

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 183Xtra

It's the time of year to say Seasons Greetings and a Happy New Year to all our readers and contributors. There are times when I really thought 2022 would start without restrictions and everything would be similar to pre 2019 chaos, but alas it isn't to be.

We start this month with the news that in France COOPERATIVE enterprise RailCoop has launched a freight service on the 160km line between Toulouse St. Jory Yard and Capdenac in southwest France on November 15th. The company has leased two Vossloh G1000 diesel locomotives from DB Cargo France and 24 bogie covered vans from Ermewa and has trained three drivers. The first train ran empty on November 15th, for a press launch, but the second on November 16th was loaded with pallets. The service is expected to run three times a week until the end of the year and daily from January 2022. The service will operate as 'open to all', with customers filling part, entire or several wagons. An early customer was another cooperative Ethiquable, which produces organic, ethical chocolate which is loaded at Toulouse then distributed to supermarkets after unloading at Capdenac. Railcoop is working with Captrain France (CPTF) at Toulouse and expects in the longer term to obtain traffic which will be forwarded to other areas of France by CPTF. RailCoop was formed as a non-profit organisation to revive passenger and freight services in parts of France "left behind" by incumbent operator French National Railways (SNCF). The company has plans for a network of passenger services starting with Bordeaux – Lyon in December 2022.

Also this month, news that Belgian freight operator Lineas has announced its partnership with Beacon and Ermewa through a sale-and-leaseback of part of its rolling stock. The transaction will allow Lineas to reimburse entirely its senior credit facilities, further strengthen its financial buffers, increase flexibility going-forward and provide additional financial means to invest in the further transformation of the company and its European growth strategy. The deal covers the sale and long-term leaseback of 109 T77 diesel locomotives (to happen gradually in the period 2021-2023), as well as approximately 4.000 wagons in 2021.

Jan De Raeymaeker, CFO of Lineas: "This sale-and-leaseback transaction is an important step towards our transformation into an asset-light company, keeping long term access to these strategic assets, whilst at the same time increasing the flexibility to up and down scale in a continuously evolving market environment. The deal allows us to further strengthen our financial buffers and repay the entirety of our outstanding bank debts. The released capital will also be used to accelerate our transformation and European growth strategy."

Kurt Coffyn, COO of Lineas: "With Beacon and Ermewa, Lineas is gaining strong partners with the necessary expertise to help build a future-proof fleet at European level. The transaction will allow us to join forces in the development of new technologies such as Digital Automatic Coupling (DAC) and the European Train Control System (ETCS). These innovations are essential in making our rail offering even greener and more efficient, and thereby driving Modal Shift and contributing to Europe's Sustainability Goals."

Rob Dee, CCO of Beacon: "Beacon is delighted to have entered into this long-term partnership with Lineas through the sale-and-leaseback of 109 T77 locomotives. We look forward to supporting Lineas in their drive for continued modal shift across the European rail network through enhancements to these assets and future growth opportunities."

As a result of the transaction, Lineas will continue to use the assets in its day-to-day operations as well as remain the entity in charge of their maintenance.

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

David

This Page

Porto heritage tram No. 205 is seen working a line No. 22 service to Carmo. *Andy*

Front Cover

CP Class 1400 No. 1413 is seen approaching Freixo de Numao-Mos do Douro with train No. R865 09:20 Porto Sao Bento to Pocinho on November 8th.

Mark Pichowicz



DB Class 186.338 leads intermodal train No. 40227 from Zeebrugge-Bundel Zwankendamme (Belgium) to Gallarate (Italy) across the Viaduct of Sint-Martens-Voeren on November 5th. *Erik de Zeeuw*

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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.

Australia

The Brisbane to Sydney XPT passes the Flame trees and Jacarandas as it heads over the Hastings River at Wauchope on November 16th. *Mark Bennett*



Austria

More waste transport to be handled by rail in future

The amendment to the Waste Management Act has been passed in the Austrian Parliament.

Rail freight transport is the only chance for sustainable land transport in the next ten to fifteen years. This also applies to the environmentally friendly transport of waste, such as excavated material, construction and demolition waste, household waste, as well as ash and slag. ÖBB Rail Cargo Group (RCG) already has many years of expertise in waste management.

The Austrian Parliament has now passed an amendment of the Waste Management Act. This is an important milestone for freight transport operators. Specifically, it was decided that transports of waste with a total weight of more than ten tonnes and above a certain transport distance should be carried out by rail – or by other alternatives with equivalent or lower pollutant or greenhouse gas potential. From 2023 onwards, this will apply to distances of 300 km or more, in 2024 from 200 km, and from 2026 for distances from 100 km.

Shift potential for waste transports

The total amount of waste generated in Austria was around 72 million tonnes in 2019. Due to their characteristics, many of these waste types would be particularly suitable for transport by rail. Yet around 80 percent of this waste, which is particularly suitable for rail transport, are still transported by road. There is a lot of potential here for shifting transport to rail and thus for an immediate reduction in CO2, fine dust and road noise in Austria. After all, every transport by rail makes a significant contribution to environmental protection, is 40 times more climate-friendly than a transport by truck and causes less than a third of external costs compared to road freight transport.



Extension to Eastern Switzerland and beyond

As from 2022, the ÖBB Rail Cargo Group (RCG) will link Vorarlberg to the Lake Constance region, with onward connections to Belgium and Italy.

The RCG's TransNET offers countless TransFER connections covering the entire Eurasian continent. The network is soon to be expanded by a new rail link between Vorarlberg and Eastern Switzerland. In future, RCG will be running services three times a week between Wolfurt terminal in the west of Austria and the Swiss terminals in Frenkendorf and Niederglatt. Thanks to this partnership, the RCG will be able to offer businesses in the Lake Constance region more frequent services not only to Rotterdam, but also to Belgium (port of Antwerp) and Italy (ports of Genoa and La Spezia).

RCG connect urban centres

Via 60 TransFER network connections and countless customisable routes, the RCG transports all manner of goods to and from various ports and commercial and industrial centres. The transport units vary from entire wagonloads to intermodal shipments right through to comprehensive customised solutions.



Depending on the place of departure and destination, additional freight forwarding services such as transshipment, warehouse logistics or customs services can be booked. The RCG takes care of every last detail – every mile of the way.

New TransFER connects Italy with Russia

The ÖBB Rail Cargo Group (RCG) expands its intermodal network with a new TransFER between Milan and Moscow. This sustainable transport solution connects Italy with Russia with high frequency and short transit times. Together with Novik Group, RCG has launched a new intermodal service between Italy and Russia.

With combined forces, the new TransFER Milan–Chernyakhovsk/Kaliningrad–Moscow brings a competitive and environmentally friendly transport mode at eye level with the traditional truck solution.

This connection on the sustainable rail route between Milan and Moscow ensures a rapid transit time of only ten to twelve days and is served with one round trip per week.

Connections in RCG's comprehensive TransNET

The TransFER includes door-to-door solutions that also cover complex storage and distribution requirements, including labelling services for goods in accordance with Russian legislation. Using over 1,000 Novik-owned 40ft High Cube Pallet Wide containers, all types of goods can be transported, including heavy cargo.

Novik Group assists with customs clearance, for example by offering a choice of two locations in either the Kaliningrad or the Moscow area. With the direct and fast block train service including loading and unloading options via the Chernyakhovsk Border Crossing Terminal (near Kaliningrad), the TransFER provides further options for transport to and from surrounding European countries along the route.

On November 5th, DB Class 193.318 is seen in Wonck with tanker train No. 48573 from Waaslandhaven-Bundel Zuid in Antwerp to Wacker Chemie AG Burghausen (Germany). The locomotive carries the slogan 'I am the backbone of the economy'. *Erik de Zeeuw*



Belgium

On November 5th, CROSSRAIL Class 186.187 comes out of the ‘Geertunnel’ in Wonck with an MSC shuttle from Germersheim in Germany to Antwerp.
Erik de Zeeuw

LINEAS Class 186.424 passes Wonck with intermodal train No. 40678 from Curtici (Romania) to Genk on November 5th. *Erik de Zeeuw*

Ascendos Rail Leasing Class 66 No. PB14, under license to CROSSRAIL, hauls a gas tank train from Visp (Switzerland) to Antwerpen Bundel Groenland on November 5th. *Erik de Zeeuw*

On November 5th, LINEAS Class 186.182 passes Gemmenich working a mixed cargo from Köln Gremberg (Germany) to the Kinkempois Yard in Liège.
Erik de Zeeuw

Czech Republic

On October 4th, CD Class 242.264 pauses at Brno hl.n. with train No. Os4674 22:04 Hustopeče u Brna to Tišnov.
Mark Pichowicz

Czech Republic

Hanzalik's Class 749.263 is seen stabled at Prostějov on October 5th. *Mark Pichowicz*

Czech Republic

On October 5th, Class 705.913 waits to depart Osoblaha with train No. Os20608 13:46 to Třemešná ve Slezsku. *Mark Pichowicz*

Czech Republic

Class 705.913 pauses at Slezské Rudoltice whilst working train No. Os20608 13:46 Osoblaha to Třemešná ve Slezsku.
Mark Pichowicz

Czech Republic

On October 8th, CD Class 111.011 and 150.213 are seen stabled at Praha hl.n. *Mark Pichowicz*

Czech Republic

Turkish steel mills will buy up to six other locomotives from CZ LOKO

The Turkish steelworks Erdemir from the city of Eregli have ordered four EffiShunter 600 shunting locomotives with a more powerful CAT C27 internal combustion engine with an output of 709 kW from the Czech company CZ LOKO. The contract for approximately 170 million crowns assumes the delivery of the entire series in the first quarter of 2023. At the same time, the steelworks have options for two more pieces under the same conditions. It can therefore be a total of up to six locomotives. They will replace obsolete machines of Soviet and Chinese design in demanding industrial operation.

"This is a great export success, which we managed despite the difficult conditions caused by the coronavirus pandemic. The key is the top quality and economical operation of these locomotives. The great ratio between price and quality is a parameter that opens the way for our locomotives to the world, " says Jan Kutálek, Sales Director of CZ LOKO.

The company thus continued the previous deliveries. It has exported ten locomotives to the country in the last six years. Six EffiShunters 600 run at the Isdemir steelworks, two 744 series locomotives are already owned by Erdemir and two other 741.7 series vehicles are used by the state-owned TCDD as a 'back-up' under the Bosphorus in the Marmaray submarine tunnel.

"We entered Turkey commercially six years ago, but it is still a new market for us, even a very demanding one. But the contract at the steel mills, one of the world's largest producers of iron and steel, confirms that we are moving in the right direction. Modern concepts, crew safety, ecological operation and high reliability allow our locomotives to withstand the difficult conditions of continuous operation of ironworks, " added Jan Kutálek.

At the same time, the extensive railway siding of steelworks not only serves for the supply of input raw materials and the dispatch of finished products, but also ensures a number of technological manipulations during the production itself. Therefore, locomotives must be reliable and able to withstand the specific conditions of continuous year-round operation. These include non-standard passage profiles, small radius curves, work in dusty environments and extreme climatic conditions. And the four-axle EffiShuntery 600 with electric power transmission and Caterpillar C27 engine can handle it with an overview.

Photo: ©CZ Loko



Czech Republic

CZ LOKO develops a hydrogen-powered locomotive



Czech locomotive manufacturer CZ LOKO has started the development of a hydrogen-powered locomotive, designated as Hydrogen Shunter 1000. So far, the project is in the feasibility study phase, when it will show whether a prototype will be built. This was stated by Jan Kutálek, Sales Director of CZ LOKO at the Žesnad technical seminar on November 22nd in Olomouc, which was attended by leading representatives of the railway industry and carriers. A locomotive with a maximum power of up to 800 kW should use hydrogen cells to recharge traction batteries.

Other evolving CZ LOKO environmental projects with which the company connects the future include the battery - powered E-Shunter 300 for light shunting, the DualShunter 2000 for operation on dependent and independent traction, and the plug-in hybrid HybridShunter 1000 for general shunting.

“A green agreement for Europe, pushing for a reduction in its carbon footprint, is a big challenge for us. We are already developing two types of dual and two types of hybrid locomotives. We continue to monitor this trend and analyse in detail the advantages and disadvantages of these unconventional solutions. And hydrogen is another of them, because the Green Deal brings about a fundamental change in the behavior of the entire EU market. Unfortunately, the dynamics of change is much more pronounced than the market’s ability to adapt to them, “ said Jan Kutálek.

According to him, “green innovation” costs a lot of money and only the strongest can afford it. However, they also have their dead ends and therefore the company pays great attention to the operational suitability and sustainability of the chosen solution. This was also the reason why CZ LOKO abandoned the development of compressed natural gas (CNG) locomotives years ago. The technical solution managed, built prototypes, but the mass expansion, even after consultation with railway carriers, the company evaluated as unrealistic and completed the project. As in the case of the TEM 35 hybrid locomotive for Russian Railways, which combines an internal combustion engine with a supercapacitor for starting, or the HybridShunter 400 dual locomotives, recharged from an external network and a backup internal combustion engine. Both solutions ended with prototypes that have been tested, drive systems and behaviour verified, but these solutions are no longer being developed.

“Without these innovative projects, we would never have moved on. Thanks to them, we already know where not to, but we still only know where to go. We are looking for a variant that is not too demanding to build additional infrastructure, enables a modular solution and a common maintenance base with our other vehicles, “said Jan Kutálek, demanding a demanding development associated with finding the best solutions. They also include easy operation, maintenance and service. The goal will be EU-wide homologation and affordability, although a “clean” locomotive will always be significantly more expensive than a conventional internal combustion engine.

The DualShunter 2000 locomotive combines trolley power and an internal combustion engine, which enables operation on both dependent and independent traction. It is designed for light and medium line service and shunting. It should be put into operation in 2023 in Italy, two years later in the Czech Republic and then in the surrounding countries. It will be possible to replace the internal combustion engine with up to three battery containers charged from a trolley or external source. The plug-in hybrid locomotive HybridShunter 1000 for shunting is to drive up to three battery containers with a total usable capacity of up to 600 kWh. The backup consists of an internal combustion engine for recharging the batteries. In terms of price, this will be an alternative to conventional shunting vehicles. The company wants to launch this type in 2026. It will be a product suitable only for a certain type of operation, which does not require continuous deployment or readiness. So for sidings, and not main line service.

