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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**

SNCF BB No. 67443 works train No. IC3831 through Gauriaguet on June 13th.

Thomas Niederl

### **This Page**

On June 16th, Czech steam loco No. 464.202 arrives into Ceska Trebova with a tour from Lethorad. *Class47* 

### **Next Page**

SNCF Fret BB No. 427039 passes Dijon Ville hauling a southbound freight on May 12th. *John Sloane* 







# Welcome

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

Well what a month it has been, as I have been caught up in some massive rail disruption in Europe, but I am very pleased to report that all the train companies concerned handled the event with great efficiency, and kept passengers fully informed at all times even providing overnight accommodation for those that couldn't get to their destination as delayed trains arrived too late to make connecting services. Great to see that co-operation between national operators worked very well and personally for me a huge thanks to Deutsche Bahn and Eurostar for getting me home on replacement services. Sad to say, but I think if similar disruption happened in the UK, we would just either tell passengers not to travel or replace all services with coaches.

A huge congratulations to Siemens this month for their continuing success of the Vectron with orders now over the 500 mark.

Also this month in Denmark, national operator DSB has reached an agreement to sell 15 of its 23 AnsaldoBreda IC2 diesel multiple-units. The two-car DMUs were withdrawn from service last year after a troubled history.



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Andrew Wilson and Erik de Zeeuw.



DSB is selling the DMUs 'as is' with no warranty and their Director of Strategy & Rolling Stock Jürgen Müller said the foreign buyer did not wish to be identified and he could not disclose the price, but he was pleased that the sale of the units had happened relatively quickly. Another of the IC2 units has been acquired by the national railway museum.

Moving slightly further afield and in Russia, Russian Railways has decided to order a new batch of 'Platskartny' coaches, its most basic style of long-distance rolling stock.
RZD had been concerned that the openplan dormitory-style accommodation in the third class cars was no longer attractive to passengers, and had been considering only ordering sleeping cars with compartments in the future. However in response to public demand for the traditional style of coach it has now ordered 232 'Platskartny' vehicles of an updated design from Transmashholding's Tver carriage workshops.

Back in the UK and this months 'From the UK' is the recent Llangollen Railway's DMU gala.

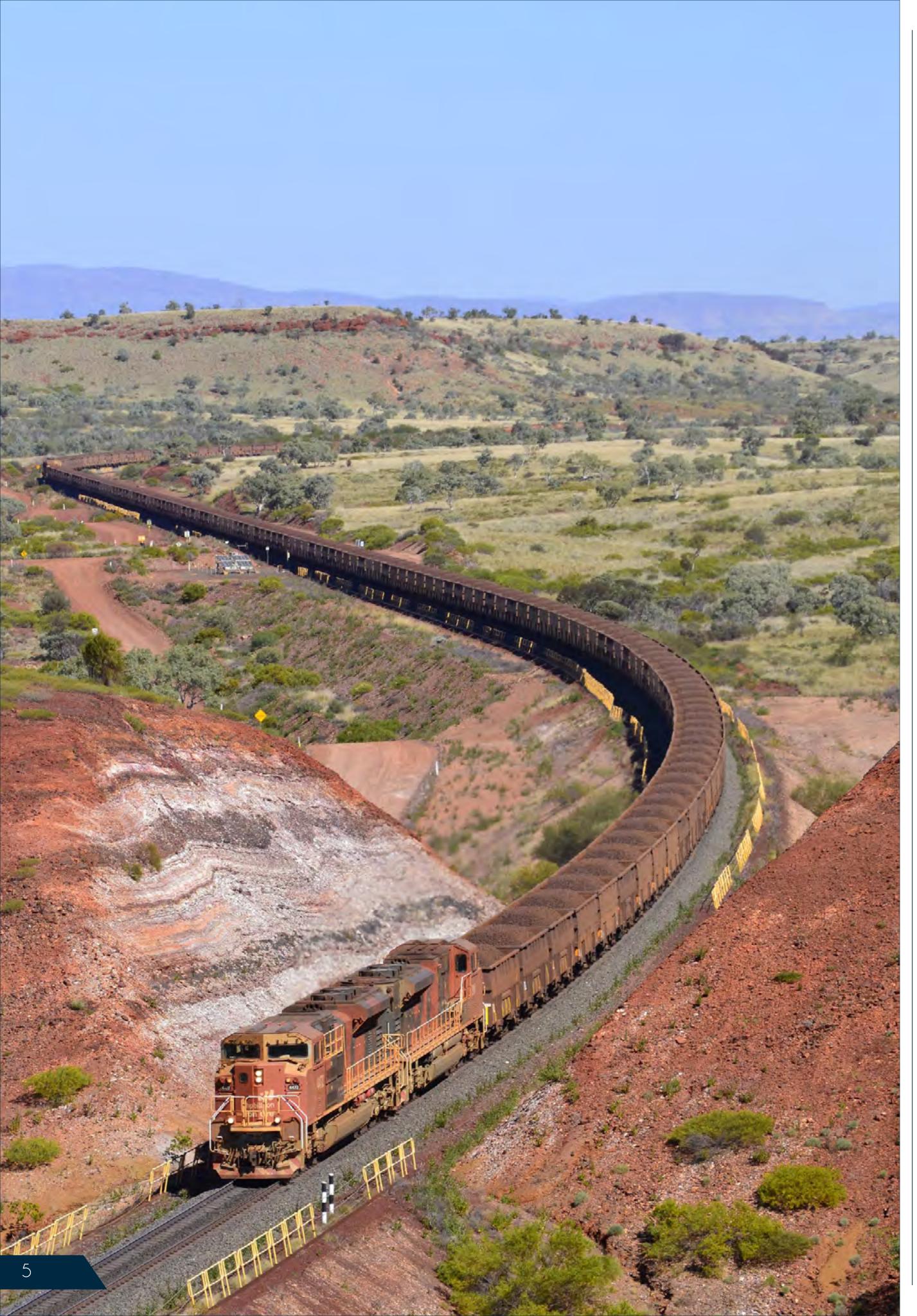
As always thanks for all the excellent photos, please keep sending them in, and remember if you are going on holiday, don't forget to take your camera.

David Editor









# Alstom's Ballarat Workshops celebrate 100 years of railway manufacturing excellence

Alstom's Ballarat workshops recently celebrated its long and proud history in the manufacturing of rolling stock for the Victorian rail network. The site was opened in April 1917 by the main rail operator in Victoria of the time, the Victorian Railways, in response to political pressures from provincial groups for decentralisation of manufacturing from Melbourne to regional areas within the state.

With the breakup of the Victorian Railways in the 1980's, the workshops passed to the State Transport Authority and then the Public Transport Corporation. With later privatisation, the workshops were purchased by Alstom Australia in 1999. Since taking over the site in 1999, Alstom has received orders from the State of Victoria for a total 101 six-car X'Trapolis trains (606 carriages,) making it one of the largest fleet of trains in Australia.

"The Ballarat site is an integral part of railway manufacturing in Victoria and has become the cornerstone of Alstom's industrial base in Australia. The site holds significant importance to our business and we are proud to have delivered Australia's largest fleet of trains from the site." said Mark Coxon, Managing Director for Alstom in Australia. The fleet of Alstom X'Trapolis trains, proudly manufactured in Ballart, have proven to be the most reliable trains on the Melbourne network - enhancing the network's capacity while also increasing the reliability of the entire system. The 145 metre trains have been designed to optimise the capacity (1430 passengers) whilst maximising passenger experience, comfort and safety.

The workshops have been a significant employer over the years, often employing generations of families that have resulted in parents and their children working side by side. The site has also seen the support and development of many apprentices into trade professionals while also supporting a significant local supplier base.

"Alstom is committed to manufacturing trains in Victoria for Victoria, ensuring the transfer of technology, supporting local jobs and developing skills. This commitment can only be met with a rolling stock workload that provides a sustainable long term operation. We look forward to continuing to work closely with the Victorian Government to establish a long term plan for the site - well beyond the end of the current build in late 2018" said Mr Coxon.





Aloaded BHP iron or etrain climbs the Chichester Ranges, about 220kms south of Port Hedland hauled by SD70s Nos. 4472 and 4398, with Nos. 4447 and 4374 midtrain. *Mark Bennett* 





# Austria

On March 31st, OBB Class 1142.601 stands at Wien Spittelau working the 15:04 Wien Franz Josefs to Krems a. d. Donau service. FrontCompVids

## Rail Cargo Operator connects Verona and Arad

# New service from the intermodal railway logistics specialist ensures an optimum rail connection

Rail Cargo Operator is continuing to expand its customer offer in Europe and beyond. As part of its implementation of customised transport and logistics solutions, Rail Cargo Operator will in the future offer its customers a new return service between northern Italy and Romania, running three times each week. The intermodal rail connection between Verona and Arad commenced on June 19, 2017 and thus inaugurated an intermodal corridor that has so far barely been linked.

### Expansion of the Rail Cargo Operator network is entering the next phase

The large flows of goods between the important Northern Italian industrial region and Romania are still predominantly transported by road. Yet it is precisely for these routes that intermodal transport offers huge potential, as the advantages of rail can be optimally used.

