





Pg 2-Welcome

Pg 4 - Pictures

Pg 68 - World News

Pg 74 - From the UK

Pg 77 - From the Archives

### 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.

### Contact Us

#### **Editor: David**

david@railtalkmagazine.co.uk

#### **Co Editor: Andy**

editor@railtalkmagazine.co.uk

#### **Content Submissions**

entries@railtalk.net

**Technical & Subscription Support** admin@railtalk.net

#### **Front Cover**

SBB's Class 923.027 passes the small village of Schüpbach in the Emmental with the daily Emmenmatt - Thun goods working. *Mark Pichowicz* 

### **This Page**

Auto-train No. 27521 departs Kandersteg for Goppenstein, with BLS Re 4/4 No. 192 as the loco on the rear. *Laurence Sly* 

### **Next Page**

DB IC2 Class 146.562 speeds through Dedensen-Gümmer with a Hannover service. *John Sloane* 







# Welcome

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

It always seems strange to wish you all a Merry Christmas and a Happy New Year so early in December but I guess that by the time you read this the big day will be even closer than it is now.

Some major news this month from Czech where investment company PPF Group has acquired rolling stock manufacturer Škoda Transportation. The group has 5 300 staff in the Czech Republic, and several international subsidiaries across Europe and in North America. Headquartered in Plzeň, Škoda Transportation produces electric locomotives, multiple-units and trams, as well as a range of components for rolling stock. In the urban transport sector it also manufactures trolleybuses and electric buses. PPF Group is run by Czech entrepreneur Petr Kellner. It was founded in 1991 and the sale brings to an end more than a year of speculation about the future ownership of Škoda Transportation.

Another recent takeover is in Australia where Downer EDI announced on November 21 that it had signed an agreement to sell its freight business to Progress Rail for A\$109m. The sale of the freight rolling stock, aftermarket and services activities is expected to complete in January. It includes customer contracts, 15



### Terms & Conditions

Railtalk Magazine Xtra is a free monthly online digital magazine (e-mag), provided in PDF and SWF (Flash) interactive format.

Railtalk Magazine Xtra takes no responsibility for any information provided or printed in this magazine. Best efforts are made at the point of going to publish, to effect all information is correct, however no guarantees are given or implied.

All content is © copyright either Railtalk
Magazine Xtra or it's respective owners. All
items are credited to their respective owners
and no parts of the magazine should be
reproduced without first obtaining permission.
In cases where ownership is unclear, please
contact the editorial team and we will be
happy to provide details of respective owners
once permission has been granted
to pass on such information.

Advertising space is limited to a first come first serve basis. Should you wish to place adverts in the magazine please make contact with the editorial team before the 3rd Friday of each month. Railtalk are not responsible for adverts and no guarantees are given to the bona fides of any advertisers.

Railtalk Magazine Xtra is published by HAD-PRINT a trading name of HAD-IT LIMITED.

HAD-PRINT
Unit 6, France Ind. Complex
Vivars Way, Canal Road
Selby, North Yorkshire
YO8 8BE
info@had-print.co.uk | 01757 600211



### With Thanks

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

These issues wouldn't be possible without: Ray Anslow, Brian Battersby, Mark Bearton, Mark Bennett, Tim Blazey, Keith Chapman, Julian Churchill, Nick Clemson, Derek Elston, Mark Enderby, Tim Farmer, Dave Felton, FrontCompVids, Paul Godding, Richard Hargreaves, Keith Hookham, Colin Irwin, John Johnson, Anton Kendall, Jyrki Lastunen, Ken Livermore, Michael Lynam, Peter Marsden, Phil Martin, Denzil Morgan, Thomas Niederl, Peter Norrell, Chris Perkins,

Mark Pichowicz, David Pollock,
Andy Pratt, Railwaymedia, Alan Rigby,
Neil Scarlett, John Sloane,
Stephen Simpson, Laurence Sly,
Stewart Smith, Steamsounds,
Steve Stepney, Mark Torkington,
Andrew Wilson and Erik de Zeeuw.



facilities including those at Malaga, Port Augusta and Clyde, associated assets and liabilities and the transfer of 360 employees.

Good news for Bombardier from Italy where FS Group's freight subsidiary Mercitalia announced an order for 'up to' 125 locomotives and a total of 250 wagons on November 14. The operator said Bombardier was awarded the €400m contract to supply the 6·4 MW Traxx DC3/MS locomotives to Mercitalia Rail and TX Logistik after a 'very close' eight-month tendering process which had attracted bids from 'the main international manufacturers'. Deliveries are scheduled to begin in autumn 2018, and Bombardier is to maintain the locomotives both in Italy and abroad for eight years.

