

Railtalk Magazine *Xtra*

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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 179Xtra

As things start to get back to somewhere near normal in this part of the world, focus has changed to several key areas. Firstly the need to encourage more rail use by passengers, secondly the need for more freight to use rail rather than road and thirdly for rail to be greener/eco friendly.

In Spain this month, Repsol and Talgo have announced that they will jointly develop projects to promote the creation of renewable hydrogen-powered trains and promote emission-free rail transport in the Iberian Peninsula. The agreement, signed on July 19th at Talgo's plant in Las Rozas, Madrid, has been signed by Repsol's Executive Director of Industrial Transformation and Circular Economy, Juan Abascal, and the Chairman of Talgo, Carlos Palacio Oriol. Repsol is the leading producer and consumer of hydrogen in the Iberian Peninsula and operates the largest hydrogen plant of Europe. The company uses this gas as a raw material at its industrial centres which are already evolving to become multi-energy hubs where renewable hydrogen is a strategic pillar in achieving net-zero emissions by 2050.

Repsol announced in November 2020, in its Strategic Plan, that it wants to play a leading role in renewable hydrogen, to be at the forefront of the market in the Iberian Peninsula. To do so, it will have an installed capacity of 400 MW by 2025 and will exceed 1.2 GW by 2030. For its part, Talgo is developing hydrogen-powered trains that will make it possible to decarbonise railway lines, especially those of the secondary network that are not electrified. To this end, it has developed its Vittal One train, a modular solution for medium-distance and commuter trains powered by hydrogen fuel cells, which will be the first dual hydrogen-electric train. The company is also planning to put on track next November a first train that will allow demonstrating and validating the concept in conditions similar to those of commercial operation.

The alliance between the two companies provides a comprehensive solution to making renewable hydrogen-powered trains a reality. Talgo will handle the design, manufacture, and commissioning of the new self-propelled trains for short- and medium-distances, while Repsol will offer up its renewable hydrogen generation infrastructure and the company's logistical means to supply the railway network.

This collaboration will promote the achievement of one of the objectives set in the Hydrogen Roadmap approved by the Government in October 2020 – to have two lines of hydrogen-powered commercial trains by 2030.

The Vittal One renewable hydrogen-powered train uses electric motors that obtain energy thanks to hydrogen cells, which turn this fuel into an electric current. This type of train can run on non-electrified tracks and without the need to install a catenary or make any other type of modifications. As such, it is a mobility solution that doesn't need long additional developments. It also benefits in particular those regions connected to secondary rail lines that have not yet been electrified, by allowing a quick and easy implementation of decarbonised mobility.

Repsol will use organic waste to generate biogas at its industrial centres, which will be used to produce renewable hydrogen. It has announced the installation of two electrolyzers with a capacity of 100 MW in Cartagena and Petronor that will supply its complexes with renewable hydrogen. In addition, the multi-energy company fosters and promotes large ecosystems across the hydrogen value chain, where supply and demand are adjusted, and technological development, investment, and public-private sector collaboration come together. This type of initiative puts Spain at the forefront of renewable hydrogen production in southern Europe.

Until next month

David

This Page

Aurizon's No. Q4007 hurries through Herne Hill with train No. 4430, the empty Sulphur containers from Malcolm to Kwinana. *Colin Gildersleve*

Front Cover

On June 17th, Northrail Smartron Class 192.010-7, under license from TX LOGISTIK (a company of the Mercitalia Group), heads through Gemünden am Main with a load of semi-trailers from Verona Quadrante Europa (Italy) to Padborg (Denmark). *Erik de Zeeuw*



On July 10th, the last service of the day from Linz - Praha was Eurocity train No. EC336 departing at 18:54 from Linz. The train is seen here about halfway between Pregarten and Kefermarkt stations. *Thomas Niederl*

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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, 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, Denzil Morgan, Thomas Niederl, Peter Norrell, Chris Perkins, Mark Pichowicz, David Pollock, Andy Pratt, 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.

Commonwealth Bulk Handling Group's No. CBH024 single handedly takes a long line of loaded grain hoppers through Wattleup to Kwinana for export. *Colin Gildersleve*

Australia

Watco Australia's No. G511 takes container transfer train No. 2142 through Thornlie from Forrestfield heading to the container port at Fremantle. *Colin Gildersleve*

On June 16th, An ÖBB RoLa service is seen near Sankt Jodok whilst climbing the Brenner Pass with a working from Wörgl to Brenner station. *Erik de Zeeuw*



Strong plus for TransFER Linz–Duisburg–Wels

The conventional wagonload and container traffic on the route from Linz to Duisburg and back to Wels shows an increase of 27 % this year compared to the same period in the previous year.

Around 135,000 net tonnes were transported in a sustainable manner by rail with the TransFER Linz–Duisburg–Wels from January to May 2021. This means that the transport volume on this route increased by around 30,000 tonnes and thus by 27 % compared to the same period in the previous year.

About this TransFER

With five round trips per week, the ÖBB Rail Cargo Group brings all types of goods in conventional wagonloads and containers, including dangerous goods transports (RID), climate-friendly and non-stop to the wide industrial area of the Rhine-Ruhr region, hereby linking the entire Central and Southeastern European area. With 100 % green traction current along the entire route, RCG also contributes to protecting the environment and to achieving the European climate targets.

Austria

Lokomotion Class 193.770-5 runs through Matrei am Brenner with a Pan Europa shuttle to Verona on June 15th. *Erik de Zeeuw*

Austria

On July 10th, OBB Class 1116.259 passes near Katsdorf with freight train No. 48511 heading to Lenzing. *Thomas Niederl*



OBB Rail Cargo Group's high-speed TransFER Linz–Antwerp

Between January and May 2021, around 142,000 net tonnes conventional wagonload and container traffic were transported between Austria and Belgium with the TransFER Linz–Antwerp in a sustainable manner on rail. With this eco-friendly transport solution between Austria and Belgium, the ÖBB Rail Cargo Group not only connects the central and southeast European economic centres with one another, but also links the northern and southern ports of Europe as a connection to sea-going shipping.

Due to the increased demand, the four weekly round trips were increased by one more in autumn last year.

As a result, conventional wagonloads and containers including dangerous goods transports (RID) are now sustainably transported by rail with five weekly round trips to and from the Belgian port area. The route leads non-stop from Linz via Passau - Nuremberg - Mainz - Bischofsheim - Aachen - Montzen - Genk to Antwerp with a transit time of only one day.

With this TransFER, RCG also offers comprehensive additional services such as transshipment options, warehouse logistics, damaged wagon and emergency management, and takes care of first and last mile. By providing up-to-date transport information, the status of the shipment can be easily checked.

Taurus locomotive Class 1116.066 departs the station at Freistadt on July 10th with train No. R3804, an international stopping service from Linz to Ceske Budejovice.
Thomas Niederl

Two days of heavy storms caused damage to the overhead wires between Ceske Budejovice and Veseli nad Luznici, so all trains were replaced by buses. The international 'Jizni Expres' trains to Linz were replaced between Veseli and the border station of Summerau because there were no dual voltage Class 380s available. In the Austrian section, the trains were hauled by Class 1142 596, it was a little comeback for this old timer in front of CD coaches once again after previously a two weeks session in the spring, when the Czech part of the line was closed due to engineering works. On July 10th, Eurocity train No. EC335 is seen about 2 km north of Pregarten. *Thomas Niederl*

ÖBB Class 1293.015-4, with classmates 1293.043-6 and 1293.062-6 are waiting for the green in Matrei am Brenner while working a TRANSWAGGON AB cellulose train coming from ScandFibre-Logistics Gävle (Sweden) and heading to Verona (Italy). *Erik de Zeeuw*

On June 15th, STB (Stubaitalbahn) No. 353 arrives at Mutters Station working a service from Innsbruck Hbf to Fulpmes. *Erik de Zeeuw*

On June 7th, Infrabel Nos. 6213 and 6214 hammer past Soignies heading south. *Erik de Zeeuw*

EUROPORTE Vossloh Euro 4000 No.4016 carries out some shunting in Ath on June 7th. *Erik de Zeeuw*

France

Alstom to supply 19 additional metros to Île-de-France Mobilités for line 11 of the Ile-de-France metro, operated by RATP

Alstom will supply 19 five-car MP14[1] metros with driver's cab for line 11 of the Île-de-France Mobilités network operated by RATP, for a total value of 132 million euro. This order, which is 100% funded by Île-de-France Mobilités, falls within the framework of the MP14 contract signed in March 2015 between RATP (mandated by Île-de-France Mobilités) and Alstom for the delivery of a maximum of 217 MP14 trains over 15 years, for a total amount of more than 2 billion euro. This contract is part of the Île-de-France Mobilités strategy for the modernisation of all rolling stock on the Île-de-France Mobilités network. An initial tranche of the MP14 contract included 35 automated metros for line 14, consisting of eight cars each. A first conditional tranche for 20 additional automated metros, consisting of six cars each, was exercised in January 2017 for line 4. A second option of 20 additional five-car trains (with driver's cabs) was exercised in February 2018 for line 11.

"With the first MP14 trains entering commercial service in October 2020 on line 14, Alstom is delighted to have received an additional order for these innovative trains. The progressive arrival of MP14 metros on lines 14, 11, and 4 (in that chronological order) will directly improve the daily lives of hundreds of thousands of passengers in Paris and the Île-de-France region. Alstom is delighted with the renewed confidence of its customers, Île-de-France Mobilités and RATP," said Jean-Baptiste Eyméoud, President of Alstom France.

A state-of-the-art metro, MP14 offers an unprecedented level of comfort and safety thanks to its interior layout and seats with a design based on the theme of the alcove, creating both hospitality and privacy. Vast reception areas offer accessibility to all passengers, with dedicated areas and boomerang-shaped seats to improve the passenger flow and the capacity of the trains. MP14 also has LED lighting efficiently distributed throughout the entire metro to provide a sense of security while eliminating darkly shadowed areas. The supports and steadying points are compliant with safety standards and further increase comfort inside the train. Warm and cool ventilation helps to provide temperature balance, whatever the season. MP14 also provides comprehensive video protection and dynamic passenger information on board. A special feature of the MP14 metros for line 11 is that the design of the driver's cab incorporates feedback from previous generations of cabs. Their design features the latest developments in ergonomics and has been validated by RATP drivers and occupational physicians.



MP14 is designed to improve passenger comfort and experience as well as reconcile performance, energy savings and ease of maintenance to keep costs under control throughout its life cycle.

MP14's 100% electrical braking system recuperates energy and re-injects it into the network as electricity, while limiting the emission of fine particles caused by the mechanical brakes. The system reduces the energy consumption of the metros, as well as air pollution, by up to 20%. MP14 is also 40% quieter than the metros currently in service on line 11, with a 95% recyclability rate.

About 20 automated metros for line 14, consisting of eight cars each, will be delivered by the end of 2021. The first six-car automated metros for line 4 are currently being tested. Production of the first five-car metros for line 11 began in the last quarter of 2020 and the first metro will begin validation tests on RATP tracks this summer.

[1] Matériel Pneu (rubber-tyred rolling stock) 2014 call for tenders

Alstom to invest in the world's first cybersecurity campus to include a dedicated rail focus

Alstom has invested € 100,000 in Campus Cyber SAS, a French company supporting the wider Paris "Campus Cyber" initiative. This investment strengthens Alstom's ambition to lead the way to greener and smarter mobility, worldwide, as outlined in the company's Alstom in Motion 2025 strategic plan. As a shareholder, Alstom has now become an associate member of the campus, a centre aimed at unifying the cybersecurity community and developing synergies between various industry players. Joining this campus will enhance existing rail systems' cybersecurity capabilities and help drive the rail industry towards a cyber-safe future.

