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Submissions & Contributions

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

Photographic Contributions

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

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

Welcome to Issue 188Xtra

Warmer weather, less restrictions on travel and plenty of sunshine equals lots of great pictures! Many thanks to you all this month for another great selection.

In the news, ÖBB has entered the planning stage for the expansion of the Phyrn line, a railway connection between Linz and Selzthal. The railway will be expanded to two lines at various sections, and the financial resources for the works have now been included into the 2022 master plan. The 104-kilometre-long Phyrn line effectively links the industrial area's in Upper Austria and Styria. It is also a gateway to the Rhine-Danube corridor. With the expansion of the line, ÖBB wants to facilitate greater passenger numbers and a bigger freight volumes. Travel time from Linz to Selzthal should be reduced from 1 hour 30 mins to 1 hour and 15 mins. Some 20 kilometres of the line has already been expanded. Over the next five years, the Kirchdorf an der Krems – Micheldorf section will gain an additional track. The other two parts that will be expanded are the Nettingsdorf – Rohr-Bad Hall section and the Hinterstoder – Pießling-Vorderstoder section. The renovation of the 4.7-kilometre Bosruck tunnel should also contribute to the improved service along the line. ÖBB has earmarked 148 million euros for investment in the project, which also includes the modernisation of stations along the route. The upgrade efforts are already underway at Micheldorf station and Kremsmünster station.

Also in the news this month, SNCF Voyageurs launched its first Ouigo Train Classique low-cost passenger services on April 11th, operating on conventional lines to complement the Ouigo-branded low-cost high speed trains launched in 2013. The national operator is aiming to attract passengers who currently travel by car and coach, with the aim of doubling ridership on the network by 2030. There are initially two Ouigo Train Classique routes serving 14 stations, including a number in the area around Paris such as Massy-Palaiseau, Juvisy, Melun and Villeneuve-Saint-Georges. There is one train each way per day on the Paris Bercy – Lyon Perrache route with a journey time between 4 h 45 min and 5 h 15 min, and two trains a day between Paris Austerlitz and Nantes, taking two different routes with journey times of 3 h 30 min and 4 h 15 min.

Alain Krakovitch, SNCF Voyageurs' Director of Long Distance Services, said the number of trains would be increased in May when further paths become available. There will be three trains per day each way between Paris and Nantes and two per day on the Paris – Lyon route. Ouigo Train Classique has been launched as a two-year experiment, and if it proves successful the concept will be expanded to other routes 'which have many cars on the roads', he said. Tickets are sold at fixed prices between €10 and €30, rather than the yield management pricing used on Ouigo Grande Vitesse, with child tickets priced at €5. Tickets are only sold online, and are available from 45 days before the day of travel. Around 60 000 tickets had been sold by the launch day, which Krakovitch said was higher than expected, with 20% of tickets being for a Paris region station, which was 'a surprise'. The trains are formed of eight coaches, operated with a dedicated fleet of nine Alsthom-built Class BB22200 dual-system electric locomotives and 36 Corail coaches displaced from former TET inter-city services, which have refurbished seats. The livery with blue logos on pink is the inverse of the livery used on the Ouigo high speed trains. Each service provides spaces for 16 bicycles, and a trolley service selling snacks is planned. Ouigo Train Classique is operated by a newly formed SNCF Voyageurs subsidiary known as Oslo, which has its own operating and safety licences. It employs 78 people, including 25 drivers, 22 train managers and 21 'comfort and service' staff. Maintenance is undertaken at SNCF's Masséna and Villeneuve-Prairie workshops. The launch event attracted a protest by railway workers unhappy at the creation of a new subsidiary. Krakovitch said it was not social dumping, as Oslo staff would be paid between 7% and 20% more than those in equivalent roles at SNCF Voyageurs.

As always a massive thanks for all the excellent photos, please do keep sending them in, until next month....

David

This Page

Florida East Coast Nos. 812 and 802 pass Saint Augustine whilst hauling FEC train No. 105 from Jacksonville to Miami on March 1st. *Laurence Sly*

Front Cover

Stadler EURO 9000 (2019 301-1) passes the town of Putten heading to get certification to run on the Dutch rail network. *Andre Pronk*

HSB 2-6-2T No. 99.6001 runs alongside the Selke River in Straßberg (Harz) on April 1st with train No. 8966 14:13 Gernrode to Hasselfelde. The Selke River gives it's name to the railway line, Selketalbahn literally translating as Selke Valley Railway. *Andy Pratt*

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With Thanks

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

These issues wouldn't be possible without: Ray Anslow, Brian Battersby, Mark Bearton, Mark Bennett, Tim Blazey, Rob Boyce, Keith Chapman, Julian Churchill, Nick Clemson, Derek Elston, Mark Enderby, Tim Farmer, Dave Felton, FrontCompVids, Colin Gildersleve, Paul Godding, Richard Hargreaves, Jim Haywood, Keith Hookham, Colin Irwin, John Johnson, Anton Kendall, Mathijs Kok, Jyrki Lastunen, Ken Livermore, Michael Lynam, Peter Marsden, Phil Martin, Thomas Niederl, Peter Norrell, Chris Perkins, Mark Pichowicz, David Pollock, Andy Pratt, Andre Pronk, Paul Quinlan, Railwaymedia, Alan Rigby, Bryan Roberts, Neil Scarlett, John Sloane, Stephen Simpson, Laurence Sly, Stewart Smith, Steamsounds, Steve Stepney, Mark Torkington, Gerard van Vliet and Erik de Zeeuw.

Australia

On a warm autumn day, Commonwealth Bulk Handling Nos. CBH009 and CBH005 take train No. 5K63 consisting of empty grain hoppers from the Kwinana Grain Terminal to a country location for another load. *Colin Gildersleve*

Transperth's 3-car 'B' set No. 5088 takes the 11:10 service from Fremantle to Perth and is seen crossing the Swan River at East Fremantle. *Colin Gildersleve*

Qube's GML10 is seen at Robb's Jetty with train No. 4142 containerised grain for export from Forrestfield Grain Terminal to Fremantle Container Port.
Colin Gildersleve

Australia

Alstom wins largest light rail contract in Australia to deliver Next Generation Trams for Melbourne, Victoria

Framework agreement with Department of Transport Victoria worth approximately €700 million to provide 100 low-floor next generation trams

Flexity 2 light rail vehicle adapted to meet customer's specific requirements for the Melbourne Tram Network

Alstom, global leader in smart and sustainable mobility, has signed a framework contract with Department of Transport Victoria, Australia, for the provision of 100 Flexity low-floor Next Generation Trams (NGTs) for the largest urban tram network in the world. Valued at approximately €700 million, the contract includes supply of rolling stock and 15-year maintenance making this the biggest tram contract in Australia and in the Southern hemisphere.

Delivery of the Flexity 2 light rail vehicles is scheduled to begin in 2025. Introduction of the low-floor NGT fleet will enable gradual retirement of further high-floor trams from the Melbourne network, ensuring compliance with disability standards for accessible transport (DSAPT) requirements and provide a modern, inclusive, safe and reliable transport network for all passengers. The new fleet will further support the increase in network capacity requirements to meet the projected population growth.

"We are very excited to be awarded this significant contract for the Melbourne Tram Network. This is a strong validation of our commitment to deliver mobility solutions that meet the specific requirements of our customers. The contract awarded by the Department of Transport in Victoria is a strong recognition of our strength and track record in delivering our innovative solutions locally. The project will provide a solution to address the balance in passenger demand growth and the need for sustainable mobility outcomes," says Ling Fang, President of Asia-Pacific Region, Alstom.

"We are delighted to continue to support and be part of the Victorian Government's investment plan to provide safe, efficient and modern mobility solutions to meet the future growth of the State. Trams are a crucial transport mode in Melbourne. The local delivery of this project will provide an all-inclusive experience for commuters while securing the manufacturing future and supply chains of one of Australia's longest-standing rolling stock manufacturing hubs at Dandenong for the next decade, confirming Victoria as the leading railway manufacturing State in Australia," says Mark Coxon, Managing Director of Alstom Australia and New Zealand.

Demonstrating its strong commitment to localisation, the contract includes 65% local content with the NGTs being manufactured at Alstom's Dandenong facility in Victoria. Additionally the maintenance contract includes 85% local content. The contract will provide long-term stability to the local railway industry and supply chains in Victoria.

The award-winning designs of Flexity trams are matched by innovative technology and environmental excellence. Flexity trams were the first in the industry to combine 100 per cent low-floor technology with conventional bogies. The modular concept paired with proven subsystems make Flexity trams a perfect fit for various customer needs, from tropical to winter climates as well as for smaller to higher capacities. With a track record of over 30 years, more than 8,000 Alstom trams have been ordered or are already in successful revenue service in 70 cities around the globe.

In this contract, the Flexity vehicle has been adapted to meet the Melbourne Tram Network's specifications allowing for seamless integration into the vast network without the need for expensive infrastructure, traction power upgrades or new signalling. The trams will also integrate an onboard energy storage system (OESS). The trams combine a unique identity well suited to the operability needs and user experience, built on the extensive Flexity operational history in Melbourne. Designed with passenger safety and comfort in mind, each of the new trams has multi-purpose areas that offer ample space for strollers, bicycles, and wheelchairs.

The fully air-conditioned vehicles with high energy efficiency and noise-optimised design keeps the interior quiet while in operation.

This order adds to Alstom's already significant rolling stock fleet in Victoria which includes 141 Flexity and Citadis trams, 106 X'trapolis suburban trains and 95 Vlocity regional trains with more to be delivered.

Photo: The award-winning designs of Flexity trams are matched by innovative technology and environmental excellence. © Alstom

Austria

On March 12th, the “erste österreichische Straßenbahn - und Eisenbahnklub” (kurz 1.öSEK)* based in Strasshof near Vienna celebrated their 50th anniversary. *First Austrian Tramway and Railway Club. Their first activity was a special run with a heritage Class 5041 DMU built in 1972. Fifty years later they ran nearly the same trip as far as it was possible after lots of line closures with the little newer Class 5042.14. The train is seen here as No. SR14125 in Pillichsdorf. The traffic on the Gänserndorf - Groß Schweinbarth - Obersdorf branch was withdrawn in December 2019 and the line is now available for special trains until further notice. *Thomas Niederl*

On March 12th, the Class 5042.14 return run (train No. SR14126) is here passing the town of Raggendorf. *Thomas Niederl*

Lineas Class 186.181 leads container train, No. TEC40679 through St. Valentin towards Wien on March 24th.
Thomas Niederl

Austria

Class 1144.207 and 1144.278 with the diverted paper train No. GAG48930 from Gratwein in Styria to Germany passes Ernsthofen. The route via Spital am Pyhrn is closed for engineering work for several months and freight trains are diverted via the Gesäuse line. Normally this train is hauled by a pair of German Class 185s. Due to the longer transit time via this alternative route, the locos are changed at Wels. *Thomas Niederl*

On the line to Grein Bad Kreuzen, only one train per day is loco hauled. Here train No. REX6381 passes the halt of Aisthofen on March 28th. *Thomas Niederl*

Austria

First RCG train to and from Spain

ÖBB Rail Cargo Group (RCG), Hödlmayr International and SNCF transport vehicles from Barcelona to Austria for the first time.

In March 2022, RCG succeeded in organising the first test train loaded with new vehicles for Hödlmayr International (a vehicle logistics specialist) from Barcelona in Spain to St. Valentin/Schwertberg in Upper Austria. With this feat, RCG, together with its partners, is demonstrating the strong capabilities of its railway logistics solutions.

From the first train to regular operation
The second test train will be announced in the next few weeks, allowing planning for regular operation to finally begin. The current plan is to operate one round trip between Austria and Spain every week.

However, it is envisaged that this will increase to three or four round trips per week in the future. In terms of organisation, the Rail Cargo Group is in charge of operating the whole route for Hödlmayr International.

For the section between Saarbrücken in Germany and Barcelona (and vice versa), the French railway company SNCF will take over as the carrier, together with its subsidiary Captrain España.

e-frachtbrief@ saves almost 35 tonnes of paper

In 2008, the ÖBB Rail Cargo Group (RCG) stopped using conventional paper consignment notes in many of its national and bilateral communications.

Wherever possible, RCG uses the e-frachtbrief@ instead of paper. There are some exceptions in situations involving things such as customs, hazardous goods and accompanying documents. The digital option doesn't just reduce paper waste. It also greatly reduces costs and bureaucracy.