“In our view, it is not a question of who will be first in the European market, but who will be the most successful and come up with the most effective solution. We are mainly interested in that, “ concluded Jan Kutálek.

Illustration: © CZ Loko

Správa železnic obtaines a Zoning Decision for the Modernisation of Masaryk Railway Station

The project of major modernisation of the Prague Masaryk railway station (Praha Masarykovo nádraží) is again closer to its realisation, because Správa železnic has a final zoning decision. The construction work itself will begin in 2023 and will include, among other things, expanding the existing number of tracks from seven to nine, building a new vestibule in the form of a roof connecting the area of Na Florenci, Hybernská and Opletalova Streets with accesses to the individual platforms. The speed of trains will be increased and track will be built for operational maintenance of trains in the Hrabovka locality.

Prague Masaryk railway station is the second most frequented station on the network of Správa železnic and is unique in its terminus arrangement, where trains stand on dead-end tracks by the platforms, which are directly connected to the roofed hall. From there, it is possible to exit at the level to Havlíčkova Street with a frequent tram stop and entrances to the metro station B Náměstí Republiky and also to Hybernská and Na Poříčí Streets. The historic centre of Prague is a five-minute walk away. It is currently the terminus of several very busy regional lines from the centres of the Central Bohemian Region. In the near future, it will also become the terminus or departure station of trains connecting the centre of Prague with Václav Havel Airport. For trains to the airport, Masaryk railway station will be extended towards Na Florenci Street from the existing 7 to 9 tracks with platforms. In order to improve the accessibility of the station from the Florence area and from the direction of the main station, and also to remove the barrier in the area currently being created by the station itself, the construction of a platform over track facility is designed. It will not only form a communication link, but will create a new eastern vestibule for waiting passengers, from which escalators, staircases and lifts will directly reach the individual platforms. Part of the platform is to be planted with greenery, creating a quiet oasis in the centre of the metropolis. The height of the platform will link on the newly planned development of a private developer on both sides of the station.

There will be three external and three bay platforms. The platform edge will be 550 mm above the top of the rail. Access to the platforms will be from two directions, either from the existing hall or from the new roofed platform from Hybernská / Opletalova and Na Florenci streets. The track facility, including the Hrabovka district, all technologies, the overhead contact line and power supply as well will undergo reconstruction. After completion of the construction works, it will be possible to increase the speed of trains running in the direction Praha-Libeň to 100 km/h. An interesting feature will be the fixed overhead contact line used due to the compressed construction height under the platform. The station will be equipped with the European train control system ERTMS/ETCS and the exclusive operation of railway vehicles equipped with the on-board part of ETCS is envisaged.

The reconstruction of Masaryk railway station is part of the modernisation of the railway from the centre of Prague to Kladno. It is divided into several stages. At the beginning of October, Správa železnic announced a tender for the construction contractor for the section from Kladno to Kladno-Ostrovec, and the section between Praha-Bubny station and the future new Praha-Výstaviště stop is also in the same stage of preparation.

Czech Republic

Transformation of Holešovice Begins: Správa železnic Has Announced a Tender for Modernisation of Bubny – Výstaviště Line Including Railway Stations

Modernisation of the railway line from Prague to Kladno with a branch line to Václav Havel Airport Prague has moved to the next phase. Správa železnic announced a tender for the contractor of the section Praha-Bubny – Praha-Výstaviště. The highest admissible bid price for the contract is CZK 3.8 billion. By the implementation of this construction, it will begin a major transformation of Prague's Holešovice, which will be connected by a completely new district in the place of today's Bubny railway station. The modernisation will be completed by 2025 and will become one of the pillars of the future development of the entire area.

"The announcement of the tender for the contractor is an important milestone for the entire modernisation of the line from Prague to Kladno and the airport. Together with the Kladno section, it is the actual beginning of the complete construction and, above all, the beginning of the transformation of the entire Holešovice district. The old railway station has been dividing Holešovice into two disparate parts for a long time, while the new railway will, on the contrary, naturally connect the two parts," says Jiří Svoboda, Director General of Správa železnic.

The most significant element of the modernised line will be the new railway station Praha-Bubny, which will be built behind the Negrelli viaduct and connected by an underground vestibule with the metro station C Vltavská.

The architectural design of the station with three platforms and four tracks is the responsibility of the Jakub Cigler Architekti architectural studio.

The design of the station will have two different phases. In the first phase, when it will be the only building in the area, a grassy resting area will be created on its roof, allowing people to have a view on the city and the changing Holešovice. In the second phase, an office building will be built directly above the station along with the construction of the new district. The station lobbies will then house a number of commercial premises that will serve both passengers and residents of the future new Bubny-Zátory district.

The station, together with the new Prague Philharmonic Orchestra building, will be the natural centre of the new district. It will also be one of the key elements of its transport services. The modernised railway will serve as an important transport hub across Prague 7 and Prague 6. As part of the modernisation of the Bubny – Výstaviště section, a railway stop Praha-Výstaviště will be built on the edge of Stromovka Park, whose architectural design will be the responsibility of the architects and which will significantly relieve Prague's integrated transport, especially at times when mass events such as trade fairs, concerts or sports matches will be held at the Prague Exhibition Centre.

A new footbridge over the railway line will improve the connection between Stromovka and Letná as well. The railway will also have similar benefit for the attendance of concerts in the Prague Philharmonic Orchestra building or in the case of mass events at Prague Letná.

The modernised line will lead in the Bubny – Výstaviště section for the most part along a new elevated track, which will enable the consolidation of Holešovice into one functional area. "The elevated track will be designed with generous bridge arches in order to maximally allow further development of the area. We are counting on the fact that in the vicinity of the Exhibition Centre (Výstaviště), following the model of Germany and other western countries, glass built-ins will be created to enable commercial use. However, if this does not happen, the elevated track will allow an airy and sensationally safe connection of the area on both sides," adds Jiří Svoboda. At the same time, it will enable the cancellation of the unpopular railway crossing in Bubenská Street and also the raising of the bridge structure in Dukelských hrdinů Street, where in the past, due to its low height profile, tram overhead contact line was repeatedly torn down by inattentive lorry drivers.

AŽD has won its fifth contract in Poland / AŽD wins another significant contract in Bulgaria

AŽD has concluded a contract for the supply of signalling and telecommunication systems on the Glincz - Kartuzy railway line in Poland with the construction company Pomorskie Przedsiębiorstwo Mechaniczno-Torowe sp. z o.o. (PPMT). The value of the contract is 46.5 million zł (approximately 256 million CZK).

This is already the fifth contract in Poland for the Czech company AŽD, this time in the role of a subcontractor of the construction company PPMT. The project is financed from the own resources of the PKP PLK infrastructure manager and is to be completed within 30 months of concluding the contract.

AŽD is a subcontractor of a computer based interlocking of the ESA 44 type for two railway stations, including the equipment of the centralised traffic control centre of the signalling equipment for a 10 km long track section. The line Glincz - Kartuzy will also be equipped with 26 electromotive point machines, 74 LED signals and 11 level crossing devices. Some deliveries, for example in the field of telecommunications, are provided by Polish partner companies.

"We face up every other order won in Poland with great humility and knowing that it will require considerable effort from our staff. Another significant contract concluded is an appreciation of AŽD's work to date in our northern neighbours, and we value this trust very much," says Zdeněk Chrdle, CEO of AŽD.

AŽD has also concluded a contract with the Greek construction company TERNA SA for the supply of signalling systems for the project "Modernization of the railway line Sofia - Dragoman - Serbian border, section Volujak - Dragoman" announced on the basis of a public tender by State National Company in Bulgaria. The value of the contract is 31.7 million BGN (approx. 16,6 million EUR).

This is the second contract in Bulgaria for the Czech company AŽD in a short time. The implementation of the project is planned for 3,5 years. AŽD is involved in the project as a supplier of the ESA-44 station interlocking system for five railway stations (Dragoman, Aldomirovtsi, Slivnitsa, Petarch, Kostinbrod), 96 electromechanical point machines of EP-600 type, 146 LED signals, axle counters, power supply, cabling and other outdoor elements.

"This contract is important for AŽD, because it considers signalling a prestigious backbone corridor leading from Sofia to the border with Serbia. We are ready again to prove the high quality of Czech technologies and the flexibility of our employees. We are keen on other interesting projects in Bulgaria", says Zdeněk Chrdle, CEO of AŽD.

One of the new Wabtec built GE ES30s pulls into El Wasta with an air-con express towards Luxor and Aswan on November 15th. *Mark Torkington*



Alstom signs agreement with the Egyptian National Railways Authority to modernise signalling for the Tanta – Zifta – Zagazig mainline

ENR awarded new contract to Alstom and Elsewedy Electric

Tanta – Zifta – Zagazig mainline covers approximately 65 km including nine main stations

Alstom and the Egyptian National Railways Authority (ENR) have signed a framework agreement to modernise the Tanta – Zifta – Zagazig mainline, covering approximately 65 km including nine main stations during the TransMEA Exhibition & Conference. The project's scope includes the design, supply, installation of the signalling, power, telecom systems and trackside equipment for migration to ETCSL1. In addition, the contract includes the testing and commissioning of signalling, telecom and power systems, civil works, trenching works and track-works including doubling of the track.

The modernisation of Tanta – Zifta – Zagazig mainline is one of the Ministry of Transport's top priorities and part of Egypt's plans to improve public transportation capacity and efficiency. The agreement was signed by Eng. Mostafa El Makarem, CEO of ENR and Andrew Deleone, Alstom AMECA President, in the presence of Eng. Ahmed El Sewedy, President and CEO of Elsewedy Electric and Mohamed Khalil, Alstom Egypt Managing Director. Alstom is currently working on modernising the Beni Suef Asyut line.

"We are pleased to be selected for an additional signalling modernisation project and to do it with Elsewedy Electric. This agreement builds on our long-term partnership with ENR and we remain committed to providing state-of-the-art signalling solutions to Egypt and its citizens," said Mohamed Khalil, Managing Director Alstom Egypt.

Alstom has been a partner to Egypt's railways since 1971, supporting the railway infrastructure development in the country. Alstom Egypt has established a strong local team and a Center of Excellence (COE) for signalling systems, power supply and maintenance workshops to support projects across its Africa-Middle East-Central Asia (AMECA) region.

Egypt's vision and strong talent pool has enabled Alstom to make significant contributions to Egypt's rail industry development. Today, Alstom employs approximately 500 people in Egypt with several ongoing projects including a consortium to design, implement, operate and maintain two new Monorail lines connecting the New Capital City and 6th October City to Greater Cairo.

Alstom awarded Egypt's largest metro rolling stock contract to improve public transport within Cairo

Alstom and National Authority for Tunnels (NAT) announced an agreement for 55 Metropolis trains (9 cars per train) and an 8-year maintenance contract, valued at 876 million euro, for the upgrade of Cairo Metro Line 1, at TransMEA 2021, financed by the French Government.

Launched in 1987, Cairo Metro line 1 is the oldest metro line in Egypt, moving approximately 2.5 million passengers per day between El Marg and Helwan. These upgrades are part of Egypt's plans to increase and improve public transportation capacity and passenger experience for citizens.

"We are honoured to play a role in the development and modernisation of Egypt's urban network and are grateful for the National Authority for Tunnels confidence in Alstom's Metropolis solution. It is a proven and technologically advanced platform. With a fleet of about 495 Metropolis cars, more residents will be able to commute safely and comfortably every day. We thank H.E. Kamel El-Wazir, Egyptian Minister for Transport, the National Tunnel Authority, the French authorities, and all those who have made this project possible for the benefit of the Egyptian people," said Henri Poupart-Lafarge, CEO of Alstom.

A state-of-the-art metro, Metropolis brings an unprecedented level of comfort to Cairo residents and tourists. Its interior layout is tailored to the specific requirements of the line and designed to maximise train capacity while enhancing comfort, accessibility and passenger flow. It features wide corridors and a dedicated women's area. At peak times, each train will be able to carry 2,580 passengers and its eco-design brings increased energy-efficiency and is up to 98% recyclable.

Finally, Alstom's proposal includes a unique design to reflect the history and culture of Cairo.

Incorporated digital solutions allow for real-time passenger information, dynamic route maps, video displays and video surveillance. Also included is Alstom's cutting-edge condition-based and predictive maintenance solution known as HealthHubTM. Through enhanced data collection, the system optimises the lifecycle costs and saves up to 20% in preventive maintenance labour and 15% in materials consumption. Maintenance work will be carried out at the depot in Cairo and managed locally, creating long-term job opportunities for local talent. A training and development plan will be rolled out in partnership with the Egyptian Company for Metros (ECM) – the operator and maintainer of Line 1.

This signature follows the agreement signed on June 13th 2021 between Bruno Le Maire, French Minister of the Economy, Finance and the Recovery, and H.E. Kamel El-Wazir, Egyptian Minister of Transport, concerning the financing of this agreement and of the maintenance contract, for the development of the Cairo metro.

The Metropolis metro will be designed and manufactured in France, at the Alstom site in Valenciennes Petite-Forêt. The other French sites involved are Le Creusot, for the bogies and motor integration, Villeurbanne, for the passenger information systems, and Toulouse, for electrical engineering.

Alstom has been a partner to Egypt's railways since 1971, supporting the railway infrastructure development in the country. Alstom Egypt has established a strong local team and a Center of Excellence (COE) for signalling systems, power supply and maintenance workshops to support projects across its Africa-Middle East-Central Asia (AMECA) region.

Egypt's vision and strong talent pool has enabled Alstom to make significant contributions to Egypt's rail industry development. Today, Alstom employs approximately 500 people in Egypt with several ongoing projects including a consortium to design, implement, operate and maintain two Monorail lines connecting the New Capital City and 6th October City to Greater Cairo.