The "Campus Cyber", located in La Défense (near Paris), will open in autumn 2021, and bring together industry, governments, academic and associations representatives under a single co-creation environment. Additional regional hubs are scheduled to open in the coming years. In a world driven by digitalization, assurances that data and connected systems are protected is a fundamental requirement of ensuring continuous operations. Therefore, Alstom has placed cybersecurity at the heart of its excellence and safety culture.

"This will be the first campus in the world with a focus on the rail sector. Again, Alstom is actively forming a partnership to ensure that the rail industry is equipped to tackle cybersecurity challenges all over the world. Leveraging expertise from other sectors to boost the ongoing development of cybersecurity solutions designed for mobility, will ensure a rapid and resilient response to operators' demand," says Eddy Thésée, Vice President of Cybersecurity at Alstom.

As a leader in the railway industry, Alstom addresses the entire rail cybersecurity lifecycle. Alstom can help rail asset owners and operators undertake risk analysis, understand where their vulnerabilities lie and react appropriately. From building a new line to launching a new type of train or upgrading or operating their transportation systems, the Alstom cybersecurity team works with trusted partners to set best practices and benchmark standards for the rail industry, throughout the entire value chain. Continuous monitoring of vulnerabilities and an understanding that cybersecurity is not a set-once-for-all process, positions Alstom as a leader in the protection of mobility systems.



On June 12th, BLS Cargo Class 475.401-6 passes Kaub with a train consisting of pocket cars loaded with semi-trailers from Novara (Italy) to Zeebrugge (Belgium). *Erik de Zeeuw*

Near Assmannshausen on June 13th, we see ECCO RAIL Class 193.599-8 following the Rhine upstream with the 'Ekol shuttle' from Köln Eifeltor to Triëste (Italy). *Erik de Zeeuw*



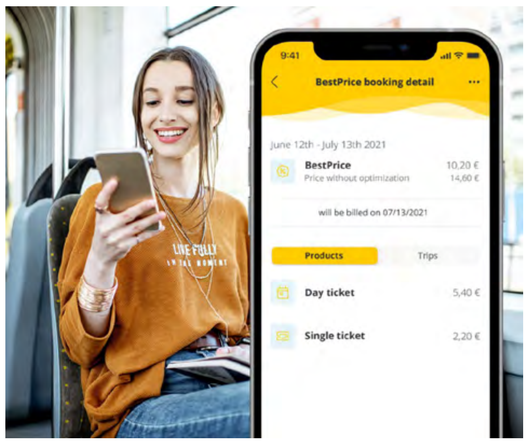
On June 17th, METRANS Class 187.508-7 is seen near Wernfeld with a deep sea container train from Nürnberg Hafen to the Kombi-Transeuropa Terminal in Hamburg. *Erik de Zeeuw*

Germany

After a check of the train by the control authority, RheinCargo Class 145.084-0 departs Gemünden am Main in the direction of Würzburg on June 17th. *Erik de Zeeuw*



Siemens Mobility subsidiary eos.uptrade provides 'Best Price' ticket solution for Stuttgart authority



Siemens Mobility subsidiary eos.uptrade has partnered with Stuttgarter Straßenbahnen AG (SSB) to integrate the 'Best Price' option into the SSB Move app, making it more convenient for passengers to buy public transport tickets.

eos.uptrade utilized its XiXo ticketing software to create a new ticketing module that automatically calculates the best possible price at all times. Passengers no longer need to decide whether a single ticket, a day ticket or even a weekly/monthly ticket is the right choice for them. The automated calculation of the best price offers maximum flexibility for passengers and operators.

"Our 'Best Price' offer is now available to a wide range of customers, allowing them to use our offer even more spontaneously and flexibly. We are very pleased to be bringing this innovative ticketing approach to life," stated Mario Laube, Commercial Director at SSB.

"This is another example of how smart and innovative applications can intelligently integrate and coordinate transportation to create a more seamless and convenient travel experience," said Andre Rodenbeck, CEO Rail Infrastructure at Siemens Mobility. "Having the ability to always get the best price from the full spectrum of mobility options significantly improves the passenger experience and enhances overall quality of life."

"Corona has significantly accelerated changes in our working environments and thus also in our mobility behavior. This increases the need for flexible and attractive public transport services," said Mathias Hüske, Managing Director of eos.uptrade. "SSB has opted for a seamlessly integrated solution that creates lasting trust among passengers."

The new ticket can be booked via the trip planner. Once the user has decided on a connection, the price overview shows the 'Best Price Ticket' option. If this option is selected, the underlying technology will do the rest. Following all journeys made within a month, the system automatically charges the lowest price. From single tickets to monthly tickets, passengers no longer need to worry about which ticket will be the right. The trip overview also shows the savings compared to a ticket without 'Best Price' optimization. The integration of the new ticket into SSB's existing mobile store means there is no need for passengers to register again, all relevant data is stored in the app and the payment method specified by the customer is used for monthly billing. The XiXo solutions from eos.uptrade are all based on best price optimization and can be flexibly expanded depending on the requirements of the transport company. With XiXo.easy, passengers do not even have to select a route in advance, they can conveniently log in via the app when boarding and will be reminded to check out at the end of their journey.

A Check-in/Be-out system (CiBo) automatically detects when the passenger leaves the vehicle. The comprehensive Be-in/Be-out solution (BiBo) utilizes supporting hardware in the vehicles to fully automate and record the route traveled. Together, Siemens Mobility, Hacon, eos.uptrade, Bytemark and Padam Mobility provide a unique and holistic ecosystem of digital services and solutions: From trip planning across passenger communication to mobile ticketing, payment, and comprehensive Mobility as a Service (MaaS) solutions, fleet management to train planning systems and mobility data analytics.

Germany

State of Bavaria supports hydrogen-powered train – trial operation in Bavaria



The Bavarian State Ministers for Economic Affairs and for Transport support the testing in Bavaria of a hydrogen-powered train developed by Siemens Mobility GmbH. The two-car train is to be tested on the Augsburg - Füssen route, among others, beginning in mid-2023. The pilot operation in the rail network of Bayerische Regiobahn (BRB) is initially planned for 30 months. The hydrogen-powered train will be stationed in Augsburg during this time. A Memorandum of Understanding to this effect has been signed by Minister for Economic Affairs Hubert Aiwanger, Minister for Transport Kerstin Schreyer, and top representatives of Siemens Mobility and Bayerische Regiobahn (BRB).

Bavaria's Minister of Economic Affairs Hubert Aiwanger is especially pleased about the development partnership. "The train is another important component in Bavaria's hydrogen strategy. My ministry is promoting research, development and applications in the field of hydrogen technology. We're organizing this rail project together with our partners because we're convinced that hydrogen technology will make a significant contribution to decarbonizing transport. We'll prove in Bavaria that business and climate protection can be reconciled with green hydrogen."

Kerstin Schreyer, Bavarian State Minister for Housing, Building and Transport explained: "The Free State of Bavaria sets itself ambitious climate targets and wants to implement a clear climate protection strategy in the transport sector. Innovative technologies and green hydrogen play a special role in this. In addition to the direct use of electricity, hydrogen has the potential to be used in a wide range of flexible applications, so that the rail transport sector can also be completely converted to renewable energies in the future. I am pleased that the Free State can also test this innovative technology in regular operation in this project."

Karl Blaim, Managing Director of Siemens Mobility: "Siemens Mobility is a leading supplier in the development of alternative drives, which can contribute significantly to reducing emissions, especially in regional transport where there are no electrified overhead lines. The technology partnership between Siemens Mobility and the State of Bavaria enables the further development of the Mireo Plus H for Bavaria and supports climate-friendly passenger transport in the state."

Arnulf Schuchmann, technical Managing Director of Bayerische Regiobahn, said: "We agreed to test hydrogen technology and to test the Siemens Mobility train in passenger service because we are curious and open to alternative forms of propulsion in the railway sector as well. Within the Transdev Group, to which we belong, there is already a lot of experience with alternative drives in the bus sector." However, it is by no means enough to put the hydrogen train on the track, since many aspects have to be taken into account during operation. Safety requirements have to be implemented, staff training, the refueling of the vehicle, the routes on which it will travel, and many other activities have already begun.

The hydrogen-powered train is being developed on the basis of the Mireo Plus H platform from Siemens Mobility. It is designed to operate on non-electrified rail lines and has a range of up to 800 kilometres. The main components of the hydrogen traction drive are two fuel cells mounted on the roof. The system uses the latest generation of batteries from the Saft company that are installed beneath the floor. The train will be presented to the public in the spring of 2022. The first test runs in Bavaria are planned for 2023, before the train officially enters passenger service in January 2024.

The development of alternative drives in rail transport is part of Siemens Mobility's sustainability strategy. The company is a pioneer when it comes to sustainable mobility and will offer the successful Mireo regional train as both a hydrogen and a battery-powered unit. The well-known Mireo Plus H platform is being used but is being equipped with a new generation of batteries to further improve both performance and passenger comfort.

Germany

DB: Interim Report on Cottbus

The new railway plant in Cottbus will be completed much earlier: which means that the first ICE trains will be serviced in Lusatia as early as 2024 - two years earlier than planned. Construction in Cottbus will start in 2022, and preparatory measures such as exploring the subsoil are already underway. This means that the structural strengthening in the region is proceeding rapidly. Because of this new jobs at the Cottbus plant will also be created earlier. By 2024, DB will be hiring more than 500 new employees, and by 2026 another 700 new jobs will be added. The new plant in Cottbus will create a total of 1,200 new, highly qualified industrial jobs.

Richard Lutz, CEO of Deutsche Bahn: “The new plant in Cottbus is a milestone on the way to a strong rail. We need this plant so that even more ICE 4 trains can run and even more people can use the train as the most climate-friendly means of transport. The plant is a double investment in the future: On the one hand, it promotes the mobility transition and thus makes an important contribution to climate protection. And it promotes structural change in Lusatia, because we offer safe and good jobs here.”

Olaf Scholz, Federal Minister of Finance: “Cottbus shows how climate protection and structural change can be tackled successfully. Deutsche Bahn is creating 1,200 new, highly qualified jobs with its new railway plant in Cottbus. This is good news for the city and for the whole of Lusatia. It’s a great signal that these jobs are now being created even faster than planned. This is how structural change works successfully and based on solidarity. At the same time, we are promoting climate-friendly mobility by rail. This is exactly how smart climate protection works. “

Dietmar Woidke, Prime Minister of Brandenburg: “The new concept of DB AG represents a milestone for the whole of Lusatia. Brandenburg has always fought to create new industrial jobs with the gradual exit from coal-fired power generation. This promise is kept. Now the railway plant is supposed to start even earlier. That makes me very happy. The new maintenance shop is part of a whole series of projects at the Cottbus location, with which we will make Lusatia known as a model region for climate protection and economic growth far beyond Brandenburg. I would like to thank Richard Lutz and Ronald Pofalla at Deutsche Bahn and the federal government. You all kept your word and stood up for this important project.”

