

Railtalk Magazine Xtra

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Content

Pg 2 - Welcome

Pg 4 - Pictures

Pg 61 - World News

Pg 68 - From the Archives

Submissions & Contributions

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

Photographic Contributions

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

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



Welcome to Issue 222Xtra

Well after my first trip overseas in 2025, I was very disappointed to find that although we have featured many times the advances in customer information and technology, it seems that it doesn't always get used. An example from Italy where all local trains were delayed including the one I needed, the info signs were saying nothing and the phone app hadn't been updated from the day previous. Just to say that in Austria and Belgium there were similar instances, but I must commend the DB app that was correct each time used.

Anyway in the news this month is that the world's first carbon fibre subway train has entered service....

The CETROVO 1.0 subway train, jointly developed by CRRC and Qingdao Metro Group, has entered commercial service on Qingdao Metro Line 1 in China. This represents the first time carbon fibre composites have been used in the primary load-bearing structures of a subway train for regular passenger operations. The train's car body, bogies, and other key structural components incorporate carbon fibre composites, offering notable advantages in terms of weight reduction, energy efficiency, and durability. Compared to traditional metal-based subway vehicles, the CETROVO 1.0 has a 25% lighter body and a 50% lighter bogie, contributing to an overall weight reduction of approximately 11%. This reduction translates into a 7% decrease in operational energy consumption, with an estimated annual reduction of 130 tonnes of carbon dioxide emissions per train.

The application of carbon fibre composites also enhances ride quality, as the material's properties provide improved vibration damping and noise isolation. Compared to conventional metal-based subway trains, the carbon fibre structure offers greater material strength and an increased safety factor. Additionally, the carbon fibre bogie frame improves impact and fatigue resistance, extending the service life of the train.

In the rail industry, lightweighting is a key focus area for improving efficiency and sustainability. Reducing vehicle weight while maintaining structural integrity lowers energy demand during operation, aligning with wider efforts to develop greener and more energy-efficient rail transport solutions.

And whilst in Germany, I couldn't help but notice the former UK rail operator National Express still continues to have seemingly successful operations. Now comes the news that Go-Ahead is to expand rail operations into Australia and New Zealand...

Go-Ahead has established a new office in Melbourne to explore rail opportunities in Australia and New Zealand. The company aims to apply its experience in managing large and complex rail operations to potential projects in the region. Go-Ahead is already a significant rail operator in the UK and the Nordics, overseeing extensive passenger services. In the UK, the company plays a major role in rail transport through Govia Thameslink Railway, which operates four rail companies in the south of England and accounts for nearly 20% of all UK rail journeys. Each year, Go-Ahead facilitates over one billion rail journeys and has contributed to the adoption of digital signalling on the UK's mainline network. From May 2025, it will also assume operation of the Elizabeth line in London, which serves more than 700,000 passengers daily. In addition to its UK operations, Go-Ahead has also expanded its presence in the Nordics. The company currently runs services in Norway and is set to begin operating Stockholm's Metro network later this year. This contract is one of the largest public transport agreements in continental Europe, serving approximately 350 million passengers annually.

Patrick Verwer, CEO, Rail, Go-Ahead said: "We have ambitious plans to build on our recent success and continue to grow our rail operations. We're excited about exploring opportunities in Australia and New Zealand where we can apply our experience of operating busy, complex transport networks."

Until next month...

David

This Page

ZRS No. 441.524 departs Banja Luja station with train No. 6405, the 15:26 to Foboj on February 26th. Note it's a mixed train with 2 passenger coaches and 3 box wagons tagged on the rear. *Andy Pratt*

Front Cover

Distinctive thanks to the 'African cab' design, MLW M4 No. 754 pauses at Galle to run around its train from Colombo to Beliatta on February 7th. *Mark Torkington*



OBB Class 1144.092 carries a special livery and on January 30th, together with 1144.237 they pass Roßleithen on their way to Graz. *Thomas Niederl*

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With Thanks

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Michael J Alderdice, John Alsop, Steve Andrews, Ray Anslow, Mark Armstrong, John Balaam, Brian Battersby, Steven Beesley, Barry Beeston, Mark Bennett, Michael Bennett, Tom Blanpain, Ben Bucki, Ian Callander, Keith Chapman, Steve Chapman, Julian Churchill, Russell Clarke, Nick Clemson, Keith Davies, Brian Dobbs, Derek Elston, Eddie Emmott, Mark Enderby, Colin Gildersleve, Vernon Goodey, John Goodrich, Greig Gibson, Carl Grocott, Richard Hargreaves, Dave Harris, James Haywood, Brian Hewertson, Paul Hewertson, Stuart Hillis, David Hollowood, Colin Irwin, John Johnson, Richard Jones, Anton Kendall, Colin Kennington, Ken Livermore, Mathijs Kok, David Lindsell, Barry Longson, Michael Lynam, Kevin McCormick, Phil Martin, David Mead, Chris Morrison, Ken Mumford, Alan Naylor, Gerald Nicholl, Jeff Nicholls, Chris Perkins, Mark Pichowicz, Colin Pidgeon, Neil Pugh, Andy Pratt, Andre Pronk, Alan Rigby, Charlie Robbins, Bryan Roberts, Barry Robinson, Dennis Rowland, Tim Saunders, Neil Scarlett, Paul Senior, Alan Sinclair, John Sloane, Laurence Sly, Lee Stanford, Steve Stepney, Steven Thompson, Mark Torkington, Brian Turner, Allison Twycross, Gerard van Vliet, David Wood, Leuan Wood, Shep Woolley, Erik de Zeeuw and the guys at RailUK.

There are only a few trains left that are operated with the ‘CityShuttle’ cars. One of them is the train No. Rex1512 from Salzburg to Wörgl on Sundays and holidays, seen here in Brixen im Thale on December 26th. *Thomas Niederl*



Near Kirchberg in Tirol, Class 1116.078 is seen with Eurocity train No. EC164 ‘Transalpin’ from Graz to Zürich HB on December 26th. *Thomas Niederl*



Until a few years ago, the Giselabahn was very busy on winter Saturdays. There were various special trains for holidaymakers from Germany, Belgium, the Netherlands and Scandinavia. This winter, only the 'Snälltaget' from Sweden survives. Here we see train No. D305 from Malmö near Oberndorf in Tyrol hauled by Class 193.288 on January 18th. *Thomas Niederl*



Austria

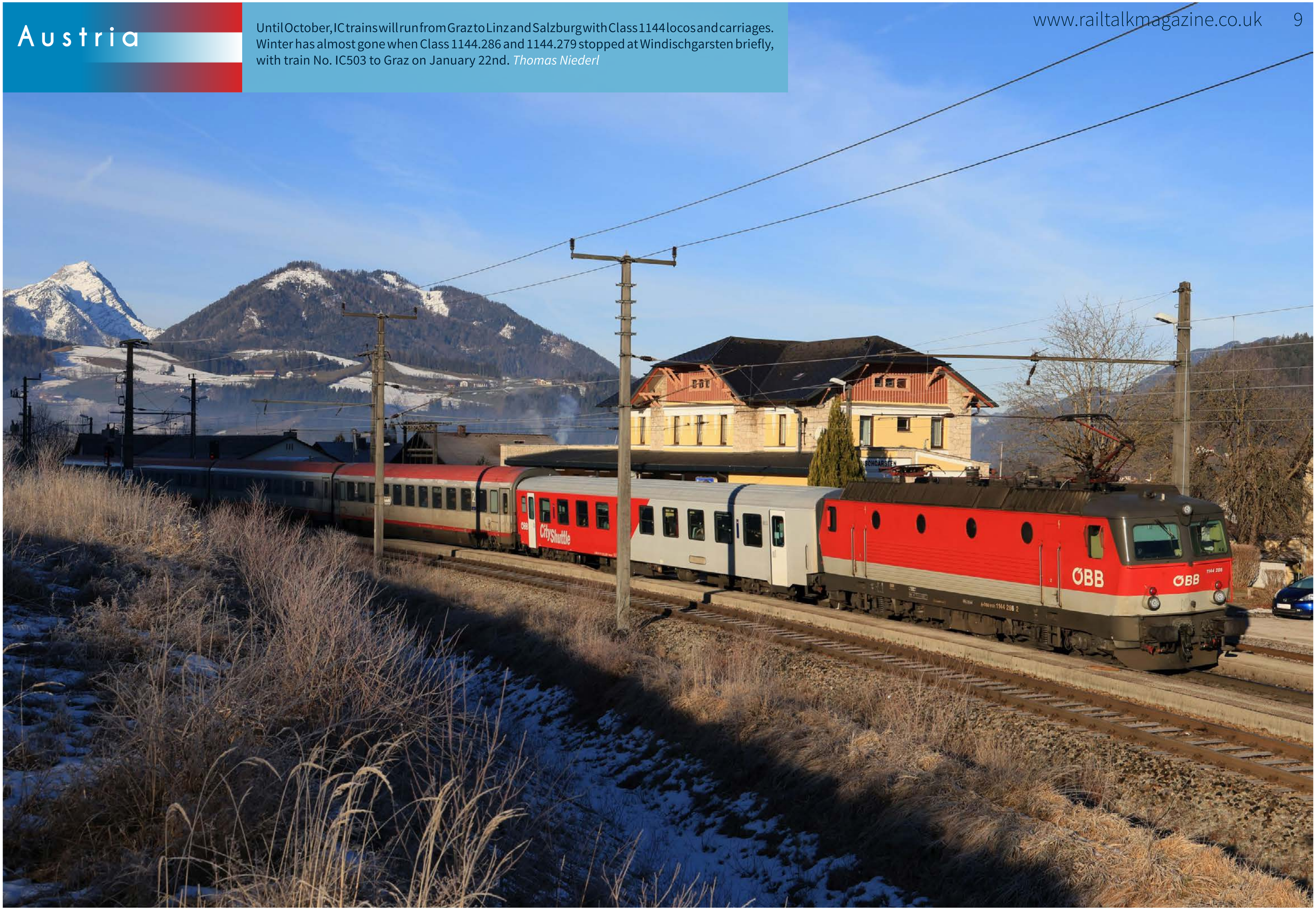
OBB Cityjet No. 4748.530 with train No. S5022 to Wörgl passes Oberndorf in TIrol on January 18th.
Thomas Niederl



The Eurocity ‘Transalpin’ is seen here seen near Pfaffenschwendt. The loco, Class 1016.021 used to carry an advertisement for Gösser beer, a very popular brand in Austria. You can still see it in the green colour of the fan grills. *Thomas Niederl*

Austria

Until October, IC trains will run from Graz to Linz and Salzburg with Class 1144 locos and carriages. Winter has almost gone when Class 1144.286 and 1144.279 stopped at Windischgarsten briefly, with train No. IC503 to Graz on January 22nd. *Thomas Niederl*



On January 30th, Class 1144.269 and 1144.285 are hauling train No. IC503 to Graz, near Windischgarsten.
Thomas Niederl

Austria

TimeTable Redesign – the Future of Planning

Managing capacities on the rail network, standardising processes across Europe, increasing the competitiveness of rail transport. This is what the European project “Timetable and Capacity Redesign for Smart Capacity Management” (TTR) is all about. The aim is to reorganise capacity planning and management processes for Europe-wide harmonisation and digitalisation.