This months 'From the UK' is the recent excellent DMU gala held at the East Lancs Railway, a very popular and well attended 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













On November 1st, the regular cement train from Grafton pulls into the loop at Kempsey on the NSW Mid-North Coast for a train to pass, hauled by Nos. 8163 and 8205. The first 3 wagons are carrying electricity poles. *Mark Bennett* 







Pacific National's Sydney to Brisbane container train, 2SB3, heads downhill towards Kerewong Tunnel on the NSW North Coast line on October 30th. *Mark Bennett* 





The Rail Cargo Group is continuing its strategy of internationalisation and consistently expanding its position on the Silk Road. In line with this, the first transcontinental container train, bound for the Hunan province in China, recently set off from the RCG terminal BILK. In addition, the collaboration with COSCO will be further intensified. From now on, daily goods trains will ply between Budapest and the Greek Port of Piraeus.

### One Belt, One Road as the driver for overland transports

With the revitalisation of traffic flows along the Trans-Siberian and Asian route, the Eurasian land bridge is noted for its enormously high potential. Over 95 percent of the current freight volume between Asia and Europe is transported on the international sea lanes by container ship. The Silk Road initiative "One Belt, One Road" will sustainably strengthen the rail transport of goods in the Eurasian corridor, and will therefore be a meaningful complement to the maritime connections via European ports.

#### Chinese delegation visits the BILK terminal

On the occasion of the summit of the premiers in Budapest for the "One belt, one road" initiative, the first transcontinental container train carrying Central European goods to the Hunan province, embarked on its journey from the Rail Cargo Terminal - BILK. The Xiang Ou Express carries 45 containers loaded with products such as Hungarian food, household appliances and spare parts for the automotive industry to the city of Changsa in China's Hunan province. This train is therefore an important addition to the existing connections between Budapest and China via the transcontinental Silk Road. This new connection opens a further chapter in RCG's expansion to its business in Asia.

High-ranking guests, including HE Baoxiang, Vice Governor of Hunan Province and his 20-member delegation, as well as László Mosóczi, deputy Secretary of State for

Transport in Hungary and Rail Cargo Group Board Member Erik Regter were present in person when the first train to China entered operations.

#### Daily trains between Budapest and the Greek Port of Piraeus

Transports between Central Europe and the Port of Piraeus are booming: By autumn 2017, the Rail Cargo Group had already transported 200 trains from Piraeus via the Balkans route to

Budapest in close co-operation with the major Chinese shipping line COSCO. The frequency is now being increased to daily trains. The Rail Cargo Group supports the strategy of ternationalisation beyond Europe's borders with a growing range of railway logistics services to the Far East and Central Asia.

Photo: © OBB

Railtalk Magazine Xtra

Austria

Slovenian Class 541.021 passes OBB 'Taurus', Class 1016.047 at Villach. The Class 541 was working one of the cross border services between here and Slovenia. *Brian Battersby* 







On November 24th, OBB Class 1116.159 in Brennerbahn Anniversary special livery has just passed the shortest tunnel on the ÖBB Network and heads towards Semmering crossing Breitenstein, Krauselklause Viaduct with train No. RJ653 Wien Int. Airport - Graz Hbf. *Thomas Niederl* 







OBB EMU No. 4020.238 working train No. R6484 from Semmering to Payerbach Reichenau passes the site of the old signalbox at Breitenstein on November 24th. This class of EMU is normally used on the Schnellbahn Network in Wien, however the normal Class 4023 EMU was unavailable. *Thomas Niederl* 







Railjet No. 80-90.331 with Class 1216.227 on the rear passes the site of the old signalbox at Breitenstein working train No. RJ76 Graz Hbf. - Praha hl.n. on November 24th. *Thomas Niederl* 



















CD Class 750.708 stands at the temporary station, Praha-Bubny Vltavská. Trains that would normally run through to Praha Marsarykovo are terminating here whilst the viaduct over the Vltava is being rebuilt. Steamsounds







# Cargo successfully carried through the Vojtanov

DB Netz, the manager of the German railway infrastructure, continued the major two-week repair of the corridor from the state border to Pirna at the end of November. From Friday evening to Monday this section was completely closed. Such closures always bring considerable complications, the extra costs associated with securing the transport of trains along diversion routes.

The well-proven solution is the use of the Vojtanov / Bad Brambach border crossing. However, this can only be used for a limited number of trains in terms of capacity. ČD Cargo has made the most of this opportunity. In total, they have, in cooperation with the German carriers, transported 51 block trains for eight days.

