



Raitalk Magazine *Xtra*

Issue 218x
November 2024
ISSN 1756 - 5030

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Content

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Submissions & Contributions

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

Photographic Contributions

All Photographic contributions should 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 218Xtra

One thing I notice from travelling around Europe is that the mobile phone signal on trains is far better than that of the UK, perhaps I have just been lucky, but for German travellers it seems to be getting even better as Deutsche Bahn and Deutsche Telekom are set to improve mobile phone reception on trains.....

Railtravellers will benefit from significantly better cellphone reception when they make calls or surf the internet using Telekom's mobile network: calls and online connections are now possible on many routes with almost no interruption. Deutsche Bahn and Telekom have invested a three-digit million amount in this over the past three years. In 2021, the two companies set ambitious goals for the expansion of mobile communications along the tracks. They achieved the goals two years faster than agreed: Telekom customers benefit from significantly greater network coverage and noticeably increased bandwidths.

The Hamburg-Berlin line is set to become Germany's innovative route for mobile communications with gigabit data rates on trains. Thanks to seamless 5G coverage, rail passengers will be able to make calls and surf the internet in top quality on one of Germany's most important city connections. Deutsche Bahn (DB), the mobile phone companies 1&1, Deutsche Telekom, O2Telefónica and Vodafone as well as the federal government have signed a declaration of intent for the open-technology testing, development and application of a corresponding '5G on the track' supply concept.

Dr Volker Wissing, Federal Minister for Digital Affairs and Transport, said: "Our gigabit strategy aims to enable gigabit bandwidths wherever people live, work and travel. With the MoU, we are setting an equally ambitious gigabit timetable alongside the ambitious schedule for the upcoming general refurbishment of the Hamburg-Berlin line. Through the joint rail and mobile expansion, we are realising considerable synergies and cost savings hand in hand. This will benefit all travellers, who can look forward to high-performance and uninterrupted mobile communications coverage in the future."

As part of the general refurbishment of the Hamburg-Berlin line between August 2025 and April 2026, DB is using the closure period to set up radio masts for the future rail radio FRMCS (Future Rail Mobile Communication System). FRMCS is based on the latest and most powerful mobile radio technology currently available, 5G. The mobile network operators will examine the extent to which they can offer rail travellers gigabit bandwidths for mobile and data connections in the future by sharing the new radio masts close to the tracks. Due to the technical and economic challenges involved in supplying rail travellers, this can only be achieved through a joint effort by all those involved.

Dr Daniela Gerd tom Markotten, Board Member for Digitalisation and Technology, Deutsche Bahn AG, said: "Rail passengers expect excellent data and mobile connections. Germany's mobile phone companies and DB are therefore joining forces to provide passengers with gigabit data rates. This makes rail travel between the two largest cities in our country even more attractive and contributes to our 'S3' refurbishment programme. Our collaboration shows how strong partners are jointly driving forward mobile broadband provision along the railway in our country."

The 278-kilometre rail link between Hamburg and Berlin is one of the busiest routes in Germany. Up to 230 trains and up to 30,000 passengers travel along it every day. During the upcoming general refurbishment of the line, DB is bundling work on tracks, points and overhead lines, creating more flexibility in operations through additional overtaking options, upgrading several stations and renewing the control and safety technology. No major construction work will then be required for several years. DB is also using the planned line closure of several months to set up the infrastructure for the future rail radio FRMCS. FRMCS will replace the current GSM-R railway radio system throughout Europe by 2035.

Until next month...

David

This Page

OBB Class 1144.092 has just arrived at Wien Westbahnhof on October 11th with a local passenger service.

Steve Chapman

Front Cover

A pair of Metrans Vectrons pass Decani whilst hauling a container train from Koper.

Laurence Sly





New Stadler Euro 9000 loco No. 2019-321 eases through Spiez with an Olten to Brig COOP service on September 4th. *John Sloane*

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

HAD-PRINT
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Vivars Way, Canal Road, Selby
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With Thanks

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

These issues wouldn't be possible without contributions from:

Ken Abram, Michael J Alderdice, John Alsop, Steve Andrews, Ray Anslow, Mark Armstrong, John Balaam, Brian Battersby, Mark Bearton, Steven Beesley, Barry Beeston, 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, Paul 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, Ken Mumford, 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 and the guys at RailUK.

Austria

▶ Class 1144.119 is seen arriving at Wien Meidling on October 11th with a westbound regional passenger service. *Steve Chapman*

▶ OBB Nightjet Vectron Class 193.598 is pictured at Wien Hauptbahnhof on October 11th at the head of the Nightjet service to Paris. *Steve Chapman*

▶ EMUs Nos. 4020.294 and 4020.313 have just arrived at Wien Meidling on October 11th with an eastbound S-Bahn service. *Steve Chapman*



Austria

▶ CD Cargo Class 193.760 passes Silberwald on October 13th with a container train heading for Wien. *Steve Chapman*

▶ No. 470.007 has arrived at Wien Hauptbahnhof on October 13th with the sleeper service to Bucuresti. *Steve Chapman*

▶ OBB Class 1144.100 heads a freight through Silberwald on its way towards Wien on October 13th. *Steve Chapman*



Austria

▶ Class 1116.061 has just terminated at Wien Hauptbahnhof on October 15th with a service from Budapest. *Steve Chapman*

▶ OBB Class 1116.225 and 1116.248 arrive at Wien Meidling on October 15th with a Railjet service to München and Bregenz. *Steve Chapman*

▶ Class 2016.013 is pictured on the rear of an eastbound ECS working through Wien Meidling on October 15th. *Steve Chapman*



Austria

▲ A general view of the yards outside the Strasshof Railway Museum with Class 2050.02 and 2050.04 amongst the many exhibits on display. *Steve Chapman*

▲ Steam locos Nos. 197.301 and 109.13 are seen in the Heizhaus at Strasshof Railway Museum on October 13th. *Steve Chapman*

▲ Class 1040.01 is also pictured in the Strasshof Railway Museum Heizhaus. *Steve Chapman*





Austria

▶ MAV-leased Class 182.571 has arrived at Wien Hauptbahnhof on October 10th with the overnight sleeper service to Bucuresti. *Steve Chapman*

▶ CD Railjet No. 1216.234 is pictured at Wien Hauptbahnhof on October 13th with the Nightjet service to Roma. *Steve Chapman*

▶ GYSEV-owned Class 4746.309 awaits departure from Wien Hauptbahnhof on October 10th with its service to Bratislava. *Steve Chapman*



New transport solution for non-craneable semi-trailers

The ÖBB Rail Cargo Group (RCG) is upgrading the TransFER Wels–Vienna–Budapest to facilitate the transport of non-craneable semi-trailers. This will enable the RCG to promote modal shift and further strengthen intermodal transport. What has already been in operation for the TransFER Genk–Curtici for some time is now also possible on the TransFER Wels–Vienna–Budapest: from now on, it will be possible to transport not only containers, swap bodies and craneable trailers but also non-craneable semi-trailers ('normal' trailers) with this TransFER. With three round trips per week, the TransFER offers a non-stop connection between the Austrian terminals in Wels and Vienna South and the BILK terminal in Hungary. It therefore builds a bridge between the economic centres of Western Europe and the countries of Southern and Southeastern Europe – and beyond to the Asian part of Turkey.

Thanks to the use of r2L handling technology, non-

craneable semi-trailers of all types can be loaded and handled efficiently at terminals. The trailer is placed on a special platform, which is then lifted onto the wagon by a crane. The ease with which this platform can be handled means that semi-trailers can be transferred quickly and safely at the terminal without the need for additional ramps or other equipment. Loading time at each hub is estimated at just five to eight minutes. This allows for precise and safe loading and unloading with minimum manpower - a simple and flexible solution that is now also available for TransFER Wels–Vienna–Budapest and makes it much easier for transport companies to make the switch to rail.

Logistical and economic benefits

The upgrade to the TransFER connection to include non-craneable semi-trailers offers transport companies numerous logistical and economic benefits. Tolls and fuel costs are eliminated, for example, enabling the RCG

to offer a competitive rate compared to road transport. On top of this, first and last mile transport by road allows for a higher total weight, which further increases efficiency – both attractive factors in favour of a shift to rail.

Boosting intermodal transport and the modal shift

With the upgrade to the TransFER Wels–Vienna–Budapest to allow for the transport of non-craneable semi-trailers, the RCG is continuing to drive forward the modal shift – in other words, the transition of freight transport from road to rail. This development offers customers environmentally friendly and at the same time economically attractive rail transport solutions.



RCG and LogServ launch future-oriented digitalisation offensive

ÖBB Rail Cargo Group (RCG) and the voestalpine subsidiary Logistik Service GmbH (LogServ) are intensifying their cooperation in a joint digitalisation offensive. Modern, cross-company technologies and a transparent approach from the ground up are being put to use. The transport industry is undergoing radical change: optimising the use of resources, reducing CO2 emissions and responding flexibly to dynamic market conditions are the order of the day. More than ever before, the use of digital technologies is playing a key role – especially when it comes to collaboration across company boundaries. Close to the customer, close to the market. To make rail freight fit for the future, RCG is focusing on the agile development of digital customer services and the use of state-of-the-art technologies for seamless data exchange. This means putting the customer at the centre and working on solutions to their specific challenges.

To this end, RCG defines development and implementation goals together with the customer and implements them step by step in continuous coordination, as was recently the case with Logistik Service GmbH (LogServ) – a 100% subsidiary of voestalpine Stahl GmbH.

Digitalisation project with added value

Together with LogServ, RCG is setting new standards in digitalisation through increased cooperation to optimise internal and external logistics processes at the Linz site. The result: more transparency and less personalised information distribution via e-mail and Excel lists. The use of customer-friendly interfaces and system integration with the latest interface technologies make daily work easier – for both LogServ and RCG, as the digitalised processes reduce hurdles and make the handling of logistics projects even easier for everyone involved.

Intuitive user interface for improved workflow

LogServ and RCG work together through user-friendly and intuitive interfaces that can be used to control all steps of the transport process – from ordering trains and empty wagons to tracking current shipments. Information and lists are no longer sent back and forth by e-mail, but are shared with all relevant stakeholders with just a few clicks. Many of these services can be handled through RCG's own logistics platform MIKE. However, the full digital potential of cross-company data exchange can only be realised in combination with coordinated interface services from the MIKE platform.

In addition, the project partners are in constant dialogue with the voestalpine Donawitz site as input for the funding project there.

New: TransFER Belgrade–Rijeka

ÖBB Rail Cargo Group (RCG) is expanding its TransNET with a new direct connection between Serbia and Croatia. This will connect two important rail freight hubs and optimise logistics between the two countries. RCG has expanded its position in the Western Balkans through strategic measures in the Serbian market. The founding of a carrier company in Belgrade in 2023 was followed in 2024 by the founding of a rail freight forwarding company together with Transfera d.o.o., one of the leading freight forwarding companies in the Western Balkans. The combination of RCG's expertise in rail freight transport and Transfera's in-depth market knowledge result in tailor-made logistics solutions that meet the specific requirements of the Serbian market, such as the recent TransFER Krusevac–Budapest–Duisburg and the latest TransFER Belgrade–Rijeka.

Direct connection to the Serbian rail network

The new TransFER runs between the Nelt container terminal – strategically located near Belgrade and other important industrial centres – and the Adriatic Gate Container

Terminal (AGCT) in Rijeka – the largest port in Croatia, through which around 70% of goods to and from Serbia pass. With the TransFER, Rijeka is becoming increasingly important as a central transshipment hub for the Serbian market. With the direct connection to the Serbian rail network, RCG can make rail freight transport more efficient for its customers and reduce transit times. This enables customers to optimise their logistics processes and take advantage of new opportunities in the region. 100% in-house rail transport The TransFER Belgrade–Rijeka is operated by RCG in own traction, with one to two round trips per week and a transit time of up to 24 hours. With a capacity of 76 TEU (Twenty-foot Equivalent Unit) per train, both 20- as well as 40- and 45-foot containers can be transported for intermodal flows of goods. In addition to a significant reduction in CO2 emissions compared to pure road transport, the TransFER offers other benefits that ensure transparency and plannability, including additional services such as the organisation of the first and last mile as well as regular status updates by e-mail.