As a result, the RCG e-services simplify logistics processes by making them paperless at every step. On top of that, customers and partners receive real-time information about the status of consignments. And last, but certainly not least, all of this benefits the environment.

In 2021, the e-frachtbrief@ service caused 34.9 tonnes of paper to be saved.

- This also meant that around 2 million litres of water were saved – roughly enough to fill a 50-metre-long, 20-metre-wide swimming pool with a depth of 2 metres.

- In addition, RCG saved around 187 KWh of electricity, equivalent to 187 washing machine cycles,

- and 105 tonnes of wood, equivalent to 156 spruce trees – enough to make up a forest the size of a football pitch.

Six times a week between Linz and Antwerp

The demand for sustainable rail transports between Austria and Belgium is steadily on the rise. For this reason, ÖBB Rail Cargo Group (RCG) is now increasing the frequency of the TransFER Linz–Antwerp to six round trips per week.

Due to the ever-increasing demand for transports between Austria and the Belgian port areas, another round trip was added to the five weekly round trips of the TransFER Linz–Antwerp. This means that as of now, RCG transports wagonloads including dangerous goods transports (RID) on this route almost every day with six weekly round trips – non-stop with only one day's transit time.

End-to-end logistics from a single source
Customers benefit from a comprehensive end-to-end offer with additional forwarding services. In addition to the transport service, RCG offers transshipment options, warehouse logistics, damaged vehicle and emergency management and takes care of first and last mile. By providing up-to-date transport information, customers can easily check the status of their shipment.

On the road to success for seven years
With the TransFER Linz–Antwerp, RCG has successfully facilitated fast and reliable transport sustainably by rail for seven years, thereby connecting economic centres in Central and South-Eastern Europe. Further advantages are the connection possibility with the northern and southern European ports and the connection to sea-going shipping for the further transport of goods.

Austria

ÖBB order 41 new double-deck multiple units from Stadler

Österreichische Bundesbahnen (Austrian Federal railways – ÖBB) has ordered 41 new KISS-type double- decker multiple units from Stadler. The order is being placed as part of the framework agreement signed in 2022 for up to 186 double-decker multiple units which recently has been cleared in the last instance by the higher administrative court in Vienna, thus ending legal proceedings.

The order value in the first request amounts to around 600 million euros. The trains are intended for use in the eastern region from 2026.

The renewal of the ÖBB local and regional transport fleet continues. ÖBB is ordering 41 new KISS-type double- decker multiple units from Stadler for the eastern region and thus guaranteeing even greater passenger capacity and comfort in the future. The framework agreement with Stadler allows ordering of up to 186 trains, for a total value of up to three billion euros. In the current request, ÖBB is ordering 20 six-car and 21 four-car vehicles, with an order value of 600 million euros. The first vehicles are expected to enter passenger operation on routes in the eastern region at the start of 2026.

“With these 41 new Cityjet double-decker trains we continue to modernise our local transport fleet in Vienna, Lower Austria and Burgenland. From 2026 on, we offer even more capacity and comfort to our passengers, making the switch from individual transport by car to rail transport more attractive to commuters.This is good for our climate and both comfortable and practical for our ÖBB-travellers,” ÖBB CEO Andreas Matthä says.

“We are proud to deliver the next generation of double-decker multiple units to Austria. In many countries, our KISS is already successfully on the move. Thanks to its high level of innovation, the KISS is a key solution for the environmentally friendly rail transport of tomorrow. We thank ÖBB for this order and look forward to a long- term, successful collaboration,” says Peter Spuhler, Administrative Board President and Group CEO a.i. at Stadler.

For the rail transport of tomorrow

The new double-decker electric multiple unit is designed for a top speed of 160 km/h; it offers 610 seats in the six-car or 380 seats in the four-car configuration. With improved acceleration behaviour and consequently shorter journey times, it is ideally suited to busy routes.

The design of the new train particularly takes into account the wishes and requirements of passengers for everyday work and leisure trips. Every individual carriage has a low-floor entrance as well as an optimised multi-purpose area with more space and accessibility for passengers with bicycles, pushchairs or luggage.

This generously designed multi-purpose area is connected directly to the entrance/exit area and facilitates quick passenger changes.

In the new KISS, passengers will also find a modern interior design, comfortable seats, climate control and sockets in every row of seats. Moreover, the new trains are fitted with a modern passenger information system (monitors with real-time information) as well as video surveillance. For passengers with limited mobility, the middle carriage of the composition also has a number wheelchair spaces with new, height-adjustable side-wall tables.

Photo: Cityjet KISS ©Stadler/Österreichische Bundesbahnen

Belgium

On March 18th, LINEAS Class 186.450 is seen in Sint-Martens-Voeren with BASF train No. 47563 from Antwerp North to Ludwigshafen BASF Ubf (Germany).
Erik de Zeeuw

RTB CARGO No. PB14/Class 266.065 and a rake of tankers are on their way from Aachen (D) to Antwerpen Groenland as they pass Sint-Martens-Voeren on March 18th. *Erik de Zeeuw*

DB Cargo Class 186.338 is pictured with a wagonload whilst crossing the river Geul on the Viaduct of Moresnet (length 1200mtr, height 52mtr) with a service from Aachen West (D) to Zeebrugge (B) near Plombières on March 18th. *Erik de Zeeuw*

On March 18th, CROSSRAIL Class 186.292 approaches Sint-Martens-Voeren with Frenkendorf shuttle No. 47028 from Switzerland to the ports of Antwerp.
Erik de Zeeuw

Czech Republic

ČD Cargo becomes a carrier in Croatia

On April 4th, 2022, the company ČD Cargo ADRIA received all necessary authorizations to operate rail freight operation in Croatia.

This 100% subsidiary of ČD Cargo started its business already in last October. We expect starting of transportation on our own license in a matter of weeks. We have prepared projects for transportation of containers, cereals and other goods.

ČD Cargo has already leased locomotives capable of operation in Croatia and for the future it is preparing so called Croatianisation and also Slovenianisation of its own interoperable locomotives that could be supplemented by several locomotives of older series.

Everything will depend on current operational and commercial needs.

Photo: © CD Cargo

ČD Cargo is back in profit, expanding its territorial scope

ČD Cargo, as, the largest domestic railway freight carrier and the most important subsidiary of České dráhy, as, realized a profit before tax in accordance with International Financial Reporting Standards (IFRS) of CZK 290 million in 2021, which is a year-on-year improvement of CZK 674 million.

The freight segment, consisting of the consolidated results of ČD Cargo and its subsidiaries, contributed to the consolidated result of the ČD Group with a net profit after tax of CZK 289 million. The carrier was able to return to profit despite the ongoing COVID-19 pandemic.

In 2021, the ČD Cargo Group transported a total of 62.8 million tonnes of goods on its own licenses, ie 1.8 million tonnes more year-on-year. Not only did the performance on the domestic railway transport market increase, but also the expansion abroad continued. ČD Cargo is now active in Austria, Germany, Poland, Slovakia and Hungary. A subsidiary, CD Cargo Adria, was also newly established in Croatia.

“The year 2021 was marked by growth in transport volumes and sales in most of the key commodities, with the exception of automotive and combined transport, which, however, were hampered by a number of external influences. The growing performance realized under the ČD Cargo brand abroad, which significantly contributed to the achieved results, can be assessed very positively. Expansion abroad is an important pillar of our strategy. Today, ČD Cargo must be seen as a Group operating in the fully liberalized European market for rail freight transport and logistics services. We already realize over 62% of our services in international transport and we still have growth potential here. Related to this is the second strategic goal, which is the renewal and modernization of the fleet of lorries and locomotives, without which we cannot succeed in the European transport market. Stabilization and rationalization measures on the one hand.” states Tomáš Tóth, Chairman of the Board of Directors of ČD Cargo, as

In 2021, ČD Cargo had to deal with operational complications caused not only by extensive closure activities and with an unprecedented growing demand for lignite transportation.

“We had to respond flexibly to the changing requirements of our customers and strive to increase the quality of services provided. This is the only key to future success in the transport market. Increased societal demand for lignite shipments to heating plants and power plants has, of course, given high priority due to the dramatic rise in energy prices. Thanks to the joint efforts of our employees and customers, we have been able to gradually increase our transport capacity and handle the situation with honour. It was not an easy year, but ČD Cargo survived. This year, however, we face a number of other difficult challenges. The geopolitical situation in the world escalated by the war in Ukraine is very unstable, which also has an impact on the diversion of some goods flows. At the same time, we have to deal with an unprecedented rise in energy, fuel and other input prices, including interest rates, which is very costly for us.
However, even in these uncertain times, we must remain a strong and stable rail carrier and at the same time a greener alternative to trucking.” Adds the Chairman of the Board of Directors.

Raildox Class 185.695 works a Karlsruhe Gbf to Bremen-Inlandshafen service with a rake of tankers past Kaarst on March 8th. *Erik de Zeeuw*

Germany

Alstom wins contract to deliver 29 double-deck Coradia Stream trains to DB Regio

Twenty-nine modern Coradia Stream High Capacity trains will increase transport capacity and reduce travel times for passengers in Germany's Hesse region

Alstom, leader in smart and sustainable mobility, has signed a contract with Germany's DB Regio AG (DB) for 29 Coradia Stream High-Capacity electric double-deck multiple units[1]. The trains will be used on the RE50 (Frankfurt - Fulda - Bebra) and RB51 (Frankfurt - Wächtersbach) lines starting December 2025.

"Following the contract awarded by LNVG for the Bremen/Lower Saxony express interchange in 2021 and the contract with DB Regio for the Main-Weser subnetwork at the end of last year, we are extremely pleased that we have also convinced DB with our offer of Coradia Stream HC trains for the RE50 and RB51 lines," said Müslüm Yakisan, President of Alstom Region DACH. "This shows once again that our state-of-the-art high-capacity concept perfectly meets today's needs for regional mobility in Germany."

The Coradia Stream HC offers a high level of passenger comfort. It features four-seat groups with large tables in first class and small wall-mounted tables in second class. Power sockets at seats and free WLAN are also standard in the new trains. The Coradia Stream High-Capacity is designed to provide barrier-free access to all doors at most stations. This is possible thanks to the uniform boarding height of 600 millimetres. The train also offers 30 bicycle parking spaces, an asset for leisure riders and bicycle commuters.

"The new electric double-deck multiple-unit trains accelerate faster. This allows for a tighter interval, reducing travel time on the RE50 between Frankfurt and Fulda by an average of eight minutes. In the future, the RE50 will even run to Bebra every hour during rush hour. With enlarged service and a high level of travel comfort, these new vehicles will make local transport in Kinzigtal much more attractive for passengers," says Maik Dreser, Chairman of the Regional Management DB Regio Mitte.

"These new trains will enable us to offer over 1,080 seats between Frankfurt and Eastern Hesse at peak times, and 840 seats during normal hours compared to the previous 720," said Rhein-Main-Verkehrsverbund Managing Director Prof. Knut Ringat. "In addition, the trains offer more comfort with power sockets at the seat and tables, as well as free WLAN. With the combination of more space, more comfort, and faster journeys, our passengers benefit quite considerably from the new Alstom vehicles. The trains are expected to enter service in Kinzigtal from December 2025 and between Frankfurt, Central Hesse and Kassel even a year earlier."

DB Regio will continue to operate the RE50 and RB51 lines beyond the timetable change planned for December 14th, 2025, following a call for tenders by Rhein-Main-Verkehrsverbund and Nordhessischer Verkehrsverbund. Alstom will produce the trains for the Kinzig Valley Railway in Salzgitter.

The project office with project and contract management, validation and commissioning, documentation and training will also be in Germany.

Alstom's Coradia range meets today's demands for regional and intercity transport featuring trains in operation demonstrated for over thirty years. To date, Alstom has sold more than 3,300 Coradia trains worldwide. Several European countries, including Denmark, France, Germany, the Netherlands and Italy, already benefit from their performance and comfort. The Coradia range offers electrical and diesel traction, along with other innovative emission-free solutions, such as battery and hydrogen-powered traction, for non-electrified lines.