On November 27th, at the Vojtanov / Bad Brambach border crossing a diverted train conveying LKW Walter trailers from Rostock to Brno, hauled by Vectron Class 383.006 which had worked the train from Cheb was photographed by Ladislav Fric.

Photo: © CD Cargo



CD Cargo's Class 123.027 hauls a mixed freight working through Velky Osek, heading to Kolin. *Paul Godding* 







# Unipetrol takesover a new locomotive from CZ LOKO

Unipetrol, the largest Czech petrochemical group, continues its planned investments. Its subsidiary, Unipetrol Doprava, which deals with rail transport and transport of chemical products, has expanded its fleet with the new diesel-electric locomotive EffiLiner 1600, referred to as Bizon by CZ LOKO. Purchasing this locomotive is part of the rolling fleet renewal of Unipetrol Transport. Another EffiLiner 1600 will be delivered by the end of this year. The ceremony took place on November 1st in Záluží u Litvínova.

"The new EffiLiner 1600 line locomotives have high operational reliability and low operating and maintenance costs. I am glad that Unipetrol can take over the first of these locomotives and I firmly believe that after checking all these features in an orderly lineup, we will order another one" said Josef Gulyás, CEO of CZ LOKO, as

Machine fleet modernization is one of the prerequisites for meeting our medium-term plan to increase the volume of transported products from the current 3.1 million tonnes to the target of four million transported tonnes in 2021.

"Everything is completely new on the locomotive, starting with the Caterpillar combustion engine, new traction engines, new controls and a new cabin," added Josef Bárta, Chairman of the Board of Directors of CZ LOKO, as. The diesel-electric locomotive EffiLiner 1600 from CZ LOKO, which has been nicknamed Bizon, has a CAT 3512 C-HD engine with a power output of 1.6 MW and is equipped with an alternating-DC power transfer (AC / DC) from the internal combustion engine to four driving wheels. It is already the sixth locomotive of this series, which was created by rebuilding locomotives of 753 nicknamed Brejlovec. But it has a brand new design and a new service solution for the new drive solution. CZ LOKO handed the first of two ordered locomotives to Unipetrol Doprava. Unipetrol has the option to buy two more.



Ceske Drahy Class 163.244 leads a Praha - Hradec Kralove service through Velky Osek. *Paul Godding* 







# Another CZLOKO delivery to Fennia Rail

On Wednesday October 25th, Fennia Rail Oy took over the fourth and fifth locomotive of the EffiShunter 1600 series from the Czech manufacturer CZ LOKO. Locomotives designated in the Czech Republic as the 774.7 series will carry the Finnish designation Dr 18.

"The options we agreed upon and the subsequent delivery of these two locomotives to Finland are very important for CZ LOKO. This means that the decision to enter the Finnish market was right and beneficial for both sides. This confirms, among other things, that our export strategy has been well chosen and will continue in the near future, "says Josef Gulyás, CEO of CZ LOKO.

Fennia Rail Oy started its transport activity a year ago and is still the only private rail carrier on the Finnish market. It offers its customers several types of transport services. These include, in particular, the transport of timber within Finland, the cross-border transport of goods to Russia or vice versa and the transport of railway switches.

The diesel-electric locomotive EffiShunter 1600 has a CAT 3512-C-HD engine with a power of 1,550 kW and is equipped with AC / DC (AC / DC) on six drive wheels. The locomotive meets the TSI standard and is intended for line service, station shifts, and heavy duty industrial siding such as metallurgy, mining or petrochemicals. EffiShunter 1600 locomotives are also working in Hungary and in the Baltic.

Photo: EffiShunter 1600 (Finnish designation Dr18.104) upon arrival at Kouvola Station. ©CZ LOKO



Prague Tatra T3SU tram No. 7122 approaches the stop at Brusnice whilst working a line 23 service. *Steamsounds* 





# Czechia

## New in Exclusive Transports

For several years, ČD Cargo has been a reliable partner for construction companies in the implementation of exclusive works. They provide not only gravel, concrete or rail transport, but also provide customers with powertrains and qualified personnel, such as gravel unloaders or track management employees. Since the second half of October there has been a blockade



between the stations Blatno near Jesenice and Bečov nad Teplou. The producer of the works in the Lubenec -Chyše section became Remex, for which ČD Cargo provides a number of interesting activities. Namely they can transport dredges

from Luben to

A new feature on November 23rd was the use of a special KOP 12/40 wagon from Strabag, where a Renault

truck loaded with gravel was taken to work.