Railway undertakings (RUs) can order train paths either for an entire year or at short notice during an ongoing annual timetable. All RUs endeavour to place their train path orders in an annual timetable in order to obtain high-quality train paths. In practice, however, the demand for train paths from freight railways changes during the year – often at short notice. This ultimately leads to wasted infrastructure capacity.

The TTR project now aims to counteract this. The goal is to standardise planning deadlines for train path orders and construction site planning across Europe. In this way, stable capacities and more flexibility can be created in the long term.

RU Consortium: Working Together as One
TTR has the potential to fundamentally revolutionise planning in railway freight transport. The ÖBB Rail Cargo Group (RCG), ÖBB Personenverkehr, DB Cargo and Forum Train Europe have joined forces to drive forward the implementation of the project on the part of the railway undertakings. Together, they are implementing initial initiatives to harmonise timetable and capacity planning.

Major progress already being made
With the Capacity Needs Announcements, RUs can announce their long-term demand for train paths for new traffic at an early stage. This is a major milestone and is particularly important for large construction projects such as the Koralm Tunnel in order to be able to better plan modal shifts. Work is also underway on a Europe-wide capacity regulation to legally secure the TTR project. Another key topic is Temporary Capacity Restrictions, which enable better construction site coordination. This involves standardised planning deadlines and a common IT system that facilitates coordination between RUs and infrastructure operators.



Tubbings delivered by rail saves 45,000 Trucks

On behalf of the H53 consortium for the Brenner Base Tunnel (BBT), the ÖBB Rail Cargo Group (RCG) ensures the sustainable delivery of tubbings and other construction materials to the construction site in Steinach-Wolf. A total of 570,000 tonnes of transported material is involved.

A modern railway infrastructure is the basis for sustainable mobility and transport systems. A central lighthouse project is the Brenner Base Tunnel (BBT), which will connect Austria and Italy as a high-performance flat railway under the Alps. 185 kilometres of a total of 230 kilometres of tunnels have already been excavated.

Once completed, the tunnel will be 64 kilometres in length, making it the longest underground rail link in the world.

Transporting Building Materials by Rail
Work on the “H53 Pfons-Brenner” construction phase, the last of the overall project and the largest on Austrian project territory, has been underway since 2023.

Since September 2024, two tunnel-boring machines have been working their way 7.6 kilometres northwards through the mountain from Steinach. The “factories in the mountain” also place the inner shell of the tunnel, which consists of so-called tubbing rings.

Each individual ring consists of six elements and one invert stone. These are manufactured by Max Bögl in Sengenthal, Germany. They arrive at their destination some 365 kilometres away by climate-friendly rail – transported by RCG from the Upper Palatinate directly to the construction site in Steinach am Brenner.

A total of 570,000 tonnes of construction material will be transported, including 530,000 tonnes of tubbings and 40,000 tonnes of pearl gravel. A sophisticated logistics solution ensures the smooth supply of materials to the construction site.

Direct Rail Connection for Efficient Logistics
The Wolf siding, in operation since 2016, enables direct delivery of materials by rail. The tubbings are unloaded using gantry cranes before being transported to the tunnel boring machine on heavy goods trucks. This significantly reduces road traffic in the Wipptal valley and ensures sustainable construction site logistics.

On February 27th, the transport logistics for tunnel construction were presented to journalists at the BBT construction site in Steinach am Brenner. A train was unloaded and the tunnel was inspected.

On site were René Zumtobel (Provincial Councillor for Mobility, Transport and Environment), Martin Gradnitzer (CEO BBT SE), Jürgen Raschendorfer (COO PORR) and Christoph Grasl (Member of the Board, ÖBB Rail Cargo Group).

UIC Rating Once Again Above Average

Top marks for a sustainable future. The latest sustainability rating by the Union Internationale des Chemins de fer (UIC) has awarded ÖBB Rail Cargo Group (RCG) a B rating, placing it well above the industry average.

As the global railway industry association, UIC has developed the Rail Sustainability Index (RSi-Tool), enabling rail operators to assess their sustainability performance. The rating is based on seven United Nations Sustainable Development Goals (SDGs) and more than 50 relevant factors. It also helps investors make targeted investments in sustainable mobility.

Good Performance Gets Recognised
ÖBB Rail Cargo Group (RCG) is setting new standards in sustainability – and this is reflected in the latest UIC rating. With a score of around 67 percent, Europe’s leading rail logistics provider is well above the industry average of 50.23 percent.

Particularly strong performance was recorded in the areas of “Decent work and economic growth” (SDG 8), “Industry, innovation and infrastructure” (SDG 9), and “Climate action” (SDG 13).

Moving in the Right Direction
The latest UIC rating confirms: Sustainability at RCG is not just a promise but a lived reality. With innovative solutions, forward-looking infrastructure, and measurable climate protection measures, RCG is actively shaping the future of logistics. Well above the industry average – and always one step ahead.

Austria

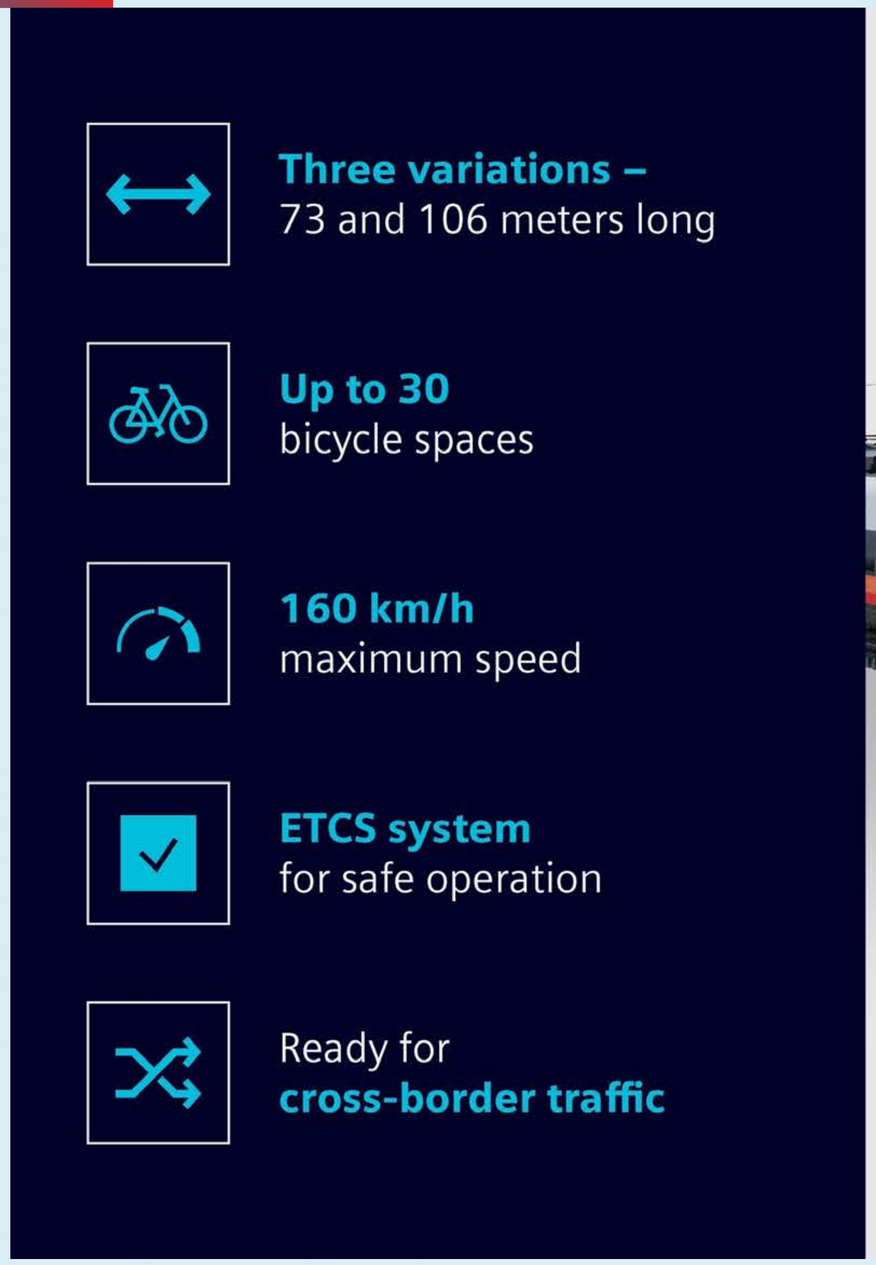
Siemens Mobility delivers additional 30 Mireo commuter trains to ÖBB

Order for 25 three-car and five four-car trains

ÖBB's Mireo fleet will grow to 100 trains

Austrian Federal Railways (ÖBB) has ordered a further 30 Mireo trains for commuter and regional transport from Siemens Mobility. The procurement, part of the existing framework agreement, supplements the purchase of 70 trains from the previous year and will bring ÖBB's Mireo fleet to 100 trains. The Mireo trains in the new order are scheduled to enter passenger service with ÖBB beginning in 2029.

Andre Rodenbeck, CEO Rolling Stock Siemens Mobility, says: "We are delighted to be supporting ÖBB with now 100 Mireo trains in its program to modernize local and regional rail transport in Austria. Our popular and reliable Mireo trains, of which Siemens Mobility has already sold over 550 trains for 23 fleets, combine high cost-effectiveness and increased fleet efficiency with modern functionalities and a high level of comfort and convenience. Their design contributes to a pleasant travel experience and ultimately satisfied passengers."





Mireo trains for high performance and an optimal travel experience

The electrically powered Mireo multiple-unit trains are an ultra-modern design that impresses with its economical operation and a high level of comfort and convenience for passengers. They can reach a top speed of 160 km/h and will operate in Austria, Germany and the Czech Republic. The trains are equipped with the European Train Control System [ETCS].

