 100 seats in the two-car version, 150 seats in the three-car configuration and 200 seats in the four-car variant. Each of the trains also provides spacious multi-purpose areas and a separate 1st class section with leather seats.

Passenger comfort and convenience is also enhanced by free WiFi service, a family area, barrier-free access and travel, and a quiet motion of the train. Numerous power sockets and USB ports ensure that device batteries can be kept charged during journeys, and suitable smartphones can be charged wirelessly at the four-person tables. A real-time passenger information system displays current arrival and departure times as well as connection options at the respective stops.

The trains are also equipped with special high-frequency window panes developed by Siemens Mobility that significantly improve mobile phone reception under way. The Mireos in the MDSB2025+ network also have significantly more doors than in the past, making boarding and alighting easier and helping ensure shorter passenger changeovers and closer adherence to the timetable.

Energy efficiency up to 25 percent higher than in trains with similar capacities and reliability ensures climate-friendly mobility. By choosing the Mireo platform, which offers both electric and battery-powered trains for the Central German S-Bahn network, the ZVNL is counting on the experience, efficiency, and synergy effects the network will gain from the standardized train platform.

To date, Siemens Mobility has sold 22 Mireo fleets with a total of over 400 trains. The fleet has proven to be especially reliable after more than 50 million kilometers of service. In addition to standard overhead line trains, the Mireo platform also offers battery- or hydrogen-powered variants and enables climate-friendly mobility by operating at up to 25 percent higher energy efficiency than trains with similar capacities.

Moreover, the trains are up to 95 percent recyclable. The latest version of the platform is the Mireo Smart, which is available with a very short delivery time of 18 months at an attractive price and also with alternative drive options.

Siemens Mobility manufactures its trains in the company's global network of factories.

Captrain's TRAXX Class 185.598-0 heads a rake of tanks through Hannover Linden.
Anton Kendall

Germany

MEG MaK No. 92 80 1275.213-7 leads another class mate through Merseburg on an empty coal train from Buna Werke ready for loading once again. *Anton Kendall*

With the early morning mist rising, Class 185.631 heads a rake of boxes through Gemünden am Main. *Anton Kendall*

Germany

Former Railjet liveried Class 193.214-4, now in ‘naked’ ELL livery, heads a container train northbound through Gemünden am Main. *Anton Kendall*

Germany

Working flat out, Erfurter Bahn Service's Ludmilla Class 232.690-8 screams through Merseburg on a southbound tank train.
Anton Kendall

Transporting a challenging cargo to Kijfhoek

The Kijfhoek marshalling yard near Rotterdam is known as the hub of Europe. As the largest marshalling yard in the Netherlands, it serves as an important link for all rail freight traffic between the port of Rotterdam and Europe's industrial regions. To ensure that the yard can deal with growing freight volumes in the future, Siemens Mobility was commissioned two years ago to modernise the 50-hectare site with 14 entry sidings, 41 sorting sidings and 12 stabling sidings. It is a mammoth project, and not just in terms of sheer size.

A large and complex project

Even transporting the new parts poses a logistical challenge. The retarders have to be transported in one piece, despite measuring 15 metres in length and almost 4 metres in width. Together with Siemens Mobility, DB Cargo Regional Sales and DB Cargo Nederlands accepted the challenge and have been working on a plan to transport the retarders since January of this year.

Good planning key to success

The team had to take a few special factors into account. As the cargo has an excess width of one metre, the secondary tracks had to be closed for this special train. "There is also limited track serviceability on the Betuweroute now", says Sebastian Hepner, Sales Manager Regional Sales Duisburg at DB Cargo. "This route is currently being upgraded to three tracks and is always fully closed between Duisburg and Emmerich at weekends. So we have to plan very carefully."

The train also has to switch locomotives three times in total, from a shunting locomotive to a German DB Cargo long-distance locomotive and then again to a Dutch locomotive at the border. This all requires extra stabling sidings. There are also precisely defined time slots for crossing the border.

"The most important factor in our planning and operations is making sure the retarders arrive just in time for installation, because large parts like these are difficult to unload and store", says Hepner. But thanks to its expertise in transporting retarders, DB Cargo successfully carried out the first just-in-time special transport with six flat wagons via the Bad Bentheim – Oldenzaal crossing in August.

Reaching the goal together with DB Cargo

The plan envisages one transport per month until late summer of 2024, each with an average of six to seven wagons. This means that a total of 51 retarders, along with the four hydraulic units needed to operate them, will be transported in the space of a single year.

"We are very pleased to be able to support the modernisation of this important marshalling yard", says Stephan Dau, Team Leader Warehouse/Dispatch & Logistics at Siemens Mobility. "For projects of this size, it is important to have reliable partners like DB Cargo on board. The cooperation was excellent. DB Cargo worked meticulously to help us plan the transports and have provided valuable support during the operations themselves. We always find a solution to every challenge so that we can keep to our schedule."

Germany

Time frames for further general rail renovations have been set

Future high-performance network will grow by 800 additional route kilometres by the end of 2026
Detailed planning requires adjustments to the schedule for two corridors
General renovation of the Hamburg – Hanover route will take place in 2029

Deutsche Bahn's (DB) plans for the general renovation of further heavily used sections of the rail network are becoming more concrete. While preparatory work for the complete renovation of the Riedbahn between Frankfurt/Main and Mannheim will begin at the beginning of January 2024, the exact periods for the general renovations planned for 2025 and 2026 have now been determined. To ensure greater quality and punctuality in train traffic, the DB will carry out the combined renewal and modernization of the rail network and stations on a total of seven route sections within two years. The time periods for five routes are unchanged and the preliminary planning is therefore confirmed:

- Emmerich – Oberhausen: February 15th to December 13th, 2025.

Due to the expansion measures, there will be a total closure period from November 1st, 2024 to May 15th, 2026, during which the route is partially single-track.

- Hagen – Wuppertal – Cologne: February 6th to July 10th, 2026

- Nuremberg – Regensburg: February 6th to July 10th, 2026

- Troisdorf – Koblenz: July 10th to December 11th, 2026

- Koblenz – Wiesbaden: July 10 to December 11, 2026

For two routes, adjustments were made to the originally planned construction process during the detailed planning and in coordination with the construction industry. This particularly affects the area of control and safety technology and the total amount of reconstruction in the superstructure. A new and longer period of time is required for the renewal and modernization of the rail network and train stations on the Hamburg - Berlin route.

The 280 kilometre long route will be renovated between August 2025 and April 2026. The period originally planned was June to December 2025. During the general renovation, the DB is replacing tracks, switches and overhead lines, creating more flexibility in operations through additional overtaking opportunities for trains and upgrading several stations.

At the same time, the performance of the route should also be increased. To achieve this, the corridor will be fully equipped with the European train control system ETCS (European Train Control System) and prepared for the digital rail operations of the future.

The modernization work on the Obertraubling–Passau route will also be slightly adjusted - and brought forward by a month - in 2026. In order to be able to offer sufficient capacity for international freight transport between Germany and Austria, the DB and ÖBB are synchronizing the renovation work in their networks. For this reason, the originally planned five-month closure will be extended to six months: the work will now last between June and December instead of the original July until the end of the year. The route should now be able to be used on a single track.

It has now been decided that the general renovation of the Hamburg-Hannover route will take place in the first half of 2029. The state of Lower Saxony and the federal government have agreed on this with the DB. Most recently, there was also the 2026 option for this corridor. In that year there will be so-called preliminary measures. The Uelzen electronic signal box will be built in July 2026.

After the general renovations have been completed, travellers and freight transport companies will benefit from noticeable improvements in quality and punctuality on heavily used route sections. By consistently replacing old technology, the number of infrastructure-related disruptions decreases significantly.

Together with states, municipalities, associations, railway companies and the authorities responsible for local transport, the DB is developing an efficient transport concept for the duration of the work. This ensures that travellers and goods reach their destination even during the general renovation. In addition, as previously planned, the DB will also upgrade diversion routes in good time in advance.

Germany

First Hydrogen fleet at the Wildenrath test center

Siemens Mobility has built seven two-car Mireo Plus H trains for Niederbarnimer Eisenbahn (NEB). The last train in the series left the factory in Krefeld on October 30th, 2023, and was transferred to the Siemens Mobility test center in Wegberg-Wildenrath near Mönchengladbach.

Following the basic electrical and mechanical functions tested at the Krefeld plant, further in-depth tests are now being carried out at the Wegberg-Wildenrath Test and Validation Center (PCW). The extensive type tests being conducted here include electromagnetic compatibility (EMC) tests and brake tests. As these tests, required for official approval of the trains and their operational stability, are conducted, the new trains will be prepared step by step statically and dynamically for operation and ultimately drive their first meters on their own. Final approval by the relevant rail authorities, including the European Union Agency for Railways (ERA) and the German Federal Railway Authority (EBA), will be granted only when all of these tests have been successfully completed.

In addition, NEB's train drivers will be trained on the new Mireo Plus H at the Siemens Mobility test center starting in mid-2024 to ensure that the company's operating personnel is ready for deployment on the Heidekrautbahn as of December 2024.

"Our first Mireo Plus H hydrogen fleet left our plant in Krefeld right on time and will be thoroughly put through its paces at our test center in Wegberg-Wildenrath," said Albrecht Neumann, CEO Rolling Stock Siemens Mobility. "The Mireo Plus H is a powerful hydrogen train that combines innovation with sustainability. Thanks to its long range, fast acceleration, and state-of-the-art technologies, it will set new standards for emission-free passenger transportation in the Berlin-Brandenburg metropolitan region."

"We're especially pleased that we are on schedule with the hydrogen trains," said Detlef Bröcker, CEO Niederbarnimer Eisenbahn (NEB). "This gives our employees sufficient time to familiarize themselves with the new trains and their innovative technology. Our customers in the Berlin and Brandenburg region can look forward to boarding new, environmentally friendly, hydrogen-powered trains on the Heidekrautbahn at the end of next year."

The train manufacturer Siemens Mobility was commissioned by Niederbarnimer Eisenbahn in 2022 to deliver seven two-car Mireo Plus H trains for the Heidekrautbahn network in the Berlin-Brandenburg metropolitan region. This marked the first series order at Siemens Mobility for a train fleet employing hydrogen technology. Progress is also being made on the order for 31 Mireo Plus B trains for the East Brandenburg network: The first battery-powered train is scheduled to leave the Siemens plant in Krefeld in the new year and will also be transferred to the Wildenrath center for final testing.