The ČD Cargo photo contest has its winners



1. Miroslav Mencil



2. Tomáš Šreiber

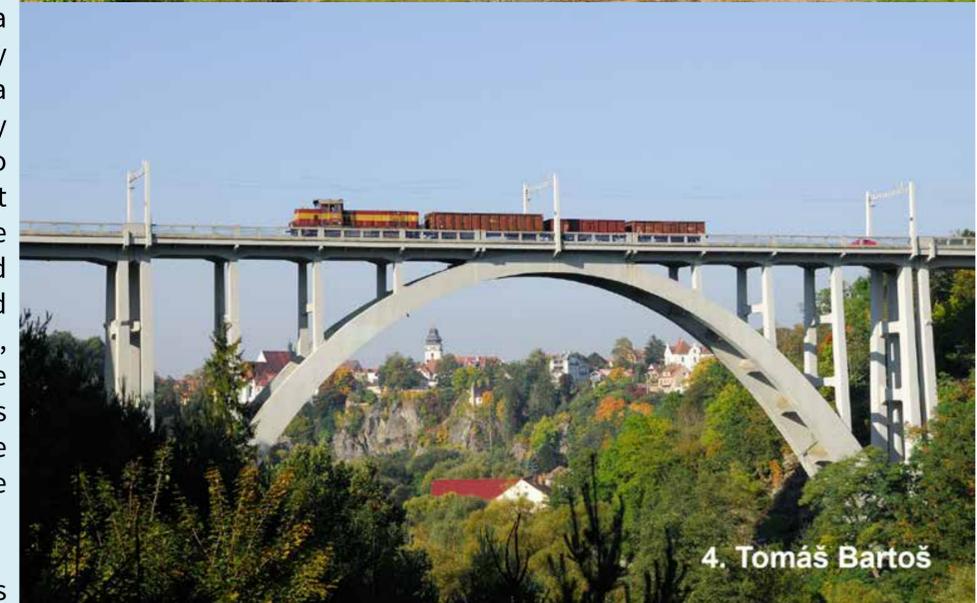
ČD Cargo presents the results of this year's photo contest. We congratulate the winners, but we would like to thank everyone who sent their photos to the competition.

This year's competition brought a small novelty in the form of a new category "ČD Cargo abroad". That is why we have selected and awarded five photos, whose authors will receive valuable prizes.

These photos are on the next page.



3. Dušan Diblík



4. Tomáš Bartoš



5. Radek Hortensky

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Alstom strengthens its position as a leader in the modernisation of railway systems through a new agreement with Škoda Group

Alstom, global leader in smart and sustainable mobility, concluded an addendum on the contract with Škoda Group for the supply of the ETCS level 2 system (European Train Control System) for trains to be manufactured by Škoda for RegioJet.

This addendum specifically applies to Alstom's ETCS Level 2 Onvia Cab™ (formerly Atlas™) for fifteen two-car electric units and eight three-car electric units for RegioJet trains. Deliveries are expected to begin in the first half of 2025.

In view of the current course of cooperation, both companies decided to expand the cooperation by signing a new amendment. This collaboration will increase the safety and efficiency of rail transport and underline the company commitment to supporting innovative and sustainable solutions in European mobility.

"We are proud to offer innovative and competitive signalling solutions that not only increase the frequency of train traffic, but also ensure railway safety. Our ETCS level 2 system is a top-of-the-line solution that meets current needs of the railway.

This contract confirms the confidence of our RegioJet customer in the reliability of solutions and confirms our leading position in the country in terms of onboard equipment installations, exceeding 700 units installed in Czech Republic," says Dan Kurucz, Managing Director of Alstom Czech Republic and Slovakia.

The volume and density of traffic is constantly increasing, and rail transport is becoming more international. To meet these challenges, state-of-the-art signaling technology is being used with lines and vehicles being upgraded.

ETCS is a standardized, transnational railway safety system that is already in use in many European countries. The system improves train control by allowing trains to run at shorter intervals and increases safety by automatically braking trains if they are travelling too fast or too close together.

The upgrade is an important step towards increasing rail transport capacity and reducing maintenance costs - all while maximizing safety.

"IT FEELS BIGGER THAN IT LOOKS" ŠKODA GROUP UNVEILS MODERN TRAIN CONCEPT FOR NIGHT TRAVEL

Škoda Group has introduced an innovative solution for night train travel – the "Sleep in Motion" concept. This groundbreaking design, developed by designers from Škoda Group's office in Austria, and introduced during InnoTrans2024 in a form of a mock-up, enhances comfort, privacy, and operational efficiency while maintaining high passenger capacity. By tackling the challenges of current night train layouts, Škoda Group is setting a new standard for rail travel.

"The 'Sleep in Motion' concept showcases our ability to deliver forward-thinking solutions that address both passenger needs and operational challenges," said Jan Harder, President Region West and North at Škoda Group. "Our design enhances comfort and privacy without sacrificing capacity. We believe this concept is a real game-changer for the night train sector, making rail travel more appealing and sustainable. Right now, we are already actively offering this solution to our customers."

Night trains are key to the decarbonisation of the transport sector, offering an eco-friendly alternative that makes travel time feel less intrusive. However, the current night train fleets are outdated, with insufficient comfort, lack of privacy, and a cramped atmosphere. Existing options such as 6-berth compartments maximise capacity but compromise comfort, while 4-berth compartments offer a more pleasant experience but reduce space efficiency and increase costs.

New concept from Škoda Group, that received a patent recently, addresses these challenges with a revolutionary design. The concept features optimised bed geometry, including non-rectangular bunks, which enable comfortable sleeping positions and freedom of movement without reducing capacity.

The cabins are arranged in double units, offering two private compartments with comfortable access and a range of features, including:

- Spacious mattresses 200 cm long and up to 85 cm wide
- A window for every passenger that also serves as an emergency exit
- 90 cm cabin height for comfort
- Dedicated luggage storage at floor level
- Hand luggage space inside the cabin for added security
- Lights, charging sockets and other more features for high comfort

This layout provides the privacy of business class combined with the efficiency of super-economy class. It transforms the night train experience into a more comfortable, secure, and enjoyable journey. The alternating width of the gangways and the dedicated luggage spaces contribute to a feeling of spaciousness while maintaining operational efficiency.



"Our new night train concept is a strong example of our ability to innovate, but we see it as just the beginning," said Martin Zsifkovits, Managing Director of Škoda Group Austria. "What we've created is a prototype that showcases a new direction for night train travel, but we remain committed to refining and improving it. The current cabin exists as a mock-up, and we are actively gathering feedback from passengers and stakeholders. Every insight we receive is valuable and will help us perfect the design to meet both operator and traveller expectations."

The idea of the sleeping cabins was presented by Wilhelm Berbig from the Austrian branch office in an internal innovation challenge organised by Škoda Group across entities and countries. "Sleep in Motion" has won the challenge in its last edition and is great example that challenging for innovation is crucial.





Finland

VR night train No. PYO269 has just arrived at Kolari behind Nos. 2819 and 2806 on October 13th. The train left Helsinki at 20:28 the previous evening and arrived at Kolari a couple of minutes early at 10:53. The monster train consisted of a service coach, 4 classic single deck sleepers, a restaurant car, a double deck seating coach, 3 double deck sleepers, 2 open car carriers and 4 enclosed car carriers. Kolari is the most northerly passenger station in Finland, well inside the Arctic Circle. At this time of year it sees just 4 trains per week. The driver has wasted no time in uncoupling and running round in order to release the cars from the car carriers. *Andy Pratt*



VR No. 3354 works a loaded log train through Oulu station on October 14th whilst a Pendolino waits to continue it's northbound journey towards Rovaniemi with train No. S35, the 04:59 from Helsinki. *Andy Pratt*



VR railcar No. 4409 stands at Nurmes station having just arrived with train No. 761, the 11:54 from Joensuu on October 11th. The journey from Joensuu is approx 160km and has just 2 return trains per day. The line continues north to Kontiomäki for freight only. *Andy Pratt*



▶ Finnish Railways Vectron No. 3352 stands at Tikkurila station with train No. IC29, the 18:19 Helsinki - Oulu on October 10th.

Andy Pratt

▶ On a gloomy October 14th at Oulu station, VR No. 2747 shunts an additional coach onto the rear of train No. IC70 12:24 to Helsinki, while alongside Sr3 Vectron No. 3316 pauses with train No. IC24 09:23 Rovaniemi to Helsinki. The additional coach being added, No. 11003, has the designation Nom and is for transporting prisoners. *Andy Pratt*

▶ VR Dv12s No. 2751 and unidentified classmate take power passing through Nurmes station heading south with a loaded log train on October 11th. *Andy Pratt*



Germany

DB Cargo FLS supports L'Oréal with an efficient transport concept to Switzerland

L'Oréal, the world's largest cosmetics manufacturer, has been relying on DB Cargo Full Load Solutions (FLS) to transport its products in an environmentally friendly way for over four years - and will continue to do so for the next three years. Weekly transports bring creams, shampoos and shower gels from the distribution center in Muggensturm to Mannheim. From there, the goods are transported by rail directly to the Migros trading company in Switzerland, which has its own rail siding.

This enables a significant reduction in CO2 emissions of around 90 percent, as well as fewer empty runs and ramp contacts - a solution that is not only sustainable, but also efficient.

L'Oréal and DB Cargo: more than just rail transportation

The partnership with DB Cargo goes beyond traditional rail transport. Alternative drive technologies such as HVO - biodiesel from waste materials - are also to be integrated

into the truck pre-carriage in future in order to make the entire supply chain more climate-friendly. DB Cargo FLS is working closely with L'Oréal to develop customized logistics solutions that meet both ecological and economic requirements.

Karin Höweler, Branch Manager Mannheim, and Volker Weirich, Senior Key Account Manager, both from DB Cargo FLS, are also delighted: "As a strategic partner, we are giving L'Oréal's transport logistics a sustainable makeover. Based on our strong transport mode portfolio, we will work with the customer to develop further optimal logistics solutions in the future - for L'Oréal and the environment!"

"We are very proud to have found innovative ecological transport solutions based on the strategic partnership with DB Cargo FLS, which enable the ecosystem to make significant CO2 savings," comments Dr. Kiri Trier, Sustainability General Manager of L'Oréal in the DACH region.

Pioneering logistics solutions for a green future

The strategic partnership will continue in the coming years. L'Oréal has further expanded the cooperation and added new transports in Germany and Austria.

DB Cargo FLS is thus once again underlining its expertise in green logistics and its role as a reliable partner for sustainable transport solutions.

Photo: ©DB FLS



Bigger, heavier, further: heavy-duty transport par excellence

DB Cargo enables a 58-ton transformer to travel across Europe, offering innovative logistics solutions across borders.

Moving 58 tons in one go? An easy task for DB Cargo: the multimodal journey of the heavy transformer from Italy to the UK was recently successfully completed. It was transported by rail from Italy to Antwerp and then reloaded onto a truck for onward transportation to the UK. With a height of 355 cm, the transformer posed a real challenge, which was overcome by using a low-loader wagon within the permissible loading gauge.

Reliable partners and smooth processes

This transport was one of a total of seven 58-ton transformers manufactured in northern Italy and delivered to the UK. Working with reliable partners makes this type of multimodal and exceptional transportation possible.

The entire process - pre-carriage and transshipment in Italy, journey from Padova to Antwerp and transshipment and onward carriage from Antwerp - was planned on the basis of the desired arrival date in the UK and carried out on schedule.

Rail as a solution for heavy goods transportation

This successful transport demonstrates that heavy goods transports can also be carried out multimodally, with the longer part of the journey being carried out by rail. DB Cargo is once again demonstrating how innovative solutions can offer customers the best service for their transportation needs.



For a more environmentally friendly rail transport in the region: Electrification of the Eifel route starts

Deutsche Bahn (DB) is starting the electrification of the Eifel line between Hürth-Kalscheuren and Trier-Ehrang. In the future, environmentally friendly electric trains will run on the approximately 164-kilometre-long traffic artery instead of diesel vehicles. Since electrically powered trains can accelerate better and are less prone to breakdowns, they ensure greater punctuality and reliability for passengers. Representatives of Deutsche Bahn and politicians have given the official start signal for the work in Kyllburg. The federal government and the states of Rhineland-Palatinate and North Rhine-Westphalia are investing around 500 million euros in the electrification of the Eifel line.

The electrification of the Eifel route is part of the S3 program for the structural restructuring of the DB Group. The focus in the infrastructure is on improving the existing network. The aim is for DB to become more punctual, reliable and profitable again. This creates a stable basis for the further growth path of the “Strong Rail” strategy, which is aimed at significantly increasing the number of passengers and the market share of the climate-friendly railway. DB Infrastructure Director Berthold Huber: “Three years after the flood, we have largely rebuilt the Eifel route. Now we are taking a further step: We are ensuring that diesel in train traffic between Hürth-Kalscheuren and Trier-Ehrang will soon be a thing of the past. With a more environmentally friendly and reliable service, we want to convince more people to switch to rail.”

Minister for Climate Protection, Environment, Energy and Mobility of the State of Rhineland-Palatinate, Katrin Eder: “The electrification of the Eifel route makes a decisive contribution to climate-friendly and sustainable mobility in Rhineland-Palatinate. By building overhead lines and making technical adjustments to the infrastructure, routes that could previously only be used by diesel-powered trains will be usable for electrically powered trains. Projects like these are important decisions for the federal government’s plan to achieve a 75 percent electrification rate in the nationwide rail network by 2030. At the same time, they contribute to the goal of further developing local public transport set out in the coalition agreement of the Rhineland-Palatinate state government. The electrification of the Eifel route will strengthen local public transport in the long term and make a decisive contribution to achieving climate neutrality in the transport sector.”

Minister for the Environment, Nature Conservation and Transport of the State of North Rhine-Westphalia Oliver Krischer: “Electrification, together with the reconstruction after the flood, is by far the largest railway investment in the region since the Eifel line was built more than 150 years ago. This enables new connections on the route, for example a connection of the Eifel to the Rhenish S-Bahn network.”