Directly from the car, the gravel was poured into the rails.

It was
brand new
experience
for ČD Cargo
employees.
And it has to
be said that



everything has been excellent and the work has been done according to the schedule.

Photos: © CD Cargo

Cesky Drahy's Class 810.333 stands at Hostivice with a local service. Steamsounds

work on a wide track, transport the excavation of Ua cars and of course the gravel on the construction site in the same wagons.















# Railtalk Magazine Xtra



### Alstom delivers the first overhauled BB36000 locomotive to Akiem

Alstom has delivered the first overhauled BB36000 locomotive out of a total of 7 vehicles covered by a mid-life overhaul contract signed on 22 April 2016. The contract was later supplemented in June 2017 with 23 additional locomotives of the same type. The BB36000 locomotives are under the responsibility of the Services team of Alstom's site at Belfort.

The BB36000 locomotives were designed and manufactured at the Belfort site. They entered service from 1996 onwards and have covered nearly 2 million kilometres to date. With this new contract, Alstom is helping its customer Akiem to optimise the lifespan its locomotives by extending their service life by 15 years.

The maintenance operations cover all the 10, 15 and 20-year interventions in the context of a mid-life review. The entire locomotive is overhauled, including the bogies, obsolescence monitoring, the repair of parts and the modernisation of the drivers' cabins. These operations are being carried out with the contribution of Alstom's sites at Le Creusot (for the bogies), Ornans (for the traction engines), Tarbes (traction systems), Villeurbanne (for the electronics) as well as a network of external subcontractors. The locomotives are fully repainted in identical fashion to restore their original external livery.

At Alstom's site in Belfort, a multidisciplinary team of about twenty people (cable fitters, pneumatics experts, assemblers, painters, metalworkers...) are involved in the project, which calls for various

skills (engineering, industrialisation, purchasing, logistics, production, testing...). "The delivery of the BB36000 locomotive in line with the schedule and level of quality required by our customer Akiem is due to the Belfort Services team's expertise. This first success confirms our desire to develop the maintenance activities of the Belfort site through an increase in activities and skills and to turn the Belfort site into a European centre of reference for locomotive maintenance," said Jean-Baptiste Eyméoud, President of Alstom in France.



The Services activities of the Belfort site currently employ approximately 70 people and are organised around the following five activities: operational maintenance of locomotives, accident repair for all types of rolling stock, mid-life overhauls of locomotives, modifications during the warranty period as well as upgrading diesel and electric locomotives. Thanks to its extensive experience in maintenance, the Belfort Services department became the first private locomotive maintenance provider in France to obtain ECM certification (Entity in Charge of Maintenance, in accordance with EU regulation 445/2011) in all 4 domains (supervision, development, fleet management and execution).

SNCF BB electric loco, Nos. 27318 stands at Viroflay Rive Gauche with a Transilien outer suburban service from Montparnasse.

John Sloane









# Railtalk Magazine Xtra

# Germany

## Alstom builds 14 Coradia iLint trains in Salzgitter for LNVG

On November 9th, in the presence of the press, the managements of LNVG, Alstom and Linde signed the contracts on the delivery of the 14 fuel cell trains and their 30-year maintenance and energy supply in Wolfsburg. Olaf Lies, Economy and Transport Minister of Lower Saxony, had invited his ministerial colleagues to this contract signing on the occasion of the transport minister conference so that they could get their own impression of the Coradia iLint prototype, which will take up pilot operation in the evb network in spring 2018 together with a second vehicle.

In Wolfsburg, Transport Minister Lies handed over the official notice of funding to the two LNVG chiefs Hans-Joachim Menn and Klaus Hoffmeister. LNVG will purchase the Coradia iLint trains for its own vehicle pool and will then rent them to a railway operator. The fuel cell trains are going to be maintained by Alstom in the evb depot in Bremervörde, which will be extended for this purpose.

Transport Minister Olaf Lies said: "From now on there will be a real alternative to diesel trains in non-electrified rail transport. Hydrogen and fuel cells are an ideal combination for climate protection as well as for the energy and transport revolution. They allow the storage of energy and emission-free travelling on rail. We fund innovative technologies and make a sustainable contribution to the energy revolution in the transport sector. I am pleased that Alstom will build the trains in Lower Saxony, thus further strengthening their production site in Salzgitter." Enak Ferlemann, Parliamentary State Secretary at the Federal Ministry of Transport and Digital Infrastructure (BMVI), declared: "Emission-free, energy-efficient and cost-effective – trainsets with fuel cell drive are an environmentally friendly alternative to diesel locomotives. To strengthen the industrial site of Lower Saxony, we want to fund LNVG's project by investing around 8.4 million euros. The funds are to be provided from the National Innovation Program for Hydrogen and Fuel Cell Technology (NIP 2)."