The use of hydrogen-powered trains on the Heidekrautbahn is part of a scientifically supported joint pilot project funded by the federal government and the states of Berlin and Brandenburg. The project is focused on setting up a regional, sustainable hydrogen infrastructure that also includes a hybrid power plant and a hydrogen storage facility. The Heidekrautbahn will be the first rail network in the Berlin-Brandenburg region operating hydrogen-powered trains for public transport. Ultimately, all train operations on the RB27 route will be carried out exclusively with green energy – renewable and regionally produced. The switch from diesel fuel to hydrogen on the Heidekrautbahn will reduce annual CO2 emissions by around three million kilograms and save 1.1 million liters of diesel.
The partners have created a joint website with information about the hydrogen project, its stakeholders, and updates on the progress being made: www.wasserstoffschiene-heidekrautbahn.de.
The project "Use of hydrogen fuel cell drives in local transport in the Barnim district" is funded by the Federal Ministry for Digitalization and Transport as part of the National Innovation Program for Hydrogen and Fuel Cell Technology. The funding guideline is coordinated by NOW GmbH and implemented by lead partner Jülich.

ICE of the future: DB launches tender

New standards in travel experience, energy efficiency and reliability
Use of the trains is planned from the beginning of the 2030s

Deutsche Bahn (DB) has launched the tender for a new generation of high-speed trains. This includes the development, construction and approval of a new train fleet that will be used in the early 2030s. The future ICE generation will set new standards in the travel experience with new interior concepts and further innovations.

As many stepless, equal-height entrances as possible should make access easier for passengers with limited mobility. DB also expects new records in terms of energy efficiency and technical reliability.

A framework agreement for up to 95 vehicles is to be concluded for this purpose. In a first tranche, the DB wants to order 33 of the maximum 400 meter long, at least 300 km/h fast, single-deck trains with around 940 seats. Before the new generation of trains goes into operation, a prototype will be tested in advance.

With the ICE of the future, the DB will replace older trains such as the ICE 1 and ICE 3 and expand the ICE fleet in the future in order to meet the rapidly growing number of passengers.

The DB is breaking new ground when it comes to purchasing the future generation of trains. After an initial call for tenders, Alstom Transport Deutschland and Siemens Mobility, together with Deutsche Bahn, each created an independent vehicle concept.

Here, DB has incorporated its expertise as the operator of one of the world's largest high-speed fleets. The DB is using the knowledge gained from this for the tender that has now been launched by formulating ambitious, but at the same time achievable, manufacturer-neutral requirements for the new generation of trains.

Germany

Small and green: Deutsche Bahn opens the first train station made of wooden modules in Zorneding

Deutsche Bahn (DB) has ceremoniously opened the first station reception building made entirely of wood in Zorneding (Bavaria). In the presence of representatives from the federal government, the state and the municipality, Bernd Koch, CEO of DB Station&Service AG, inaugurated the 200 square meter, modern and light-flooded building. The DB, together with the BMDV, the state of Bavaria and the municipality, invested around 2.2 million euros in the station. Sustainability is clearly the focus of construction, technical equipment and interior design. The wood for the building comes from the region and the individual structural elements were manufactured in a traditional timber construction company in Regensburg.

The innovative thing: The modules are standardized so that – like a prefabricated house – many different floor plans, sizes and designs are possible on the same construction basis. In this way, many more small green stations can be created in the next few decades that provide individual, quick and environmentally friendly access to climate-friendly travel. The waiting room invites you to linger with modern seating and charging options for cell phones. In the future, passengers will be able to purchase travel supplies, baked goods and snacks in a ServiceStore DB with outdoor seating on the forecourt that has been redesigned by the municipality. There will be 200 additional bicycle parking spaces there, and a new bicycle ramp will improve access. Public, barrier-free toilet facilities and ticket machines round off the offer.

Bernd Koch, CEO of DB Station&Service AG: “Our goal is to build sustainable station buildings for cities, communities and our travellers in a short time. Zorneding marks the debut of a whole series of other small green train stations. The more inviting and attractive the stay at our stations is, the more passengers we can attract to the climate-friendly railway and thus to “Strong Rail”.

Dr. Corinna Salander, head of the railways department in the Federal Ministry for Digital and Transport: “Serial, sustainable construction is a huge topic for us. This construction method combines three main advantages: it is faster, more sustainable and cheaper in the long term. We will therefore look at this pilot project very closely because we believe that it offers great opportunities for the construction methods of the future.”

Bavaria’s State Minister for Housing, Construction and Transport, Christian Bernreiter, was unable to attend the meeting. He was represented by the head of the rail and air transport department, Alexander Bonfig, but had his greetings conveyed: “Our voluntary financial injection is an appreciation for Deutsche Bahn’s sustainable new station buildings - climate-friendly in construction and operation. Such sustainable projects are role models and are in the interests of our environment, passengers and station users.”

Piet Mayr, First Mayor of the municipality of Zorneding: “This station building with its modern, trend-setting architecture and the well-thought-out planning of this building are a real expression of an efficient, sustainable and livable community, which will set the trend for many communities of our size in the Federal Republic with rail connections in the future. I am pleased that a central meeting place for people from the town and the surrounding area has once again been established here.”

Zorneding train station is also a green pioneer when it comes to technology: a 140 square meter photovoltaic system supplies the systems with solar energy. A sustainable second life battery storage system from the DB startup encore collects excess energy from used electric car batteries, which stores up to 20 kWh of energy from the solar system and can release it when required. A climate-friendly heat pump ensures pleasant temperatures in winter and cooling in summer. Skylights allow daylight into the interior, reducing the need for artificial lighting. All lights are equipped with energy-saving LEDs. The wooden facade is glazed on the outside with environmentally friendly open-pored paint. This ensures a pleasant indoor climate. In addition to Zorneding, another small green train station, Haar, is nearing completion. The DB is currently completing the shell. The topping-out wreath is already on the roof after six months of construction and the opening is planned for summer 2024.

Deutsche Bahn is clearly committed to sustainability and its ecological, economic and social responsibility along its value chain and beyond. In line with its “Strong Rail” corporate strategy, DB is turning its stations into hubs of modern mobility in order to convince more people of climate-friendly rail.

Germany

Successful night train alliance: First Nightjet connects the metropolises of Berlin, Brussels and Paris

Travel overnight to a European metropolis in a relaxed manner and save on hotel accommodation: the night train alliance of DB, ÖBB, NMBS/SNCB and SNCF is offering a night train connection from Berlin to Brussels and Paris. The Nightjet (NJ) runs three times a week (Mondays, Wednesdays and Fridays). The train from Paris/Brussels runs back to Berlin on Tuesdays, Thursdays and Saturdays. The first NJ was seen off on its journey in Berlin by the transport ministers of Germany, Belgium, France and Austria as well as the four CEOs of the participating railways. The new offer is the latest milestone in a successful partnership between European railways, which set itself the goal of environmentally friendly night train connections at the end of 2020.

Dr. Volker Wissing, Federal Minister for Digital Affairs and Transport of the Federal Republic of Germany: “This is a good day for all travellers and commuters who will benefit from the new rail connections between the European capitals in the future. This new offer is thanks to the close cooperation of all those involved, who have formed a true night train alliance and are thus implementing our TEE 2.0 concept into concrete offers for travellers. I am convinced that we need more team play on the railways in Europe in order to make rail even more attractive in the competition between modes of transport. The Austrian, French, Belgian and German railway companies are showing how this works with their night train alliance.”

Manja Schreiner, Berlin Senator for Mobility, Climate Protection, Transport and Environment: “Three great European capitals – Berlin, Brussels and Paris – are now connected to each other in a comfortable and climate-friendly way. We can make great strides towards becoming a CO2-neutral city, because traveling by rail only causes one sixth of the greenhouse gas emissions of a flight per passenger. If you travel on the night train, you not only do something for the environment, but you also arrive much more relaxed. I wish this connection to Brussels and Paris many passengers. May the capacity utilization ensure that other European metropolises will soon be accessible from Berlin by night train and that particularly relaxed visitors will come to Berlin.”

Leonore Gewessler, Austrian Minister of Transport: “Traveling by train means protecting the climate. This is particularly true for the night train, which also allows you to travel practically and comfortably: get on the train in the evening and wake up the next morning feeling refreshed in another European capital. With the new Nightjet connections, important European cities are growing together and it is becoming even easier to travel around Europe in a climate-friendly way. I am convinced: This is the future of our mobility. Short and medium-haul routes in Europe belong to trains.”

Georges Gilkinet, Belgian Deputy Prime Minister and Minister for Mobility: “Trains make you dream. With the launch of the new Nightjet from Brussels to Berlin, a dream is now coming true. The offer is being expanded step by step. And the Belgian government is doing its part: we offer financial support to all transport companies that travel to Belgium with their night trains. No means of transport is more environmentally friendly than rail, which is why, as Transport Minister, I am very pleased about this new offer.”

Clément Beaune, French Minister of Transport: “It is possible to fall asleep in Paris and wake up in Berlin! It is the culmination of a commitment that I have had for three years. A highlight for Europe and ecology. This train is the image of European cooperation responding to the climate emergency and the need to connect peoples. This line completes a series of French night trains in France, with ten lines gradually reopening. Our ambition is great: we will open more routes in France and Europe over the course of this decade, we will buy and renovate night trains. The night train is no longer a symbol of the past, it is the image of the future.”

Dr. Richard Lutz, CEO Deutsche Bahn AG : “Together with our partners, we have set ourselves the goal of making rail travel even more attractive for our customers in Europe. The night train stands for climate-friendly travel and a connected, borderless Europe. This is also what we stand for with our Strong Rail strategy. We as DB are proud to be part of the European night train alliance.”

Andreas Matthä, CEO of the Austrian ÖBB : “With the new, international connections, we are consistently continuing to expand our night train business and underlining our position as a leading provider of night train travel. The ÖBB Nightjet is already a symbol of a Europe growing together. The collaboration between four European railways will now create a new offer between Berlin and Paris as well as Berlin and Brussels with attractive, climate-friendly connections overnight.”

