

Railtalk Magazine *Xtra*

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Railtalk Magazine Xtra

Welcome

Welcome to another edition of Railtalk Xtra, the monthly magazine that predominantly features railways outside the UK.

Well 2018 is heer and firstly I would like to wish you all a very Happy New Year, but before we get into 2018 lets see what has happened in December 2017. Firstly the news from Canada that in order to 'accommodate future growth opportunities and drive operational efficiency', Canadian National have ordered 200 new diesel locomotives from GE Transportation for delivery over the next three years. 'We are bullish on the North American economy and on our ability to compete and win new business with our superior service model', explained CN President & Chief Executive Officer Luc Jobin.

One piece of news that's sure to interest some of our UK readers is that Croatian open access freight company Transagent Špedicija is to deploy a former British Rail Class 92 multi-system locomotive previously used by DB Cargo Romania on intermodal services from the port of Rijeka to Hungary and Serbia.

In Austria meanwhile, Stern & Hafferl have ordered a Bombardier Traxx F140 AC Last Mile locomotive for use to haul limestone from Salzkammergut, they have also ordered a VectronDE for use on trains between Austria and Germany.

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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 to the right or on the next page.

All images ideally should be provided at a resolution of at least 2048px x 1536px at 150dpi.

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Front Cover
A grubby Union Pacific No. 5260 leads Nos. 3965, 8518 and 5064 as they approach Truckee, Ca with a westbound intermodal. *Nick Clemson*

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On November 6th, Class 220.019 stands at Kalambaka working the 17:32 to Athens Central. *FrontCompVids*

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SNCF 4 car 'Pays de le Loire' EMU No. Z27938 stands at Chartres on November 25th. *John Sloane*



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Railtalk Magazine Xtra

Some more Traxx orderes and TX Logistik have signed a firm order for Bombardier Transportation to supply 40 Traxx MS3 multi-system locomotives for use on Italy – Switzerland – Germany services from mid-2019.

Any guesses as to the new partner in Spanish freight will be?, as on December 14 the government's Development Minister Íñigo de la Serna announced that a 'strategic partner' is to be sought for RENFE's freight business. This partner would hold up to 50% of a new company to be established in 2019, focused on continuing recent growth and increasing activity outside Spain.

And finally from France where the voyages-sncf.com website was rebranded as 'oui.sncf' in December. *(Your editor says non! - why do they pick such stupid names*)

This months 'From the UK' is a look back at some of the highlights from 2017 in the UK - we couldn't pick them all as it seem that there has been so many, but we hope you like our chosen few.

As always thanks for all the excellent photos, please keep sending them in, and remember if you are going on holiday, don't forget to take your camera.

David
Editor

On November 25th, No. 4621 freight from Newcastle to Grafton on the NSW North Coast works north out of Wauchope behind Nos. 8227, 8215, 8135, 8105 and 8203 hauling just 6 cement and 5 sugar wagons. The excess motive power was being transferred to Grafton to work a concrete sleeper train the next week.

Mark Bennett

Bombardier Keeps Regional Victoria's Rail Network Moving with Additional VLocity Railcars

Bombardier to supply 27 additional VLocity diesel multiple unit (DMU) railcars to Transport for Victoria (TfV) bringing the total fleet to 264 railcars

Trains to be manufactured locally in Dandenong, Victoria supporting over 600 jobs in the region

Bombardier Transportation will build and deliver an additional 27 VLocity diesel multiple unit railcars for Transport for Victoria (TfV) and the Victorian State Government, which will bring the total fleet to 264 railcars (88 x 3 car-sets) in passenger service by 2019. The total value of the contract is approximately 146 million AUD (112 million USD, 95 million euro).

"We are delighted to deliver these award-winning trains to Victoria's Regional Rail Network in partnership with the State Government, TfV and V/Line" said Andrew Dudgeon, Managing Director of Bombardier Transportation in Australia. He added, "These trains will provide an improved travel experience for passengers, and help address the mobility needs of a rapidly growing population. This order demonstrates confidence in our VLocity vehicle platform which was designed, engineered and manufactured in Victoria, for Victorians."

The new trains will achieve over 69% local content, support over 600 jobs across the rail industry and help meet the demands of the regional rail network. As part of the Victorian Governments recently announced $18 million Regional Rail Connectivity Project, Bombardier is enhancing passenger connectivity across the regional fleet with the installation of in-train 4G signal technology following the successful completion of a pilot program this year.

Operating on V/Line's Regional Rail Network since 2005, the VLocity trains that Bombardier has been building in Dandenong for over ten years move approximately 1.2 million Victorians safely each month. The VLocity trains are designed to operate at a maximum speed of 160kph and carry over 230 passengers per train. Proven components and systems on the fleet ensure high reliability and minimize downtime during maintenance, supporting maximum availability of the fleet for passenger service.



Bombardier has been active in Australia for more than 60 years. Today, it has a workforce of more than 1000 employees across 21 locations and it is a complete provider of rail solutions and services.

Photo: © Bombardier

Bombardier Wins Contract to Provide Melbourne's First High-Capacity Signalling System

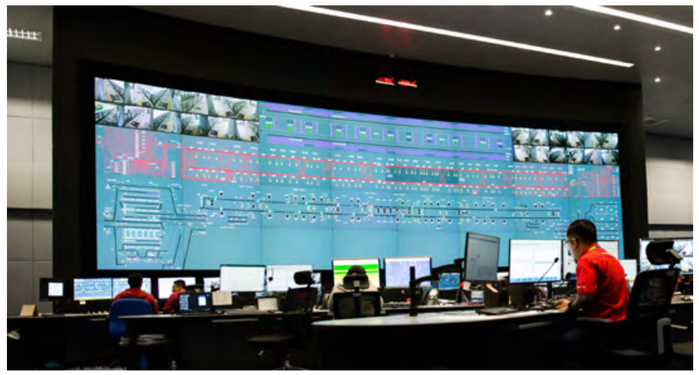
Victoria's largest ever public transport initiative will see Bombardier equip the new Metro Tunnel Project with its CITYFLO 650 solution

Passengers to see a significant increase in frequency of train services across the city centre

Rail technology leader Bombardier Transportation, as part of the Rail Systems Alliance (RSA), has won the contract to install its next-generation, high-capacity rail control solution for the 11 billion AUD Melbourne Metro Tunnel Project, Victoria's largest ever investment in public transport. The RSA comprises Bombardier Transportation, CPB Contractors, Melbourne Metro Rail Authority and Metro Trains Melbourne. Bombardier will deliver the signalling and rail control solution and systems integration. The value of the RSA Signalling and Communications package awarded by the Victorian State Government is approximately 1.1 billion AUD ($862 million US, 730 million euro). The contract for Bombardier is valued at approximately 310 million AUD ($238 million US, 202 million euro).

"The BOMBARDIER CITYFLO rail control solution is already moving cities across the world including Madrid, Bangkok and Kuala Lumpur. Once installed in Melbourne, passengers will see services along the line safely run every two to three minutes", said Andrew Dudgeon, Managing Director of Bombardier Transportation Australia. "As the first high-capacity rail control project in Melbourne, and the first on an existing system in Australia, Bombardier is very excited to be working with our partners on this highly collaborative project to deliver the Victorian Government's vision of 'More Trains, More Often,'" he added.

Over 235 million passenger trips were made on the Melbourne Metropolitan Network from 2016 to 2017, a number forecast to grow significantly over the next 20 years, and Bombardier's advanced CITYFLO 650 rail control solution will help Melbourne meet this sharp capacity increase. The system to be installed on the Sunbury to Cranbourne/ Pakenham Lines, including the new twin 9 km tunnels, will provide the city with its first high-capacity, metro-style operation, major capacity improvements and reduced journey times. The RSA will also develop skills through training and ensure an 80% spend on local equipment and raw materials. The system will be ready for operation in 2026. With a 15-year service record and operating or in delivery on 37 lines worldwide, Bombardier's well-proven CITYFLO 650 solution can be installed quickly on new lines or with minimal disruption to existing services. Bombardier has been active in Australia for more than 60 years, delivering its extensive portfolio of winning mobility solutions from train and tram fleets to signalling, propulsion and control technology, mining solutions, asset management and through-life support on rail projects across the country.



This is the 5WB3 steel products and containers train to Brisbane, worked by Pacific National loco's Nos. NR12, 9307 and NR4 on December 22nd, skirting the Manning river near Taree on the NSW North Coast. *Mark Bennett*

Austria



OBB shunter No. 262.056 sits at Wien Hbf.
Brian Battersby

Rail Cargo Group expands China offering

RCG now also connects Italy and China by rail

The Rail Cargo Group is continuing its strategy of internationalisation and intensifying its Asia offering. Following the successful start to the China-Italy train from Taiyuan in China to Lugo in Italy – initially a pilot project and now a regular monthly service – the connection between Italy and China is being further strengthened. Thus, a container train has now been operated for the first time from the Italian city of Mortara to the Chinese city of Chengdu.

“We will further push the internationalisation in the upcoming years. In order to continue to lead the tune in the rail freight business, we will enhance the expansion in new markets on full power. Thereto, we make the necessary means and resources available to ensure a smooth train handling and an even higher quality-level of the Rail Cargo Group“, says ÖBB CEO Andreas Matthä.

Italy and China coalescing

Since the Chinese market offers enormous potential for cargo transportation from and to Europe, the Rail Cargo Group is continuously expanding its long-distance connections. Starting from Mortara, south-west of Milan, transportation continues on to the Chinese city of Chengdu. The route covers Italy, Austria, the Czech Republic, Poland, Belarus, Russia, Kazakhstan and China. Transported are 34 40-foot containers loaded with goods such as industrial machinery and Italian tiles.

Thanks to a sophisticated transport concept and the bringing together of professional partners such as RTSB, Captrain and RCG, it is possible to provide a high-quality container train across the Eurasian land bridge, which, thanks to a transport time of 17 days, represents a real alternative to the maritime container ship route. Plans are in place to expand the frequency to two trains per month from the second quarter of 2018.