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Egypt

On November 14th, new build GEs pass at Luxor as No. 2589 is on an air-con express to Cairo whist No. 2590 is arriving with the sleepers from Cairo.
Mark Torkington

The first Henschel built AT22 No. 3001 sits on a ballast train at El Wasta on November 15th. *Mark Torkington*



Egypt

One of the GM JT22MCs No. 3237 shunts a commuter train after arrival at Cairo Ramses on November 16th. *Mark Torkington*



Egypt

On November 14th, No. 3982 is shunted away at Aswan after a trip to High Dam and back on a local service. *Mark Torkington*

Egypt

GM G22 No. 3964 sits at Kom Abou Rady on the El Wasta to Fayoum branch waiting to pass an opposite working on November 15th. *Mark Torkington*

On November 12th, RBH Class 145.020 and 145.015 pass the signal box in Köln-Kalk Nord with a rake of Falns (Coal) on their way from Oberhausen West to München Johanneskirchen. *Erik de Zeeuw*



Germany

Reconstruction after the flood disaster: Deutsche Bahn is returning to the Ahr valley



Around four months after the devastating flood disaster, parts of the Ahr valley are reconnected to rail traffic. The first section of the badly damaged Ahr Valley Railway has been in operation since November 8th: the trains run twice an hour in each direction between Remagen and Ahrweiler. The water masses had swept away the 110-year-old Ahr Valley Railway on many sections of the route. Heimersheim, among others, was particularly affected: Here the water carried the entire platform away, destroyed the embankment over a length of 1.5 kilometres and tore more than 1.2 kilometres of tracks out of their position. For the reconstruction of the destroyed tracks, the specialists of Deutsche Bahn (DB) and specialist companies had to remove tons of rubble that had washed up. They then repaired tracks, embankments and technology, and some of them were rebuilt.

Ronald Pofalla, Board Member for Infrastructure at DB: “The trains are back in the Ahr valley - and thus another piece of normality for the people here in the region. The reconstruction was a real feat. Our employees worked tirelessly together with the specialists from the construction companies to repair and rebuild the destroyed railway systems. With this commitment and the excellent cooperation, we were able to complete the work four weeks earlier than originally thought. I am particularly grateful to everyone involved for this. We also want to set the pace for the remaining sections of the route: Everywhere in the areas hit by the flood, people should be able to take the train again as quickly as possible.”

Andreas Scheuer, Federal Minister for Transport and Digital Infrastructure: “Step by step, route by route, hope and signal at the same time. As of Monday, Ahrweiler will be a little better connected again. The route to Walporzheim will be back in operation from next month. We are making good progress given the severity of the damage. We will have to struggle with the long-term consequences of this flood disaster for a long time to come, but I can assure you that we will not let up in our commitment to rebuilding the infrastructure. The necessary funds are ready and the work is in full swing. I would like to thank everyone involved for their tireless efforts.”

Malu Dreyer, Prime Minister of Rhineland-Palatinate:“Today is an important day for the Ahr Valley, which shows that we are making visible steps on the mammoth task of rebuilding. For the people it brings great relief in their everyday life, because they can now travel well by train every day in the section of the route close to the Rhine. My thanks go to Deutsche Bahn AG and everyone involved who restored this section of the route in record time. The state government is still at your side so that the reactivation of the rest of the route can proceed quickly. Our common goal is a swift and at the same time sustainable rebuilding of the Ahr valley. The state government advocates for this with the highest priority and with broad involvement of companies, associations, municipalities and the citizens of the region.”

The First District Councillor Horst Gies MdL is relieved: “That was the route of Ahrtalbahn Remagen to Ahrweiler up in such a short time again repaired, is a small miracle in the face of destruction. My big thanks go to everyone who accepted and mastered this challenge. For the people in the Ahr Valley, this is a great signal and a sign that reconstruction is progressing bit by bit. That lets us look to the future with optimism.”

DB used a total of 4,200 tons of gravel and 7,800 tons of ballast to repair the section between Remagen and Ahrweiler. In addition, five kilometres of cable, one kilometre of rail, 1,500 sleepers and two level crossings had to be replaced. Initially, however, the trains will only run on one track - the repair of the second track will take some time. In addition, the Heimersheim stop has to be cancelled for the time being.

From the timetable change on December 12th, the next section of the Ahr Valley Railway will go into operation: Then the DB will also resume traffic between Ahrweiler and Walporzheim.

The work on the rest of the Ahr Valley Railway between Walporzheim and Ahrbrück will take significantly longer. Here the damage is particularly serious: Among other things, the DB has to replace eight bridges and almost all supporting structures and lay new rails. In addition, seven level crossings and the destroyed signal boxes in Dernau and Kreuzberg are being repaired.

The Ahr Valley Railway’s electronic signal box, which is currently under construction, is being redesigned from scratch. At the same time, the first plans for the all-round renovation of the railway infrastructure and a possible electrification are in progress. Concrete prognoses for recommissioning are not yet possible here, nor for the Euskirchen – Bad Münstereifel (Erfttalbahn) and Rheinbach – Euskirchen (section of the Voreifelbahn) lines.

Paribus Rail Portfolio III Class 192.012 (licensed to TXLOGISTIK) runs through Bremen Hbf with an ARS Altmann car train from Bremen Rbf to München Milbertshofen on October 13th. *Erik de Zeeuw*

Germany

Siemens Vectron Dual Mode Class 248.005 ‘Guntea’ under license from MINDENER KREISBAHNEN passes Bremen Hbf light engine on October 13th. *Erik de Zeeuw*

Germany

On October 12th, LINEAS Class 186.296 passes Hüde with a short Volvo train from Älmhult (Sweden) to Gent (Belgium). *Erik de Zeeuw*

Germany

Chemion Logistik GmbH Class 1275.001 is seen in Köln-Kalk Nord with the CHEMPARK Shuttle to Krefeld, Dormagen & Leverkusen on November 12th. *Erik de Zeeuw*

Germany

Steel belongs on the rails:
With DB Cargo, U.S. Steel is choosing the most sustainable means of transport



Every day, thousands of lorries take to our roads to deliver goods. Congested motorways are the inevitable outcome. These transports take a heavy toll on the environment, too. Against this backdrop, more and more companies are rethinking how they do things and shifting their goods to rail. Every tonne of freight brought to its recipient by train emits roughly 80% less CO2 than the same goods hauled by lorries on the motorway.

Steel producer U.S. Steel Košice is banking on rail
This has now led U.S. Steel Košice to adopt its current motto: “Off the road and onto the rails.” The Slovakian branch of U.S. Steel aims to ship its products to customers with more climate-friendly methods in future and has pulled in DB Cargo for the job. “Many of our customers lack their own private siding. Thus far, we have relied exclusively on road transport to supply those customers. From now on, we will be working with DB Cargo to transport the products in an environmentally friendly way,” says Martina Kováčová, General Manager Procurement, Center of Excellence from U.S. Steel Košice.

This year, U.S. Steel Košice has already shifted 33,069 tonnes of steel from road to rail, emitting 2,442 fewer tonnes of CO2 than the equivalent lorry transports. The steel products first make their way by rail. The main leg takes them from Slovakia to various railports in Germany. Once they arrive, they are transhipped and stored, if necessary, before being delivered to the end recipients by lorry. With the rail transports to Mengen and Bielefeld alone, the steel group saved already around 270 tonnes of CO2 emissions in 2021.

“We handle the entire transport, manage the operational side and maintain an overview of everything – from coordination to delivery. U.S. Steel Košice’s job is done as soon as the goods leave the steelworks,” says Mario Bahn, account manager at DB Cargo. The end customers are pleased, as well: “We are very satisfied with the new transport solution, since it is safer while also reducing the burden on the roads. We receive the products much faster by rail,” says Herbert Schanz, Managing Director of Franz Schanz GmbH und Co. KG in Mengen, a customer of U.S. Steel Košice.

Digital data handling introduced with EDI
Parallel remote data transmission via EDI has been put in place to record the entire process digitally. U.S. Steel Košice uses the IT solution to notify the railport once the goods are sent. The railport knows what is headed its way and confirms receipt, dispatch and delivery of the goods to the customer. “U.S. Steel Košice therefore has all the data directly in its system for further processing. This considerably reduces manual effort,” says Mario Bahn from DB Cargo.

Further cooperation is planned
The partnership between U.S. Steel and DB Cargo to shift current lorry shipments to environmentally friendly rail between Germany and Slovakia is just getting started. There are plans to broaden the cooperation in future. Additional routes with last mile solutions for France and Belgium are already being planned in areas where large volumes are still delivered to U.S. Steel Košice’s customers by lorry.

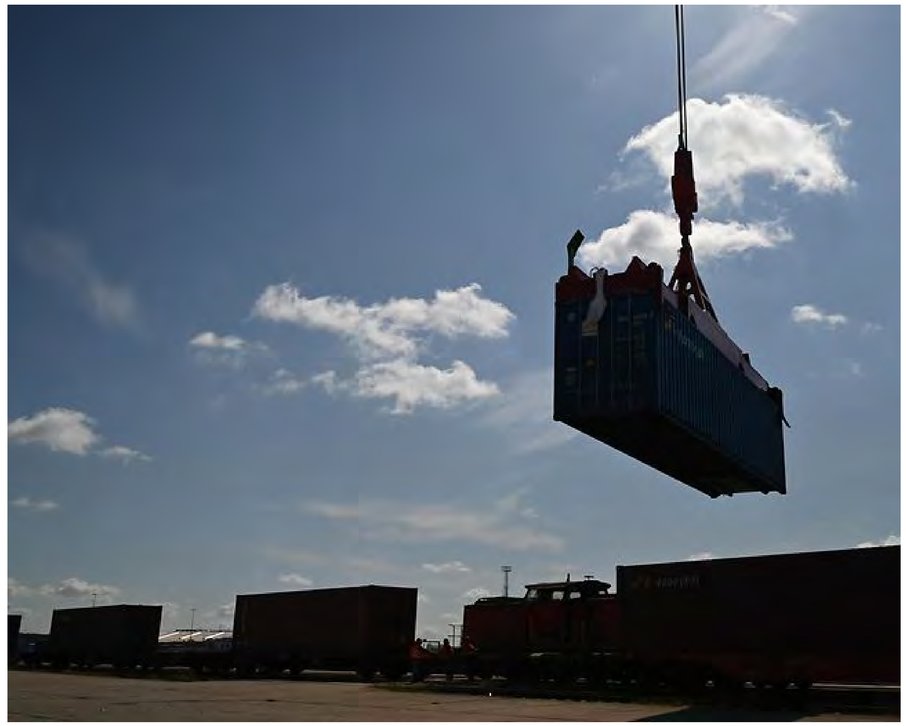
Germany

On September 19th, BLS/CROSSRAIL Class 185.615 passes Braubach with intermodal train No. 40253 from Antwerpen D.S. Combinant (Belgium) to Domodossola and Gallarate (Italy). *Erik de Zeeuw*



Germany

New silk road is booming: new DB Cargo subsidiary strengthens rail freight traffic between China and Europe



The climate-friendly and reliable transport by rail freight is becoming more and more important for global supply chains. That is why demand is booming on the “New Silk Road”, the rail route between Europe and China. With the establishment of “DB Cargo Transasia” in Shanghai, Europe’s largest freight railroad is considerably strengthening its services in the Far East. Because DB Cargo is the only provider able to link the traffic on the New Silk Road with the European DB Cargo network. That means direct train connections to 18 European countries. In China, DB Cargo Transasia enables various services relating to the supply chain, which is more than 10,000 kilometres long, to be offered more quickly and from a single source. The attractiveness of the rail route will continue to increase. Transports on the trans-Eurasian corridor are significantly faster than with the container ship and cost only a tenth of comparable air freight.

DB Cargo Eurasia is expanding its role as a strong partner

The DB company opened several new routes between China and Europe this year, most recently the new Shanghai - Hamburg - Shanghai connection at the end of September. DB Cargo Eurasia currently handles traffic over more than ten routes. In 2020, China was Germany’s most important trading partner for the fifth time in a row. According to industry estimates, a total of more than 12,000 trains were last on the Eurasian corridor in 2020. The last rate of growth was an increase of 3,000 trains per year. DB wants to increase its transport capacities accordingly - from more than 200,000 containers (TEU) on the Eurasian corridor in 2020 to 500,000 containers in 2025. That makes ecological and economic sense: because the freight train causes around 95 percent less CO2 in comparison emissions than the airplane and almost 80 to 100 percent less than a comparable road transport.

In order to further exploit the potential, DB Cargo Eurasia has repositioned itself. Since September of this year, Andreas Lübs has been the new CEO at the helm of the company. On December 1st, Tabea Klang will take over the position of Managing Director Sales (CSO). Andreas Lübs has been with DB Cargo Eurasia since 2018 and was largely responsible for the development and expansion of business on the Eurasian corridor. Prior to being named CEO, he served as the company’s CFO.Tabea Klang gained important professional experience with the OECD in Central Asia and during her studies in Moscow. From her work as Senior Advisor to the Board of Management of Freight Transport at Deutsche Bahn AG / Chairwoman of the Board of Management of DB Cargo AG, she brings with her in-depth knowledge of the DB Group. In addition, she speaks five languages and thus has the best prerequisites for further advancing the global network and international business of DB Cargo AG as CSO.

Lighter, more comfortable, more environmentally friendly: DB has already renovated 650 stations



The offensive for more beautiful train stations is having an effect: thanks to the “immediate program for attractive train stations” that Deutsche Bahn (DB) and the Federal Ministry of Transport and Digital Infrastructure (BMVI) have launched to stimulate the economy, DB has already been able to comprehensively renovate 650 train stations in 2021.

With 300 new benches, 70 additional weather shelters and around 90,000 litres of paint, it ensures a better appearance of the stations. In order to save energy, the DB will be converting around 90 stations to energy-saving LED lights and expanding old heating systems by the end of the year. Around 800 handicraft businesses nationwide are getting involved so that travellers feel even more comfortable at the train stations and thus have a further incentive to switch to the environmentally friendly train.

Ronald Pofalla, DB Board Member for Infrastructure: “The surveys clearly show that our passengers are significantly more satisfied with the stations than they were before the renovation. And that’s exactly what we’re about - with attractive train stations to convince people to leave their cars behind in favour of the environmentally friendly train. The immediate program for attractive train stations is not only an economic stimulus for the German economy, but also an important driver in the direction of the mobility transition. We are continuing to pace and will renovate a total of 1,000 stations by the end of the year.”

Andreas Scheuer, Federal Minister for Transport and Digital Infrastructure: “The figures prove it: Our immediate program is a real success. Attractive train stations, strong handicrafts, secure jobs - that’s what it’s all about. Often they are only small measures that have a big impact overall. Because they facilitate access to the train, improve the information situation and make the stations more attractive overall. This is exactly what we need to get even more people to switch to the train - because it is our most climate-friendly means of transport.”