Parliamentary State Secretary to the Federal Minister for Digital and Transport Oliver Luksic: “If we look back to the situation three years ago, it is hard to imagine that we are standing here today and can celebrate the start of construction of the electrification of the Eifelbahn. What everyone involved has rebuilt here from scratch in a very short space of time is



unprecedented. For the first time, a special feature came into play: not only was the reconstruction largely exempt from approval and thus significantly accelerated, but the electrification of the route could also be planned and implemented directly from a single source. That is a real plus. Because electric trains are more environmentally friendly, quieter and more reliable.”

District Administrator of the Eifel District & Deputy Association Chairman of the Rhineland-Palatinate North Local Rail Transport Association Andreas Kruppert: “The electrification of the Eifel route is a decisive step towards more sustainable and reliable mobility. There are significant advantages for the citizens of our rural regions: The rebuilt infrastructure enables more environmentally friendly rail transport with improved punctuality, which will make everyday life easier for many commuters in particular. It is important that rail transport remains resilient and future-proof - an important contribution to the quality of life in our homeland.”

Co-Chairman of the Sector Advisory Board and Managing Director of go.Rheinland GmbH Dr. Norbert Reinkober: “I am delighted that we can modernize the railway lines so quickly in the areas that were so badly affected by the storm. This has only been possible thanks to good cross-institutional cooperation and broad political solidarity. Electric trains will be able to be used here in just a few years. These will give a real boost to operational quality and ensure greater reliability.”

In the coming years, DB will be installing 300 kilometres of overhead wire and ten traction power systems on the Eifel route alone. It will also be renewing numerous tracks and switches and adapting 56 bridges and ten tunnels to make room for the new overhead lines and trains. The first sections of the route are expected to be technically completed by 2026.

Reconstruction after the flood disaster

The flood disaster in the summer of 2021 had almost completely devastated the Eifel route on numerous sections in North Rhine-Westphalia and Rhineland-Palatinate. In many places, the reconstruction was tantamount

to a new construction. In addition to the route with tracks, sleepers and ballast, 170 bridges and culverts as well as 24 level crossings also had to be renewed. DB made sure that the new infrastructure was more resilient to extreme weather events. This includes bridge structures without central pillars, which offer as little surface area as possible in the event of a potential flood.

The comparatively high pace of reconstruction and electrification is made possible not only by the close cooperation of all those involved but also by legal exemptions in the flood areas. For example, simplified conditions apply to planning law and awarding contracts. The federal government, the state, the responsible authorities, the municipalities and the DB are working closely together to quickly bring people back to a degree of normality.

Electrification and green electricity at DB

More than 60 percent of the German rail network is already electrified. This figure is above the EU average. Around 90 percent of the DB Group’s passenger and freight transport performance is provided electrically.

DB operates its own traction power network in Germany and covers 68 percent of DB traction power with renewable energies. Long-distance passengers have been traveling with 100 percent green electricity since 2018. By 2038, all DB traction power - ten terawatt hours per year - will be 100 percent green. In addition, DB will supply its factories, office buildings and train stations in Germany entirely with green electricity by 2025.

General renovation: DB InfraGO and industry start dialogue on projects for 2028

Deutsche Bahn (DB) is pushing ahead with its plans for the general renovation of other heavily used sections of the rail network.

DB InfraGO, as the infrastructure operator, informed the railway companies as well as representatives from politics and associations about which routes are scheduled to undergo bundled renovation and modernization work in 2028. Within the framework of European guidelines, DB InfraGO is obliged to report construction-related capacity restrictions in good time and to consult those authorized to access the network.

The general renovation of the heavily used rail network is an important component of the overall S3 program, which aims to renovate DB's infrastructure, operations and profitability by 2027. In the next three years alone, around 1,500 kilometres of track are to be completely renovated. In this way, the group is creating a stable basis for the further growth path of the Strong Rail strategy. In order to be able to continue the renovation and modernization offensive in the following years, DB is already making all the necessary preparations. With the presentation of the corridors for a general renovation in 2028, a one-year consultation phase has begun.

The railway companies can now comment on the plans.

DB InfraGO regularly evaluates its projects for the general renovation of the heavily used rail network. Changes may be necessary, particularly due to interactions with other construction projects, including, for example, the major bridge renovations in Cologne, coordination with partner railways in other European countries and progress within the projects. In addition, it is important that the transport routes for rail freight traffic are secured.

Specifically, the following corridors are now planned for general renovation in 2028:

- Cologne – Bonn – Koblenz (04.02.2028 – 07.07.2028)
- Koblenz – Mainz (04.02.2028 – 07.07.2028)
- Hagen – Unna – Hamm (04.02.2028 – 07.07.2028)
- Munich – Rosenheim (04.02.2028 – 07.07.2028)
- Würzburg – Ansbach – Treuchtlingen (07.07.2028 – 08.12.2028)
- Minden – Wunstorf (07.07.2028 – 08.12.2028)
- Weddel – Magdeburg (July 7th, 2028 – December 8th, 2028)
- Aachen–Cologne(07.07.2028–08.12.2028)



- Forbach – Ludwigshafen (07.07.2028 – 08.12.2028)

Changes in the selection and order of the corridors are possible during the consultation phase. In addition, the implementation of the projects is subject to the condition that sufficient funds are available in the future federal budget.

To improve the quality and punctuality of train services, DB has planned over 40 general renovations in the coming years.

The aim is to quickly improve the condition of the rail network and to modernize and upgrade the stations. Once the general renovations are completed, travellers and freight transport companies will benefit from noticeable improvements, a more efficient infrastructure and more attractive stations on the currently heavily used sections of the route. The consistent replacement of old technology will significantly reduce the number of infrastructure-related disruptions.

The Riedbahn between Frankfurt/Main and Mannheim is a pilot project for the general renovation of heavily used sections of track. Since July 15th, DB has been renewing and modernizing tracks, switches, signals and replacing the overhead wire. All work is to be completed by the timetable change on December 14th.

Wabtec to Supply Passenger Information Systems for Munich S-Bahn Trains

Wabtec has announced a letter of intent with Siemens Mobility to supply passenger information systems for Munich S-Bahn trains. The multi-million-euro agreement will provide the new Siemens trains with systems that deliver an improved and intuitive passenger experience.

“The Munich S-Bahn is one of the busiest transit systems in Germany, and those commuters rely on easy access to information each day to simplify their journey,” said Pascal Schweitzer, President of Transit, Wabtec. “The state-of-the-art system will provide comprehensive, real-time information for an enhanced passenger experience. This solution is a tribute to the close collaboration with Siemens Mobility and Deutsche Bahn to define the best fit for fulfilling the operator’s needs and solving technical challenges.”

The agreement is a result of a close working relationship between Wabtec

and Siemens Mobility engineering teams to meet the requirements of the Munich S-Bahn and provide passengers with better information. The two companies have a strong track record of leading major projects across Deutsche Bahn’s network. Most recently, Wabtec worked with Siemens Mobility on integrating the passenger information system for the VELARO MS II project.

Wabtec will supply Siemens Mobility the passenger information systems for 90 S-Bahn trains starting in late 2025. The systems, to be built at Wabtec’s site in Brunthal, Germany, will feature high resolution, full-color LED and TFT displays. The screens will be located above the doors both inside and outside the car, on the ceiling, and in the transitions between the cars. The system will track the course of the journey and provide information about the stations and the occupancy of the respective train. In addition, the systems

feature Bluetooth® Auracast™ technology built into the audio solution to improve the journey for hearing-impaired passengers.

The new S-Bahn trains ordered at Siemens Mobility for Munich offer more space, greater comfort, and many innovations. The first trains are scheduled to enter passenger service at the end of 2028. For the first time in Germany, completely integrated S-Bahn trains with a total length of more than 200 meters will be in use, providing capacity for more than 1800 passengers. With the order, the State of Bavaria and the Munich S-Bahn are preparing for expected passenger growth in the coming decades and for the planned mobility transition. The trains are highly energy-efficient, require little maintenance, and receive software updates via the cloud.

New timetable with more international offers, more sprinter and direct connections in Germany

New daily direct connection from Berlin via Strasbourg to Paris • New train fleets in international traffic offer more comfort and capacity • Fewer transfers with additional ICE direct connections

From the timetable change in mid-December, Deutsche Bahn (DB) will be offering more international train journeys. A total of over 330 journeys a day will then connect Germany directly with twelve neighbouring countries. That is an increase of around 25 percent compared to 2019. A highlight is the new daily direct ICE connection from Berlin via Strasbourg to Paris. The new ICE will travel between the two capitals for the first time on December 16th.

Within Germany, DB is continuing to expand its range of Sprinter trains and direct ICE connections. Six additional ICE Sprinters are running daily between Berlin and Frankfurt (Main), connecting both cities non-stop in around four hours. This means that there will be 22 particularly fast trains on this route in the future. In the ICE Sprinter network, customers can save up to 30 minutes of travel time between the cities compared to trains with more stops, and up to 45 minutes between Berlin and Munich.

Dr. Michael Peterson, DB Board Member for Long-Distance Passenger Transport: “International long-distance transport is booming. People want more rail in Europe. SNCF and DB are implementing this customer request. I am looking forward to the first ICE connection from Berlin to Paris. At the same time, we are increasing our timetable in Germany with a sense of proportion - and in those places where there is corresponding demand from our passengers. With new Sprinter and direct ICE connections, the train scores points compared to the car with attractive travel times.”

Information and tickets from October – new: advance booking period extended to up to twelve months

The new timetable will apply from December 15th, 2024. Tickets go on sale from October 16th. The previous advance booking period of a maximum of six months will be extended to up to twelve months. National offers such as the Super Sparpreis, the Sparpreis and the Flexpreis can therefore be booked well in advance for the coming summer holidays or other planned events and with maximum savings. For tickets abroad, the maximum advance booking period will initially remain six months.



All information and tickets are available on bahn.de and in the DB Navigator as well as in DB travel centers and DB agencies.

The new timetable at a glance International long-distance transport

A highlight is the new daily direct connection from Berlin to Paris via Strasbourg. The ICE departs Berlin Hauptbahnhof at 11:54 and reaches Strasbourg at 17:53 and Paris Est at 19:55 (arrival in Frankfurt/Main South at 15:52, Karlsruhe at 17:06). It leaves the French capital at 09:55 and Strasbourg at 11:46, arriving in Berlin at 18:03 (arrival in Karlsruhe at 12:34, Frankfurt/Main South at 14:04).

In addition to the direct Berlin-Paris connection, Amsterdam will also be connected to Stuttgart and Munich daily by ICE for the first time, without changing trains. Between Frankfurt (Main) and Brussels there will be a new late-night connection in both directions every day from mid-April to early November. Two additional trains will be running on the Munich-Lindau-Reutin-Zurich route in the future. A new early/late service will make it possible to spend up to twelve hours in Munich during the day.

The range of journeys between Germany and Poland is being expanded again: with two additional trains per day, the Berlin-

Breslau-Krakow route will now run every four hours. In the summer months, there will be additional direct trains from Munich via Verona with four daily journeys to/from Venice and six journeys to/from Bologna.

The entire range of cross-border European rail services can be booked from the starting station to the destination station via bahn.de, in the DB Navigator and in the DB travel centers.

Green Mobility Partners: Market entry with up to 50 Vectron locomotives from Siemens Mobility

8 fast deliveries of Vectron MS for rental to railways, maintenance contract Green Mobility Partners, a Vienna-based new player in the European full-service locomotive leasing business, has placed an order for up to 50 locomotives with Siemens Mobility. The contract includes the agreed purchase of eight Vectron MS locomotives as well as support in the service area.

Christoph Katzensteiner, GMP founder: “Our team scores with extensive experience in locomotive leasing business. As Vectron specialists, we are highly motivated to offer our customers the best service with this vehicle.”

Andre Rodenbeck, CEO of Rolling Stock Siemens Mobility: “With Green Mobility Partners, the family of Vectron operators continues to grow. We are pleased that even newly entering companies can benefit from the advantages of the vehicle. The Vectron MS has approval in over 20 countries and sets the standard for cross-border travel in Europe on all rail corridors. The state-of-the-art product platform, with its strength in interoperability and continuous expansion of its features, is perfectly suited for the leasing business.”

The Vectron locomotives have a maximum power of up to 6.4 MW and a top speed of up to 200 km/h. They are the ideal vehicles to offer cost-effective and efficient mobility on sustainable railways in the Central and Eastern European region.

The production of the new locomotives takes place at the Siemens Mobility plant in Munich-Allach, with the chassis coming from the global competence center in Graz.

The service contract includes around-the-clock support as well as the option for on-demand corrective and preventive maintenance activities.