Thanks to its competitive journey time between the Interporto Quadrante Europa

di Verona terminal and the Railport in Arad, together with optimum times for availability and closing of cargo and a corresponding pricing structure, the new RCO rail service offers an attractive rail alternative for all combined transport containers. All container types, tanks, swap bodies and (mega)trailers can be transported.

Starting on June 19 with three weekly departures in each direction, Rail Cargo Operator will thus offer the only open train system for intermodal consignments between Northern Italy and Romania. On the 1,109 km long route between Verona and Arad, the trains travel through five European countries – in an unbeatable journey time of less than 40 hours. The market demand before operation begins has shown that the service is going to be popular. As a result of the high level of bookings in the run-up to operation, Rail Cargo Operator is already working on increasing the number of round trips. In other words, depending on market demand, the departure frequency may shortly be increased to five round trips per week.







- On March 27th, OBB Class 1144.105 stands at Bischofshofen with the 07:45 Graz - Salzburg Hbf 'City Shuttle' service. FrontCompVids
- OBB's Class 2016.060 stands at Braunau am Inn on March 30th. FrontCompVids
- On March 27th, Class 1142.636 stands at Liezen working the 08:57 service to Selzthal. FrontCompVids























# Trams on tracks

From 16th to 19th May 2017, ČD Cargo trains were transporting from Krnov to Prague a modernized T3R.PLF tram from the Pragoimex company. The carriage was carried out by conventional train formation, but using a special technical solution using the front ramp with rails in Prague-Zličín station. This seemingly simple solution, however, faced a major pitfall, namely the unavailability of a railway car equipped with rail for transporting the tramway and, above all, its sliding on ramp rails. Consequently, the transport company came up with an interesting idea, which was finally realized. On the floor of the low-wall wagon of the Res series were laid old BKV panels with grooved rails, which simply created the necessary runway. The car was equipped with these panels in Prague and then sent for loading to the machine shops in Krnov.

The tram was brought to Prague-Zličín on May 19th on the Mn 85020 train, the unloading itself took place in the morning hours of the same day. Two common

tram cars were assisted by unloading - the two-way car KT8D5.RN2P of number 9070 secured its own withdrawal of the new tram from the railway car to the "solid ground" and its dropping into the loop. Here, after the change of direction, the new car was pulled up behind the car T3R.P 8550, which transported a new tram to the nearby Motol carriage, where it was revived and put into operation.



The siding of the Transport Company of the city of Liberec and Jablonec nad Nisou comes to life several times a year by transporting the sand to the trams. This year, however, there were also three Res series cars loaded with rails destined for the reconstruction of tram routes in Romanian streets. Cars were put on siding on Friday, May 26, 2017.

After unloading, one of the Res wagons was unusually used to transport a tram damaged by accident to the repair shop in Krnov. After repairs, the tram will be transported with ČD Cargo back to Liberec.

Photo: © CD Cargo



CD Cargo's Class 731.012 pushes empty coal wagons into the mine at Trebusice. Mark Enderby























- RM Lines's Class 121.007 leads 742.205 through Vsetaty on June 13th, heading towards Nymburk. *Paul Godding*
- On hire from Railpool, IDS Cargo's Class 186.435 heads through the station at Breclav on June 12th. *Paul Godding*
- On June 13th, CD Cargo's Class 130.040 heads south along the river at Usti nad Labem Strekov hauling a rake of empty car carriers.

  Paul Godding













On June 15th, Slovakian Class 751 No. T478.2069 speeds through Velky Osek with a 'Cycloexpress', heading towards Turnov. *Class47* 

# Transport of two new transformers from Austria to Mikułowa in Poland

From June 5th to 7th, ČD Cargo transported two transformers manufactured by Siemens in Austria for the Polish substation in Mikułowa, which lies near the border with the Czech Republic north of the Jizera Mountains.

The Transformers were transported across the Czech Republic via Břeclav st.hr. - Bohumín - Vrbice st.hr., each with a special train, and each led by one Class 742 locomotive. Both trains crossed the Czech section with two "night jumps" from 5th to 6th June and from 6th to 7th June.

The origin station was Weiz in Austria and the destination was Mikułowa in Poland. Both transformers are designed for the 400/220/110 kV substation, which is undergoing extensive reconstruction and modernization to parts of all three voltage levels.

The picture shows the train No. 90010 with locomotive Class 742.262 before departure on June 5th from Břeclav, behind it is hidden second train No. 90000 with locomotive No. 742.090.

Photo: © CD Cargo













- CD 'City Frog' Class 451 025/451 026 departs Beroun with a service to Praha hl.n. during the PID event on June 16th. *Class47*
- Also at Beroun for the event was unit No. M262.1212 seen here shortly before departure towards Zdice. *Class47*
- On June 16th, having only recently retired from CD duties, Class 749.006 found itself back at Praha working services to Beroun for the PID event held there. *Class47*

















Alstom's Citadis Dualis tram-trains have commenced service on the section of the T11 Express line that runs between Epinay-sur-Seine and Le Bourget. The first Citadis Dualis was delivered to SNCF Mobilités for Ile-de-France in August 2016 followed by a delivery rate of one train per month, making it possible to carry out tests progressively.

Designed based on Alstom's Citadis tram, the Citadis Dualis tram-train can run on a tramway network just as easily as on a regional rail network thanks to adaptations related to power, safety and comfort. This configuration makes it a highly versatile means of transport: it has the same dimensions as a tram, meaning it can circulate in town, while its performance, the same as that of a train, allows it to transport passengers at speeds of nearly 100 km / h in outlying areas without the need to switch transport modes. Citadis Dualis provides the link between the city centre and the suburbs without having to change trains, reconciling the advantages of the train and the tram.

"Alstom's teams are very proud of the entry into commercial service of this new versatile mode of transport for SNCF and the STIF. In particular, we worked on increasing reliability to meet operational constraints in Ile-de-France," says Jean-Baptiste Eyméoud, President of Alstom in France.

48 Citadis Dualis tram-trains are in operation to date: 24 in the Rhône-Alpes region to the West of Lyon since 2012 and 24 in Pays-de-la-Loire, which entered commercial service on the Nantes-Clisson and Nantes-Châteaubriant lines in June 2011 and February 2014 respectively. The trains ordered for Ile-de-France are currently being manufactured in Valenciennes. Five other French Alstom sites are involved in the manufacturing process: Ornans for the motors, Le Creusot for the bogies, Tarbes for the traction drive equipment, Villeurbanne for the on-board electronics and passenger information systems, and Saint-Ouen for the design.







SNCF diesel BB No. 67526 is seen stabled at Dijon Perrigny Depot on May 13th. *John Sloane* 











Alstom has delivered the new generation of Euroduplex train sets to SNCF Mobilités in time for the commercial launch of the new Océane line between Paris and Bordeaux on 2 July 2017. The new trains incorporate a number of innovations, both in terms of interior design and equipment, to provide passengers with an unprecedented travel experience.

Euroduplex, a double-deck train from Alstom's Avelia high-speed train range, is a solution unparalleled in today's high-speed market, demonstrating French excellence in this field. With higher capacity (556 seats instead of 509), the interiors of the Océane cars have been redesigned. The train has 4 seats for people with reduced mobility, a new passenger information system, new information screens providing updates on the journey in real time, and a space for storing bicycles.

Passengers have been placed at the heart of the development of this new train, with the

emphasis on onboard mobility, comfort and leisure. New materials (wood) and new colours have been used to create a warm atmosphere. Special attention has been paid to indoor spaces and fixtures to increase their accessibility. The train is also pre-equipped to provide onboard internet access (wifi). Everything is designed to make Euroduplex a comfortable, accessible and connected train.

The seats are designed to offer maximum comfort to passengers: enhanced comfort, new seating positions, ergonomic seating, universally adaptable head and armrests. An innovative system allows first-class seats to rotate 180° so that passengers can face the direction of travel. As surface coverings and cladding have a direct effect on ergonomics and comfort,

Alstom has paid particular attention to the choice of materials and the quality of their development.

Last but not least, the buffet car has been completely redesigned to let in more light thanks to a more open counter, a brand new space for the provision of in-seat catering and a configuration that provides the possibility of installing an automatic vending machine.

"This new train has a lot of advantages for rail operators: with improved comfort levels, it has greater capacity in comparison with an equivalent train, thus reducing the cost per seat. A new air conditioning system and an improvement to the train's aerodynamics make it possible to optimise energy consumption, thus preserving the environment and reducing operating costs," said Jean-Baptiste Eyméoud, President of Alstom in France.