With the immediate program, DB is investing nationwide in both small, medium-sized and large stations. The train stations are located in metropolises as well as in the regions. She preferably commissions regional craft businesses for the work. The improvements for the travel;ers are manifold: For example, DB at Speyer station renewed the stairs to the station building and the heating, replaced windows and floors and painted the facade. In Bielefeld, the underpass and the station building were painted in fresh colours, and work on the station facade is in full swing. Neumünster has also got a new outer skin, paint in the pedestrian tunnel and new way finding. The floors at Dresden Hbf were renewed. In Bruchsal, the roof has been insulated and the weather protection house is in place.

In August 2020, the BMVI and DB started the immediate program for attractive train stations. Nationwide, the DB freshened up a total of more than 430 train stations for 40 million euros in a very short time in cooperation with executing craftsmen. With a total volume in 2021 of 120 million euros from the federal economic stimulus program, DB is continuing its offensive this year and tackling a total of 1,000 stations.

BoxXpress Class 193.539 heads a deep sea container train from Rotterdam (Netherlands) to Kornwestheim (Germany) seen at the height of Leutesdorf. *Erik de Zeeuw*

Germany

Greater comfort and more attractive offers for regional rail: 57 new trains will serve the Franconia-South Thuringia and Danube-Isar networks



DB Regio Bayern and train manufacturer Siemens Mobility will put a total of 57 new trains in service in Bavaria beginning in December 2023. Twenty-six Desiro HC trains are currently being built for the Franconia-South Thuringia network, along with 25 Desiro HC double-decker trains and six Mireo trains for the Danube-Isar network. The 18 Desiro HC trains will operate in the Franconia-South Thuringia network as four-car units beginning in December 2023 and eight Desiro HC trains as six-car units in June 2024. They travel almost as fast as the ICE, for example between Coburg and Erfurt at 190 kmh. In the Danube-Isar network, the 31 new trains will inaugurate service in December 2024.

Mireo Danube-Isar network

"We requested new vehicles in the tenders for both networks in order to improve passenger comfort, increase capacity and also expand services," says Thomas Prechtl, spokesman for the management of Bayerische Eisenbahngesellschaft, which plans, finances and controls regional and S-Bahn transport in Bavaria. "A special treat are the eight trains specially equipped for use on the Bamberg - Coburg - Erfurt high-speed line, which we planned together with the Free State of Thuringia. Their maximum speed will be 190 kilometres per hour."



Hansrüdiger Fritz, CEO Regional Management, DB Regio Bayern: "Attractive trains and service offers for our customers are a prerequisite for generating more uptake of the climate-friendly railway. To achieve this, we are further increasing the quality of mass transit in Bavaria and are winning additional passengers. Together with our partner Siemens Mobility, we are looking forward to launching this impressive fleet of new trains in Bavaria's rail networks. Our passengers will benefit from improved services in both networks. On the heavily traveled Nuremberg – Bamberg route, for example, the new trains will significantly increase passenger capacity. From 2024 onward, up to 200 more seats will be available on each train."

Dr. Elmar Zeiler, Head of Mass Transit and Regional Trains at Siemens Mobility: "Only by providing a strong rail sector can we satisfy the growing demand for mobility and at the same time achieve our climate targets. Siemens Mobility is proud that we will be making a significant contribution here with our Desiro HC and Mireo trains in Bavaria and Thuringia. Both trains stand for enhanced passenger comfort and convenience, maximum availability and sustainability, are highly popular with passengers, and have already considerably improved passenger satisfaction on many routes."

Facts and figures: Franconia-South Thuringia network

Siemens Mobility has been commissioned by DB Regio Bayern to deliver 18 four-car and eight six-car Desiro HC double-decker electric trainsets for the Franconia-South Thuringia network. Passenger service with the four-car Desiro HC is scheduled to begin in December 2023. The trains will be used on the lines RE 20 Nuremberg – Bamberg – Würzburg, RE 42 Nuremberg – Bamberg – Lichtenfels – Saalfeld, RE 49 Nuremberg – Bamberg – Lichtenfels – Coburg - Sonneberg, and RB 25 Bamberg – Kronach. The six-car Desiro HC trains will operate as of June 2024 on the line RE 19 Nuremberg – Bamberg – Coburg – Erfurt/Sonneberg. Since that route uses the high-speed Berlin – Munich line, the trains must meet special technical requirements and, for example, will be equipped with the most modern ETCS (European Train Control System) technology. Moreover, the trains will be pressure-tight to operate at high speeds in tunnels along the route. With a top speed of 190 kilometres per hour, they are among the fastest regional trains in Germany.

For the Franconia-South Thuringia network, the BEG – which plans, finances and controls rapid transit transport in Bavaria – together with the State of Thuringia, specified that the new trains be barrier-free, air conditioned, and have high passenger capacities. The double-decker trains from Siemens Mobility are air conditioned, provide power sockets at each seat, and feature improved passenger comfort. The six-car trains have 634 seats, while the four-car trains can also operate in coupled units on busy sections, thus providing up to 760 seats. As of December 2023, passengers can look forward to an improvement in scheduling: Existing gaps in the current timetable will be closed and service intervals in part reduced. This applies in particular to the heavily used Nuremberg – Erlangen – Bamberg route. In the future, regional trains will run on this line at half-hour intervals throughout the day. The regional express line Nuremberg – Bamberg – Coburg – Sonneberg via the new Ebensfeld – Erfurt line will also operate twice as often: the Coburg region will be connected to Bamberg, Erlangen and Nuremberg every hour.

Danube-Isar network

In December 2024, the new Desiro HC and Mireo trains will also be inaugurated in the Danube-Isar network. The Desiro HC trains are designated for use on the line RE 3 Munich – Landshut– Plattling – Passau and on the line RB 33 (Munich) – Freising – Moosburg – Landshut until the opening of the second main S-Bahn line through Munich. The Mireo trains will be used on the line RE 22 Munich Airport Terminal – Landshut– Regensburg. Following the opening of the second main S-Bahn line in Munich, the RB 33 trains will be used to increase the frequency of service between Munich and Regensburg or Plattling during rush hours. The four-car Desiro-HC-trains have 360 seats in 2nd class and 20 seats in 1st class. Up to three Desiro HC trains can be coupled for greater flexibility and capacity. The double-decker trains are barrier-free for passengers with limited mobility. At platforms with a standard height of 76 cm, wheelchair users can board and exit the trains without assistance. There is also a doorway lift for wheelchair users to facilitate boarding and exiting at stations with lower platforms.

The six four-car Mireo trains provide 250 seats in 2nd class and 14 seats in 1st class. Passengers can see all the way through the train, which makes it easy for passengers to move from car to car. For the convenience of passengers with reduced mobility, all trains are equipped with duplex sliding steps fitting different platform heights. There is also a doorway lift for wheelchair users to ease boarding and exiting at stations with lower platforms. A large number of luggage racks provides generous space for passengers to stow their suitcases and other items. Passenger capacities in the Danube-Isar network will also be expanded when the new trains enter service. The Munich – Passau/Munich – Landshut line is one of the most important commuter routes in the greater Munich region. In the future, there will be around 300 more seats per train available here during peak times.

The double-decker trains for both networks will be equipped with multi-purpose seatless areas equipped with innovative bicycle supports that enable cyclists to transport their bikes comfortably and safely. All 57 trains will also feature high-frequency windowpanes developed by Siemens Mobility that significantly improve cellphone reception, as well as a modern real-time passenger information system. In addition, passengers can look forward to free WiFi service on the trains.

Germany

Alstom's Avelia Horizon very high-speed train wins German Design Award



On November 17th, Alstom's Avelia Horizon very high-speed train received the prestigious German Design Award, the official design award presented by the German Design Council (Rat für Formgebung)and the German Ministry for Economics and Technology. The award recognized the Avelia Horizon's successful marriage of advanced engineering and strong sustainability focus with inspiring organic contours and an interior design that delivers a truly exceptional passenger experience.

Speaking about this award, Laurent Jarsalé, Vice-President, Mainline Platform, Alstom, said, "The Avelia Horizon very high-speed train is Alstom's latest iteration in a long series of successful high-speed train projects. This award-winning design is the result of close cooperation between our talented engineering, passenger experience, and eco-design and style teams that each strove to optimise the existing Avelia platform into a striking design that illustrates a fusion of natural aesthetics with environmentally-focused, very high-speed mobility." The Avelia Horizon has a top operating speed of 350 km/h and can carry up to 740 passengers per trainset.

For the project, Alstom strove to emphasise a sense of nostalgia reminiscent of the rail manufacturer's first very high-speed trains which leveraged the use of large panoramic windscreens to express the essence of high-speed rail travel. To communicate this, designers created, or enhanced, a series of unique design elements such as implementing aerodynamic improvements to the nose to reinforce the train's sensation of velocity and closely merging the front windscreen and lateral windows to reinforce an elegant, aerodynamic essence. Lengthening the longitudinal stretch of the headlights also helped further evoke feelings of acceleration and momentum.

Inside, equal attention was given to the passenger experience. All windows were enlarged to offer an even closer connection to the exterior landscape while the choice of smooth shapes and plush material for interior fixtures seeks to create an embracing atmosphere of comfort that leaves passengers with a sensation of inclusivity and safety.

Perhaps equally important to receiving the design award was the close attention put on meeting sustainability and efficiency goals. The Avelia Horizon addresses ambitious goals in terms of competitiveness of the rail sector and profitability: maintenance costs will be more than 30% lower and thanks to its aerodynamic design and a more efficient traction drive, Avelia Horizon will consume 20% less energy compared to the previous generation and achieve the lowest total cost of ownership per seat on the market for a train of its type.

The German Design Award celebrates its tenth anniversary in 2021. The top-class international jury honours ground-breaking design achievements, making the most modern and powerful design trends visible across all sectors.

Alstom to transfer Coradia Polyvalent platform, Reichshoffen site and TALENT 3 platform to CAF

Commitment to the European Commission in relation to the acquisition of Bombardier Transportation

Alstom announced on November 24th that it has agreed to divest its Coradia Polyvalent platform, its Reichshoffen production site in France and its TALENT3 platform, currently developed in Hennigsdorf, Germany to CAF.

The divestment of the relevant businesses was a condition for the clearance of the Alstom/Bombardier transaction by the European Commission.

CAF is pleased with this transaction which will enable it to continue its development thanks to the skills and know-how of the concerned sites. CAF continues to invest in France consolidating its position in this country and at the same time the Group will boost its activities in the German and center European markets.

The divestiture project will be subject to the completion of the applicable social processes and consultations with employee representatives' bodies and to regulatory approvals. Closing of the transaction is expected between April and September of 2022.

Germany

East Brandenburg rail network gets 31 battery-electric trains

The Berlin-Brandenburg metropolitan area will get the first battery-electric, emission-free regional trains in late 2024 along with an improved and expanded timetable. To provide this service, Niederbarnimer Eisenbahn (NEB), which again won the contract for the network early in June, has ordered 31 two-car, battery-operated Mireo Plus B trains from Siemens Mobility. The federal states of Berlin and Brandenburg are responsible for planning and financing regional rail passenger service in the VBB region.

Guido Beermann, Minister for Transport for the State of Brandenburg: “The use of environmentally friendly propulsion systems in public transport marks a milestone in the technical transition taking place in the rail sector. As the first battery-electric, multiple-unit train in the VBB network, the Mireo Plus B provides real added value in terms of climate compatibility and economy compared to the trains operating with combustion engines currently in use. This trend toward electric trains, together with an even more attractive service offering, will continue and give further impetus to the transport transition.”

Regine Günther, Senator for the Environment, Transport and Climate Protection, the State of Berlin: “The new trains ordered for regional service will make a double contribution to protecting the environment: There will be more train connections and at the same time fewer emissions. Providing more space, better equipment and features, and a higher service frequency, the regional trains will become more and more attractive for daily commuting and a real alternative to private cars.”

Susanne Henckel, Managing Director of the Berlin-Brandenburg Public Transport Authority (VBB): “We have set new standards with the East Brandenburg network and its focus on alternative drives. The new trains along with the increased service frequency will significantly improve the offering for passengers. There is, in fact, no alternative: Environmentally friendly rail must be further supported and expanded. What pleases me the most is that electric trains with battery storage systems will operate on many lines in the future. The transport transition and climate protection are in full harmony: It’s a good day for public transport in Berlin and Brandenburg.”

Detlef Bröcker, Managing Director, Niederbarnimer Eisenbahn (NEB): “With the Mireo Plus B from Siemens, we have a high-performance, highly efficient and innovative train in terms of performance, range and equipment, and one that’s especially suitable for the partially electrified regional lines of the East Brandenburg network. With our push toward innovation and providing equipment that is geared to the needs of our passengers, we’re strengthening climate-friendly regional rail transport and combining climate protection goals with the requirements of the transport transition.”

Dr. Elmar Zeiler, Head of Mass Transit and Regional Trains at Siemens Mobility: “Sustainability is a very high priority for Siemens Mobility, which is why we are so pleased with the second order for our battery-powered Mireo Plus B. Our Mireo is really poplar with customers as well as passengers. We’ve already sold over 240 trains in this successful series. This state-of-the-art train delivers passenger comfort and convenience, reliability, and availability along with climate protection. By using batteries, the trains can operate on non-electrified railway lines, replacing diesel-powered trains and making a significant contribution to reducing CO2 emissions.”



Emission-free, energy-efficient, and recyclable trains for East Brandenburg

In their Europe-wide tender for the East Brandenburg rail network, the states of Berlin and Brandenburg clearly focused on alternative drives and reducing environmental pollution. At present, diesel-powered trains operate on the network’s routes. By switching to the Mireo Plus B battery-powered trains, annual consumption of diesel fuel will be reduced by around 4.4 million litres in the East Brandenburg network. The new trains will also completely eliminate local CO2 emissions and, depending on the electricity mix, also cut supra-regional emissions by roughly 11,500 tons per year. At the same time, they will significantly reduce fine dust emissions.
The battery-hybrid train draws its energy from the overhead contact line. On non-electrified sections of the network’s routes, lithium-ion batteries – previously charged on the electrified sections – provide the train’s power supply. Recovered braking energy is also used for powering the train. The two-car train has a battery-electric range of more than 90 kilometres.