RCG consistently expanding its position on the Silk Road

The Asia team of RCG started work in summer 2017. Equipped with experienced specialists, various train products from Hungary and Italy are now en route to the Far East and Central Asia. The continuous internationalisation strategy of RCG is once again being highlighted with the new rail logistics offering.

Austria

From Steyr to Grünburg in Upper Austria, about 40km from Linz, a heritage narrow gauge railway, the 'Steyrtalbahn' has operated since 1985. Every Summer weekends and on a few days around Christmas lots of passengers travel with the heritage steam trains. Here on December 10th, loco No. 298.102, built in 1888, and the oldest engine on the line operates the 11:30 Service from Steyr Lokalbahn to Grünburg and reaches the stop of Neuzeug.

Thomas Niederl



Working a service to Amstetten, OBB Cityjet Class 4744.550 arrives into Melk. *Brian Battersby*



On a dull wet Autumn day, Class 754.045 stands at Praha hlavní nádraží working a service to Cercany. *Steamsounds*



Czechia

Cesky Drahy's Class 151.023 arrives at Bohimin with a service from Žilina. *Steamsounds*

Record amount of freight carried by CD Cargo Poland - 3 million tons

On December 18, 2017, the CD Cargo Poland subsidiary established a new record. At that time, it has carried out 3 million tons of goods . Most were transported black coal, metallurgical products, and this year the transport of containers was very positive.

" I congratulated our subsidiary on the achievement of this result and expect to transport at least the same amount of goods in the next year, " says Ivan Bednárik, Chairman of the Board of Directors of CD Cargo Poland.

Photo: © CD Cargo

CD Cargo Poland





CER Cargo Holding buys other locomotives from CZ LOKO

The Hungarian carrier CER Cargo Holding will include other locomotives from the Czech manufacturer of locomotives and specialty CZ LOKO locomotives in their locomotive park. A two-system electric locomotive of the EffiLiner 3000 type for CER Slovakia and a diesel-electric locomotive EffiLiner 1600 for CER Hungary. The expected delivery date is in the first quarter of 2018 and the locomotive of the carrier will be used for freight trains on the territory of Hungary, Slovakia and the Czech Republic. The ceremony for the signature of the EffiLiner 3000 sale agreement took place in October at the Château in Liblice, in the case of EffiLiner 1600 it was the beginning of December in Budapest. At the moment, the negotiations for the delivery of another EffiLiner 1600, this time for CER Slovakia, are finalizing.

"This is another great success for us, which follows on from the previous delivery of the EffiShunter 1600 locomotive from June this year for CER. The continuation of the cooperation confirms that our locomotives will compete in demanding line traffic and European competition, " said Chairman of the Board of Directors Josef Bárta in Budapest.
The two-system electric four-axle locomotive EffiLiner 3000 with a capacity of 2,910 kW and a maximum speed of 120 km / h represents the comprehensive modernization of the discarded Belgian locomotives Class12, which under CZ LOKO led more than 10 companies of the Czech and Slovak railway industry. The entire project started in 2013 when CZ LOKO imported 12 new electric vehicles from the Belgian state carrier SNCB to the Czech Republic and began their comprehensive upgrading. CER Hungary will become the first foreign user of this electric locomotive from CZ LOKO.

The EffiLiner 1600 diesel-electric four-axle locomotive of 1 550 kW and a maximum speed of 100 km / h offers high reliability and low operating and maintenance costs. In the Czech Republic, these locomotives are already operated by SD - Rolling Shuttle and UNIPETROL TRANSPORT. Before completing is another locomotive, this time for the Slovak company PSŽ.

"The latest deliveries for the CER Group clearly demonstrate the correctness of the decision to focus also on the Hungarian market. We see huge potential in it and we want to continue to develop our business activities on it. The Electric EffiLiner 3000 shows interest in a number of carriers and the delivery to CER Cargo Holding confirms this, " explains other business plans Jaroslav Plhák, Sales and Marketing Director of CZ LOKO.
CER Cargo Holding expects revenues to reach HUF 6.3 billion this year. The subsidiary, CER Hungary, is the fourth largest rail carrier in Hungary. The volume of transport amounted to 2,5 million tonnes in 2016. They are increasingly targeting the transport of dangerous goods such as gas or bioethanol. The company now employs seventy people and the number of employees has almost tripled over the last three years.

Czechia

The now famous Prague 'Lubricating' tram passes the stop at Vltavská. It is famous thanks to the live web cam it carries. *Steamsounds*

Czechia

ŠKODA WILL SUPPLY NEW TRAINS FOR THE SAINT PETERSBURG METRO

The carriage stock of Saint Petersburg Metro will be boosted by the new train NěVa, which will be supplied by OOO VAGONMAŠ, part of the Škoda Transportation Group. The company has succeeded in a tender for seven six-car trains. The contract is worth about four billion roubles, or almost 1.5 billion CZK.

“The present project follows two previous deliveries for St. Petersburg Metro. Seventeen of our state-of-the-art trains have already been in operation on the “green” Neva-Vasilyevsky Island line. The rolling stock features a high degree of availability. Currently, another seven trains will be added. The 24 metro trains made by Škoda will therefore be in operation in St. Petersburg,” says Tomáš Ignačák, Chairman of the Board of Škoda Transportation.

The deliveries of the new trains will begin before the end of 2018. Their completion is planned for the first half of 2019. The latest metro trains are manufactured according to the technologies and know-how of Škoda Transportation. “The new trains will be upgraded based on extensive experience with operation in St. Petersburg. For example, they feature a new type of doors equipped with electric drives and an automatic train control option, and they have special modifications to the interior for passengers with reduced mobility,” explains Václav Kozák, Area Sales Director of Škoda Transportation.

The rolling stock also uses a braking energy recovery system thanks to which the vehicles can save up to 25 per cent of electricity compared to the trains operated today. Safety for passengers and drivers is guaranteed by external and internal camera surveillance systems with data recording. Passengers are also assisted by the clear audio-visual information system.

The project history of the new metro dates back to 2007 when the prototype of the vehicle NěVa was developed. The train has also won a prestigious award for the best innovation project Saint Petersburg.

Škoda also has experience with the extensive modernization of Prague Metro rolling stock. The modernisation included a total of 93 trains, the service life of which was extended significantly. Complete traction equipment has also been made by Škoda for metro trains in Budapest (Hungary), Kiev (Ukraine) and Kazan (Russia). Other trains are being supplied to the Chinese city of Suzhou. Furthermore, Škoda Transportation is currently taking part in a tender for the delivery of metro trains for the Polish capital city Warsaw.



Photo: © Skoda

At the Masarykovo stop ‘Nostalgic Tram’ built by Továrna na vozy, a.s. Kolín, No. 2172 passes Tatra T3R.PV built No. 8453. *Steamsounds*

Czechia

Cesky Drahy's Class 750.708, having just arrived with a service from Praha Masarykovo, stands next to Class 810.585 at Rakovnik.
Steamsounds



Bombardier to Provide 32 OMNEO Double-Deck Trainsets for French Intercity Lines in Region Centre-Val de Loire

Rail technology leader Bombardier Transportation has recently announced that it received a repeat order for 32 OMNEO Premium double-deck trainsets (256 cars) from the French National Railway Company, SNCF Mobilités, on behalf of the Centre-Val de Loire Region. The order is the result of an agreement reached between the State and the Region on 19 January 2017 to take over the management of three intercity lines or Trains d'Equibilibre du Territoire (TET). This repeat order is part of the contract signed in 2010 with SNCF to provide up to 860 double deck trains to French regions and is valued at approximately 375 million euro ($444 million US). The Centre-Val de Loire Region plans to roll out these new spacious, highly comfortable trains on the following very frequently used lines: Paris-Orléans-Tours, Paris-Bourges et Paris-Montargis-Nevers. The first trains will be delivered in 2020 and gradually until 2022.

"This order of OMNEO Premium trains from the Centre-Val de Loire Region confirms the demand for spacious, modern, comfortable trains for intercity journeys", said Laurent Bouyer, President of Bombardier Transport France. "Regular passengers will discover a new style of rail travel as well as tourists who come from all over the world to visit the attractions in Berry and the World heritage listed Loire Valley. These trains from the OMNEO double-deck platform are designed and produced by Bombardier teams on our Crespin site in the Hauts-de-France Region. Such a high-tech project highly contributes to the French Rail industry at large."

Specially designed for long intercity journeys, the OMNEO Premium can travel at 200km/h and offers a high level of onboard comfort to meet the demands of long distance travellers. Bombardier's engineers developed a new interior design which optimises available space to the benefit of passengers and seating arrangements. The train will feature a newly developed wide seat with integrated lighting, power plug, and Wi-Fi, while its interior design, colour scheme and configuration will be fine-tuned in the coming months in cooperation with the client. It offers improved access via large, platform-level doors, wide corridors and gangways for easy movement throughout the length of the train.
The 110m-long train for the Centre-Val de Loire Region will offer a seating capacity reaching 373 seats in first and second-class cars, with large baggage racks, dynamic passenger information screens, a dedicated area for two wheel-chairs and space for nine bicycles. It will operate in multiple units of two or three.



SNCF Fret BB No. 27080 runs light engine off Dijon Perrigny depot. *John Sloane*

The OMNEO platform, which includes the Regio 2N and the OMNEO Premium, is a family of extra-large double-deck trains which brings greater capacity, comfort and accessibility to urban, regional and intercity services.

To date, ten French regions have ordered a total of 373 OMNEO/Regio 2N trains. The OMNEO double-deck platform cater for suburban, regional and intercity services. Orders per region are as follows: 32 OMNEO Premium intercity trains for Centre-Val de Loire and 40 for Normandy ; and 301 Regio 2N for Auvergne-Rhône-Alpes (40), Brittany (26), Centre-Val de Loire (14), Hauts-de-France (25), Ile-de-France (125), Nouvelle Aquitaine (24), Occitanie (18), Pays-de-la-Loire (13), Provence-Alpes-Côte d'Azur (16).