Germany

NAH.SH/DB EMU No. 445.033 is seen at Kiel on August 18th with a service to Hamburg Hbf. *Brian Battersby*



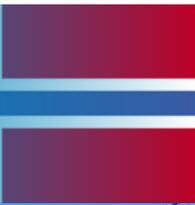




Germany

NAH.SH/nordbahn DMU No. 648.834 is seen at Kiel on August 18th. *Brian Battersby*





Heritage 2-axle tram No. M5-129 stands at Gothenburg in front of the Central station on September 14th.
Thomas Niederl

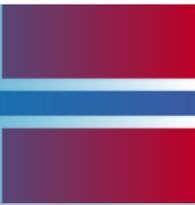


Norway



In Oslo, a BM 69 unit which are used on the L2 line of the network, No. BM 69077, is seen working service No. L2721 stopped at Oppegård.
Thomas Niederl





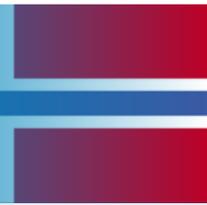
No. Di4.654 departs from Fauske with the Trondheim bound train No. F472 on September 17th.
Thomas Niederl





On September 18th, No. Di4.655 waits at Bodø for departure as night train No. F476 to Trondheim. At the end of the train there are two sleeper coaches. The journey duration is around 10h. *Thomas Niederl*



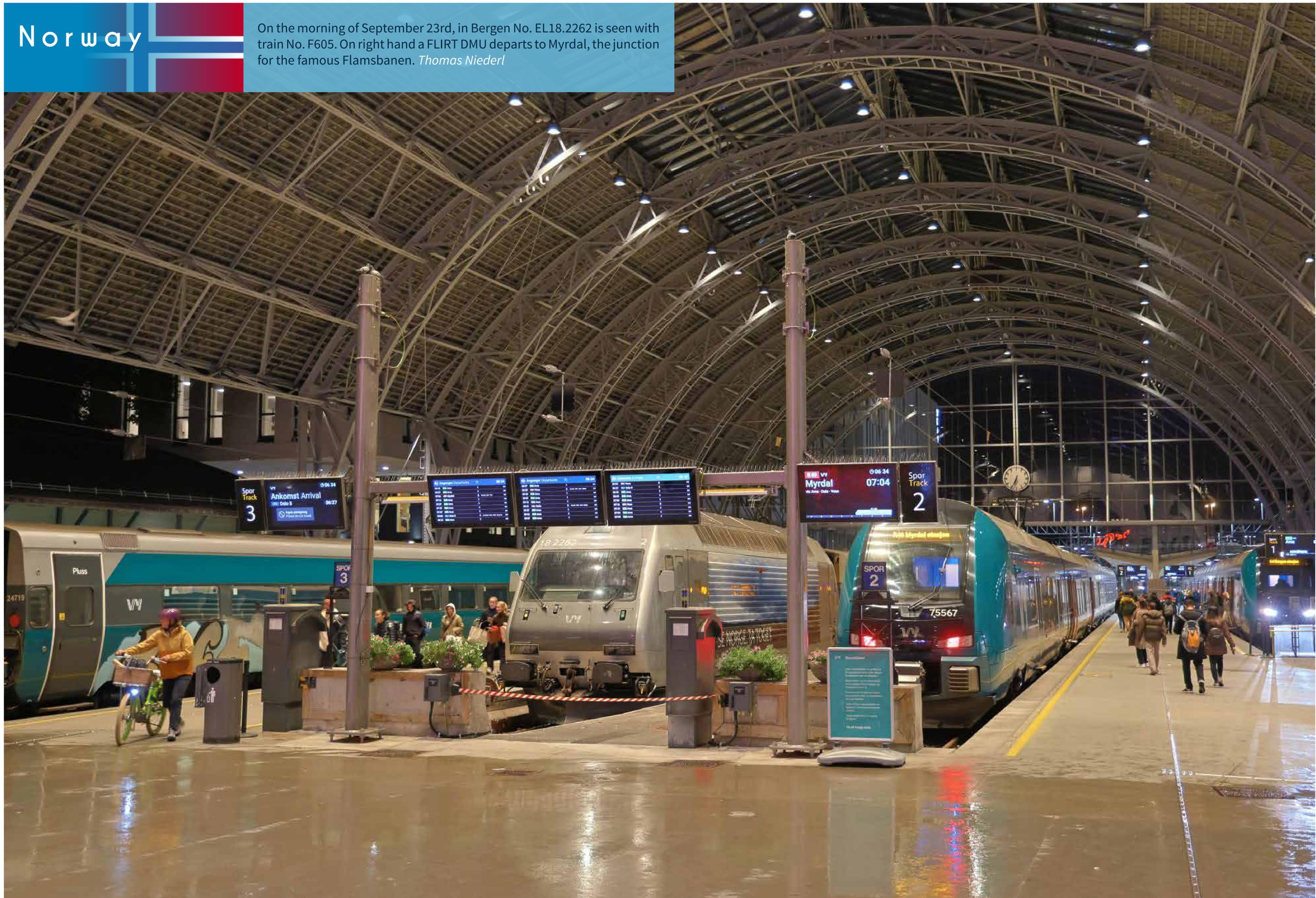


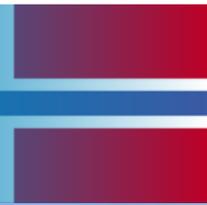
Hamar is the base of the Norsk Jernbanemuseum. On September 20th, Norwegian Railway's celebrated the 100th anniversary of the Raumabane to Andalsnes. On September 21st, the special train arrived back to Hamar station with three Nohab Locos: Nos. Di.3.602, Di.3.642 and Di.3.616. *Thomas Niederl*



Norway

On the morning of September 23rd, in Bergen No. EL18.2262 is seen with train No. F605. On right hand a FLIRT DMU departs to Myrdal, the junction for the famous Flamsbanen. *Thomas Niederl*



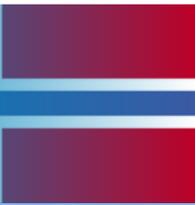




On September 23rd, No. EL16.2211 with car carrier wagons passes Finse with train No. 95518.

Thomas Niederl





On September 26th, old trams type M29 were in use. Nos. M29.815 and M29.816 on Line 10 to Guldhelden are seen next the halt at Kungssportsplatsen. *Thomas Niederl*







Poland

PKP Cargo Vectron No. 193.502 leads a freight through Poznan Staroleka on August 22nd. *Brian Battersby*

















▶ Metrans Class 383.424 approaches Zanigrad whilst banking a container train from Koper to Rodik. *Laurence Sly*

▶ SZ Class 363.028 passes Crnotice whilst hauling a container train from Koper. *Laurence Sly*

▶ No. 363.035 approaches Hrastovlje whilst hauling a train of hoppers heading to Koper. *Laurence Sly*







Switzerland

SNCF Sybic No. 26147 is pictured after arrival at Basel SNCF on a service from Strasbourg on August 31st. *John Sloane*



Switzerland

SBB Cargo Class 484.006 leads another loco of the same type northwards through Pratteln on August 28th. *John Sloane*



Switzerland

On August 28th, an SBB Class 460 approaches Pratteln with a train for Zurich and passes several stabled BLS locos headed by Vectron No. 475.410. *John Sloane*







Durchgang verboten
Passage interdit
Passaggio proibito
Passage prohibited

Pratteln

Switzerland

No. 11335 works light through Pratteln on August 28th and is one of only two SBB Class 420 locos in the heritage green livery. *John Sloane*









On September 3rd, BLS Class 465.017 arrives at Spiez at the head of an Interlaken to Montreux 'Goldenpass Express' whose stock will change gauge to metre at Zweisimmen where a metre gauge MOB loco will take over. *John Sloane*







Switzerland

BLS No. 194 stands outside the former loco shed building at Brig on September 4th. *John Sloane*



Switzerland

On September 4th, Matterhorn Gotthard Bahn loco No. 101 is about to depart Brig for Andermatt whilst 'Orion' unit No. 309 awaits departure to Visp and Zermatt. *John Sloane*



Switzerland

▶ An overhead view from the Lotschberg route on September 4th of the MGB depot at Visp with locos Nos. 3, 22, 23, 102 and 204 present.
John Sloane

▶ On September 5th, JB unit No. 211 departs from Kleine Scheidegg with a train to the summit at Jungfrauoch, the highest station in Europe at 3454m. As the weather was bad and the fare very expensive it isn't surprising that the train contained no passengers!
John Sloane

▶ WAB unit No. 148 stands outside the depot at Grindlewald Grund on September 5th.
John Sloane





Switzerland

On August 28th, SBB Cargo Class 193.466 'Bellinzona' leads another SBB Vectron as they head in the direction of Zurich with a train probably destined for Italy via the Gotthard route.. *John Sloane*



Switzerland

SBB Class 460.030 stands in Basel SBB station with a service to Brig on August 28th. *John Sloane*



Switzerland

An unidentified SBB Class 460 arrives at Rheinfelden with a working from Zurich to Basel on August 30th. *John Sloane*

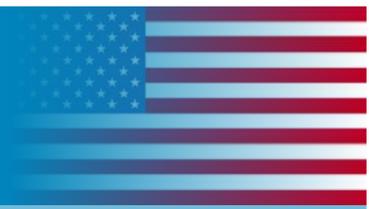
Gleis



Switzerland

Class 185.591 is seen at Rheinfelden on August 30th. *John Sloane*





Union Pacific No. 4014 heads through Weiner, Arkansas on September 14th. *Barry Robinson*

Mighty Union Pacific steam loco No. 4014 passes through Stephens, Arkansas on September 16th. *Barry Robinson*

With two water carriers behind the loco UP No. 4014 is seen at Pine Bluff, Arkansas on September 16th. *Barry Robinson*





Hitachi-Alstom enlists public in design of the UK's new high-speed trains

In the most extensive project of its kind seen in the UK, the public has been put at the heart of refining designs for the interior of the 54 trains. The process is being taken forward by West Coast Partnership (WCP), HS2 Ltd and its manufacturing joint venture, Hitachi-Alstom High Speed (HAH-S).

Since the start of 2024, a range of customer groups, ranging from people with reduced mobility to cyclists and young families, have been invited to experience life-sized wooden mock-ups of the trains at HAH-S' facility in Derby – helping engineers understand the levels of ease, accessibility and comfort.

Inclusive design

The process included reviewing different options around boarding and alighting from the train, the positioning of grab rails to aid mobility and support, and testing the layout of toilets – particularly for wheelchair customers. Life-sized mock-ups have also been made of other sections of the train including the café-shop, bicycle storage and child buggy storage. It forms part of a refinement process – supported by market research – that enables the final designs to be adjusted to fully meet the needs of passengers and staff. Although similar processes have previously been used in the development of rolling stock, it is believed to be the most extensive user development exercise ever undertaken for a new train fleet built in the UK.

“As we progress towards delivering the next generation of high-speed trains for HS2, the feedback from passengers has been invaluable. Their insights are helping us refine the design to ensure that our trains not only meet but exceed expectations for accessibility, comfort and convenience. Engaging with a diverse range of future passengers, including those who may not typically consider train travel, has been crucial in shaping the features that will make a real difference to their experience,” said Niall Simmons, Collaborative Design Manager at Hitachi-Alstom High Speed.

He added: “HAH-S is committed to putting passengers at the heart of every decision. By working closely with the public, we are confident that we’re creating a fleet of trains that will set new standards for intercity travel in the UK. This collaborative approach ensures that when HS2 is operational, it will deliver a transformative and stress-free journey for a wide range of people.”

Twenty groups have given feedback on the designs so far as part of a process organised by WCP, the train's future operator. It underlines the scale of the progress that has already been made as part of the complex development of HS2's fully electric trains that will offer unparalleled levels of reliability, speed and comfort and will help in the fight against climate change.

“We’re designing HS2 to provide a step-change in the passenger experience so that it’s accessible to everyone – and especially to people who don’t currently think train travel is for them or don’t consider in the first place,” said James Dawson, Senior Rolling Stock Engineer at HS2 Ltd, the company responsible for developing and promoting the UK's new high-speed rail network.

He added: “I’m confident that work with Hitachi and Alstom, plus our innovative design refinement approach, will deliver a quality product that stands the test of time.”

Design features

Features tested by the groups included best-in-class legroom and reclining seats to feature throughout all trains in the fleet. Passengers like to be able to see their luggage throughout journeys, so designers have maximised both overhead and under seat storage space to accommodate a variety of baggage and case sizes in an effort to enhance convenience and reduce stress levels. Every seat will be able to recline, as well as having an independent reading light, coat hook, and USB-C and standard plug socket.

“Together with our partners at HS2 and Hitachi-Alstom, we want to produce a train that delivers the best travel experience in the UK and sets new standards for rail. As part of our work to prepare for future operations, public



testing at this stage of the programme enables us to make the right decisions for customers in this critical design phase of the project,” said Simon Aslett, Rolling Stock Director at West Coast Partnership Development. As part of the design, a carefully-considered mix of ‘airline style’ seats in rows and four table seats is provided throughout the train to ensure there is a seat for everyone’s needs. Passengers in airline style seats will also benefit from a smartphone and tablet holder so that they can be comfortably viewed.

Next steps

With feedback from user group sessions, designers have repositioned grab handles near the doors, created a ‘step-free’ solution for passengers, redesigned the bicycle storage area, rearranged USB-C sockets and tray tables, and adjusted wheelchair spaces to give a much better customer experience.

Future use group sessions will help designers to finalise passenger seat design to ensure they are comfortable for everyone on long journeys; as well as optimising the train’s LED lighting system to help deliver an enhanced ambience throughout the day and across the seasons. Additionally, testers gave feedback on the ‘step-free’

access design that will enable passengers to board and alight more easily.

Joint venture

Once the train’s designs are finalised, full production will start around 2027. Body shell welding and electrical installation will be led by Hitachi’s County Durham plant before the interior fit out is completed by Alstom in Derby. Meanwhile, the bogies – which house the train’s wheel sets – will be made by Alstom at their Crewe facility; the first time in almost two decades that these have been manufactured in the UK.