Ronald Pofalla, Board Member for Infrastructure, Deutsche Bahn: “My thanks go to the Federal Government and the State Government of Brandenburg, namely Federal Finance Minister Olaf Scholz and Brandenburg’s Prime Minister Dietmar Woidke. Both have done everything to ensure that this plant can and will be built in Cottbus.”

DB relies on a two-hall concept for the new railway plant. Instead of a large maintenance hall with six tracks, a double-track hall will initially be built by 2024. Another hall with four tracks will follow by 2026. With this concept, parts of the new plant will be put into operation earlier. This means that the capacities for the maintenance of the new ICE 4 trains are available more quickly. Entire ICE trains of almost 400 meters in length can be serviced in both halls.

Passengers benefit because the trains are back on the route faster and are



more reliable and therefore more punctual. This is an essential building block on the way to further increasing the number of long-distance passengers and thus contributing to climate-friendly mobility and the turnaround in traffic. DB is currently receiving a new ICE 4 every three weeks. The fleet currently comprises almost 80 trains. By the end of 2024, 137 ICE 4 trains are to be in use across Germany.

The new hall for hybrid locomotives originally planned in Cottbus will now be integrated into the existing plant. In the course of the preliminary planning, it turned out that more efficient production processes are possible as a result. The new plant is financed on the basis of the Coal Regions Investment Act. Investments amounting to 1 billion euros are planned. With this law, the federal government and the federal states support the regions affected by the coal phase-out in Brandenburg, the Free State of Saxony, Saxony-Anhalt and North Rhine-Westphalia in building sustainable jobs and new economic structures.

Successful ‘Schleswig-Holstein XMU II’ transaction receives IJGlobal Award 2020

Successfully executed by Paribus, the ‘Schleswig-Holstein XMU II’ transaction has received the IJGlobal Award 2020 in the category ‘European Transport Mass Transit’. With this international annual award, the popular IJGlobal trade magazine acknowledges extraordinary transactions completed in the international infrastructure and energy market the preceding calendar year. One of the central elements of the transaction is the long-term project financing through registered bonds, which have been subscribed for by investors of Allianz Global Investors.

‘The XMU project, which was implemented in collaboration with our partners, received the IJGlobal Award 2020, which not only honours their contribution to making rail transport even more eco-friendly and attractive, but also demonstrates broad recognition of our expertise in the procurement, financing and leasing of high-tech trains,’ explains Dr Volker Simmering, Managing Partner of the Paribus Group. ‘We would like to take this opportunity to thank all of the partners involved for the trust and successful collaboration in this demanding and pioneering project dedicated to financing and further developing local public rail transport.’

About the project
Represented by NAH.SH, the state of Schleswig-Holstein awarded its ‘XMU II’ public contract to Paribus in spring 2020, allowing the company to procure a total of 55 eco-friendly battery-powered trains, which will be leased to various rail transport companies to be selected by the state over a period of 30 years. Specially founded for the purpose of financing, the project company Paribus-XMU- Fahrzeugvorhaltegesellschaft mbH issued registered bonds, which have been subscribed for by investors of the Allianz Global Investors. Société Générale is also involved as an additional financing partner. The state of Schleswig-Holstein is helping to finance the rail vehicles with the provision of a debt service guarantee. The new trains will be built and delivered by train manufacturer Stadler, with consultancy services provided by law firms K&L Gates and Ashurst and auditing firm Mazars.

Northrail is already involved in the project, providing support during the manufacturing process.
The new battery-powered ‘Flirt Akku’ trains are scheduled for delivery between late 2022 and mid-2024 and will primarily be replacing diesel locomotives in an effort to promote sustainable rail transport. Because



they’re equipped with the corresponding batteries, the new, all-electric trains can even use routes without an overhead line. Northrail GmbH (Northrail), which belongs to the Paribus Group, will be supporting the project for the full duration, until 2052, which will initially entail intensive monitoring of the process for manufacturing the trains. Following successful delivery of the new trains, Northrail will also be in charge of the ongoing technical and business sides of asset management.

Germany

Upward trend beginning in the second quarter
More record capital expenditures to fight climate change

More passengers, more freight and higher revenues: Deutsche Bahn (DB) has seen a noticeable uptrend as of the second quarter of 2021. As Covid-19 restrictions were lifted in Germany, demand for long-distance services, which were especially hard hit by the pandemic, began to increase sharply in April. Even so, the tight lockdown during the first few months of the year, which was repeatedly extended, had a major impact on DB Group's bottom line for the first half of 2021. Despite the pandemic, DB Group has continued to invest at record levels for more climate-friendly growth – capital expenditures at the railway in Germany has been higher than ever before. DB Group ended the first six months of 2021 with an operating loss (adjusted EBIT) of EUR 975 million due to the pandemic. Taking extraordinary items, net interest balance and income taxes into account, DB Group showed an after-tax loss of EUR 1.4 billion. However, the loss was much lower than in the first half of 2020. At EUR 21.8 billion, DB Group's revenues in the first six months of 2021 were up 12.2% compared with the same period in 2020.

Very strong performance by DB Schenker, DB Group's logistics unit, had a positive impact. And some of DB Group's other business units, including DB Regional, DB Netze Track and DB Cargo, also saw revenue increases despite the pandemic.

"We are really picking up the pace for sustainable mobility and logistics. Our products and services have never been better – we are well equipped for more passengers and growth," said Dr. Richard Lutz, CEO of DB, in Berlin. Lutz reported that DB Group was making substantive improvements to its fleet and network, such as adding new XXL ICE 4 trains and modernizing nearly 2,000 kilometers of track in 2021 alone. Lutz also stressed DB Group's important role in reaching climate targets set by Germany and the EU: "The recent disastrous flooding in Germany is just the latest example of how serious the consequences of climate change are already. That's why rail is more important than ever for sustainable development. The uptrend we have seen in recent weeks is proof that people want to take the train again."

DB Group's capital expenditures – about EUR 5.6 billion gross and about EUR 2.7 billion net in the first six months of 2021 – matched the highest half-year numbers in DB Group's history, which were seen in 2020. Funds are being spent to modernize infrastructure and purchase new trains. This record capital expenditures, primarily in the railway in Germany, will help DB Group to further improve quality in the future. Punctuality at DB Long-Distance was 79.5% in the first half of 2021 (compared with 83.5% in the first half of 2020). This was due in part to much higher infrastructure usage, a cold spell in the first quarter that was worse than any Germany had seen in years, and the recent extreme rainfall. In the first half of 2021, roughly 480 million passengers took DB Group's trains in Germany (compared with roughly 663 million in the same period last year). This was in stark contrast to pre-pandemic levels: over one billion people took DB trains in the first half of 2019. DB Regional, DB Group's subsidiary for regional and local transport, saw rail patronage fall around 27% compared with the same period last year. DB Long-Distance saw an especially large drop, with patronage down 34%. The half-year figures for 2020 and 2021 are not directly comparable, however, not least because last year's numbers included record months before Covid began to have an impact.

The lockdown across the entire first quarter was responsible for the lower numbers at DB Long-Distance in the first half of 2021. Capacity utilization and bookings have since increased noticeably. Passenger numbers in the second quarter of 2021 were about 50% higher than in the second quarter of 2020.

DB Cargo, DB Group's rail freight subsidiary, turned transport volumes around and started growing – thanks in part to higher demand for climate-friendly supply chains. It increased its volume sold to 43 billion ton kilometres, up 12.6% over the first half of 2020. DB Schenker, DB Group's global logistics unit, surpassed the values of the first six months of 2020 by far. With an operating profit of nearly EUR 630 million, DB Schenker posted the best figure at the half-year mark in its history. DB Schenker benefited from high demand for stable global logistics chains, more than doubling its profits compared with the first half of 2020. DB Arriva, DB Group's local transport operator in Europe, saw losses again but performed far better than in the same period in 2020.

"We will overcome the serious challenges that the pandemic has created, step by step. We intend to continue the uptrend and return DB Group to profitable business," said DB Group's CFO Dr. Levin Holle. "For this to happen, all of us at DB Group need to do our part. Saving wisely and consistently investing in the future are two sides of the same coin." Holle stressed that DB Group intends to cover half of its Covid-19-related losses – more than EUR 10 billion in total – itself by 2024.DB Group expects an operating loss (EBIT adjusted) for 2021 as a whole, in part because it will likely no longer be able to make up for the months of lockdown at the beginning of the year. The operating loss is expected to be roughly EUR 2 billion, which is much lower than in 2020. DB Group anticipates that revenues in 2021 will continue to rise again, to over EUR 42 billion. All forecasts are still subject to a high level of uncertainty, as it is impossible to reliably predict how the pandemic, the economy and flood recovery could affect performance.

Branded ICE recognizes the commitment of employees on the occasion of ten years of the LGBTIQ

With an ICE in rainbow colours, Deutsche Bahn (DB) is sending a clear signal for an open society without discrimination. The group is once again underlining its support for the LGBTIQ movement. DB CEO Dr. Richard Lutz and DB Human Resources Director Martin Seiler, together with Norbert Nirschl, board spokesman for the LGBTIQ employee network "railbow", presented at the train station in Berlin Gesundbrunnen. The network is celebrating its tenth anniversary this year; the patron is Dr. Richard Lutz. With the rainbow ICE, DB is honouring the longstanding commitment of employees who work for diversity and tolerance within and outside the group.

Dr. Richard Lutz : "The rainbow as an international symbol for tolerance, acceptance and the appreciation of diversity has recently been very present in the public debate. Good this way! Because this is not about symbolism, but about attitude, social interaction and concrete living conditions. At DB, diversity is part of our identity and is firmly anchored in the corporate strategy. Because it is in our DNA to bring people together, to promote encounters and exchange."

Martin Seiler: "At DB we use all the colours of the rainbow, our diversity makes us strong! As a company, we claim to live a respectful and trusting coexistence over the long term and are committed to treating the diversity of our employees and travellers in an appreciative manner. Open and covert discrimination have no place with us. Our goal is a culture of equal opportunity and appreciation. With targeted measures, DB strengthens a mutual understanding of individuality and promotes the equal participation of all employees."

Norbert Nirschl: "The fact that we are celebrating our tenth birthday this year and that we are also sending a clear signal for diversity and tolerance in these special times makes me proud and shows that the topic is not a flash in the pan for DB. As a Bavarian and as a Munich resident, I am of course particularly pleased that the ICE "Munich" is spreading this message from today on. "

Diversity at Deutsche Bahn



As a company made by people for people, DB values the diversity of its employees and travellers and maintains an open corporate culture. Over 330,000 people with more than 100 different nationalities and from four generations are currently working successfully together under the umbrella of the DB Group. Employees of different sexual orientations and gender identities treat each other respectfully and openly at DB. For this purpose, DB supports the LGBTIQ employee network "railbow". In addition, DB is involved in the annual Pride Month. Diversity is taken into account in all decisions as an overarching cross-cutting issue throughout the Group and anchored in the "Strong Rail" umbrella strategy. All diversity measures are bundled in the group initiative "Individually".

Photo: ©DB/PI-Regenbogen-ICE

Germany

Destruction on a historic scale: DB draws an interim balance sheet after the flood disaster



About a week after the heavy storms in North Rhine-Westphalia and Rhineland-Palatinate, Deutsche Bahn (DB) draws an initial balance sheet. Head of Plant and Maintenance Management at DB Netz AG, Dr. Volker Hentschel: “In this dimension, our infrastructure has never been destroyed in one fell swoop. We are facing a tremendous show of strength.”