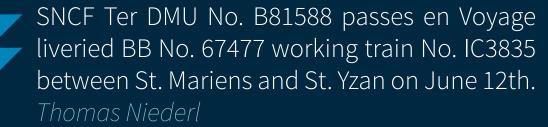
A new Alstom 'Regiolis' 4 car EMU, No. 51577M arrives into Dijon on May 11th. *John Sloane* 











Ter DMU No. B81587 heads along the line between St. Mary's and St. Yzan on June 12th. *Thomas Niederl* 

As of July 2nd, the new line 'LGV Sud Europe Atlantique' will be opened. In the course of this, extensive changes in the timetable will come into force at SNCF. This also applies to the Intercité line Bordeaux - St. Jean-Nantes which is currently still being driven with Dieselloks series BB67400 and Corail cars. A particular highlight is the bridge "Pont ferroviaire de Cubzac" not far from Bordeaux, which is the ideal setting for train No. IC3842 with loco No. 67441 at the helm on June 13th. *Thomas Niederl* 









# Bombardier to Supply 83 Additional Regio 2N Double-Deck Trains to Île-de-France

Île-de-France passengers to have a fleet of 125 new Regio 2N on lines R, N & D

Extra-wide, articulated suburban trains which combine seating capacity, accessibility, and comfort

Rail technology leader Bombardier Transportation has received an order for 83 Regio 2N train sets from the French National Railway Corporation, Société nationale des chemins de fer français (SNCF) on behalf of the Paris public transport authority, Syndicat des Transports d'Ilede-France (STIF). This call off is valued at approximately 867 million euro (\$968 million US), and includes price escalations based on best faith assessment of assumptions. These new trains, entirely financed by the STIF, are planned to enter service at the end of 2019 on Line N leaving from Paris Montparnasse Station as well as on portions of the RER D line.

Valérie Pécresse, President of the Ile-de-France Region, announced her intention to order additional Regio 2N when visiting Bombardier's Crespin site in February. During the site tour, she was introduced to the train's colourful interior design as well as the train's specific features tailored to meet the needs of Paris' suburban network: accessibility at all stations, uncluttered onboard access platforms enhancing passenger flow to seating areas, air conditioning, a dynamic travel information system and power plugs to recharge passengers' mobile devices.

"Based on our successful BOMBARDIER OMNEO double deck platform, each Regio 2N offers space for 1,000 passengers, translating into more comfort and seating capacity for the busy commuter lines in the Île-de-France Region. It also

represents a great benefit to Crespin site, the Hauts-de-France Region and the French rail industry", stated Laurent Bouyer, President of Bombardier Transport France.

With this order for these 83 additional Regio 2N and the previous order of 42 Regio 2N for the line R placed in December 2014, the STIF will have a substantial fleet of 125 Regio 2N and will benefit fully from the operating and maintenance cost optimization of the OMNEO platform. To date, ten French regions have ordered a total of 341 OMNEO/Regio 2N trains under a contract signed in 2010 with SNCF on behalf of the regions for a maximum of 860 trains. The OMNEO platform offers trains for suburban, regional and intercity services. Orders per region are as follows: 40 OMNEO Premium intercity trains for Normandy and 301 Regio 2N for Auvergne-Rhône-Alpes (40), Brittany (26), Centre-Val de Loire (14), Hauts-de-France (25), Île-de-France (125), Nouvelle Aquitaine (24), Occitanie (18), Pays-de-la-Loire (13), Provence-Alpes-Côte d'Azur



SNCF Ter Bougogne Bi-mode unit No. 81565 has just arrived at Dijon Ville on May 11th. John Sloane





Alstom has been chosen by Akiem to carry out the mid-life overhaul of 23 BB 36000 locomotives. The contract follows a first agreement signed at the end of April 2016 for the mid-life overhaul of 7 locomotives of the same type, operated in Morocco. The BB 36 000 locomotives were designed and manufactured at the Belfort site and entered service in 1996. With this new contract Alstom accompanies its customer Akiem in extending the life and commercial operation of the locomotives by about 15 years. These operations are worth 20 million euros.

The maintenance work covers overhauls to be carried out after 20 years, including bogie overhauls, obsolescence monitoring, the repair of parts and modernisation of driver's cabins. The operations will be carried out by the Services team at Alstom's Belfort site with the contribution of Alstom's service centres in le Creusot (for the bogies), Ornans (for the traction motors), Tarbes (for the traction drive) and Villeurbanne (for the electronics). As part of the first firm order, a first locomotive is currently in production in Belfort. This new contract will ensure continuity of production, with the last BB 36000 scheduled to be delivered to Akiem by 2024 at the latest.

According to Fabien Rochefort, President of Akiem group: "This technical and industrial collaboration with Alstom has allowed us to define a programme of overhauls in line with our commercial ambitions for this fleet, which we intend to deploy in France as well as in the France-Italy and central European corridors".

"The mid-life overhaul of this fleet of 23 additional locomotives will allow us to pursue the development of the Services activity at Belfort, as well as our investment

and skills development plan," said Jean-Baptiste Eyméoud, President of Alstom in France. The Services activity at the Belfort site currently employs more than 50 people and focuses

on the following 4 activities: operational maintenance of locomotives, accident repair for all types of trains, mid-life locomotive maintenance, and the application of modifications during the warranty period. Thanks to its team of engineers, the Belfort Services department has become the leading French provider of private maintenance of ECMcertified locomotives



(Entity in Charge of Maintenance, in line with EU regulation 445/2011) for all four functions (supervision, development, fleet management and execution).

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SNCF Infra liveried No. 675091 approaches Dijon on May 11th with an engineers working. John Sloane

# Alstom delivers the 200th Coradia Polyvalent train, produced in Reichshoffen, to the Grand Est Region, in France

Philippe Richert, President of the Grand Est region, former Minister, Mathias Emmerich, Executive Vice President Performance for SNCF Mobilités, and Jean-Baptiste Eyméoud, President of Alstom in France, celebrated the production of the 200th Coradia Polyvalent train for Regiolis at the site of Reichshoffen. The 200th train was delivered on 10th June and is one of the 34 trains ordered by the Grand Est Region to date.

After 3 years of operation, the total fleet of Coradia Polyvalent trains delivered to date has travelled more than 27 million kilometres, with a level of reliability that surpasses the objectives defined with SNCF. The 30 Grand Est Regiolis trains currently in commercial operation have travelled more than 5 million kilometres.

Since 2009, the Grand Est region has ordered 34 Regiolis trains worth over €300 million: 24 suburban trains (TER Alsace) and 10 regional trains (TER Lorraine). By 1 January 2018, this fleet will be extended with 19 trains of the same type, called Coradia Liner, resulting from the

transfer of the Paris - Troyes - Belfort - Mulhouse Intercity line. The Grand Est Region will thus be in possession of the largest fleet of all the new Regions.

During the event, Philippe Richert announced that the Grand Est Region would place a firm order for at least 10 Regiolis at the end of 2017. This could be supplemented by 15-20 additional units in 2018, including 15 crossborder trains running between France and Germany, for which the Grand Est Region is currently funding a feasibility study. He also confirmed the support of the Grand Est Region for the research projects carried out by Alstom and SNCF for more energy-efficient trains.

"We are very pleased to celebrate today, alongside SNCF and Alstom, the production of the 200th Regiolis train to be delivered this Saturday. The development of the

region requires the mobility of our citizens, which is why we are committed to developing this multimodal network by investing in high-performance equipment. Our collaboration with Alstom and SNCF, particularly in the context of a study for energy-efficient trains, will also allow us to be even more respectful of the environment, which is essential for us in the context of global warming," said Philippe Richert, President of the Grand Est Region, former Minister.

"The 200th train constitutes an important event for the Reichshoffen site as well as being the symbol of French industrial excellence at the service of French Regions and SNCF. These future orders announced by the Grand Est Region are a sign of confidence and excellent news for the site," said Jean-Baptiste Eyméoud, President of Alstom in France.











- SNCFRER Transilien No. 807606 departs Viroflay Rive Gauche with an outer suburban train on May 18th. *John Sloane*
- SNCF Ter DMU No. X76708 in Champagne-Ardenne region livery is seen departing Dijon on May 11th. *John Sloane*







### Bremen orders new tram fleet from Siemens

The German operator Bremer Straßenbahn AG (BSAG) has ordered 67 Avenio trams from Siemens. The order includes an option for up to 17 additional trams. The four-section trains will begin service in Bremen's tram network step by step beginning in spring of 2019. The city's network is comprised of seven lines with 163 stations and has a total length of 79 kilometres. The Avenios will replace the GT8N-series trams currently in service and will have the type designation GT8N-2.

"Modern, comfortable, reliable, durable and naturally barrier-free – that's the new tram for everyone in Bremen," said of BSAG board spokesman Hajo Müller. "Today's signing of the contract marks a milestone for mass transit in Bremen and the surrounding region. The Avenio



is the ideal tram for Bremen's community. With its spacious interior, wireless Internet access and information system with double monitors, it fulfils all the demands for comfort and quality that we and our riders expect of a modern tram."

"Following Munich, The Hague and Doha, Bremen is now the fourth city we are supplying with the Avenio. Our modular design ensures that the Avenio can be tailored to each city's particular needs and can also be flexibly used in a demanding infrastructure," said Jochen Eickholt, CEO of Siemens Mobility.

The Avenio can clearly be identified as a new member of the BSAG fleet: It features the company's signature bright red paint and references to the linear design and the BSAG logo used on earlier trams. The interior design allows speedy boarding and alighting, shortening stops at the stations. A reflector strip runs along the exterior of the Avenio and is interrupted at the doors. The automatic door openers are marked with striking LED lighting that recalls the BSAG logo and are easy to spot in the dark and by those with impaired eyesight. Riders can quickly and easily move from the entry areas along the level aisle to available seats and standing room throughout the train. The four-section modules form a single, spacious interior. Large windows and LED lighting provide pleasant lighting conditions.