HS2’s trains will offer direct services between London and the West Midlands plus services further north via the West Coast Main Line. Manufacture of the rolling stock will take place in parallel to the huge construction of the new line, with the railway expected to be operational between 2029 and 2033. When complete, HS2 will create shorter and more reliable journeys, driving economic growth while crucially freeing up space on the most congested part of the existing West Coast Main Line.

Image: ©HS2 concept design

India



Alstom delivers the first driverless trainset for Chennai Metro Phase II

Alstom, global leader in smart and sustainable mobility, has successfully delivered the first Metropolis metro train for the Chennai Metro Phase II, from its world-class manufacturing facility in Sri City (Andhra Pradesh). These 100% made-in-India trains are designed for a safe speed of 90 kph and operational speed of 80 kph. The mock-up car upon manufacturing completion was unveiled at an event organised at Alstom's Sri City site on September 22nd 2024 in the presence of dignitaries from government of Tamil Nadu, CMRL and Alstom.

Olivier Loison, Managing Director - Alstom India shared his views on this momentous milestone, "Chennai Metro has become a beacon of efficient and reliable transportation, transforming daily commutes for its residents. We are proud to support this vision by delivering world-class, made-in-India driverless metro trains that not only elevate the commuter experience but also drive sustainable mobility by reducing emissions

and easing road congestion. As India's trusted partner in advancing sustainable transportation, Alstom is committed to strengthening this partnership and reshaping Chennai's mass transit landscape for a greener future."

With production started in February 2024, this order aims to deliver 36 trains, each comprising of three cars. These trains are designed to run on the 26 km corridor, a segment of Phase-II linking Poonamallee Bypass to Light House via 28 stations of which 18 elevated and 10 underground.

The project valued at 124 million euros also includes training the Chennai Metro personnel in operation and maintenance. Equipped with Automatic Train Operation (ATO) and Automatic Train Protection (ATP), these metro trains are engineered and designed to operate driverless with Unattended Train Operations (UTO),

representing grade of automation level 4 (GOA4). Thanks to the regenerative braking system, ensuring substantial energy conservation, these trains will offer an efficient, environmentally friendly and comfortable metro solution for passengers of Chennai. Under the 'Make in India' initiative, these Metropolis trains have been completely designed in India in Bangalore (Karnataka) and are built at the manufacturing facility in Sri City (Andhra Pradesh). Since being awarded its first contract by Chennai Metro Rail Limited (CMRL) in 2010, Alstom has delivered 208 metro cars for the phase I of the Chennai Metro. Additionally, Alstom has designed, tested, and commissioned track work covering 45 kilometres across these corridors. With the delivery of first trainset of Chennai Metro Phase II, Alstom continues to solidify its commitment to transforming the mobility landscape of Chennai, driving the city towards a more connected and sustainable future.

About Metropolis metros

Alstom's modern metro trains are serving the different needs of customers worldwide for over 60 years. Designed to fit new and existing infrastructure, Metropolis metro trains can be adapted to multiple capacity needs. With flexible configurations from 2-to-9-cars, small to large gauge profiles, different voltage systems, and individual interior designs, Alstom's metros can be operated manually or driverless. Metropolis metros feature low noise levels, high recyclability, and optimised energy-efficiency to minimise environmental impact. Over 35,000 metro cars have been ordered or are in operation in more than 70 cities in 40 countries.

Spain



Metro Ligero Oeste in Spain and Alstom sign a contract for the comprehensive overhaul of its Citadis tram fleet

Metro Ligero Oeste (MLO), transport operator in Madrid, has formalised the signing of a key contract with Alstom, a global leader in smart and sustainable mobility solutions, to carry out the comprehensive overhaul of key systems for the operation of the Citadis tram fleet that has been operating in Madrid since 2007.

The contract includes a mid-life general overhaul of its fleet of 27 Alstom Citadis trams. Tasks to be performed include the inspection and maintenance of braking system, bogies (both motor and trailer), circuit breakers, vehicle couplings, inter-car shock absorbers and the emergency brake control unit.

Optimising efficiency and commitment to security

This contract not only involves the optimisation of the fleet maintenance processes, but also a guarantee of the quality of service that MLO provides to its passengers. The overhaul of the trams' critical systems ensures efficient, reliable and safe operation, while maintaining the continuity of the service and passenger safety as a priority.

The overhaul of braking system will begin in January 2025, with additional equipment scheduled for overhaul in 2026.

Alstom's industrial site in Pinto, Madrid will be responsible for the engineering, tests, and fine-tuning the equipment, highlighting the commitment of both companies to quality and safety.

The contract will be developed in two phases starting in 2025 and running until 2029.

"This agreement with Alstom Spain reaffirms our confidence in a key partner for the proper performance of our service; and it is a guarantee of optimisation of the efficiency of maintenance processes, as well as a key commitment to the safety and continuity of the services we provide to our passengers" says Pablo Escoda, general manager of Metro Ligero Oeste.

"We thank Metro Ligero Oeste for renewing its confidence in Alstom Spain. Our entire team, from our centres in Madrid, provides industrial and technological support

to operators and passengers to build sustainable, safe, smart and inclusive mobility," said Leopoldo Maestu, Manager Director Alstom in Spain.

Alstom, the manufacturer of the Citadis trams operated by MLO, has been a strategic partner since the start of operation of the service in 2007. During these 17 years, the collaboration between the two companies has focused on warranty projects, maintenance and supply of materials, consolidating a relationship that is now strengthened with the signing of this new agreement.

This long-term collaboration strengthens MLO's confidence in Alstom as a reference supplier in the sector, ensuring sustainable and high-quality urban mobility for the community of Madrid. Alstom is the market leader in rail services, supporting customers over the entire asset lifecycle with the broadest portfolio of services solutions. Alstom's FlexCare Sustain solutions cover parts, repairs, component overhauls



and obsolescence management, with flexible contracts from on demand orders to long-term agreements, with committed costs and lead-times. Alstom provides 24/7 customer care through a worldwide network of repair and overhaul centres to sustain the safety and reliability of fleets for the long run.

Netherlands

Arriva wins competitive tender in Netherlands

Arriva is awarded new contract for both train and bus services by the Province of Gelderland.

The contract is expected to be worth around €2 billion over the maximum term of 17 years.

The concession runs from December 2025 for ten years, with an option to extend for up to seven years.

Arriva Netherlands has been successful in its bid to operate passenger transport services in the Province of Gelderland, providing bus transport in the Achterhoek and Rivierenland region and train transport in the Achterhoek region.

Starting in December next year, the contracts could run up until 2042 if the full seven-year extension is applied beyond the initial ten-year term. Arriva already has a presence in the region, having operated buses in Achterhoek since 2010 and in Rivierenland since 2003, with trains added in 2012. The new contracts will see Arriva growing its footprint and operating more routes and services. It will also see the current bus fleet of around 100 buses being replaced by new, electric buses. The passenger transport authority in the region noted that Arriva's success was down to its commitment to grow the number of bus services, especially in rural areas and on important high traffic routes. In addition,

a programme of refurbishment for the 24-strong train fleet is set to increase comfort levels on board as well as improving efficiency with new cleaner engines installed and a number of technical and cosmetic innovations. From 2025 another nine trains will be added to Arriva's fleet to serve the region, bringing the total to 33.

Arriva is also able to help the passenger transport authority achieve against its sustainability target, for emission free bus services by 2030, with the introduction of a new electric fleet of around 100 buses, operating alongside its existing Hydrogen fleet of nine, from the start of the contract.

Anne Hettinga, Managing Director of Arriva Netherlands and member of the Arriva Management Board, commented: "This is a very exciting win for us and secures our operations in the region for at least another ten years, possibly 17 years. With a long contract we can invest securely and grow our operations, ensuring we make a difference to passengers. We can also support the local transport authorities to achieve their sustainability targets".

In addition to the 33 trains which will be in operation from the start of the new contract in 2025, an additional four train sets will be added in 2028 when Arriva starts operating the RegioExpress service from Arnhem to



Doetinchem. This will ensure sufficient capacity is provided on an important route in the region which is experiencing continued growth.

These trains will run on Hydrotreated Vegetable Oil from the start of the concession, significantly reducing emissions in the region.

France

Alstom receives an order from Proxima for 12 Avelia Horizon very high-speed trains, including 15 years of maintenance

Alstom, global leader in smart and sustainable mobility, will supply 12 Avelia Horizon very high-speed trains to Proxima and provide 15 years of maintenance on the lines along the Atlantic coast in France. The total order is worth almost 850 million euros[1]. First deliveries are expected in 2028.

Leveraging on 40 years' experience of high-speed trains in commercial service, Alstom's Avelia Horizon very high-speed train is the latest generation of double-decker train capable of travelling at speeds exceeding 300 km/h. It offers great operational flexibility and guarantees high levels of safety and passenger experience. It is made up of two innovative short-length power cars, combining

high performance and compactness, and articulated double-decker cars.

Avelia Horizon reduces operating costs. The train has fewer bogies, which account for 30% of the cost of preventive maintenance. With the largest passenger capacity in the market, Avelia Horizon offers great level of service and comfort, and consequently lowers operating costs per seat.

A partner of choice

Proxima, the launch of which has been announced in June 2024, is headed by two leading figures in the railway industry: Rachel Picard and Tim Jackson. It is

fully financed by Antin Infrastructure Partners, backed by a consortium of leading French and international banks. Its very high-speed trains would serve Bordeaux, Nantes, Rennes, Angers and Paris, for journeys of 2 hours or less.

A product designed and manufactured in France

11 of Alstom's 16 French sites will be involved in this project:

- Belfort, for power cars;
- La Rochelle, for passenger cars and project management;
- Villeurbanne, for the control-command computer system, passenger information system and on-board

equipment;

- Ormans, for engines;
- Le Creusot, for bogies;
- Flertex, for brake friction components;
- Tarbes, for traction and electrical cabinets;
- EDC Toulouse, for electrical circuits;
- Petit-Quevilly, for transformers;
- Saint-Ouen, for design and signalling;
- and Valenciennes (CDS Interiors) for the interiors

[1] Contract booked in the second quarter of Alstom's 2024/25 fiscal year

Alstom and Flox receive SEK 3.3 million from Vinnova to test AI technology to combat railway wildlife accidents

Alstom, global leader in smart and sustainable mobility, has together with Flox received SEK 3.3 million in funding from Vinnova to conduct field tests of a groundbreaking AI system that prevents collisions between trains and wildlife. Every year, Trafikverket reports around 5,000 animal collisions in Sweden, and by reducing both accidents and damage to train vehicles while protecting wildlife, the project has the potential to revolutionise railway safety.

“By combining our expertise in sustainable mobility with cutting-edge AI technology, we are taking an important step towards creating safer railways while protecting wildlife,” says Maria Signal Martebo, CEO of Alstom Sweden.

Flox, an innovator with expertise in AI and image analysis, has developed a system to identify and deter

wild animals from reaching railway tracks. By using tailored sound signals for different animal species, a deterrent is created that prevents accidents before they happen. This technology has already been successfully tested and now the system will be validated in a railway environment in Sweden. The system knows wildlife and reacts in different scenarios in other areas such as airports, traffic intersections, mines, cities, and agriculture in both Europe and the United States

“Our train-based Flox technology is based on advanced AI and in-depth understanding of animal behaviour, making it possible to protect both train traffic and wildlife. Together with Alstom, we can now validate the solution in a railway environment and make a real difference to both safety and nature,” says Sara Nozkova, CEO of Flox. The combination of Alstom’s products and expertise in railway signaling solutions, and Flox’s unique

software technology creates a powerful foundation for groundbreaking advances in railway safety. Building on this foundation, a field tests will be carried out on selected railway lines in Sweden during the autumn of 2024 and winter of 2025. The project is supported by Vinnova and has been selected because of its high potential for national and international dissemination. Innovation station

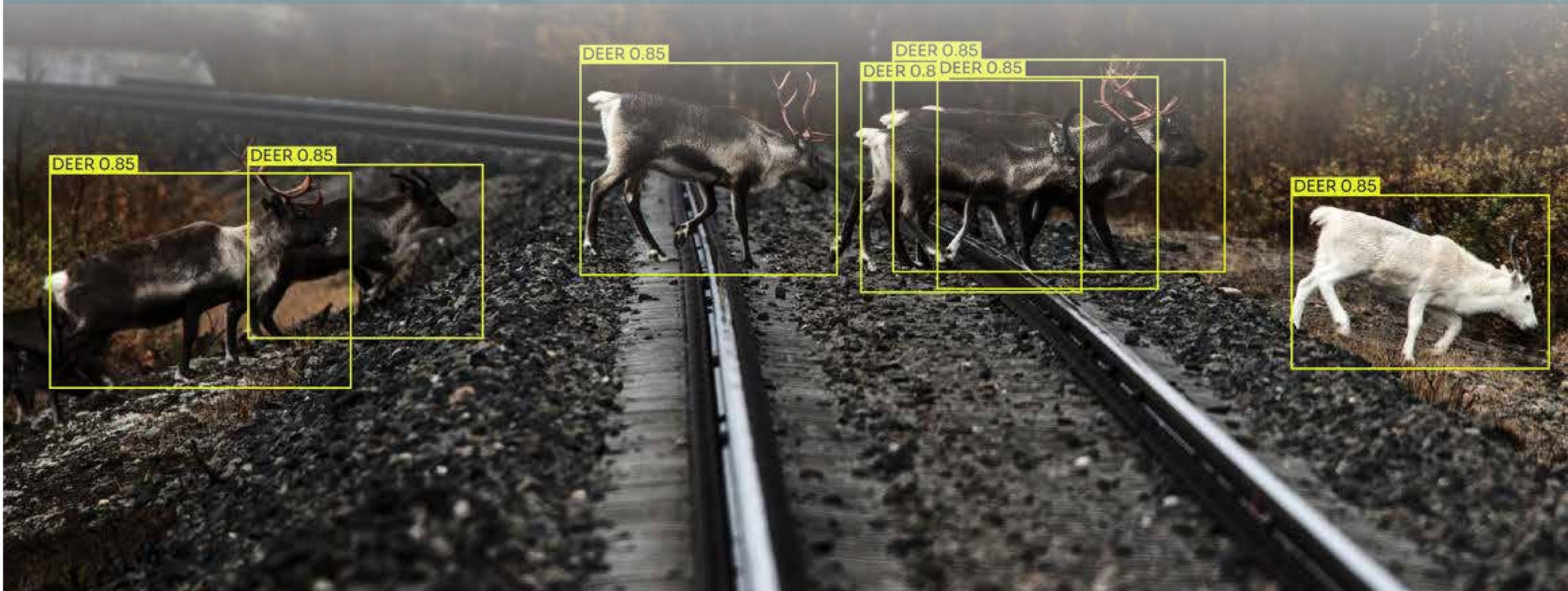
Alstom’s “Innovation Station” in Stockholm opened in 2023 and was established to develop technological advances and innovative solutions in the transport sector.