Sophie Dutordoir, CEO of the Belgian NMBS/SNCB: “Since the time of Georges Nagelmackers, founder of the legendary Compagnie des Wagons-Lits, night trains have been an integral part of Belgian railway history. Geographically, Belgium is at the heart of the European rail network. When the ÖBB revived night train services at the beginning of 2020, we as SNCB were very keen to support the initiative to connect other European capitals and metropolises to Brussels via long-distance train connections - be it during the day or at night. SNCB contributes to this with maintenance services, train staff on the Belgian section and ticket sales through our own sales channels.”

Christophe Fanichet, CEO of France’s SNCF Voyageurs: “We are proud of the new night train connection, which strengthens our network across Europe. After the successful commissioning of the Paris-Vienna route, the Paris-Berlin route is a new strong symbol of the revival of night trains, made possible with financial support from the French government. Europe is an important part of SNCF Voyageurs’ history and operations. I would like to thank the partners for their cooperation over the last two years. So we can start the connection to Berlin today. The ÖBB, DB, SNCB and SNCF Voyageurs have decided to join forces for a common goal: the expansion of rail connections in Europe.”

Also new since the timetable change on December 10th, 2023 is a daily connection with sleeping and seated cars on the Munich-Vienna-Warsaw line. As early as December 2022, the partner railways had expanded the Zurich-Prague night train line and extended the night train from Munich-Venice/Rijeka/Zagreb/Vienna-Budapest to the start and destination station in Stuttgart. By consistently expanding night trains, Allianz is making an important contribution to achieving the EU’s climate goals agreed in the Green Deal.

Tickets for the night train connections from Berlin to Brussels and Paris are available in the seated car from 34.90 euros per person and direction, in the couchette car from 49.90 euros and in the sleeping car from 79.90 euros.

Germany

Historic start of construction on Fehmarn

Deutsche Bahn (DB) has started construction of the rail connection to the “Fixed Fehmarnbelt Link”. From the end of 2029, trains will run from Copenhagen through the Fehmarnbelt Tunnel via Lübeck to Hamburg in just two and a half hours. The resulting rail connection is the crucial link between the Belt Tunnel, which connects Lolland in Denmark with the island of Fehmarn, and the mainland in Schleswig-Holstein. In addition to its importance for travellers, the new route is also fundamental for freight traffic between Northern Europe and Italy and the necessary shift in traffic to rail. The official starting signal was given today by DB Infrastructure Board Member Berthold Huber, Schleswig-Holstein’s Prime Minister Daniel Günther and State Secretary Susanne Henckel in Fehmarn.

The federal government, the state of Schleswig-Holstein, the DB and the European Union are jointly investing around 3.5 billion euros in one of the most important European transport projects. A total of 88 kilometres of new railways are being built on the German side between Puttgarden (on Fehmarn) and Lübeck. The Danish Femern A/S is building the Belt Tunnel. Joint commissioning is planned for the end of 2029.

DB board member for infrastructure, Berthold Huber : “After years of planning, today we can celebrate the start of construction of the rail connection here on Fehmarn. Together with our Danish partners, we are creating a new European rail connection here in the middle of the Baltic Sea from Denmark via Germany to Italy by 2029. This corridor is just as important for local and long-distance transport here in Schleswig-Holstein as it is for European freight transport.”

Schleswig-Holstein’s Prime Minister Daniel Günther : “The start of construction on the rail connection is an event that we have been working towards for a long time. I am pleased that we have managed to find a compromise for the route together with the local citizens, the federal government and the DB. With this cross-border transport project connecting countries, we are creating greater proximity between Denmark and Schleswig-Holstein, between the economy and especially between people. The Fehmarnbelt Tunnel is a strong sign of closer ties and cohesion in Europe.”

Susanne Henckel, State Secretary in the Federal Ministry for Digital Affairs and Transport : “The connection to the Fehmarnbelt crossing not only brings Germany and Denmark closer together, but also the whole of Europe. From Hamburg to Copenhagen, train travellers will only need half as long as now at 2.5 hours. But the connection brings so much more. A European rail network is being created on which goods can travel more quickly from north to south - from Oslo to Palermo. A real European milestone.”

Magda Kopczyńska, Director General, Directorate-General for Mobility and Transport, European Commission: “The expansion of the railway line between Lübeck and Puttgarden is an essential part of the Trans-European Transport Network and the Scandinavian-Mediterranean Corridor. An efficient rail connection to the Fehmarnbelt fixed link is a basic requirement for the success of the overall project, which will lead to a noticeable shift in passenger and freight traffic from road to rail. The Fehmarnbelt fixed link, including the access routes, is more than just a simple transport connection. The project will allow the region between Hamburg and Copenhagen to continue to grow together beyond national borders in economic, tourism and cultural terms. The EU will continue to support this project.”

Denmark’s Transport Minister Thomas Danielsen: “Today we are one step closer to completing an important connection. A connection not only between Denmark and Germany, but also between Scandinavia and Europe. The connection will bind Europe closer together and significantly improve international rail transport.”

Deutsche Bahn is initially starting with the double-track expansion and electrification of the 11.4 kilometer long route between Puttgarden and the Fehmarnsund Bridge - the first of a total of ten construction phases. From 2026, construction will begin in parallel on all sections between Fehmarn and Lübeck. Of the 88 kilometres of total route, 55 kilometres are planned as new construction.

When it goes into operation at the end of 2029, travellers on local and long-distance transport will benefit from more frequent and faster connections between Copenhagen, Fehmarn and Hamburg. For commuters in the Ostholstein region, the completion of the new route will, among other things, reduce the travel time from Fehmarn to Lübeck from just under an hour and a half to just 49 minutes. The trains will then only travel for 23 minutes between Lensahn and Lübeck instead of the previous 53 minutes. All of these are important building blocks for the connection to the Deutschlandtakt and are crucial for the economic development of the region. In Ostholstein alone, several new commercial areas are being created along the route due to the significantly better transport connections.

The railway is also building six new, modern and barrier-free train stations, including between Großenbrode and Heiligenhafen and in Ratekau, which is good news especially for tourism in the region, but also for commuters towards Hamburg and Denmark and even more people from the “Strong Rail” should convince.

The Belt connection is also considered the heart of the new European freight corridor between Oslo and Palermo. In the future, 68 freight trains will run along the Belt Route every day. There are also another 30 freight trains from the port of Travemünde towards Italy. In this way, Deutsche Bahn is also making an important contribution to shifting traffic to climate-friendly rail and thus achieving the federal government’s climate policy goals.

ÖBB Vectron Class 1293.174-9 heads a grain train into the sidings at Budapest Kelenföld. *Anton Kendall*

PKP Cargo's Taurus Class 183.714-5 heads into Budapest Kelenföld with a rake of box wagons. *Anton Kendall*

Class 630.020 works out of Budapest Kelenföld on a rare sunny day for last summer. *Anton Kendall*

One of the earliest YDM4s still in service, No. 6338 pulls into Talala Junction with a service to Delvada on November 16th.
Mark Torkington

On November 17th, No. 6402 working the Junagadh to Delvada service and 6720 working the Amreli to Junagadh service (which has to run round) pauses side by side for passenger connections at the small junction station of Visavadar. *Mark Torkington*

No. 6560 crosses the viaduct approaching Satadhar station with the morning Junagadh to Delvada service on November 18th. *Mark Torkington*

The small but picturesque Badher station sees YDM4 No. 6692 pulling in with a service from Amreli to Veraval on November 17th. *Mark Torkington*

A pair of 'Shakti' locomotives built for freight work (Class WDG3) pull into Parbhani Junction on November 11th with an express service from Hyderabad to Aurangabad which will reverse here. *Mark Torkington*

No. 14107 on a works train, and No. 14803 on a passenger service pause side by side at Fazilka on November 21st.
Mark Torkington

India

Dying breed... ALCO No. 14802 shares the stabling point at Bathinda with 2 EMD locos Nos. 40561 and 40139 on November 20th. *Mark Torkington*

India

A rare working for a WAG5 freight locomotive as No. 23687 is kicked out for an unknown express from Hyderabad on November 13th. *Mark Torkington*

WDP4D No. 40178 waits at Ahmedabad station with train No. 22957, the overnight service to Veraval, on November 15th.
Mark Torkington

New kid on the block... GE No. 49029 passes through Jaipur station with a freight service on November 15th.
Mark Torkington

On December 15th, KombiRail Europe Class 193.128 passes the RSC Terminal working a Neuss Trimodal (Germany) to Rotterdam ECT/Hutchison Ports liner. *Erik de Zeeuw*

LINEAS Class 186.510 is seen in Baambrugge with a Kijfhoek Yard to Seelze (Germany) tanker train on December 20th. *Erik de Zeeuw*

Train Charter Services has bought 45 ICRmh carriages from NS. TCS has plans for services to Berlin and Basel. On December 20th the empty stock, seen in Baambrugge, is being transferred from the yard in Arnhem to Amsterdam Watergraafsmeer headed by TCS No.101003. *Erik de Zeeuw*

Netherlands

ICM-1 No. 4011 is seen at Amsterdam Centraal station on December 31st, built in 1983 the unit has been running for 40 years. No. 4011 was the first of the 3 part carriage of the ICM-1 series. Their nickname was ‘Koploper’ which freely translated as ‘Headwalker’ or ‘walking through the head’. When the ICM units joined, the doors at the end of the train would open, and a walkway created, coupling with the other set and allowing passengers and crew to walk through to the next carriage. Since 2005 these were no longer used due to many technical problems that made the trains late and the doors were permanently closed after a revision. The ICMs exist out of: ICM-0, built in 1977 as a prototype, numbers 4001–4007 and taken out of service in 2003; ICM-1 and ICM-2 built from 1983 until 1989, numbers 4011–4097 as three car units, and ICM-3 and ICM-4 built from 1990 until 1994, numbers 4201 – 4250 as four car units. *Andre Pronk*

Portugal

Medway's Class 335.035 approaches Pala whilst hauling Medway freight No. 64234 from Godim to Vila Nova De Gaia. *Laurence Sly*

CP Class 1400 No. 1429 passes Santa Leocadia whilst hauling train No. IR869 13:20 Porto Sao Bento - Pocinho. *Laurence Sly*