[1] Booked in Q4 2021/22

Image: Coradia Stream High Capacity trains will increase transport capacity and reduce travel times for passengers in Germany's Hesse region. © Alstom Advanced Design & Styling

HSB 2-10-2T No. 99.7243 climbs towards Drei Annen Hohne with the 10:25 Wernigerode to Brocken service on April 2nd. *Andre Pronk*

Duties completed at the Brocken for another day, the HSB snowplough is returned to Wernigerode behind Harzkamel No. 199.872 on April 2nd. *Andy Pratt*

Germany

On April 8th, DB Cargo Class 189.039 is seen in Boisheim with Talns and Shimmns cars from Beverwijk (NL) to Oberhausen West Yard.(D). The Talns go further with diesel traction to Rheinkalk in Wülfrath while the Shimmns have Hagen-Vorhalle as their destination. *Erik de Zeeuw*

Germany

Close to the former border between East and West Germany, 2-10-2T No. 99.7245 has just departed Sorge on the Harzer Schmalspurbahnen with train No. 8920 10:33 Nordhausen Nord to Brocken on April 3rd. *Andy Pratt*

Germany

New metros for Munich: SWM and MVG to get additional latest-generation trains

Stadtwerke München (SWM) is continuing its modernization of the Munich Transport Company's (MVG) metro fleet. On Wednesday, April 27th, 2022, SWM and MVG took delivery of the first of a total of 22 type C2 metro trains of the third delivery series (the so-called 2nd option) at SWM's technical base in Fröttmaning near Munich. There, the train will now be made ready for operation, undergo extensive tests and be approved for passenger service.

Together with the delivery of the first train from the 2nd option, Stadtwerke München commissioned Siemens Mobility to deliver an additional 18 six-car type C2 metro trains. Siemens was able to prevail against several competitors in a Europe-wide tender. As a result, a total of 85 C2 trains will be operating in Munich's metro system in the future.

Ingo Wortmann, Chairman of the Management Board of the Munich Transport Company (MVG): "I'm especially pleased that we are taking a further important step today in modernizing Munich's metro fleet with the first delivery from the third delivery series. We've been operating this train type since 2016, so our order of additional trains from this series is relying on a proven concept to replace the aging A-trains step by step."

Albrecht Neumann, CEO Rolling Stock at Siemens Mobility: "We're delighted that Stadtwerke München has commissioned us to deliver an additional 18 six-car metro trains. This order will increase Munich's C2 fleet to a total of 85 trains that combine reliability with innovation. The C2 trains improve public transport in our hometown of Munich by providing greater passenger comfort, higher capacity, and sustainability."

District President Dr. Konrad Schober: "The expansion of local transport in the Greater Munich area is of central importance, because public transport has a key role to play in coping with the increasing volume of traffic. As the technical supervisory authority for the underground and trams, the Government of Upper Bavaria is a reliable partner in the approval of new rail vehicles. I am pleased that today we can transfer the first train of the C2.13 series to the depot to begin approval process. The commissioning of the C2 vehicle series can then continue on a continuous basis."

The metro trains are particularly ecofriendly and energy-saving. In selecting the materials, priority was given to environmentally friendly components that are up to 97% recyclable. And like all modern metro trains, the trains feed energy back into the power grid when they brake, further improving the CO2 balance in Munich and making public transport even more sustainable.

The vehicles will be manufactured at the Siemens Mobility plant in Vienna and delivered in 2024/2025. The bogies will be supplied by the company's factory in Graz.

Germany

On March 8th, NIAG No. 7 (Class 275.018) passes the Oberhausen West Yard with a rake of Falns cars heading from Lünen to Moers Gbf. *Erik de Zeeuw*

WFL is seen working a service from Gelsenkirchen Hbf to Bochum Hbf with a rented DB Class 143.326 (ex-DDR) and their own 'Steep Wall' cab-car on line RB46 'Glückauf-Bahn' passing Bochum-Hofstede on March 8th. *Erik de Zeeuw*

Green electricity significantly reduces Metrans carbon emissions

The conversion to green electricity already underway at HHLA's rail subsidiary Metrans, one of the leading private intermodal businesses in Europe, has led to a significant reduction in carbon emissions. In Germany and Austria, all rail transports were already converted to sustainably generated electricity last year. Even though the transported volumes increased, the maritime transports in the Metrans network between European ports and their hinterland produced about 60 percent less CO2 in 2021.

Metrans also fully offsets the emissions of containers transported on these routes for users of the "HHLA Pure" product. Last year, this corresponded to 912,000 TEU (standard containers) on routes to and from Hamburg, Bremerhaven and Koper, with over 45,000 tonnes of CO2 offset through climate protection projects that meet Gold Standard certification criteria.

Peter Kiss, CEO of the Metrans Group: "Transferring goods from road to rail is a key lever for mitigating climate change. The future belongs to eco-friendly logistics and it is therefore our aim to provide carbon-neutral logistics. With our joint product HHLA Pure, we are coming one step closer to this future every year."

And Metrans has set its sights even higher: The first electric truck in Hungary went into operation in Budapest in order to cover the "final mile". Hybrid locomotives have also been in use for years where overhead lines are not available for shunting using electricity. Other electric rail gantry cranes have also been ordered to replace some of the diesel-powered reach stackers. The overarching aim of the HHLA Group is for its production to be climate-neutral by 2040.

The "HHLA Pure" product has been successfully certified by TÜV Nord. Customers can benefit from HHLA Pure transportation by requesting certificates that prove the transportation was carbon-neutral.

Germany

Harz 2-6-2T No. 99.6001 departs Silberhütte (Anhalt) on April 3rd with train No. 8966 14:13 Gernrode to Hasselde. The River Selke is in the foreground. *Andy Pratt*

Germany

Little Big

Justin Pfeiffer from DB Cargo makes model locomotives unique using elaborate DB decals.

They look just like real DB locomotives but they're 87 times smaller: model locomotives in HO scale. Justin Pfeiffer's role is to make the models more closely resemble their full-size counterparts. Justin, a DB Cargo employee, runs the company airbrushpfeiffer. He has made it his mission to quicken the heartbeats of model rail enthusiasts by putting elaborate special DB locomotive models such as Günni the freight train and "Stahl auf Stahl" (steel on steel) onto model railway systems at a 1:87 scale.

Two to three hours of airbrushing after work

As well as holding down a full-time day job as a specialist advisor for strategic partners at DB Cargo in CMR South, Justin spends a lot of time repainting model locomotives after clocking out: "Sometimes I dedicate two to three hours a day to airbrushing. But I still can't say exactly long a wagon or a locomotive will take me. It depends a lot on the design and the effort put into it." A particularly elaborate example is the Bahnland Bayern, a double-decker driving trailer.

"Each of my models is one of a kind"

Even just preparing to repaint is a time-consuming task: Justin needs about an hour to disassemble a locomotive. To do this, for instance, he needs to remove the windows and other glued-in components. Justin then removes the original lettering with wet sandpaper and tapes the locomotive for painting. "I custom-cut the tape to size, depending on the design. There is no template for this. That makes the models truly unique," he explains.

Detailed work: every touch has to be right

In addition to airbrushing, airbrushpfeiffer also offers UV prints for model locomotives. For these he needs high-resolution images of the originals so that a graphic designer can create a suitable template. He then carefully applies the finished decal film to the model train: "Each touch has to be just right, because it's an extremely thin material." Justin even prints onto some models directly, which is also a unique selling point for a model airbrusher.

Brisk demand

No wonder, then, that railway fans regularly commission Justin to repaint special wagons and locomotives. There is particular demand for Günni the freight train on a class B185.2 locomotive or the special "Stahl auf Stahl" decal on DB Cargo's class 185.0. Justin explains: "You can't buy these special locomotives from model manufacturers, and it doesn't seem likely that they'll have them printed like this in the near future."

Model locomotives for Ukraine

Menzels Lokschuppen and DB Cargo conduct major fundraising campaign for the Deutsche Bahn Foundation

Rail enthusiasts for Ukraine: well-known model train dealer Menzels Lokschuppen & Töff Töff GmbH from Düsseldorf and DB Cargo have responded to the situation in Ukraine by joining forces to quickly launch their own fundraising campaign.

100 euros donated per locomotive

The model railway shop Menzels Lokschuppen is launching a model locomotive to accompany the campaign. The design is modelled on the DB Cargo locomotive used by DB to transport aid to Ukraine. From the sale proceeds, EUR 100 euros will be donated to the Deutsche Bahn Foundation for each locomotive sold. The donations will be used to support people fleeing the war and provide targeted aid.

About the DB rail aid link

Deutsche Bahn has set up a logistics network to transport humanitarian aid supplies from Germany to Ukraine. The logistics teams from DB Cargo, DB Schenker and DB Transa-Spedition are working hand in hand to achieve this. Urgently needed goods such as food, drinking water, warm clothing, and sanitary and medical products are being transported directly to the country by freight train using the DB rail aid link. The donations are collected in lorries in Germany, loaded into containers and transported across the border to Ukraine on board freight trains operating on DB Cargo's European rail network.

Deutsche Bahn Foundation: national and international aid for Ukraine

With their fundraising campaign, Menzels Lokschuppen and DB Cargo are helping to support the Deutsche Bahn Foundation's Ukraine aid efforts. Together with its close partner of many years, the Travellers' Aid Society, the foundation is currently providing emergency humanitarian aid directly on board trains and at stations in Germany to support, advise and offer guidance to the arriving refugees. The Deutsche Bahn Foundation also provides humanitarian aid internationally for people fleeing the war in Ukraine with the help of experienced partners and DB's own logistics expertise. The foundation plans to transport medical supplies, medical equipment and medicines to a hospital in western Ukraine later this month. The foundation will also be supporting educational and psychosocial services for refugee children and adolescents.

The locomotive model adopts the design of the original DB rail link locomotive down to the last detail. The illustration shows a hand sample.

Would you like to purchase one of the locomotives? The model locomotives from the fundraising campaign are available from the DB shop (Germany only) and, of course, from the Menzels Lokschuppen online shop. Advance sales started on April 12th and will run through May 31st 2022; delivery of the locomotives will begin in October 2022.

Germany

Toronto and the province of Ontario award contracts worth billions to Deutsche Bahn

Deutsche Bahn International Operations takes on the planning, operation and maintenance of a 450-kilometre local transport network in Canada
Valuable experience and profits generated for projects in Germany

Global climate goals can only be achieved through strong partnerships

The international DB subsidiary Deutsche Bahn International Operations (DB IO) has won the competition for a contract worth billions in Canada. As the leading partner in a joint venture, DB IO will take on the planning, operation and maintenance of the regional rail passenger transport system in the metropolis of Toronto and the surrounding province in Ontario. The order volume of the 25-year contract is in the tens of billions. The 450-kilometre route network is to be completely modernized and expanded.

DB Infrastructure Board Member Ronald Pofalla: “The transportation project is considered the most significant in Canadian history. Rail traffic around the metropolis of Toronto is being redesigned from the ground up. This order is unique. There is nothing comparable in Germany and Europe. The enormous transfer of technology and knowledge and the experience that we are gathering in Canada are of direct benefit to the railways in Germany. The profits also flow into our German network. With this international order, we are strengthening rail transport in Germany.” The project starts immediately after the signing of the contract with the preparations for the operation and the expansion of the rail network. State-of-the-art technology for digitization and automation is used. By the time operations are taken over in 2025, significantly more capacity and performance will be available in the network. Significantly more capacity and performance will already be available in the network for the planned takeover of operations after the two-year development phase.

At the same time, DB is making a contribution to global climate protection: “We can only achieve our climate goals as a global community if we work together. Especially when we build partnerships, learn from each other and support each other in the transformation. This is the greatest success in the history of the DB ECO Group. We are successfully exporting German rail and climate protection know-how,” says Niko Warbanoff , CEO of the DB ECO Group, to which DB IO belongs.

As a specialist in the operation and maintenance of rail transport systems, DB IO is responsible for international operator projects outside of Europe.

The federal government and railways invested around 150 million in noise protection in 2021

Noise abatement of the rails is progressing: On the “Day against Noise”, Deutsche Bahn (DB) reported in the “Noise Protection Balance Sheet 2021” that around 32,800 residents along the railway lines were relieved of noise last year.

In 2021, DB and the federal government invested a total of around 150 million euros as part of the federal government’s voluntary noise abatement program. This enabled a further 71 kilometres of railway line to be noise-remediated. DB and the federal government want to relieve around 3,250 kilometres of rail traffic noise by 2030.

Andreas Gehlhaar, DB noise protection officer: “We are making our trains quieter and consistently driving noise protection forward. Our common goal: By 2030, more than 800,000 residents on railway lines in Germany will live and sleep more peacefully.”

Michael Theurer , Parliamentary State Secretary at the Federal Minister for Digital Affairs and Transport: “In order to achieve our climate protection goals in transport, we urgently need to expand and expand the rail network. Rapid expansion can only succeed with the necessary acceptance from the residents. That is why noise protection along the rails has top priority for the federal government.”