The train's modern design and interior fittings ensure a pleasant travel experience for all passengers.

Every train is equipped with air conditioning, WLAN service, barrier-free entrances, power sockets, racks for skis and snowboards, space for baby carriages and wheelchairs in the boarding areas, and extensive space for carrying bicycles. Specially for the new ÖBB trains and its passengers, the cars will be wider than in previous Mireo generations and based on a single-car train concept.

Bosnia

First light on February 22nd catches ZRS Bo-Bo No. 441.809 waiting to depart Banja Luka station with train No. 6403, the 07:26 to Doboj. *Andy Pratt*

ZRS No. 441.304 is framed in the station canopy at Novi Grad on February 22nd during its 4 hour 20 min layover between arriving with train No. 6422 07:24 from Banja Luka and departing with train No. 6432 13:45 to Dobrlijn. *Andy Pratt*

With the Bosnian flag emphasising the international border, ZRS No. 441.304 stands at Dobrlijn station on the border with Croatia waiting to depart with train No. 6425 14:56 to Banja Luka on February 22nd. Sadly, the border crossing sees no regular passenger traffic now, only freight. *Andy Pratt*

Bosnia

ZRS No. 441.529 arrives at Prisoje station on February 26th with train No. 6403, the 07:26 Banja Luka - Doboj.
Andy Pratt



Bosnia

ZRS No. 441.301 departs Banja Luka with a freight heading towards Doboj on February 26th. *Andy Pratt*



ZRS 'Kennedy' No. 661.302 is Banja Luka station pilot on February 26th and shunts some stock for servicing. *Andy Pratt*

Czech Republic

On February 21st, CD Cargo Class 750.103 is seen on the turntable at Breclav. *Class47*

Czech Republic

On hire to Regiojet, CT-Train Class 193.442 'Terri' speeds through Chocen on February 21st with a Praha bound service. *Class47*

Germany

Alstom and Deutsche Bahn sign long-term framework contract for the modernisation and digitalisation of the German rail network

Alstom, global leader in smart and sustainable mobility, has signed a long-term framework agreement with Deutsche Bahn for the digitalisation of the rail network in Germany. This framework agreement has a fixed scope of at least 1890 interlocking units and a contract value of over 600 million euros. There will be several calls between 2025 and 2028, with the first call-off in the first quarter of 2025. The implementation period for individual projects carried out by Alstom will end in 2032.

“Deutsche Bahn is taking a big step in digitalising the German rail network. We are proud that they are relying on Alstom’s digital interlocking as well as train control and safety technology,” said Tim Dawidowsky, President of the Central and Northern Europe region at Alstom. “A long-term framework agreement with a fixed scope is the basis for maximum success in implementing the Digital Rail Germany initiative. Alstom will make an important contribution to this success.”

The framework agreement introduces a long duration and a clearly defined scope of at least 1890 interlocking units, providing Deutsche Bahn and Alstom an unprecedented level of planning and execution security. Alstom’s services includes the provision and integration of digital interlocking technology as well as control and safety technology in the international ETCS[1] standard.

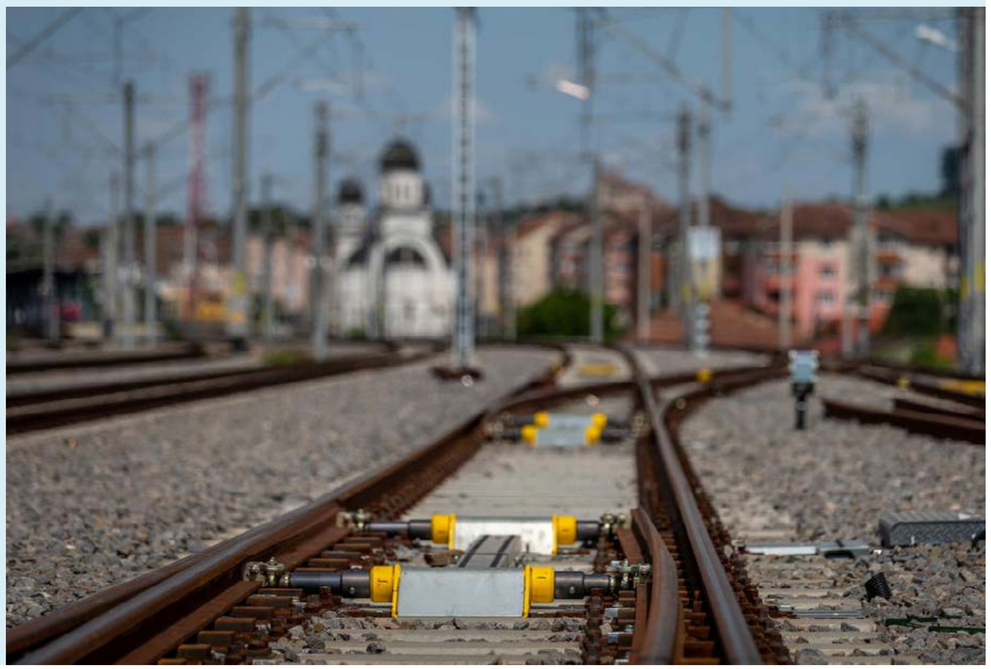
The interlocking units include, for example, switch drives, signals, and track barriers.

Worldwide expertise in signalling technology

With the framework agreement with Deutsche Bahn, Alstom is further expanding its expertise in the implementation of digital signal technology on main and secondary lines. Worldwide, Alstom has implemented over 135 ETCS projects and equipped 23,000 km of track with train control and safety technology. In addition, Alstom has installed more than 3,000 interlockings in over 35 countries. Alstom’s digital interlockings can be seamlessly integrated into the most diverse and complex infrastructures.

ALSTOM™ is a protected trademark of the Alstom Group.

[1] European Train Control System



Future-orientated logistics with a clear focus

Sustainable and efficient transport solutions - for our customers

The logistics industry is changing - and DB Cargo are actively keeping pace. Their goal is to stand by your side as a reliable partner. To achieve this, they are reorganising their structures, making processes more efficient and placing the needs of their customers even more at the centre of their activities.

Customised transport solutions for your industry

Every sector has its own requirements, and DB Cargo know that there is no one-size-fits-all solution. That’s why their new industry teams take responsibility for their area - from locomotives to freight wagons to personnel. For our customers, this means more direct contacts, faster decisions and customised solutions that fit their business perfectly.

Specialised support for maximum efficiency

In order to offer customers the best possible service, they have clearly structured their organisation. The Rail Logistics division serves various industries, including steel, chemicals, mineral oil, bulk goods, automotive and full load solutions. The maritime combined transport division focuses on both maritime and continental transport solutions.

Six independent business units act flexibly, efficiently and offer customised solutions for your industry.

Sustainability as an integral part of their strategy

DB Cargo focus on environmentally friendly transport solutions in order to drive forward the decarbonisation of transport together with you. With their Climate+ concept, the increased use of renewable power and climate-friendly fuels such as HVO (Hydrotreated Vegetable Oil), they are significantly reducing CO_2 emissions.

In this way, DB support their customers with sustainable transport solutions that make a decisive contribution to achieving climate targets.

Working together for efficient, reliable and sustainable logistics

DB Cargo uses modern technologies and intelligent planning to make rail freight transport more efficient and reliable. In this way, they ensure that your goods reach their destination on time, safely and in an environmentally friendly manner. Let’s work together on viability for the future - because we are convinced that the best solution is one that works for everyone.



Germany

DB Cargo can also haul suburban trains

First quarter-length train transport of an S-Bahn from Wannsee to Seddin creates benefits for all involved.

DB Cargo has successfully transported the first quarter-length train of an S-Bahn from Berlin-Wannsee to Seddin in order to relieve the burden on the S-Bahn's maintenance depot in Wannsee and improve the capacity utilisation of DB Cargo's handling and shunting service providers at the Seddin site.
This relieves the burden on the Berlin S-Bahn and maximises maintenance capacities at the same time.

With a DB Cargo class 249 hybrid locomotive, all options could be optimally utilised: First with electric traction from Seddin-Süd to Berlin-Wannsee, then with a diesel engine

from the platform to the factory and then radio-controlled for exact positioning of the S-Bahn between the match wagons.

In the end, the quarter-length train was perfectly prepared for collection by the works locomotive in Seddin South - a successful example of well thought-out logistics and partnership-based cooperation.



DB Cargo starts regular operations with over-length trains of up to 835 metres between Maschen Rbf and Malmö Godsban

Increased capacity and efficiency with freight train up to 835 metres long

Since the 2024/2025 timetable change, DB Cargo has been operating over-length trains of up to 835 metres between the Maschen marshalling yard and Malmö Godsban in Sweden six days a week. These trains offer significant capacity and efficiency advantages compared to the maximum 740 metre-long trains possible on the rest of the German rail network.

Increased capacity and efficiency
DB Cargo has been operating over-length trains between Maschen and Fredericia in Denmark since 2012. The trains are up to 835m long and have a maximum load 2,300 tonnes. The new regular service will now increase the capacity per train on the Maschen-Malmö route by up to 13%, which will boost competitiveness on the route between Germany and Scandinavia, while the use of resources (train driver, locomotive) will remain the same.

Advantages for various industries
The introduction of extra-long trains significantly supports single wagonload transport in Europe for different industries and different goods. The ScanMed Corridor (corridor between Scandinavia and the Mediterranean) is one of the most important freight corridors for Germany and Europe. Customers from the steel industry and the consumer goods sector, for example, benefit along the ScanMed corridor.

Cooperation and research
The DB Cargo Lab, DB Cargo Scandinavia and Trafikverket have successfully collaborated in the European Shift2Rail research project FR8RAIL IV to overcome operational and infrastructural challenges, enabling the introduction of extra-long trains on an important route on the ScanMed corridor. The project is part of DB Cargo's overarching strategy for digitalisation and automation along the rail freight value chain.

Outlook
Completion of the fixed Fehmarnbelt bridge, which is completely designed for 835 metre-long trains, is planned for 2029. The tunnel will significantly shorten the route from Maschen to Malmö, as the current route has to cross the mainland and three bridges. The opening of the new route will combine the advantages of extra-long trains and shorter distances, which will further increase efficiency and cost-effectiveness.



Germany

By train to the flight: 1.1 million travellers used cooperation offers from DB and airlines in 2024

More and more travellers are combining train and flight. This is shown by the current figures for the cooperation offers from DB and now around 50 airlines.

Last year, 1.1 million passengers travelled on DB's ICE and Intercity trains before and after their flight. That was around 4 percent more than in 2023.