Innovation Station is a hub for partnerships with startups at the forefront of technology—the collaboration with Flox is a good example of collaboration that both contributes to the growth of local startups and contributes to the

development of Alstom’s offering.

“The grant from Vinnova confirms our work to drive innovation and development in rail and infrastructure. Thanks to this funding, we can deepen our involvement in the bright startup landscape in the Nordics.” says Gael Chosson, Head of Alstom’s Innovation Station in Stockholm.

Alstom is the largest supplier in the Swedish train market, with over a thousand trains delivered to the Swedish railways and several large maintenance contracts. Alstom is also leading the implementation of the European Railway Traffic Management System (ERTMS) in Sweden, both on board the vehicles and along the tracks, and is also supplying the new national traffic management system for the Swedish Transport Administration.



Belgium

NEW NATIONAL AUTOMATIC TRAIN PROTECTION SOLUTION TBL 1+ APPROVED FOR BELGIAN RAIL NETWORK

The Signalling Company (TSC), a Škoda Group affiliate, announces the certification and release of the first of its new national Class B Automatic Train Protection solutions, TBL1+, for vehicles operating on the Belgian National Rail network. The solution, designed and developed in close collaboration with Lineas, is built on TSC's Universal Digital Rail Platform, iEVC-RailOS. The TSC team is also entering the certification phase for its ETCS solution scheduled for availability in 2025.

“It is an important validation milestone for ourselves and our lead customer and close collaborator, Lineas. It marks the beginning of the series retrofit cycle for the Lineas HLD77 fleet that will see these locomotives installed, commissioned and returned to work with TBL1+. It will be done after ERA/DVIS authorisation. As the platform already incorporates BTM and Odometry functions, the fleet will be ready for a software-only upgrade to ETCS in 2025-2026. The certification of our

ETCS solution should be ready during next year,” says Alexander Betis, Managing Director of The Signalling Company.

An industry first, iEVC-RailOS meets the all-important Safety Integrity Level 4 (SIL4) standard for critical rail applications using standard-off-the shelf computing hardware (iEVC) running RailOS, TSC's hyper efficient and secure real-time operating system.

“The release of TBL1+ marks the first step of the iEVC-RailOS vision shared and seeded by Lineas' early investment in TSC. Now we can proceed with our retrofit program in the knowledge that we have a futureproof digital rail platform on board the HLD77 fleet; one that can be upgraded to support the ETCS Baseline 3 to 4 evolution and other applications during the fleet's operational lifetime,” notes Kurt Coffyn, COO at Lineas.

“The vision is about breaking away from sole-supplier vehicle upgrades that drive the need for more hardware and software that is prohibitively expensive, consumes precious space, increases immobilization time of the locomotive, and increases maintenance cost. Instead, we now have a digital rail platform which consumes a tiny amount of space and is therefore easier to integrate and gives us access to ETCS and as many other applications that TSC or their RailOS certified development partners can provide,” adds Bruno Vanlede, Head of Fleet Management, at Lineas.



Italy

CAF continues to reap success in Italy, in this case in Bologna and Rome

CAF continues to consolidate its foothold in Italy, securing two new agreements for the cities of Bologna and Rome. It has been awarded the Framework Contract for the supply and maintenance of trams for Bologna, and has also reached an agreement with the Rome operator ATAC S.p.A. to extend the tram contract that CAF is currently undertaking for the Italian capital. As a whole, these new awards are worth approximately €200 million.

This marks further success for the CAF Group in the Italian market, reaffirming its leading position in the field of sustainable urban transport. These contracts follow other major contracts that CAF recently secured in Italy, including the supply of trams for Palermo, metro units for Naples, and more than 360 hydrogen and electric buses contracted for cities including Venice, Cagliari, Milan, and Catania.

Trams for the City of Bologna

The City of Bologna (Comune di Bologna) has awarded CAF the Framework Contract to supply up to 60 trams, which includes the maintenance of the units for 4 years,

as well as the supply of spare parts and special tools for the fleet. Initially, a first contract will be entered into for the supply of 33 units for a value of more than EUR 130 million, which could then — with a maximum term of 6 years — be extended up to 60 trams as mentioned above, or as many as 72 trams (an additional 20% provided for by law), which would more than double the operation's amount if all the envisaged options are exercised.

The CAF-designed units pertain to the Urbos tramway platform, a model with more than 1,000 vehicles already in service in more than 20 countries on five continents. In this case, the tram will comprise 5 modules and will have a capacity for more than 200 passengers along its 35-metre length. It will also be fitted with the OESS (On Board Energy Storage Systems) system, which enables catenary-free unit operation, thereby reducing the visual impact and increasing service energy efficiency. This is a tried and tested technology developed by CAF for a significant number of projects, which has established the company as a leading on-board energy system company in the railway sector.

This contract is related to the project for the development of a new tramway network in the historic capital of the Emilia-Romagna region. The tram network will comprise four lines (red, yellow, green, and blue) and will be operated by the company TPB, owned by TPER (Trasporto Passeggeri Emilia Romagna), the same operator that awarded the CAF Group the contract to supply 127 hydrogen-powered Solaris buses last year.

This project, financed with funds from the European Union's Recovery and Resilience Facility, forms part of the Sustainable Urban Transport Plan currently being undertaken in the city; an ambitious plan that seeks to restore a city with less pollution to its citizens and visitors, with the possibility of traveling in a sustainable and safe manner through the creation of a single integrated metropolitan transport system, with the tram system serving as one of the mainstays of this new model of sustainable transport.

Extension of the Tram Contract for Rome

In addition, the Italian operator ATAC S.p.A., the company that manages public transport in the Rome metropolitan area, has made use of a first extension option provided for in the Framework Agreement for the tram supply project, which CAF was awarded at the end of last year. This Framework Agreement included a first contract covering the design and manufacture of an initial 40 trams, with the possibility of increasing the number of project units by a further 81 vehicles, making a total of 121.

Entering into this second contract, the Rome operator has decided to extend the supply with a first extension of 20 additional trams, which will also be fitted with OESS (On Board Energy Storage Systems), including their maintenance for 5 years. This decision is part of ATAC S.p.A.'s plans to replace the old units of the fleet currently in operation on the six existing lines of the network, as well as to acquire units that will operate on the new lines soon to be built in the Italian capital.

Austria

Czech Republic

The Czech and Austrian railway infrastructure managers Správa železnic and ÖBB-Infrastruktur have signed a cross-border cooperation agreement. Its aim is to elaborate a study focused on a common strategic perspective for the Prague – České Budějovice – Linz route as a possible new high-capacity railway line.

The purpose of the study is to analyse the transit

Správa železnic and ÖBB-Infrastruktur are planning better connection on axis Prague – České Budějovice – Linz

potential of the axis for passenger and freight transport in the European, international and regional context. This study could become the basis for an updated cost-benefit analysis (CBA) for the possible construction of the cross-border railway line. Based on the study, strategic requirements for further steps will be set. First results are expected by the end of next year.

“Signing this agreement, we are taking a further important step towards analysing the potential of the cross-border axis Linz – České Budějovice – Prague together with our Czech colleagues,” said Judith Engel, member of the Management Board of ÖBB-Infrastruktur.

“The further development of the Prague – České Budějovice–Linz route follows the existing modernisation programme for the Prague – České Budějovice section and the Austrian Target Network 2040.

Thanks to our mutual cooperation, the line České Budějovice – Linz can become a fully-fledged connection of the Czech railway network not only to Austria, but also further to southern and western Europe, and complement the overloaded border crossing Děčín – Bad Schandau,” stated Jiří Svoboda, Director General of Správa železnic.

Period after 2040

The upgrade of the railway line České Budějovice – Linz (the so-called ‘Summerauerbahn’ – Summerau railway) is foreseen in the new Austrian concept called Target Network (‘Zielnetz’) only after 2040, as previous analyses, which focused only on measures on the Austrian side, did not prove a sufficiently high potential.

The planned study defines a joint commitment to analyse the entire Prague – České Budějovice – Linz axis from the perspective of passenger and freight transport.

U.S.A.

Stadler, a global leader in the design and manufacture of passenger trains, and Utah Transit Authority (UTA) signed a contract on October 23rd for up to 80 new light rail vehicles tailored for the UTA TRAX service in and around Salt Lake City. Stadler is set to build the vehicles at its Salt Lake City manufacturing site – proudly built in Utah for Utah. This is Stadler’s first large light rail contract in North America and the first serial contract in its US home state of Utah.

The Utah Transit Authority (UTA) Board of Trustees approved a contract on October 23rd, 2024, for up to 80 new light rail vehicles as part of the agency’s TRAX Modernization project to upgrade and expand service over the next decade. Stadler, a global leader in the design and manufacture of passenger trains, was selected by UTA through competitive procurement and will build the vehicles at its Salt Lake City-based U.S. headquarters and manufacturing facility.

“After a competitive and comprehensive procurement process, Stadler was selected for UTA’s next generation of TRAX vehicles, offering a low-floor, all accessible boarding that will comfortably carry 14% more passengers than our current fleet,” said UTA Executive Director Jay Fox. “The location of Stadler’s manufacturing facility in Utah

provides a unique opportunity for UTA to work directly with our equipment supplier and fast track adjustments that develop throughout the build process. With a 25-year-old TRAX system and ridership already up 17% this year systemwide, these new vehicles will help UTA modernize and expand its light rail system for generations to come.”

The first Stadler light rail train in the US

The initial \$129 million contract is for 20 new Stadler Citylink light rail cars and funded, in part, by a Federal Transit Administration grant. Pending additional funding, it includes options for 60 additional vehicles, all built in accordance with federal Buy America requirements. The Citylink light rail vehicle can be modified to meet customers’ needs and requirements and offers maximum accessibility in part due to its low-floor design. This makes the vehicle Stadler’s most innovative, customer-focused and service-proven light rail solution. More than 800 units of this low-vibration vehicle type have been sold in various countries across Europe since 2003.

“Building streetcars for Salt Lake City is another milestone for Stadler. The UTA order is the first light rail order in the United States for Stadler and the first large Citylink order outside the European continent. We are convinced that the Citylink will be well received by customers here,”

Stadler to supply new light rail vehicles for Salt Lake City



says Stadler CEO Markus Bernsteiner.

“Salt Lake City is our home in the U.S., and the opportunity to build trains for our community is a massive honour. Most of our workforce and their families live in and around Salt Lake City and will ride these new trains, so the excitement can be felt throughout our entire facility today. We are thrilled to partner with UTA as they modernize their TRAX network to provide a state-of-the-art public transit system built by Utahns for Utahns,” said Martin Ritter, CEO Stadler US Inc.

Stadler established its U.S. headquarters in Salt Lake City in 2016 when the company expanded to North America

from Europe. Stadler now employs more than 500 people at its Salt Lake manufacturing facility and employment will continue to grow as Stadler expands to meet market demands across the country.

Learn more about UTA TRAX Modernization projects, including expansion of a fourth Orange Line and all accessible vehicle boarding, at rideuta.com Future of Light Rail Study.

Eurostar

Eurostar is excited to announce the return of Snap, the much-loved product tailored for spontaneous travellers eager to explore Europe's iconic cities, with fares discounted by up to 50%.

Designed for those who thrive on spur-of-the-moment adventures, Snap offers an innovative and affordable way to enjoy Eurostar's high-speed rail journeys at unbeatable prices, making it easier than ever to travel on a whim.

How does it work?