By 2050, a total of around 6,500 kilometres will be relieved of noise. This means that all 1.6 million affected residents should benefit from noise protection. In order to achieve this ambitious goal, DB continues to rely on two proven pillars and reduces noise both on site and directly at the source.

Noise protection walls on the route primarily contribute to noise protection directly on site. Since 1999, around 2,100 kilometres of track have been noise-remediated through the federal government’s voluntary noise abatement programme. Around 1.75 billion euros were invested in this. The money was also used to equip tens of thousands of apartments with passive noise protection, such as special windows.

Since the end of 2020, DB Cargo’s entire active freight wagon fleet in Germany has been rolling on “silent soles”. By 2030, the company will also phase out all diesel locomotives in the 232/233 series. And DB Fernverkehr will replace all diesel-powered shunting locomotives with quiet and climate-friendly hybrid models by 2025.

HSB 2-10-2T No. 99.7243 avoids the traffic in Kirchstraße, Wernigerode on April 4th while working train No. 8903 11:55 Wernigerode to Eisfelder Talmühle. A few lazy flakes of snow in the air preceded blizzard conditions later in the day. *Andy Pratt*

Germany

HSB 2-10-2T No. 99.222 works the 11:13 Wernigerode to Brocken Traditionszug on April 2nd. *Andy Pratt*

HSB 2-10-2T No. 99.7241 makes a characteristic lively departure from Drei Annen Hohne with train No. 8920 10:33 Nordhausen Nord to Brocken on April 2nd. *Andy Pratt*

HSB 2-6-2T no. 99.6001 approaches Drahtzug haltepunkt on April 2nd with train No. 8966 14:13 Gernrode - Hasselfelde. *Andy Pratt*

Germany

On April 22nd, DB electric loco No. 103.245 is seen parked in platform 1 at Koln Hbf in preparation for a special train (Sonderfarth) the following day. This is one of the few Class 103s still in operational condition. *Andre Pronk*

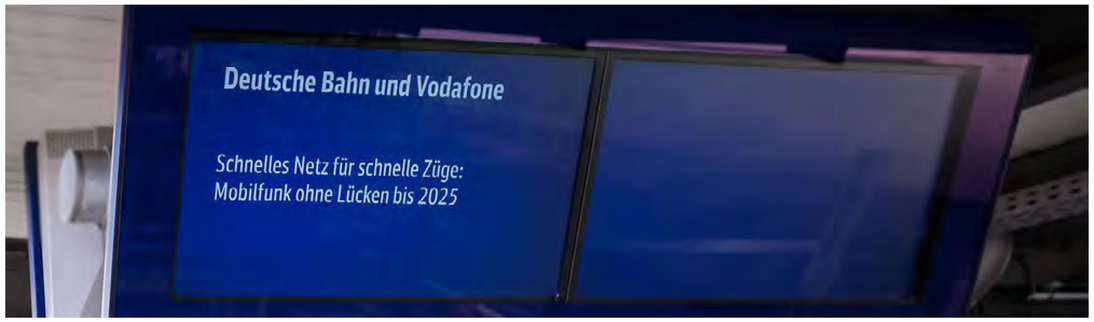
Vodafone and Deutsche Bahn close dead spots on rail routes

Fast network for fast trains: Vodafone and Deutsche Bahn are working together to close the remaining gaps in the Vodafone mobile network on rail routes throughout Germany. To this end, both companies have agreed on an infrastructure partnership. In addition, Vodafone will be the first mobile communications provider to activate its 5G+ network on Germany's ICE routes by 2025. In addition to high bandwidths, rail passengers will also benefit from extremely short response times for the first time.

To make train travel even more attractive, the agreement between the two companies stipulates that Vodafone will provide particularly heavily frequented routes with a seamless LTE mobile network with high bandwidths by 2025. The main beneficiaries of this are those passengers on DB trains who use the Vodafone network. Dropped calls will be a thing of the past. Mobile web surfing will work faster and without interruptions. Greatly improved mobile phone reception is the prerequisite for even more people taking the train. More comfort on board drives the mobility turnaround and thus contributes to climate protection.

The goals agreed by Vodafone and Deutsche Bahn go well beyond the expansion commitments laid down by the Federal Network Agency.
dr Daniela Gerd tom Markotten, Board Member for Digitization and Technology at Deutsche Bahn AG: "Sending e-mails, streaming films, phoning family – a stable mobile network is essential for our passengers. The fact that we are closing the last dead spots in the Vodafone network is great news for our mutual customers. With this, we are taking big steps towards our goal: All mobile phone networks must be available everywhere without gaps. Our customers should feel at home on the train or in their home office."

Hannes Ametsreiter, Vodafone Germany CEO: "Nine out of ten rail passengers use the mobile Internet or make calls on their smartphone when they are on the move – and they are still far too often annoyed by annoying dead spots. Together with Deutsche Bahn, we are now finally finding a remedy and eliminating one of the biggest annoyances for many millions of commuters and travelers. We start the project 'Future Train'. With the highest bandwidths, lightning-fast response times and clear goals: we are building a seamless mobile phone network for all rail passengers and the most modern 5G network in Europe for Germany's fastest trains."



dr Volker Wissing, Federal Minister for Digital Affairs and Transport: "We want to consistently digitize our trains. People should have state-of-the-art rail mobility options that enable them to work and communicate digitally. With today's step we are making progress on the way to a fast and seamless network in the train. I very much welcome this initiative. It brings us progress and makes the railway even more attractive."

Specifically, the joint expansion plan by Vodafone and Deutsche Bahn provides that Vodafone will provide the 7,800 kilometres of main traffic routes on which ICE and IC travel with bandwidths of at least 225 megabits per second in the LTE network by mid-2025. Vodafone will ensure a seamless LTE network with bandwidths of at least 125 megabits per second on 13,800 kilometers of passenger-heavy routes with more than 2000 passengers a day by summer 2025. To this end, Vodafone will set up 160 additional cellphone stations and carry out around 1,000 modernization measures. In addition, Vodafone is also pushing ahead with the expansion of mobile communications along the secondary routes in order to achieve almost universal mobile communications coverage here by 2024. Deutsche Bahn will make areas and fibre optic infrastructure available along the rails to an even greater extent than before and offer services related to planning, approval and construction processes. DB is constantly working on technical innovations such as window panes that allow mobile communications to direct mobile communications signals even better into the interior of the trains.In addition, Vodafone is the first mobile communications provider in Germany to go one step further when it comes to expanding the network on the train tracks: the Düsseldorf digitization group is bringing the most modern 5G technology in Europe to the tracks. Vodafone will activate the new 5G+ network throughout Germany by 2025 and will also supply the 7,800 kilometers of main DB routes extensively. 5G+ will reach rail passengers via the 1,800 megahertz frequencies without the DB trains having to be technically upgraded.
5G+ describes the 5G standalone technology. Experts speak of the complete 5G network. In addition to high bandwidths, the technology also makes fast reaction times possible for the first time (latency times of 10 milliseconds). Video conferences then work even more smoothly. Augmented and virtual reality applications can be used in significantly higher quality. Thanks to the short response times with 5G+, gaming fans have an advantage – in the future this will also apply to train journeys.

DB reduces residual expenditure on expansion projects by half a billion euros and thus almost 60 percent

Deutsche Bahn (DB) was able to significantly improve the access to funds for ongoing expansion projects and thus reduce the remaining expenditure that had accumulated for years in the past year. In the past, it had repeatedly been criticized that not all funds for infrastructure expansion could also be used in the planned periods.

Ronald Pofalla, Board Member for Infrastructure at Deutsche Bahn: "We have now brought about a turnaround. In 2021 we used all budgetary funds for our new construction and expansion projects and reduced the leftovers from previous years by half a billion and thus almost 60 percent.

Funds were left over in the past because too few projects were planned a decade ago. We took countermeasures and were able to start construction on more and more projects. Foresight and continuity are now paying off. We have also achieved more speed thanks to our now close alliance with the construction industry. This puts us in an increasingly better position to complete construction sites even earlier and better."

Changed framework conditions for pre-financing in project planning also contributed. The fact that more federal funds have been drawn down year after year since 2015 is also based on more effective management and improved project control in the infrastructure department.

In 2021, despite the consequences of the corona pandemic and the steadily increasing shortage of materials, reliable project implementation was established.

This project planning and implementation will also be consistently continued in the coming years: Around 175 projects are currently being planned or built.

DB Cargo Class 189.091 passes Holten with a wagonload service fom Hagen-Vorhalle (Germany) to the Kijfhoek yard in Zwijndrecht (Netherlands) on March 16th. *Erik de Zeeuw*

Foundation ‘Hondekop’ Mat ‘54 No.766 (built in Holland) is seen in Moordrecht on March 25th as train No. 28201 from Utrecht CS to The Hague ‘Hollands Spoor’. After that the train continues its journey to the workshop in Leidschendam for maintenance on March 25th. *Erik de Zeeuw*

On March 27th, České Dráhy Cargo Class 193.584 and LTE Class 186.942 (dead) passes Baambrugge with intermodal No. 41322 from Lovosice (CZ) via Lehrte Megahub terminal (Germany) to Rotterdam (Netherlands). In the Netherlands the train is operated on an LTE-NL license. Four round trips per week will be operating regularly. At the Lehrte Megahub terminal, partial reloading of containers and semi-trailers takes place in both directions. *Erik de Zeeuw*

Netherlands

Traditionel FEK-Karsamstagsfahrt “50 Jahre Rheingold-Zug” (FEK-Easter saturday train journey ‘50 years Rhinegold-train’). Organized by ‘Der Freundeskreis Eisenbahn Köln e.V’, is seen on April 26th on the way back from Amsterdam CS to Köln (Germany). *Erik de Zeeuw*

Netherlands

On April 1st, Mail train No. mP3031 seen in Soest Zuid while it snows. The so called motorpost was built in 1966 and is now owned by the National Railway Museum. *Mathijs Kok*

On March 26th, Rail Force One Class 193.742 arrives in Rotterdam with empty Falns cars from Bottrop (Germany). *Erik de Zeeuw*

Netherlands

LTE Class 193.232 passes Loenersloot with a rake of Tagnpps cars from Bad Bentheim (Germany) to Rotterdam Europort on March 31st. *Erik de Zeeuw*

Railexperts No. 6004 is seen with a Skoda car train at Amersfoort Central station on April 5th. The loco is a former DR V60 and was built in 1979.
Mathijs Kok

Netherlands

On a cold April 1st, mP No. 3031 9 (former NS & PTT Post) from the Dutch Railway Museum heads through Bussum-Naarden working a service from Utrecht Maliebaanstation to the Watergraafsmeer Yard in Amsterdam. *Erik de Zeeuw*

The VSOE ‘Orient Express’ is seen on its way from Amsterdam to Belgium passing here the village of Hulten with traction provided by Lineas Class 186.258. *Andre Pronk*

Alstom takes another step towards Autonomous Train Operation in the Netherlands

Alstom, global leader in smart mobility, and its partner Elta Systems and its smart mobility spin-off NIART have successfully performed ODS tests in Oosterhout, near the city of Breda in the Netherlands. These tests, which were conducted with Dutch infrastructure manager ProRail and rail freight operator Lineas have demonstrated that the ODS installed on-board the locomotive is able to detect obstacles up to 1,000 metres away in all-weather and visibility (day and night) conditions. It can be operated as a Driver-Assistance-System, as well as a fully automated system in conjunction with Alstom’s AutoPilot component. These tests were performed during the ongoing ATO tests on shunting trains in GoA level 4 of automation.

“Thanks to ODS and NIART’s expertise, the locomotive is able to detect both large obstacles such as a car and smaller ones such as a rabbit or human being, both during the day and at night,” said Abel Poelaert, Customer Director Alstom Benelux. “The tests we performed helped us to successfully resolve some small issues. The results are very encouraging and exciting.”

NIART’s ODS is a perception system based on an innovative High Resolution Digital Radar fused with Multi-Spectral Electro-Optics backboned by powerful Classical and Machine Learning algorithms to detect and classify obstacles on the train route at 1,000 metres distance, in all weather and visibility conditions. The system is a complete self-contained on-board solution able to provide the locomotive driver with an early alert and actionable insights to ensure safety and reliability of the route, especially in harsh weather conditions.

The game changer is the radar, that scans the path ahead as fast as 200 times a second and utilises high-resolution imaging technics to analyse the scene and detect obstacles further than one kilometre away, even when the visibility for driver and optic-based systems is degraded. Elta Systems’ experience in imaging techniques used in Ground and Space-Borne systems is ported to the automotive world, to solve one of the major challenges of railway automation - reliable operation in all weather conditions.