Slopes and embankments, but also track flooding and undercutting, have led to massive destruction. The damage to over 50 bridges is particularly serious. In addition, the floods of water severely affected stations and stops as well as the technology: 180 level crossings, almost 40 signal boxes, more than 1,000 catenary and signal masts, energy systems as well as elevators and lighting systems in the stations are affected. “According to an initial assessment, we assume that the water masses in our network and at the stations caused damage of around 1.3 billion euros,” Hentschel continued.

DB is working flat out to make as many routes as possible passable again. Work on this has already begun. They follow a clear principle: repairs and construction measures that can be carried out quickly and that are highly beneficial for passengers and rail traffic have priority. As a first step, the DB construction team carried out makeshift repairs, especially on the main lines and connections with minor damage. At the same time, specialists replaced damaged overhead lines, cleaned tracks or removed alluvial debris. The work on site and the recording of the damage continue unabated.

Dr. Volker Hentschel: “My special thanks go to the employees who, in the midst of a historical catastrophe, have been working around the clock for days on exploring and repairing tracks and systems. Our goal is to be able to bring around 80 percent of the damaged infrastructure back into shape by the end of the year. However, the pictures on site show very clearly: some stretches are still flooded or have completely disappeared. It will take months, if not years, to restore all of this.”

After the first repairs, more complex work is now to be done, ranging from replacing overhead line and signal masts to building new platforms, bridges and elevators to repairing level crossings. With this, DB wants to achieve further noticeable improvements for rail traffic.

A longer planning and construction period is required for routes and systems that have been completely destroyed by the masses of water. Together with municipalities, federal states and the federal government, completely new traffic concepts have to be developed here, taking into account the respective landscape conditions.

DB is preparing for future weather extremes and the consequences of climate change with a resilience strategy. The basis is a study commissioned by the DB by the Potsdam Institute for Climate Impact Research, which developed scientific forecast values for 34 traffic regions in Germany.

Germany

IdeenzugCity:
DB sets new standards for rail traffic in Germany's metropolises

Deutsche Bahn (DB) has presented the walkable model of a S-Bahn of the future, setting new standards for rail traffic in metropolitan regions. With the IdeenzugCity, DB is once again showing innovative solutions with which customers and rail operators in local transport can significantly increase quality and capacity on the climate-friendly rail. The IdeenzugCity makes travel for commuters and day trippers in regional and S-Bahn traffic even more reliable, comfortable and flexible.

The seating areas can be extended or retracted at the push of a button. The available capacities can be flexibly adapted to the number of passengers and the time of day and, if necessary, additional space can be created for bicycles and strollers. LED strips help passengers to orientate themselves better in and around the train. New displays and digital foils on windows and doors improve passenger information. A 180 ° train destination display in the windshield adapts to the viewing angles of the passengers on the platform by moving the destination station from the center of the display to the side so that it is easy to read for all customers. Passengers who want to work on the train will find an integrated display as a second screen for a laptop and a comfortable folding table.

DB Regional Manager Dr. Jörg Sandvoss: "Innovations are the key to more passengers and more climate protection. With the IdeenzugCity, we are making specific offers to the entire local transport industry for the further development of S-Bahn trains, with which we as DB Regio alone transported over 1.3 billion people in Germany's largest metropolises every year until the outbreak of the pandemic. The flexible room concept with automatically adjustable seating and standing landscapes is unique worldwide. At the push of a button, we can increase capacity by up to 40 percent. This is how the mobility turnaround works, this is how we win new passengers for the environmentally friendly train. "

The IdeenzugCity is already the second 1: 1 model from DB Regio, financed from its own resources, which makes innovations tangible for customers and operators in regional transport. In the meantime, DB has expanded the IdeenzugRegio, which was presented in 2018, to include newly designed toilet rooms and a flexible interior concept for taking bicycles along. The first implementations from the IdeenzugRegio can be found at the Munich S-Bahn and, in the future, at the Stuttgart S-Bahn, the Hamburg S-Bahn and the Südostbayernbahn.

Photo: © Ideenzug_Oliver-Lang



BayernBahn veteran Class 139.287-7 (in retro-look) passes Karlstadt with the 'Henkel train' (detergents) from Langenfeld to Gunzenhausen on June 17th. *Erik de Zeeuw*

BayernBahn Class 140.850-9 (in retro-look) crosses the river Fränkischen Saale with TransWaggon Laaiis and Habbiins cars (Henkeltrain) from Wassertrüdingen to Langenfeld. *Erik de Zeeuw*

On July 6th. BLS/CROSSRAIL Class 186.496-6 passes the old signalbox in Oberlahnstein with a GTS shuttle from Frankfurt/Main to Antwerp (Belgium). *Erik de Zeeuw*

Germany

On July 5th boxXpress Class 193.835-6 is seen near Braubach hauling a deep sea container train from Rotterdam Mvtw to München Riem Ubf (Germany).
Erik de Zeeuw

SBB Cargo International Class 482.008-0 heads a rake of tankers from Köln Eifeltor to Gelsenkirchen Bismarck away from Duisburg on July 8th. *Erik de Zeeuw*

On July 6th, FLIXTRAIN Class 182.521-5 working the afternoon Berlin to Stuttgart service is seen at the height of Odensachsen. *Erik de Zeeuw*

Prototype refurbished Coradia Continental trains completed

On behalf of Alpha Trains, continental Europe's largest lessor of trains and locomotives, Talbot Services has completed the prototype for the upgrade and refurbishment of a total of 35 multiple train units of the type Alstom Coradia Continental at the Talbot plant in Aachen. With the development of this prototype, all the prerequisites are met for the fast and smooth upgrade and refurbishment of the remaining vehicle fleet. The long-term experience of the Alpha Trains engineering team with modernisation and refurbishment projects is a key advantage in the largest upgrade and refurbishment project in the company's history. The specifications were drawn up based on the requirements of the public transport authority, the technical specifications were developed in close collaboration with Talbot Services, and the construction of the prototype closely supported by Alpha Trains.

Thomas Schmidt, Managing Director of Alpha Trains Europa GmbH, said: "The prototype is truly impressive. The project is a prime example of how tried and tested rolling stock can be upgraded and refurbished to provide passengers with a level of convenience similar to that of new trains. The overall concept is both sustainable and future-proof due to the considerable savings in terms of resources."

The previous and current operator of the fleet is NordWestBahn, a subsidiary of the French Transdev Group, which has been operating the trains on the 270km-long network of the Regio-S-Bahn Bremen/Lower Saxony (RSBN) since December 2010. The rail company prevailed in a Europe-wide tender in 2019 and won the order for the new transportation contract running until December 2036. The refurbishment and modernisation of the further 34 existing trains will be carried out successively from January 2023 onwards, when two trains at a time will be refurbished and upgraded within a six-week period.

The upgraded trains

The upgrade of the trains includes equipping them with Wi-Fi, including a preliminary set-up for 5G and the installation of a new passenger information system with large screens and real-time information on connecting trains. The vehicles will also be equipped with power sockets for charging e-bikes, a modern video monitoring system, energy-efficient LED lighting, tinted scratch-resistant foil and numerous other power outlets. The refurbishment includes the new livery in Transdev design and a contemporary interior design with a new seat upholstery and covers, new armrests and tables to complete the picture. Hygiene standards in these refurbished trains will also be far higher and in future they will be fitted with disinfectant and fragrance dispensers in the toilets as well as highly resistant powder coating systems on the handrails. Accessibility for passengers with limited mobility has also been optimised and includes the installation of a guidance system for the blind, door buttons with a locator tone and improved access to the spacious multi-purpose area designed for prams, wheelchairs and bicycles.



Ulrich Ehrhardt, Managing Director of NordWestBahn, said: "The prototype train offers a great foretaste of what awaits our passengers on the entire Regio-S-Bahn route network from 2023 onwards. With this state-of-the-art technology, we will hopefully be able to convince many more people of the convenience and the advantages of the Regio-S-Bahn network in particular, but also of regional rail transport in general."

For the change to the winter timetable in December 2022, 16 new Stadler Flirt XL trains will be added to the existing Coradia fleet in order to expand the route network, which means that a total of 51 electric multiple units from Alpha Trains will then be in operation in and around the Hanseatic City Bremen.

Photo: ©Alpha Trains/NordWestBahn

boxXpress Class 193.881-0 leads a container shuttle from Bremerhaven-Speckenbüttel to München-Riem Ubf on July 7th. *Erik de Zeeuw*

Italy

On June 15th, ÖBB Class 1216.025-7 (the world record loco with a speed of 357km/h) departs Brenner station with Eurocity train No. EC83 from München (Germany) to Verona Porta Nuova. *Erik de Zeeuw*

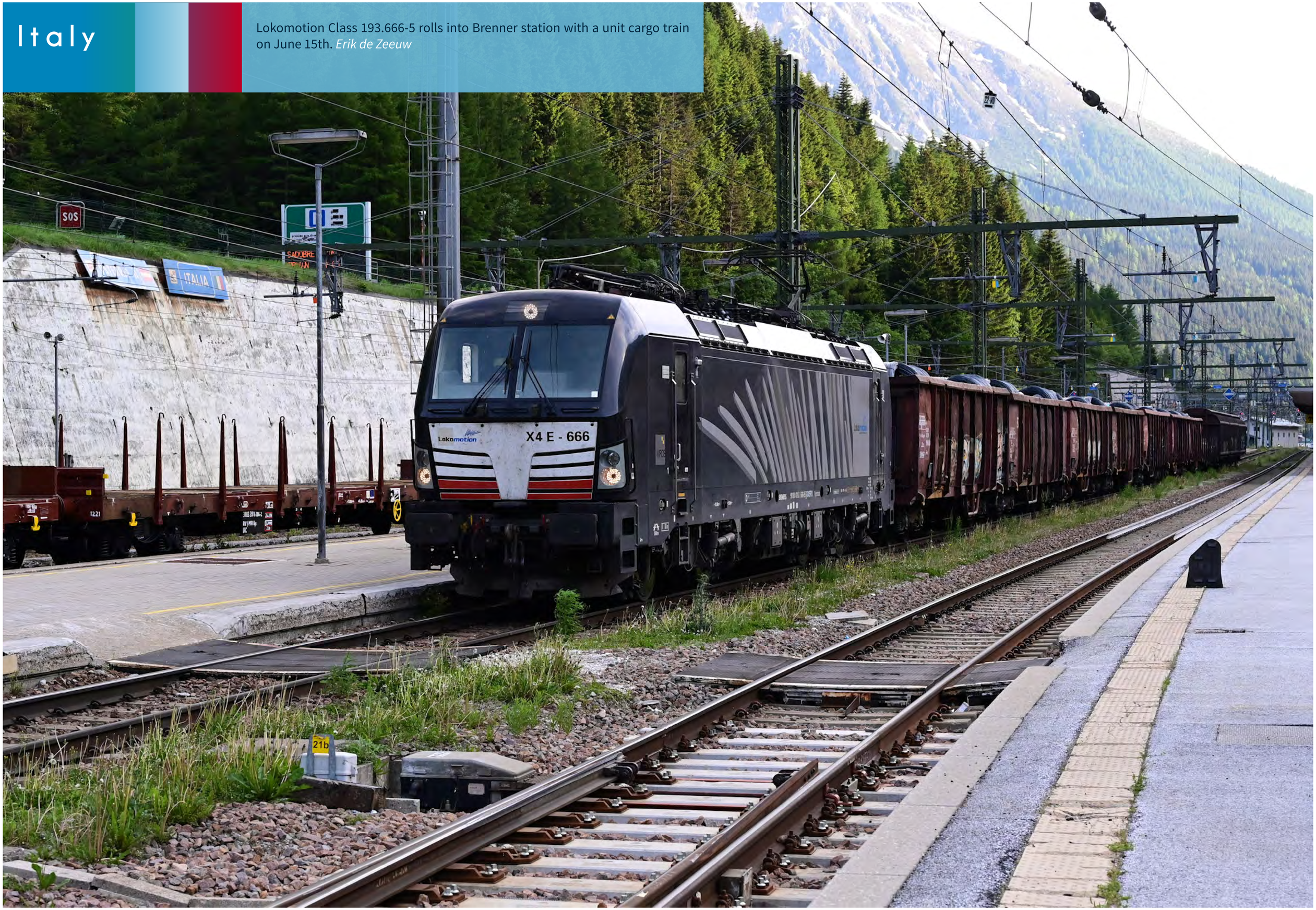
Italy

TXLOGISTIK (A Company of the Mercitalia Group) Class 193.550-1 and 193.559-2 hauling a combined freight train, gets underway from Brenner heading towards Verona Quadrante Europa on June 15th. *Erik de Zeeuw*