More service and comfort for passengers

The East Brandenburg network also meets all the regional rail transport quality standards set by the states of Berlin and Brandenburg. The new trains will provide additional passenger-oriented services with regard to both equipment and service standards. The new train cars are equipped with three doors on each side, enabling passengers in wheelchairs or with buggies to board and exit easier, even on lower platforms. Three doors on each car side as well as new navigation system in the train ensure that passenger interchanges at stations are fast, uncomplicated and, above all, barrier-free. With the new trains, passengers on the network’s lines will have available at least 128 seats and twelve spaces for bicycles, wheelchairs, and buggies. Two or more trainsets can be coupled and operated as so-called double or multiple units to provide additional seating capacity. With the creation of the new East Brandenburg network, the timetable offering will be increased on some lines, and the states have order more double trainsets than in the past to be operated on heavily used lines. The Mireo Plus B has more seats than required in the original tender. In the future, passengers will also have free WiFi access, a real-time passenger information system, and a specially designated family area. Around 60 electrical sockets are evenly distributed throughout the two cars, as well as USB charging ports and locations for inductive charging.

Background:

The order will also include a service and spare parts supply contract over twelve years until 2036. Siemens Mobility will ensure the availability of the trains over the entire term of the contract. Part of this service contract is not only to organise the performance of all necessary maintenance activities, but also continuously further develop maintenance activities, adopted to the customer-specific use of the vehicles.
The battery-electric trains will operate on the following routes:
RB12 Berlin Ostkreuz – Oranienburg – Templin Stadt
RB25 Berlin Ostkreuz – Werneuchen
RB26 Berlin-Lichtenberg – Müncheberg (every second train Mondays to Fridays)
RB35 Fürstenwalde (Spree) – Bad Saarow
RB36 Frankfurt (Oder) – Beeskow – Königs Wusterhausen
RB54 Rheinsberg (Mark) – Löwenberg (Mark) (– Berlin Ostkreuz)
RB60 Eberswalde – Wriezen – Frankfurt (Oder)
RB61 Schwedt (Oder) – Angermünde
RB62 Angermünde – Prenzlau
RB63 Eberswalde – Joachimsthal (– Berlin Hbf.)

Germany

Deutsche Bahn removes bottleneck in the Frankfurt rail network: additional track to the main train station completed

A bottleneck in the Frankfurt rail network is history: Deutsche Bahn (DB) is today putting the newly built second track on Homburger Damm north of the city center into operation. This gives the important access route to the main train station significantly more stability. 25,000 passengers a day will then travel more reliably by train. ICEs can get into and out of the main train station faster - this brings noticeable improvements for nationwide long-distance traffic. Local transport will also benefit from the additional capacities. This means that even more people can switch from their cars to the climate-friendly train. The federal government and DB invested around 180 million euros in expanding the infrastructure on Homburger Damm.

Ronald Pofalla, Board Member for Infrastructure at DB: “Two tracks instead of a bottleneck - we are increasing capacity, becoming significantly more reliable and making rail transport even more attractive. We have created space so that, in the future, more trains can enter and leave Frankfurt Central Station. In this way we can offer our passengers a wider range of environmentally friendly rail options. That is active climate protection.”

Enak Ferlemann, Parliamentary State Secretary at the Executive Minister for Transport and Digital Infrastructure: “With the new track, we are creating space for more trains and removing a real bottleneck in the Frankfurt traffic junction. This means that we can handle rail traffic in Frankfurt Central Station more smoothly and punctually and thus offer local passengers an even better offer. This is exactly what it takes to get even more people to switch to environmentally friendly trains.”

Tarek Al-Wazir, Hessian Minister for Economic Affairs, Energy, Transport and Housing:“If we want to get more people off the road and onto the rails, we need a resilient rail network. The additional track on Homburger Damm is therefore really good news for all train travelers to and from Frankfurt, a significant step towards better local and long-distance services and an important contribution to climate-friendly mobility - after just four years of construction. The incoming and outgoing trains will be more punctual and waiting times will be reduced. The expansion was urgently needed, because a successful turnaround in traffic includes not only our flat-rate tickets such as school and senior citizens’ tickets, but also more trains and attractive rail offers.”

Peter Feldmann, Lord Mayor of the City of Frankfurt am Main: “The expansion of rail traffic in Frankfurt is making headway: five kilometres of new railway line, 30 switches and 180 million Euros in investments that will pay off. Not only does the process at the main station become smoother thanks to the second track, but punctuality also increases. This is good news for one of the most important train stations in Europe.”

Prof. Knut Ringat, Managing Director of the Rhein-Main-Verkehrsverbund: “The commissioning of the second track on the Homburger Damm shows that the times of the announcement are over for the rail infrastructure. The ‘decade of building’ is on. Two years ago we opened the Gateway Gardens S-Bahn station and a new section of the route. Construction work on the S5 extension and dedicated tracks for the S6 is ongoing. Work on the Wallauer Spange or the North Main S-Bahn will follow. The fact that the excavators are now rolling is crucial for the mobility transition: only with more rail infrastructure can we offer more journeys, improve punctuality, transport more passengers and thus encourage more and more people to switch to buses and trains.”



For the new track between Mainzer Landstrasse and the north side of Frankfurt Central Station, DB built five kilometres of railway line and 30 points. Thanks to this infrastructure, long-distance trains now mainly arrive and depart in the southern area of the main station. The regional traffic starts and ends mostly on the north side of the station. A new railway overpass ensures that trains no longer have to wait for other traffic to enter or leave the main station. That saves time and brings more quality.

The DB Cargo family continues to grow: DB Cargo Transasia is taking off in China

DB Cargo Eurasia is repositioning itself in order to bring even more freight transport onto the rails between Europe and China in the long term. As of November, its wholly owned subsidiary DB Cargo Transasia has given it a greater presence in the Chinese market – not only in terms of the sheer number of freight transports on the Eurasian corridor, but also in terms of people power. Over 20 employees are now available in Shanghai and Xi’an to take care of our Chinese customers’ requirements, orders and requests. “Thanks to our new presence, we’ll be even closer to our customers and will be able to meet with them in person, proactively maintain contact with them, handle billing directly, respond more quickly, and implement tasks more quickly – all things that are appreciated in the Asian market,” says Frank Schulze, General Manager at DB Cargo Transasia. And Schulze knows what he’s talking about. He has been in China on behalf of DB Cargo Eurasia since August 2018. Before taking on his new role, he served as Head of the DB Cargo Liaison Office China, the predecessor to DB Cargo Transasia. “When Jeremy Tang and I started the liaison office in 2018, we had next to nothing. We had to take care of everything, just the two of us,” says Schulze. “The first few months were not easy. We were overjoyed when the first train was booked.” According to Schulze, two things in particular were important: building confidence and demonstrating flexibility. “China is insanely fast-paced. It doesn’t wait for you. Everything needs to be taken care of quickly. Acting fast is more important here than anywhere else in the world because things can change in just a matter of hours.”

Of course, the goal wasn’t to book only one train. The DB Cargo Liaison Office China won over customers and was already well ahead of its ambitious targets by the end of 2019. The next logical step was to establish DB Cargo Transasia and set up a team in Asia to take care of operations directly on site. When DB Cargo Transasia opened on 26 November 2021, 23 employees were already working at the two offices in Shanghai and Xi’an, with numbers rising. “We’ve put together a highly motivated, energetic, young team that is incredibly fun to work with” says Schulze.

The team has set very clear goals: increasing block train volume, expanding single container business, and gaining a foothold in other regions of China in order to give DB Cargo an even more important role in the Eurasian corridor in the future. DB Cargo Transasia is already cooperating with 20 Chinese logistics platforms, and its transports cross four of China’s borders. Schulze sees growth continuing, especially in light of sustainability concerns, which, as elsewhere, are becoming increasingly important in China. Although the Middle Kingdom is currently the world’s largest producer of carbon emissions, it is aiming for climate neutrality by 2060. Many regions are already changing the way they think and are expanding rail on a grand scale. Schulze and his team want to score points with environmentally friendly and reliable DB Cargo power and quality: “That only works if everyone involved is aware that they’re part of this development. Everyone on my team knows what depends on them and that’s why we all support each other.”

MÁV Class 431.296 departs with a local service No. Sz5537 to Füzesabony from Eger. It is one of the last classic push and pull sets which is used with electric locos. These old carriages, hauled by electric traction can only be found at Füzesabony and will be replaced soon. *Thomas Niederl*



Hungary

H-Start No. 431.092 passes Füzesabony without stopping with Intercity service No. IC190 ‘Hernad-Zemplén’ to Hidasnemeti with carriages to Satauraljauhely. If there were no COVID, the Slovak carriages would continue to Kosice and not terminate at the border. Only one train in the morning and one in the evening now pass across the border to Slovakia. *Thomas Niederl*

Late in the afternoon, Intercity train No. IC193 returns to Budapest Keleti and is seen passing Emőd station. The train is hauled by Traxx Class 480.011.
Thomas Niederl

From Füzesabony is a secondary line to Debrecen. This line is one of the last places where Class 418 diesels with old Bhv carriages are used. Almost all trains are push-pull sets and at the time of my visit all trains were seen with loco leading. Here is seen Class 418.149 departing with train No. Sz6637 from Tiszafüred. Class 117 railbusses were due to take over these services imminently. *Thomas Niederl*



In Hungary there are a lot of narrow gauge lines in operation. One of them is the Matravasut from Gyöngyös. Here is seen train No. 5205 from Szalajkaház to Gyöngyös at Gyöngyössolymos-Jánoska. *Thomas Niederl*

Russian built DMU Class 416.040 arrives at Kunszentmárton with a service No. Sz7214 from Szolnok to Szentes. Note the ancient level crossing and distance signal. *Thomas Niederl*

A little further north is one of the most remarkable places on Hungarian railways. At Bagimajor the line passes an old windmill. Here railbusses Nos. 117.217 and 117.255 with two trailers are seen working train No. Sz7216 to Szentes. *Thomas Niederl*

Kiskunhalas railway station is equipped with semaphore signals. It's a junction on the electrified main line between Budapest and Serbia. Nowadays the line is only used for local trains and some freight services, Class 431.002 arrives into the station with a coal train. *Thomas Niederl*

Two trains a day arrive at the border station of Kelebia, with a connecting train to Subotica in Serbia. One of them is train No. Gy343 'Ivo Andric' which is seen heading away from Kiskunhalas station towards Kelebia with Class 431.348. The front two carriages were bought second hand from ÖBB. *Thomas Niederl*

Netherlands

SSN 3 Cylinder Pacific Class 01.1075 built in 1940 by Berliner Maschinenbau-Actien-Gesellschaft former L. Schwartzkopff, Berlin, and weighing 192 tons is seen in Portengen with a special train working a trip for musicweb.nl on October 23rd. *Erik de Zeeuw*



Netherlands

On November 12th, RTB CARGO Class 186.425 passes Meteren with the 'Blerick' shuttle from Venlo to Rotterdam. *Erik de Zeeuw*



Hupac Class 193.495, in BLS livery, heads a tanker train loaded in Trecate Italy with Benzene destined for Koole Tankstorage Botlek in Rotterdam on October 10th. Hupac was founded on 1st March 1967 in Chiasso by the transport companies Bertschi and F.lli Bernasconi, the haulage contractors Danzas and Jacky Maeder and Swiss railways SBB. *Erik de Zeeuw*

RRF No. 1445 takes care for the last mile of a rake of tankers from HES Botlek Tank Terminal heading to the Botlek yard. *Erik de Zeeuw*

Netherlands

HSL Class 186.234 passes Hoog Soeren with a TXL intermodal from Eskilstuna Kombiterminal in Sweden via Malmö Gbg to the Railterminal Greenport in Venlo (NL) on October 27th. TXLOGISTIK runs the train from Sweden to Osnabrück (Germany) where HSL takes over for the last part of the journey. *Erik de Zeeuw*

Train Charter Services No.102001 arrives at Rotterdam Centraal station with a 'dining train' on October 23rd. *Erik de Zeeuw*

NSM trainset Class '64 (Plan V) No. 876 passes the mill in Lisse on the way from Utrecht Maliebaan station to Leiden with the volunteers of the Dutch Railway Museum on October 16th.
Erik de Zeeuw

On October 16th, LTE No. 6406 takes the Mannheim/Wörth shuttle to the container terminals in the port of Rotterdam. *Erik de Zeeuw*

On November 5th, DB Cargo No. 6455 hauls a newly loaded coal train to the yard at Amsterdam Harbour. *Mathijs Kok*

Railpro shunter No. 607 assists with loading a ballast train at Amsterdam Harbour on November 5th.
Mathijs Kok

On November 5th, a Strukton ballast train with no less then five locomotives, electric locomotives Nos.1824 and 1756 on the front, two MaK G1206 locomotives and the 'zero-emissions' No. 1740 in the back, seen at Amsterdam Harbour. *Mathijs Kok*

Arriva Flirt-III Tricourant No. 552 is seen in Griendtsveen and is on its way to for maintenance to Stadler in Blerick on October 22nd.
Erik de Zeeuw



On September 24th, RTBCARGO Class 193.727 passes Meteren whilst heading the Frankfurt/Oder (Germany) to Pernis PCC shuttle on the 'Betuweroute'. *Erik de Zeeuw*

On November 21st, the Veluwsche Stoomtrein Maatschappij steam loco No. 23.071 went with a number of carriages from Beekbergen via Apeldoorn, Amersfoort, Hilversum, Woerden to Rotterdam Noord where it would collect No. 65.018 from the SSN, which has had maintenance on its wheels. *Andre Pronk*