CP No. 1436 departs Ermida whilst working train No. IR21861 08:20 Porto Sao Bento - Pocinho. *Laurence Sly*

Portugal

CP No. 1436 passes Baiao whilst hauling train No. IR21860 15:12 Pocinho - Porto Sao Bento. *Laurence Sly*

CP Class 1400 No. 1461 passes Caldas De Moledo whilst hauling train No. IR861 07:25 Porto Campanha - Pocinho. *Laurence Sly*

No. 1455 approaches Pala whilst hauling train No. IR868 13:08 Pocinho - Porto Campanha. *Laurence Sly*

Portugal

CP No. 1438 passes Arnozelo whilst hauling train No. IR21861 08:20 Porto Sao Bento - Pocinho. *Laurence Sly*

No. 1438 departs Vesuvio whilst hauling train No. IR868 13:08 Pocinho - Porto Campanha. *Laurence Sly*

CP No. 1427 approaches Arnozelo whilst hauling train No. IR865 09:20 Porto Sao Bento - Pocinho. *Laurence Sly*

Portugal

No. 1427 passes Freixo de Numao whilst hauling train No. IR21860 15:12 Pocinho - Porto Sao Bento. *Laurence Sly*

Class 1400 No. 1427 approaches Aregos whilst working IR21861 08:20 Porto Sao Bento - Pocinho. *Laurence Sly*

No. 1424 approaches Tua whilst hauling train No. IR876 17:14 Pocinho - Porto SB. *Laurence Sly*

Portugal

No. 1436 passes Ribadouro whilst hauling train No. IR876 17:14 Pocinho - Porto Sao Bento. *Laurence Sly*

Class 1400 No. 1461 approaches Tua whilst hauling train No. IR876 17:14 Pocinho - Porto Sao Bento. *Laurence Sly*

No. 1427 approaches Covelinhas whilst working train No. IR868 13:08 Pocinho - Porto Campanha. *Laurence Sly*

CP Class 1400 No. 1429 passes Mirao whilst working train No. IR861 07:25 Porto Campanha - Pocinho. *Laurence Sly*

No. 1461 approaches Aregos whilst hauling train No. IR865 09:20 Porto Sao Bento - Pocinho.
Laurence Sly

On October 2nd, a Class 363 passes Crnotice whilst hauling an intermodal train from Koper.
Laurence Sly

An unidentified Class 363 approaches Zanigrad whilst hauling a freight train to Koper on October 5th. *Laurence Sly*

Slovenia

Class 541.011 approaches Crnotice whilst hauling an empty car train on October 2nd. *Laurence Sly*

Class 363.018 passes Zanigrad whilst hauling an intermodal train to Koper on October 5th. *Laurence Sly*

On October 2nd, Class 541.007 approaches Crnotice whilst hauling a train of Rocktainer wagons. *Laurence Sly*

Slovenia

Class 541.106 and 541.013 pass Zanigrad whilst hauling a mixed freight to Koper on October 5th. *Laurence Sly*

Class 1216.146 passes Zanigrad whilst hauling a train of cars to Koper on October 5th. *Laurence Sly*

On October 5th, Class 541.019 approaches Hrstovlje whilst hauling a container train to Koper. *Laurence Sly*

A Class 541 approaches Zanigrad whilst hauling a train of Cargo Wagons to Koper on October 5th.
Laurence Sly

Slovenia

Class 363.026 approaches Hrstovlje whilst hauling a container train to Koper on October 5th. *Laurence Sly*

Class 541.105 passes Zanigrad whilst hauling a train of tanks to Koper on October 5th. *Laurence Sly*

On October 5th, Class 363.001 passes Zanigrad whilst hauling a container train to Koper. *Laurence Sly*

Spain

RENFE 2-8-2 No. 141F-2416 built by Euskalduna in 1960 is seen on display in the Museo del Ferrocarril in Madrid. *Mark Armstrong*

Diesel locomotive No. 4020 (340-020-3) built by Babcock & Wilcox, Krauss Maffei license, in Spain in 1967 is seen on display at the museum in Madrid. *Mark Armstrong*

RENFE diesel-electric locomotive No. 1615 (316-015-7) was built by ALCO, United States in 1953. *Mark Armstrong*

Spain

Also on display at the Museo del Ferrocarril in Madrid is electric locomotive No. 7420 (274-020-0) which was built by Secheron and Devis in Switzerland/Spain in 1944. *Mark Armstrong*

Electric locomotive No. 7507 (275-007-3) is another 1944 built exhibit, this one was a collaboration of Brown Boveri, Oerlikon and CAF, Switzerland/Spain. *Mark Armstrong*

Some Talgo II coaches are also on display, these trains started service in July 1950 and combined three fundamental innovations: guided rotation of wheels, articulated composition and lightness of its aluminium bodywork. *Mark Armstrong*

Italy

Alstom to supply first hydrogen trains to the Italian region of Puglia and second order of trains in the framework agreement with Lombardy

Ferrovie del Sud Est (FSE) orders two Coradia Stream hydrogen trains for Puglia
Ferrovie Nord Milano (FNM) orders two more trains within existing framework agreement
Alstom's innovation in sustainable mobility supporting Italy's efforts to move away from diesel

Alstom, global leader in smart and sustainable mobility, will supply to Ferrovie del Sud Est, transport operator of the Puglia region, two Coradia Stream H hydrogen trains to replace the current diesel trains. These will be the region's first hydrogen trains.

Additionally, Ferrovie Nord Milano signed the second order for two Coradia Stream H trains in addition to the six trains already on order, within the existing framework agreement, which allows for the acquisition of a total of 14 trains.

"We are extremely proud to supply the first hydrogen trains in Puglia and to grow the hydrogen train fleet in Lombardy. Alstom's unrivalled expertise in the full range of green traction solutions uniquely positions us to identify the best solutions for our customers depending on their specific needs. With the supply of four hydrogen trains to Ferrovie del Sud Est and Ferrovie Nord Milano, we are advancing local innovation and the reduction of C02 emissions. This will not just transform the public transport system but also create opportunities for the local economy," said Michele Viale, Managing Director of Alstom in Italy and President and CEO of Alstom Ferroviaria.

The new Coradia Stream H trains are based on Alstom's single-deck Coradia Stream regional train platform. Specifically designed for the European market, these trains are manufactured by Alstom in Italy. When using green hydrogen, the Coradia Stream H produces no direct CO2emissions in operation, and just like the electric variant of the train, it offers the exceptional comfort appreciated by passengers. The train features several additional innovations in clean energy conversion, efficient energy supply and storage system combined with intelligent energy management. Alstom was the first railway actor to invest in hydrogen trains as an alternative to diesel traction for non-electrified lines.

The train is designed and produced at Alstom's plants in Italy, involving the Savigliano site for development, certification, production and testing, the Vado Ligure site for the outfitting of the "power car" in which the technologically innovative hydrogen-related part is installed, the Sesto San Giovanni site for components and the Bologna site for the development of the signalling system.

How the hydrogen train works
The primary source of energy resides within the intermediate railcar known as the "power car", where the core of hydrogen technology is situated. The energy is generated through the combination of hydrogen, stored in tanks, with oxygen from the external air, producing energy without emitting CO2 into the atmosphere. The energy is stored in high-performance lithium-ion batteries, which are utilised during acceleration to complement the hydrogen cells, optimising fuel usage. As part of the IPCEI Hy2Tech programme, the project is being funded by European Union – NextGenerationEU.

About green traction with zero direct carbon emissions
Alstom offers the complete rolling stock portfolio of traction technologies with zero direct carbon emissions, from hydrogen fuel cells to battery and electric. In 2016, Alstom introduced the world's first and only operational passenger hydrogen train and has also developed battery traction solutions across multiple rail platforms to serve shorter non-electrified lines. In addition, Alstom's green traction solutions offer the opportunity to convert existing diesel trains to traction with zero direct carbon emissions.

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

Romania

Alstom to modernise the Caransebes-Lugoj railway line in Romania with new ERTMS signalling system

Alstom, global leader in smart and sustainable mobility, secures a contract for the modernisation of the Caransebeș-Lugoj railway section in Romania, by implementing new ERTMS Level 2 signalling and electrification. This contract, in line with Romania's National Recovery and Resilience Plan (PNRR), will enhance capacity, energy efficency, and service reliability. The agreement was signed by the Asocierea RailWorks consortium, consisting of Alstom and the Romanian civil works companies Arcada Company and Euroconstruct Trading '98, in partnership with CFR SA, the Romanian state rail infrastructure operator.

Alstom is set to provide cutting-edge digital train control, traffic management system, and electrification infrastructure, while Arcada and Euroconstruct will be responsible for all civil works. The contract has a 42 month implementation period, covering both the design and execution phases.

"This new contract consolidates Alstom's leading position on the Romanian railway market, for both signalling and electrification. Over the past years, Bucharest has become a strategic centre for Alstom's signalling proficiency, hosting a team of over 200 highly qualified engineers, whose expertise supports both our local and our international projects," says Gabriel Stanciu, Alstom Managing Director for Romania, Bulgaria and the Republic of Moldova.

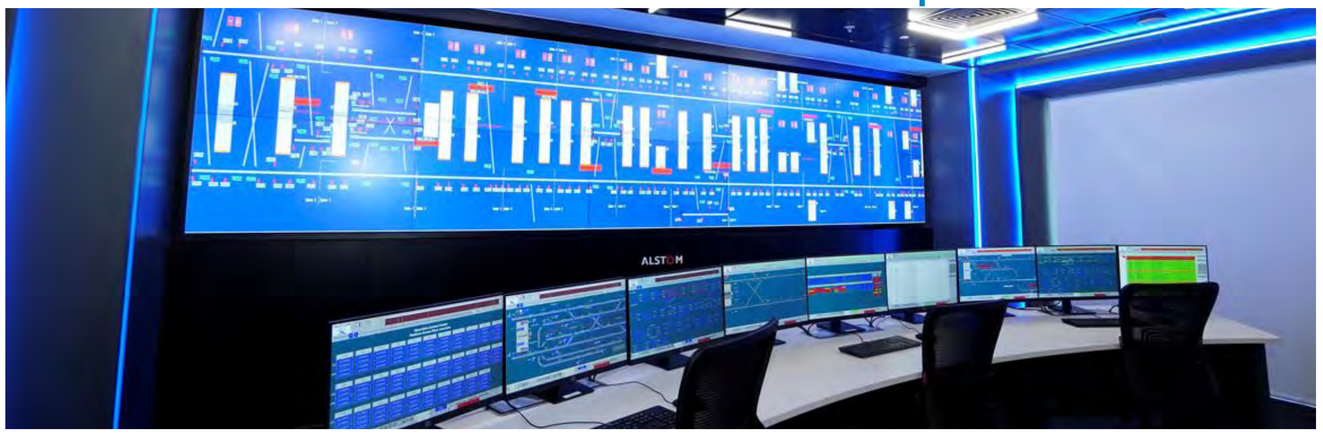
The new contract covers the modernisation of 39.56 kilometres of the railway line between Caransebeș and Lugoj. The modernisation will enable a doubling of the entire line, electrification, infrastructure and superstructure modernisation, signalling and telecommunication systems, as well as civil works.