Stefanie Berk, Board Member for Marketing and Sales at DB Long-Distance Transport : "With our joint offers, we want to motivate more people to avoid short-haul flights within Germany or to leave their cars at home on the way to the airport. In our long-distance trains, customers travel with 100 percent green electricity. The fact that these offers are being used so intensively is good news for the climate."

The main co-operations include the Rail&Fly and Lufthansa Express Rail programs. For over 30 years, Rail & Fly has enabled travellers to travel from all 5,600 train stations in Germany to the various German airports - and back.

As part of the partnership with Lufthansa, the Lufthansa Express Rail offer, this is even possible with a combined ticket for train and flight that can be purchased in just one booking step. Lufthansa Express Rail alone was booked around 500,000 times last year. Traveling by train not only benefits the climate, but also directly benefits customers. It is not only comfortable, but also inexpensive in view of rising flight and gasoline prices.

Taxi and parking fees can also be saved



effectively. And with 410 ICE trains, travellers have the largest and most modern fleet that DB has ever had at their disposal.

In March, DB is making a special statement for climate protection and sustainable mobility: with tomato juice! Because everyone who misses the tomato juice that is popular in the aircraft cabin on board the trains can now enjoy it on the ICE. In March, DB is offering organic tomato juice from Voelkel in the on-board restaurant and bistro - in a promotional bottle design.

Stefanie Berk: "Our cooperation with the airlines is very popular with passengers. We want to celebrate this and are now offering tomato juice, an icon of air travel, on our trains. In keeping with the motto: tastes good on all domestic trains!"

Northrail expands fleet with up to 50 new Vectron locomotives

Delivery of 15 Vectron locomotives with an option for 35 additional locomotives

Comprehensive full-service contract for eight years, with an option to extend to 16 years

Innovative fleet monitoring, based on the Railigent X application suite

Siemens Mobility has signed a major framework agreement for 50 Vectron locomotives with RIVE Private Investment, an independent European investment group and parent company of Northrail, a leading leasing provider and asset manager of rolling stock in Europe.

The new agreement covers the delivery of 15 Vectron locomotives, including a comprehensive full-service contract over a period of eight years. There is also an option to order an additional 35 Vectron locomotives and to extend the service contract by eight years. The full-service contract is supported by innovative fleet monitoring, an application from the Railigent X application suite, providing support for maintenance and life cycle management.

'We are delighted that Northrail and RIVE Private Investment have once again opted for innovative Siemens Mobility technology. With more than 2,600 locomotives sold, the Vectron offers both reliability and flexibility and is perfectly designed for the requirements of European rail freight transport,' says Andre Rodenbeck, CEO Rolling Stock at Siemens Mobility.

'With Siemens Mobility, we have a partner whose technical expertise and comprehensive service approach will support us in our continued sustainable growth and the optimisation of our operations. The new Vectron locomotives will make an important contribution to realising our long-term goals,' says Michael Trentzsch, Chief Investment Officer and Chief Commercial Officer of Northrail AG.

'The conclusion of this agreement further strengthens the RIVE/Northrail rolling stock leasing platform's strategic positioning in the railway sector and underscores our commitment to future-oriented investments in the field of sustainable mobility. We look forward to pursuing our partnership with Siemens Mobility to drive innovative transport solutions fostering the modal shift and land transport decarbonization,' says Camille Brunel, Partner Transportation Assets at RIVE Private Investment.

The signing took place immediately before the handover of the 40th Vectron Dual Mode from the current contract. The new framework agreement continues the successful partnership started in 2021 and at the same time marks an important step towards the consistent expansion of Northrail's fleet.

With the latest order, Siemens Mobility has sold over 2,600 locomotives from the Vectron family to 103 customers in 16 countries. The fleet has completed a total mileage of over one billion kilometres to date and proves its efficiency on a daily basis. The locomotives of the Vectron platform have received homologation in 20 European countries.

Germany

DB signs first volume contract with rail industry: 6.3 billion euros for modern control and safety technology



Long-term volume framework agreement with purchase obligation secures more capacity for new signalling technology in a significantly shorter time

Sector can develop platform solutions and build up resources

First calls as early as spring 2025

Deutsche Bahn has for the first time concluded a long-term volume contract with four companies in the rail industry for the delivery and construction of digital control and safety technology (DLST). The agreement, worth 6.3 billion euros, covers digital interlocking technology (DSTW) including the European Train Control System ETCS as well as integrated control and operating systems.

The four business partners are MerMec Deutschland GmbH, Hitachi Rail GTS Deutschland GmbH, Alstom and Siemens Mobility in a bidding consortium with Leonhard Weiss. In the contract, DB undertakes to call up a total of 15,500 control units from the volume contract by the end of 2028. For individual projects, the implementation period is set to 2032.

Berthold Huber, Board Member for Infrastructure at Deutsche Bahn AG : “In the next few years, we want to massively advance digitization in the network and renew many times over the number of signals, switch drives and signal boxes across the country.

The new volume contract with the sector will significantly accelerate this process. We have entered into a new partnership and agreed on a complete package that benefits both sides - and our customers on the network. Control and safety technology is one of the most quality-critical trades with the highest level of obsolescence. The volume contract will make a significant contribution to changing this situation and renewing more control and safety technology more quickly.”

What is new in the award and contract model is that it is a large volume that has to be implemented over the long term. The contracting parties undertake to realize a defined volume in the sense of a general contractor to DB.

DB promises binding call-off quantities over the period. In return, the industry undertakes to use technical platform solutions with standard interfaces and to reliably build up and maintain the necessary resources.

Another advantage of the new approach: instead of the usual and time-consuming process of an average of eight years, the processes of commissioning, planning, construction and commissioning of the technology will be shortened to just a few years in the future.

The contract with the companies in the rail industry is groundbreaking because it will eliminate the many individual contracts and individual calls that were previously required within the planning and implementation of the projects. The model is to be applied to other areas.

The first calls for several million euros from the contract are expected to take place as early as spring 2025.

Germany

Berlin Central Station becomes more efficient – more switches for more traffic



Rapid effects on reliability and punctuality in the north-south connection

Additional switches and signals in the main station (tief)

Temporary diversions and train cancellations during the work

Additional switches and signals will be installed in Berlin Central Station so that trains can reach the platforms faster and more flexibly in the future. During the construction work between February 17th and April 22nd, 2025, four of the eight tracks in the underground station will be available.

The underground station will be completely closed on two weekends from March 21st to 24th and during the Easter holidays from April 18th to 22nd.

Berlin will continue to have good long-distance connections during the construction work . Only on the weekends of the full closures will the long-distance trains probably stop at other Berlin long-distance stations instead of Berlin Hauptbahnhof and Südkreuz. The Intercity between Warnemünde and Dresden will stop at Berlin Ostkreuz from February 18th to April 15th.

The S-Bahn and the above-ground part of the main station are not affected by the work.

During the construction work, there will also be timetable adjustments for regional transporton lines RE 3, RE 5, RB 14 and RB 23 as well as on the airport express FEX .

There will be diversions with changed stops:

- The hourly trains on line RB 14 run from Berlin-Spandau via Jungfernheide and Berlin-Gesundbrunnen to Berlin-Lichtenberg - and continue on as FEX to BER airport without changing trains.

- The FEX continues to run every half hour between Berlin Lichtenberg and BER airport. The line also stops in Schöneweide.

- Coming from the north, the RE 5 line ends in Berlin-Gesundbrunnen.

- Due to the diversions in regional traffic, the RB 23 trains run every two hours between Potsdam-Griebnitzsee and BER airport. The hourly connection between Golm and Potsdam-Griebnitzsee remains in place.

- The RE 3, RB 10 and RB 21 lines are partially affected: For example, individual RE 3 journeys are cancelled during rush hour between Berlin-Gesundbrunnen and Berlin-Südkreuz; on the RB 21 line, there are individual cancellations between Berlin-Jungfernheide and Berlin-Gesundbrunnen; there are also minor changes to travel times on the RB 10 and RB 21 lines.

- During the construction work, the ODEG RE8 Süd only runs as far as Südkreuz and ends there.

All timetable changes will be made available in good time on www.bahn.de and in the DB Navigator app.

Rail traffic at Berlin Central Station has increased continuously since it opened in 2006. One example is the new hourly high-speed connection between Berlin and Munich. Travellers also notice the increased traffic volume when, for example, entry to the underground station is delayed because the tracks are occupied.

DB has been using the “Small and Medium Measures” (KMM) program to renovate its infrastructure since 2022. The measures include additional crossing options, additional signals and track change operations, or new switches and platforms.

The program aims to quickly achieve positive effects on quality and punctuality for travellers and freight transport customers. The small and medium-sized measures can quickly and effectively eliminate bottlenecks, make rail operations more flexible and make the network more resilient. The 105th measure was put into operation in December 2024.

The implementation of over thirty measures is planned for 2025.