SNCF Transilien EMU No. 20915 departs Javel with an RER line C service. The station is built on a bridge over the railway situated in a cutting and was built for the 1889 Exposition Universelle.
John Sloane

France



SNCF Y shunter No. 8411 with ETF No. 61838 (G1206-1838) behind it, are seen at Juvisy yard on November 27th. *John Sloane*



SNCF BB No. 22328 stands at Gare du Nord on November 29th. *John Sloane*



A selection of electric multiple units are seen stabled for the weekend at Trappes on November 25th. *John Sloane*

Transilien EMU No. 20615 approaches Villeneuve St. Georges from the Juvisy direction on November 27th. *John Sloane*



SNCF BB electric loco, No. 22398 departs Dijon Ville with a Ter service to Lyon Part Dieu.
John Sloane

Alstom to supply 6 additional Citadis trams and their innovative charging systems to the Nice Côte d'Azur Metropole

Alstom is to supply 6 additional Citadis trams and 22 ground-based static charging zones (SRS) to the Nice Côte d'Azur Metropole for a total amount of 27 million euros as part of the contract signed in October 2015. The first firm part of this contract covered the supply of 19 Citadis trams and their SRS charging system, scheduled to enter service in summer 2018 on the section between Cadam and Magnan.

These additional trams and SRS equipment (on board and in-station) will circulate on the T3 section of the East-West tramway line, which extends from the Plaine du Var to Saint-Isidore via the airport. These 6 additional trams will also be able to circulate on the T2 section of the East-West line. The manufacture of these new trams will begin in early 2019, following on from the trams covered by the firm tranche. The new SRS equipment, meanwhile, will be installed in stations in Nice during the first half of 2019.

"Thanks to our state-of-the-art technology, we are pleased to be able to play a role in improving the Nice Metropole's public transport offer, a real showcase for Alstom. Our teams are hard at work every day confirming the trust placed in us by Nice Metropolis," says Jean-Baptiste Eyméoud, President of Alstom in France.

The latest addition to the range, the Citadis X05 tram for Nice, incorporates new technologies for a renewed passenger experience: greater comfort with 40% more glass surfaces, LEDs for soft, homogeneous lighting, large individual seats, travel information on extra large screens. Double-doors along the entire length of the tram ensure increased accessibility. The innovations of Citadis X05 are also designed to make operations easier: a 10% increase in passenger capacity, a 20% increase in the exchange ratio in stations, and a reduction of over 20% in preventive maintenance costs. Finally, this new tram will help protect the environment by consuming 30% less energy, recovering energy from braking and a 98% recovery rate.

Alstom is also implementing its new ground-based static charging solution, SRS, which can be used to charge the tram when stopped at stations in under 20 seconds, automatically and securely. The trams will be equipped with an on-board energy storage device, Citadis Ecopack, guaranteeing their autonomy between two charging points. SRS builds on the functional and safety principles of the proven APS solution (trams of Bordeaux, Reims, Dubai). Seven of Alstom's 12 French sites are involved in the development of the tramway system for the Nice Metropole: La Rochelle for the design and assembly of the trams, Le Creusot for the bogies, Ornans for the engines, Tarbes for the traction system, Villeurbanne for the on-board electronics and passenger information systems, Vitrolles for the SRS and Saint-Ouen for the design.



To date, a total of 2,500 Citadis trams have been sold to more than 50 cities in 20 countries.

France



Former SNCF Fret No. 61744, now numbered 61013, stands at the end of Trappes yard on November 25th. *John Sloane*

ECR introduces corridor structures

The rail freight company bundles its personnel in France for better customer service and higher quality

Euro Cargo Rail (ECR), the French DB Cargo subsidiary, has completed its restructuring measures. The rail freight company has regrouped its operational functions, streamlined processes and improved internal communication. The aim of the restructuring measures is to improve service quality for customers and to make internal communication simpler and more efficient. “I am very proud of the work we have put in over the last eighteen months. It means we can now start a new chapter in terms of service and quality,” says ECR’s CEO Gottfried Eymer.

In future, ECR will concentrate on transport corridors oriented around existing operations and that bundle all trains as well as the resources behind them. The company has established three corridors: Nord, Mediterranée and Atlantique. The Nord corridor mainly involves transport operations in northern France, Belgium and the UK, while the Mediterranée corridor covers trains in south-eastern France and links from Italy to the Mediterranean and Spain, especially the major port of Barcelona. The Atlantique corridor runs from Saarbrücken to the Atlantic coast via Paris and Bordeaux, linking Germany, France and Spain.

New staff roles

The staff assigned to each respective corridor work at ECR’s Paris headquarters and in the regional sites. They are now responsible for the trains that run mainly in their corridor. Not only do they take care of production, they will also in future be responsible for customer service, providing customers and partners with relevant information.

ECR is also carrying out internal restructuring to allow streamlined and more efficient train planning and production. New positions are being created at the Paris headquarters in order to better integrate planning and production. At present, up to nine different units are involved in train dispatch management – in future, it will only be two. “This restructuring means that customer service staff get the relevant information from Production more quickly, and can respond more swiftly as a result,” says Eymer. “That helps directly improve the quality of the service for our customers.”



Transilien's BB No. 27316 heads out of Montparnasse on a sunny November 25th. *John Sloane*

Germany



Captrain's Class 193.892 approaches Hamburg Harburg with a container service, heading for the docks. *John Sloane*

Bombardier Awarded Contract to Deliver 47 Trams for Duisburg, Germany

FLEXITY trams will allow for more capacity and increased passenger-flow

Vehicles will feature Bombardier's obstacle detection assistance system to provide additional safety for all traffic participants

Rail technology leader Bombardier Transportation has been awarded a contract with Duisburger Verkehrsgesellschaft AG (DVG) to supply 47 new BOMBARDIER FLEXITY vehicles. The contract is valued at approximately 132 million euro (156 million US). The first vehicles will be delivered by mid-2019 with further trams to follow until 2023.

"We are making an investment in a mobility solution that will provide more comfort and space to our customers. In addition, we count on the newest technological developments for the safety of our passengers and traffic participants. That's what Bombardier's vehicles deliver," said Klaus-Peter Wandelenus, Chief Technology Officer at DVG.

"We are proud that DVG relies on Bombardier's expertise for the renewal of their fleet," said Michael Fohrer, Managing Director of Bombardier Transportation Germany. "Passengers of DVG can look forward to equally innovative vehicles that score high on maximum value in safety and comfort."

The integration of the world's first homologated obstacle detection assistance system for trams will improve safety for all traffic participants. Bombardier's driver assistance system was recently awarded the European Rail Cluster Innovation Award 2017, and has been in operational use on customer Frankfurter Verkehrsgesellschaft GmbH's vehicles in the city of Frankfurt, Germany. To further ensure passenger safety, two cameras will replace rear-mirrors and an additional picture-in-picture camera will eliminate blind spots.

The bidirectional 3-car-vehicles for Duisburg will be 70 per cent low-floor FLEXITY trams, 34 meters long, 2.3 meters wide and able to transport up to 200 passengers. With two additional doors in the end cars and one in the middle car, they will allow for better accessibility. The new fleet for increased passenger-flow and higher capacity, is Bombardier's contribution to Duisburg's efforts in attracting an even bigger share of the city's population to use public transport, reduce local road traffic and air pollution.





Berlin 'S' Bahn S5 service heading for Strausberg Nord calls at Berlin Ostbahnhof. *Steamsounds*

ICE 4 begins regular service

One-year testing phase successfully concluded
Five trains now underway between Hamburg and Munich and Hamburg and Stuttgart
ICE 4 fleet will grow to 119 trains by 2023

With December's timetable change, Deutsche Bahn AG (DB)has introduced the ICE 4 into regular service, thus reaching a further project milestone right on schedule. Initially, five trains will operate on the routes between Hamburg and Munich and Hamburg and Stuttgart. The ICE 4 fleet will grow to nine trains by the summer of 2018. All in all, Siemens will deliver a total of 119 trains by 2023. Of these, 100 will be in a twelve-car configuration and 19 in a seven-car configuration.DB plans to reach its ambitious growth goals with the ICE 4 fleet. The operator's mainline strategy, approved in 2015, is to expand its long-distance offerings by 25 percent by 2030. DB wants to attract an additional 50 million passengers a year, and the ICE 4 will provide the backbone for its long-distance service.

"The ICE 4 is the new flagship for our long-distance routes and sets standards for our passengers: Plenty of storage space for luggage, an elegant restaurant and an innovative lighting concept ensure a high level of comfort for passengers. This is the first ICE on which passengers can take their bicycles. Thanks to a completely revamped family area and parent-and-child compartment, we're making journeys even more relaxing for families," says Birgit Bohle, Chairwoman of the Management Board of DB Fernverkehr AG.

"The ICE 4 is the biggest order for trains ever received in the nearly 170-year history of Siemens. We're right on schedule with the execution of the order, and regular service could be started punctually. This train sets new standards in intercity transport with its unique technological concept," explains Sabrina Soussan, CEO of the Mobility Division.
The ICE 4 trainset was designed to provide the greatest possible flexibility. A total of 24 train configurations are possible on the basis of five car types and the trains can be adapted to capacity requirements, top speed and the selected route profile. A prerequisite for the virtually freely configurable trains was the development of a so-called powercar that combines all traction components within a single car. In these powercars, all main traction and power supply components are arranged under the car floor. The trains are a combination of powercars, a service car, intermediate cars and two end cars. A 12-car ICE 4, for example, is driven by six powercars and can reach a top speed of 250 km/h.

The 346-meter long, 12-car train offers 830 seats and has large luggage racks located near the seats. A family compartment offers more room compared to earlier cars. The train also has additional open areas for accommodating baby buggies in the parent and child section. Four spaces are available for passengers in wheelchairs and, for the first time, it will be possible to take along bicycles in an ICE: eight spaces can be reserved in the end car.
An innovative lighting scheme is attuned to the time of day and creates a pleasant atmosphere inside the cars. The system provides subdued lighting in the early morning, and when the sun rises, it turns into a warm and stimulating tone before shifting to normal daytime lighting. In the evening, the lighting system simulates a setting sun.