On June 15th, Rail Traction Company Class 193.776-2 is seen near Feldthurns/ Velturno with the Pan Europa shuttle from Bremen Grolland (Germany) to Verona. *Erik de Zeeuw*

Italy

Lokomotion Class 193.666-5 rolls into Brenner station with a unit cargo train on June 15th. *Erik de Zeeuw*



Netherlands

On June 11th, DB Class 193.337-3 passes Harselaar industrial estate near Barneveld with an empty car train from Amersfoort to Osnabrück Gbf (Germany).
Erik de Zeeuw

SBB Cargo International Class 193.535-2 is seen near Oisterwijk with a P&O combined transport train from Rotterdam Europoort to Novara Boschetto (Italy) on July 3rd.*Erik de Zeeuw*

Netherlands

NS Sprinter SGM No. 2135 working train No. 5141 in direction of Rotterdam, passes Delft on July 21st. Due to the summer schedule and the phasing out of this type of EMU, the train is very short, only a two-car unit. Just like at the start of operation of this type of EMU in 1974. *Gerard van Vliet*

Netherlands

On July 3rd, RFO Class 193.623-6 passes Oisterwijk with a deep sea container train from Germersheim (Germany) to Rotterdam. *Erik de Zeeuw*

At the height of Griendtsveen, we see SBB International Cargo Class 193.519-6 with the Busto-shuttle from Busto Arsizio in Italy to Rotterdam on July 3rd. *Erik de Zeeuw*

Netherlands

On June 26th, DB Class 193.360-5 works the Pruszków-shuttle from Poland to Antwerp (Belgium) through Notter (Rijssen). *Erik de Zeeuw*

Near Notter on June 26th, PKPCARGO Class 370.026-4 hauls a container-shuttle (which had originated in China) from Małaszewicze (Poland) to Tilburg. *Erik de Zeeuw*

Netherlands

NS No. 9528, in the new NS Flow livery, passes Schalkwijk on its way to Maastricht on June 24th.
Erik de Zeeuw

Brazil

Alstom to deliver 36 Metropolis trains for São Paulo Metropolitan Train System lines 8 and 9

Alstom, global leader in smart and sustainable mobility, has been selected by ViaMobilidade Linhas 8 e 9 concessionaire[1] to deliver 36 eight-car trains which will provide service on the 8-Diamante and 9-Esmerala lines in São Paulo, Brazil. The new trains are part of the package of improvements and obligations taken on by the concessionaire that recently acquired the responsibility to operate and maintain both metropolitan train lines for 30 years.

This new Metropolis fleet is made up of the same model as the 9000 Series trains that Companhia Paulista de Trens Metropolitano (CPTM) currently operates on lines 12 and 13 and will operate with Alstom's Automatic Train Control (ATC) solution. Made of stainless steel, one of the main advantages is their durability: the car body shells last more than 40 years and are lighter compared to carbon steel models. In addition, they consume less energy and, consequently, are more energy efficient. Each train can carry 2,600 passengers.

The trains will have doors and corridors that offer excellent passenger exchange and freedom of movement, in addition to spaces reserved for people with reduced mobility. Large windows and doors will provide a clear view of the outside, ensuring passengers have a smooth, safe, and comfortable journey. The trains will also feature modern technologies: passenger counting, dynamic line maps, monitors and video surveillance, as well as fire detection and extinguishing systems.

"We are immensely pleased that ViaMobilidade has chosen Alstom to manufacture the new trains for Lines 8 and 9, supporting the State Government's plans to provide safe, reliable and efficient public transit for passengers in São Paolo. This reinforces Alstom's position as a truly global mobility provider with innovative solutions that are calibrated for each customer's needs," says Pierre Bercaire, Managing Director of Alstom Brazil.

Metropolitan trains lines 8 and 9 transport more than one million passengers a day, according to data pre-coronavirus pandemic. Line 8, which connects Júlio Prestes to Amador Bueno, is 41.6 kilometers long and has 22 stations, serving the municipalities of São Paulo, Osasco, Carapicuíba, Barueri, Jandira and Itapevi. Line 9 connects Osasco to Grajaú, running 32 kilometers with 18 stations, serving the cities of São Paulo and Osasco.

Produced at Alstom's industrial unit in Taubaté in the state of São Paulo, Alstom will in invest in a new production line that will double the plant's capacity and will contribute to the creation of more than 500 direct jobs. In addition to producing the Metropolis cars for Sao Paulo, the Taubaté plant will also produce Metropolis cars for Bucharest, Romania, and Taipei, Taiwan.

With a flexibility that offers a wide range of possible configurations, Alstom's Metropolis range of trains has been in operation for over 20 years worldwide. Over 30 cities have ordered or are operating Metropolis trains, including Amsterdam, Singapore, Panama City, Barcelona, Paris, Riyadh, Dubai, Sydney, Montreal, Rio de Janeiro and Santiago.

[1] ViaMobilidade Linha 8 e 9 concessionaire consists in CCR and RuaInvest companies

UK

Alstom's Voyager Fleet celebrate 20 years of Inter-City service in UK

On July 27th, Alstom, Britain's leading train manufacturer and maintenance provider, celebrated 20 years of the highly successful 'Voyager' and 'SuperVoyager' Inter-City fleets. Alstom, together with rolling stock owner Beacon Rail, and train operators, Avanti West Coast and CrossCountry marked two decades of reliable, high speed operation at a special event at the train's home depot, Alstom's Central Rivers facility in Staffordshire, UK. The Class 220 and Class 221's were manufactured by Bombardier, acquired by Alstom in January 2021, and entered service from 2001. Operating at speeds of up to 200 km/hour, they have clocked up over 380 million miles of service, equivalent to 843 times to the moon and back.

Delivering reliable, comfortable services for Avanti West Coast and CrossCountry, Alstom's Voyager Fleet can be found across the length and breadth of Britain's Inter-City network from Aberdeen to Penzance, London to Llandudno. With innovations ahead designed to achieve greater sustainability, such as hybrid diesel/battery operation and intelligent engine stop/start, they are set for many more years of service on Britain's railways. Peter Broadley, Managing Director, Services for Alstom UK & Ireland said: "Twenty years of reliable, 200 km/hour operation across Britain is a very significant milestone. We are delighted to celebrate Voyager 20 with our friends from Beacon Rail, CrossCountry and Avanti West Coast and look forward to future innovations to achieve even greater sustainability."

Rob Dee, Beacon Rail said "The Voyager fleet is an integral part of Beacon's portfolio, consisting of close to 2,000 items of rolling stock operating in 17 countries across Europe. Since taking ownership of the Voyagers in 2017 Beacon has worked closely with our customers Avanti West Coast and CrossCountry as well as Alstom to ensure the Voyagers offer a high level of safety, reliability, availability and comfort to the travelling public. Beacon has also commissioned industry colleagues to develop a hybrid battery solution for the fleet. The hybrid will significantly reduce emissions in built-up areas whilst maintaining Voyager's high-speed, go-anywhere capability".

Tom Joyner, Managing Director at CrossCountry said: "The Voyager fleet has provided a sterling service for countless passengers over the past twenty years. There are some innovative projects in the pipeline, which will ensure the Voyagers continue to form a key part of our fleet and we are looking forward to working with colleagues from Alstom and Beacon Rail on these in the months ahead."

Gus Dunster, Executive Director Operations & Safety, Avanti West Coast said: "The Super Voyager has played a key role in the transformation of the West Coast Main Line - being integral to a high frequency timetable and helping to put Shrewsbury and Blackpool back on the map. The recent £8.3m investment in the fleet has given the trains a new lease of life and they will continue to serve our customers with great distinction."



In total 34 Class 220s and 24 Class 221s are in service with CrossCountry operating across multiple mainline routes all serving Birmingham; 20 Class 221's are in service with Avanti West Coast operating tilting, high speed services along the West Coast Mainline. All 78 units are owned by Beacon Rail, and maintained by Alstom at its Central Rivers depot, with heavy component overhaul taking place at Alstom's Crewe and Ilford facilities.

Norway

OSLO TRAM JOINS LEADMIND, CAF´S DIGITAL PLATFORM, FOR EASING DIAGNOSTICS IN THE TESTING PHASE

CAF is the supplier of the new 87 trams of the Urbos range for Sporveien, public transport operator of the capital Norway. The first units are already in the testing phase and feature LeadMind, CAF's digital platform for optimizing fleet operation and maintenance. The platform is providing a great improvement from this first phase, accelerating diagnostics times and increasing customer satisfaction.

Thanks to LeadMind real-time data and advanced analytics capabilities, CAF testing team recognizes that this is an important advantage to take better and faster decisions to improve reliability during the earliest stages of the project.

LeadMind its being a key testing process enhancer and a key technology for incident resolution and thus, it favors the delivery of a train that has been intensely tested, with greater quality and precision. In this process, the operator Sporveien has access to data, they have all the information when they receive the train and that means transparency and trust. In addition, we continue strengthening our commitment to provide good service to passengers.

The advantages of LeadMind, specifically for units at this stage, start from capturing high quality data, providing real time information and reducing diagnostic times. Therefore, it prepares a datalake for future use cases: from safety to predictive maintenance, passenger counting or energy consumption which has been started to be developed in coordination with Sporveien.

In addition, a strong coordination between onsite and manufacturing teams is gained by having unified access to train information. It also allows the geolocation of the alarms, telemetry, access to IHM information remotely and rule engine with automatic notification in order to deal better with the demanding climatic conditions typical of Norway. This way, the Oslo Tram joins LeadMind in the testing phase and also joins operator activity to offer the best service to passengers.

This CAF-developed platform is now a reality with more than 30 active projects in 20 different countries.

Kazakhstan

Alstom released its first passenger locomotive fully assembled in Kazakhstan

On July 21st, Alstom released its first Prima M4 KZ4AT passenger locomotive fully assembled in Kazakhstan. After 20 Prima KZ4AT passenger locomotives assembled in France between 2014 and 2016. The first made-in-Kazakhstan locomotive #0021 is successfully commissioned to Kazakhstan Railways (KTZ).