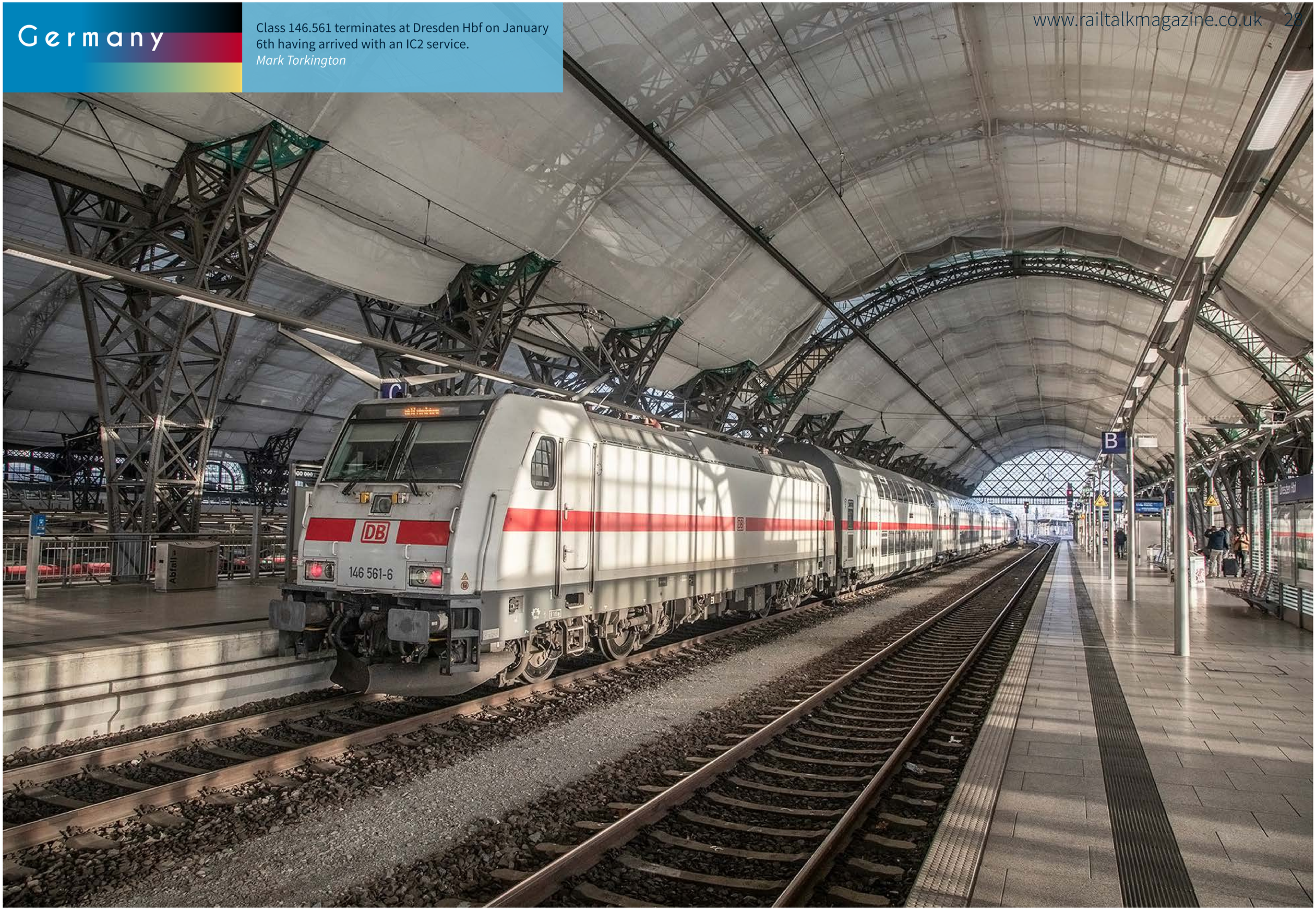
IGE Werrabahn's 2-8-2 No. 41.1144 waits to depart Eisenach Hbf on February 8th with the Rodelbitz Sonderzug to Arnstadt Hbf. *Andy Pratt*

Germany

DB Regio Class 146.016 pauses at Dresden Hbf working a S1 service on January 6th. *Mark Torkington*



Class 146.561 terminates at Dresden Hbf on January 6th having arrived with an IC2 service.
Mark Torkington



Dampflok No. 99.1747 comes off shed at Radebuel Ost on January 6th. *Mark Torkington*



Czech Railways Class 193.028 is seen in the depths of Berlin Hbf with a Hamburg to Praha Eurocity service on January 6th. *Mark Torkington*

No. 99.1794 is seen on arrival at Oberweisenthal on the steeply graded Fichtelbergbahn in heavy snow on January 6th. *Mark Torkington*



On February 2nd, No. E-1436 approaches Marrakesh whilst hauling train No. 110, the 09:35 from Rabat.
Laurence Sly

On February 4th, No. 420 passes Sidi Abdeljelil whilst hauling train No. 101 to Nador. *Laurence Sly*



On February 4th, No. 428 passes Sidi Abdeljelil whilst hauling train No. 103 to Nador. *Laurence Sly*

No. 365 passes Sidi Abdeljelil whilst hauling train No. V20000, 11:35 Oujda - Tanger on February 4th.
Laurence Sly



No. 414 passes Sidi Harazem whilst hauling train No. 301, 07:30 Tanger - Oujda on February 4th.
Laurence Sly



On February 4th, No. 416 approaches Sidi Harazem whilst hauling train No. 503 09:36 Nador - Fes.
Laurence Sly

No. 413 departs Fes on February 5th whilst hauling train No. 101 to Nador. *Laurence Sly*

No. 420 passes Ouled Ayad whilst hauling train No. 503, 09:36 Nador - Fes on February 5th.
Laurence Sly



Sri Lanka

On January 30th, M5 No. 779 is about to depart Colombo, having re-engined the Matara to Kandy express.
Mark Torkington



Henschel built with an EMD power unit, M6 No. 788 terminates at Kalutara South with the daily ‘mixed’ train from Colombo on February 1st. *Mark Torkington*

M10 No. 916 powers through Thirinagama with an express from Kandy to Matara on February 8th. *Mark Torkington*

BNSF Nos. 9716 and 9709 run down the middle of Atwood St. in Longmont. This is the Longmont to Fort Collins local known locally as the Longmont Switch. *Laurence Sly*

Amtrak Nos. 11 and 158 pass Model whilst hauling the ‘Southwest Chief’ from Chicago to Los Angeles. *Laurence Sly*

U.S.A.

Great Western Railway of Colorado No. 415 crosses the Cache la Poudre River as it departs Fort Collins for Windsor. *Laurence Sly*

Great Western Railway of Colorado No. 415 passes Timnath whilst hauling the Fort Collins job back to Windsor. *Laurence Sly*

Great Western Railway of Colorado No. 415 approaches Windsor. *Laurence Sly*







Amtrak Nos. 11 and 158 pass through the Raton Pass whilst hauling the 'Southwest Chief' from Chicago to Los Angeles. *Laurence Sly*

U.S.A.

Amtrak Nos. 159 and 171 pass Yarmony whilst hauling Amtrak train No. 5, the 'California Zephyr', 14:00 from Chicago to Emeryville.
Laurence Sly



Amtrak Nos. 159 and 171 pass Palisade whilst hauling Amtrak train No. 5, the 'California Zephyr', 14:00 from Chicago to Emeryville.
Laurence Sly



Amtrak Nos. 159 and 171 approach Dotsero whilst hauling Amtrak train No. 5, the 'California Zephyr', 14:00 from Chicago to Emeryville.
Laurence Sly



Amtrak Nos. 137 and 154 pass Thomson Springs whilst hauling Amtrak train No. 6, 08:52 Emeryville - Chicago. *Laurence Sly*

U.S.A.

Union Pacific Nos. 5040 and 4927 pass Thomson Springs whilst hauling the Potash local from Grand Junction. *Laurence Sly*

Union Pacific Nos. 5040 and 4927 pass Gold Bar Canyon whilst hauling the Potash local from Grand Junction. *Laurence Sly*

Union Pacific Nos. 5040 and 4927 pass Klondike whilst hauling the Grand Jct. - Potash local. *Laurence Sly*







Union Pacific Nos. 5040 and 4927 pass Little Canyon whilst hauling the Grand Jct. - Potash local. *Laurence Sly*

U.S.A.

Union Pacific Nos. 4927 and 5040 pass the Corona Arch Trail whilst hauling the Potash turn back to Grand Junction. *Laurence Sly*

Amtrak Nos. 11 and 158 depart Las Vegas (New Mexico) whilst hauling the 'Southwest Chief' from Chicago to Los Angeles. *Laurence Sly*

Amtrak Nos. 11 and 158 pass through the Raton Pass whilst hauling the 'Southwest Chief' from Chicago to Los Angeles. *Laurence Sly*

Union Pacific Nos. 4927 and 5040 pass Thompson Springs whilst hauling the Potash turn back to Grand Junction. *Laurence Sly*

Amtrak No. 10 and 179 pass Fruita whilst hauling Amtrak train No. 5, the 'California Zephyr' from Chicago to Emeryville. *Laurence Sly*

Great Western Railway of Colorado, No. 415 passes the Rigden Reservoir whilst hauling the Fort Collins job back to Windsor. *Laurence Sly*



Union Pacific No. 3576 passes Parachute whilst hauling Amtrak train No. 6, the 'California Zephyr'. The Union Pacific locomotive assisted the train from Grand Junction after the failure of one of the Amtrak GE P42s. *Laurence Sly*

Union Pacific Nos. 5040 and 4927 pass the Corona Arch whilst hauling the Potash turn. *Laurence Sly*



Union Pacific Nos. 5040 and 4927 run alongside the Colorado River as they approach Potash.
Laurence Sly

Amtrak Nos. 11 and 158 pass Wagon Mound whilst hauling the 'Southwest Chief' from Chicago to Los Angeles. The Wagon Mound area has the last remaining semaphore signals in the United States. *Laurence Sly*



USA

Alstom signs contract to overhaul NJ TRANSIT multilevel II trucks

Alstom, global leader in smart and sustainable mobility, has announced that it has signed a contract with NJ TRANSIT to overhaul 209 Multilevel II Trucks. The overhaul work will be performed at Alstom's facility in Kanona, NY, a Center of Expertise for Vehicle and Component Overhauls in the United States. The new contract is valued over $25 million USD. Alstom employees will rebuild or replace truck components to original equipment manufacturer specifications, restoring performance, safety, and passenger experience. The Multilevel II vehicle trucks are required to undergo an overhaul every 10 years to keep the rail cars in a state of good repair and in compliance with all mandated regulations, including federal safety standards and the American Public Transportation Association (APTA) standards.

"We are committed to restoring the performance of NJ TRANSIT's fleet through comprehensive overhauls, ensuring our customer and their passengers benefit from safe, reliable and efficient transit services," said Michael Keroullé, President of Alstom Americas. "This initiative underscores our dedication to maintaining the highest standards for our products for our customers over their entire lifecycle."

A market leader in rail services

With the widest components portfolio in the industry, Alstom offers the best solution available to original equipment manufacturers, operators, and asset owners, for increasingly safe and environmentally friendly travel. Its range of state-of-the-art and proven systems and products includes bogies, motors, dampers, brake friction, switchgear, traction and auxiliary converters, transformers, green traction solutions, interiors and train control and information systems.

Alstom is also the market leader in rail services globally, 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. Alstom provides customer care through a worldwide network of repair and overhaul centres to sustain the safety and reliability of fleets for the long run.

ALSTOM™ and FlexCare Sustain™ are protected trademarks of the Alstom Group.



Eurostar

Eurostar Resumes Direct Amsterdam-London Services with Enhanced Customer Experience

Eurostar is pleased to announce the resumption of its direct service between Amsterdam and London, offering travellers a seamless and sustainable journey from the heart of Amsterdam to the heart of London.

From February 10th 2025, Eurostar will operate three daily services on weekdays and Sundays (two on Saturdays) between London St Pancras and Amsterdam.