A new type of air conditioning system ensures that outside temperatures ranging from a minus 25 degrees Celsius to a plus 45 degrees Celsius can be comfortably handled. The system is also redundant, so that one part will continue to operate if the other should shut down.
The new and modern seats have improved headrests. When adjusted, the seatbacks don't recline to the rear but rather into the seat's shell without disturbing the passenger behind. Each seat in 1st class has its own electrical socket and a reading lamp. Reservation signs and seat numbers are easily visible and reachable, and integrated into the seat headrests. The new trains have multi-provider technology using the latest WiFi technology. The system connects with the fastest data network available (LTE, 3G) while the train is underway and bundles the capacities of the network operator so that higher data volumes can be processed. This provides passengers with a faster and more stable WLAN connection.

The ICE 4 fleet is equipped with the European Train Control System (ETCS). With this system, the ICE 4 will be able to operate on the new high-speed rail route between Berlin and Munich as of December 2018.

CFL Cargo's Class 185.534 nears Kaub with a northbound rake of tanks. *John Sloane*

Germany



HEX DMU No. VT648.369 working a line No. 4 service to Goslar, stands at Wernigerode. *Steamsounds*

Bombardier to Provide 40 TRAXX Locomotives to TX Logistik

TX Logistik to be first customer to order new innovative TRAXX Multi-System locomotives
Part of Europe's most modern four-axle locomotive platform, the cross-border TRAXX MS3 locomotive operates under all four main European catenaries
Contract includes 15 - year fleet maintenance agreement and options for up to 25 additional locomotives

Rail technology leader Bombardier Transportation and European rail transport company TX Logistik have signed at Bombardier's site in Kassel a contract for 40 innovative BOMBARDIER TRAXX MS3 (Multi-System) locomotives. The contract includes a 15 years fleet maintenance agreement with preventive and corrective maintenance that will provide TX Logistik a higher operational fleet reliability and availability. Based on the list price, the contract for the 40 locomotives and the 15 years fleet maintenance is valued at 250 million euro (297 million USD). The contract also includes an option for up to 25 additional locomotives. Deliveries are planned to start in summer 2019.

Michael Fohrer, President Locomotives & Light Rail Vehicles and Chairman of the Management Board, Bombardier Transportation GmbH Germany, emphasized: "The TRAXX MS3 is based on the successful TRAXX platform with more than 1,750 locomotives in

operation across Europe – and its cross-border function gives operators the ability to work across nearly all of continental Europe. Together with our launch customer TX Logistik, we are proud to introduce the TRAXX MS3 to the market. The included 15-years service contract with Bombardier Transportation Germany will ensure superior reliability and highest availability of the fleet."

Bombardier's TRAXX locomotive platform consists of the TRAXX AC3 locomotive (alternating current), TRAXX DC3 locomotive (direct current) as well as the TRAXX MS3 locomotive (multi-system, all main currents in Europe). It has many strengths from operator's view: Amongst other things, it can pull one additional wagon per train compared to other locomotives of the same performance class. It´s energy costs are low due to reduced energy consumption depending on the operational loads and because of its regenerative braking system. Regarding the TRAXX MS3 locomotive, the latest signalling technology is introduced offering dynamic transitions at country borders or signalling system changes.

HSB Dampflok's Nos. 99.222 and 99.7239 stand at Drei Annen Hohne. *Steamsounds*

Germany



HSB's No. 99.7247 is photographed shortly after departing Schierke. *Steamsounds*

Alstom secures new high speed operation in Germany with its onboard signalling control systems for ICEs

Alstom has been equipping for Deutsche Bahn the complete ICE high speed fleet, intended for the German Unity Transport Project VDE 8, with its Atlas 200 onboard control systems (ETCS/ ERTMS level 2 baseline 3). On 10 December 2017, the high speed section between the cities of Erfurt (Thuringia) and Ebensfeld (Bavaria) started operation. This line is connecting Berlin with Munich over Erfurt and Nuremberg.

Alstom equipped 70 ICE T, 66 ICE 3 and 40 ICE 1 high speed trains with its proven solution Atlas 200 for Deutsche Bahn. This Baseline 3 is the latest technological ETCS standard and secures the smooth and safe operation of high speed traffic.

Currently, VDE 8 is the biggest infrastructure project in Germany. The project started in 1991 to improve the rail connection between East and West as well as North and South for passenger and freight transportation. The high-speed section between Berlin and Munich is a closure in the German high-speed network and at the same time an important section of the Trans European Network (TEN).

"We are proud to open together with Deutsche Bahn a new chapter in the European rail transport and to make it more secure for passengers. To travel by train from Berlin to Munich in less than four hours is a great success offering a competitive and environmentally friendly alternative to roadways and aeroplanes. We have been the first company to put this kind of ETCS into practice. It demonstrates the wide range of our portfolio in the mobility sector", said Gian-Luca Erbacci, Senior Vice President Alstom Europe.

ERTMS has several objectives: facilitate border crossings, open up the rail signalling market, increase commercial speeds, reduce intervals between two trains, decrease maintenance costs and guaranteeing maximum safety.

The project was realized under the direction of the Alstom ERTMS competence centre of Charleroi, Belgium (development and adaptation of the software) in close cooperation with the project office in Berlin, Germany, Villeurbanne, France (Hardware) and the German sites in Salzgitter and Braunschweig (vehicle integration and installation).



On December 9tth, diesel hydraulic Class V160.002 stands at Goslar after arriving with a railtour from Osnabück to the Christmas market. *Mark Pichowicz*

Germany

Erfurter Bahnservice operated Lumdilla No. 132.334 pauses at Nordhausen with the return leg of a railtour from Erfurt to the Christmas market at Goslar on December 10th. *Mark Pichowicz*

Germany



DB Netz Class 203.314 is seen shunting at Hamm. *John Sloane*



Chemnitz tram No. 605 working a line 4 service calls at Theaterplatz. *Steamsounds*



DB Class 146.272 arrives at Dortmund Hbf with an RE6 service to Minden(Westf). *Steamsounds*

Germany

METRANS: NOW WITH EVEN MORE PULLING POWER

HHLA's intermodal subsidiary Metrans has ordered ten more TRAXX multi-system locomotives from the manufacturer Bombardier so it can move more trains with its own locomotives. At present, 50 mainline locomotives owned by the company are in transit in the European Metrans network, supported by 17 shunters. The HHLA intermodal subsidiary Metrans not only has its own terminals in the hinterland but is also fortifying its own traction fleet. This means that more and more Metrans locomotives are pulling container trains through Europe. Metrans will pursue this successful strategy by adding ten further locomotives to its fleet, beginning in the first quarter of 2018.

Peter Kiss, Executive Board member of the Metrans group: "With more of our own locomotives at our disposal, we can do an even better job of managing the transport process. This will allow us to be more reliable, to be more flexible in response to the requests of our customers and to offer new services. Next year, we will be looking to accomplish this goal mainly in Poland, where Metrans is taking over from the HHLA subsidiary Polzug." The locomotives are Bombardier TRAXX F140MS models (class 186). The "F" stands for "freight", "140" stands for the model's maximum speed and "MS" stands for "multi-system". The locomotives are constructed to deal with the different tensioning and train control systems in place across Europe.



DB Regio Class 423.919 calls at Eppstein with an S2 service for Dietzenbach. *Steamsounds*

HSB Dampflok No. 99.1777 runs light engine through Kurort Kipsdorf. *Steamsounds*

DB Class 218.834 is seen stabled at Hannover Hbf. *John Sloane*

The fascinating world of single-wagon transport

Customers take a look behind the scenes at Munich North marshalling yard
The single-wagon network is the backbone of DB Cargo's transport offering. Around 70 per cent of DB Cargo trains run within the single-wagon system.

DB Cargo operates an extensive network of marshalling yards, hubs and transhipment points. However, the complexity of the system is often incomprehensible for outside parties. For that reason, DB Cargo occasionally invites customers to take a look behind the scenes of the complex system – a great opportunity for them to learn how the individual process steps of their transport operations interlink.

Munich Regional Sales invited customers to its "A look behind the scenes of the single-wagon network" customer event at Munich North marshalling yard in October 2017. Twelve representatives from six customers in the chemical and mineral oil industry in the Munich region attended the event. "This initiative was an attempt to help customers to understand the single-wagon production processes and to illustrate our work in a transparent way," says Marion Duldner of Regional Sales Munich. "To achieve that we invited our customers to visit us on site, at the heart of the production process. Several of our customers' transport operations run via Munich North."

During a guided tour of the station, the group learned about the processes carried out between the reception and departure sidings. The shunting hump is used to separate wagons from incoming trains, sort them into the individual sorting sidings and assemble them into new outbound trains. Wagons that are rolling too quickly are slowed down by hump, trough and track retarders. Wagons that are rolling too slowly are pulled to the sorting sidings by marshalling conveyor systems.

Heiko Ruhfaut, Acting Head at Munich North marshalling yard, also gave an overview of the facility, which currently has a capacity of 3,000 wagons a day. The yard will undergo extensive modernisation and automatisation by 2020. In the single-wagon transport operations of the future, the process of sorting wagons using the shunting hump will be fully computer-controlled.
Regional Sales is considering organising the event again in 2018. "We were very satisfied with the feedback from our customers," says Marion Duldner.



DB Class 114.011 calls at Eppstein with a Limburg(lahn) service.
Steamsounds

Germany



DB Class 146.010 propels a Meißen bound 'S' Bahn service away from Kurort Rathen. *Steamsounds*



Berlin tram No. 8025 working a line M4 service to S Hackescher, calls at Alexanderplatz. *Steamsounds*



A MRB EMU No. 1440.214 arrives at Tharandt with a service for Hof. *Steamsounds*

Germany



DB Class 189.073 approaches Gremberg with a mixed load from Dusseldorf. *John Sloane*

Swifter wagon repairs

Customers can now report damaged wagons via a new app, getting wagons back into service more quickly and improving availability

When customers order an empty wagon at DB Cargo, they can usually count on it being in full working order. In rare cases, however, a wagon may be in need of repair: the bogie may be snagging, a hinge may be stuck or a door may be dented. In those cases the wagon will either have been damaged on its way to the customer or the damage would have been caused during loading or unloading at the customer's site.