"Today is a very important day, a date to be remembered! We are very honored to present and commission the very first made-in-Kazakhstan passenger electric locomotive. Thanks to our strong partnership with KTZ and our ambitious localization plan, this tailor-made locomotive will run across the country at speeds up to 200 kph. This new product is a result of an additional transfer of technology completed thanks to the support of our European manufacturing sites. The state of the art quality of the product also demonstrates the strong capacities acquired in our EKZ plant, located in Nur-Sultan, which is definitely positioned as a key player of the railway industry, here in Kazakhstan", said Guillaume Tritter, Alstom Managing Director for Western & Central Asia.

Delivery of KZ4AT passenger locomotives is part of the execution of the contract with KTZ for supply and maintenance of 302 Prima T8 KZ8A freight and 119 Prima M4 KZ4AT passenger locomotives to KTZ since its signature in 2010. This multi-purpose locomotive is based on the Alstom Prima modular platform designed to provide operators with the most suitable solutions for passenger services. It is one of the most versatile, in terms of applications, electric locomotives in the world. This locomotive is able to run at 200km/h in passenger services and has been designed to successfully operate in extreme weather conditions from -50C to +50C. Developed on the basis of KTZ technical requirements and in compliance with GOST[1] standards and specifications, the locomotive has a cutting edge traction system based on Alstom's technology and components produced by Alstom.

Alstom's Prima range is covering all market segments of locomotives from heavy-haul, freight and passenger operation and shunting or track work operation. Over the past 20 years, more than 3,200 Prima locomotives (more than 4,600 sections) have been sold worldwide. Alstom is present in Western & Central Asia with more than 1,000 people, three country offices in Kazakhstan, Azerbaijan and Uzbekistan, five depots, repair center and two plants, EKZ in Nur-Sultan for electric locomotives manufacturing and maintenance and production of on-board transformers, and KEP in Almaty to produce point machines. Alstom is a major contributor to the revitalization of the region's mobility industry and the development of its economy. EKZ, a joint venture of Alstom, employs around 850 people and is working on supplying and maintaining the Prima electric locomotives ordered by KTZ, Kazakhstan's national railway company and export markets, like Azerbaijan.

[1] Gost: CIS standards



China

First automatic people mover (APM) delivered to Beijing Capital International Airport



On July 14th, Alstom's Chinese Joint Venture CRRC Puzhen Bombardier Transportation Systems Limited (PBTS) delivered the first new automatic people mover (APM) train to BCIA (Beijing Capital International Airport). A delivery ceremony was held in the assembly area of its workshop, the customer toured the factory and was able to take the new APM train.

Beijing Capital International Airport, as China's "first gateway", is a large international airport with the most important geographical location, the largest scale, the most complete equipment and the busiest transportation and production in China. The number of flights taking off and landing and the passenger throughput of the airport are in the leading position in the industry worldwide. In 2008, Alstom delivered Beijing Olympic designated project–Beijing Capital International Airport APM to welcome the Olympic Games, and in November 2019, PBTS and BCIA signed the APM trains supply and upgrading contract. Facing with the challenge of COVID-19, the teams of both sides overcame the difficulties and worked together to push forward the project design, production and delivery, and completed the testing of train in early July 2021, which was ready for delivery.

Since established in 2014, PBTS has been committed to providing small and medium volume rubber wheel rail system solutions, and the core products of PBTS, monorail and APM, have achieved impressive results in the domestic and international markets. The rubber wheel APM system is one of the best solutions for passengers to move quickly and easily between airport terminals.

Sweden

CAF SECURES TWO SERVICE CONTRACTS IN SWEDEN

National rail transport operator, SJ AB has awarded EuroMaint Rail AB, a Swedish subsidiary of the CAF Group, two service contracts worth more than €100 million in total. Firstly, the Swedish state-owned operator, SJ selected the CAF Group subsidiary to provide maintenance services for 12 years for the fleet of trains that run on the Krösatågen and Kustpilen lines and provide service in south Sweden, specifically in the Jönköping, Kalmar, Kronoberg, Blekinge, Halland and Skåne regions.

SJ will begin operating the Krösatågen and Kustpilen lines from December 2021, for which reason it made an agreement with Euromaint to maintain - from that date - the fleet that is currently in service, as well as the new units that CAF will soon supply under the contract secured just 3 months ago. This contract consisted in the supply of 28 new trains, 20 EMUs (electric units) and 8 BMUs (biodiesel-electric bimodal units) which the company AB Transitio will purchase and lease to the regions which operate the service on the aforementioned Krösatågen and Kustpilen lines. The maintenance activities are currently being mobilised and are scheduled to begin this December. They will be carried out at workshops in Nässjö and Kalmar.
The SJ AB operator has also selected Euromaint to remodel the fleet of overnight passenger cars. This contract consists of the remodelling of a total of 57 cars from various series - BC4, WL1, WL4 and WL6 - with this work planned to be carried out at the workshop Euromaint owns in the Swedish town of Örebro. The upgrading work will begin on these vehicles in August 2021 and continue until February 2025. With this investment, the operator, SJ AB intends to improve night travel and meet the comfort, reliability and safety expectations of passengers that use these types of services.

EuroMaint has been a benchmark company in the Nordic railway market for many years, with a significant market share in the train fleet maintenance sector, an activity the company combines with the supply of railway components for operators in the region. Securing these new contracts is yet another testament to CAF's firm foothold in the Scandinavian region, a continually growing market, where CAF has already supplied units for the high-speed line that connects Oslo with its airport, the Helsinki metro and the tram network serving the cities of Stockholm, Oslo and Lund.

THE SUCCESS OF CAF'S LEADMIND DIGITAL PLATFORM

Finally, it should also be noted that further progress is being made in the Nordic market with the implementation of CAF's LeadMind digital platform through contracts for the Lund tram, Oslo tram, commuter trains for the Oslo-Bergen line in Norway, commuter trains for the aforementioned Krösatagen and Kustpilen lines in Sweden and the recently awarded contract for the Gothenburg tram. These will all include CAF's predictive maintenance which provides both operation and maintenance benefits, one of the most significant being increased fleet availability for operators, thereby avoiding stoppages and faults that affect passenger services.

LeadMind has been designed to make it easier for operators and maintainers to manage data in real time and to make swift and efficient decisions so as to avoid any events that might affect services and to also be able to prioritise actions before the units reach the workshop. To this end, LeadMind includes the possibility of automatic measuring and monitoring of the most significant vehicle components, such as wheels, brakes, pantographs and bogies.
LeadMind's advanced analysis represents a maintenance process transformation that directly affects operation, as it only operates on affected components when the first symptoms are detected, increasing operating efficiency to help operators improve the quality of the services they provide. This CAF-developed platform is now a reality with more than 30 active projects in 20 different countries.

India

Alstom begins manufacturing of modern commuter & transit trains for Delhi-Ghaziabad-Meerut RRTS project

Alstom has begun manufacturing the regional commuter and transit trains for the Delhi-Ghaziabad-Meerut semi-high-speed rail corridor for RRTS Phase 1. In May 2020, the company was awarded the contract to design, build, and deliver 210 regional commuter and transit train cars along with comprehensive maintenance services for 15 years.

As per the contract, Alstom will deliver 30 regional commuter trainsets of six cars each and 10 intracity mass transit trainsets of three cars each. In accordance with India's 'Aatmanirbhar Bharat' vision and the Make-in-India guidelines, these RRTS trains are 100% indigenously manufactured, with over 80% localisation and are being manufactured in Alstom's factory in Savli (Gujarat). This facility will produce the bogies, car bodies and undertake train testing. The propulsion systems and electricals are being manufactured at the company's factory in Maneja (Gujarat).

Alain Spohr, Managing Director – Alstom India says, "This project is a game-changer in India's regional rail segment, benefitting millions of people and contributing towards socio-economic development. We are happy to begin local manufacturing of these technologically advanced trains for the country's first semi high-speed commuter service. At Alstom, we focus on developing sustainable products and solutions that stand the test of time by operating efficiently for decades to come."

The first look of the train for India's first Regional Rapid Transit System (RRTS) was unveiled in September 2020. Inspired by Delhi's iconic monument, The Lotus Temple, the fresh, modern and advanced look of the new trains resonate a unique amalgamation of sustainability and India's rich heritage. These energy efficient semi-high-speed aerodynamic trains will incorporate latest tech features to provide a superior passenger experience, to all commuters, including the specially-abled.

These trains have been developed with the vision to transform the future of regional commute for passengers in India. The RRTS corridors will operate the fastest trains in India with a design speed of 180 kmph. Right ergonomics, safety, low life cycle costs and high recyclability also contribute towards making these trains an attractive sustainable choice to promote public transport thereby reducing traffic congestion and air pollution significantly. Alstom's scope of work also includes designing, supply, installation, testing and commissioning of Signalling & Train Control, Supervision, Platform Screen Doors and Telecommunication Systems for this 82.15 kms corridor. This line will be the first in India to adopt the European Train Control System (ETCS) hybrid Level 2 signalling system, which is the core signalling and train control component of the European Rail Traffic Management System (ERTMS).



Egypt

Signalling equipment installed on the Quseia Sector of the Beni Suef-Assuyt railway line

9th commissioned sector of Beni Suef- Assuyt (BSA) line.
15 km length connected with Abu-Qurqas, Roda, Mallawi and Deirut stations.

Alstom has successfully installed and commissioned its SIL 4 signalling Electronic Interlocking System (IXL solution-Smartlock 400 GP), including a support system and SCADA that supervises and controls different subsystems, based on Alstom Iconis, TLC system and 11 kv power supply sub-station. Quseia is considered the 9th commissioned sector of the Beni Suef- Assuyt line.

Quseia sector length is 15 km and connected with Abu-Qurqas, Roda, Mallawi and Deirut stations which are already in service. Overall, the length commissioned is 131 km with 9 stations, 40 level crossings and 186-point machines, and this inauguration happens one week after the inauguration of the automatic area of Samalut sector.

The automatic area of Samalut is 6 km with one secondary building.

The inauguration ceremony was attended by Eng. Mostafa Shahin, Head of Signaling System at ENR, Eng., Emad Assad, Upper Egypt Zone Manager at ENR, Eng., Ashraf Khalifa, Head of Operation Department, Eng., Mohamed Magdy, BSA Executive Project Manager at ENR, Eng., Mohamed Fawzy, Operations Manager at ENR, and Mr. Ramzi Agoudjil, Alstom Egypt BSA Project Director.

Alstom has been a partner to Egypt's railways since 1971 and has continuously supported railway infrastructure development in the country. Over these years, Alstom Egypt has established a local talent pool and Center of Excellence (CoE) related to signalling, power supply and depot equipment to support projects across its Africa, Middle East and Central Asia region. It is this rich heritage that has enabled Alstom to make a significant contribution to Egypt's rail industry development.

Today, Alstom employs approximately 500 people in Egypt and its current projects include the modernisation of signalling system on the Beni Sueif – Assyut line and two monorail lines for Cairo.

Alstom remains fully committed to the principles of operating an ethical business and sets clear guidelines in order to deal with public authorities and customers.

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Eurostar

Rail companies unite to run Climate Train to Cop26

In October, ProRail, NS, Eurostar, Avanti West Coast and Youth for Sustainable Travel will join forces to run a special 'Climate Train' to the COP26 Climate Summit in Glasgow. Almost six years after the Paris Climate Agreement was signed, more focus on 'sustainable mobility' including rail is needed according to European Commission Vice-President Frans Timmermans who consciously chooses to take the train to Glasgow.