Paving the way for smart and green mobility

The next phase of the pilot project in the Netherlands, which will be performed in the coming weeks, will be to test ODS in combination with ATO. The final goal is to have a shunting locomotive which will drive completely on its own, to fully integrate ODS with ATO systems and therefore, to enable GOA3-4 operation for future autonomous trains. These next test phases will be carried out before the end of the summer. These tests performed with NIART, ProRail and Lineas are fully in line with Alstom’s strategy to evolve towards smart and green mobility. Alstom has demonstrated the advantages of ATO especially on metro systems around the world. Experience shows that automation leads to capacity increase, cost reduction, energy savings and flexibility of operations. Automation in rail is a way for operators to increase the capacity on their networks without making expensive changes to the infrastructure.

Netherlands

DB Cargo Class 189.026 is seen in Venlo hauling a train loaded with right hand drive Ford's from Dillingen (Germany) to Sloe on April 8th. Final destination of the cars is the UK.
Erik de Zeeuw

On March 31st, Karel Foundation Plan V No. 466 'DE KAREL / WE'RE ROLLING FOR CHARITY' is on its way to Boxtel after visiting Haarlem and the Dutch Railway Museum in Utrecht with a group of 55+ people from Helvoirt. *Erik de Zeeuw*

Netherlands

CROSSRAIL Class 186.218 hauls the Germersheim (D) to Antwerp (B) MSC shuttle past Venlo on April 8th. *Erik de Zeeuw*

Netherlands

On April 13th, Fairtrains No. 1315 ‘Tiel’ (built in 1952 by Alsthom, Belfort France) passes Loenersloot with HSL tankertrain No. 47790 from Amsterdam Houtrakpolder to Eindhoven. *Erik de Zeeuw*

On April 15th, Foundation 2454 CREW mP No. 3029 takes care of the transport of Mat '24 mC No. 9002 (in the middle) from NS Techniek in Haarlem to SpoorIJzer in Roosendaal. The third car assists braking. *Erik de Zeeuw*

PKP CARGO Class 186.372 hauls a Małaszewicze (PL) to Tilburg (NL) Chengdu shuttle at Schalkwijk on March 21st. *Erik de Zeeuw*

CP Class 1400 No. 1438 passes Ribadouro whilst hauling train No. IR865 09:20 Porto Sao Bento - Pocinho on March 19th. *Laurence Sly*

CP No. 5615 passes Salreu whilst working train No. IC730 08:37 Porto Campanha - Lisbon on March 21st.
Laurence Sly

Medway No. 4725 passes Salreu whilst hauling a southbound cement train on March 21st.
Laurence Sly

Portugal

CP Class 2600 No. 2626 passes Ancora Praia whilst working train No. IR854 14:25 Valenca - Porto Campanha on March 21st. *Laurence Sly*

CP EMU No. 2290 passes Ancora Praia whilst working train No. R3206 14:48 Valenca - Viana do Castello on March 21st. *Laurence Sly*

CP Class 1400 No. 1436 passes Lagoa whilst hauling train No. 20823, the 'Almonds in Blossom' special from Porto to Pocinho on March 19th. *Laurence Sly*

CP Class 1400 No. 1432 passes Arnozelo whilst working train No. IR866 11:08 Pocinho - Porto Campanha on March 24th. *Laurence Sly*

Medway Class 335.036 approaches Aregos whilst hauling Medway freight train No. 50323 from Vila Nova de Gaia to Godim on March 27th. *Laurence Sly*

CP Class 1400 No. 1438 approaches Aregos whilst working train No. IR865 09:20 Porto Sa Bento - Pocinho on March 27th.
Laurence Sly

GE ES44C4 Nos. 805 and 821 pass New Smyrna Beach whilst hauling FEC train No. 103 from Jacksonville to Miami on March 2nd. *Laurence Sly*

U.S.A.

After working industries in Daytona Beach, FEC local train No. 910 heads back to the yard in New Smyrna Beach on March 2nd hauled by EMD GP40-2 No. 413. *Laurence Sly*

Florida East Coast GE ES44C4 Nos. 813 and 804 cross Spruce Creek whilst hauling train No. 105 from Jacksonville to Miami on March 2nd. *Laurence Sly*

CSX ES40DC No. 5430 and AC44CW No. 83 cross the Manatee River in Bradenton whilst heading back to Tampa Yeoman yard with local train No. 0823 on March 6th. *Laurence Sly*

U.S.A.

On March 3rd, after heading north mid morning to swap cars with Jacksonville local train No. 905, the New Smyna local working, arrives back in the yard to tie down for the day. *Laurence Sly*

On March 4th, SunRail MPI MP32PH-Q No. 100 crosses the St. John's River at DeBary whilst working SunRail train No. P312 08:15 Poinciana - DeBary. *Laurence Sly*

U.S.A.

SunRail train No. P317, the 10:00 DeBary - Poinciana crosses the St. John's River on March 4th. The loco on the rear is MPI MP32PH-Q No. 100. *Laurence Sly*

Amtrak P42DC No. 174 and P40DC No. 815 cross the St. John's River in DeBary whilst working Amtrak train No. 91, the Silver Star from New York to Miami on March 4th. *Laurence Sly*

Latvia

SJSC "Latvijas dzelzceļš" discusses opportunities for expanding cooperation in freight transport with Kazakhstan Railways management, offers locomotive modernization services

As part of their visit to Central Asia, management of SJSC "Latvijas dzelzceļš" and its subsidiaries, LDZ CARGO Ltd. and LDZ Logistika Ltd., met recently with the Kazakhstan Railways management and visited Kazakh ferroalloy plant YDD to discuss transportation of its products.

SJSC "Latvijas dzelzceļš" Board Chairman Māris Kleinbergs met with Kazakhstan Railways CEO Nurlan Sauranbayev in the Kazakh capital of Nur-Sultan to discuss possibilities of increasing transportation of Kazakh freights. Kazakhstan Railways management also expressed interest in LDz subsidiary LDZ Ritošā Sastāva Serviss Ltd. experience in modernization of shunting locomotives ČME3M and mainline locomotives 2M62UM.

"Currently many countries with 1,520-millimeter gauge railroads, including Kazakhstan, lack new, modern locomotives. Given that purchasing new locomotives from global manufacturers means significant investment, which companies are not always ready to make, they are interested in our service as our experience in modernization of locomotives makes it possible to deliver a refurbished locomotive at almost half the price," says SJCS "Latvijas dzelzceļš" Board Chairman Māris Kleinbergs.

At the invitation of Kazakh cooperation partners, SJSC "Latvijas dzelzceļš" Board Chairman Māris Kleinbergs and LDZ CARGO Ltd. Board Chairwoman Svetlana Berga met with YDD head Yerlan Nigmatulin in Karaganda on April 22nd to discuss transportation of the plant's products via SJSC "Latvijas dzelzceļš" infrastructure and Latvian ports. YDD is one of the largest ferroalloy producers in Kazakhstan that exports its products to 49 countries on all continents.

SJSC "Latvijas dzelzceļš" Board Chairman Māris Kleinbergs: "Companies of LDz Group are currently working on various opportunities to increase turnover, looking for new markets for freight transportation, as well as offering their experience and services in locomotive modernization. We are pleased with the results of the meeting with management of the Karaganda ferroalloy plant, which in the future will very likely make it possible to increase freight transport volumes between Kazakhstan and Latvia."

After modernization, locomotives become significantly more economical, more powerful and more comfortable for locomotive drivers, moreover, locomotive operators can offer their customers more favourable transportation tariffs, as transportation becomes more efficient. After refurbishment of diesel locomotives, their operating capacity increases by 50 percent and fuel consumption decreases by around 17 percent, reducing CO2 emissions by 15,000 tons per year.

Kazakhstan Railways' representatives will visit Latvia this coming May to inspect modernized locomotives and get acquainted with services of LDZ Ritošā Sastāva Serviss Ltd.

U.S.A.

Alstom signs a 10-year contract with Dallas Fort Worth International Airport for operations and maintenance services

Alstom, global leader in smart and sustainable mobility, has signed a contract with Dallas Fort Worth International Airport (DFW) to provide operations and maintenance services for the automated people mover (APM) system for the next 10 years, until January 2032. The contract is valued at just over €200 million[1].

Under this contract, Alstom's scope of work includes ongoing preventive and corrective maintenance of the system's 64 Innovia APM 200 vehicles, subsystems and related components, which consists of switches, power distribution, station doors, public address announcements and station signage. Alstom will also be responsible for the maintenance of the eight-kilometre elevated dual-lane guideway, which includes the running surface, guide beam, 3rd rail power and the related switches, the power distribution, guideway heating systems, and the Automatic Train Control equipment.
Alstom and DFW have been working together since 2000 providing the eight-kilometre elevated dual-lane guideway APM system. Known as Skylink, the 32 train APM system (64 cars) offers convenient passenger travel in either direction on comfortable, climate controlled Innovia APM vehicles, connecting all five terminals – A, B, C, D and E. Alstom has provided maintenance support for the SkyLink system since it opened on May 21st, 2005. Since its opening, the DFW system has achieved outstanding results in availability, exceeding 99% each year, carrying more than 20 million passengers annually, pre-pandemic.

"DFW is the most connected airport in the world, and Skylink helps our customers navigate easily between terminals," says Sean Donohue, Chief Executive Officer of DFW Airport. "Ensuring Skylink is properly maintained and operational is essential to the customer experience."

Talking about the contract award, Michael Keroullé, President, Alstom Americas, says: "We are incredibly pleased and proud to extend our partnership with Dallas Fort Worth International Airport. The customer's renewed trust in Alstom proves our operations and maintenance expertise in helping customers provide efficient, reliable, and safe service for their end users."

The driverless Innovia APM is a transportation system specially designed to serve airports and dense urban areas. It offers quick, comfortable, and convenient service for commuters within cities, to and from airports, or between airport terminals. Innovia APM cars operate on a dedicated guideway underground, on ground level, or elevated. This ensures a consistent service that does not interfere with surrounding road or runway traffic. Built on 50 years of successful and dependable operation, Innovia APM systems incorporate modern aesthetics and advanced subsystems for optimised functionality. Over 30 of Alstom's APM systems have been delivered around the world; Alstom is the maintainer or operator at 18 of the world's busiest airports.

Alstom has a long-standing track record of providing operations and maintenance services to transit systems, including more than a dozen across the United States and Canada. Its comprehensive services portfolio also includes modernization, parts, repairs, overhauls, and digital and support services.

[1] Order booked in Q4 2021/22

Photo: Innovia APM 200 train in action at Dallas Fort Worth International Airport. ©Alstom

U.K.

Stadler introduces the Class 99 bi-mode Co'Co' locomotive in the UK with the first contract for 30 units.

Stadler, Beacon Rail and GB Railfreight (GBRF) have signed an agreement for the supply of 30 Class 99 bi-mode Co'Co' locomotives including spare parts.
Following the success of the EURODUAL 6-axle locomotives in continental Europe, with about 100 units sold, Stadler is introducing this concept to the UK. Like its sister, the Class 99 is a versatile Co'Co' locomotive, adapted to the British gauge and specifications, combining 25 kV AC electric and diesel operating modes. It represents a new generation of locomotives that offers rail operators many economic and environmental benefits and underscores Stadler's green credentials.

Stadler has signed the first contract with the leasing company, Beacon Rail and GBRF, for the supply of 30 Class 99 locomotives, which includes spare parts. Able to reach speeds of up to 120 km/h, the powerful machines can run on 25 kV AC electrified lines with a power of 6,000 kW at wheel. In addition, they feature a high-power low-emissions Stage-V engine allowing them to operate on non-electrified lines. The Class 99 locomotives boast an outstanding tractive effort of up to 500 kN, high hauling capability and performance. They also offer optimal visibility and an excellent working environment for the drivers, including ergonomic desks.

"Stadler has extensive experience in the UK locomotive market. Over recent years, we have introduced the Class 68 diesel-electric locomotive, the Class 88 bi-mode locomotive and Europe's first tri-mode locomotive, the Class 93, in line with our commitment to decarbonising rail transport", said Iñigo Parra, CEO of Stadler Valencia. "We are very proud to go one-step further with the development of the Class 99, a versatile, high- performance locomotive that will provide environmentally-friendly and cost-effective rail transport services, supporting modal shift to rail", he added.