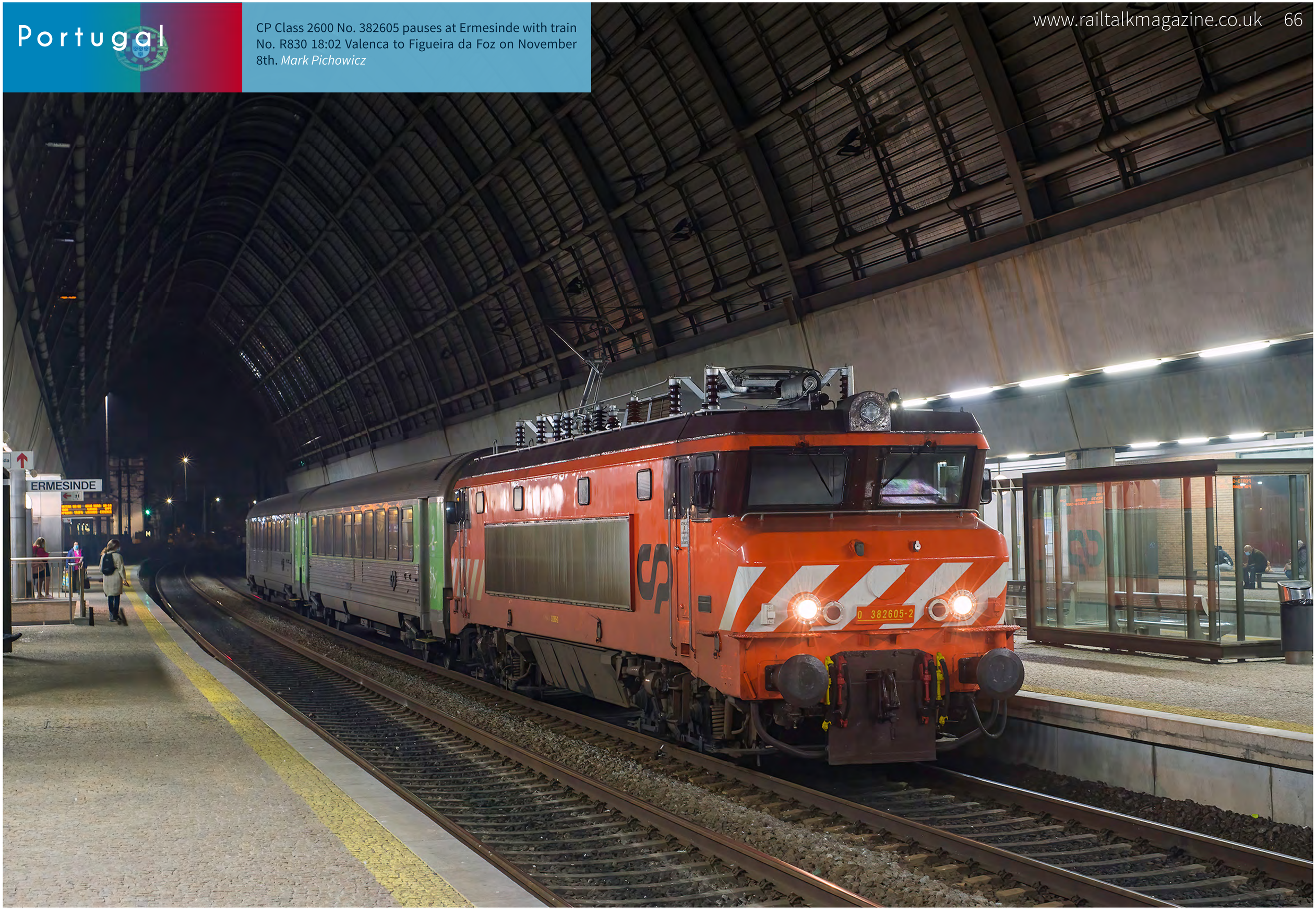
On November 21st, on their way back from Rotterdam, VSM No. 23.071 is seen with 65.018 heading to their home base in Beekbergene.
Andre Pronk

On the former 'Hofplein' railway line, a tram working a line No. 4 service is seen on the bridge over the river Vliet working a service from Zoetermeer to Den Haag on October 8th. *Erik de Zeeuw*

CP Class 1400 No. 1413 arrives at Ermida with train No. R868 13:08 Pocinho to Porto Campanha on November 7th.
Mark Pichowicz



CP Class 2600 No. 382605 pauses at Ermesinde with train No. R830 18:02 Valenca to Figueira da Foz on November 8th. *Mark Pichowicz*



Portugal

Medway Class 335.033 passes Ermesinde with a cement train on November 7th. *Mark Pichowicz*

Portugal

On October 15th, a Takargo rail loco hauls a rake of tanks through Vila Nova de Gaia station. *Andy*

Medway loco No. 1904 is seen stabled with a rake of open box wagons at Vila Nova de Gaia on October 15th. *Andy*

On October 15th, Alfa Pendular Series 4000 Train No. 4007 is seen at Vila Nova de Gaia. *Andy*







Portugal

CP Class 2600 No. 382611 is seen at Porto São Bento station on October 15th. *Andy*

Portugal

CP Class 1400 No. 1408 is seen upon arrival at Porto São Bento station on October 16th. *Andy*



3400 Class EMU No. 3416 is seen at Vila Nova de Gaia station on October 15th. *Andy*



Class 3250 4 car EMU No. 219M is seen stabled at Regua on October 16th. *Andy*



CP Class 1400 No. 1436 is seen shortly after departing Freixo de Numao-Mos do Douro working train No. R866 11:08 Pocinho to Porto Campanha on November 11th. *Mark Pichowicz*



CP Class 1400 No. 1461 departs Pocinho on November 15th with train No. IR866 11:08 to Porto Campanha. *Andy Pratt*

Slovenia

Adria Transport Class 1216.922 approaches Ptuj whilst hauling a train of tanks from Hodos.
Laurence Sly

SZ Class 541.103 passes Strihovec whilst hauling a Rocktainer train to Koper.
Laurence Sly

A northbound freight train passes Kranj with Class 664.116 is on the rear of the consist.
Laurence Sly







Slovenia

A MRCE Dispolok Class 189 passes Ostozno whilst hauling an empty car train.
Laurence Sly

No. 363.008 approaches Ptuj whilst hauling an intermodal train from Hodos to Koper.
Laurence Sly

Class 342.022 passes Strihovec whilst working Eurocity train No. EC151 073:8 Wien - Ljubljana.
Laurence Sly







Slovenia

SZ Class 363.007 passes Presnica whilst hauling an intermodal train to Koper. *Laurence Sly*

Slovenia

Class 193.730 passes Kranj whilst hauling a EuroCity train to Zagreb. *Laurence Sly*

Class 193.286 passes Rakek whilst hauling an Adria Transport container train from Graz to Koper. *Laurence Sly*

Vectron No. 193.636 passes Spodnje Laze whilst hauling an intermodal train. Class 193.285 and 223.007 are also in the consist. *Laurence Sly*







Spain

The PTG Tours ALCo Holic 6 railtour was one of the first international tours to go ahead after Covid and about to work its first train in preservation, No. 1603 is seen at Lleida Pirinie on November 10th. *Mark Torkington*

Spain

The PTG Tours ALCo Holic 6 railtour was one of the first international tours to go ahead after Covid, with the sun making an appearance at Medina del Campo on November 12th, some shunting was arranged so that this view of the veteran ALCO was available for the photographers. *Mark Torkington*



Spain

The PTG Tours ALCo Holic 6 railtour was one of the first international tours to go ahead after Covid and on the last day, November 12th, Nos. 2150 and 1603 were paired up for a stunning run from Bilbao to Madrid, seen here at Pancorbo. *Mark Torkington*

Spain

RENFE Class 321-044 is seen out of service at Miranda de Ebro on November 11th. *Mark Torkington*



Germany

VTG Rail Logistics and European Loc Pool start long-term partnership

Hybrid locomotives for more efficient and ecological rail transport on strategic corridors

VTG Rail Logistics Germany with railways undertaker subsidiary Retrack and European Loc Pool (ELP) have signed a first long-term full-service leasing contract for up to four EuroDual locomotives, which will be operated on selected strategic corridors served by Retrack.

The hybrid EuroDual locomotive with an output of 2.8 MW in diesel mode and 6 MW in electric mode is ideally suited for use in heavy freight train service. The high tractive force in combination with the optimised energy consumption translates to a high increase in performance and efficiency for VTG Logistics/Retrack.

The new locomotives can pull up to 30 percent more tonnage than the existing electric and diesel locomotives that are in use on the main Retrack corridors. The hybrid mode also makes it possible to reduce CO2 emissions. Thus, the EuroDual locomotives offer not only considerable economic and logistical, but also ecological advantages.

“We look forward to the delivery and use of the new EuroDual on our Europe-wide rail transport. With the first six-axle hybrid locomotives, we can offer our customers an even more powerful range as well as the latest technological standards in rail logistics,” says Remco van Staaijeren, Managing Director of Retrack.

In addition, the ability to operate heavy freight trains independently over diesel routes and in the shunting area (first and last miles) is becoming increasingly important for Retrack customers – not least because the freight trains are currently being extended to up to 740 metres.

The first locomotives will be delivered to Retrack in the first quarter of 2022. Both companies look forward to a long-term, partnership-based cooperation to offer innovative, efficient and environmentally conscious freight logistics on the rails in the future.

Canada

Alstom signs contract with Metrolinx to overhaul 94 BiLevel commuter rail cars in Ontario, Canada

This circa €118 million (CAD$171 million) contract will be executed in Thunder Bay, Ontario, Canada

Alstom is a preferred partner for modernisation projects to extend the lifespan of rolling stock

On November 30th, Alstom signed an agreement with Metrolinx to overhaul 94 BiLevel commuter rail cars for GO Transit, the regional public transit service for the Greater Toronto and Hamilton Area (GTHA) in Ontario, Canada.

The contract is valued at approximately €118 million (CAD$171 million). Refurbishing work on the BiLevel series VII cars, originally built between 2003-2008, will quickly begin at Alstom’s facility in Thunder Bay, Ontario, Canada. The mid-life overhaul and upgrades of the cars will be performed over a two-year period, requiring the vehicles to be stripped down, overhauling parts and producing newly refurbished BiLevel cars for the GO Transit fleet.

“We are delighted with the opportunity to extend our 45-year partnership with GO Transit with the overhaul of these BiLevel cars and we thank Metrolinx for their renewed trust and confidence and for recognizing the unique industrial expertise of our team in Thunder Bay,” said Michael Keroullé, President, Alstom Americas. “We look forward to continuing to serve transit users of the Greater Toronto and Hamilton Area.”

Updates to the interior will include the installation of updated outlets with USB ports, cosmetic updates to panelling and flooring, a full replacement of customer seating, upgrades to washrooms and service-proven LED lighting. Moreover, extending the life of these coaches will ensure Metrolinx has the rail fleet available to support service enhancements including through the GO



Expansion program, with the goal of providing faster and more convenient service for the region.

Cars for the distinctive green and white GO Transit fleet have been built in Alstom’s Thunder Bay 500,000 square-foot facility for over 45 years and the team completed the most recent Metrolinx order for 36 BiLevel passenger coaches and accessible cars this summer. Alstom has been maintaining the GO Transit fleet of coaches and locomotives (1,000+ pieces of rolling stock equipment) for over 20 years and operating the GO Transit commuter train network for over a decade (approximately 400 daily trips, 700+ daily route kilometres).

With its long-standing experience as a system integrator, rolling stock designer and manufacturer, Alstom is a preferred partner for modernisation projects to extend the lifespan of rolling stock. The company has worked on several modification and overhaul projects in North America for customers such as Port Authority Transit Corporation (PATCO), Los Angeles County Metropolitan Transportation Authority (LA Metro), California Department of Transportation (Caltrans), Massachusetts Bay Transportation Authority (MBTA - 2 fleets), Canadian Rocky Mountaineer (SilverLeaf cars) and Maryland Transit Authority (MTA - light rail).

Alstom has been present in Canada for 80 years and is a long-term and dedicated partner of the country’s public transit development. Since delivering its first metro cars to the City of Montreal in 1966, Alstom has continued to design and build rail cars in Canada for cities such as Edmonton, Ottawa, Vancouver and the GTHA. The company also designs and delivers integrated signalling and control centre solutions for Canada’s busiest rail corridors and hubs, including Metrolinx and Union Station Rail Corridor, Société de transport de Montréal (STM) and the Toronto Transit Commission (TTC). Alstom is currently delivering a turnkey automatic and driverless light metro system for Réseau express métropolitain (REM), including rolling stock, signalling, platform screen doors and depot equipment, which will include 30 years of operations and maintenance. Most recently in Canada, Alstom announced it will build 60 new Flexity streetcars for the TTC.

Austria

EURODUAL LOCOMOTIVE NOW HOMOLOGATED IN AUSTRIA

European Loc Pool AG (ELP) has initiated and driven forward the homologation of the Eurodual locomotive in Austria. EuroDual locomotives are now available for use in Austria.

With Stadler Valencia as a partner, ELP was able to obtain the homologation for the EuroDual locomotive based on the 4th railway package in Austria. The EuroDual locomotive can operate on the lines of profile 312 on the ÖBB network. Homologation for the border stations to Hungary (Hegyeshalom), Slovakia (Bratislava) and the Czech Republic (Břeclav) is expected by the end of this year.

Together with its service partner, Stadler Rail Services, ELP has already been able to establish the service network in Austria. The first workshops are located in Vienna and Linz. Additional workshops will be added to the network shortly.

ELP's existing EuroDual Germany locomotives are being converted for Austria, and the declaration of conformity for the new EuroDual Germany-Austria vehicle type is expected in the coming days. Future EuroDual Germany locomotives will be delivered directly with the corresponding configuration for Germany-Austria.

For ELP, this is a major step in the geographical expansion of the EuroDual operational area. ELP's goal in the next few years is to further expand the operational area towards South-Eastern Europe (Balkans) and towards the port of Rotterdam (route approval on the Betuwe route in the Netherlands).

Mexico

Alstom celebrates Supplier Day to start the production of the Mayan Train



Alstom, a leading global company in mobility solutions, brought together 130 representatives of companies established in Mexico interested in being part of the Mayan Train project, as part of the suppliers of the consortium that will build the rolling stock, signalling system and infrastructure for the project. The meeting took place at the facilities of the Ciudad Sahagún plant, in Hidalgo.