Alstom will directly oversee the ERTMS Level 2 deployment, implementation of the digital interlocking and passenger information systems as well as electrification works including power supply and overhead contact line. The upgrade will facilitate a maximum speed of 160 km/h for passenger trains and 120 km/h for freight trains. For the electrification works, Alstom will upgrade the Traction Power Station in Caransebes and will supply its OCS3 catenary solution for main lines, leveraging its inhouse capabilities at the manufacturing facility in Lecco, Italy, and its worldwide experience of OCS3 in commercial operation.

Alstom is the world leader in ERTMS deployment and is recognised as a pioneer in the development of new functions and standards. Alstom's digital solutions provide optimal efficiency and high levels of safety and security. In Europe, Alstom supplies over 30% of the operational ERTMS Level 2 lines, showcasing its significant presence and contribution to this technology across the continent.
Alstom has been active in Romania for almost 30 years and is a market leader in railway electrification and signalling solutions. The company is responsible for implementing signalling or electrification solutions on the Northern branch of the Rhine-Danube railway corridor in Romania as well as on two lots of the Cluj-Oradea railway line. The company is part of the consortium building the second metro system in Romania, in the city of Cluj-Napoca, the first fully automated metro line in the country. The first CBTC urban signalling solution in the country is under implementation by Alstom on Bucharest's metro Line 5. The company has also been the provider of maintenance services for the Bucharest metro fleet for the last 18 years and a new long-term contract is in place, valid until 2036.
Alstom™ is a protected trademarks of the Alstom Group.

India

Alstom launches its largest Digital Experience Centre for next-generation Signalling solutions development in India



On December 20th, Alstom, a global leader in smart and sustainable mobility, launched India's first Digital Experience Centre ever built by a rail OEM. Located in Bangalore and spread over 5000 sq.ft., the Digital Experience will be the hub for executing Urban, Mainline, Freight & Mining (specific market) projects along with the integrated cybersecurity, Security & Telecom and SCADA features. With this centre, Alstom has its largest signalling lab infrastructure spread over 60000 sq.ft. in India that will aid the company's vision of making India a global hub for technology and innovation. The dedicated experience centre will support more than 7 million hours of engineering work for Indian and global projects.

Commenting on the laith of the Digital Experience Centre, Olivier Loison, Managing Director, Alstom India said, "The rail network in India, both urban and mainline is becoming highly modernised and complex, this makes its more important than ever to develop advanced Signalling solutions to drive safety, efficiency, and improved passenger experience. In addition to our excellent manufacturing and engineering capabilities, we are proud to be now leading the charter of rail technology innovation with the launch of this centre in India. As the leaders in sustainable mobility, we look forward to developing modern signalling solutions by harnessing the country's vast talent pool, moving forward the innovation goalpost in our industry.''

As per a study by GII, the market for railways signalling systems is expected to witness significant growth and the global railway signalling systems market is expected to grow at a CAGR of 9.5% over the forecast period from 2022 to 2030. Alstom's signalling lab infrastructure in India today addresses more than 40% of its worldwide R&D needs. Highlights about the Digital Experience Centre

The centre will facilitate learning, adaptation, experimentation, simulation, and validation of Alstom's new signalling solutions advanced industry hardware and software innovations. It will conduct complete simulations of world-class signalling technologies, including the one developed for the NaMo Bharat, India's first semi-high speed regional train. Moreover, the centre will leverage IoT, IoB for Security and Telecom-related domains, GenAI applications (OpenAI based), and blockchain for innovation projects in railway applications. These initiatives aim to enhance Alstom's business capabilities, efficiency, and inspire a culture of innovation within the organisation. The centre's extensive infrastructure will speed up localisations of solutions and R&D programs, drive innovation in India, and support the 'Make in India' initiative of the government.

Other key highlights include:

- Centralised demonstration of Operation Control Centre depicting all train movements in a project
- Remote system monitoring and troubleshooting
- Display of safety-critical hardware, trackside equipment, innovation booths, and interactive information on all signalling gears
- Complete end-to-end tests for projects and R&D software delivered from India.
- Built leveraging emerging technologies such as AI, Big Data, intelligent maintenance, LTE, and cybersecurity.
- Mobile app enabled solutions.

Israel

Alstom reaches financial closure for Israel's NTA contract of Tel Aviv's Green light rail systems

Alstom, a member of the TMT Consortium (TLV Metropolitan Tramway Ltd.) and its partners Electra Ltd. & Dan Public Transportation Ltd., have reached financial closure on the contract, awarded in May 2022, to design, build, maintain, and finance the Tel Aviv Metropolitan LRT Green line by Metropolitan Mass Transit System Ltd (NTA). The project is valued at 2.6 billion euro and Alstom's share is valued at €858 million euro[1].

Alstom's responsibility includes the design, engineering, supply, integration, testing and commissioning of the railway system including tracks (Appitrack, rapid mechanised tracklaying), electrification, power supply (Hesop, energy saving system), signaling, communication system and the supply of 98 Citadis X05 trams. Electra will manage the design and construction of the civil works. Maintenance of the system will be performed by a joint venture composed of Dan Public Transportation Ltd., Electra Ltd. and Alstom.

"We are excited and grateful for the opportunity to support NTA in the development of the city's urban network and serve hundreds of thousands of residents every day. We believe access to transport is an essential factor to promote and enhance social and economic progress. Everyone benefits from better access to public transport, reduced commute times, less congestion and lower carbon emissions. Alstom and our partners Dan Transportation and Electra Ltd., believe this project will contribute to the growth of the rail ecosystem in the country and support the creation of hundreds of new jobs," said Eran Cohen, Managing Director Alstom Israel.

This project is part of a greater Transport Investment plan by Israel to address the country's growing mobility demand, to reduce congestion in Tel Aviv and support its 4,000,000 inhabitants. The Green line extends for 39km with 62 stations, of which 4km will be underground. The line will run from north to south of the city, connecting Holon and Rishon Lezion with the centre of Tel Aviv, Tel Aviv University, the industrial and business area in western Herzliya and the business area in Kiryat Atidim. The Green line will have state of the art trams and is expected to move 76 million passengers in 2030.

The trams will operate in double units, 34 meters each with full low floor. The Citadis X05 trams will be designed and manufactured by Alstom's Centre of Excellence in La Rochelle. The other French sites involved are Le Creusot for the bogies, Ornans for motors, Saint-Ouen for Cybersecurity and Villeurbanne for Passenger Information Systems. Additionally, Fez in Morocco will provide harnesses and electrical cabinets and Charleroi in Belgium, will supply the 1500V Integrated Traction and Auxiliary Converter and the Hesop energy saving system.

About Citadis light rail vehicles

With an outstanding track record of more than 30 years and over 8,000 vehicles ordered or in successful revenue service in 140 cities around the world, Alstom is the global leader in light rail solutions. The versatile portfolio ranges from trams and light rail vehicles to streetcars and tram-trains, offering solutions that are ideally suited for existing networks and new lines as well as for inner-city and suburban connections. 26 LRV lines in 13 countries have been delivered as integrated systems.

Alstom in Israel

Alstom's presence in Israel dates back 30 years as a trusted supplier and service provider to Israel Railways (ISR). Recently, ISR extended their Double-Deck fleet ordering additional 96 coaches from Alstom bringing ISR's installed Double-Deck fleet to 680 coaches. Furthermore, in recent years, our collaboration with ISR has been expanded further with the award of the design-build of an ETCS L2 onboard system. These days, Alstom also delivers ISR state-of-the-art Traxx electric-locomotives and will complete deliveries of 63 TRAXX units in the coming year.

[1] order booking expected in 2023/24

Alstom™, Citadis™, Citadis X05™, Hesop™, Appitrack™ and Traxx™ are protected trademarks of the Alstom Group.

France

Alstom's Citadis Dualis trams have been inaugurated on the new line T12, in the Île-de-France region

Alstom's Citadis Dualis tram-trains were inaugurated on December 9th on line T12 of the Île-de-France Mobilités network, which will link two major centres of the Essonne region, Évry-Courcouronnes and Massy-Palaiseau (near Paris) from December 10th.

Every day, more than 40,000 passengers will be able to enjoy the benefits and performance of a latest-generation rolling stock, which is environmentally friendly and 100% accessible to people with reduced mobility.

Citadis Dualis tram-trains offer both the line speed of a train and the urban performance of a tramway, as they run both on the National Railway Network (between Massy and Épinay-sur-Orge) and on dedicated urban tracks (between Épinay-sur-Orge and Évry-Courcouronnes). This configuration makes it a versatile mode of transport: its tramway gauge means it can travel in towns and cities, while its train-like performance means it can carry passengers outside towns and cities, without having to change modes of transport.

In a consortium with TSO (leader) and Terideal, Alstom also built the new 10 km tramway track between Épinay-sur-Orge and Evry-Courcouronnes for line T12 (the line uses existing tracks between Massy-Palaiseau and Épinay-sur-Orge).

A proven equipment

In the Île-de-France region, 77 Alstom Citadis Dualis trains, 100% financed by Ile-de-France Mobilités, are now in operation:

- 15 trains on line T11 (Épinay-sur-Seine – Le Bourget) since July 2017, and on Transilien line P (on the Esbly – Crécy-la-Chapelle section) since March 2022
- 26 trains on line T4 (Bondy – Aulnay-sous-Bois or Montfermeil) from December 2019
- 11 trains on line T13 (Saint-Cyr-l'École – Saint-Germain-en-Laye) since July 2022
- And finally, 25 trains on line T12 (Evry-Courcouronnes – Massy-Palaiseau).