Today marks the first step in a phased expansion of services:

- February 10th – Late March 2025: Services will accommodate a maximum of 400 passengers from Amsterdam per journey, a +10% increase.
- March 30th – April 22nd: A temporary terminal closure will take place at Amsterdam Centraal to facilitate further platform renovations.
- From April 22nd: Passenger capacity will increase to 600 from Amsterdam +220% increase and +160 from Rotterdam. Enhanced services and facilities will include an exclusive boarding point for a seamless travel experience.
- By September 2025: Full capacity of up to 650 passengers from Amsterdam will be introduced.

Looking ahead, Eurostar's ambition is to expand to five daily services between London and Amsterdam by 2026.

A State-of-the-Art Terminal at Amsterdam Centraal

Coinciding with the service expansion, the new UK Terminal at Amsterdam Centraal opens on 10 February. This terminal, located in one of Europe's most historic stations, offers a 21st-century travel experience with sustainability at its core:

- Eco-friendly design: The terminal features carbon-negative flooring, an A+ energy efficiency rating, and sustainable finishes such as recycled plating and felt ceilings.
- Enhanced customer experience: Ultra-fast Wifi modern real-time information system, and smart lighting.
- Comfortable spaces: A variety of seating areas designed for relaxation and productivity, including a low-stimulus space for added comfort.
- Premium refreshments: Travellers can enjoy barista-made coffee, fresh pastries from our new café, and free chilled water while unwinding under our smart lighting system.

"We are delighted that direct Eurostar services between Amsterdam and London are back. This is more than just a train journey — it is a seamless connection between two vibrant capitals, offering our customers an efficient, comfortable, and sustainable way to travel. Eurostar is proud to unveil this state-of-the-art terminal, reinforcing our commitment to providing a seamless, sustainable, travel experience. We know we will welcome more passengers on board as we continue to grow our services and set the standards for connectivity across Europe. The tripling of capacity on the Netherlands-UK route is step one in a broader strategy to increase Eurostar's network for customers all across Europe." explained Gwendoline Cazenave, CEO of Eurostar.

Seema Malhotra MP, Minister for Migration and Citizenship said: "Working closely with our European neighbours is a priority for this government, as we continue to ensure seamless passenger travel for those travelling to and from the UK, while protecting our borders.

I am pleased to see the reinstatement of the direct Eurostar connection to London from the Netherlands. Our hard-working UK Border Force officers based in Netherlands will ensure that our border security remains robust."

Morocco

CAF secures major intercity train contract in Morocco

The beginning of this year is proving just as successful as the end of last year for CAF, with the company securing a major new contract in Morocco. This achievement adds to the company's already impressive order backlog.

ONCF (Office National des Chemins de Fer), the national railway operator of the Kingdom of Morocco, has awarded CAF a contract to supply 30 modern intercity trains to operate on the country's railway network. The contract also includes an option to increase the scope of the contract in the future, with the delivery of 10 additional units, as well as the possibility of providing technical assistance and spare parts supply services for ONCF.

This marks a major milestone for CAF as it is the first project the company has secured in Morocco. Valued at nearly €600 million - not including any potential options that ONCF may choose to exercise later - this contract will be financed by the Spanish Government's FIEM (Business Internationalisation Fund) funds.

The units designed by CAF for this project are intercity trains offering the highest levels of performance and comfort, built to operate at a speed of 200 km/h. In addition, the trains will have a high transport capacity, with more than 500 seats, and space for people with reduced mobility.

ONCF plans to use the supplied trains to connect Morocco's main cities on the Fez-Marrakech and Kenitra-Fez connecting lines. The new rolling stock is expected to significantly improve the quality of rail services in the country, strengthen regional connectivity and increase passenger transport capacity.

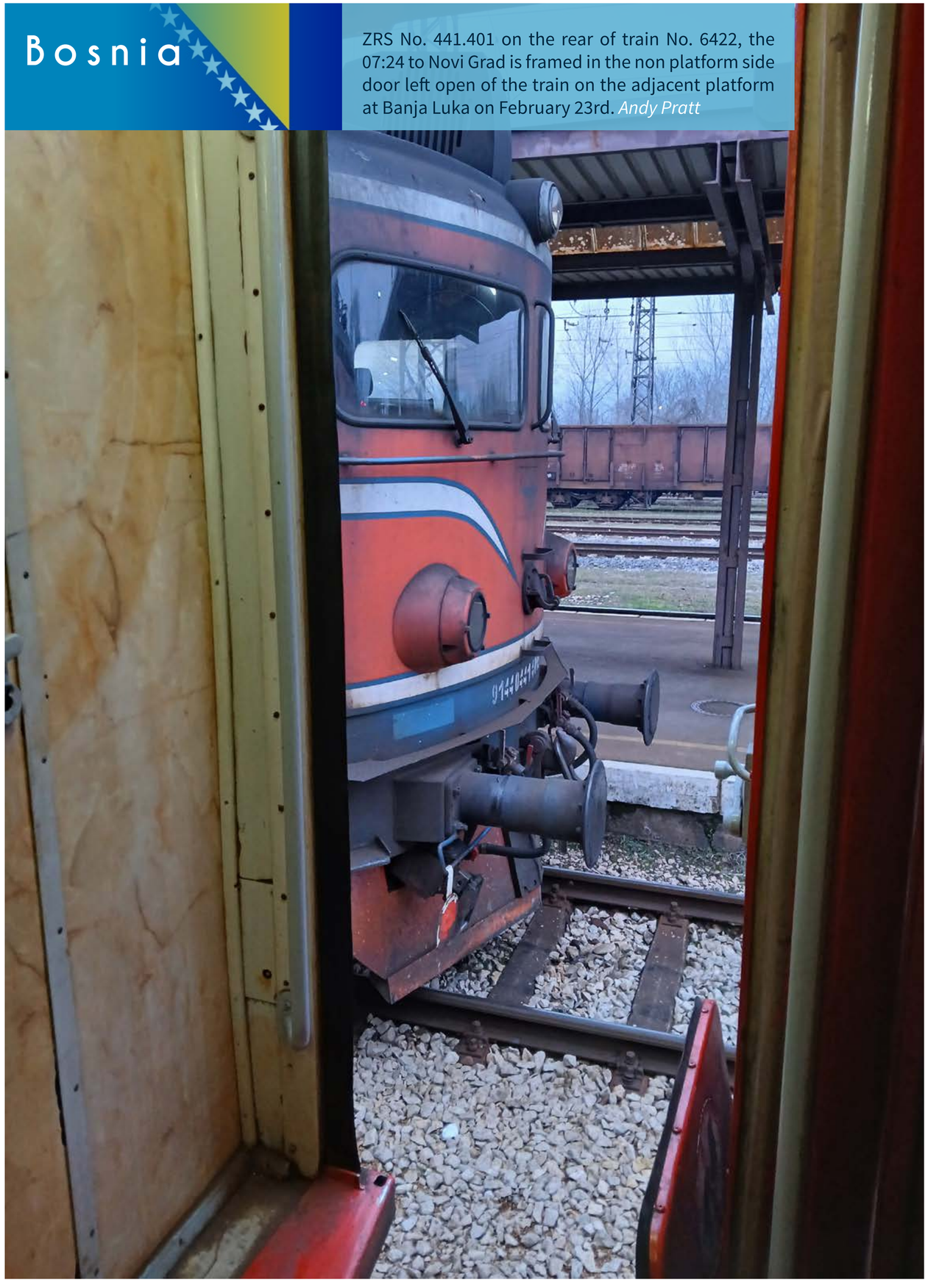
It should also be noted that Morocco is currently pursuing an ambitious plan to modernise and improve its infrastructure, with a particular focus on its rail network. In this context, the choice of CAF to contribute its experience and technological expertise to this initiative is a clear recognition of the company's strong track record in recent years.

Specifically, this award is part of the plan to renovate Morocco's rail network in preparation for the FIFA World Cup 2030, which the Kingdom of Morocco is co-hosting with Spain and Portugal. One of ONCF's objectives is to increase the country's rail coverage rate to 87% of the population by 2040 (currently at 51%) by connecting more than 40 Moroccan cities, compared to the 23 cities currently served by the country's rail network.



Bosnia

ZRS No. 441.401 on the rear of train No. 6422, the 07:24 to Novi Grad is framed in the non platform side door left open of the train on the adjacent platform at Banja Luka on February 23rd. *Andy Pratt*



U.K.

Alstom expands current Technical Support and Spares Supply contract with GTR to include an additional 30 trains

Alstom, global leader in smart and sustainable mobility, has signed a £24.5 million variation contract with passenger operator Govia Thameslink Railway (GTR) to help reactivate a fleet of 30 Class 379 trains.

The Electrostar trains will be used by the UK's largest railway franchise on their Great Northern network, connecting London King's Cross with Cambridge, Peterborough and King's Lynn. The fleet was acquired by Porterbrook from Akiem in March 2024.

As part of the variation contract under the current Technical Support and Spares Supply Agreement (TSSSA), Alstom has been providing both engineering and on-train technical support to ensure the first units could enter service as soon as possible. Their reactivation underscores the growing confidence in rail travel post-pandemic and the industry's focus on delivering reliable, passenger-focused services.

The Class 379 trains are also be the first GTR fleet to utilise Alstom's HealthHub web-based platform that analyses and displays all the data captured by the train. Every 30 seconds, a train will send data on more than 200 parameters – everything from the speed of the train to the temperature inside the carriages, to the GPS coordinates that give its location. This provides real-time monitoring that alerts the team if there is anything wrong with the train or supports to prevent incidents happening in the future.

"As part of our ongoing commitment to smart and sustainable rail solutions, Alstom is delighted to support the reactivation of the Class 379 fleet. This project exemplifies the importance of collaboration within the rail industry to enhance capacity and experience for the fare-paying passenger, while optimising the use of existing assets," said Peter Broadley, Commercial Director UK and Ireland at Alstom.

The first trains entered service on Monday February 10th (379 002 and 379 022) and will initially be used on a number of Great Northern services to and from Letchworth Garden City.

Several new roles are being supported by the variation contract, with work being carried out at existing Alstom sites, including its historic Crewe Works. Home to Alstom's UK Centre of Excellence for Bogie and Traction Motor Overhaul, the Crewe facility has overhauled over 20,000 bogies – which house the train's wheelsets – during the past ten years for the UK rail market. The site is now be responsible for overhauling the Class 379 bogies, alongside heating, ventilation and air conditioning (HVAC) units for the GTR trains.

"These extra trains we have started to bring into service are a real demonstration of GTR working with partners across the rail industry to give passengers extra services and better journeys," said Steve Lammin, Engineering Director at Govia Thameslink Railway.