Beacon CEO, Adam Cunliffe said: "Beacon is proud to introduce the Class 99 to the market; this is the result of a collaborative approach with our long-standing customer GB Railfreight and manufacturer Stadler. The Class 99 order underlines Beacon's drive to support the UK's journey towards a greener and more efficient rail network. We look forward to supporting the delivery programme for these locomotives ahead of introduction to service in 2025, providing further momentum to facilitate modal shift from road to rail".

France

Alstom and ENGIE sign a partnership to supply a fuel cell system with renewable hydrogen for use in European rail freight

Alstom and ENGIE have signed a partnership agreement to offer the rail freight sector a solution for the decarbonisation of mainline operations by replacing diesel-powered locomotives with hydrogen versions.

Under the terms of this partnership agreement, Alstom, a pioneer in the field of hydrogen-powered rolling stock, is designing a hydrogen solution based on a high-power fuel cell system that can power electric locomotives on non-electrified sections. ENGIE, a leader in energy transition and a major player in hydrogen, is supplying the renewable hydrogen for this solution via the deployment of an innovative supply chain.

This partnership will provide a low-carbon, zero-emission solution in response to climate, environmental and public health issues, including on non-electrified branch lines and sidings. The target market is the major European rail freight countries.

A partnership that has already its worth
Alstom and ENGIE share the ambition to put hydrogen at the heart of rail industry decarbonisation. This has already been successfully demonstrated during the Coradia iLint train test, organised in March 2020 in the Dutch Province of Groningen, where renewable hydrogen was used to refuel a passenger train. For Alstom, this partnership is in line with its strategic plan 'Alstom in Motion 2025' as well as its hydrogen strategy initiated in 2013 with the development of the Coradia iLint train and pursued with the acquisition of fuel cell manufacturer Helion Hydrogen Power in 2021.

"Our ambition is to accelerate the adoption of hydrogen power in the rail industry by developing innovative solutions that help green heavy-duty mobility operations like rail freight. In order to help drive the evolution of the hydrogen rail sector we need to gather stakeholders, and this is exactly why we have decided to partner with ENGIE". Raphaël Bernardelli, Vice President, Corporate Strategy, Alstom.

For ENGIE, this partnership is in line with its aim to supply heavy-duty mobility markets with renewable hydrogen, thanks to its target production capacity of 4 GW by 2030. "After successfully supplying the Coradia iLint during tests in the Netherlands in 2020, we are delighted to continue our efforts with Alstom in decarbonising heavy-duty mobility by combining our respective expertise to serve European rail freight. This partnership marks a new step in the development of decarbonated hydrogen solutions to answer to the strong demand of these growing market." Sébastien Arbola, Executive Vice President in charge of Thermal Generation, Hydrogen & Energy Supply, ENGIE.

ENGIE, a catalyst for the renewable hydrogen economy
ENGIE is a pioneer in the development of an industrial-scale hydrogen economy. Our ambition is to help industry and mobility players achieve their carbon neutrality objectives. With more than 200 experts fully dedicated to hydrogen, we are a long-term partner to our customers and secure every step of their multi-gigawatt projects from design to operation.

By 2030, we plan to:
- develop 4 GW of renewable hydrogen production capacity,
- have 700 km of dedicated hydrogen network and 1 TWh of storage capacity,
- manage more than 100 refuelling stations.

Our portfolio of renewable capacities, our expertise in hydrogen mobility and our industrial-scale renewable hydrogen production projects make us one of the most integrated energy companies in the hydrogen value chain.

In heavy-duty mobility, ENGIE has been working since 2019 on the decarbonisation of activities in the mining sector. This is the case, for example, with the Hydra consortium in Chile, or with Anglo American in South Africa, where we are developing global decarbonisation solutions based on renewable hydrogen for the first mining trucks running on this energy.

Alstom, a pioneer in zero emission mobility
Alstom, world leader in green and smart mobility, has been developing a portfolio of zero-emission mobility solutions for several years and has launched an ambitious programme of innovations in batteries and hydrogen. Alstom has been working since 2013 on the launch of a regional passenger train equipped with hydrogen fuel cells: the Coradia iLint. The first two 100% hydrogen iLint trains entered commercial service in 2018 in Germany and, to date, 41 trains have been ordered by two German Landers and successful trials have taken place in Austria, the Netherlands (in cooperation with ENGIE), Poland, Sweden, and France.

In 2021, France also joined the circle of "founding countries" with an order from SNCF for 12 Coradia Polyvalent Regiolis dual-mode (electric/catenary and hydrogen/fuel cell) trainsets (+ 2 options) for the regions of Auvergne-Rhône-Alpes, Bourgogne-Franche Comté, Grand Est and Occitanie.

In 2021, Alstom continued to build a complete ecosystem for its hydrogen rail offering, signing partnership agreements with players such as Liebherr – Aerospace & Transportation SAS, Hynamics, and Plastic Omnium. Alstom also invested 6 million euro in a new hydrogen fuel cell manufacturing platform at the Alstom Hydrogen site in Aix-en-Provence.

Sweden

Alstom to deliver 25 high-speed trains to Sweden

Alstom, global leader in smart and sustainable mobility, has signed a historic agreement with Sweden's national rail operator SJ to supply 25 Zefiro Express electric high-speed trains, with an option of 15 additional trains. The contract for the first firm order is valued at around €650 million.

The new trains will effectively be Sweden's fastest ever, capable of operating at maximum speeds of 250km/h. The first train is scheduled for delivery in 2026.

"Alstom is immensely proud to be delivering these new high-speed trains to SJ. This is a historic agreement that will change the way passengers travel across the country. With concerns about climate change, high-speed rail is the primary alternative to air travel. It's comfortable, convenient, and now very fast. This is a trend we see everywhere, and Alstom is the leader in this domain with experience from several high-speed train projects around the world. We thank SJ for their continued confidence in us,"says Rob Whyte, Managing Director of Alstom Nordics.

Designed for Swedish conditions

The Zefiro Express trains are designed to operate in harsh weather conditions – even when temperatures drop as low as -40C – and their cutting-edge technology will ensure that passengers will have a safe and comfortable journey. The floors in the train carriages are flat and ramp-free, which allow easy passage on, off and along the train.

The state-of-the-art Zefiro Express trains will each have a total capacity of 363 seats, providing passengers with an exceptional travel experience – the trains have been ergonomically designed for maximum comfort and feature premium seating and lighting.

The carriage width, electrical systems, and signalling systems have been developed with an understanding that the trains will run in both Sweden and Denmark, but they will also be certified for traffic in Norway.

Leader in high-speed trains

The Zefiro Express is part of Alstom's high and very high-speed train Avelia platform – the largest offering on the market, covering maximum operating speeds between 200 km/h and 350 km/h. A wide range of configurations and architectures are available to provide best fit to customer needs; single-deck or double-deck, concentrated or distributed traction, articulated or non-articulated architecture, as well as options such as tilting capability.

Almost 3,000 high-speed or very-high-speed trains with Alstom technology have been sold worldwide over the last 40 years.

Alstom is the most significant supplier in the Swedish rail market, having delivered more than 1,000 trains to Swedish railways. Alstom also has several large maintenance contracts, carrying out maintenance in 19 local depots, including depots in Motala and Västerås, specializing in heavy maintenance and renovations. The company is also leading the roll-out of ERTMS in Sweden, both onboard and trackside, and is supplying the standardised national traffic system to the Swedish Transport Administration.

Alstom is a pioneer in sustainable mobility solutions, in line with its ambition to facilitate the global transition to transport systems with a low climate footprint. Among those innovations is the renowned Coradia iLint, the world's first hydrogen-powered passenger train, which Alstom demonstrated in Östersund, Sweden on the 24th of August 2021. The Coradia iLint is a hydrogen fuel cell train that produces its own electrical power on board, emitting nothing but water during operation.

Image: The new trains will effectively be Sweden's fastest ever, capable of operating at maximum speeds of 250km/h. © Alstom

Spain

Alstom celebrates the 30th anniversary of the first high-speed train in Spain

In 1992, Alstom pioneered the introduction of high-speed rail in Spain. Since then, the company has added a long list of innovations that continue to revolutionise railway mobility. Now Alstom in Spain celebrates the 30th anniversary of the arrival of high-speed trains in the country, an event in which the company played a special role. In April 1992, the Renfe Series 100 train travelled on Spanish railway lines and was the first train to run at more than 300 kilometres per hour. This high-speed train was designed, built and maintained by Alstom.

This HST (called AVE in Spain) was also the first railway system in the world to make a punctuality commitment to passengers, with the promise to refund their ticket price if they had to wait more than five minutes.

Today, 30 years later, Alstom is still a key player within the Spanish railway industry. Alstom has been a pioneer, not only with the introduction of the first AVE high-speed train, but also with other major Spanish milestones such as the high-speed regional shuttles, the Mediterranean corridor, automatic driving systems, cutting-edge signalling technology, the return of the modern tramway, new electrification systems, multimodality intelligent management, the application of artificial intelligence to railway maintenance and more.

These technological advances have been accompanied by a strong industrial drive and development. In recent decades, Alstom has been expanding its presence in Spain, leading the transition towards more sustainable and innovative mobility. The Group, which has over 3,000 employees in Spain, is the only manufacturer and technologist with a local presence for all activities related to rail transport including signalling, infrastructure, train manufacturing, services and digital mobility.

"The Alstom Group in Spain and Portugal has the expertise and resources, the capacity for innovation and the pioneering spirit to continue leading the transition to a new era of sustainable, smart and responsible mobility. Linking Madrid and Seville on the first high-speed train in Spain was only the beginning of a long history of commitment and innovation," said Leopoldo Maestu, President of Alstom Spain and Portugal.

Madrid-Seville: 85 million passengers in 30 years

The Madrid-Córdoba-Seville AVE train has been in commercial service for thirty years, with an accumulated figure of nearly 85 million passengers. On April 21, 1992, one day after the inauguration of the Universal Exhibition, the AVE Madrid-Seville high-speed train ran its first commercial service, marking the debut of the high-speed train in Spain.

Since then, the volume of passengers on this service

has tripled from 1.3 million users in that first year of operation to an average of 3.5 million passengers per year, compared to the usual services and seats available prior to the Covid pandemic. This data shows that the high-speed train has positioned itself as a mode of transport capable of generating demand and providing other competitive advantages, such as sustainability and energy and CO2 emissions savings over other modes of transport.

Spain

Talgo Develops New Rolling Assemblies For Very High-Speed Trains, Reduces Weight By 50%

Talgo has developed a new type of its characteristic running gear frames -rodals- which makes it possible to further reduce the tare weight of the vehicles it manufactures, starting with Avril very high-speed trains.

By using carbon fibre reinforced polymer composites (CFRP), the rolling assembly mass can be dramatically reduced by 50%, thus improving the energy consumption of the train and passenger capacity.

Current running gear frames are constructed using welded steel plates. Both the geometry of those frames and the welding properties (mainly due to fatigue considerations) do constrain the possibility of weight improvement in the frames with current materials and processes.

New concept

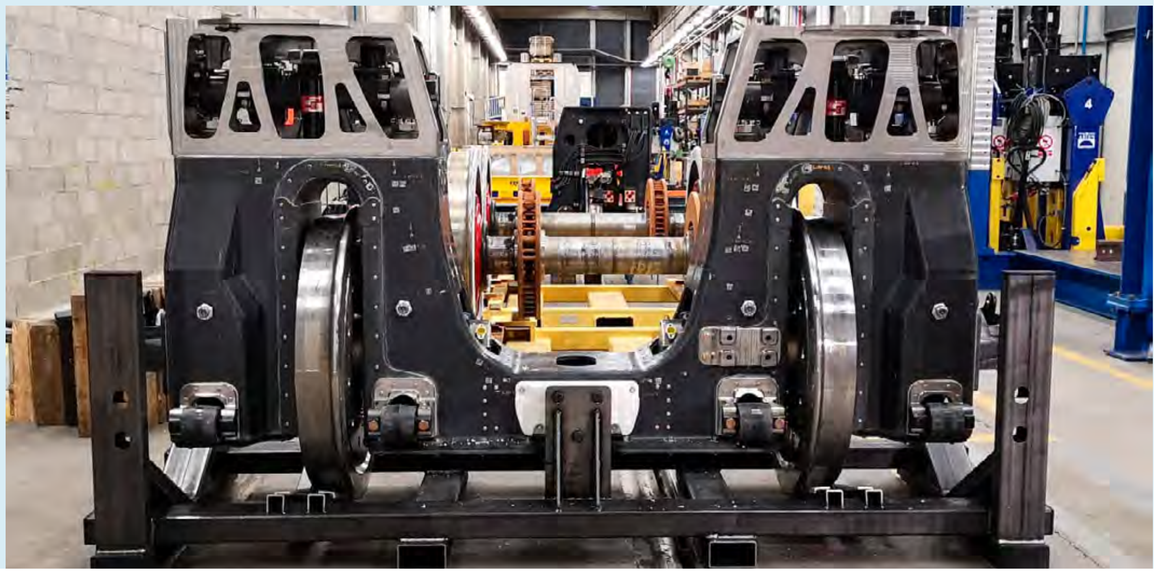
As the running gear is the second heaviest structural component of the train, and the first one in terms of structural resistance requirements, the substitution of steel with new generation composites can result in strong weight reductions with no impact for the rest of operating requirements.