Riders with reduced mobility in wheelchairs or with walkers have spacious areas available at the entrances with convenient seating or room for parking. An electric lift at the second door operates a complete section of the floor. Bicycles and baby strollers can also be parked in the multifunctional areas near the doors. A color-coded guidance system provides additional orientation assistance for visually impaired riders. An air conditioning system ensures a pleasant, draught-free interior atmosphere throughout the year. The tram is up to 90-percent recyclable. The Avenio uses a large part of its recovered braking energy for heating or feeds it back into the power grid. The tram uses energy-saving LED lighting exclusively.

VAG Frieburg tram No. 228 heads through Freiburg on June 12th working a line No. 1 service to Landwasser. *Alan Rigby* 







### Munich-Allach plant wins order for 500th electric Vectron locomotive

Additional eight Vectron locomotives for European Locomotive Leasing (ELL)

ELL is currently the biggest Vectron customer

507 locomotives have been ordered to date

Siemens has sold its 500th electric Vectron locomotive. The jubilee locomotive was ordered by European Locomotive Leasing (ELL), a provider of full-service leasing of locomotives and currently the biggest Vectron customer. The follow-up order from ELL is for eight multisystem locomotives that will be leased to the Czech railway carrier České Dráhy for passenger service on the Prague-Berlin route. A total of 507 electric Vectron locomotives have been ordered to date.

"This milestone highlights the success story and reliable service of our Vectron locomotives throughout Europe. We've already convinced 31 customers in 14 countries with our flexible platform and customer-tailored equipment packages," said Jochen Eickholt, CEO of Siemens Mobility Division.

The Vectron fleet has accumulated more than 75 million kilometres of service so far. The locomotives are currently certified for operation in Austria, Bulgaria, Croatia, the Czech Republic, Finland, Germany, Hungary, Italy, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland and Turkey.



DVB Dresden tram No. 2593 working a line No.
 9 service to Prohlis, calls at Theaterplatz.
 Steamsounds

















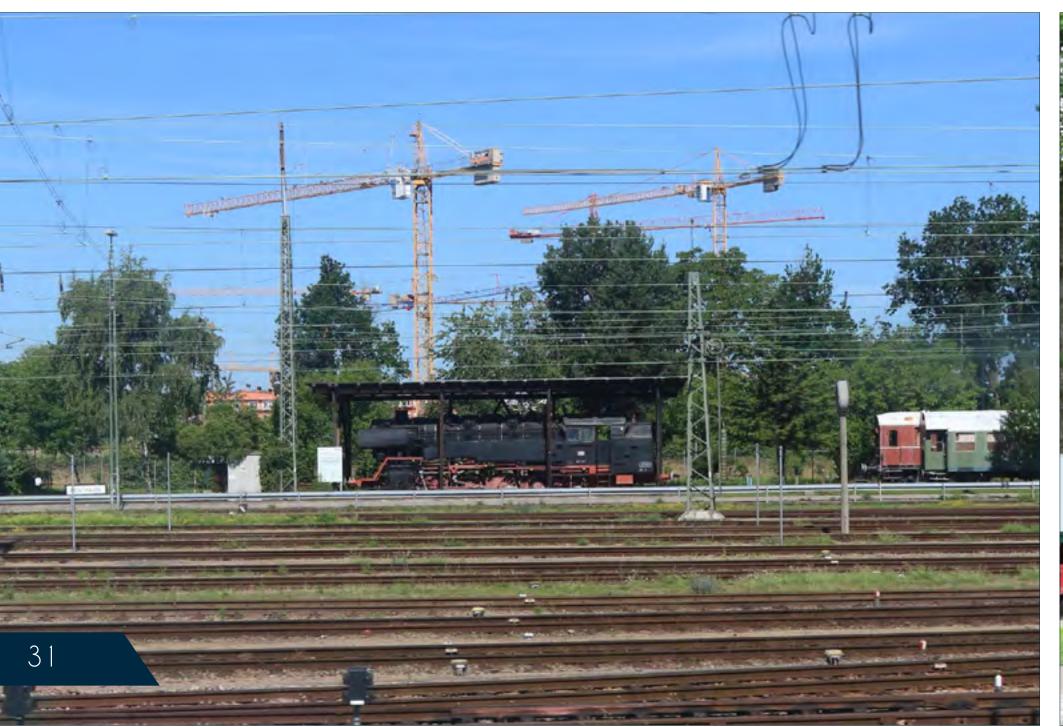








- DB No. 262BB runs round its train at Blumberg Zolhaus. *Alan Rigby*
- DR No. 50.245 is seen on static display outside Triberg station. *Alan Rigby*
- DB No. 85.007 was built in 1932-33 and was used by the Deutsche Reichsbahn. All of the locos in this class were stabled in Freiburg, and were originally to be used for passenger trains as well as goods trains, but were also employed as pusher locomotives on the Hllentalbahn in the Black Forest. All locos but one were running in the Black Forest until 1961. This loco is stored un-operational, and is housed in the former locomotive shed. *Alan Rigby*



































- Centralbahn's ex-SBB RE 4/4 I No. 10019 arrives at Köln Hbf with a Sonderzug on May 5th.

  Steamsounds
- DB Class 218.417 departs Ulm Hbf with train No. IRE4225 to Lindau Hbf. *Steamsounds*
- DB Class 146.236 is seen backing onto its train at Freiberg, working a RE service to Basel Bad Bf. *Alan Rigby*











DB Class 218.326 stands at Augsburg with train No. IC2084 from Oberstdorf to Hamburg Altona, waiting to attach coaches from München Hbf. *Steamsounds* 



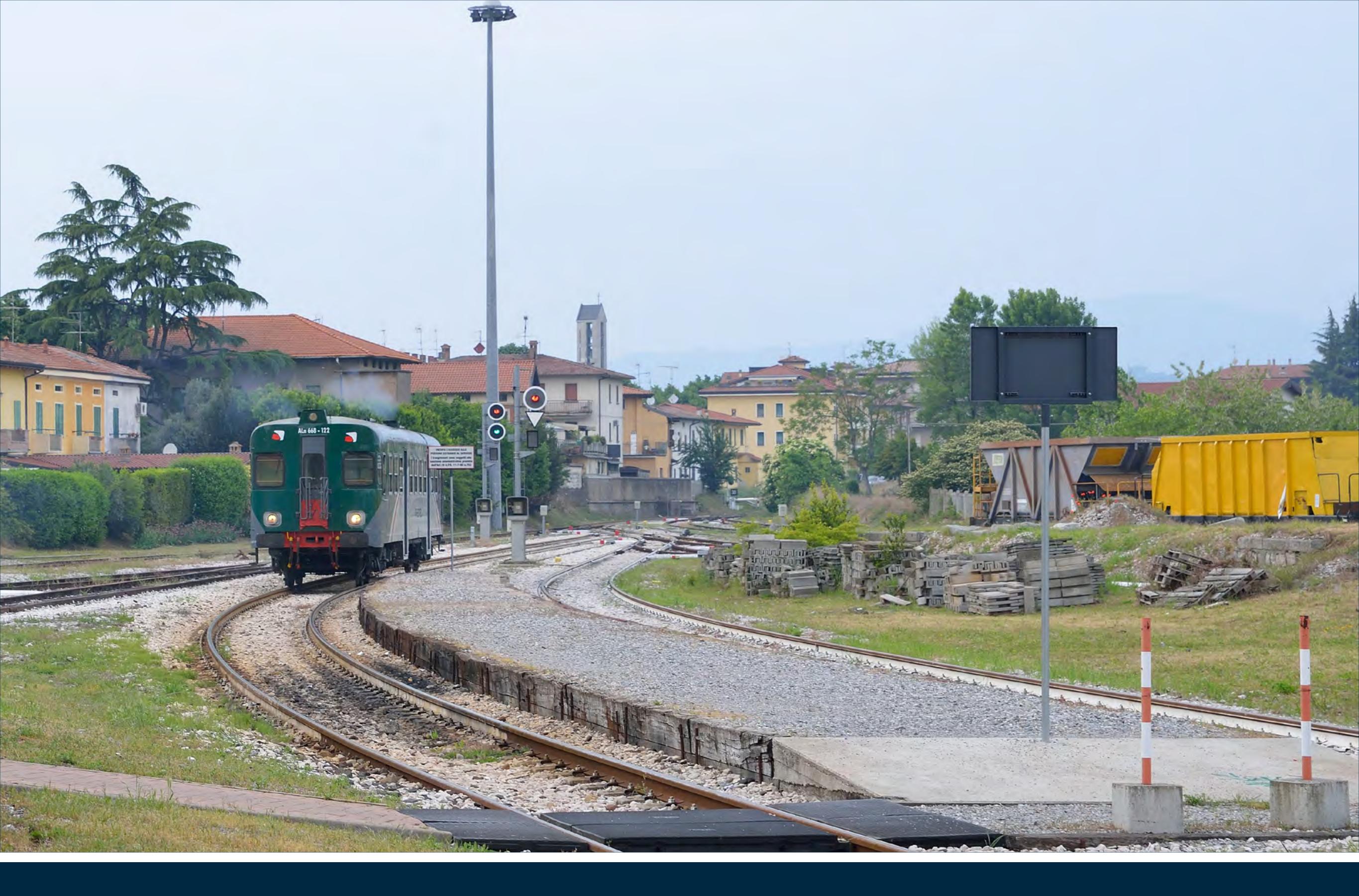






















Milan tram No. 1863 is seen near Milano Central station on April 25th. Class47

#### Roll-out of the first bimodal FLIRT

Stadler presented the first bimodal FLIRT in Bussnang on June 15th. The train is destined for the Valle d'Aosta region. Stadler presented the very first FLIRT with bimodal drive system to an audience of customers and Italian guests – railway operators, regional representatives from Valle d'Aosta, Piedmont, Molise and Calabria, and media representatives. The environmentally friendly vehicle is equipped with a 3 kV direct current drive for electrified lines, and a dieselelectric drive for non-electrified lines. Its low axle load, at a maximum of 18 tonnes, is particularly impressive.