The areas requiring the participation of companies in the construction of rolling stock for the Mayan Train include, among others: interiors, electrical, electronic, metalworking components, and equipment for workshops, which in turn are divided into subcategories that will allow to those interested to apply in the areas most appropriate to the lines and specialties they have. Maite Ramos, Managing Director of Alstom México, accompanied by the General Director of Fonatur, Rogelio Jiménez Pons, the Governor of Hidalgo, Omar Fayad, the His Excellency the Ambassador of France in Mexico, Jean-Pierre Asvazadourian, representing SEDENA, the Gen. René Trujillo Miranda, as well as Elodina Guerra representing the Secretary of Economy and the municipal president of Tepeapulco, Marisol Ortega, who started the technical meetings with more than 130 national suppliers who presented their work portfolios to specialists from the consortium led by Alstom for the manufacture of the Mayan Train.

"A train for Mexico, made in Mexico, is the objective of the most ambitious mobility project in recent years, a train that reflects what Mexico is today: a growing country, open to the world and willing to show its culture through of modernity, technology and development", mentioned Maite Ramos.

The selected companies will be subjected to a Quick Industrial Assessment (QIA), in order to guarantee compliance with Alstom's global guidelines.

Omar Fayad, Governor of the state of Hidalgo stated "When we learned that the winning consortium for the construction of the rolling stock of the Mayan Train was the one made up of Alstom, that day was a holiday for the Hidalgo people because we were inserted in one of the national projects most important in the country and we know that this project will help boost the economy in a large scale in Hidalgo state".

His Excellency the Ambassador of France in Mexico Jean-Pierre Asvazadourian, expressed his satisfaction that a company like Alstom has the responsibility of creating a train as emblematic as the Mayan Train, highlighted that the technological development of the company is at the forefront of the mobility industry in the world.

Rogelio Jiménez Pons, manager director of FONATUR, was also at the event and stated that "The Mayan Train project seeks, through the movement of people and cargo, to promote the economic development of the region, respect the rights of indigenous peoples, guarantee the safeguarding of the environment, protecting the archaeological and cultural heritage, for this purpose it will seek to promote the sustainable development of the project from four axes: environmental, social, economic and cultural.

Alstom builds the most avant-garde, safe and reliable mobility solutions in the world, and the construction of the Mayan Train, a train for Mexico, made in Mexico, at the Ciudad Sahagún plant, in Hidalgo, is no exception.

The construction of this project means the creation of four thousand (4,000) direct jobs and 7,500 indirect jobs, activating not only the economy of Peninsula, but also that of several states where Alstom's operations are located. In addition, the Mayan Train is expected to benefit the entire southeast of the country, where the economic benefit will be very positive.

The Mayan Train project

The Mayan Train is a comprehensive mobility project of more than 1,554 kilometres that aims to develop and connect the southeast of the country and will be a great boost for mobility and economic growth in this region of Mexico.

The consortium - made up of Bombardier Transportation Mexico, Alstom Transport Mexico, Gami Ingeniería e Instalaciones and Construcciones Urales - will carry out the Mayan Train, a large-scale interurban railway project that is established to transform sustainable mobility in the country. The winning bid was announced by the National Tourism Promotion Fund (FONATUR) on May 26, after its technical committee approved the consortium's operational, technical and economic proposals.

The consortium is responsible for the design, manufacture and commissioning of 42 X'Trapolis trains, as well as the entire signaling system, including the design, supply and installation of on-board ETCS technology and more than 1,500 km of track equipment. It includes ETCS, interlocking, traffic management and telecommunications systems, leveraging Alstom's entire portfolio. In addition, the consortium is responsible for the construction of the maintenance workshops and depots and the after-sales service of the system equipment.

Alstom will manufacture the 42 trains at its Ciudad Sahagún plant, in Hidalgo.

Dominican Republic

Alstom wins maintenance contract for railway electrification system in Santo Domingo

Alstom, a leading global company offering mobility solutions on five continents, has announced that it has been retained by the Office for the Reordering of Transport (OPRET), the operator of Santo Domingo's metro, to maintain the power and catenary systems of lines 1 and 2 of the metro system for the next 3 years, beginning in November of this year.

The contract was awarded to a consortium with Sofratesa, in which Alstom is the leader. The two lines of the Santo Domingo metro system make it the most important public transportation system in the Dominican Republic.

Alstom has been present providing its maintenance services and experience since the creation of the Santo Domingo metro: the correct maintenance allows a maximum useful life of the components and maintain an optimal availability of the assets without compromising safety.
Since the line first opened and through to the end of 2020, the system has transported more than 51.5 million people safely and efficiently.

For Alstom, this maintenance contract, and its partnership with OPRET as a contractor since the construction of lines 1 and 2, are great sources of pride. The company's global industry experience allows it to provide efficient interface management between partners, third-party maintainers, third-party train operators, regulatory agencies, and more.

Israel

Israel Railways issues a notice to proceed for the supply of 36 Traxx locomotives from Alstom

To date, Alstom has supplied Israel Railways with 27 Traxx locomotives

The locomotives will be delivered between April 2023 to October 2024

Israel Railways (ISR) has issued a notice to proceed for the supply of additional 36 Traxx locomotives from Alstom as part of its framework agreement in 2015 for the supply of 63 electric Traxx and additional 74 double-deck coaches in 2019.

In September 2015, ISR ordered 62 Traxx 160 km/h P160 AC3 locomotives. The contract also included an option for additional 32 units[1].

The 36 locomotives will be delivered between April 2023 to October 2024, at a beat rate of two or three locomotives each month and will include unique features and advanced safety features. To date, Alstom concluding the delivery of 27 locomotives to ISR. The delivered locomotives are serving ISR growing electrified network, the locomotives maintained by ISR at the Lod depot with warranty services support by Alstom's Product Introduction teams.

The locomotives are powered with 6,000 kW traction suited for ISR electric network of 25kV 50 H. The Traxx electric-locomotive hauled ISR Twindexx Vario red double-deck coaches delivered by Alstom. More than 500 of these double-deck cars are successfully in service in Israel since 2002, providing safe, reliable and comfortable journey to all passengers in Israel.

"We thank ISR for providing Alstom the notice to proceed for the supply of additional 36 locomotives. Alstom is extremely proud to continue taking part in ISR electrification and green evolution. Our ISR Traxx electric locomotives are the best in class proven reliable and green mobility solution. We look forward to continue delivering these locomotives along with ISR to reach our mutual objectives of higher operational performance, lower infrastructure costs and higher availability and reliability of service," said Eran Cohen, Managing Director of Alstom Israel Cluster.

More than 2,300 Traxx locomotives have been sold around the world in the last 20 years. They are authorized to operate in 20 countries around the world and drive a cumulative total annual mileage of 300 million km.

Alstom has been contributing to the development of railway systems in Israel for more than 30 years, and everyday hundreds of thousands of Israelis enjoy its products, services, and green and sustainable mobility solutions. The company operates in 6 sites in Israel: the headquarters in Tel-Aviv, a retrofit site and Fleet Maintenance site in Haifa, a vehicle production site in Dimona and a Signaling project in Tel-Aviv and Be'er-Sheva. Alstom retains over 250 employees in Israel and is involved in 8 advanced infrastructure projects, for which it provides passenger coaches and electric locomotives, signaling and integration systems and maintenance services.

[1] The contract, which also includes the option for additional 32 units, was fully booked in 2015.



CAF TO SUPPLY LRV UNITS TO THE CANADIAN CITY OF CALGARY

The City of Calgary has selected CAF to supply 28 LRV units which will serve the future Green Line, that will run along a 46 km north-south route across the city. The project, which comprises the first 20 km stage of the line, is already underway and will connect Shepard Station, where the depot will be located, with the 16 Avenue North station in the north of the city.

The contract consists of the design, manufacturing and commissioning of 28 LRVs, including the delivery of depot parts, special tools and testing equipment, as well as the TSMSSA service (Technical Support and Maintenance Spares Supply Agreement). This agreement also includes the option of extending it by up to a further 24 LRVs and extending the term of the TSMSSA service. Accordingly, the volume of the contract, including the base contract and all additional options, could come to almost 300 million euros.

Calgary, in the province of Alberta, Canada, is approximately 80 km east of the Rocky Mountains. With a population in excess of one million, it has been recognised, on various occasions, as being one of the world's cities that offers the highest quality of life. The construction and commissioning of the Green Line marks the city's largest ever infrastructure investment. With a budget of approximately 3.4 billion euros, it is financially backed by the Federal Government of Canada, the Province of Alberta and the Municipality of Calgary, and will play a fundamental role as part of the Canadian city's transport system.

The project will provide Calgarians with an extremely frequent and fast transport service offering connections to many key destinations all around the city. This 46km extension of the current LRT (Light Rail Transit) system together with the erection of 29 new stations will be instrumental towards shaping the future of the city, connecting the city's residential areas, business centres and essential services, as well the main tourist attractions. This will all contribute towards new investment opportunities and economic growth in the metropolitan area, whilst also improving residents' quality of life and helping create a more sustainable and accessible city.

The unit is part of CAF's tram platform, called URBOS, and will comprise of 7 modules along a length of 42 metres. With a capacity to carry 288 passengers, 73 of which will be seated, its cutting-edge design will guarantee excellent user safety and comfort, with other standout features being vehicle accessibility and spaciousness. This is the first project CAF will complete in Canada, which once again bears out the company's ongoing international expansion and growth.

CN Advances Sustainability Efforts With Wabtec's Battery-Electric Locomotive

CN is proud to announce its purchase of Wabtec's FLXdrive battery-electric freight locomotive, the first 100 percent battery heavy-haul locomotive for the region in support of CN's sustainability goals. This new technology is a key component in achieving an effective transition to a lower carbon future. Recognizing the potential of the initiative, Pennsylvania's Department of Environmental Protection awarded financial support for the initiative under the Marine and Rail Freight Movers Grant Program.

For its first battery-electric freight locomotive, CN plans to partner with Wabtec to put in service its next generation of FLXdrive technology, which will reduce fuel consumption and emissions by up to 30 percent. The anticipated efficiencies and emission reductions from the technology will be significant and help open the door to new alternatives beyond the diesel-powered locomotives used today.

"As part of our sustainability strategy to reduce freight transportation emissions through innovation, we plan to continue to lead the sector by deploying low and no carbon technologies. At CN, we believe rail has a tremendous potential to reduce the environmental impact of transportation. As a mover of the economy, CN is committed to playing a key role in the transition to low-carbon economy." - Jean-Jacques Ruest, President and Chief Executive Officer, CN

"The FLXdrive is a defining moment for the freight rail industry, and Wabtec is proud to partner with CN to accelerate the industry toward low- to zero-emission locomotives," - Rafael Santana, Wabtec President and Chief Executive Officer

"I am excited to see that the Canadian National's (CN) Bessemer & Lake Erie Railroad (B&LE) Company has received a grant from the Pennsylvania Department of Environmental Protection (DEP) to help with the purchase of a new innovative Wabtec battery-electric locomotive. As a member of a family that has proudly worked for Bessemer for four generations, I am thrilled by this opportunity to accelerate the future of rail by promoting cleaner and more efficient transportation. I would like to offer my congratulations to CN's B&LE and Wabtec as they work together to create sustainable and efficient railroads for future generations." - Pennsylvania State Rep. Parke Wentling (R-17th District)

CN is the most fuel-efficient railway in North America, using approximately 15% less locomotive fuel per gross ton mile than the industry average.

In 2020, CN's actions to reduce emissions, mitigate climate risks and to develop the low-carbon economy resulted in CN being one of only three Canadian companies listed on CDP's prestigious Climate A List. The continuing successful development and availability of innovative propulsion technology is part of a portfolio of carbon reduction initiatives.

In April 2021, the Science-Based Target Initiative ("SBTi") approved CN's commitment to reduce scope 1 and 2 greenhouse gases ("GHG") emissions by 43% per million gross ton miles by 2030 from a 2019 base year. CN furthermore commits to reduce scope 3 GHG emissions from fuel and energy related activities by 40% per million gross ton miles by 2030 from a 2019 base year. CN's Climate Action Plan and its new level of ambition target support the Paris Agreement.



China

China's first fully automated and driverless elevated monorail provided by Alstom's Chinese joint venture enters service in Wuhu

Equipped with ATO GoA level 4, the Wuhu Line 1 is the country's first fully automated and driverless elevated monorail

With strong contributions from Alstom's Chinese joint ventures, new Innovia monorail system ushers in a new era of eco-friendly rail mobility in Wuhu

On November 3rd, a fleet of 28 six-car Innovia monorail trains entered commercial service on Wuhu Rail Transit's Line 1 in Anhui Province, China. At the inaugural event, Party Secretary Shan Xiangqian, Ning Bo, Mayor of Wuhu City, Chairman of CRRC (PPP leader and customer) Sun Yongcai, President Chen Wenjian of China Railway Group Limited (PPP member and customer), and Jianwei Zhang, President of Alstom in China all shared a ceremonial ride on Wuhu's new monorail.

The first of its kind in China, Wuhu's new monorail will be elevated and equipped with automatic train operation (ATO) grade of operation 4 (GoA4). The highest level of automation available, GoA4 enables the Innovia monorail to operate fully automated, without driver or attendants.

The Innovia monorail platform, along with a total of 168 cars, was provided by Alstom's Chinese joint venture CRRC Puzhen Bombardier Transportation Systems Limited (PBTS)[1]. The related Cityflo 650 signalling system that enables the automatic train operation was provided by Bombardier NUG Signalling Solutions Company Limited (BNS)[2], Alstom's Signalling joint venture in China. Alstom's joint venture for propulsion in China, Bombardier NUG Propulsion System Co. Ltd. (BNP)[3], provided the Mitrac propulsion equipment for the monorail trains.

"The start of operation marks another milestone for Alstom's Chinese joint ventures, which remain committed to working alongside our customers. Wuhu's new fully automated and driverless elevated monorail will be a game changer for residents, decreasing their commute time while also reducing congestion, pollution, and carbon emissions in the city. It is an important part of Wuhu's ongoing efforts to redefine its urban transportation to the benefit of its passengers and the environment. As always, we are committed to helping our customers realize their transportation visions by providing safe, smart and green mobility solutions," said Jianwei Zhang, President of Alstom China.