After a careful study of materials and processes, CFRP was considered by Talgo as the best option for the development of a completely new concept in the rail sector. Up until today, Talgo has successfully finished the full-scale validation of structural requirements according to the current standards (EN 13749), including both static and fatigue tests exceeding 10 million of cycles, with no significant damage after NDT inspection. The technology used to manufacture the running gear is additionally based on hand lay-up CFRP prepreg, making it fully compliant with the most stringent Fire-Smoke-Toxicity standards in rail transport. Next development steps will see the composite-made rodal running on track, operating under real conditions for final acceptance. In parallel, the development will also be used to gain valuable knowledge to be used sector-wide, in the implementation of a new set of standards regarding the acceptance process of new materials like CFRP in rail transport (CEN/TC 256/SC 2/WG 54).

Modular solution

The new rolling assembly has been developed using the Avril very high-speed platform as a reference, but it could be adapted to other Talgo intercity or commuter vehicles, with positive impacts on capacity of the train, simplified assembly processes, a reduction on energy consumption and of track wear and tear. In addition, all the knowledge created with the experience could be exported for other primary structural components of the train.

The CFRP running gear frame will be formally presented at the JEC fair, the leading international composites show, in Paris This project has been supported by the European Commission through the Shift2Rail initiative.



Brazil

Siemens Mobility and ViaMobilidade to Modernize Commuter Rail Lines in São Paulo, Brazil

Automated signaling and electrification systems to be installed on commuter Lines 8 and 9 in São Paulo

Will provide greater availability, enhanced operations, improved sustainability, and better passenger experience

Siemens Mobility has been awarded two contracts by ViaMobilidade Linhas 8 e 9 to upgrade and modernize the São Paulo metro network. ViaMobilidade is part of the Brazilian infrastructure company CCR Mobilidade and are responsible for all urban mobility projects for the CCR Group in the country.

Siemens Mobility will equip Line 8 with an automated signalling system and will install new electrification and traction power systems on both Line 8 and 9. The renewal of both lines will provide for greater availability, enhanced operations, increased sustainability, and an improved passenger experience. These contracts build on the already well-established relationship Siemens Mobility has with the concessionaire and the São Paulo metropolitan transportation network.

“Our investments in lines 8 and 9 will result in a very positive model for metropolitan rail transport. We are pleased that Siemens Mobility will continue to contribute significantly to the modernization of our network,” says Francisco Pierrini, CEO of ViaMobilidade Linhas 8 e 9.

“These comprehensive signalling and electrification upgrades will provide ViaMobilidade Linhas 8 e 9 with state-of-the-art technology that will improve the availability and reliability of the system, while also enhancing the overall passenger experience for the people of São Paulo. The modernization of both lines will also provide the basis and ability to pursue future signalling and operational improvements that can further increase automation, capacity and energy efficiency,” said Andreas Facco Bonetti, CEO of Siemens Mobility in Latin America.

For Line 8, Siemens Mobility will design, supply, and implement an automated signalling system that includes an electronic interlocking (Westrace MKII) in the regions of Osasco, Presidente Altino and Imperatriz Leopoldina stations. Track improvements and ATS reallocation will also be carried out in Barra Funda station. On both lines, Siemens Mobility will implement a series of improvements that will include the implementation of the complete electric system necessary for the functioning and operation of lines 8 and 9 of the São Paulo metropolitan region rail network.

This specifically includes:
Line 8
- Renovations of the Imperatriz Leopoldina, Osasco, Santa Terezinha and Santa Rita substations
- New cabins at Barueri, Itapevi and Amador Bueno
- Renovation of Presidente Altino, Osasco and Quitaúna cabins

Line 9
- New substations of Cidade Jardim and Socorro
- Renovation of Jaguaré and Morumbi substations
- New cabins at Ceasa, Pinheiros, Berrini, Santo Amaro, Jurubatuba and Grajaú
- Renovation of Cidade Dutra cabinet and distribution lines in 34,5kV

The 41 km Line 8 (Diamond) has 22 stations, crosses six municipalities in São Paulo metropolitan region and is served by a fleet of 36 trains. It is used by around 500,000 passengers a day. The 31.8 km Line 9 (Emerald) has 18 stations and a fleet of 36 trains, and transports 600,000 passengers a day.

Both lines are operated by ViaMobilidade Linhas 8 e 9.

Siemens Mobility has been a technology provider for CCR Mobilidade for many years. This has included signalling projects for the São Paulo Metro Line 4 (UTO, GoA4) and for two surface Metro Lines (GoA2) in Salvador da Bahia, as well as the 3kV catenary system.

SBB in 2021: Low demand and further losses due to Covid-19, but course set for the future.

The coronavirus pandemic also dominated the 2021 financial year: around one third fewer customers used our trains and stations to get on the move compared to before the pandemic; SBB Cargo Switzerland experienced a stagnation in volumes transported. This weak demand led to a loss of CHF 325 million. However, the loss was lower than in 2020 – thanks to cost-cutting measures, higher incomes and increased support from the Confederation. SBB intends to stabilise its long-term financial situation and save around CHF 6 billion by 2030. We are pleased to note a further increase in staff satisfaction, high customer satisfaction and good punctuality, though in the latter case there were regional and seasonal differences. Punctuality, reliability, safety: these are the guiding principles for the SBB 2030 Strategy. Given the advantages of rail for the climate, the company expects strong growth in demand over the long term and plans to meet new customer needs with increasingly more flexible offers.

SBB looks back on another extremely challenging year marked by the Covid-19 pandemic. Demand recovered from the summer onwards but fell again towards the end of the year during the fifth wave of the pandemic. A total of 885,000 passengers travelled with us each day in 2021; this is 4.9% more than in 2020 but 33.1% less than the year before the pandemic in 2019. Leisure travel has experienced a stronger recovery than business travel. Many commuters continued to work from home in 2021. For international passenger services, the occupancy rate was around a third lower than in 2019, though it varied significantly depending on the restrictions in force in individual countries. During the summer of 2021, SBB even reached 2019 levels for some destinations. Although the number of customers in stations increased by 3.6% from 2020, this figure remained 30.5% lower than the 2019 value. Transport volumes at SBB Cargo Switzerland stagnated at a low level (2021: 5,256 million net tonne-kilometres; -0.2% compared to the previous year) and were considerably lower than in 2019 (5,979 million net tonne-kilometres).

A very difficult financial situation – stabilisation package prepared.
Coronavirus is causing great financial strain for SBB. The consolidated result closed at a loss of CHF -325 million (previous year: CHF -617 million). This includes the CHF 330 million in financial support from public funds (previous year: CHF 277 million). Thanks to this support – but also thanks to higher incomes and cost-cutting measures made by SBB – the 2021 loss was 47.3% lower than in 2020. Net interest bearing debt increased by CHF 720 million to more than CHF 11 billion. The debt coverage ratio – the ratio of net interest-bearing debt to EBITDA – is 13.7, which lies far above the upper limit of 6.5 required by the Confederation. According to current estimates, the coronavirus crisis will cost SBB around CHF 3 billion in total.

To ensure SBB's finances are in a sustainable position by 2030, SBB has prepared a stabilisation package together with the Confederation. SBB will implement planned cost-cutting measures of around CHF 6 billion by 2030, accompanied by further annual saving and/or yield optimisation measures of CHF 80 million from 2024 to 2030 as expected by the Confederation. This remains a challenge.

Happy staff create happy customers.
Unlike in 2020 and despite the coronavirus crisis, SBB did not run a reduced timetable in 2021; only during the Omicron wave at the start of 2022 was SBB forced to do so to a limited extent. In 2021, the company implemented further measures to increase punctuality, reliability, and safety. Good planning of construction sites and fewer disruptions to rail infrastructure and trains resulted in the second-best punctuality figures that SBB has seen in its history, though there were seasonal and regional variations.

The operational problems in French-speaking Switzerland were also reflected in customer satisfaction, which was above average as in the previous year, but also undermined by poor scores for the second half of the year in French-speaking Switzerland. The lowest point was the total suspension of service on the main route between Lausanne and Geneva lasting several days in November because of track subsidence in Tolochenaz. To ensure that punctuality remains high, the timetable requires more reserves in future, especially in French-speaking Switzerland.

Staff who work on trains, on the track, at stations, in workshops and at home all make an important contribution to the high punctuality and satisfaction scores. We are pleased to see that our staff themselves are also satisfied in most cases – the 2021 staff survey returned better results in almost all areas when compared to the previous year. The difficulties posed by the shortage of locomotive drivers have also finally been overcome, with the number of drivers reaching slightly above the required level during the first half of 2022. This means that SBB can train its locomotive crew for more routes and vehicle types, enabling a more flexible use of resources.

Rail is a very safe means of transport. However, particular attention is paid to occupational and shunting accidents, which increased slightly in 2021 despite a downward trend over the past 20 years.

Working and travelling on public transport is safe thanks to the protection plan.
Wearing a mask at work, following the Covid-19 protection plans and working from home continued to play a major role in daily working life for SBB staff in 2021. Since the beginning of the pandemic, SBB staff have been cleaning trains and stations more frequently and more intensively. Observing the Covid-19 protection measures means people travel safely and protect themselves, their fellow passengers, and our staff. The requirement to wear a mask on public transport is still in force until the end of March and continues to be well adhered to. SBB thanks its customers for their cooperation.

Rail travel is good for the climate and has a future.
SBB looks forward to welcoming its customers back. Travelling in a climate-friendly way and avoiding traffic will become increasingly important in future. In the long term, rail is set to show strong growth once again. There will be greater variation in travel behaviour, which will be less predictable; more people will travel for leisure and commute less. SBB is responding to this development with its 2030 Strategy, which was presented at the end of the year. As a first step, SBB will stabilise its operations and the timetable by 2025. By 2030, travelling by rail is set to become even easier and more comfortable: SBB will gradually design its service offer with greater flexibility on the basis of the tried-and-tested clock-face schedule. This will increase the attractiveness of rail travel over individual motorised transport.

In line with the 2030 Strategy, SBB is focusing on providing a punctual, reliable and safe railway in 2022. SBB intends to win back customers who left us because of the pandemic. The key points of this approach are: testing new travelcard formats, attractive Supersaver Class Upgrades, improved customer information during service disruptions, more connections to the mountains and abroad, more bicycle spaces and developing stations as attractive transport interchanges. SBB is driving forward digitalisation projects, for example, in integrated railway production. These projects help to make rail more efficient and robust.

Together with the Confederation, SBB is discussing solutions that will enable a modal shift from road to rail in freight services. As the most climate-friendly means of mass transport, SBB makes a significant contribution to achieving the Confederation's climate goals.

Ultimately, SBB wants to contribute to developing mobility in Switzerland as a whole and promote the combination of rail with other means of transport.

Italy

SACE and Alstom partner to promote exports and procurement of Italian small and medium enterprises

On April 27th, Alstom, a global leader in smart and sustainable mobility, and SACE, the Italian Export Credit Agency, signed a partnership agreement to increase Alstom's exports from Italy, and thus strengthen the Group's ties with the Italian supply chain.

As part of the Export Boost Framework Agreement, SACE is willing to assess the issuance of guarantees on export credit operations for the benefit of Alstom, according to the Group's overall purchases from Italian suppliers. The aim is to encourage Alstom's procurement from Italian exporting companies.

Furthermore, in order to increase the procurement of Italian companies, Alstom is committed to participate in business matching meetings organised together with SACE, with small and medium-sized enterprises (SMEs) interested in becoming suppliers of the Group.