The Valle d'Aosta region ordered five of these bimodal FLIRT vehicles (BMU) in May 2015. This vehicle was presented in Bussnang and at the nearby commissioning centre in Erlen after a development and construction period of just over two years. Dr Pierluigi Marquis, President of the Valle d'Aosta regional council, and Peter Jenelten, Executive Vice President of Marketing and Sales at Stadler, cut the ribbon in a festive ceremony marking the vehicle's debut on the rails.

Like all FLIRT vehicles, the first bimodal FLIRT is constructed using an extruded aluminium profile, making it light and energy-efficient. The three-part vehicle features an accessible power module, which houses the two Deutz V8 diesel engines (Euro IIIB), the tank, and additional drive equipment. The vehicle is 66.8 metres long, 2.82 metres wide and

4.12 metres tall. Its maximum speed is 160 km/h when using the electrical drive, and 140 km/h when using the diesel-electric drive.

This FLIRT vehicle for the Valle d'Aosta region is a milestone for Stadler: it is the first FLIRT to feature a bimodal drive system. Its low axle load of a maximum of 18 tonnes is unique among bimodal regional trains. This means that the vehicle is also suitable for secondary lines. The FLIRT for the Valle d'Aosta region is now undergoing the required approval tests. The first vehicle will be put into commercial operation on the Aosta-Turin line in May 2018.

The new bimodal FLIRT is a vehicle that offers excellent performance whether using the electrical or the diesel-electric drive. Thanks to its versatility, the fact that it is particularly environmentally friendly, and its low axle load, the vehicle meets requirements set by railway operators servicing both main and secondary lines in an efficient, sustainable and reliable manner.













- At Moerdijk on June 7th, a NS original sprinter EMU built in 1975, No. 2954, heads south on a local service. *Stephen Simpson*
- Apair of Class 6400 diesel locos are seen running light engine across 'The Polder', heading from the single track link to local industrial sites to the main line. *Stephen Simpson*
- SNCB Traxx No. 2813 works a Bruxelles Midi Amsterdaam Centrale service past Moerdijk on June 7th. *Stephen Simpson*











NS TRAXX No. 186.043 brings up the rear of an intercity train, propelling former driving trailer No. 16507, passing Moerdijk which is at the southern end of the Hollands Diep, one of the branches of the Rhine and where the railway crosses the wide river on two bridges, the newest of these built a few years ago for the high speed line. Stephen Simpson





































- On May 2nd, LTE's Class 2016.922 approaches Hrstovljah with a rake of empty container wagons. *Laurence Sly*
- Slovenske železnice Class 363 016 passes Zanigrad whilst hauling an intermodal train to Koper. *Laurence Sly*
- A pair of Class 541s pass Kranj whilst hauling a freight train to Ljubljana on May 6th, the lead locomotive is No. 541.002. *Laurence Sly*











- At Chur, SBB Re 4/4II No. 11108 waits to work an Ersatszug replacing train No. ICE1258 to Basel SBB, the incoming working (ICE75) having been heavily delayed in Germany. Steamsounds
- The Engadine in Spring! An unidentifiable Allegra EMU hauling an AGZ set arrives at Samedan in heavy snow on April 27th.

  Steamsounds
- TILO FLIRT Class 524.104 exits the Gotthard Tunnel at snowy Göschenen on April 28th, with train No. RE4310 from Bellinzona. Due to a problem with a failed train further north this terminated at Göschenen, was sent back to Bellinzona as train No. RE4323 with a bus provided for Erstfeld passengers. *Steamsounds*

















- SBB Re Class 460.093 heads an Intercity service past Zurich Hardbrücke on May 19th.

  Peter Marsden
- Rhb Ge 4/4II No. 629 stands at St. Moritz having just arrived from Chur, working a Glacier Express service on June 10th. *Ray Anslow*
- On June 10th, Rhatische Bahn No. 54, together with sister loco No. 56 awaits departure time with the 11:03 Bernina Express from Tirano, Italy to St. Moritz. *Ray Anslow*

















- Under an fast evolving sunset, SBB Pendolino ETR Class 610010 departs Zurich Hauptbahnhof with train No. IC889 to Chiasso on May 19th. Peter Marsden
- SBB Re4/4 Class 420.299 heads a late running OBB Nightjet from platform 8 at Zurich Hauptbahnhof on May 19th. The rear portion of the train forms train No. EN465 to Graz, with the front portion continuing to Zagreb as train No. EN40465. Car carrier wagons will be attached at Feldkirch for the overnight trip to Graz.

Peter Marsden





























# The UK's largest and most sophisticated new centre for train modernisation opens in Widnes

On June 29th, Alstom opened the biggest and most sophisticated centre for train modernisation ever in the UK. In a major boost to the rail industry in the North West of the country, this facility was officially opened by Lord Prior of Brampton - Parliamentary Under Secretary of State at the Department for Business, Energy and Industrial Strategy, and some of Alstom's newest apprentices and graduates. With over 13,000 square metres of space, Widnes will be the largest rolling stock modernisation facility in the UK. Its vast size, and close embrace of 'Industry 4.0' principles, makes it ideal for work on intercity trains. Alstom will soon start to work on the €28 million contract to re-paint the 56-strong fleet of Class 390 'tilting' Pendolino trains, which are used by Virgin on the West Coast Main Line. The first Pendolino train is already in the modernisation halls. Industry 4.0 features of the contract will include innovative Virtual Reality painting simulators that the team will be trained on and will use to validate the work.

Alstom is committed to recruiting from the local area, and the majority of the team being assembled for the painting contract have come from the Liverpool city region and other local areas such as Warrington. The repainting team is 80-strong and includes five new apprentices who will work on the project, demonstrating Alstom's commitment to developing skills locally. Having successfully completed their level 2 apprenticeships in Riverside college, Alstom is proud to welcome them to Widnes to complete their level 3 qualification while delivering this important project.

"This new centre for manufacturing will grow local skills, create hundreds of jobs both in Widnes and across the

entire UK rail supply chain. This long-term investment marks Alstom's commitment to the future of the sector in the UK."

"Through our ambitious Industrial Strategy, we are committed to supporting businesses and their supply chains across the country so that they can make the most of the opportunities ahead," said Business Minister, Lord Prior. "I'm proud to be here in Widnes today opening the UK's newest rail facility. Alstom is committed to the UK and this area. We have a team of 80 people in place to deliver our first contract, repainting the beautiful Pendolino trains and that includes five new apprentices, showing our commitment to skills. We want this to be just the start of our story in Widnes.

We have already committed that if we win contracts like Transport for London's Deep Tube Programme, we will build the new trains here, and we look forward to the Alstom Training Academy opening in September," said Gian-Luca Erbacci, Senior Vice-President of Alstom in Europe.





#### Stadler secures contract in Denmark

Stadler Pankow comes out on top again in Denmark with a successful tender issued across Europe. As part of the launch of a new light rail system, Denmark's third largest city, Odense, has placed an order for the manufacture and supply of sixteen trams type Variobahn. The order totals around 45 million Euro. Stadler signed the deal to supply 16 low-floor LRVs during an official event on 14th June with the operator Odense Letbane. By the end of 2020 the fleet of trams should enter service.

This is Stadler's second light rail contract in Denmark. Back in 2014 the rail manufacturer was selected to supply 23 VARIOBAHN and TANGO LRVs to the Danish city, Aarhus. Like Aarhus, an entirely new rail infrastructure is being constructed in Odense.

The first vehicle will be delivered to Denmark in autumn 2019. By December 2020 Odense plans to launch the fleet in the local transport network. The new tramlines are forecast to connect around 35,000 passengers, 33,000 workplaces as well as 23,000 student study spaces every day.

"In the last few years selected cities in Denmark are beginning to build light rail systems. Winning the bid for the initial project in Aarhus and now again in Odense reinforces the success of our experienced VARIOBAHN." says Ulf Braker, CEO of Stadler Pankow. "Once again we are extremely proud to have a great product meet with such success in the international market. We extend our thanks to Odense Let-bane for their faith."