Outside the Île-de-France region, Alstom's Citadis Dualis tram-trains are also in service in Loire-Atlantique, and in western Lyon. Alstom has sold more than 3,000 Citadis trams in 70 cities worldwide, including 25 in France. Citadis tramways have covered more than 1 billion kilometres and carried 10 billion passengers since the first tram entered service in 2000.

The Citadis Dualis tram-train is designed and assembled in France. 7 of Alstom's 16 sites in France participate in the project:

- Valenciennes for design, production, assembly, validation, and testing,
- Le Creusot for bogies,
- Ornans for motors,
- Petit-Quevilly for transformers,
- Villeurbanne for on-board electronics,
- Tarbes for power traction,
- Saint-Ouen for design.

Photo: T12 Trams ©Île-de-France Mobilités

Hungary

25 Traxx electric locomotives of MÁV-START to be overhauled by Alstom

MÁV-Vagon and Alstom signed a €3 million contract for the overhaul of MÁV-START's fleet of 25 Traxx locomotives
The service of the locomotives is expected to take 3 years

Alstom, global leader in smart and sustainable mobility, and MÁV-Vagon have signed a contract worth €3 million for the overhaul of the bogie frames of 25 Traxx electric locomotives, part of the MÁV-START fleet. The project, which is expected to be completed over 3 years, aims to improve the quality and reliability of the rolling stock, and increase the safety and efficiency of rail transport.

The work required for the overhaul will be carried out jointly by the two companies: MÁV-VAGON will be responsible for the refurbishment of the bogies, dismantling and reassembling the gears, while Alstom will provide the overhaul of the engines and the supply of new axles and wheelsets. For the works, the locomotives will be removed from service one by one.
The bogies are dismantled, assembled and commissioned at MÁV VAGON's headquarters in Szolnok, while the associated engine overhaul is carried out in Hennigsdorf, Germany.

The first shipment of the engines to be renovated left Szolnok on December 12th, 2023. After the repairs, they are expected to arrive back in the first quarter of next year and be installed on the renovated bogies. The Traxx locomotives are the youngest electric locomotives in the MÁV-START fleet and together they have already covered more than 60 million kilometres.

Alstom™ and Traxx™ are the protected trademarks of Alstom Group.

France

RIVE Private Investment secures major bank financing, enabling future growth in the rail business together with its partner Northrai

RIVE Private Investment strengthens its positioning in the rail sector with the structuring of a new €300 million financing platform dedicated to the acquisition of innovative locomotives.

This CAPEX facility was provided by KfW IPEX-Bank, Crédit Agricole CIB, Société Générale and Siemens Financial Services through Siemens Bank.

The rail sector represents 40% of the transactions of RIVE's RTAIF fund, dedicated to impact transport assets.

RIVE Private Investment ("RIVE"), an independent European investment company, is strengthening its position in the railway sector by the structuring of a new €300 million financing platform dedicated to the acquisition of innovative locomotives. This CAPEX facility was provided by a banking club consisting of KfW IPEX-Bank, Crédit Agricole CIB, Société Générale, and Siemens Financial Services through Siemens Bank. Additional incremental facilities of up to €225 million may be added to this amount.

Upon their delivery, between 2024 and 2026, the locomotives will be leased to European operators and managed on behalf of RIVE by its long-time partner and asset manager Northrail.

Through this operation, RIVE secures funding for the coming years and equips itself to deploy its investment strategy in the railway sector. RIVE and Northrail support their joint clients in renewing and growing their fleets towards a more sustainable business model and support manufacturers in the development of innovative products for the decarbonization of the sector. These hybrid and/or electric locomotives are at the forefront of the latest environmental and noise standards in Europe, and will allow for the saving of 247,000 tons of CO_2 per year compared to road freight.

Camille Brunel, Partner at RIVE Private Investment, said: "The rail sector plays a special role in the development of an environmentally friendly mobility and transport offering. It faces colossal financing needs for the renewal and maintenance of asset fleets, making it a particularly attractive segment for banks and investors, to which we wish to expose our LPs even more. This operation with our banking partners marks a strategic step in the development of our impact transport asset portfolio."

Michael Trentzsch, Chief Investment Officer of Northrail, said: "We are very happy to continuously provide our reliable asset selection and asset management services to both our investment partner RIVE and the banks financing RIVE's rail asset purchases. With our excellent business relationships to both the OEM's and the lessees, we are confident to provide economically sound and secure results to RIVE and its banking partners."

This financing platform will initially support an existing order of 15 Vectron Dual-Mode locomotives manufactured by Siemens Mobility, which operate alternatively in electric or diesel mode and the acquisition of 20 Traxx MS3 locomotives manufactured by Alstom – the first of their type to be homologated in France, able to operate in six European countries including Germany, Poland, and France – and (20 Modular EBB hybrid locomotives manufactured by Vossloh – this is the manufacturer's first order for this new type of locomotives.

Italy

EIB and FS Italiane: 500-million-euro green bond for the purchase of over 100 regional trains

The funds will be used to purchase of 102 new electric trains for the Italian regions of Campania and Lazio as Eligible Green Projects under FS' Green Bond Framework, in line with the EU taxonomy. This brings to six the number of FS bonds purchased by the EIB since 2015, totalling 1.6 billion euros, including over 1 billion euros in green bonds. The EIB has provided over 13 billion euros to support Italy's high-speed system and rail service since 1998.

Improving the rail service quality in Campania and Lazio regions by purchasing electric trains, thereby helping to promote a modal shift to rail and thus supporting the development of sustainable mobility. These are the main goals of the 500 million euros agreement signed on December 7th in Rome by the European Investment Bank (EIB) and Ferrovie dello Stato Italiane S.p.A. (FS).

More specifically, the EIB has signed a private placement purchase for a 500-million-euro bond issued by FS, which Trenitalia (lead company of the FS Group's Passenger Business Division) will benefit from via an intercompany loan. The EIB funds will be used to purchase of 102 new electric regional trains equipped with ERTMS (Europe's most advanced rail signalling system) technology and designed to the highest accessibility, safety, and infotainment standards for travellers.

The new trains will be of two types: high-capacity POP vehicles and medium-capacity ROCK vehicles. The operation will have a low environmental impact thanks to the adoption of energy-efficient technologies (such as natural ventilation engines, light-alloy casings, LED lighting, climate-control sensors, and smart parking functionality). Moreover, 95% of their component materials will be recyclable.

The new electric trains — set to enter service by mid-2027 — will cover regional rail services in Campania and Lazio under the relevant service contracts.

"This transaction helps modernise Italy's regional train fleet further and consolidates the already excellent partnership between the EIB and FS, which is key to promoting sustainable mobility and economic development in Italy. Green bonds are a great alternative to traditional financial products to support projects contributing to the climate transition," said EIB Vice-President Gelsomina Vigliotti. "Not many people are aware that the EIB launched the first green bond in 2007, and since then, we have issued 69 billion euros of green bonds in 23 currencies."

"The agreement signed with the EIB is further proof of the confidence and interest the European Investment Banks has towards the FS Group, thus showing the great work carried out in recent years by two key players in the development of our country," said Chief Financial Officer of FS Marco Fossataro.

This agreement confirms the commitment of the EIB, the EU climate bank, and the FS Group to sustainable finance. Following the success of the previous EIB-FS operations finalised in December 2021, when the EIB purchased a green bond for the first time, and July 2022, today's subscription brings the number of FS green bonds purchased by the EU bank to three, totalling 1.05 billion euro.

The green bond issue purchased will be based on the 12-billion-euro medium to long-term bond issue programme (EMTN programme) started by FS in 2013 and is in line with the principles of the current Green Bond Framework (GBF) published by FS for the first time in 2017 and updated in 2022, in accordance with the Green Bond Principles issued by ICMA.

The 2022 GBF update includes the decision to gradually align (on a best-efforts basis) eligible FS green emissions projects with the EU taxonomy and the GBF with the EU Green Bond Standard. The EIB fully supports these elements in promoting the implementation of EU legislation on sustainable finance.

Latvia

In the first three quarters of the year the number of passengers carried by rail continued to grow and reached 13 million

In the first nine months of this year, the number of rail passengers continued to gradually return to the pre-pandemic level, with 13 million passengers carried by the infrastructure of SJSC “Latvijas dzelzceļš” (LDz) in the three quarters of the year, which is an increase of 11.3 percent against the same period a year ago. Meanwhile, rail freight volumes continued to drop because of the geopolitical situation and related reasons.

One of LDz’s most important performance indicators is the number of kilometres travelled on its railway infrastructure, which is used as the basis for calculating the track charge. In the 9 months of 2023, 2.37 million train-km of public-use railway infrastructure was used for freight traffic and 4.82 million train-km for passenger traffic (including 36 thousand train-km for “Gulbenes-Alūksnes bānītis” Ltd.).

The volume of freight transported by railway infrastructure in Latvia in the first three quarters of this year was 11.59 million tonnes, which is 5.24 million tonnes or 31% less than in the first 9 months of 2022. In the 9 months of 2023, grain, grain products, seeds and fruit (33.2%), oil and oil products (18.0%) and coal (12.4%) made up the largest part of the freight carried by rail.

LLC “LDZ CARGO”, one of Latvia’s key transport and logistics companies, generates the bulk of LDz Group’s revenue. In order to increase rail freight volumes and diversify freight segments, in January 2023 LLC “LDZ CARGO” launched freight transportation operations in Estonia and opened a branch in the neighbouring country in June. In the third quarter of the year, LLC “LDZ CARGO” continued work to attract new customers and develop new routes in Estonia, and in the first 9 months of the year the company transported 272 thousand tonnes of freight in Estonia.

LLC ”LDZ ritošā sastāva serviss”, a subsidiary of SJSC “Latvijas dzelzceļš”, also continued to promote its services in the Baltic States and elsewhere in the third quarter of this year. In 2023, the company continued active cooperation with foreign customers and business partners, as well as successfully attracted new foreign customers for rolling stock repairs.