- Customers visit snap.eurostar.com to select a travel date and destination
- Eurostar then allocates the train times for the chosen date
- 48 hours before departure, Eurostar confirms the train details with customers

Spontaneous travellers can book Snap tickets exclusively on snap.eurostar.com, up to two weeks in advance for travel to and from London, and up to eight days ahead

for other routes, benefiting from discounted fares aboard Eurostar trains.

Thanks to Snap, more people can enjoy the comfort and style Eurostar is known for, including high-speed, city-centre-to-city-centre trips and environmentally friendly connections. Snap journeys are also eligible to earn Club Eurostar points, redeemable for future rewards, adding even more value to each trip.

François Le Doze, Chief Commercial Officer at Eurostar, commented: "Snap has been a customer favourite, and we're thrilled to bring it back year-round, offering a smart solution for travellers who can be flexible with their schedules. With Snap, Eurostar makes a simple yet compelling promise: travellers pick the date and destination, we select the time, and they can snap up to 50% off the price for remaining Eurostar seats. It's a smart way to travel, ensuring no seat goes unused – a win for our customers, a win for Eurostar, and a win for the planet."

Switzerland

Stadler delivers to MOB six metre-gauge locomotives

The Montreux Oberland Bernois Railway Company (MOB) and Stadler have signed a contract for six new metre-gauge locomotives for passenger and rail services. Thanks to the power and versatility of the new locomotives, which have been specially customised for the MOB, it is possible to increase performance and safety on the MOB line. The signing of this contract confirms Stadler's leading role in producing tailor-made locomotives.

The Montreux Oberland Bernois Railway Company (MOB) and Stadler signed a contract for the manufacture and delivery of a total of six new high-performance metre-gauge locomotives for passenger and rail services. Four four-axle electric locomotives will be used for passenger services operated by the Goldenpass Express premium train on the MOB metre-gauge line. The two other identical hybrid locomotives are intended for rail services and infrastructure maintenance. Thanks to this order, the company's old vehicles will be replaced by modern ones in the typical design of the Stadler locomotive family. The metre-gauge locomotives were purchased as part of a joint tender with Transports de la Région Morges-Bière-Cossonay (MBC).

"We are proud to have been awarded this contract by MOB. Our metre-gauge locomotives specially developed for MOB will continue to successfully pull the Goldenpass Express premium train built by Stadler, whilst allowing old rail service locomotives to be replaced. We are

convinced that the new innovative, tailor-made vehicles will meet MOB's requirements. We would like to thank MOB for their trust," says Christian König, Deputy Head of Sales & Marketing at Stadler.

"The arrival of these modern, innovative locomotives will secure the long-term future of the Goldenpass Express, one of the most beautiful trains in the world. This opens up new horizons for us to satisfy an increasingly numerous and demanding clientèle," says Georges Oberson, CEO of the Montreux Oberland Bernois Railway Company, who thanks the cantons of Vaud, Fribourg and Bern, as well as the federal government, for their confidence in the development of the Goldenpass Express. He concludes by emphasising that MOB embodies everything that people love about Switzerland.

Metre-gauge locomotives for passenger services

The metre-gauge locomotives for passenger services will be used as traction units for the Goldenpass Express premium train. With an output of 3 MW, they can pull and push the train, which increases the

possible uses and flexibility in operation. The locomotives are equipped with the latest technology and the necessary tractive force for the demanding Meterpur route of the Goldenpass Express. They allow a maximum speed of 100 km/h.

Metre-gauge locomotives for rail services

Like the Goldenpass Express locomotives, the modern,

powerful locomotives are also 17 metres long and have four powered axles. The locomotives are designed for rail services and are equipped with a hybrid drive to haul service or construction trains without overhead contact lines. Both locomotive models are new developments that have been customised precisely to the requirements of MOB and other rail operators.



U.K.



Siemens Mobility starts rolling stock manufacturing in the United Kingdom

Following an investment of up to €230 million, Siemens Mobility is opening its Train Manufacturing Facility as a key part of its new Goole Rail Village in the United Kingdom, on a site which spans 67 acres, the size of 35 football pitches. London Underground's new Piccadilly line trains will be assembled at the factory in Goole before they start entering passenger service from 2025, helping Transport for London (TfL) transform rail travel across the UK's capital. Overall, Siemens Mobility's investment in the region will create up to 700 new jobs and an additional 1,700 supply chain opportunities by 2030. This investment will strengthen local production to serve global markets.

Siemens Mobility starts rolling stock manufacturing in the United Kingdom

Alongside the opening, Siemens Mobility announced an additional investment of up to €50 million in a state-of-the-art new facility in Goole to assemble and overhaul bogies for trains. The new Bogie Assembly and Service Center will incorporate and expand Siemens Mobility's current capabilities to overhaul bogies from UK trains, including the 3,224 strong fleet of vehicles (572 trains) it maintains in the UK, and will also include new production lines for assembling bogies for new trains, a first for Siemens in the UK. This new investment will secure

around 100 existing jobs and create up to a further 200. It is due to be operational towards the end of 2026.

Commenting on the investment, UK Transport Secretary Louise Haigh said: "This impressive, world-class facility will be transformational to Goole and its people, providing a boost to the region's economy and supporting hundreds of skilled jobs. Its opening demonstrates the importance of high quality, long-term investment to pave the way for employment and growth. I know how vital rail manufacturing is to our economy, which is why we will not sit on our hands when it comes to supporting it. For too long, the cycle of boom-and-bust has held back this sector. That's why I am determined to put an end to the stop-start approach to investment and provide the industry with the certainty it needs to deliver a railway that is fit for the future."

Mayor of London Sadiq Khan said: "This train manufacturing facility in Goole is a fantastic example of the expertise we don't have and how investment in London benefits the whole country. This factory, where the new state-of-the-art Piccadilly line trains will be built, will create up to 900 direct jobs and support another 1,700 in the supply chain, delivering great benefits to the wider UK economy, showing that where London succeeds, the whole country succeeds and vice versa.

I'm excited to continue working together with the new Government to build a better, fairer and more prosperous London, and country, for everyone."

"We are celebrating the opening our Rail Village in Goole, East Yorkshire, where we are investing up to €277 million in building a state-of-the-art manufacturing facility for the Piccadilly line as well as for future UK train fleets and a host of other facilities. This great moment builds upon our significant investments in a modern signalling manufacturing facility in Chippenham, further solidifying our long-term commitment to the advancement of the UK's rail industry," said Karl Blaim, Managing Director and Chief Financial Officer of Siemens Mobility. "Siemens Mobility has a proud history of over 180 years in the United Kingdom and has been transforming rail, travel, and transport in Britain. We have delivered every fourth passenger train in the UK, are pioneers in digital signalling technology and provide leading service solutions. Our dedicated team of 5,500 UK employees is committed to delivering top-quality transportation solutions, from Britain, for Britain."

Andy Lord, London's Transport Commissioner, said: "The opening of the Siemens Mobility factory in Goole marks a new stage in this transformational project. The new Piccadilly line trains that are being assembled in

Goole will change the experience of millions of Tube customers every year, helping to drive growth and revitalise communities not only in the capital but across the country thanks to the supply chain. We are working with Siemens Mobility, the Mayor of London and the Government to ensure that the benefits felt from this project will continue through funding for new Bakerloo line trains to replace the existing fleet, which at more than 50 years old is the oldest operating in daily passenger service anywhere in the UK. We look forward to welcoming the first new Piccadilly line test train to London later this year and for customers to start using them when they come into service from next year."

The Goole Train Manufacturing Facility, with its cutting-edge technology, highly skilled workforce, and strategic location, is set to become a cornerstone of the British and global rail industry. It will bolster the UK's rail manufacturing capabilities. The Goole Rail Village consists of the Train Manufacturing Facility which assembles and commissions trains, the Components Facility where Siemens maintains gearboxes, traction motors and other parts for train and tram fleets, the Logistics Center warehousing facility and the Rail Accelerator and Innovation Solutions hub for Enterprise (RaisE) business center, all of which will now be joined by the Bogie Assembly and Service Center.

Portugal



Stadler builds 24 trains for Lisbon Metro

Stadler has signed a contract with the Lisbon metro operator Metropolitano de Lisboa for the supply of 24 vehicles. The agreement includes an option for up to 12 more vehicles. The order was signed today in the presence of the Portuguese Minister of the Environment and Energy, Maria da Graça Carvalho, and the Secretary of State for Mobility, Cristina Pinto Dias.

Metropolitano de Lisboa has awarded Stadler the contract for the manufacture and supply of 24 three-car vehicles with an option for up to 12 additional vehicles. The contract is worth 134 million euros. This is the second order Stadler has received from the Portuguese capital's metro operator. The first order was signed in

2021. Stadler is responsible for the supplying will serve the Circular Line. The 14 vehicles are currently being built, with the first undergoing tests on the Metro Lisbon network.

Bright, spacious and barrier-free

The new vehicles will be 49.6 m long. They will have large windows, and the passenger compartments will be recomfortable, light and bright and maximise available space. A modern passenger information system will have large monitors and a video surveillance system. The fully accessible and barrier-free vehicles have nine double doors on each side and more space in the vestibules to enable people to get on and off quickly and easily.

"We are very proud that Metropolitano de Lisboa has once again entrusted Stadler with the renovation and modernisation of its fleet," said Iñigo Parra, Executive Vice President of Stadler Division Spain. "The new metros are more comfortable, more spacious, quieter and lighter. We are pleased that our technology and expertise can contribute to this important mobility project. The acquisition of these new trains represents a significant step forward in the modernisation of the Lisbon metro. They will enhance performance and provide a superior travel experience for the passenger."

Maria Helena Campos, Acting

President of Metropolitano de Lisboa, commented that "the procurement of these new trains marks a major step forward in the modernization of the Lisbon Metro, enhancing service quality and capacity, while also improving the travel experience and mobility within the Lisbon Metropolitan area."



Customised Stadler locomotives for the Paris metro

Régie autonome des transports Parisiens (RATP), operator of the Paris Metro, is ordering twelve locomotives from Stadler. Powered by battery, they underscore Stadler's commitment to providing sustainable and flexible solutions. They will undertake service, maintenance and repairs on the entire RATP network and be introduced into passenger service from 2027.

The Paris metro operator, Régie autonome des transports Parisiens (RATP), has commissioned Stadler to manufacture and supply twelve customised locomotives. This is the first order that Stadler has received from RATP. The signed framework agreement includes an option for two further vehicles. RATP will use the locomotives to carry out service, maintenance and repair work on the infrastructure of the Paris Metro network, which is approximately 245 kilometres long.

One locomotive for all lines

The new locomotives are part of an RATP project aimed at making the maintenance of the metro infrastructure more streamlined and more efficient. They will complement the existing generation of vehicles from 2027. The four-axle locomotives are 15 metres long, equipped with fully automatic couplings and capable of double traction. They run on the standard gauge and are designed to accommodate the tight curves that characterise this

network. These locomotives can be used on all 14 lines of the Paris Metro. This includes the routes which trains with conventional steel wheels run and on those used by vehicles with rubber tyres (Pneu-Metro).

Efficient, battery-electric drive

The RATP locomotives haul heavy work trains to construction sites on the metro's rail network. They are authorised to operate in parallel with normal metro services, as well as on the routes operated without drivers. They pull around 120 tonnes in single traction and around 240 tonnes in double traction.

The new locomotives are flexible in use, low-maintenance and environmentally friendly. Their high level of redundancy means that they are both very safe and very reliable. This is especially important for operation in tunnels parallel to metro traffic and on construction sites. In battery-electric drive, energy is transmitted to the vehicles via the pantograph or by using on-board traction batteries. In normal operation, the conductor rail supplies the electrical energy of 750 V. On construction sites, where the conductor rail is switched off, the locomotives are powered by traction batteries. These are then recharged through the conductor rail.

Reliable maintenance organisation

RATP is the third-largest urban transport operator in the world, carrying 11 million passengers every day. "We are

very proud to have won RATP as a customer and to have impressed them with our technology," says Christian König, Deputy Head of Sales & Marketing at Stadler. "With our innovative, customised locomotives, efficient and sustainable maintenance can be realised and the infrastructure of the Paris metro can be made fit for the future."

RATP is not the only railway operator in France to have commissioned Stadler locomotives. The EuroDual, Euro4001 and Euro6000 six-axle high-performance locomotives were all manufactured at the Stadler plant in Valencia, Spain, and are today successfully used by various operators in the rail freight sector in France, Belgium and Spain.

Photo: © Stadler



Wabtec Finalizes \$405-Million Locomotive Deal with Kazakhstan Temir Zholy

Wabtec have announced a \$405-million agreement to supply Evolution Series ES44ACi locomotives to Kazakhstan Temir Zholy (KTZ). The new locomotives will upgrade KTZ's aging fleet and support growing rail demand in the region.

"Kazakhstan has a progressive and open-thinking local government that understands the importance of railways in driving the local economy," said Gokhan Bayhan, Wabtec's Regional Senior Vice President, Operations for CIS, Europe, Middle East, and Africa. "KTZ serves as a critical link for the transportation of freight between China and the West. These Evolution Series locomotives will provide the efficiency, reliability, and operational

savings to effectively support the growing demand on the Trans-Caspian International Transport Route."

The locomotive features a 12-cylinder, 4,500-horsepower Evolution Series engine, which provides a high horsepower and low life-cycle costs, improving performance in heavy-haul operations. It is designed to operate in the demanding extreme weather conditions and mountainous terrain of Kazakhstan. The ES44ACi can operate for longer periods between maintenance overhauls than the aging locomotives in KTZ's fleet.