In either case, the customer should report the damaged wagon as soon as possible. DB Cargo will provide a replacement wagon or send a mobile team to repair the wagon on site.
DB Cargo's new "Damaged Wagon App" now makes this report process digital. "Our aim is to speed up this process and to make it more transparent for all involved," explains Jürgen Bosse, Head of myRailportal, whose team developed the new app in cooperation with customers. In the past, the process of reporting damaged wagons was rather laborious: customers had to fill out an A4 form and fax it to the customer service department and the office.

Now, however, the new app provides a clear and intuitive menu, via which the customer can submit a damaged wagon report with just a few clicks through their user profile. "The customer can also attach photos, providing Production with a better idea of the extent of the damage," says Jürgen Bosse. A technician then decides whether the customer should be provided with a new wagon, or whether the repairs can be carried out by a mobile team.

Experience shows that most cases of damage to wagons occur when loading heavy and large-volume scrap. DB Cargo is therefore currently piloting the app with two customers from the scrap metal industry. "The damaged wagon app will simplify our handling process significantly," says Thomas Grötzinger, Head of Logistics at Scholz Recycling GmbH. "Our staff will use the app on their smartphones. Any damage identified is photographed immediately, and the photos are submitted digitally to DB Cargo – which really speeds up the decision over whether to provide a new wagon."

Digitisation also offers one further advantage: all damaged wagon reports arrive at myRailportal, DB Cargo's digital customer service interface. In future, all information about reports, damage and billing will be accessible to DB Cargo and its customers in this system. The app is scheduled to become available to all customers by the end of 2018.

RurTalBahn's Class 186.422 leads an intermodal working north through St. Goarshausen. *John Sloane*

Greece



Class 120.018 stands at Thessaloniki on November 5th working train No. IC52 10:18 from Athens Central. *FrontCompVids*



A loco change at Palaiofarsalos on train No. IC53 07:04 Thessaloniki - Athens Central, with Class 120.012 taken off and replaced by Class 220. 014 and 220.007. *FrontCompVids*



On November 7th, Class 220.014 and 220.007 are seen at Levadia working train No. IC53 07:04 Thessaloniki - Athens Central. *FrontCompVids*

On November 6th, Class 220.019 waits at Kalambaka with the 17:32 service to Athens Central. *FrontCompVids*

H-Start Class 418.312 is seen stabled at a quiet Gyor depot with just Class 418.319 and 460.018 for company. *Brian Battersby*

India

Indian Railways YDM-4 No. 6717 crosses the small viaduct at Choral with a Metre Gauge train from Mhow to Sanawad on November 12th. *Mark Torkington*



DLW built WDM-3A Nos. 16459 and 16457 blast through the semaphores at the small station of Lunsariya on November 4th with an express from Okha to Ernakulem - a journey of approx 1400 miles!. *Mark Torkington*



YDM-4 No. 6655 approaches Kankroli on November 10th with the morning train on the Mavli to Marwar Metre Gauge line in Rajasthan. *Mark Torkington*

Japan



No. EF65-2090 works a rake of northbound flats through Omiya, Tokyo on November 8th. *Mark Enderby*



JRF ‘Blue Thunder’ No. EF200-1 on a southbound modal, heads through Omiya, Tokyo on November 8th. *Mark Enderby*



A Shinkansen unit is seen at Utsunomiya. *Mark Enderby*

Electric loco No. EH500-63 leads a southbound modal working through Omiya, Tokyo on November 8th. *Mark Enderby*

Tokyo Sakura Trams Nos. 7704 and 7708 pass at Oji, Tokyo on November 8th. *Mark Enderby*

Japan



A Class 117 Kawasaki built 6 car EMU working local service No. 603 stands at Kyoto on November 15th. *Mark Enderby*



Hitachi built Class EF200 series No. EF210-4 leads an eastbound modal through Kyoto on November 15th. *Mark Enderby*



Steam loco No. C61-2, working a Kyoto Railway Museum shuttle is seen on November 15th. *Mark Enderby*

Netherlands

DB Netherlands shunter No. 6417 is seen stabled in the yard at Almelo, on December 8th. *Mark Pichowicz*

Netherlands



On December 12th a Siemens 'Power Package' consisting of DB Class 189.086-2 and 189.082-1 departs Amsterdam-Westport with a coal train from the OBA Bulk Terminal heading to Germany. *Erik de Zeeuw*



Hybrid Metro/Tram No. 51 crosses over the 'Benelux Lane' in Amstelveen with a service from Amsterdam CS to Amstelveen West-District on December 12th. *Erik de Zeeuw*



Steam locomotive No. 01.1075 from 'Steam Foundation Netherlands' hauls a Christmas Tour seen departing Utrecht on December 9th. *Erik de Zeeuw*

Netherlands

A pair of DB Netherlands shunters, with No. 2006.422 leading, head through the countryside at Willemsdorp on November 6th.
Stephen Simpson



NS Sprinter No. 2954 heads across the bridge at Willemsdorp on November 6th.
Stephen Simpson



On November 6th, NS Traxx Class 186.042 heads across the railway bridge at Willemsdorp, near Dordrecht. *Stephen Simpson*

ZSSK Cargo's Class 363.095 hauls a rake of coal empties through Zilina. *Class47*

RTS Swietelsky operated Class 1216.902 heads through Ljubljana with a rake of tanks. *Brian Battersby*

SZ's Class 363.004 heads a line up of locos stabled at Ljubljana.
Brian Battersby

Slovenia

Despite being around 40 years old, SZ Class 342.014 looks in remarkably good condition. *Brian Battersby*

Switzerland

With the fields being ploughed ready for next year, SBB Class 500.023 speeds past at Itingen. *Paul Godding*



SBB Class 420.124 and 420.223 pass through Killwangen Spreitenbach with a Zurich service. *Paul Godding*



RhB Electro-diesel Gem 4/4 No. 801 passes through Davos Platz, hauled by Tm 2/2 No. 120. *Steamsounds*

SBB Cargo's Class 620.067 and 420.344 heads through Eglisaua with a loaded container train. *Paul Godding*

Switzerland

SBB Class 460s Nos. 460.053 and 460.047 both await departure time at Brig. *Paul Godding*

Switzerland

SBB Class 420.154 crosses the Eglisau river bridge over the river Rhine. *Paul Godding*





SBB Re 4/4 II No. 420.214 ‘on the blocks’ at Zürich HB. *Steamsounds*

RhB Ge 4/4 II No. 624 stands at Samedan with train No. RE1334 to Landquart. *Steamsounds*

SBB Class 420.145 heads through Sissach with a Basel bound service. *Paul Godding*

Switzerland

BLS Cargo's Class 486.508 passes the superb location of Speiz Ghei with a container working. *Paul Godding*



BLS Cargo's Class 485.016 leads a RoLa working through Speiz Ghei. *Paul Godding*



SBB Class 420,265, 421.385 and 420.276 head through Pratteln with an intermodal working. *Paul Godding*

Switzerland

DB Class 185.085 and 185.094 pass Eglisau with a train of covered steel wagons. *Paul Godding*

BLT Basel tram No. 174 is seen near Bahnhof SBB with a line No. 11 service to Aesch.
Paul Godding

New SBB double-deck train receives operating permit

With all tests passed successfully, TWINDEXX Swiss Express receives BAV operating permit.

The TWINDEXX Swiss Express for SBB FV-Dosto has received its operating permit for the Swiss network from the Federal Department of Transport (BAV).

In a procedure involving multiple tests, BAV awarded SBB's new double-deck train with an operating permit for the Swiss network. In doing so, BAV confirms the TWINDEXX Swiss Express has, among other things, met all the required criteria regarding safety. The managing director of Bombardier Transportation in Switzerland, Stéphane Wettstein, is delighted that the operating permit has been awarded: "Now we can begin the process of gradually passing the trains on to SBB. We have made great progress with production and will be supplying all the trains as per the original delivery schedule by early 2020."

Bombardier Transportation is supplying SBB with 62 trains in three different models (the IC200 with a restaurant car and family compartment, the IR100 and the IR200). The new SBB long-distance train has around 10 per cent more seats than current double-deck trains and can go through curves up to 15 per cent faster, thanks to the built-in roll compensation (Wako), without the ride comfort for the passengers being affected.



BNSF SD45-2 No. 6507 and C44-9W No. 5483 lead an eastbound manifest through the Feather River Canyon near Pulga, California. *Nick Clemson*

U.S.A.

Union Pacific's GE ES44AC No. 7907 heads an empty car train towards Oakland by the San Francisco Bay Trail, at Hercules, California on October 6th. *Nick Clemson*

U.S.A.

Union Pacific's AC45CCTE No. 7831 is seen on the rear of an eastbound intermodal at Truckee, California. *Nick Clemson*



BNSF GE ES44AC No. 6035 and C44-9W No. 710 head through Modesto with a southbound manifest. *Nick Clemson*



A MoW (maintenance of works) pick-up truck pulls on to the rail crossing in Truckee, Ca, and changes from road to rail mode and will head off up the line, the whole operation not taking more than a couple of minutes. *Nick Clemson*

U.S.A.

With engineer David Shelley (the `East Coast Hogger`) at the controls, FEC ES44C4 's Nos. 803 and 821 pass through the middle of Daytona Beach Golf Club while working train No. FEC101-26 14:00 Jacksonville Bowden - Miami Hialeah on November 26th.
Laurence Sly

U.S.A.

United States Sugar Corporation EMD GP11 No. 308 crosses the swing bridge at Moore Haven whilst hauling a rake of empty sugarcane cars on November 22nd. *Laurence Sly*

U.S.A.