Menn und Hoffmeister, whose transport authority organizes regional transport on rail between the North Sea and the Harz Mountains, yearly spending tax revenues of nearly 300 million euros for it. emphasized during the contract signing: "Fuel cell technology has good chances to prevail in Germany in the next 10 to 15 years, with diesel vehicles being more and more

forced out of the market", as both outline the future of rail transport.

Gian Luca Erbacci, Senior Vice President for Europe at Alstom, said in Wolfsburg: "This day represents a real breakthrough in rail transportation and a big step change towards a clean mobility system. For the first time worldwide, a hydrogen-fuelled passenger regional train will replace diesel trains, generating zero emission with the same performance as a regular regional train and up to 1,000 km autonomy. Alstom is very proud to have developed its Coradia iLint train in Salzgitter, Lower Saxony. We are grateful to the German federal government and to the regional government of Lower Saxony for their continuous support and confidence in Alstom's strong innovation capabilities".

The guarantee of a reliable and secure supply of energy is one of the prerequisites for a successful use of fuel cell trains. The Linde Group, a world-leading gases and engineering company, will provide for the hydrogen supply of the new fuel cell trains and will therefore erect and operate the worldwide first hydrogen filling station for trains in Bremervörde. The necessary investment costs will be estimated at around 10 million euros funded by the Federal Government. LNVG will rent the premises for the filling station from evb and will make it available to Linde AG, which will also be responsible for the operation and construction permit. The on-site production of hydrogen by electrolysis and by means of wind energy will be planned in a later phase of the project.

Bernd Eulitz, Member of Executive Board of Linde AG, emphasized: "The use of hydrogen for rail vehicles is a milestone in the application of fuel cells for emission-free transport. For the first time, the coupling of this sector to hydrogen infrastructure will be realized within a significant scope and in an economically viable manner. This development will push the establishment of a hydrogen society and will create new solutions for the storage and transport of energy. We are proud to be part of this innovation project."

A Danish DSB/DB ICE set No. 605.019 is seen arriving at Hamburg Hbf. *John Sloane* 

























One of DB's ECO Hybrid shunters, No. 1002.008 is seen stabled at Nuremberg. These Alstom H3 hybrid shunting locomotives (diesel+battery) are in use at stations to reduce emissions and noise. *Brian Battersby* 













- Built in 1962 this former DB operated V100 is now in use with Erfurter Gleisbau GmbH, Erfurt and numbered 211.074, seen here at Nuremberg.

  Brian Battersby
- Chemnitz tram No. 440 working a C15 line service to Hainichen, rounds the curve at Theaterplatz. Steamsounds
- Berlin tram No. 9052 calls at Alexanderplatz.

  Steamsounds







## DB Museum Koblenz

- A Trans Europe Express unit Class VT11.5 is seen in the sunshine at Koblenz. These 1950's units shaped the image of international express train traffic like no other train set. *John Sloane*
- The Class 216 (classified as V160 until 1968) was a diesel locomotive type of the German Federal Railroad and the first variant of the V 160 family. Class 216.067 is represented at the museum. *John Sloane*
- The E 10 series was a unitary electric locomotive built for the German Federal Railways for the first time in 1952. It has been operating as a Class 110 since 1968 and was for years the most important locomotive type for German fast trains. *John Sloane*









Berlin is looking forward to its new S-Bahn with great anticipation – and the first concrete steps are underway! The starting gun for the technical and interior equipment of the still empty car bodies for the latest trains of S-Bahn Berlin's light rail fleet has been fired at the Stadler plant in Berlin- Pankow. The exterior paint of the first bodyshell in the daylight-filled assembly hall is a real feast for the eyes. 220 kilograms of red and yellow color painted onto the car's approximately 17 meters length leave no doubt that securing the future of Berlin's light rail system is in full swing. Manufactured at the Stadler plant in Hungary, the first end car was transported to the German capital city on a flatbed truck. The technicians from the Siemens/ Stadler manufacturing consortium can now start their job. First, they will focus on 30 pilot series cars. Five fully walk-through four-car units and five two-car trainsets will each be equipped in the coming months. 352 additional cars will follow in the next few years.