The original TSSSA was signed between Alstom and GTR in October 2022 for around £256 million, with a duration that aligns with the length of the operator's National Rail Contract. This saw Alstom continue to support the Derby-built Class 377 and Class 387 Electrostar fleets in operation on Southern, Gatwick Express and Great Northern services into London's Victoria and King's Cross stations.

"I'm delighted that more of our Electrostars are entering service with GTR. When we acquired the fleet from Akiem last year we were confident that they would be perfectly suited to GTR's requirements, and it's excellent to see them back out on the network to serve passengers for many more years to come," said Stefan Rose, Chief Investment Officer at Porterbrook.

Alstom has been a long-term trusted partner to GTR, having already serviced the fleets for over 20 years with a 35-strong project team. Along with Alstom's unique material supply facility in Brighton, Alstom and GTR teams located across the operator's four major depots in Battersea, Brighton, Hornsey and Selhurst continue to work together to support a total fleet of 1,342 cars and ensure the highest standards of train availability, reliability and safety for some of the UK's busiest commuter routes.

The 30, four-car Class 379 electric multiple units (EMUs) – known as Electrostars – were built by Alstom at its Derby Litchurch Lane Works between 2010 and 2011, and originally served passengers between London Liverpool Street and Kings Lynn via Stansted Airport and Cambridge until 2022. Under GTR, the trains will now operate out of their Hornsey depot.

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 Perform maintenance services are tailored to customer needs and operational requirements, from technical support with spares to fully outsourced maintenance solutions. Alstom maintains over 35,500 vehicles worldwide and is a trusted partner for servicing both Alstom and non-Alstom rail assets.



Photo: Class 379 002 and 379 022 wait at Platform 4 at King's Cross before making the inaugural journey carrying Great Northern passengers to Letchworth Garden City. ©Govia Thameslink Railway

Saudi Arabia

Design meets technology – a turnkey tramway system to connect AlUla's core historical districts



When you combine historical heritage with cutting-edge low-carbon technology, the results are bound to be eye-catching. With the design phase completed for the AlUla turnkey tramway system, Mohamed Khalil, Alstom's Managing Director for the Middle East RHQ, shares insights into this exceptional project.

Has the final design of AlUla's tramway been confirmed yet?

The overall design of the Citadis B™ battery tram was already confirmed, but the choice of the materials, the colours, and the overall look and feel required approval, which has now been finalised. The tram features unique elements such as brass and wood-like panelling, and we are grateful for the strong collaboration with our customer to finalise these choices.
To ensure swift decision-making, we focused on delivering high-quality design proposals right from the start, which helped us align with the Royal Commission (RCU) for AlUla's expectations.

What was the inspiration behind the design for the AlUla tram?
We've worked closely with the Royal Commission for AlUla (RCU), to develop a stunning design, even though we really had to step out of our comfort zone to get there. Initially, RCU envisioned a design with elevated carriages, resembling a wagon more than a tram. Through collaboration between the customer, Madrasat Aldeera and Alstom, the design evolved into tramway system that would blend seamlessly with its surroundings. Our initial design proposals drew inspiration from AlUla's rock formations, with mirrored segments referencing the Maraya cultural venue. The colours of the final product reflect AlUla's natural environment, incorporating shades of green to represent the region's river valleys. The tram also features a lovely 'Belvedere' outdoor seating area at the back.

How does this iconic project align with Saudi Vision 2030?
AlUla is a breathtaking region relatively untouched by tourism, featuring desert oases, lush river valleys, and a unique concentration of UNESCO World Heritage sites. Under Saudi Arabia's Vision 2030, there is a strong focus on enhancing infrastructure and attracting visitors to the country. This is what prompted the discussions with RCU for this project, which will connect 17 strategically located stations and provide access to the region's historical sites.

In what way does AlUla showcase Alstom's competencies in turnkey tramway systems?
Alstom is providing the turnkey tramway system for AlUla. This includes the Citadis B battery tram, signalling, communication, depot equipment, power supply, and ten years of rolling stock maintenance. We are playing a pivotal role in this project, from system design to integration, installation, testing and commissioning. RCU is handling the track infrastructure and station construction as part of a separate lot.

How is this project an example for Alstom's expertise in sustainability, innovation and digital technology?
AlUla represents a major step forward in terms of sustainability. It will be the world's longest battery-powered, catenary-free tramway line. Adapting battery solutions to this arid climate was a real challenge, as extreme temperatures affect battery efficiency. In this respect, we are a pioneer, and our experience will help to secure the success of future projects. In terms of digital technology, the AlUla tram features HealthHub™, Alstom's condition-based and predictive maintenance solution, which has already been deployed on projects, such as the Dubai tram. Experience from several projects utilising HealthHub demonstrates its direct impact on costs by enhancing operational efficiency, extending maintenance intervals, and prolonging asset lifespan.

Given the large numbers of people expected to visit the area, why will reliability be key?
The reliability of our trains is non-negotiable, and we have robust processes in place to meet our targets. That said, the priorities of this project differ from those of a mass transit project. AlUla is much more than just a tramway. It is designed to offer a total experience, a true 'wow factor', transporting passengers back in time. Imagine stepping into a scene straight out of Lawrence of Arabia, where history meets cinematic grandeur, all set against the timeless beauty of the AlUla desert.

How do other cities and regions stand to benefit from this project?
Following our announcement, several cities in Saudi Arabia and beyond reached out to explore potential collaborations. Many had initially considered alternative solutions, as they were unfamiliar with rail systems. While I can't predict the outcome of these discussions, the fact that they were curious enough to contact us is already a significant achievement! The potential of tramways has already been demonstrated by other Alstom projects in the GCC region, such as the Lusail tram in Qatar. Spanning 24 km, it's the largest tramway system in the Gulf.

How does the future of Alstom in Saudi Arabia look now?
Saudi Arabia is undergoing a renaissance, with cities all over the country actively seeking innovative public transport solutions to support their ambitious urban development goals. At Alstom, we are proud to have established ourselves as trusted partner to the Saudi Authorities, contributing to the development of transportation systems that align with their vision for a connected and sustainable future.

What truly sets Alstom apart is our unwavering focus on collaboration, regardless of the size or complexity of the project. We have consistently worked closely with our customers to understand their unique challenges and provide tailored solutions, whether for large-scale infrastructure projects like the Riyadh Metro or specialised initiatives like the AlUla tramway. Our presence in Saudi Arabia speaks to the strength of these partnerships and our long-term commitment to supporting the Kingdom's vision. By leveraging our global expertise and cutting-edge technologies, we aim to continue playing a pivotal role in reshaping mobility across the region.

Ireland

Alstom completes one of Europe's largest Level 1 ETCS installation for Ireland

Alstom, global leader in smart and sustainable mobility, has successfully completed the installation of the European Train Control System (ETCS) Level 1 on the Dundalk to Greystones route, marking a significant milestone in Ireland's rail modernisation. Spanning approximately 120km, this system overlay integrates new safety features and enhanced interoperability across the entire Dublin Area Rapid Transit (DART) commuter network and beyond, from Dundalk in the north to Greystones in the south.

The project, which has supported more than 50 roles globally – from the design stage in early 2022 to site testing in late 2024 – represents one of Europe's largest Level 1 ETCS installations. Delivered in partnership with Iarnród Éireann (Irish Rail), this achievement reinforces Alstom's commitment to delivering reliable, efficient and safe rail solutions that are tailored to Ireland's needs.

"The completion of the Dundalk to Greystones ETCS Level 1 project is a testament to our technical expertise and commitment to enhancing rail safety and efficiency in Ireland. This landmark achievement lays the foundation for the future of Irish rail, ensuring safer, smarter and greener transport for passengers," said Piers Wood, Managing Director for Ireland at Alstom.

He added: "Our teams have worked tirelessly to deliver this milestone, and we are all proud to support Ireland's journey towards a modernised, sustainable rail network." Central to the railway's digital future, ETCS is a train control standard, based on in-cab equipment that is able to supervise train movements, including stopping the train. Information is received from balises in between the rails, of which more than 1,200 were installed as part of the work between Dundalk and Greystones.

Equipment – including 337 signals – was provided from Alstom's globally-proven trackside portfolio, with more than 450 Micro-Coder lineside electronic units (LEUs) overlayed on legacy equipment to provide enhanced safety and minimise disruption. All equipment was configured, installed and tested in one year between October 2024 and November 2024. An IÉ 22000 Class – 22001 – was fitted out as the trial train. Safety was paramount throughout and the project completed without a lost time incident (LTI).

This transformational project is currently undergoing safety approvals with Iarnród Éireann and the Commission for Railway Regulation. Once operational, it will support the introduction of Ireland's next-generation fleet for the DART+ network. Alstom has a ten-year framework agreement with Irish Rail for up to 750 new commuter rail cars as part of the DART+ programme, with firm orders for 37 five-car X'trapolis trains (including a 15-year support



services contract). Currently being manufactured at Alstom's Chorzów facility near Katowice in Poland, 31 of the ordered trains are battery electric multiple units (BEMUs) – a first for Ireland – while six are Electric Multiple Units (EMUs).

The first train from the fleet arrived in Dublin in November 2024, where it is undergoing testing before entering service next year. DART+ is the transformative programme that will ensure train travel is at the heart of Ireland's sustainable transport network. Funded under the National Development Plan by the National Transport Authority, DART+ is an investment that will double the capacity and treble the electrification of the Greater Dublin network – Ireland's most populous suburban area – facilitating sustainable mobility and development to enhance quality of life in the capital and its surrounding counties.

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Photo: IÉ 22000 Class. ©Irish Rail

France

SNCF Voyageurs Orders Wabtec's KinetiX Inspection Technologies

Wabtec Corporation announced on February 4th an agreement to provide KinetiX Inspection Technologies to Société Nationale des Chemins de Fer français (SNCF) Voyageurs. The order enables the French national railway company to enhance the safety, efficiency, and reliability of its rail network.

"SNCF Voyageurs is a forward-thinking industry leader that is transforming its transit system by empowering its operations team with the latest inspection technologies," said Roopa Shenoy, Senior Director, Product Manager for Wabtec's KinetiX. "As one of the busiest rail networks in Europe, SNCF relies on us to support its efficient, reliable, and safe service. The KinetiX systems are innovative and offer a real performance boost, which is the result of a strong collaborative working relationship between Wabtec and the Material Department of SNCF Voyageurs.'

The agreement expands the existing use of KinetiX Systems at 13 SNCF Technicentres across France, for axle maintenance and acoustic bearing monitoring, with the addition of TreadView, WheelView, and BrakeView inspection systems. These wayside solutions provide real-time, automated contactless inspection monitoring of the SNCF Voyageurs fleet.