Meanwhile, “LDZ Loģistika” generated revenue by providing transport-freight forwarding services, and in the 9 months of this year, the company’s net operating turnover was 11.8 million euros, which due to a decrease in the overall freight volume, is a reduction of 16.6% from the first 9 months of last year. LLC “LDZ Loģistika” continues cooperation with customers who need their freight to be transported from the European Union and other countries via Latvia as a transit country, offering a broad range of modality of all types: road transport, sea, railway, reloading.

The net turnover of LLC “LDZ apsardze” increased by 25% or EUR 1.38 million in the first 9 months of this year as the company’s revenue from security services grew. During this period, the company, which is a member of LDz Group, continued to expand its technical security services and offered a wide range of security and fire safety services to its customers.

The net turnover of SJSC “Latvijas dzelzceļš” was 123.39 million euros, which is an increase of 19.58 milliom or 18.9% against the 9 months of 2022. LDz Group’s consolidated revenue in the 9 months of this year were 194.94 million, which compared to the three quarters of 2022, is an increase of 7.4%. At the same time, LDz Group’s operating result for the first 9 months of 2023 is a loss of 730 thousand euros.

Considering the tendency for freight volumes to decrease in recent years, the main priorities and goals of the “Latvijas dzelzcels” Group involve the promotion of the company’s operational efficiency by reviewing business, organisational and technological processes in order to save costs and stabilise finances, as well as to ensure the Group’s competitive performance in the future.

On track to victory: Eurostar opens key summer date ticket sales for EURO 2024

On December 18th, Eurostar, the European high-speed rail service, announced its early ticket release for travel to the EURO 2024, which takes place in Germany between June 14th and July 14th, 2024. Tickets will be available from December 18th 2023 on the new Eurostar website to travel from London to Essen and Cologne, where England play two group stage games in their bid to bring the Henri Delaunay Trophy home.

Eurostar's expanded network takes customers from London to Brussels with seamless connections into Germany as well as many other destinations. England will play group stage games against Serbia in Essen on June 16th, Denmark in Frankfurt on June 20th, and Slovenia on June 25th in Cologne. Travel from London to Brussels in under two hours. From Brussels, travellers can reach Cologne in 1h47 and Essen in 2h42 with Eurostar.

This can be booked as one journey via the app or website for ease. Traveling supporters can also benefit from a generous luggage allowance, to bring plenty of England gear.

For more football fun, fans can also travel to other popular Eurostar destinations, including Dusseldorf and Dortmund, which could be the potential host for England's knockout bouts. Up to five direct Eurostar trains run daily between Brussels and German cities, making it easy for fans to plan their journeys. England fans can also connect onto direct trains to Frankfurt from Brussels and Paris.

Eurostar supports UEFA's mission to make "EURO 2024 the most sustainable European Championship of all time" by advocating rail travel as the sustainable choice for travelling to Germany. Opting for Eurostar significantly reduces carbon footprints by 90% compared to driving, presenting an open goal for sustainability-minded fans.

For more information, visit Eurostar.com

FIRST ELECTRIC UNITS ŠKODA 16EV START REGULAR OPERATION IN LATVIA

The first electric Škoda 16Ev units of the Latvian national carrier Vienā vilcienā (VIVI) have just gone into service with passengers in Riga. It happened at Riga Central Station at 10:58 local time on December 15th in the presence of the Minister of Transport Kaspars Briškens. The delivery of the last train unit will take place in mid-2024.

"We are pleased that after the hard work of all our colleagues we have managed to cope with the impact of the covid-19 pandemic and the Russian aggression in Ukraine. Thanks to the efforts of our entire extended team, we stand here today with the first units ready to carry passengers. At this point, I would like to express my sincere thanks to all colleagues involved in the implementation of this contract. It would not have been possible without you. I would also like to thank the customer, with whom there is great cooperation, and also the representatives of Latvia. I believe that from now on, all passengers will enjoy travelling with the new units with pleasure," commented Zdeněk Sváta, Member of the Board of Directors of Škoda Group.

Chairman of the Board of JSC "Pasažieru vilciens" Rodgers Jānis Grigulis said: "At this time when we thank a number of partners who have supported us on the way to these trains, in their testing, certification and training of employees, I would like to say special thanks to every employee of joint stock company "Pasažieru vilciens" – both those who were directly involved in the delivery process of electric trains and those who through their daily work have ensured that the train service is already highly appreciated by passengers today. Together, we are taking a big step forward in the development of train travel and we continue to work to ensure that more and more passengers choose to travel by train, ensuring regional accessibility, helping the country to meet its mobility goals and passengers to have a more pleasant experience."

Wide gauge Panter

Škoda Group supplies a total of 32 fully passenger-ready electric trains on 1520 mm gauge to Latvia. The new trains are based on the well-known RegioPanter in the Czech Republic, but they have been adapted to the possibilities in Latvia, so in addition to the wide gauge, they also have a larger width and can accommodate more passengers. Each vehicle consists of four coaches. One electric train is 109 metres long and has 436 seats. The trains have single-level boarding for passengers from the platforms, which will not only make the service more accessible to all, but also reduce the time it takes for passengers to transfer at stops. In addition, wider train doors will help speed up boarding and alighting.

The new electric trains are fully air-conditioned, have ergonomic seats and modern equipment. They are equipped with video and audio information systems and powerful Wi-Fi connectivity. Their operation will be smoother and their cabins will have lower noise levels than those currently in use. The new trains have a design speed of up to 160 km/h (currently 120 km/h). In the future, the maximum speed will be possible on sections where the railway infrastructure allows it. Thanks to the new electric trains from Škoda Group, VIVI will be able to introduce interval timetables on all routes of these trains. This means that trains will run every 15 to 20 minutes on weekday mornings and evenings, which are traditionally the busiest times. The new trains will run in the direction of Aizkraukle, Tukums, Skulte and Jelgava.

Hungary

AŽD has first Hungarian digital interlocking in operation

The Czech company AŽD has successfully commissioned the first Hungarian digital station interlocking system ESA-44-HU in the Röszke railway station.

As part of the modernization of the signalling equipment on the Hungarian railway line Szeged – Röszke – HU/SRB border, company AŽD commissioned the first digital station interlocking system ESA-44-HU. The delivery also includes an integrated open line signalling systems, level crossings and the delivery and installation of the stationary part of the ETCS system at L1 level, which will be activated in the next phase of the project. In 2024, the installation of additional digital interlocking systems will follow in Szeged station and on the line Soroksár – Kelebia.

AŽD collaborated on the development, production and installation of railway interlocking equipment in Hungary with the companies V4SIL and R-KORD (part of the V-Híd holding). The cooperation included the application of Czech know-how and tools in the production of the final device in Hungary, as well as the development of software specially adapted to Hungarian regulations.

“The development and modification of the interlocking system itself was challenging due to the specific principles of signalling technology in Hungary. From a technical point of view, we encountered significant differences here, which we had to implement in our devices in a very short time. However, I greatly appreciate the cooperation with the experts from Hungarian Railways and our partner companies R-KORD and V4SIL, who together significantly helped us in meeting all the conditions,” said AŽD Research and Development Director Karel Višnovský.

Subsidiaries AŽD Slovakia and Projekt Signal also play a significant role in realisation of the Szeged – Röszke – HU/SRB project.

Belgium

EURO9000 gets green light for operations in Belgium and the Netherlands

The EURO9000 locomotive from Stadler, the new generation of 6-axle hybrid locomotives, has successfully received type approval for operation in the Netherlands and Belgium. This approval extends the operational area of the EURO9000, which is already authorised in Germany, Austria and Switzerland, and emphasises its adaptability to the requirements of international rail corridors. An operating licence in Italy is expected to be granted in 2024.

The EURO9000 is an interoperable locomotive specially designed for use on international routes along the main European railway corridors. Following the approval already in place in Germany, Austria and Switzerland, the locomotive has now also received approval for operation in Belgium and the Netherlands.

The EURO9000 locomotive meets the technical specifications for interoperability (TSI) and is intended to be equipped with various country packages. These include conventional automatic train protection systems and ETCS to ensure smooth cross-border operations. The basic configuration covers Germany, Austria, Switzerland, Italy, the Netherlands and Belgium, where two prototypes have been successfully tested in the last two years.

The EURO9000 was developed in response to the challenges of rail freight transport. Its more powerful, more versatile design represents an efficient solution to the increasing demands of cross-border transport.

The EURO9000 locomotive has been available for use in Germany and Austria since March 2023. It received type approval for operation in Switzerland on November 2nd. The current approval for Belgium and the Netherlands is a further milestone for Stadler and emphasises the reliability and performance of the EURO9000 at international level.

Iñigo Parra, Executive Vice President of Stadler Division Spain, says: “The challenges associated with the interoperability of European rail networks and the European Union’s requirements to shift more freight transport to rail motivated us at Stadler to develop one of our most innovative products – the EURO9000. This underlines our commitment and our pioneering role in shaping the future of rail freight transport.”

Most powerful locomotive in Europe

With a power output of 9 MW, the EURO9000 is currently the most powerful locomotive on the European market. This allows operation on electrified routes with alternating current and direct current. The modular design also enables up to three different drive systems (electric, diesel and/or battery drive) to be installed together so that the same trains can run on non-electrified sections of track. The diesel motors also provide additional power when the locomotive is travelling under a 3-kV DC overhead contact line. The EURO9000 is capable of travelling at high speed on the main European corridors with mixed traffic and often allows longer, heavier trains to be pulled by a single locomotive.

The leasing company European Loc Pool (ELP) was the first customer to order EURO9000 locomotives. It has so far acquired 30 locomotives, 7 of which have already been delivered and are in operation.

Alpha Trains also recently ordered 12 EURO9000 locomotives, which are due to be delivered in 2025.

Philipines

CAF TO SUPPLY EXPRESS TRAINS IN THE PHILIPPINES

Mitsubishi Corporation has chosen to outsource the design and supply of 7 Electric Multiple Units (EMUs) to CAF as part of the contract awarded to them by the Department of Transportation (DOTr) of the Government of the Philippines. The project includes the manufacture of the seven express trains mentioned above, each one consisting of eight cars including the fleet spares.

The contract is one of the packages of the macro project for the North-South Commuter Railway Project which will connect the Clark International Airport (northwest of Manila) which serves as one of the country's principal entry hubs for international flights with the province of Laguna (southern part of Luzon). The project is worth €150M, and it is financed by the Japan International Cooperation Agency (JICA).