South Florida Regional Transport Authority's Brookville BL36PH No. 828 approaches Deerfield Beach whilst working TriRail train No. P619 09:00 Mangonia Park - Miami Airport on November 21st. *Laurence Sly*



Florida East Coast's ES44C4 's Nos. 803 and 821 approach Deerfield Beach whilst working train No. FEC109-21 00:30 Bowden Yard - Hialeah on November 21st. *Laurence Sly*



United States Sugar Corporation EMD GP11 No. 303 approaches Bryant with a rake of loaded sugarcane on November 22nd. *Laurence Sly*

Union Pacific's ES44AC-H No. 2560 and AC45CCTE No. 7428, having come over the Donner Pass with an eastbound, double stacked intermodal, head through Truckee, California. *Nick Clemson*

Heading north through Modesto, Ca, with a double stacked intermodal are BNSF's SD75M NO. 8274, C44-9W No. 5214 and CSX's ES40DC No. 5226. *Nick Clemson*

Bombardier's Rail Control Approved for Up-coming Swedish Rail Modernization Programme

High-capacity European Rail Traffic Management (ERTMS) signalling technology to play central role in Sweden's ambitious 11,000 kilometre rail network upgrade

The BOMBARDIER INTERFLO 450 mainline rail control solution has received official approval for operation in Sweden. The type approval, granted by the Swedish Transport Administration, Trafikverket, and Swedish Transport Agency, Transportstyrelsen, opens the door for Bombardier's high-capacity signalling system to be implemented as part of Sweden's programme to modernise its entire 11,000 kilometre mainline rail network.

Thore Sekkenes, Managing Director, Bombardier Transportation Sweden, commented, "Our deep Swedish roots make us even more proud to continue providing the latest digital rail technology to help Sweden keep pace with increasing passenger and freight demand. With this final regulatory approval, our INTERFLO 450 solution is ready to play its part in the roll-out of ERTMS Level 2 rail control across Sweden, improving speeds, reliability and capacity while increasing integration with the rest of Europe."

This official confirmation makes Bombardier Transportation the first supplier to receive approval for its ERTMS Level 2 technology for Sweden and verifies that the INTERFLO 450 wayside solution meets the required national and European technical and safety regulations. The announcement reflects the successful operation of the technology on both the Ådal and Bothnia pilot lines which entered operation in 2012 and now run with 99.9% availability, over four times better than the existing system.

As well as being the first supplier in Sweden to start ERTMS operation, Bombardier is the market leader there for rail control solutions and has also equipped over 130 vehicles to date with its EBI Cab onboard system. This technology is compatible with both ERTMS and the existing signalling system, enabling trains to operate as the Swedish network continues to be upgraded.

Initially created to allow European cross-border rail traffic, the globally-adopted ERTMS Level 2 signalling standard provides accurate and continuous radio-based, automatic train protection. The wayside system can cater to higher-speed operations, optimizing the flow of trains and supporting network inter-operability, while reducing maintenance costs. Bombardier was the first supplier worldwide to commission ERTMS Level 2 for operation and today its solutions are used in 26 countries.

Bombardier has supplied solutions to the Swedish national railway system for over 100 years. Its local presence includes its regional business, project delivery and engineering hub for rail control, production centre for propulsion systems and network of service centres. Bombardier is also a leading signalling supplier for Sweden's regional and commuter rail lines, most recently equipping the new Stockholm City Line.



Contract concluded for supply of brake blocks to PKP CARGO

On December 20, PKP CARGO S.A. signed a contract for the supply of LL-type composite brake blocks (low friction coefficient) with Knorr-Bremse Systemy Kolejowe Polska Sp. z o.o. The products are destined for the conversion of used freight cars. With this move, the largest Polish rail carrier is gradually adapting its rolling stock to the future requirements of the European Union relating to inter-operability and at the same time reducing the impact of noise on the environment.

By implementing an acoustic upgrade program for its existing freight cars, PKP CARGO S.A. is progressively replacing the cast-iron brake blocks with LL-type composite blocks. The program of modernization, which has already covered approximately 1,400 cars, is a response to the future requirements of the recently amended technical specification of inter-operability regarding the noise emitted by rolling stock (TSI Noise), not only for new freight cars, but also for the existing freight rolling stock. The contract with Knorr-Bremse governs supplies of LL-type composite blocks to PKP CARGO for over 10,000 cars of various types, equating to some 16 percent of the transport company's cars. To cover part of the cost of purchase and replacement of the blocks (about 20% of eligible costs), PKP CARGO has received European Union funding from the "Connecting Europe" CEF program.

"PKP CARGO has embarked on the intensive renewal of its existing rolling stock. Concern for high standards of customer service and protection of the environment has led us to fit wagons previously equipped with cast iron brake blocks, with modern LL-type composite blocks, which significantly reduce noise during braking. I am convinced that the brake block replacement program in a given number of cars will be completed by us within the deadline, and while meeting new EU requirements in this regard, we will also strengthen our presence on the European rail transport market," said Witold Bawor, Member of the Board in charge of Operations of PKP CARGO S.A.

"We are very pleased that such a significant railway carrier as PKP CARGO has chosen our company, specialising, among other things, in the supply of brake systems and components for rail vehicles. I hope that thanks to modern, UIC-compliant LL-type brake blocks made of IB116* material, manufactured by Icer Rail S.L., part of the Knorr-Bremse Group, PKP CARGO will quickly be able to adapt its rolling stock to interoperability standards," said Jacek Biłas, Chairman of the Board of Knorr-Bremse Systemy Kolejowe Polska Sp. z o.o.

The contract for supply of Icer Rail IB116* brake blocks will be implemented between 2017 and 2020.



Bombardier and Mercitalia Rail Signed Contract for 40 TRAXX DC3 Locomotives and Long-Term Fleet Maintenance Service

Italian freight company, Mercitalia Rail, will be the first customer to benefit from TRAXX DC3 locomotive's improved traction, adhesion control and energy efficiency

Contract includes 16 years fleet maintenance service and option for up to 20 additional locomotives

Bombardier Transportation and Mercitalia Rail, a major freight rail operator in Italy, have signed a contract for 40 innovative BOMBARDIER TRAXX DC3 (direct current) locomotives and 16 years of fleet maintenance to be carried out by Bombardier Transportation Italy's Services division. Based on list price, the contract is valued at approx. 210 million euro (249 million USD). It also includes options for up to 20 additional locomotives and maintenance services, as well as an option for additional eight years of maintenance on the whole fleet. Locomotive delivery is scheduled to start in the 4th quarter of 2018.

Luigi Corradi, Chief Country Representative Italy, Bombardier Transportation, emphasized, "The solution's optimized features make this vehicle the most advanced DC locomotive in Europe. The 16 years service contract with Mercitalia Rail, managed by our Services division in Italy will ensure superior operational availability of the vehicles. We are proud that Mercitalia Rail, the market leader for rail freight traffic in Italy, has chosen the TRAXX DC3 locomotive to modernize its fleet, and will be the first customer to benefit from this innovative product."
The DC version of the TRAXX 3 platform belongs to the most modern four-axle locomotive platform in Europe. It consists of the TRAXX AC3 (alternating current), the TRAXX MS3 (Multi-System, for all main currents in Europe) and the TRAXX DC3.



Bombardier Transportation Italy employs more than 700 people at their Vado Ligure manufacturing plant or at a dedicated rail control signalling and urban transport engineering center in Rome. As of today, Bombardier Transportation Italy produced a total of 728 E464 locomotives, 50 ETR1000-V300ZEFIRO trains and 191 TRAXX DC locomotives, approximately 90% under Bombardier full service maintenance contract.

Overall almost 2,000 locomotives have been produced in Vado Ligure site; the site has a long experience in the development of state of the art DC traction units and in major overhaul and revamping of rolling stock. More than 200 locomotives, 17 trams and 50 very high-speed trains are under Bombardier Transportation Italy Services maintenance contracts.

The Italian production site in Vado Ligure celebrated its 110th anniversary in 2015. Bombardier's site in Rome is responsible for the implementation of signaling and control systems for rail and metropolitan traffic; in Italy more than 3,000 km of the railway network is equipped with Bombardier systems. The headquarters in Rome is also the center of excellence for rail signaling systems in the Mediterranean region with projects completed and ongoing in Croatia, Romania, Turkey, Greece, Algeria, Ethiopia and Morocco.



Alstom becomes majority shareholder in its Kazakh locomotive joint venture

Alstom signed an agreement with the Kazakh national railway company (KTZ) to acquire their 25% stake in the EKZ Joint Venture (JV). After approval by the relevant authorities, Alstom will see its total share brought to 75%. The agreement was signed by Maksat Kabashev, KTZ Strategy VP and Didier Pfleger, Alstom Senior Vice-President for Middle-East and Africa.

Alstom entered the Kazakhstan's railway market in June 2010 together with its Russian partner Transmashholding (TMH), by laying the first stone of the EKZ facility in order to build locomotives for the Kazakh network. The joint company was held by Alstom (25%), TMH (25%) and Kazakh Railways (50%). Alstom, EKZ, TMH and KTZ had signed a contract for the supply of 200 Prima T8 (KZ8A) and 95 Prima M4 (KZ4A) locomotives. The plant was inaugurated in 2012. In 2016, Alstom had acquired another 25% from KTZ. The freight locomotives are now fully assembled at EKZ, the full assembly of passenger locos will start in the beginning of 2018.

"By increasing once again Alstom's share in EKZ, we show our confidence in the attractiveness of Kazakhstan and we contribute to the development of new expertise and skills locally to address not only Kazakhstan's needs but also regional ones", said Didier Pfleger.

This acquisition reaffirms Alstom commitment to modernizing Kazakhstan railway and follows the signature of a MoU last week in Astana by Henri Poupart-Lafarge, Alstom Chairman and CEO and Mr Kanat Alpysbayev, President of KTZ, for Alstom other local JV KEP for the modernization of the signalling in 25 railway stations around the country.



Kazakhstan is an important hub linking Europe, Middle East, Asia and Russia through the new Silk Way. With almost 20,000 km of tracks, the Kazakh railway network is the world's third biggest using the 1,520 mm track gauge. Besides wide and winterized rolling stock able to run in temperatures reaching -50°C, this market is characterized by very specific technical standards which require adapted engineering solutions.