Wabtec will support the implementation with a dedicated team that guides SNCF Voyageurs from installation to ongoing maintenance of the technology suite.

The Wabtec KinetiX Inspection Technologies is a comprehensive portfolio of solutions that redefine the inspection and monitoring of rail assets. The wayside systems evaluate the condition of key railcar components, including wheels, brakes, bearings, air hoses, pantographs, and cross keys, delivering a detailed overview of the train's overall health.

Integrating machine vision, laser scanning, remote sensing with acoustic and thermal technology, load monitoring, and AI-driven analytics, the technology sets the standard for automating inspection processes, enhancing asset availability and life while significantly reducing operational costs. KinetiX's meticulous inspection analysis can be undertaken while the train operates and moves at line speeds of up to 120 km/h

Italy

FS Italiane and ITA Airways: train + plane ticket to travel between Italy and Spain

Iryo, Trenitalia (FS Group) subsidiary operating in the high-speed sector in Spain, and ITA Airways, the main Italian airline, have signed an agreement to offer integrated 'train + plane' travel between Spain and Italy.

Thanks to this partnership, passengers will have access to a new series of combined trips, with a single booking: ITA Airways customers may easily reach destinations such as Cordoba, Valencia, Alicante, Seville and Malaga, currently not covered directly by ITA Airways flights, with Frecciarossa trains, while iryo passengers can reach over 20 airports in Italy, including Rome, Milan, Venice, Florence and Naples.

'For the FS Group, Europe is not just a market: it represents a fundamental strategic opportunity to look at an increasingly integrated, intermodal and sustainable future mobility. Our vision is to promote seamless mobility between different European Countries, with trains connecting major cities and metros. In this scenario, intermodality becomes the beating heart of a European transport system that can reduce Co2 emissions and improve people's quality of life. For this reason, the 2025-2029 Strategic Plan aims to enhance international business, for which a 40% increase in passenger volume is estimated. The means to achieve the targets we have set is FS International, a company encompassing all segments not directly related to Italy, which already comprises 12K employees and a EUR 3 billion turnover' said Stefano Antonio Donnarumma, CEO and General Manager of the FS Group.

'This new agreement with iryo, a company of the FS Group, represents an important extension of the offer for the Spanish market and reinforces ITA Airways' commitment to intermodal travel, highlighting the values and ambitions that drive our strategy: sustainability, innovation and customer focus. Our goal is to enhance connectivity between Spain and Italy, providing connections from the Rome Fiumicino hub, via Madrid and Barcelona, to seven destinations in Spain. We are happy to cooperate with an innovative operator like iryo, and with a historical partner like Ferrovie dello Stato' stated Joerg Eberhart, Managing Director and General Manager of ITA Airways.

With the combined ticket, passengers of ITA Airways and iryo will benefit from the offers and services of both companies. ITA Airways Customer Information Assistance and iryo staff, where present at the stations, will be ready to assist them in case of need. From the Madrid and Barcelona airports, it will be possible to reach many Spanish destinations by high-speed train. The local rail connection is already included in the booking, so no additional transfer fee is required.

'Train+plane' tickets can be purchased directly on the ITA Airways website ita-airways.com, at authorised travel agencies, ITA Airways ticket offices and the company's Customer Information Assistance Office.

Before boarding iryo trains, ITA Airways customers can request their tickets to be emailed to them at the time of booking, or they can obtain their iryo tickets directly by visiting www.iryo.eu.

iryo is the railway operator Intermodalidad de Levante S.A. (ILSA) trademark. It is the first private Spanish high-speed operator participated by Trenitalia, AirNostrum and Globalvia. On November 25th 2022, the first Frecciarossa train departed between Madrid and Barcelona, and then new destinations were added, including Valencia, Cuenca, Seville, Malaga, Cordoba, Alicante and Albacete. Since its launch, iryo has transported over 13 million passengers.

In the current winter season, ITA Airways will fly to 55 destinations, with 15 intercontinental, 24 international and 16 domestic flights. In the Spanish market, ITA Airways currently offers 42 weekly frequencies (84 flights) between Spain and Italy, with direct connections from Madrid (21 frequencies) and Barcelona (21 frequencies) to the Rome Fiumicino airport. From here, passengers can enjoy convenient connections to the airline's international and intercontinental destinations, including routes to South America, such as São Paulo, Buenos Aires and Rio de Janeiro, which are already part of the airline's network.

Norway

Railcare receives order on a Railvac machine

Railcare has won an order from the Norwegian Baneservice for a Railvac maintenance machine, with a total value of SEK 30 million. Delivery is expected to take place at the start of 2026.

"Norwegian railways also have extensive maintenance needs, and we are naturally delighted that Baneservice has chosen to invest in one of our machines," commented Mattias Remahl, CEO of Railcare.

The new diesel-powered machine will be built in the Skelleftehamn workshop during 2025 and early 2026. Delivery is scheduled for the first quarter of 2026.

"Over the past year, we have sharpened our focus on external sales of proprietary machines. Accordingly, we are pleased that our increased efforts have won us this order," commented Jonny Granlund, Business Area Manager, Machines and Technology.

Railvac is a diesel-operated vacuum machine used for applications such as cable management and reballasting. The machine has been developed to operate in areas that regular excavators cannot reach, or where damage could be caused to the infrastructure assets.

Baneservice is Norway's leading railway contractor, providing engineering and contracting services for the Norwegian railway infrastructure. Baneservice already has three Railvac in its machine fleet.



Italy

Modern and comfortable Stadler Trams are running in Milan

Comfortable, quiet and barrier-free new 74 Stadler Trams are now running in Milan. After the official presentation to the press of the Stadler TRAMLINK on February 19th, Azienda Transporti Milanesi S.p.A. (ATM) has started regular services. For Milan the new Stadler trams represent a milestone of innovation in public transport. Stadler supplies 74 trams that are replacing older vehicles from now onward over the next two years. The Stadler TRAMLINK is modernising and improving Milan's urban mobility by making it increasingly sustainable and efficient.

"We are particularly proud to supply Milan's new trams and to be able to offer its citizens high standards of travel comfort, safety and accessibility," said Iñigo Parra, CEO and President of Stadler Valencia. "The TRAMLINK incorporates Stadler's many years of experience in passenger vehicles and is a benchmark in terms of performance, reliability, safety, accessibility, comfort and state-of-the-art technology."

Milan: 160 kilometres tram lines

"This milestone marks a further step in the innovation path of our public transport system," said Arrigo Giana, CEO of ATM. "It is an investment that confirms Milan as the tram capital of Italy, which today has a tram network of almost 160 km and 17 lines. The new vehicles represent the future, but they will continue to stand alongside the icon of the historic trams among the symbols of Italy in the world".

Quiet, safe and barrier-free

These Stadler TRAMLINKs are characterised by the iconic Milan yellow livery, are 25 metres long and consist of three modules. They are the first bi-directional trams of Atm and have an attractive open interior provided with 66 vandal-resistant seats and specific areas for wheelchair users. They are fully accessible.

The barrier-free low floor interior and three doors per side allow easy boarding and alighting. In addition, the doors are equipped with ramps to facilitate the access of people with reduced mobility. The innovative pivoting bogies enable trams to run smoothly in the very tight radius curves characteristic of the city centre. This significantly reduces noise to the benefit of passengers and residents.

Particular attention has been paid at the new Stadler tram to the safety of passengers, drivers, and pedestrians. Large windows in the front allow an extra-wide field of vision for the driver. No blind spot cameras guarantee the security throughout the whole vehicle.



The new hi-tech trams are fully air-conditioned and equipped with USB sockets for charging smartphones. They are also fitted with a modern passenger information system and large monitors indicating stops and routes, as well as general information. The excellent dynamics of the TRAMLINK, as well as its high levels of safety and comfort, will enhance passengers' travel experience and modernize public transport in the Lombardy capital.

Spain

The Alstom site in Trapaga is expanding with new workshops and will extend its activities with three new projects for Germany, Sweden and the UK



Trápaga (Bizkaia) industrial centre has strengthened its position as a reference component site within the Alstom Group as the site has been selected to deliver three new projects for Germany, Sweden and the United Kingdom. These projects involve manufacturing traction systems and converters for 158 trains: 61 commuter trains for Deutsche Bahn (Germany), 39 medium-distance trains for Västtrafik (Sweden), and 85 trains for London Underground's Central line (United Kingdom).

At the same time, the Alstom Trapaga industrial site is undergoing expansion and diversification, recently opening new workshops for railway equipment maintenance. In December 2024, the factory expanded its activities by incorporating new equipment and machinery for the repair and overhaul of traction converters, power modules, and motor fans.

"These new projects, planned for the next few years, reinforce the workload and strengthen our position within the Group. But they are, above all, the result of the excellent work of the entire Alstom Trapaga team, which has made our levels of quality and competitiveness a global benchmark. We are also proud that the site can expand with new workshops to support our growth," says Diego García, Alstom Trapaga Manging Director.

Alstom's Bizkaia factory, covering 45,000 m^2, supplies propulsion and electric traction systems for any type of railway application in all power ranges, including locomotives, high-speed, long-distance, regional, and commuter trains, as well as metros, monorails, trams. The facility employs over 200 workers, with nearly all production destined for export. Recent projects include traction systems for Iryo's and Trenitalia's high-speed trains, French regional trains, German DB's commuter trains, and trams in Brussels, Zurich, Graz, and Berlin.
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From the Archives

Cuba

27½ inch gauge Baldwin of 1891 No. 1166 brews up at Simon Bolivar sugar mill on February 18th 1985.
John Sloane

From the Archives

Cuba

Russian built Te114K type No. 52605 passes the road crossing at Ciro Redondo on February 19th 1985.
John Sloane

From the Archives

India

YP No. 2307 departs from the metre gauge side of Delhi Junction station with the 17:10 'Haryana Express' to Hisar Junction on March 18th.
John Sloane

From the Archives

Italy

An E656 Bo-Bo-Bo passes through the spectacularly situated station at Framura with an express from Rome to Turin on August 19th 1992. *John Sloane*



From the Archives

Rhodesia

Class 16A Garratt No. 628 heads a freight at Bulawayo Yard on October 27th 1973.
John Sloane



From the Archives

Spain

FEVE Ferrocarriles Vascos section Bo-Bo electric No. 17 'Udalaitz' (Asea 1950) awaits it's next duty at San Sebastian Amara station on April 12th 1977. *John Sloane*