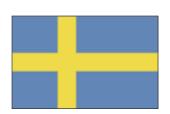
"I am extremely proud and excited that we have just signed the Contracts with Comsa S.A.U. for delivery of the Transportation System and with Stadler Pankow GmbH for delivery of the Rolling Stock", says Mogens Hagelskær, CEO of Odense Letbane. "The Rolling Stock is supplied by Stadler Pankow GmbH which is based in Berlin. Stadler has supplied the lightrail vehicles to the cities of Bergen in Norway and Aarhus here in Denmark. Odense Letbane has learned a lot from these projects, which is why we know, that the Rolling Stock will be of high quality and very reliable. Stadler is known for delivering well-proven standard solutions combined with modern technology – and all this with the best of German thoroughness."

#### Stadler's VARIOBAHN

VARIOBAHN light rail trams are flexible in length, carriage width, and tack gauge due to their modular construction. The bidirectional vehicles have a fully low-floor design, accommodating 193 passengers with step-free access to platforms. Air-conditioned carriages for passengers and driver compartments, double glazed windows, spacious gangways as well as five exterior doors on either sides are all features for Odense. Variobahns reach a maximum speed of 70 kilometres per hour. For years VARIOBAHN streetcars have been successfully operating in London, Bochum/Gelsenkirchen and the Norwegian city of Bergen, whose tram network was voted the "world's best urban transport system" in 2011.



#### World News



#### Alstom signs new contract for train refurbishment with Västtrafik



The contract is worth €9 million (90 MSEK). Works are planned to start in autumn this year and finish end of 2020.

Alstom has signed a new contract with operator Västtrafik for revision and refurbishment of 18 X12 and X14 two-car vehicles.

The work will be carried out in Motala, a workshop that specialises in refurbishment and heavy maintenance.

The previous Motala Train company, as it was known before its acquisition by Alstom, has already performed overhaul activities on this fleet and Alstom has strong experience as leading supplier of services, including to non-Alstom fleets. The mainly exterior refurbishment entails rust repair and painting, while the interior makeover will involve stripping the vehicles and mount new walls, ceiling, floor, chairs, etc. "Alstom sees this contract as an important milestone to grow its presence in the region. It establishes our depot in Motala as a centre for large refurbishments and revisions. Our staff already has great experience of these trains and will be able to efficiently use the existing local competence to deliver this project with high quality and precision", says Björn Asplund, Managing Director of Alstom Sweden.

"Västtrafik looks forward to implementing the contracting measures that the vehicles need. It will ensure the operation of the vehicles as well as contribute to a better customer experience during the vehicle's remaining service life. We look forward to carrying out the work together with Alstom-Motala Train, who has long experience from similar work on relevant vehicle types," says Bülent Esenteg, Rolling Stock Manager X11-X14 Västtrafik. The X12 and X14 trains belongs to the X10 family which were manufactured in 1991-1995 by ASEA/ABB. Västtrafik operates these trains primarily in the commuter traffic on the route Göteborg-Borås and Ud-devalla-Borås-Varberg. In addition to these trains, Västtrafik runs a fleet with several different vehicles types, including 27 Alstom Coradia Nordic trains, in the Gothenburg region, all of which are maintained by Alstom in the depot of Gothenburg.



#### World News



#### Bombardier Wins Major Rail and Maintenance Contract in the UK

Contract for 750 cars is the largest AVENTRA train order ever

AVENTRA train designed to help FirstGroup and MTR deliver greater passenger capacity and comfort on the South Western network

Rail technology leader Bombardier Transportation has signed a contract with FirstGroup and MTR to supply and maintain 750 BOMBARDIER AVENTRA vehicles, for operation on the South Western franchise in the United Kingdom. This is the largest ever single contract globally for AVENTRA trains. The contract is valued at approximately £895 million GBP (\$1.1 billion US, 1 billion euro). In addition, Bombardier will execute a Technical Services and Spares Supply Agreement (TSSSA) for the duration of the seven year franchise, with an option to extend for 11 periods in line with the existing franchise extension option. The UK-based rolling stock investment consortium Rock Rail will finance the multi-million pound procurement.

Steve Montgomery, First Rail Managing Director said, "We have exciting plans for the South Western rail franchise and these new trains are an important step on the way to delivering an improved journey experience for our passengers. We know from listening to passengers and stakeholders that alongside improved performance, what they want to see is additional seats and we will deliver this via these state-of-the-art trains."

Richard Hunter, UK Managing Director, Bombardier Transportation, commented "We are thrilled to have won this important contract. It demonstrates further confidence placed in this market leading rolling stock, designed and built in Britain. AVENTRA offers enhanced performance and increased passenger capacity, which will play an important part in helping First/MTR satisfy continued levels of passenger growth on the South Western network. The contract builds upon our strong credentials, following the selection of AVENTRA for Crossrail and

LOTRAIN in London, as well as for the East Anglia franchise. We look forward to deepening our collaborative relationship with First/MTR."

In addition to delivering a significant performance increase with innovative energy benefits such as regenerative braking, Bombardier's new AVENTRA electric multiple unit will transform the passenger experience with features including wide-open gangways between carriages, air conditioning, WiFi, 2 + 2 seating, USB sockets at seat locations, universal toilets and improved passenger information system. The new units will be supplied in both 5-car and 10-car configurations. The FirstGroup and MTR partnership will take over the South Western franchise on 20 August 2017. The new trains will operate on the Windsor, Reading and West London suburban routes. The new trains will start to come into service from mid-2019 and will all be in place by December 2020.





#### Alstom's JV EKZ obtains the first IRIS certification in Kazakhstan

Alstom's JV EKZ has become the first train manufacturer in Kazakhstan to receive the IRIS certification (International Railway Industry Standard). This certification has been established based on the ISO 9001 standard, with the goal of securing higher quality in the railway industry. It is the only sector-specific quality standard recognised worldwide by the rail industry for assessing management systems.

"We are proud to be the first train manufacturer in obtaining IRIS certification, which focuses on manufacturing of new locomotives and maintainability in service. Being certified demonstrates our continuous improvement and good fit between quality management system and our customers' demands", said Bernard Peille, Managing Director of Alstom in South CIS. EKZ employs 420 people and is working on supplying and maintaining the Prima electric locomotives ordered by KTZ for 2020. Today, 42 Prima T8 freight locomotives and 20 Prima M4 passenger locomotives are already in commercial operation on Kazakhstan's rail lines. In 2015, Alstom and EKZ were awarded by Azerbaijan Railways a contract to deliver 50 locomotives to Azerbaijan.

Alstom is present in Kazakhstan with more than 600 people, two Joint Ventures and two plants, EKZ in Astana for locomotives manufacturing and maintenance; and KazElectroPrivod in Almaty for the production of point machines. Alstom is the only manufacturer of electric locomotives and point machines in the Central Asian and Caucasian region and a major contributor to the revitalisation of its rail industry and the development of its economy.



With 16,000 km of track, the Kazakh railway network is the world's third biggest network using the 1,520 mm track gauge and represents a substantial market for maintenance activities.



#### World News



# Alstom's first train of the additional fleet for Line 1 of Panama Metro begins operations

Alstom's first three-car train brought to complement the Panama Metro Line 1 fleet has begun operations. Line 1 of Panama Metro is approximately 16km long, with 14 stations, and runs through Panama City, from North to South. Since its start of operations, in April 2014, it has been a major contribution to Panama's public transportation network.

optimized traction and energy recovery performance. This unit reaches maximum speeds of 90km/h and features a passenger communication and information system. It also offers wide access doors, with a large passenger capacity within corridors for circulation between cars. In addition, the driving cab is designed to provide maximum visibility to the driver.

Thanks to the extension of the fleet, taking it from 20 three-car trains to 26 five-car trains, Line 1 of Panama Metro will improve mobility for more than 293,000 passengers that use the line daily.

The Metropolis trains, manufactured by Alstom in Santa Perpetua, Spain, reach the highest environmental standards due to their light weight model, allowing it to have an





## Alstom's first 'Make in India' Metro inaugurated in Kochi

On June 17th, Alstom inaugurated the metro of Kochi (India), in presence of the Hon'ble Prime Minister of India, Shri Narendra Modi. As part of the €150 million project, the Alstom-built metros are the first to have been entirely designed in Bangalore and manufactured at Sri City in India supporting the Government's 'Make in India' campaign.