DOTr is the primary government institution in charge of the country's transport systems and services and is also responsible for managing all infrastructure projects (roads, railways, ports, airports, etc.). Its primary goal is to drive economic growth and improve the country's competitiveness by planning and developing modern and efficient transport systems.

The new line, which will be managed by the Department of Transportation in partnership with the Philippine National Railways (PNR), forms part of the national initiative to improve transportation in the surrounding areas of the Philippine capital city (in this case the route to the airport), reduce road traffic, and prevent major traffic jams in the metropolitan area, all forming part of the framework of the Philippine government's policy to achieve more sustainable transport.

In recent years, the CAF Group has established a close strategic relationship with Mitsubishi Corporation, having undertaken numerous extremely successful railway projects. Highlights include supplying rolling stock for Line 1 of the Manila Light Rail Transit System, also in the Philippines, automatic units for the Istanbul Metro, and constructing a transport system in the Australian City of Canberra.

This also consolidates CAF's operations in the Philippine market, a market with major potential in Asia Pacific.

This is a strategic region for the company's future, both in view of the ongoing annual GDP growth, which exceeds European levels, and the major infrastructure projects that the Philippines intends to develop over the next few years.

Thailand

Alstom's automated Innovia monorail system enters service on Bangkok's MRT Pink Line

Alstom, global leader in smart and sustainable mobility, announces the entry of Bangkok's MRT Pink Line into trial passenger service. The new rail service was inaugurated by the Prime Minister of Thailand, Mr. Srettha Thavisin, on November 21st 2023 for free public trial until December 30th. After successful public trial, the MRT Pink Line is planned to enter revenue service on December 31st 2023. The Northern Bangkok Monorail Company Limited, operators of the Pink Line, awarded Alstom the contract to supply the turnkey Innovia monorail system powering the Pink Line in 2017. Alstom has also provided a monorail system for Bangkok's MRT Yellow Line which has been operational since July 2023.

Extending over 34.5 kilometres and featuring 30 stations across Chaeng Wattana and Ram Intra, the Pink Line will seamlessly integrate with five other rail lines to improve access to city's east-west transport corridors. The Pink Line will also have two additional stations by 2025, which will further improve the connectivity between Bangkok and Nontaburi province.

Toby Tiberghien, Managing Director for East Asia at Alstom, commented on this significant event: "The inauguration of the Pink Line marks another critical milestone for Alstom in Thailand, as our second monorail system starts operation and showcases our expertise in delivering state-of-the-art mobility solutions. Through the Pink Line, we are proud to have supported our customer NBM and the Mass Rapid Transit Authority of Thailand (MRTA) in extending Bangkok's urban transit network to new city areas. This accomplishment reflects our ongoing commitment to innovating for more connected and efficient urban transportation."

The project delivery, led by Alstom's Turnkey regional hub in Bangkok, included system integration, installation and test and commissioning of the Innovia monorail trains, Cityflo 650 GOA4 driverless signalling, communication systems, power supply and conductor rail, track switches, platform screen doors and depot equipment. The Innovia monorail trainsets have been manufactured at the Alstom joint-venture CRRC Puzhen Alstom Transportation Systems Ltd. (PATS) in China.

In 2018, Alstom further solidified its commitment to the project by securing a 20-year service contract, ensuring a seamless operation from delivery to maintenance. This contract encompasses using Alstom's advanced predictive maintenance tool, HealthHub, covering various aspects such as trains, signalling, and depot operations.

Alstom's portfolio of fully automated, driverless turnkey transport solutions is the ideal solution for the particular challenges of Bangkok's urban transportation. Designed to serve rapidly growing cities and dense urban areas, Innovia monorail systems are elevated and operate on dedicated guideways. This ensures a smooth service that does not interfere with surrounding road traffic. The solutions are characterised by exceptional route flexibility, outstanding availability and high efficiency in terms of passenger capacity, energy consumption and land use. The monorail also features spacious and open designs, low interior noise and vibrations as well as large windows to create a bright atmosphere and comfortable passenger experience.

With both Pink and Yellow Lines now in service, over 5 million residents in eastern and northern Bangkok, Samut Prakan, and Nonthaburi provinces will have access to sustainable urban transportation and reduced travel time by up to 50%.

As the leading global provider of integrated urban solutions with over 50 years experience and 95 lines in commercial service worldwide, Alstom is a trusted partner to deliver integrated turnkey rail systems customised for every mobility need.

Alstom™, Innovia™, Cityflo™, Urbalis Flo™ and Healthhub™ are protected trademarks of the Alstom Group.

From the Archives

Chile

2-6-0 No. 620 brews up in the shed yard at Victoria on a windy December 6th 1981. *John Sloane*

From the Archives

Cuba

2-8-0 No. 1821 and 4-6-0 No. 1653 are seen at the loco shed at Central Ecuador sugar mill on March 11th 1988. *John Sloane*

From the Archives

France

SNCF Bo-Bo No. 9226 gathers speed past Boulevard Massena with empty stock from Paris Austerlitz on October 28th 1994. *John Sloane*

From the Archives

France

SNCF BB No. 72189 stands at Troyes with a service to Paris Est on November 8th 2016. *John Sloane*

From the Archives

Germany

Class232.502powerspastOberhausen West Yard with a heavy freight on July 1st 2014. *John Sloane*

From the Archives

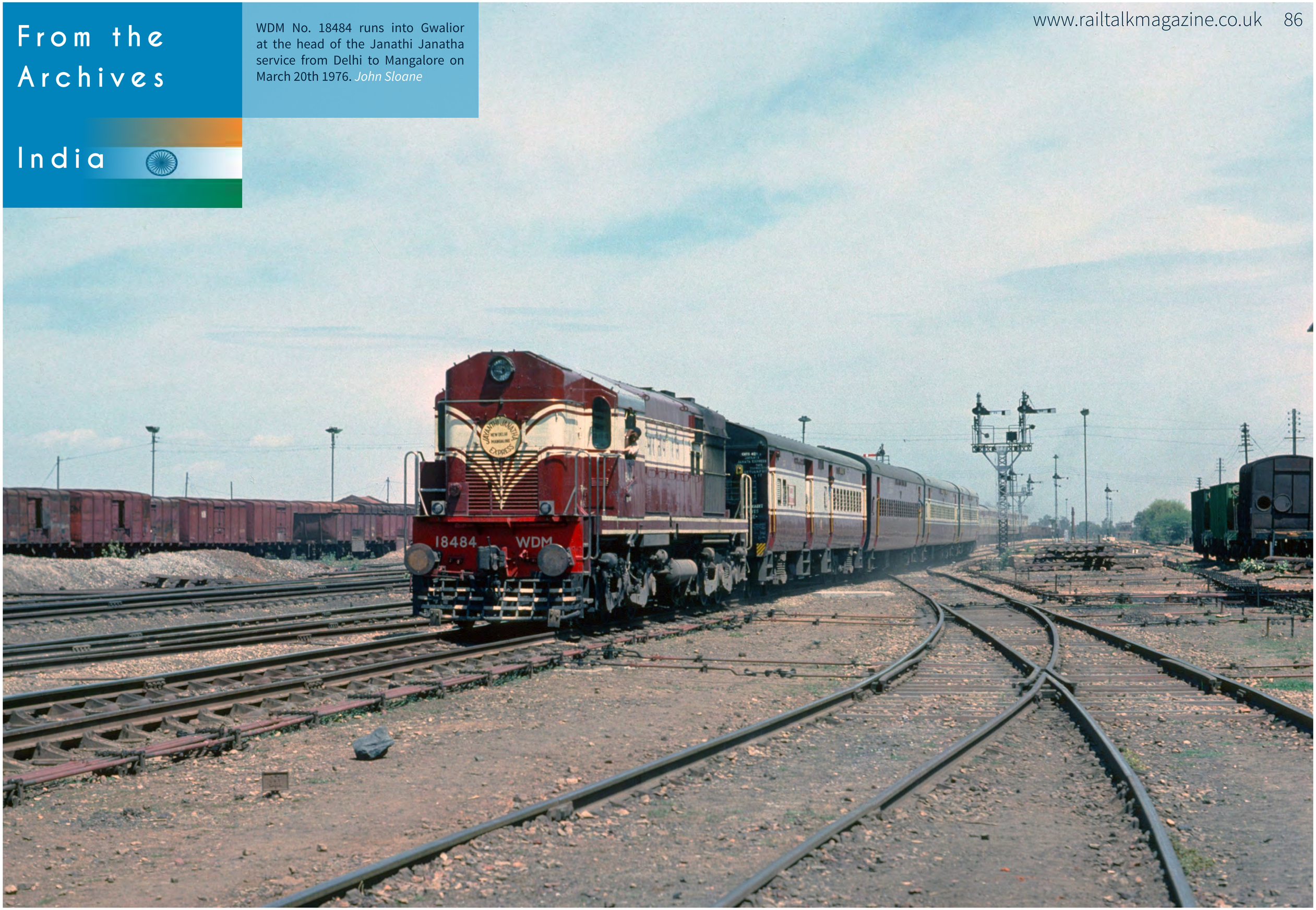
Hungary

Preserved ex Austrian 4-6-0 No. 109.109 raises steam at Istvantalek Works in Budapest on September 13th 2007. *John Sloane*

From the Archives

India

WDM No. 18484 runs into Gwalior at the head of the Janathi Janatha service from Delhi to Mangalore on March 20th 1976. *John Sloane*



From the Archives

Ireland

GM No. 078 is seen departing from Waterford on April 1st 1996.
John Sloane

From the Archives

Malasya

English Electric built 0-6-0 diesel shunters Nos. 151.11 and 151.12 seen at work at Kuala Lumpur with GWR style shunters trucks on February 12th 1980. *John Sloane*

From the Archives

New Zealand

Brush Traction built Bo-Bo-Bo's of Class EF Nos. 30059 and 30140 await their next duties to Hamilton at Palmerston North on November 20th 2010. *John Sloane*

From the Archives

Poland

On February 27th 1986, Pt No. 47-113 sets out from Klodsko in the snow. *John Sloane*

From the Archives

Spain

Alsthom built No. 278-015 sits outside Valencia station on April 15th 1976.
John Sloane