Last month, over 40,000 people experienced the country's first fully automated and driverless elevated monorail train firsthand during trial runs. For the start of its commercial operation on November 3rd, the Innovia monorail will depart from Baimashan Station in the south of the city and end at Baoshun Road station in the north. The 25-station line is 30.46 km long and its tentative operating hours from 06:30-22:00 on weekdays and holidays. Wuhu Line 1's new elevated monorail operates at a speed of 80 kilometres per hour and has been equipped with ATO GoA4, the most-advanced and highest level of automatic train operation that enables the train to operate both driverless and fully unattended. To ensure the safe, reliable and efficient operation, the train has also been deeply integrated with key technologies such as track beams, switches and power supply rails. The train's passenger compartment offers a clear and open view as the entire train passes through the city emitting low noise and vibration. With strong dynamic performance, exceptional climbing ability and a tight turning radius, the train is well adapted to the needs of an urban landscape. In addition to providing citizens with a safe, convenient, and green transportation experience, Wuhu's Innovia monorail has also become a recognized part of the Wuhu's modern and picturesque cityscape.

Designed to integrate seamlessly into the urban environment, Alstom's fully automated and driverless Innovia monorail systems provide an energy-efficient, comfortable, and cost-effective mobility solution, particularly for growing or dense cities. The modern looking and quiet vehicles run on elevated guideways that are built off-site to permit fast assembly with minimal disruption on-site. Alstom offers 30 years of expertise in successful monorail design, build, operations and maintenance, with industry leading availability and safety standards.

Present in China for over 60 years, Alstom participates in the full spectrum of China's railway projects. With the completion of Bombardier Transportation effective Jan. 29, 2021, Alstom in China now has a complete range of rolling stock (high-speed trains, railway passenger cars, locomotives, metro, automated people movers, monorail and trams), customised services, as well as infrastructure and signalling solutions.

Alstom in China has thirteen joint ventures, seven wholly foreign-owned enterprises, and over 11,000 employees. Together, the joint ventures have delivered more than 5,900 railway passenger cars, 1,530 electric locomotives, 7,194 metro cars, 536 monorail cars, 168 automated people mover cars and 191 tram cars to China's growing rail transit market as well as to overseas markets. In China, Alstom also provides customers with a wide range of services solutions, from heavy maintenance to modernisations, and currently has 2,252 metro cars under maintenance contracts. It is a major signalling supplier to the Chinese high-speed network, and through its joint ventures, its signalling systems are utilised in 102 urban mass transit lines and its propulsion equipment are applied in 100 metro lines in Chinese cities.

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[1] CRRC Puzhen Bombardier Transportation Systems Limited is owned at 50% by Alstom Group and is consolidated by equity-method. The 50% share in net income of CRRC Puzhen Bombardier Transportation Systems Limited is included into Alstom aEBIT.

[2] Bombardier NUG Signalling Solutions Company Limited is owned at 50% by Alstom Group.

[3] Bombardier NUG Propulsion System Co., Ltd. is owned at 50% by Alstom Group.



France

CAF SIGNS A 107.9 MILLION EUR GREEN GUARANTEE FACILITY FOR THE SUPPLY OF ELECTRIC TRAINS IN FRANCE

CAF, the Spanish multinational leader in the design and implementation of comprehensive mobility systems, has recently entrusted Société Générale to act as fronting and issuing bank of a 107,9 million green guarantee facility to be utilized for the supply of electric trains in the scope of an interurban passenger rail transport project with zero direct emissions.

Société Générale has structured a 107,9 million Eur green trade finance facility for CAF, to issue advance payment bonds covered by CESCE, the Spanish Export Credit Agency (ECA), regarding their contract with SNCF Voyageurs for the supply of 28 train units for the Paris - Toulouse and Paris - Clermont-Ferrand axes and with an optional range of 75 train units.

The trains will be 100% electrical and are intended to be progressively effective starting from 2024.This project is financed by the Direction Générale des Infrastructures, des Transports et de la Mer (DGITM), from the French Ministry of the Ecological Transition.

CAF is a global rail equipment leader that operates in more than 40 countries offering one of the most comprehensive and flexible arrays of produces in railway related markets, such as rolling stock, components, infrastructure, signaling and services. This contract is a further step in the company's commitment towards a sustainable energy transition.

"One of CAF's core objectives is to create sustainable transport systems. The company provides new technological solutions to offer more efficient, eco-friendly means of transport", explains the company.

"We are proud to support CAF with this green bonding facility to reinforce sustainable mobility. Société Générale is committed to play a key role in the energy transition by supporting its clients in positive impact projects", explain Laetitia Rodríguez, Banker at Société Générale.

U.S.A.

First DMU for SBCTA leaves Stadler factory

Stadler starts delivery of second US-manufactured project: The first of three DMU trains for San Bernardino County Transit Authority (SBCTA) leaves Stadler's Salt Lake City manufacturing facility.

This is the second project Stadler is able to deliver to a transit authority from its Salt Lake City location, after delivering trains to Trinity Metro's Texrail line in Fort Worth, TX, in 2019. Upon arrival in San Bernardino County, all three Diesel Multiple Unit (DMU) vehicles are scheduled to undergo extensive testing on SBCTA's infrastructure.

In September 2017, the San Bernardino County Transportation Authority ordered three diesel-electric low-floor multiple unit FLIRTs from Stadler for the Arrow passenger rail service, also known as the Redlands Passenger Rail Project. The trains operate on a nine mile commuter route with five stations in the corridor between the San Bernardino Transit Center and the University of Redlands.

«We are pleased to deliver these state-of-the-art vehicles to San Bernardino County this year. We are confident that our DMUs will allow SBCTA to provide excellent passenger rail service to their customers and that passengers will enjoy travelling on the new trains after successful completion of testing,» said Martin Ritter, CEO Stadler US Inc. «This is just the beginning of a longstanding relationship between Stadler and SBCTA. As we finish up the DMU project we have already started the next project for SBCTA: the hydrogen train FLIRT H2 ,» said Ritter.

The design of the DMU vehicles allows operation of a mixed fleet including freight trains. The DMUs comply with Alternative Vehicle Technology (AVT) requirements of the Federal Railroad Administration (FRA), and meet the Federal Transit Administration (FTA) Buy America requirements.

The FLIRTs for SBCTA offer 116 seats and additional standing room for 120 passengers.

«This initial shipment represents the culmination of a lot of hard work and collaboration to improve transit options in San Bernardino County,» said Curt Hagman, President of the San Bernardino County Transportation Authority. «It is also the pivotal first step to bringing cleaner transit technologies that will effectively move our residents throughout the region.»

In addition to the three DMUs, in 2019 SBCTA and Stadler signed the first ever contract to supply a hydrogen-powered train, to run in the United States. The hydrogen train FLIRT H2 is currently in development in Stadler's headquarter in Switzerland and is planned to be introduced in 2024 as part of Arrow cooperation even further," says Dr Ansgar Brockmeyer, Executive Vice President Marketing & Sales and Deputy Chief Executive Officer of Stadler.

In operation from the 2023 timetable change
The first TINA trams will be put into service in December 2023. Additional vehicles will follow in 2024 and 2025.

They will replace the current Schindler trams, which are over 40 years old.



Egypt

Wabtec Wins Major Locomotive and Services Deal from Egyptian National Railways



Order includes 100 locomotives and multi-year service agreement to support Egypt's rail infrastructure needs

Wabtec (NYSE: WAB) has signed contracts with Egyptian National Railways (ENR) to supply 100 ES30ACi Evolution Series Locomotives, as well as a multi-year service agreement to maintain the fleet. The agreement supports ENR's continued modernization effort by providing the latest, fuel-efficient locomotives needed for the growing demands on Egypt's rail infrastructure. The locomotive supply contract is funded by the European Bank for Reconstruction and Development. To celebrate the agreement, several dignitaries from the Ministry, ENR and Wabtec attended a signing ceremony including: H.E. Kamal El Wazir, Minister of Transport; Engineer Mostafa Abu El Makarem, ENR Chairman; and Gökhan Bayhan Wabtec's Senior Vice President for Russia/CIS, Europe, Middle East and North Africa.

"This order underscores the commitment by the Ministry of Transportation and Egyptian National Railways to provide world-class passenger service," said Bayhan. "These locomotives will provide the quality, performance and reliability needed to meet the needs of Egypt's rail network. With this agreement, we will help Egyptian National Railways move passengers and products faster and more efficiently."

Deputy Chief of Mission for the United States Embassy in Cairo, Nicole Shampaine said: "We are thrilled to see this important deal, evidence of the close U.S.-Egypt economic partnership. U.S. firms, like Wabtec, deliver value, efficiency, and reliability to Egypt as the country modernizes its rail system, and pursues its sustainable development strategy of 'Vision 2030.' We look forward to continued collaboration with the Ministry of Transport on future projects to modernize Egypt's growing transportation sector."

The ES30ACi Locomotive is a double-cab locomotive delivering best-in-class fuel efficiency, lowest total cost of ownership, and high performance in high temperature environments. It will be equipped with a 12-cylinder, 3,300 horsepower Evolution Series engine, AC traction technology, individual axle control, and dynamic brakes. Wabtec has been a committed partner in Egypt for more than 40 years. With this deal, the company will have over 300 locomotives in ENR's fleet. This agreement builds on our longstanding partnership with the Ministry of Transportation and ENR. The company will deliver the locomotives to ENR in 2023.

Turkey

Alstom wins two major signalling projects in Turkey

Digitalization is key to support sustainable mobility

It will facilitate border crossings, increase reliability & commercial speeds and decrease maintenance costs

Alstom has won two signalling contracts to support Turkey's General Directorate of Infrastructure Investments (AYGM), and Istanbul Metropolitan Municipality's in their efforts to upgrade their signalling infrastructure in the country.

The scope of AYGM includes the construction and supply of electromechanical works for the Bandirma– Bursa– Yenisehir– Osmaneli (BBYO) high standard railway project which is nearly 201 km-long.

Alstom, through Kalyon Insaat Sanayi ve Ticaret A.S., will supply Interflo 250 and 450, European Rail Traffic Management System (ERTMS) level 1 & 2, and deploy the entire Interlocking system including Traffic Control Centre (CTC). Additionally, Alstom will install a smart object controller with the system to eliminate obsolescence risks with legacy systems and provides the capability for the line's signalling systems to interface over modern fibre-based digital networks and GSMR (Railway communications system) to increase reliability, performance and functionality. At the end of the project, BBYO line will be fully interoperable to all available trains in the Turkish network.

The scope of the second contract with Istanbul Metropolitan Municipality's Cekmekoy-Sancaktepe-Sultanbeyli (CSS) metro line will include the construction and electromechanical procurement work. Through Dogus Insaat ve Tıcaret A.S. – Yapı Merkezı Insaat ve San. A.S. – Ozaltın Insaat Tıcaret ve Sanayı A.S. JV, Alstom will supply, test and commission the entire signaling system of the 11 km long Cekmekoy-Sancaktepe-Sultanbeyli (CSS) metro line, which has the capacity to carry 120.000 passengers/hr, including the supply of wayside equipment for 8 stations and on board systems, the Based Train Control (CBTC) signalling, for 4 new trains. These driverless systems will shorten headways between trains by 90 seconds. Digitalisation is key to support sustainable mobility, simply by adding more capacity to the existing infrastructure while further increasing the comfort and safety of rail.

"As I am starting my new position as the Managing Director of Alstom in Turkey, I am extremely happy to see the impact of Alstom as a leader of sustainable and innovative mobility in the country. We are honoured to deploy a number of digital-ready technologies that will bring much needed reliability improvements to support traffic levels and deliver greater efficiencies," Volkan Karakılınç, Managing Director, Alstom Turkey.

Alstom offers leading expertise in mainline and urban signalling standards with over 13,300 km of regional lines equipped and over 160 metro lines equipped with CBTC in over 25 countries.

Alstom has been present in Turkey for more than 60 years, delivering rail vehicles, turnkey transit systems for metros and trams, and established as a leading provider of signaling and train control technology.

The Istanbul office hosts the regional center for Alstom's signalling expertise, as well as the systems & infrastructure project teams, providing project management, engineering, training and maintenance services.

From the Archives

Cuba

A couple of Railbuses are seen stabled at Trinidad, Cuba on May 12th 2011.
Mark Enderby

From the Archives

Bulgaria

BDZ No. 06.066, a Sulzer engined Co-Co built by Electroputere in Romania in 1966, edges onto the turntable at Stara Zagora shed on May 3rd 2011.
John Sloane

From the Archives

Czech

Czech ‘Goggle’ No. T478.3156 is seen at Prague Hlavni Nadrazi station on December 3rd 1976.
John Sloane



From the Archives

Germany

DB Class 155.125 is seen on a northbound container train at Kaub on May 9th 2005. *Mark Enderby*

From the Archives

Germany

NRS operated Nos. V100.001, V100.002 and V100.003 are seen at Lubeck on April 26th 2006. *Mark Enderby*



From the Archives

India

Indian Northern Railway's No. 187 is seen at Kalka on a train to Shimla on July 30th 1991.
Mark Enderby



From the Archives

Rhodesia

RR 12th Class 4-8-2 No. 254 (NBL/1930) stands amongst the Garratts at Gwelo shed on October 28th 1973. *John Sloane*

From the Archives

Russia

Standard Soviet designed 2-10-0 No. L-0029, built Kolomna in 1945 and fitted with a Vanderbilt tender, stands at Kavkaskaya station on February 19th 2002. *John Sloane*

From the Archives

Sri Lanka

Sri Lankan Railways No. 634 (Henschel) arrives at Mount Lavinia with a commuter train from Colombo on August 10th 1980.
John Sloane

From the Archives

Sri Lanka

Hitachi diesel unit No. 733 approaches Mount Lavinia on a train heading from Galle to Colombo on August 10th 1980 as Hitachi Bo-Bo diesel No. 770 heads away in the distance. *John Sloane*

From the Archives

Switzerland

SBB Class 460.003 is seen at Baden on October 17th 2004. *Mark Enderby*



From the Archives

Thailand

Davenport 1952 built 500hp single ended Bo-Bo No. 515 stands at Thonburi shed on April 15th 1981. *John Sloane*

From the Archives

Tunisia

SNCFT (Ex CPSG Sfax - Gafsa Rly) Alsthom 1950s built No. 202 stands at Sfax on August 30th 1979.
John Sloane

From the Archives

Turkey

TCDD Fiat 1961 built 'Mototren' No. MT5505 is seen at Izmir Halkapinar station on August 12th 1976.
John Sloane



From the Archives

U.S.A.

Grand Canyon Railway's F40-FH No. 239 is seen at the terminus on October 8th 2006. *Mark Enderby*