"Heart, brain and soul": The assembly technicians will breathe life into the red and yellow car bodies. The traction container hosting the traction motors and electrical equipment is the "heart" of the car, whereas the control system is the "brain". And finally, the comprehensive comfort features designed by the development team in close cooperation with light rail customers and passenger associations symbolize the "soul". This also includes the contemporary continuation of the classic red and yellow color design that has made S-Bahn Berlin so distinctive for almost 100 years.

Peter Buchner, Managing Director of S-Bahn Berlin, expresses his delight that a major milestone has been reached: "We're on schedule. Just about two years after signing the contract, the assembly of the new trains so eagerly awaited by future passengers has now started. The first fully equipped train will already rest on its own bogies next year."

"We are proud to be able to fire the starting gun for the assembly of the new light rail trains together with our contractual partners today," declares Ulf Braker, CEO of Stadler Pankow GmbH. "In the next few weeks we will bring to life a product from Berlin, for Berlin." Sabrina Soussan, CEO of the Siemens Mobility Division, emphasizes: "We will equip the new trains for Berlin with components that have proven their worth many times – a tried-and-tested, robust technology which is operating extremely reliably in vehicles worldwide. Since the trains stand out due to their particularly fault-tolerant design, passengers in Berlin can look forward to a highly reliable train service."

After their delivery during the period from 2021 to 2023, a total of 85 new four-car trains and 21 two-car units will be available for light rail operations on the so-called Ringbahn (circular line) and the southeastern access routes – the impressive result of the two experienced rolling stock manufacturers' hard work. S-Bahn Berlin is investing about € 900 million in new vehicles and the necessary adaptation of its workshop in Grünau.



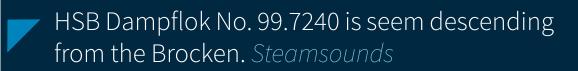


MRCE Dispolok Class 189.090 approaches Kaub with a northbound intermodal working.
John Sloane









- DR No. 99.1777 waits at the impressive and recently reopened terminus at Kurort Kipsdorf. *Steamsounds* 
  - HSB Mallet No. 99.5901 is seen on shed at Wernigerode. *Steamsounds*

















- A fairly new Bombardier built DB Class 187.123 approaches Kaub with a northbound freight. John Sloane
- Westfalenbahn's Stadler Kiss EMU Class ET601 works a service near Dedensen-Gümmer.

  John Sloane
- A superb livery on Sunrail's Class 140.002 as it heads a westbound loaded car train near Dedensen-Gümmer. *John Sloane*









What could be better suited to the task of promoting sustainable rail freight transport than an electric locomotive? The design came about as part of the "Rail Club" during the "transport logistic" trade fair in Munich in May 2017, where DB Cargo organised a brainstorming event with their customers. Ideas on the topic of "Why is our environment worth protecting?" were gathered and were implemented graphically and fed into the e-locomotive's branding design. That locomotive now serves as an ambassador for DB Cargo's sustainable rail freight transport services and climate-friendly eco solutions.

This autumn, Deutsche Bahn is putting the focus on the environment. DB Cargo will also be promoting its climate-friendly logistics services in order to draw attention to an important point: rail freight transport reduces CO2 emissions by around 80 per cent compared to road transport. Furthermore, customers can carry out their transport operations completely CO2-free in Germany and Austria with the DBeco plus product.

The rail company is also communicating its ambitious climate targets. After achieving the goals it had set for 2020 ahead of schedule, DB has now raised the bar once again. The company is aiming to reduce the specific CO2 emissions of all transports by more than half by 2030, compared to the 2006 figures.