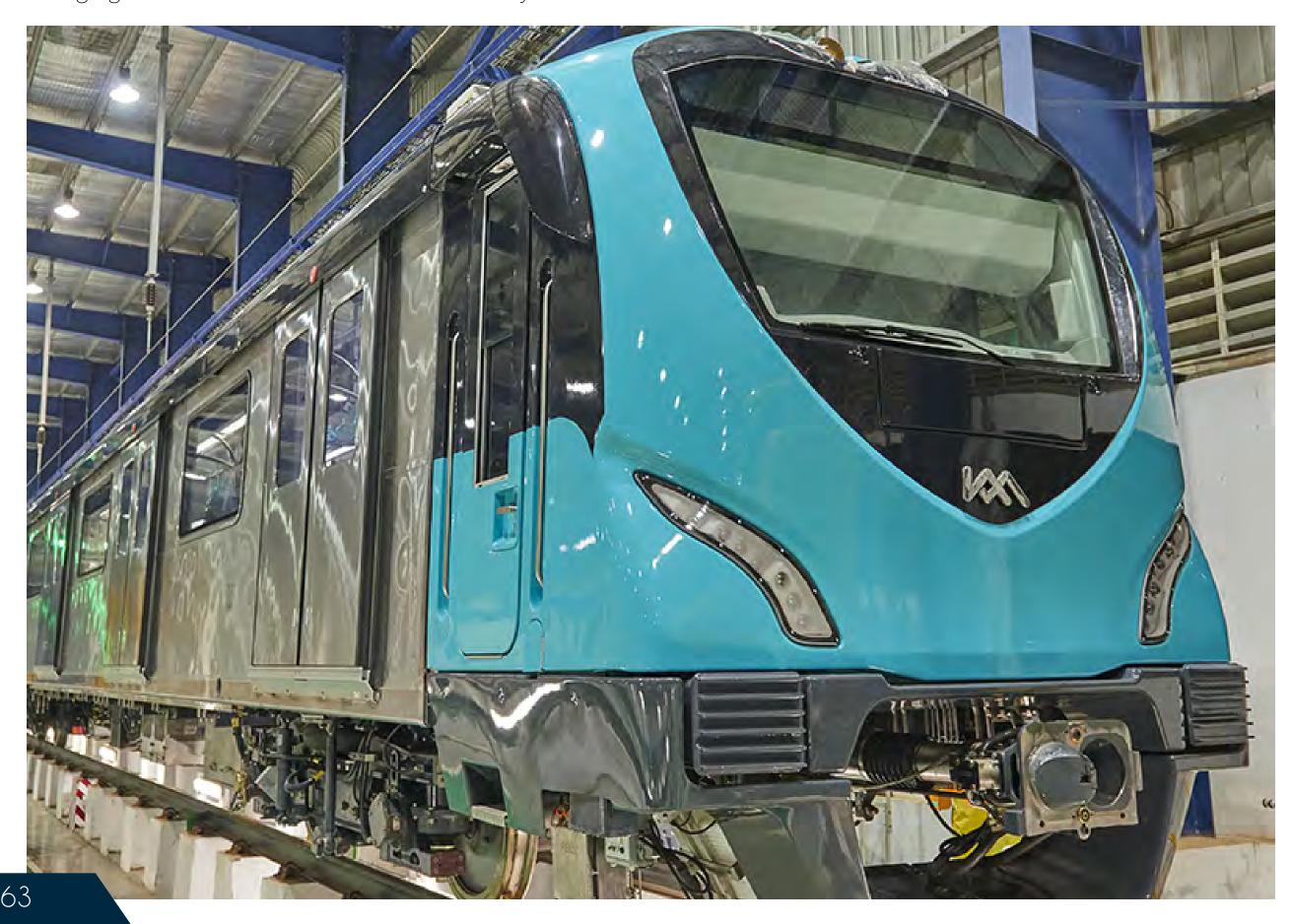
Each Metropolis train delivered to Kochi Metro Rail Limited (KMRL) will be able to carry up to 975 passengers and provide 136 seats, with wide gangways and longitudinal seating arrangements allowing passengers to walk from one end of the train to the other, optimizing transport capacity and facilitating easy boarding. As the first Communication-Based Train Control (CBTC)-based metro in India, Alstom's Urbalis 400 will control the movement of trains precisely, allowing more trains to run on the line at higher speeds in total safety. Alstom has also provided the telecom solution, with a third rail-based 750VDC power supply solution along with the associated SCADA system.

"Our goal was to deliver an innovative and effective mobility solution for the people of Kochi. Alstom's smart solutions have helped us meet that aim. Their end-to-end services and close attention to our needs ensured there the lead time was extremely competent and no gaps were caused by multiple-party involve-ment," said Mr Elias George, Managing Director and Additional Chief Secretary of

Transport of Kochi Metro Rail Limited.

Alstom focused on enhancing the customer experience to all possible aspects of the train. In an interesting design feature, the train conjures up an image of a 'nettipattam' on an elephant tusk with eyes that light up when in drives through dark tunnels. The trains are fitted with air conditioning and real time passenger information systems for a high level of passenger comfort. They are also equipped with CCTV, fire & smoke detection system for passenger safety and multiple USB charging points for mobiles – the latter is another first for metros in India.

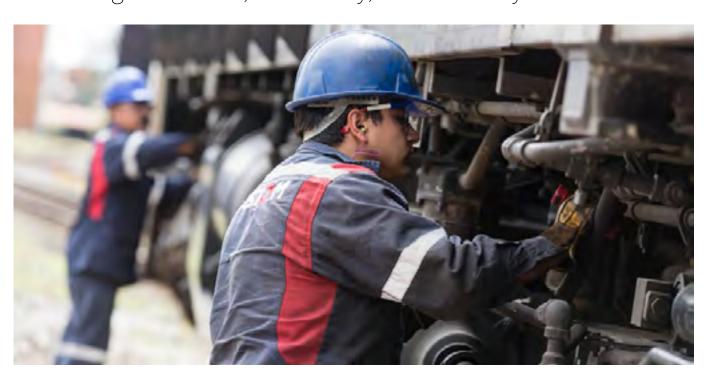
Alstom's strategy is supported by investments in India and continuous innovation that will bring significant value to the passengers and operators with an aim to be the benchmark of mobility of the future. Mr. Bharat Salhotra, Managing Director, Alstom in India and South Asia, added, "The Kochi Metro re-affirms our strong commitment and endorsement of the Government's 'Make in India' vision. It reinforces our goal to being the preferred partner of cities, countries and operators to answer their mobility needs as a turnkey solution provider. This is an exciting day for us and we are proud to be associated with this project."





## Alstom to modernize P2000 light rail fleet

Alstom has been awarded a contract worth over €130 million (\$140 million) by Los Angeles County Metropolitan Transportation Authority (METRO) to perform the midlife overhaul of 52 P2000 light rail vehicles (LRVs), which operate on Los Angeles' Blue, Green and Expo lines. The scope of the overhaul includes the upgrade of major systems such as propulsion, HVAC, automatic train control, auxiliary power supply, brake control, communications and doors, as well as the LRV's bogies. The overhaul is expected to allow METRO to keep the fleet in service for at least another 15 years, enhancing its comfort, availability, and reliability.



"We are delighted that METRO has recognized and selected Alstom to overhaul the P2000 fleet based on our technical proposal, as well as our past project management experience and performance. Alstom is committed to serving transit agencies on America's West Coast, and overhauling the LRVs will allow METRO to offer high quality service to its customers," said Jérôme Wallut, Senior Vice President of Alstom North America.

Alstom will perform the overhaul work at its Mare Island facility in Vallejo, California. This dedicated manufacturing and service facility will perform the railcar stripping, final assembly, and testing. Alstom's Naperville, Illinois, site will provide the required engineering for the project. The first vehicles to be overhauled will arrive in Mare Island in July 2017, with the last overhauled LRVs returning to service in 2021. Alstom expects the LRV overhaul programme to create roughly 45 local jobs over the course of the contract as the company continues to invest in its Mare Island facility.

Alstom has a strong track record in maintaining and modernizing Alstom and non-Alstom built trains. The P2000 light rail fleet, built by another manufacturer, will benefit from Alstom's over 20 years of experience in the train services business. Moreover, Alstom has extensive experience in US railcar overhaul work, with the modernization of close to 5,100 railcars for many major transit agencies, including New York City Transit, Chicago Transit Authority, New Jersey Transit, Southeast Pennsylvania Transit Authority, Massachusetts Bay Transit Authority, Maryland Transit Administration, Amtrak, Caltrans, and the Port Authority Transit Corporation. In addition to the overhaul of the P2000 fleet, Alstom's Mare Island site is supporting San Francisco Municipal Transportation Agency with a vendor managed inventory programme; performing extensive wreck damage repairs on the Amtrak Pacific Surfliner fleet; modifying 66 Caltrans bilevel intercity passenger rail coaches, and transforming Rocky Mountaineer traditional passenger cars.



#### World News



### Alstom to supply 38 Citadis Spirit Light Rail Vehicles for Stage 2 of Ottawa's O-Train Confederation Line

Alstom has been awarded a contract worth close to €200 million (approximately CA\$300 million) by Rideau Transit Group (RTG) to supply 38 Citadis Spirit light rail vehicles for the Stage 2 O-Train Light Rail Transit Expansion Project in Ottawa, Ontario. The expansion will extend the Confederation Line currently being built further east by more than 12 km, and further west by another 15 km. Construction of Stage 2 will begin in 2019 and, once complete in 2023, the total LRT system will have nearly 60 km of rail and 41 stations, with more than 70% of residents in Ottawa living within five kilometres of the line.

"We are excited that RTG has selected Alstom to supply the Citadis Spirit for the Stage 2 extension of Ottawa's light rail system," said Angelo Guercioni, Managing Director of Alstom Canada. "This second order for Ottawa builds upon our track record, where close to half of the 34 Citadis Spirit vehicles for the Confederation Line are in various stages of assembly and testing." The Citadis Spirit is a 100% low-floor vehicle that offers easy accessibility, and an interior layout featuring a wide central aisle and interior circulation that provide a safer and more enjoyable passenger experience. Alstom is currently supplying 34 Citadis Spirit vehicles for Ottawa's O-Train Confederation Line as per a 2013 subcontract agreement with RTG, and will maintain both vehicles and the light rail system for a period of 30 years.