Achieving a better climate through sustainable mobility
"Six years after the Climate Summit in Paris, many countries have still taken too few concrete steps to limit global warming, according to Mara de Pater, from Youth for Sustainable Travel, If we continue at this rate, the earth will have warmed up by 3 degrees by the year 2100, according to research by the UN climate panel IPCC. This will lead to a sharp rise in sea level and more extreme weather, with all its consequences. This can and must change, and the travel industry is an important sector in this respect, where many sustainability steps can still be taken."

CO^2 savings
Travelling to London by Eurostar instead of plane emits up to 93 percent less CO^2 per passenger and a freight train can replace an average of 56 trucks. Despite the sustainable advantage of trains, only seven percent of all passengers and 11 percent of all goods in Europe travel by rail. Yet, with its 200,000 kilometres of track, Europe has one of the most intricate networks in the world. With the 'EU Sustainable and Smart Mobility Strategy', Vice-President of the European Commission Frans Timmermans wants to give sustainable transport in Europe a boost. Setting a good example is part of this, with hundreds of passengers choosing to travel by train from the continent to Scotland for the COP26 climate summit.

Frans Timmermans, European Commissioner, said: "What could be nicer than travelling by train to an international climate summit? The train is sustainable and provides a lot of comfort, whether you travel for work or pleasure. More and more passengers in Europe are recognising the advantages of travelling by rail. We want to increase this number in the coming years by, for example, doubling the amount of high-speed train traffic and making international rail travel even easier. I am really looking forward to leaving for Glasgow by train with our delegation."

From sailing ship to train
The idea to travel to COP26 through Europe by rail started as a successful grassroots movement by Youth for Sustainable Travel in cooperation with rail operator ProRail. The Climate Train then became a reality thanks to collaboration with carriers Eurostar, NS and Avanti West Coast (who were planning a service to the conference in Glasgow). The initiative is also supported by CER – the Community of European Railway and Infrastructure Companies, EIM - European Rail Infrastructure Managers and UIC - the International Union of Railways. In 2019, young people from Youth for Sustainable Travel, with the participation of ProRail, organised a sailing trip to the Climate Summit that was to be held in Chile. After the summit was moved to Madrid, they successfully called on other young people in Europe to visit the climate summit by train. This initiative, called 'Sail to the COP', is now followed up with 'Rail to the COP' (where COP stands for the UN climate summit / Conference of the Parties) and comes in support of the EU Year of Rail 2021, in line with the European Union's ambitions to promote the train as the sustainable alternative for travel and transport.

The 'Climate Train'
Rail to the COP will bring together as diverse a group as possible from all over Europe. Young people, official delegations, mobility experts, NGOs and representatives of the railway sector are invited to travel by Eurostar from Amsterdam, Rotterdam or Brussels to London, where they will change to an Avanti West Coast train to Glasgow. During the trip, Youth for Sustainable Travel and the rail partners will organise a series of debates and seminars to draw attention to the important role that rail and sustainable travel can play in achieving the global Climate Change Goals.

Italy

New Vossloh service company in Italy

The founding of Vossloh Rail Services Italia S.r.l. is both a consequence of the positive market development and part of Vossloh's firm focus as an expert in asset management. Vossloh is now pooling its customer-specific resources in Italy as well in order to meet current and future requirements of rail networks and ensure the best track availability possible at reduced life-cycle costs.

The Italian subsidiary Vossloh Rail Services Italia was founded on May 6th 2021. The service business began for Vossloh with the introduction of milling solutions, which paved the way for preventive rail maintenance. Operations with the Flexis system followed, and today the HSG-city is in service on various local transport lines. "More and more, our customers are keeping an eye on life cycle costs and availability, and consequently our service business in Italy is developing extremely well", says Andrea Bono.

VRS Italia's managing director is looking forward to a promising future. "Our aim is to use our all-encompassing expertise in rail infrastructure to provide our customers with comprehensive support. By giving customers maximum insight into the interdependencies of track infrastructure, we can offer them tailored maintenance measures thanks to our own fleet of machines and the personnel we have available."

A recently signed annual contract with an Italian mass transit operator for diagnostic and grinding services is a fitting confirmation of this approach. "Condition-based, customer-specific rail machining is key to our growth strategy", Andrea Bono continues. "We therefore truly welcome this opportunity to thoroughly test out our smart digitalization solutions for surveying the condition of rails." The status data is analyzed and used to present various maintenance scenarios and their costs in a way that allows network operators to easily decide where, when and what kind of machining work is required.

Vossloh Rail Services Italia is positioning itself as a provider of customized asset management solutions that provide customers with genuine added value in terms of the availability and safety of turnout and track systems at an optimized budget.



Netherlands

Vossloh signs agreement to acquire ETS Spoor B.V. and expand its position in the important Dutch market

Vossloh, a leading international supplier of rail infrastructure products and services, has signed an agreement to acquire the Dutch company ETS Spoor B.V. (ETS). ETS is an established and leading market player with a wide range of products and services in the technologically sophisticated and highly innovative Dutch rail infrastructure market.

With the acquisition of its longstanding business partner ETS, the Vossloh Group is strengthening its strategically important position in the Dutch rail infrastructure market which offers outstanding growth prospects. ETS has excellent market knowledge and contacts with all major local customers and has already been cooperating very successfully for many years with a number of partners, including Vossloh.

In addition, ETS has exclusive distribution agreements with suppliers of products and services outside the Vossloh portfolio and thus rounding off the local offering in the sense of a one-stop shop. This aspect is of crucial importance, particularly with regard to trendsetting service models.

"The acquisition of ETS Spoor plays a key role in the implementation of our Group strategy. It brings us a decisive step closer to important Dutch customers such as the network operator ProRail, who have so far purchased our products and services directly or indirectly at ETS Spoor. As a result, we will be in an even better position in the future to tailor our unique technological expertise and our entire range of services to the needs of our customers.

The Dutch market is already a pioneer for trendsetting business models in the rail infrastructure sector and we see ourselves excellently positioned in the new constellation to drive this forward and create important added value for our customers," explains Oliver Schuster, CEO of Vossloh AG. "I am delighted that through this acquisition we are now opening the next chapter in our successful cooperation with our highly esteemed and long-standing partners and extend my welcome to the Dutch team to Vossloh."

The closing of the sale will take place on July 30, 2021. The parties have agreed not to disclose the purchase price. In 2020, ETS generated sales of around 20 million euros and will be managed in the Lifecycle Solutions division in the future.

U.S.A.

Siemens Mobility awarded historic $3.4 billion in contracts from Amtrak

Order includes first of its kind hybrid battery Venture trains.
73 sustainable and reliable trains to be delivered starting in 2024.
Includes predictive maintenance technology and real-time digital monitoring.
Largest North American Siemens Mobility contract in history.

Siemens Mobility has been awarded $3.4 billion in contracts in the United States to design, manufacture and technically support 73 multi-powered trains for Amtrak, the National Railroad Passenger Corporation which has transformed transportation by modernizing rail travel in the United States for the past 50 years. There is also a possibility for up to 140 additional trains and further maintenance agreements. The order is the Railroad's latest endeavor to acquire the most sustainable and efficient trains on the market, which include dual powered and hybrid battery vehicles.

The trains will operate across the Northeast Corridor and across various state-supported routes, including operations in Maine, Massachusetts, New York, North Carolina, Oregon, Vermont, Virginia, and Washington. With expanded capacity and the ability to shorten trip time, Amtrak expects the new trains will add over 1.5 million riders annually.

"These new trains will reshape the future of rail travel by replacing our aging 40-to-50-year old fleet with state-of-the-art, American-made equipment," said Amtrak CEO Bill Flynn. "This investment is essential to preserving Northeast Regional and state-supported services for the future and will allow our customers to travel comfortably and safely, while reducing carbon emissions."

"These trains will offer Amtrak and its passengers the latest in sustainable and intelligent rail technology. We believe hybrid battery and dual powered trains will play an important role in reducing emissions and protecting the environment in the United States. In addition, through our digital services, Amtrak will receive real-time information about vehicle operations, allowing them to ensure that their passengers arrive safely and efficiently," stated Michael Peter, CEO of Siemens Mobility. "Amtrak's investment illustrates America's commitment to enhancing its rail systems, offering passengers a more sustainable option for travel."

Accompanying the manufacturing contract will be a long-term service agreement for technical support, spare parts and material supply. The trains include wireless communications, remote monitoring and fully integrated digital diagnostics for increased reliability. These advanced features will enable Amtrak to test and develop new technology and introduce new maintenance approaches to drive efficiency, increase availability and reduce long term costs.

The order includes dual power and hybrid battery trains. The first will be delivered in 2024, while the first of its kind Venture Hybrid battery train will begin testing in 2025. The trains for the Northeast Corridor and State Supported routes will be delivered from 2024 through 2030. Through the use of multi-power systems, including hybrid battery operation, they will also provide a substantial environmental benefit through reduced emissions compared to the existing fleet.



The latest trains will feature more comfortable seating, individual power outlets and USB ports, onboard Wifi, enhanced lighting and panoramic windows, a more contemporary food service experience, including self-service options, as well as state-of-the-art customer trip information, digital seat reservation system and navigation display systems. The trains were designed with the latest health and safety standards, including enhanced HVAC, touchless restroom controls, and automated steps. In addition, they will be designed with Amtrak's new standard of enhanced accessible features, including inductive hearing loops, accessible restrooms and vestibules, accessible Food Service car, and lifts for customers with reduced mobility, including wheelchair users. The trains meet all the latest safety regulations and standards, providing improved structural safety.

The trains will be manufactured at Siemens Mobility's North American rail manufacturing facility in Sacramento, California and will comply with the Federal Railroad Administration Buy America Standards.

This year, the facility is celebrating its 30th anniversary of operations as it continues to add to its more than 2,100 team members. It is one of the largest plants of its kind on the continent, and one of the most sustainable, using a 2.1 MWp solar panel installation to generate much of its power from the California sun. Siemens Mobility designs and manufactures across the entire spectrum of rolling stock including passenger trains, light rail and streetcars, locomotives, and passenger coaches in Sacramento.

Customer services and maintenance will be managed out of the Siemens Mobility's U.S. headquarters for maintenance and repair operations 60,000 square-foot McClellan Park plant, also located in Sacramento.

Serbia

AŽD signed a contract for delivery of control-command signalling systems for Serbian railway line Subotica – Horgoš

The Czech company AŽD succeeded in its tender for the supply of control-command signalling systems for the Subotica - Horgoš railway line (Hungarian border with Serbia). The main contractor of the project is a consortium of companies "Karin komerc MD Doo Veternik" and "RZD International" and AŽD will realize its deliveries as a subcontractor. The value of the AŽD scope of supply is 11.5 million EUR and the implementation will take 11 months.

AŽD will install the microprocessor based station interlocking systems ESA-44 in four railway stations (Javna Skladišta, Palič, Bački Vinogradi and Horgoš) as a part of the modernization project in Serbia. The delivery also includes the securing of 26 turnouts, the installation of axle counters and 44 modern LED signals in all mentioned railway stations. The whole line will be equipped with the European Train Control System ETCS level 1 from AŽD production.

"Serbia has long been one of the strategic territories where our company supplies modern signalling technologies for the railways. We will continue to strive for contracts in our field of activity and prove the quality of Czech systems," said Zdeněk Chrdle, CEO of AŽD.
By signing the contract, AŽD confirmed its important position in the Balkans, where, except Serbia, it is currently implementing large-scale projects in Montenegro, Bosnia and Herzegovina and Croatia.