Schwebebahn cars Nos. 9 and 25 pass at Wuppertal-Oberbarmen. *Steamsounds* 

### More albatrosses to Wilhelmshaven

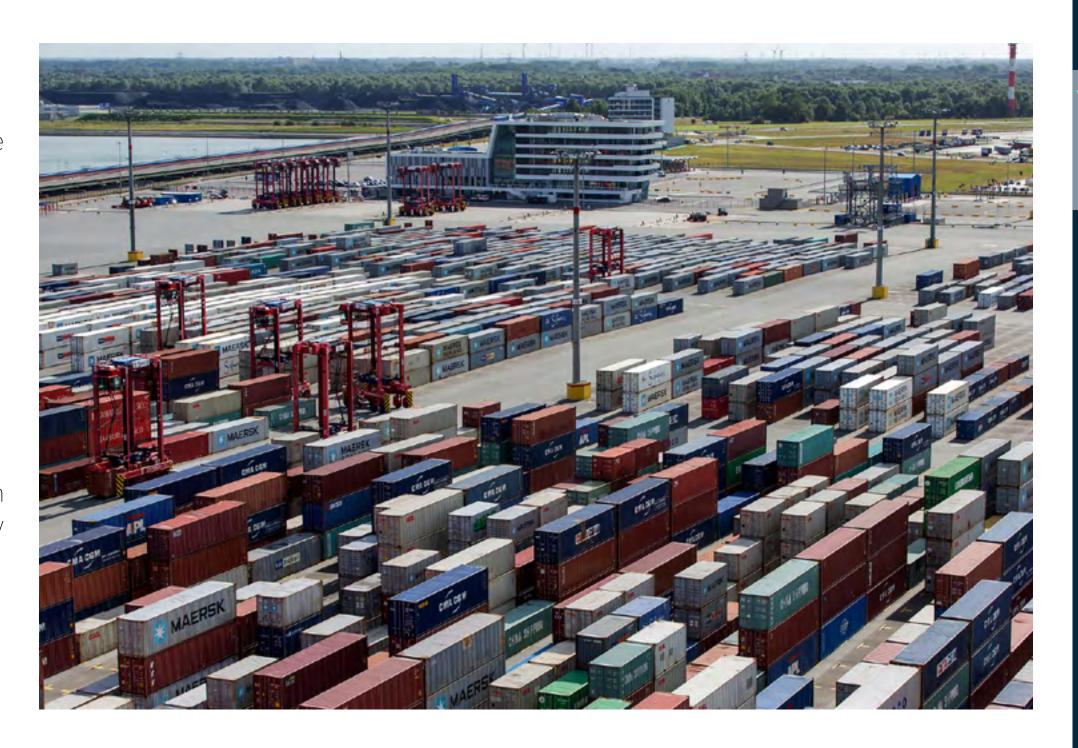
### TFG Transfracht increases train frequency to the JadeWeserPort

At the beginning of September, TFG Transfracht, the market leader in containerised seaport hinterland transports, increased the number of round trips to Wilhelmshaven by one departure a week. The reason behind this development is the growing volume of freight transhipped at the JadeWeserPort, and the accompanying demand for rail freight transport services.

Transhipment volumes were low at the JadeWeserPort for a long time. However, turnover has increased massively since the 2M alliance between the Danish logistics company Mærsk and their Swiss competitor MSC began handling transport operations to East Asia there – transhipment volumes reached 482,000 TEU in 2016. In April 2017, six further container shipping companies established operations in Wilhelmshaven.

In May 2017, TFG Transfracht included the JadeWeserPort in its timetable for the extensive AlbatrosExpress service for the first time, with three weekly connections. The addition of the fourth weekly connection coincided with the fifth birthday of Germany's only deep-water port on 21 September 2017. The growth potential is huge: the container terminal has an annual capacity of 2.7 million TEU.

TFG Transfracht currently offers four weekly connections on 20 routes, linking Wilhelmshaven with the most important economic centres in Germany, Austria and Switzerland. The DB subsidiary, with its extensive AlbatrosExpress network, offers daily connections linking the ports of Hamburg, Bremerhaven and Wilhelmshaven with more than 15,000 towns and cities in Germany, Austria and Switzerland. (mh)





# Germany

### Bombardier Hands Over First Three of 52 TRAXX Locomotives to Akiem

Akiem hands three locomotives over to lessee HSL Logistik GmbH with three more planned for the second quarter of 2018

collaboration with our important customer Akiem, who has ordered 87 TRAXX locomotives since 2011. HSL will add these three locomotives from Akiem to their large fleet of leased locomotives. In addition, HSL will receive its first TRAXX locomotive in December."

#### Blend of locomotives expands both companies' operations and market share

Rail technology leader Bombardier Transportation has recently handed over three BOMBARDIER TRAXX AC locomotives to the rolling stock leasing company Akiem, who then passed them directly over to lessee HSL Logistik GmbH. This double handover took place at Bombardier's Kassel site. The handover was based on a framework agreement signed in the Summer of 2016 between Akiem and Bombardier Transportation for 52 electric TRAXX locomotives with options for additional call offs. Akiem called-off their first batch of 26 TRAXX AC and MS locomotives (configured for use in twelve countries) in parallel to signing the framework agreement. In November 2017, Akiem then called off additional ten locomotives.

"These new locomotives don't just meet our customers' requirements, they also expand our business' development in Europe by extending our service, flexibility and performance. We are very glad to continue our long-term partnership with HSL and with Bombardier", said Hengameh Panahi, Managing Director of Akiem.

"As Germany's largest privately owned rail transport company, transporting around 300 trains per week, we are confident that these new TRAXX locomotives will enable us to further enlarge our business as that trend continues to increase," said Haiko Böttcher, CEO HSL Logistik GmbH.