The new locomotives will be built at Wabtec's Lokomotiv Kurastyru Zauyty plant in Astana. The plant meets all

global quality standards, such as MC ISO 9001-2015, and employs over 700 people.

"This order builds upon Wabtec's strong relationship with KTZ to transform Kazakhstan's rail industry," said Bayhan. "For more than 20 years, we have been working together to position the country as a rail hub in the CIS region. Our companies continue to explore opportunities that improve the fleet and overall efficiency of the rail ecosystem."

Wabtec will begin delivering the first locomotives from the order next year. The new additions will join a fleet of approximately 451 Evolution Series freight locomotives

already operating in KTZ's fleet.



Eurostar

Eurostar culinary evolution: Trio of chefs introduced onboard

After a decade of French dining, Eurostar is revolutionising its gastronomic offering. For the first time in high-speed rail history, three food and beverage visionaries have come together to serve their contemporary creations onboard our trains, which are available for customers from November 4th.

We're welcoming Two Michelin Starred Chef, Jérémy Chan, renowned French pastry chef Jessica Préalpato and Natural Wine Connoisseur Honey Spencer to the Eurostar family. The trio are experts in the art of innovative cuisine and wine, offering Eurostar Premier customers a culinary voyage. This new catering offer is part of the launch of Eurostar's new service classes: Eurostar Standard, Eurostar Plus and Eurostar Premier. Designed to be environmentally friendly, all the menus on offer will be prepared with fresh, seasonal ingredients from countries on the Eurostar network.

Gwendoline Cazenave, CEO of Eurostar: "By reinventing the onboard culinary experience, making it more innovative, daring, and environmentally friendly, Eurostar is presenting itself as a destination in its own right. Our new gastronomic offer aims to transform each journey into a unique experience, where the indulgence begins as soon as you board, making the new Eurostar a reality for our customers. Eurostar is more than just

a train: it's a promise of new discoveries and unique moments. Our new chefs bring this vision to life and we're delighted to work with them on this journey."

A New Generation of Chefs

- The amuse-bouches and main courses have been designed by Jérémy Chan, a British chef who celebrates locally sourced ingredients, blending them with a variety of spices and flavours from around the world. His London restaurant, Ikoyi, of which he is Executive Chef, has 2 Michelin stars and was voted one of the World's 50 Best Restaurants in 2023.

- The desserts have been created by Jessica Préalpato, a French pastry chef who favours natural flavours such as ancient grains, unrefined sugars and plants. Named Best Pastry Chef in the world in the World's 50 Best in 2019 and the first woman to be named Pastry Chef of the Year by Gault et Millau, Jessica is one of the new faces of patisserie.

- The wines and champagne have been carefully selected by British sommelier and co-owner of Sune, Honey Spencer. Honey is an advocate of organic and sustainable wines, has worked as a sommelier at some of London's top establishments, and is one of the 50 Most Influential Sommeliers in London according to The Drinks Business.

The culinary styles of Jérémy Chan and Jessica Préalpato, with their emphasis on bold combinations, harmonise and respond to each other, while being complemented by the wine list designed by Honey Spencer.

A Bold Menu

The menu, with its generous plates, is now made up of four courses including amuse-bouches, main course, a cheese course and dessert. Each menu has been developed by the chefs during collaborative workshops and multiple tasting sessions with in-house teams to create a distinct signature cuisine that reflects Eurostar's identity and transports it perfectly onto the plates served on board. The promise: a premium offer that shakes up the norms of European travel.

Onboard Eurostar, guests will be treated to a culinary journey, which could begin with delightful amuse-bouche of Curried Cauliflower Mousseline. For the main course, they will be able to choose between a hot option, which could include Baked Salmon served with Coconut Rice and Tangy Potatoes, or a cold option, such as Roasted Pumpkin with Honey and Cashew Miso. The meal might be complemented by a rich Colston Bassett Stilton, paired with burnt honey and apple, and conclude with a refreshing Citrus Delight infused with green cardamom. To elevate the dining experience, a carefully curated selection of wines is available, including Champagne

Fleury, which offers a balanced and rounded palate with the depth of Pinot Noir. The red wine selection features Domaine De La Dourbie, Oscar, a light option with a touch of cocoa, and Symbiose, Merlot, with enticing blackcurrant and pepper aromas. White wine enthusiasts can enjoy Château La Mothe Dubourg, a balanced and dry Bordeaux, while rosé lovers will appreciate La Fleur de Julie, an organic Grenache with fresh red fruit aromas. The wine list is refreshed every three months, ensuring a variety of choices. For those who prefer non-alcoholic options, a carefully selected mocktail is also offered, alongside the usual range of beverages.

Matthieu Quyyollet, Director of Development and New Customer Experience: "We have come up with a bold and modern concept, with, for the first time, a team of three talents, three chefs who have joined forces to create a perfectly harmonised menu, all of which can be served at a speed of 300 km/h. With their expertise, we have designed a 'journey through flavours', a unique culinary experience on board."

Honey Spencer, Sommelier: "I had the pleasure of developing the wine and drinks menu for Eurostar Premier, showcasing wines made by small producers who work with the utmost respect for their soils and terroirs. Each wine is unique and offers a glimpse of France's most progressive estates, each with its own story to tell and flavours to reveal."



Denmark

Stadler delivers up to 24 battery-powered trains to Lokaltog

Lokaltog A/S is decarbonising its fleet in the Zealand region. The company has opted for the FLIRT battery-powered trains from Stadler, the global leader in battery-electric multiple units. Stadler's battery-powered vehicles enable comfortable and emission-free travel. They are a pioneering step towards sustainable and decarbonised mobility in Denmark. The new trains will be delivered in 2028.

The contract signed in Taastrup/Denmark covers the purchase of 14 FLIRT Akku trains with an option for 10 additional vehicles. The fleet of FLIRT Akku trains for Denmark represents the top of emission-free rolling-stock solutions designed to offer a comfortable and environmentally friendly travel experience. They are to

be operated in Region Zealand on the Tølløsebanen and Østbanen lines, with the potential to extend services to Lollandsbanen and Odsherredsbanen. The award to Stadler is following a public tender announced in November 2023.

«We at Lokaltog are delighted to have found a supplier for our future battery trains. They are to replace our IC2 vehicles, which have served us well since 1997. These are the trains of the future that we are buying now, and they will hopefully be on our tracks and bringing comfort to our customers for many years», says Lars Wrist-Elkjær, Managing Director of Lokaltog.

Driving the future of green technologies

«We at Stadler are driven to lead in sustainable mobility, and for years we have been consistently and determinedly developing alternative drive solutions. Today, our FLIRT Akku has won another competition for battery trains. And this one is in one of the European Countries with the highest potential of decarbonisation in the railways, due to its low degree of track electrification», emphasizes Dr. Ansgar Brockmeyer, Executive Vice President Marketing & Sales at Stadler. «We are thrilled that Denmark is now embracing this innovative solution and proud that with our vehicles we can support our customer on the path to sustainable mobility. The accelerating climate crisis only reinforces our conviction that the future of modern transport lies in green technology.»

FLIRT Akku for Denmark: a net-zero, comfortable and fully accessible rail travel

The two-units FLIRT Akku vehicle for Denmark was designed fully in accordance with TSI PRM requirements – supporting accessibility, considering the needs of passengers with reduced mobility and featuring low-floor entry for easy boarding, even from low platforms. It has wide doors with automatic gap bridges and designated spaces for wheelchairs and bicycles. Additionally, it is equipped with a semi-automatic ramp for wheelchair users, further facilitating smooth and independent access. The vehicle will be fully air-conditioned, passengers will also have access to a universal toilet in accordance with TSI PRM, a WLAN network and a modern passenger information system.

From the Archives

Main: CP Rail No. 1413 with CP Rail 'Canadian' passes through the siphon in the irrigation aqueduct at Brooks AB on July 10th 1974.
Inset: 50 years later, on August 13th 2024, CP Rail No. 8941 with a container train passes approximately the same place. The aqueduct is now out of use but preserved as a monument and replaced by a wider canal between dikes.
Gerard van Vliet

Canada



From the Archives

CP Rail locos Nos. 5619, 5695, 5620 and 5645 pull a grain train towards Calgary, Brooks AB, on June 20th 1981.
Gerard van Vliet

Canada



From the Archives

CN Rail loco No. 9175 with a passenger train to Toronto ON is seen in Jasper AB, on July 10th 1981. *Gerard van Vliet*

Canada



From the Archives

VIA Rail loco No. 6501 with B unit No. 6605 and CN loco No. 4104 depart Jasper AB with a passenger train heading towards Vancouver BC on July 11th 1981.
Gerard van Vliet

Canada



From the Archives

Minaz No. 1205 is a Forney type 0-4-4T and is seen working the yard at Eduardo Garcia Lavandero sugar mill on February 25th 1985. *John Sloane*

Cuba



From the Archives

France

SNCF No. 507201 stands at Port Vendres with a Cerbere to Avignon service on June 7th 2013. *John Sloane*



From the Archives

No. D341.1001 is seen at Taranto with a train for Reggio di Calabria on April 10th 1974. *John Sloane*

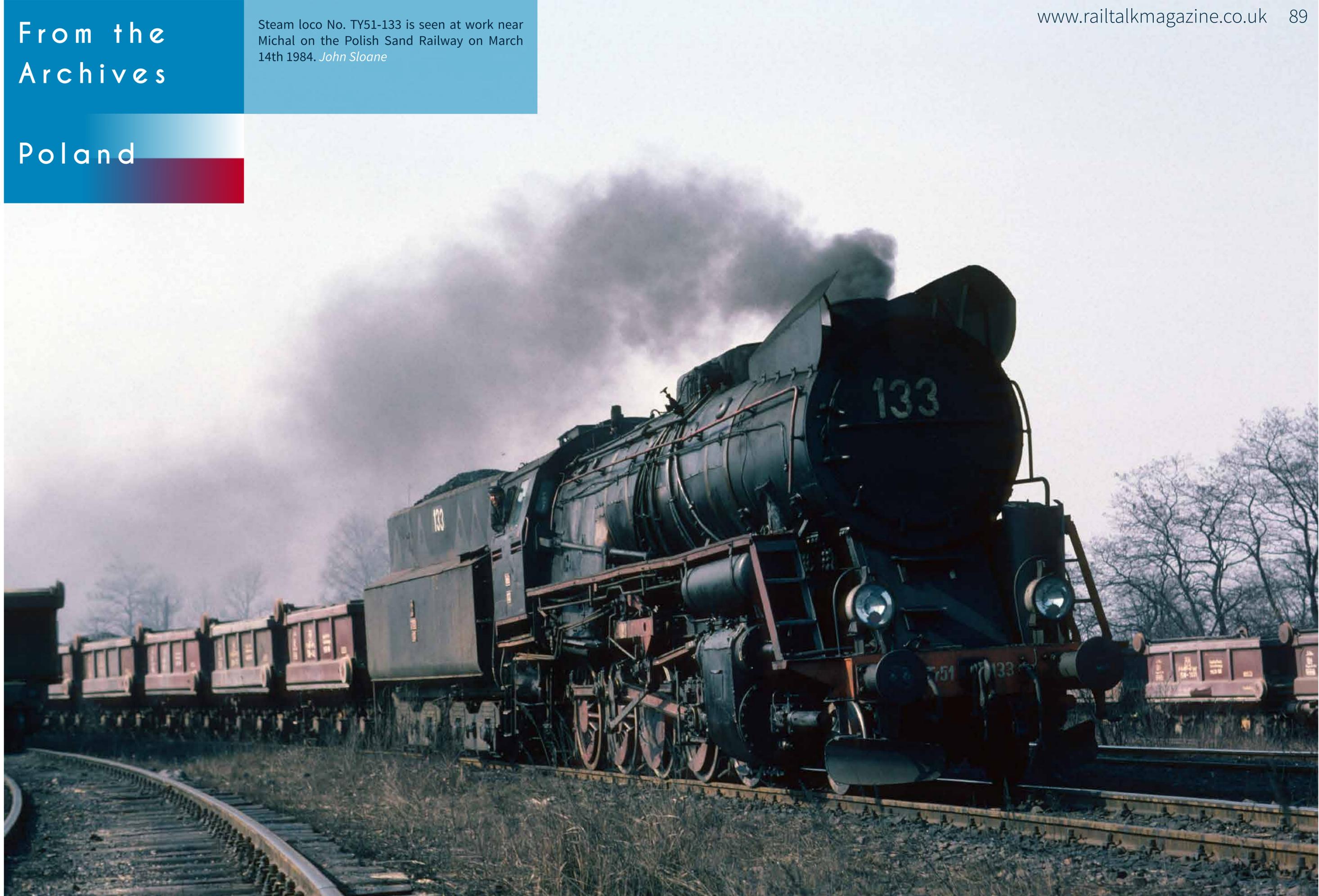
Italy



From the Archives

Steam loco No. TY51-133 is seen at work near Michal on the Polish Sand Railway on March 14th 1984. *John Sloane*

Poland



From the
Archives

CP No. 285 simmers between duties at
Regua shed on August 22nd 1974.

John Sloane

Portugal