Alstom has approximately 120 employees located at the Belfast Yard Maintenance and Storage Facility (MSF) where the Citadis Spirit vehicles are being assembled and tested. Currently, 9 vehicles are in various stages of assembly and an additional 7 vehicles are undergoing static and dynamic testing. In March 2017, the Citadis Spirit vehicle achieved and surpassed commercial operating speed during dynamic tests on the Confederation Line alignment. The 38 vehicles in the Stage 2 order will also be assembled by Alstom at the Belfast Yard MSF. The contract announced today follows on a firm order received on 31st May worth approximately

€355 million (CA\$529 million) from Metrolinx, an agency of the Government of Ontario, for the supply of 61 Citadis Spirit light rail vehicles for the Greater Toronto and Hamilton area (GTHA). Alstom's Citadis range of light rail vehicles is proven technology with approximately 15 years of return on experience, with more than 2,300 Citadis trains sold to more than 51 cities worldwide.





#### World News



# Bangalore Metro's Green Line enters commercial service equipped with Alstom's train control & signalling system

Alstom is proud to be associated with the Bangalore metro's much-awaited launch of operations on the Green Line that will connect Nagasandra in North Bangalore with Yelachanahalli in the South, the last section of Bangalore Metro Phase 1. Inaugurated by Hon'ble President of India, Shri Pranab Mukherjee in the presence of Shri. M. Venkaiah Naidu, Union Minister for Urban Development, Housing, Urban Poverty Alleviation, Information & Broadcasting, India, Shri. Siddaramaiah, Chief Minister of Karnataka and other dignitaries, this milestone is a clear illustration of Alstom's global capabilities out of its Bangalore Engineering and Innovation Centre in India.

As part of the contract, valued at a total of € 114 million (INR 710 crores), awarded by Bangalore Metro Rail Corporation Ltd (BMRCL) in 2009, Alstom provided the design, manufacture, supply, installing, testing and commissioning of the train control and signalling & telecommunications systems that have been deployed by engineering and R&D team in Bangalore. They equip two corridor lines (42 km, 41 stations) including two depots, one Operation Control Centre (OCC) and one Back up Operation Control Center (BCC). It includes the Urbalis 200 Automatic Train Control system which will ensure optimal safety, flexible operations and heightened passenger comfort. This solution has already been successfully deployed in many cities around the world and in cities like Delhi, Jaipur and already operational sections of Bangalore Metro.

Commenting on the occasion, Mr Bharat Salhotra, Managing Director, Alstom in India and South Asia said: "it is our great pleasure to be associated with this prestigious project and a matter of great pride for the team to see the project come to life. Bangalore is home to our talented engineering base which has been instrumental in bringing the project to

successful completion. We at Alstom are working tirelessly to ensure our teams in Bangalore bring out the best-in-class, competitive and sustainable mobility solutions of the future." Alstom is committed to evolving India's urban transport infrastructure requirements as the country embarks on its journey towards managing its growing cities. The successful deployment of this solution showcases the close co-operation between several Alstom units: Bangalore and Coimbatore in India, Saint-Ouen and Villeurbanne in France, and Bologna in Italy.





### Arriva wins Swedish rail franchise worth 550 million euros

Arriva is re-awarded the eight-year franchise following a competitive tender

The contract will see Arriva run the Pågatågen train services until 2026

Arriva – a leading pan-European passenger transport company has announced that it has been awarded an eight-year contract to run the Pågatågen train services in Sweden until December 2026. The contract was awarded by the transport authority of the Skåne region following an open competitive tender. Arriva has run services on the system in Sweden's southernmost county since 2007 and had already secured a two-year extension on its franchise through to 2018 before its latest bid success.

Commenting on the contract win, Arriva Group CEO Manfred Rudhart said: "Mainland Europe is an important growth engine for Arriva and so to secure the new

engine for Arriva and so to secure the new rail contract for Pågatågen against tough competition is a significant win for us. Over 21 million passenger journeys are made

more connected service and better service information."

For the first time, Arriva will be responsible for fleet maintenance and for introducing new trains into service. The number of trains will also increase from 66 to 99 trains with more service connections. Alongside this Arriva is developing a new digital mobility portal - Arriva Tågportal – which will enable better coordination of services and improve passenger information.

These improvements are expected to see passenger numbers rise significantly from 21.2 million (2015).

Arriva has been active in the Swedish bus market since 1999 and has been a rail transport provider since 2007 when it first started operating the Pågatåg rail contract. Arriva employs 3,900 employees in Sweden, and operates and manages 900 buses, 150 trains and 90 tram cars in the country.

Under the E20 contract, Arriva serves 96 million passengers a year through



every year on this franchise connecting people to some of Sweden's major cities, including Malmö, Helsingborg, Lund, and Trelleborg. Under the new contract, passengers will benefit from new trains, a combining bus and rail services into integrated multi-modal public transport networks – the largest of its kind in Sweden.



### Delivery of EURO 4000 locomotives: Alpha Trains consolidates its market position in Spain and Portugal

On 31st May 2017, the six new EURO4000 locomotives were delivered by Stadler to Alpha Trains. Four of them will be operated under a long-term leasing agreement by Medway. The acquisition of the new locomotives builds on Alpha Trains' market position as rolling stock lessor in Spain and Portugal. The locomotives were built at the Stadler Valencia's Albuixech plant. To perform cross-border freight transport between Spain and Portugal, the assets are equipped with the specific Spanish and Portuguese Signalling System and Radio. The EURO4000 is a proven, reliable and trusted locomotive in the Iberian market.

"It is the first time that Medway has leased locomotives from Alpha Trains and we hope to continue providing Medway with our services and to support their business success," says Fernando Pérez, Managing Director of Alpha Trains Locomotives Division.

The investment in new freight assets is also an investment in a sustainable future: "Our broad portfolio of rolling stock for various needs and customer-tailored leasing solutions facilitates modal shift from road to rail and hence, reduces CO2 emissions. This contributes to the achievement of the European Union's greenhouse gas reduction targets," explains Shaun Mills, CEO of the Alpha Trains Group.

"Stadler has successfully delivered more than 100 EURO4000 locomotives to different European rail freight operators. The robust and reliable six-axle locomotives offer high flexibility and hauling capacity, low energy consumption and reduced operational costs contributing to the profitability of the rail freight transport", says Iñigo Parra, CEO of Stadler Valencia.

"Expanding and updating our fleet with these 4 new interoperable locomotives represents a huge step towards our business goals: it will officially mean the entrance in the Spanish market, through a focus on innovation, sustainability and modernization, which will surely be key for us on our way to turn MEDWAY into the leading freight operator in the Iberian Peninsula", Carlos Vasconcelos, MEDWAY's President of the Board, affirms.



## Siemens to build eleven light rail vehicles for Phoenix

Valley Metro orders 11 light rail vehicles from Siemens

Option for up to 67 additional vehicles

The urban transport company Phoenix Valley Metro Rail has ordered 11 new S70 light rail vehicles (LRV) from Siemens. The vehicles will operate in Phoenix, in the U.S. state of Arizona. The order also includes an option for up to 67 additional vehicles. The new vehicles offer a larger interior, energy-efficient LED lighting, and heavy-duty air conditioning systems. The trams for Valley Metro will be built at Siemens' manufacturing plant in Sacramento, California.

"Investment in transit is a major contributor to powering this nation's ongoing economic growth, both locally and across the country," said Valley Metro Rail Chair, Tempe Mayor Mark Mitchell. "We look forward to successful collaboration and partnership with Siemens who plays a critical role in the expansion of our Valley's light rail system."

"Phoenix is already the 18th city in North America to rely on light rail vehicles built by Siemens. Our modern vehicles offer riders a comfortable and safe journey on board. Siemens' rapid transit systems offer cities throughout the world reliable solutions that are tailored to their specific needs," said Sandra Gott-Karlbauer, CEO of Siemens Urban Transport.



#### World News









### From the UK

### Llangollen Railway

The Llangollen Railway is a heritage railway in Denbighshire, Wales, which operates between Llangollen and Corwen. The standard gauge line, which is 10 miles long, runs on part of the former Ruabon - Barmouth GWR route that closed in 1965. One on the lines features is its large collection of railcars.

- Class 104 DMU Nos. M50454 and M50528 are seen arriving into Carrog. *Richard Hargreaves*
- Class 109 Driving Motor Brake Second No. 50416 and Driving Trailer Composite Lavatory No. 56171 await departure time at Llangollen. *Richard Hargreaves*
- Class 108 Driving Motor Brake Second No. 51907 and Class 108 Driving Trailer Composite Lavatory No.54490 depart Berwyn with a service to Corwen on June 3rd. *Richard Hargreaves*







### From the UK

- Class 104 Nos. 50528 and 50454 arrive into Berwyn with a service to Llangollen.

  Richard Hargreaves
- Class 127 Driving Motor Brake Second No. 51618 and Class 108 Driving Trailer Composite Lavatory No. 56223 stand at Carrog awaiting departure time with a service to Llangollen. *Richard Hargreaves*
- With the unlikely destination of Scarborough displayed, Derby Lightweight Driving Motor Brake Second No. 79900 stands at Berwyn.

  Richard Hargreaves