Alstom put into service the first 1,500V Hesop advanced reversible substation for Yellow Line of Milan Underground

Alstom has put into service its innovative Hesop reversible substation for the Yellow Line of MM, Milan Underground. This is the first Hesop 1,500V 4MW. This will help make ATM (Azienda Trasporti Milanesi), Milan's subway operator, more energy efficient and will also help control tunnel temperatures. This is the second Hesop in commercial operation on a subway line, the first was the Hesop 600V 1MW installed for the London Underground, in operation since March 2015.

The Hesop system works by converting and transferring any unused power, generated by the trains during braking, to accelerating trains elsewhere on the line or to the grid. The Hesop control system is highly intelligent and ensures that the energy is recovered via the most efficient route that the infrastructure will permit. It enables the recovery of more than 99% of the traction energy generated during braking, thereby reducing CO2 emissions through reduced energy consumption. The system allows ATM on the Yellow Line to recover 15% of the traction energy generated when trains brake, and then to re-inject that energy into the public power grid.

"This is fantastic news for us, for Milan Underground, for commuters and for the environment. We bring our innovative technology with the introduction of Hesop in the Rogoredo sub-station of Yellow Line of Milan subway. We would like to thank ATM that played a key role by supporting the Alstom team throughout the duration of the installation and testing phase . This is just the latest sign that we at Alstom are determined to become more and more active across rail infrastructure in Italy " said Michele Viale, Managing Director of Alstom in Italy and Switzerland.

"ATM has always paid great attention to the environment, so it is always interested in participating in innovative projects that allow greater energy efficiency and a lower environmental impact. This is another piece in the ATM policy towards a zero-emission company" said Miles Parisi, Energy Manager ATM.

The project was developed jointly by Alstom's site in Rome, Italy Charleroi, Belgium and Saint-Ouen, France for ATM. ATM, the Milan subway operator, played a key role in the project by making proofing environment available and by sharing the installation solutions in the project phase. This project is funded by the LIFE+ program of the European Commission.
124 Hesop substations have been sold by Alstom so far for the projects of Desio-Seregno tramway and metro, London Underground, Riyadh metro, Sydney tramway, Panama and Dubai metros.

Hesop 1,500V has just been awarded a price at Alstom's internal innovation contest, I Nove You.

Alstom begins dynamic tests on its Coradia trains for Algeria

Alstom has begun its first dynamic tests at the Velim railway test centre in the Czech Republic for the first of the 17 Coradia trains for Algeria. The train left Alstom's factory in Reichshoffen on 29 September. These tests will allow Alstom to make final adjustments to the train prior to its forthcoming delivery to the SNTF in Algeria.

"These dynamic tests are increasingly synonymous with entry into commercial service in Algeria. It is the rigorous nature of these tests that guarantees not only the smooth running of the trains but also the control of all norms to guarantee maximum safety for both the SNTF and its passengers. The first train has been manufactured in strict adherence to the schedule and we are working on keeping our commitments to our customer's complete satisfaction," said Henri Bussery, Managing Director for Alstom in Algeria.

The site at Velim is a closed test circuit, used to test trains in complete safety. The Coradia train will cover more than 30,000 kilometres, representing around 400 hours of dynamic testing, with dozens of repeated test steps. The tests will continue for 2.5 months. There will be four kinds of test: traction tests, brakes, safety and acoustic equipment. They will help to verify that Coradia's performances are in line with those stipulated by the SNTF in its contract specifications. A team of 14 Alstom engineers and technicians, six of whom will be permanently at the Velim site, will be mobilised during the test programme.

Over the last few months, the train has already undergone a variety of specific tests (static tests) to check its behaviour with regard to the local characteristics of Algeria, including sand tests, with the creation of a specific test bench where some train equipment (power pack, air conditioning...) was submitted to projections. Air conditioning tests were also carried out in the climate chamber at Alstom's site in La Rochelle to check the air conditioning's resistance to temperatures of up to 55°C and that of equipment exposed to the sun and extreme heat.
After Velim, the Coradia train will be transferred to the French test site at Bar-le-Duc where it will be used to train SNTF drivers and executives.

Present in Algeria with more than 300 employees, Alstom has provided integrated tramway systems to the cities of Algiers, Oran and Constantine, as well as infrastructure for the tramway systems of Ouargla, Mostaganem and Sétif.





ACTN consortium will complete the civil works for Cuenca Tram Project

The ACTN Consortium was selected to complete the civil works of the Cuenca Tram. It is composed of Alstom, CIM (Compagnie Internationale de Maintenance) and NGE Group (TSO and NGE contracting).

The Consortium will perform the construction of the workshop yard, the preparation of the road platform and the implementation of the technological systems (SIR) for the transportation of the low-voltage system.



“With over 35 years contributing to Ecuador´s infrastructure, Alstom continues to seek ways to provide modern and sustainable solutions to respond to the country’s transport needs. Alstom, with its partners, is dedicated to the successful completion of the Cuenca Tramway line. Looking further ahead, Alstom expects to expand its operations to provide the same high quality and efficient solutions to the rest of the country, in order to benefit the Ecuadorian population” said Ludovic D’Hauthuille,

Managing Director for North LAM at Alstom. “At CIM, we and our teams are very proud of this new international success, which further consolidates the expertise of our company in major railway infrastructure projects”, said Alain Lovambac, Chairman & Chief Executive Officer of CIM.

“We have been working closely with Alstom and CIM since the start of the Cuenca tram project. Today, the signing of this new project strengthens our partnership and will allow us to demonstrate our expertise in civil engineering as well as develop our global multi-expertise offer on the international market,” said Jean Bernadet, President of TSO and NGE Contracting.

After a thorough analysis of the different expressions of interest and proposals presented in this selection process, the Autonomous Municipal Decentralized Government of Cuenca, made the decision based on the Technical and Economic Report prepared by the Executive Unit of the Cuenca Tram Project. The contract process was carried out following the guidelines stated in the Organic Law of the National System of Public Contracting.

Alstom as leader of the group of companies named GME CITA, had been awarded in 2013 a contract to provide the integrated electromechanical tramway system including, electrification with a part in APS allowing catenary less operation in the UNESCO heritage city center of the city, power supply and 14 Citadis tramways. The

Alstom tram model supplied is the Citadis 302, which is of nearly 33 meters long and can transport around 300 passengers. They are fully equipped and feature low floor and wide doors, guaranteeing perfect accessibility, notably for passengers with reduced mobility.



Bombardier’s Joint Venture Completes Delivery of 184 New Generation High Speed Train Cars for China

The final trains will start service in December
A fleet of 23 eight-car CRH1A-A high speed trains, ordered in February and April 2017, are already increasing capacity in southern and western China
The total 184 train cars completed customer acceptance within eight months

Bombardier Transportation has announced that its Chinese joint venture, Bombardier Sifang (Qingdao) Transportation Ltd. (BST), has delivered 184 CRH1A-A new generation high speed train cars for two contracts with China Railway Corp. (CRC) for China’s evolving high speed rail network.

Jianwei Zhang, President of Bombardier China said, “We are very proud that our latest CRH1A-A trains are contributing to increasing connectivity across South China. With this delivery, Bombardier’s Chinese joint venture BST has delivered more than 3,500 high speed railway passenger cars to our Chinese customer, reflecting the strength of our technology and expertise.” He added, “We greatly appreciate the tremendous effort from our team, as well as the trust and support from our long term strategic partner CRC, in delivering this latest batch of trains on time and with maximum quality.”

The highly efficient CRH1A-A train cars previously delivered to CRC have performed with a high level of reliability. From the time the first CRH1A-A was put in service in November 2016, BST has succeeded in reaching an excellent performance in passenger service within twelve months. The newly delivered 72 train cars will increase potential transport capability to Guangzhou Bureau Group. The 184-car order was delivered in two stages: 112 cars for Phase 1 which entered passenger service in October; 72 cars for Phase 2 starting service from December 2017.



Now in total there are 87 CRH1A-A trainsets consisting of eight cars (five motor and three trailer cars) capable of running at 250 km/h in operation. Those trainsets run across China in the south of Guangdong province, on the east coast in FuJian province, on the tropical island of Hainan province and now in Guangxi and Guizhou Province.

Bombardier Transportation in China is the full solution provider across the entire value chain. From vehicles and propulsion to services and design, Bombardier Transportation in China has six joint ventures, seven wholly foreign-owned enterprises, and more than 7,000 employees. Together, the joint ventures have delivered more than 3,500 high speed railway passenger cars, 580 electric locomotives and over 2,000 metro cars to China’s growing urban mass transit markets.

Bombardier and Transnet Freight Rail Celebrate Handover of First TRAXX Locomotive Africa at Ceremony in Durban

Rail technology leader Bombardier Transportation and the South African State-Owned Enterprise Company Transnet have celebrated the handover and acceptance of the first of 240 BOMBARDIER TRAXX locomotives for freight traffic in South Africa. The handover event took place on December 7, 2017 at Transnet Engineering's assembly plant in Durban attended by dignitaries from Transnet, Government officials, suppliers and the media.

Aubrey Lekwane, Managing Director, Bombardier Transportation South Africa, said, "The handover and acceptance of the first TRAXX locomotive Africa is fantastic news. We are committed to South Africa through local production, a strong local supply chain, job creation and transfer of technology, in line with the latest localization and Broad-Based Black Economic Empowerment programme (B-BBEE) requirements. We are proud to say that from the first to the last, each TRAXX locomotive Africa for our important customer Transnet Freight Rail will be manufactured in South Africa."

In March 2014, Transnet Freight Rail awarded Bombardier Transportation the contract to supply 240 electric locomotives, part of the National Infrastructure Plan which includes the investment of €30 billion into the modernization of the national rail system. The locomotives will be used to transport coal and ore on long routes between mines, ports and urban areas. So far, 15 of the 240 electric multi-system locomotives have been completed and operation is expected to start on the Transnet Rail network at the beginning of 2018.