The agreement includes two main areas of collaboration:

- Direct export support for Alstom Italy
- Strategic partnership to support Alstom's international projects and Group exports commensurate with the overall procurement that Alstom Group will carry out in Italy

The Export Boost initiative, which sees SACE become a partner of large international groups through the stipulation of a Framework Agreement, stems from the experience gained by the company led by Pierfrancesco Latini in supporting Italian exports.

Deeply rooted in the Italian railway tradition, Alstom in Italy has been manufacturing trains for 160 years, signalling equipment for 90 years and traction systems for 60 years. Today, with 10 sites throughout Italy and more than 3,500 employees, Alstom is a strong local employer recognised as one of the leaders in the Italian market. Alstom in Italy has two centres of excellence in high-speed trains: the Avelia Pendolino, based on tilting technology and regional single-decker trains such as the Coradia Stream, but also in railway signalling equipment and systems. The Group also uses several Italian suppliers to carry out its projects abroad, with a total procurement in the last 12 months of around 350 million euro.

"Alstom has global excellence in the transport and rail infrastructure sector, which represents one of the pillars for the global transition to a more sustainable transport model," said Pierfrancesco Latini, SACE CEO. "We are therefore proud to collaborate with a company of such great international importance and with such deep-rooted relations with the Italian supply chain. This agreement represents an important strategic element in support of export and internationalisation, facilitating access to financing by the Alstom Group, and thus supporting, directly and indirectly, supplies from Italian companies, particularly SMEs. We are confident that this agreement will enable our companies to increase their commercial relations with the Group and improve their competitiveness in the world."

"The partnership with SACE makes us very proud and consolidates Alstom's role in the Italian industrial and railway domain. A sector that, with the investments of the Recovery and Resilience Plan, is preparing for the energy transition that will give rise to sustainable, green and zero environmental impact mobility. The agreement represents an important support for export and internationalisation, as well as for all players who work with us every day to build the future of rail transport," explained Michele Viale, General Manager of Alstom Italia and Alstom Ferroviaria President and CEO.

Latvia

SJSC "Latvijas dzelzceļš" and Uzbekistan Railways will develop closer cooperation in freight transport, rolling stock repair and training of specialists

During a meeting with Uzbekistan Railways representatives in the Uzbek capital of Tashkent on April 20th, members of the management of SJSC "Latvijas dzelzceļš" and its subsidiaries, "LDZ CARGO" Ltd. and "LDZ LOĢISTIKA" Ltd., discussed opportunities for increasing freight transport volumes between Latvia and Uzbekistan and agreed on developing closer cooperation in repair and modernization of locomotives and wagons and in training of railway specialists.

SJSC "Latvijas dzelzceļš" Board Chairman Māris Kleinbergs: "SJSC "Latvijas dzelzceļš" and the entire "Latvijas dzelzceļš" Group is actively working on different solutions to increase freight transport volumes in order to compensate for the decrease in freight traffic over the pasts several years. Taking into consideration the growth of the Uzbek economy and our successful cooperation for many years, we now see an opportunity to continue increasing freight traffic volumes between Latvia and Uzbekistan."

"LDZ LOĢISTIKA" Ltd. Board Chairwoman Jūlija Vasiļkova: "We have already developed excellent cooperation with Uzbek customers, therefore, while in Uzbekistan, we have spoken to the existing and prospective new customers. Our aim is to further develop container transport and general cargo transport in covered wagons. By continuing to promote electronic document circulation, we help our customers process invoices faster to make freight transport even more efficient."

Akmal Kamalov, Deputy Chairman of Uzbekistan Railways Board, acknowledged during the meeting that Uzbekistan had traditionally relied on Latvian ports and had a high opinion of its long-time cooperation with SJSC Latvijas Dzelzceļš. "Not only the price of the service is important to us, but also reliability of our partners. Cooperation with China and other countries in the region has taught us the importance of ensuring circulation of electronic documents, which helps to make operations much faster and more efficient," emphasized Akmal Kamalov.

During the meeting, SJSC "Latvijas dzelzceļš" representatives offered their Uzbek colleagues to use the opportunities offered by LDZ Training Centre for training of railway specialists, to further develop mutual cooperation also in employee training.

The two companies' representatives also agreed to cooperate in repair and modernization of wagons and locomotives in order to address the current problems with availability of spare parts, which, together with the international sanctions against Russia, may hamper rolling stock modernization and repair projects.

Canada

Alstom and consortium partners selected for GO Expansion

Alstom has announced that ONxpress Transportation Partners, a consortium comprising Alstom, Aecon Group Inc., Deutsche Bahn International Operations GmbH and FCC Construcción S.A., has signed the project agreement for the On-Corridor Works Project of the GO Expansion program following a procurement process led by Metrolinx and Infrastructure Ontario. The multibillion-dollar On-Corridor Works Project will transform collective mobility in the Greater Toronto and Hamilton Area (GTHA), making it faster, more reliable, and more sustainable.

Alstom's scope within the consortium is anticipated to include the supply of new electric locomotives, train control systems, a new traction power system and network electrification via an overhead catenary system, as well as the integration of its scope. Alstom will also upgrade the existing GO Transit BiLevel rolling stock, signalling systems, telecommunications systems, and other digital equipment, and maintain the new locomotives and signalling system for a period of 25 years. Alstom's turnkey approach and integrated offering capitalises on its global system knowledge and portfolio of solutions to offer state-of-the-art solutions, such as Alstom's ERTMS[1] train control system, which will be introduced for the first time to the North America market.

GO Expansion will transform the GO rail network from a commuter service into an all-day rapid system, converting the network from a diesel-powered commuter railway to a primarily electric regional express system and will include system-wide upgrades, to deliver all-day service every 15 minutes on the core rail network. The On-Corridor Works Project, Ontario's largest capital infrastructure project, is an innovative, fully integrated contract that will not only deliver fast, more frequent and improved rail services within the Greater Toronto and Hamilton Area (GTHA), but also cleaner and more environmentally-friendly service.

"This agreement reinforces Alstom's contribution as the main railway partner in the growing Greater Toronto and Hamilton area and we would like to thank Metrolinx and Ontario for their continued confidence in Alstom. We are extremely proud to have been a part of this pursuit with ONxpress Transportation Partners for over four years and confirm our commitment to the people of the GTHA through a project that will not only provide faster, more frequent and all-day world-class service but is also a major step toward zero-emission mobility in the GTHA," said Michael Keroullé, President of Alstom Americas.

The multi-billion-dollar value of the On-Corridor Works Project commences with a safety signalling upgrade work package and a two-year collaborative development phase between ONxpress Transportation Partners and Metrolinx to refine the scope, progress with the design and plan the operational improvements to the system[2].

The scope of work and corresponding contract value will be finalised between ONxpress Transportation Partnersand Metrolinx upon completion of the development phase. The project is expected to generate significant employment opportunities in the GTHA during the design and construction phases. Certified Top Employer in Canada two years in a row, Alstom currently employs over 4,200 employees across the country, including more than 2,300 in Ontario. Hundreds of employees will be recruited by Alstom in the GTHA for the On-Corridor Works Project, including over 300 highly skilled professional and engineering positions to be filled during the first year alone.

[1] European Rail Traffic Management System
[2] Only the work package of safety signalling upgrade and the two-year collaborative development phase will be booked as order in 2022/23 Alstom's account

Luxembourg

Alstom has been awarded a maintenance contract for 70 locomotives by Alpha Trains

Alstom has signed a long-term maintenance contract with Alpha Trains Group, one of Europe's leading rail vehicle rental companies. Under this agreement, Alpha Trains has decided to trust Alstom's expertise and know-how to maintain part of its locomotive fleet for the next eight years on the European corridor. The collaboration started with 50 locomotives in October 2021, and thanks to the very high-performance level and quality of maintenance offered by Alstom, this figure has risen up to 70 after only a few months.

This long-term contract with Alstom allows Alpha Trains to offer greater reliability, availability and flexibility to its customers throughout Europe through preventive and corrective maintenance, long-term improvement actions and access to Alstom's mobile teams. These teams can be on site very quickly in the event of a breakdown. Alstom also has an extensive network of depots in Europe, located along the main rail freight corridors, allowing a decreased downtime of the assets and increased availability of the fleets, a crucial value for Alpha Trains' customers.

"This contract with Alpha Trains is very important for us, it is proof of our customer's trust in our services, and we are proud to be a long-term service partner," explains Frank Strik, Managing Director Services Benelux. "Alstom is the world leader in rail services, and this is a win-win situation for both parties. For Alstom, this enhanced collaboration is an opportunity to optimise its relationship with Alpha Trains, and to further strengthen its maintenance services division and leverage its growing EU maintenance network. We are very proud to have been selected by Alpha Trains Group."

"We are delighted to have entered into a framework agreement with Alstom Benelux and Alstom Germany to maintain locomotives on a full-service basis. The agreement guarantees the high maintenance quality of Alstom, enabling Alpha Trains to offer the best reliability and availability of Traxx locomotives in Western and Central Europe," said Fernando Pérez, Managing Director of the Locomotives Division of Alpha Trains.

The collaboration between Alstom and Alpha Trains had already started, several agreements already existed at local level. But this is the first time that the two companies have signed a global long-term framework agreement for such business. In Benelux, the well-equipped and experimented sites in Antwerp, Bruges and Rotterdam contribute to the maintenance of these locomotives both in the depot and on site. The sites offer a large panel of activities on all types of railway vehicles. The Benelux Services activities which employ over 400 people is growing for all types of maintenance. Alpha Trains is Europe's leading operational leasing and management company for rolling stock with more than 130 employees working at its different sites in Luxembourg, Antwerp, Cologne, Madrid, Paris and Warsaw. Alpha Trains has a fleet of more than 850 railcars and locomotives, which are currently used in 22 European countries by numerous public and private operators.

Photo: An Alpha Trains' Traxx locomotive in service on a European rail freight corridor. ©Alpha Trains/Hanau Großauheim Mathias Oestreich Germany

From the Archives

Bulgaria

‘Ludmillas’ Nos. 07-123 and 07-020 depart Panagjurishte with a train to Plovdiv on May 2nd 2011.
John Sloane

From the Archives

China

On February 3rd 2005, No. BJ3132 is seen at Xiamiaozi, Liaoning Province, China. *Mark Enderby*

From the Archives

Cuba

Former Hershey Railway's General Electric Bo-Bo of 1925 No. 20808 pulls out of Camilo Cienfuegos Yard on February 16th 1985. *John Sloane*

From the Archives

Germany

DB Class 181.201 leads an IC service through Cochem on May 7th 2005.
Mark Enderby

From the Archives

Germany

DB Class 112.105 arrives at Berlin Freidrichstrasse with an S-Bahn train from the east on April 23rd 2009.
John Sloane

From the Archives

India

Southern Railway WT Class 2-8-4T No. 14015 and WP Pacific No. 7738 are seen at Arkonam shed on November 25th 1977.
John Sloane

From the Archives

Ireland

CIE 071 Class No. 085 is seen at Dublin Heuston on July 15th 2005 working the 16:20 to Ballavan. *David Lindsell*

CIE 200 Class No. 201 is seen arriving at Dublin Heuston on July 15th 2005 with the 8 coach 16:25 from Cork. *David Lindsell*

On July 16th 2005, Nos. 124 and 134 are seen departing at Dublin Connoly station with a seven coach charity special to Sligo. *David Lindsell*

From the Archives

Italy

Unrebuilt Class E444.085 sits inside Genova Brignole shed on July 31st 1984. *John Sloane*

From the Archives

Pakistan

SGS No. 2504 is seen at speed near Sialcot with the 10:25 from Wazirabad on February 14th 1980.
John Sloane

From the Archives

Poland

PKP No. SP45-109 is seen at Przeworsk station on March 11th 1990.
John Sloane

From the Archives

Switzerland

SBB No. 16513 is seen working as station pilot at Basel on October 21st 2004. *Mark Enderby*

From the Archives

Switzerland

BLS locos Nos. 272 and 195 are seen at Spiez depot on July 28th 1985. *John Sloane*

From the Archives

Switzerland

SBB Re 4/4 No. 11307 stands at Lausanne on June 4th 1995. *Mark Enderby*

From the Archives

Ukraine

Grechany shed with an M62 built at Voroshilovgrad and a Czech built ChMe3 heavy shunter facing the turntable on April 29th 1993.
John Sloane

From the Archives

Ukraine

Two section diesel loco No. 2Te10M-2822 runs light through Kristinovka station on April 30th 1993. *John Sloane*

From the Archives

U.S.A.

Commuter trains lay over at the Caltrain Depot, 4th Street, San Francisco on March 21st 2000.
Mark Enderby