The subsidiary "AŽD Saobračajni sistemi" from Belgrade will play a significant role in implementation of line signalling systems on the Subotica - Horgoš line.

Czech Republic

One year since the conclusion of the first agreement on energy efficiency between the Ministry of Industry and Trade and ČD Cargo

ČD Cargo was one of the first companies to establish cooperation with the Ministry of Industry and Trade in the field of increasing energy efficiency by signing a voluntary agreement on energy efficiency. In 2020, ČD Cargo achieved energy savings of 28,827 MWh (approx. 104 TJ). The joint efforts of the state, energy market players and other businesses will help increase energy efficiency without having a significant impact on final energy consumers. The Czech Republic has to save 0.8% of final energy consumption every year between 2021 and 2030 with regard to climate change and the need to reduce greenhouse gas emissions.

This follows from Directive 2012/27 / EU on energy efficiency.

“I am pleased that ČD Cargo is socially responsible and joined the strategic statement as one of the first companies last year,” says Deputy Prime Minister and Minister of Industry and Trade Karel Havlíček adding: “I believe that the willingness to participate in sustainable energy consumption and increase energy efficiency will be reflected in other companies. After all, enter into an agreement is not difficult.”

As part of the voluntary agreement, ČD Cargo focuses, among other things, on increasing the energy efficiency of rail transport.

“Two directions are key for us in savings,” says the Chairman of the Board of Directors of ČD Cargo Ing. Tomáš Tóth and continues: “The first is gradual modernization of the vehicle fleet, where, for example, instead of vehicles with loss-making resistance control, we purchase new locomotives with lossless semiconductor power regulation, allowing the use of regenerative braking.”

“Locomotives are also being modernized with a focus on technical and environmental parameters. The gradual upgrading of the rolling stock also applies to freight wagons, where wagons with lower driving resistances and lower noise are purchased. The second direction is aimed at our trade policy, where we are actively striving to transfer transports from road to rail. The proof is the transport of road semi-trailers by rail, new transport of metallurgical products from Italy to the Czech Republic and Poland and a number of other business cases,” adds Tomáš Tóth.

Czech Republic

World Architecture in Brno: Dutch architects Benthem Crouwel won the international competition for the new main railway station

It is decided - the new Brno main railway station will be created according to the design of the Dutch studio Benthem Crouwel Architects, which is behind the project of the railway station in Rotterdam and the reconstruction and completion of the railway station in Amsterdam. According to the winners, the Brno railway station will become a new gateway to the city and a positive impetus for the emerging Trnitá district on the Svratka river embankment. The people of Brno will get a modern interchange and a guarantee of further development of the local railway transport. The selection of the expert jury, which included the architect Eva Jiřičná and urban planner Peter Gero, has been confirmed by the management of the city of Brno and the Railway Administration. As the organizer of the competition, the office of the architect of the city of Brno will exhibit all the designs, including a large model of the new district in the Křížová corridor of the Brno New Town Hall at the end of September.

The award-winning main railway station in Rotterdam, Amsterdam or The Hague in the Netherlands are all connected by the author’s name of the Benthem Crouwel Architects studio. “ The authors of the winning design will oversee the quality processing of the project documentation for the new building. They will be a guarantee that, when completed, the new railway station will not only be the pride of South Moravia, but also a place that passengers will really enjoy.

“The current assumption of the completion of the new main railway station building dates to 2032 to 2035, when part of the new Trnitá district will be ready,” says Mojmír Nejezchleb, Deputy General Director for Railway Modernization from the Railway Administration. Smooth integration into the city network and enrichment of the public life of the new district, comfortable and easy use with excellent transfer options and a representative building that strengthens the identity of the city of Brno.

“According to the jury, the winning design combines a reference to historic public buildings with a modern interchange and quality public space. It emphasizes the Brno genius loci and a careful assessment of the practical functioning of the new station building and its surroundings,” adds the city architect Michal Sedláček, who also sat on the expert jury. “ In addition, during the competition, we recommended that some parts of the design be further refined, so that the result will be even better in line with the current strict requirements for the new station building ,” he adds.

“I am very pleased with the cooperation of Brno railway administrations on this critical project ,” acknowledges Mayor of Brno Markéta Vaňková and emphasizes: “ Upgraded heart of Brno railway junction in the new location by the river Svratka significantly affect the further development of the city. The simplification of the network of tracks will remove barriers and free up large areas in the city center for parks, recreation and larger housing construction. The historic railway viaduct will become a promenade between the city center and the transformed waterfront. The new railway station will be surrounded on both sides by a high-quality public space, connected to the city center by a new boulevard with tree-lined streets and a tram line.”

Other benefits are recalled by the First Deputy Mayor Petr Hladík: “ One of the goals of the new station is to enable a quick transfer between train, bus and public transport in one place. This includes favourable conditions for bringing the lines of the planned high-speed railway in the direction of Prague, Ostrava and Vienna. At the same time, comfort for pedestrians and cyclists, passengers and new neighbours of the station building is essential. “

Today, the Brno railway junction is no longer in terms of capacity or technology and its modernization is necessary. Without it, Brno would have stalled at the end of the last century, when the last big change took place together with the construction of the freight stretch. Brno has been prepared for the construction of a new station in a relocated position several times, but the plans have repeatedly been halted by the unfavourable situation from the Great Depression through World War II to the Soviet occupation in 1968 . Therefore, Brno deserves an investment in its future and the results of the international competition presented today confirm that the city will acquire the most modern European railway station,” said Deputy Mayor Tomáš Koláčný.

The new main railway station is the most important part of the modernization of the Brno railway junction. Its location by the river was preferred on 30 May 2018 by the Central Commission of the Ministry of Transport. Even earlier, in the same year, representatives of the city and the region decided on it. Currently, the modernization of the Brno-Židenice railway station, which will move closer to public transport, is also being prepared for the establishment of a new terminal at Černovice in Olomoucká Street, Brno.

“The international urban-transport-architectural competition for the design of a new main railway station in Brno was announced on August 31, 2020 and the jury decided on the winning proposals at a two-day meeting on July 1 and 2, 2021. It was the largest architectural competition in the history of the Czech Republic, competitors to design the station building, including a complete solution of adjacent public spaces, buildings for administration, housing and public amenities, bus station, public transport terminal and pedestrian connection,” said Councilor for Spatial Planning and Development Filip Chvátal.

It was a two-phase narrower project competition for a design. A total of twelve teams took part in the first phase. Three were invited directly, the other nine were selected by an expert jury from 46 submitted applications and portfolios of architects. Among them were, for example, the authors of the stations in Vienna, Berlin, Rotterdam, The Hague, Bologna, London and Birmingham. In the first phase, twelve competitors developed their proposals. Four of them were selected for the second phase of the competition, where the participants worked them out in more detail.

From the Archives

Argentina

Restored shark nosed General Roca No. 5037 (Balwin Lima Hamilton of 1953) at Buenos Aires Constitution station with a special charter train on October 20th 2004. *John Sloane*



From the Archives

Argentina

A contrast in loading gauges at Olavarria on the FC Roca on November 11th 2004 with 1972 built EMD type GT22CW No. 9048 standing coupled to an imported American re-gauged GE U18 now numbered 8121. *John Sloane*



From the Archives

Belgium

At Antwerp Dam shed on November 1st 1991, Bo-Bo No. 7505 heads a line of locos the first of which is a cab-less ‘slave’ shunter unit No. 8275. On this weekday occasion some 132 locomotives were present on the shed.
John Sloane

From the Archives

Bulgaria

BDZ Romanian built No. 06.066 waits to depart Stara Zagora on May 3rd 2011. *John Sloane*

From the Archives

Burma

On January 29th 2006, No. DF.1606, an Alsthom 1600hp Bo-Bo-Bo, is seen being prepared at Pyin oo Lwin shed.
John Sloane

From the Archives

Cuba

Russian built TEM 4 type No. 51036 is seen hauling a vintage six wheel bogie saloon near Sagua Grande on March 14th 1988.
John Sloane

From the Archives

Egypt

A Henschel 1979 built Co-Co No. 3130 departs Cairo Main with empty stock on April 14th 1982. *John Sloane*

From the Archives

France

SNCF No. 22256 propels a stopping service from Ventimiglia to Marseilles past Cap Martin on September 5th 2016. *John Sloane*

From the Archives

Germany

On the Austrian border, Class 194.122 is seen at Freilassing in June 1986. *Don Chadwick*



From the Archives

Germany

The prototype ICE is seen on test at Wurzburg on July 27th 1989.
Mark Enderby



From the Archives

Germany

In July 1986, DB Class 103.234-1 departs Koln on the rear of a service to Munich. *Don Chadwick*



From the Archives

Germany

The driver of Class 218.368 toots and waves as he makes a rousing departure from Karlsruhe in July 1986.
Don Chadwick



From the Archives

Hungary

MAV No. V46.003 is seen at Budapest Nyugati on September 11th 2008.
Mark Enderby

From the Archives

India

Northern Railway WAM4 No. 20638 is seen at Delhi Junction shed on March 28th 1983. *John Sloane*

From the Archives

India

Northern Railway WDM2 'Jumbo' type with a low hood No. 17879 waits to depart Amritsar with an express on March 29th 1983. *John Sloane*

From the Archives

India

Indian Railways WAM4 No. 20582 passes New Delhi Railway Museum on August 22nd 1991.
Mark Enderby



From the Archives

Indonesia

On the island of Sumatra, Henschel (32229/78) No. BB303.36 is seen making up a train of tank wagons at Dolok Merangir on April 3rd 1985. *John Sloane*



From the Archives

Indonesia

PNKA No. BB303.27 stands amongst steam locos at Kisaran shed on April 5th 1985. *John Sloane*



From the Archives

Italy

FS Bo-Bo-Bo No. 626.381 sweeps through Riomaggiore station in the Cinque Terre with a southbound freight on August 2nd 1984. *John Sloane*

From the Archives

Malaysia

‘River’ Class No. 22113 ‘Sungai Perak’ pilots steam loco No. 564.36 ‘Temerloh’ on a northbound freight at Kajang on February 12th 1980. *John Sloane*



From the Archives

Morocco

Enafer Peru No. 617 (MLW of 1974) approaches Lima Desaperados station from Callao with the train to Huancayo on March 28th 1988. *John Sloane*

From the Archives

Philippines

Working at the Victorias Milling Co., Manalpa, on Negros Island on January 30th 1980, were No. 28, a 175hp 0-6-0D (GE 34263/61) and No. 39 a 380hp B-B built at Victorias in 1977 from GE parts. *John Sloane*

From the Archives

Singapore

Malaysian Railways Class 22 No. 22138 ‘Bagan Serai’ built by English Electric/AEI departs Singapore shed on April 13th 1994.
John Sloane

From the Archives

South Africa

Nos. 34438 and 34411 pass preserved steam locos at De Aar shed as they leave with a long distance passenger train on October 19th 1973.
John Sloane



From the Archives

Spain

RENFE No. 289-024 calls at Burgos on August 4th 1974 with a train heading for Madrid. *John Sloane*



From the Archives

U.S.A.

Union Pacific Nos. 8275 and 4427 enter the street running section at Oakland, California on December 9th 1997. *Mark Enderby*



A Long Island Rail Road train is seen at Oyster Bay, Long Island on October 20th 2008.
Mark Enderby

From the Archives

U.S.A.