Over 60% of the total contract value of approximately 15 billion Rand (€933m, $1,099m) will be spent on locally manufactured material, components and services for the locomotives, and the supply chain involves around 90 South African companies. Bombardier's factory in Isando, Johannesburg produces the BOMBARDIER MITRAC high power propulsion equipment, the car bodies are produced by DCD in Boksburg. Transnet Engineering produces the bogies, and undertakes final assembly, commissioning and static testing in Durban. 140 Bombardier employees are currently involved in the production of the 240 locomotives, and in total, Bombardier Transportation has created 300 jobs in South Africa, supporting the Government's B-BBEE programme.



Bombardier has built more than 2000 TRAXX locomotives primarily for the European market. In South Africa, milestones include the delivery of 96 BOMBARDIER ELECTROSTAR vehicles for the Gautrain Rapid Rail Link rail mass transit in the Greater Johannesburg area, and the implementation of the BOMBARDIER INTERFLO 200 operations control system on several routes in the Greater Durban area.

Bombardier's Chinese Joint Venture Wins its First Monorail Contract in China

Strategic contract represents Bombardier's joint venture entry into the China Monorail market

Bombardier Transportation contributes to Chinese urban mass transit industry by providing green transportation systems with cutting edge technology

Rail technology leader Bombardier Transportation announced recently that the CRRC Puzhen Bombardier Transportation Systems Limited (PBTS), a joint venture (JV) between Bombardier Transportation and the Chinese CRRC Corporation Limited (CRRC), has been awarded its first monorail contract in China. The order is to provide the BOMBARDIER INNOVIA Monorail 300 platform, along with a total of 240 cars to Wuhu City in Anhui Province. The total contract is valued at approximately 1.785 billion CNY (229 million euro, $270 million US). Bombardier owns 50% of the shares in PBTS, which is consolidated by Bombardier Transportation's partner CRRC Nanjing Puzhen Limited.

Planned to open in 2020, the new 24-station, 30.3km Line 1 and the 12-station, 16.5km Line 2 Phase One, will be the first two monorail lines in Wuhu and will form the rail transportation backbone in the city. PBTS' scope under this contract will comprise the design, supply, Line 1 installation with 28, six-car trains and Line 2 Phase One installation with 18, four-car trains.

Jianwei Zhang, President of Bombardier China said, "We are very proud to have been selected by Wuhu city to provide our first, and the most modern monorail system in China. Medium capacity monorails are a highly-efficient and environmentally-friendly alternative to metros and Bombardier's experience, having delivered monorail technology for over 20 years including operating and maintaining these systems, was the core reason why Wuhu city chose our joint venture. This choice will ensure that Wuhu gets a reliable and green transportation system that better serves its passengers. We are confident that the monorail will become an icon for Wuhu city and we will see more Bombardier Monorail systems in other Chinese cities in the future."

Bombardier Transportation is the world's leading supplier of fully automated, driverless monorail systems. The INNOVIA Monorail 300 system is its latest evolution in medium capacity monorail technology. The combination of lightweight carbody design and other advanced system technologies results in substantial energy savings compared to other monorail and metro technologies. The INNOVIA Monorail 300 also brings futuristic aesthetics, spacious interiors and a smooth ride for passengers. Its inter-car walk through provides free passenger flow and enhances passenger safety, and its flexible seating arrangements permit optimization of the system to suit customer specific requirements. Fully automated driverless operation also allows for frequent, safe and reliable service, attracting more passengers and generating more revenue.





CAF TO SUPPLY 18 URBOS TRAMS TO LARSEN & TOUBRO IN THE MAURITIUS METRO EXPRESS PROJECT

CAF has signed a contract exceeding € 100 million for the supply of 18 Urbos Trams with Larsen & Toubro Limited, India which is executing a 26 km Integrated Light Rail Transit System (circa € 450 m) in the Republic of Mauritius.

CAF's scope of supply includes 18 bi-directional 100% low-floor trams comprising 7 modules each, signalling system, automatic vehicle location system (AVLS), transit signal priority system (TSPS), depot equipment and a driving simulator.

This is a turnkey project in the Republic of Mauritius, the south-west Indian Ocean island, which lies some 900 kilometres from Madagascar and approximately 3,800 kilometres apart from the southern tip of India. This investment is the result of the country's ongoing development policies, aimed at boosting the modernisation of transport infrastructures and services.

The 26 km route connects five major cities in Mauritius (Curepipe, Vacoas, Rose Hill, Quatre Bornes and the capital Port Louis) covering an area inhabited by circa 600,000 people, with 19 stations, 2 of which will be state-of-the-art elevated stations. The project is scheduled for completion within 48 months, with the first phase of 13 km to be completed within 24 months

This new contract endorses CAF's good year in terms of order intake, as it brings the volume of incoming orders in 2017 around €1,500 million. Outstanding among these are orders abroad in countries such as Sweden, Belgium, Holland, Italy, United States, Philippines, United Kingdom and New Zealand.



Alstom and the Iraqi government sign a Memorandum of Understanding for the development of urban transport

Alstom has signed a Memorandum of Understanding (MoU) with Iraqi government for the development of urban transport in Baghdad and Basra. The MoU was signed during the Franco-Iraqi government authorities meeting, in the presence of Dr.Sami Al Araji, Head of National Investment Committee of Iraq and Jean-Baptiste Lemoyne, French Secretary of State.

The MoU covers two major projects. The first project is to implement a 20 km Elevated Train in Baghdad, with the supply of rolling stock, electromechanical systems, tracks, associated civil works. The light rail system would link Al-Mustansirya, AlShab, Al-Wazyria, Alsarafia AlEtafia bridge, Al-Khadumia, AlMuthana airport and Al-Alawi.

The second project focuses on the development of the Metro System in Basra, which consists of two elevated lines of approximately 30km each, 15 stations and one depot for each line from North to South, from Zubair to Shat Alarab and from East to West, from Karma to the Desert.

These projects would significantly contribute to the development of the country's urban infrastructure and national economy.

"We appreciate the opportunity to develop industrial cooperation with the Republic of Iraq, in order to better address the country's needs for urban transportation. Alstom is ready to bring its innovative technologies and sees the signature of this MoU as a first step towards the development of a long-term partnership with Iraq", said Bernard Peille, Managing Director of Alstom in Western & Central Asia.

Alstom is already well established in the Middle East & Africa Region with more than 3,800 employees, 1,800 suppliers and present in more than 15 countries in the region with offices and joint-ventures in Algeria, Morocco, South Africa and Kazakhstan.



Alstom to provide signalling and electrification works in the rehabilitation of Ilteu-Gurasada rail subsection in Romania

Alstom will perform works amounting to approximately €40M for the Ilteu-Gurasada rail subsection, within the contract for railway modernisation, recently signed by CFR SA and Asocierea RailWorks consortium of which Alstom is a part. The completion deadline is December 2020. The rail subsection (2c) Cap Y Ilteu – Gurasada is located on the northern branch of the Rhine-Danube Corridor, linking Nuremberg-Prague-Vienna-Budapest-Curtici-Simeria-Brasov-Bucharest-Constanta.

The contract covers the modernization of 22.34 km of railway infrastructure for passenger trains operation at a maximum speed of 160 km/h, the civil works, the electrification and power supply works, as well as the signalling implementation works. Alstom being responsible for the last two tasks within the consortium. For the signalling, Alstom will supply its ATLAS 200 ERTMS Level 2 train control solution and the interlockings and will implement the GSM-R telecommunications system.

"This contract strengthens Alstom's leading position on the Romanian market, both for railway signaling and electrification. I am very happy to see that the modernisation of Romanian railway lines progresses and Alstom continues to be actively involved in it. Alstom teams are going to implement ERTMS Level 2 signalling systems, including GSM-R and electronic interlocking, as well as electrification – feed lines and traction substation on this rail subsection," said Gabriel Stanciu, Alstom General Manager for Romania, Bulgaria and the Republic of Moldova.
"The project comes at the right time, when another similar project, carried out for the Micasasa-Coslariu rail section, is coming to an end. This new contract will ensure continuity of activities in the area and the highly effective implementation of the new project, which can start immediately", added Gabriel Stanciu.
Alstom has been present in Romania for over 20 years, and holds leadership positions in both the signaling and electrification markets in Romania. Moreover, the company currently has five national ongoing railway rehabilitation and modernisation projects and a 15-year maintenance contract for the metro of Bucharest.







From the UK

A look back at 2017

Well it's that time of the year once again when we look back at some of the happenings on the UK rail network over the last 12 months. Will 2017 be remembered as the year of the introduction of the IEPs, signalling the beginning of the end for the HSTs on many routes.

To celebrate over 111 years since first servicing trains on 17 March 1906, GWR unlocked the doors of Old Oak Common Depot for members of the public. *Steve Thompson*

In August, due to a shortage of XC power cars, hired in VTEC liveried No. 43305 leads 43207 on 1S51 Plymouth - Glasgow through Dawlish, the previous day an EMT power car was utilised. *Steve Thompson*

One of the many IEP test runs on the East Coast main line during 2017 sees Great Western's Class 800 008 and 800 009 passing Hambleton Jct. *Neil Scarlett*

From the UK

Following the re-opening of the Settle to Carlisle line after rebuilding due to flood damage, the first timetabled ordinary main line passenger steam trains to run in England for 50 years were the result of a pioneering modern and heritage industry alliance, formed to help revive the economic fortunes of the beleaguered S&C as well as the towns and villages that it serves. Here A1 No. 60163 'Tornado' and Class 67 029 pass Helwith with one such service in February. *Gerald Nicholl*

Was this the working of the year? After featuring at the Knottingley open day on October 28th, the following day Deltic Class D9009 'Alycidon' hauled a Class 66 and set of hoppers as 15:32 Milford West Sidings to Neville Hill Up Sidings. *Andy*

SNCF 2D2 No. 5406 sits on Bordeaux shed on February 25th 1991.
John Sloane

OBB Class 1180.01 stands at Landeck on March 23rd 1975 with a local service. *John Sloane*