Marko Schreiber, Head of Product Families MS/DC Locomotives,

Bombardier Transportation, added, "We are proud of the strong





















Japan

- A JR West 103 Series EMU stands at Inari station, working a Kyoto area service, on September 15th. *Keith Chapman*
- JR 4-6-4 steam loco No. C612 is seen working at Kyoto Railway Museum on September 14th. This class of Japan's largest passenger steam locos, were built in 1948 by Hitachi. *Keith Chapman*
- A Japan Railways (JR) E657 Series EMU near Akihabara station in Tokyo on September 8th. *Keith Chapman*











A N700 Series Shinkansen EMU is seen approaching Kyoto station on September 14th. Taken from the observation deck in the Kyoto Tower. (The Kyoto Railway Museum is just out of shot in the top right-hand corner). *Keith Chapman* 













- A Shinkansen unit stands at Omiya, Tokyo on November 7th. *Mark Enderby*
- A JR West 221 Series EMU passes Inari, working a Kyoto area service, on September 15th.

  Keith Chapman
- A W7 Series Shinkansen EMU stands at Tokyo Central station on September 11th. Keith Chapman











Japan

- A 2 car DMU stands outside Takayama depot on November 10th. *Mark Enderby*
- JR 4-4-2 steam loco No. 1080 is seen at Kyoto Railway Museum on September 14th. This loco was built in Glasgow by Dubs & Co in 1901. Keith Chapman
- On November 11th, Eizen Railway EMU No. 902 is seen at Kurama, Kyoto. *Mark Enderby*





























St Kitts Scenic Railway also known at "The Sugar Train" and referred to as the last railway in the West Indies, was constructed between 1912 - 1926 to transport Sugar Cane from the plantations to Bassererre for processing and exporting. Now an 18 mile scenic narrow-gauge railway (30"wide), the railway owns and operates three 0-6-0 diesel - hydraulic diesel of the PKP class Lyd2 built by FAUR in Romania. Here a train to La Vallee waits to depart Basseterre Station. *Michael Lynam* 













The double deck carriages are locally built with the covered top deck open to the elements, while the lower deck is air conditioned, carpeted and includes a bar and toilet facilities. The first coach is a generator coach for all the service needed.











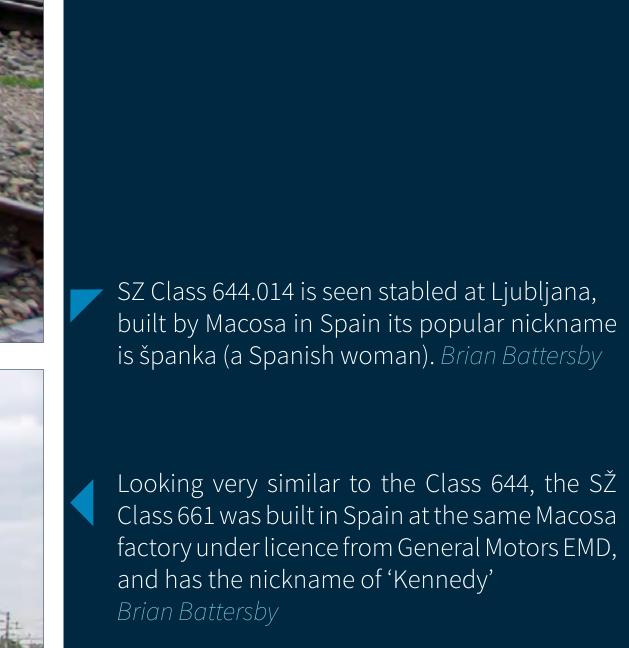


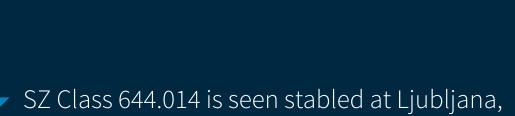






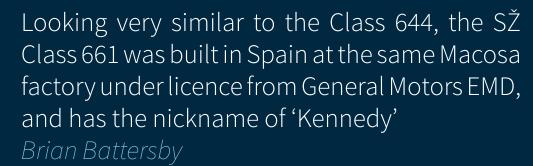






Slovenia

Railtalk Magazine Xtra



Slovenske železnice Class 642.012 carries out some shunting at Ljubljana. These locomotives are an GM-EMD design, assembled under license by Đuro Đaković in 1984, and nicknamed 'Regan'. Brian Battersby

















- In stunning scenery SBB Class 460.089 hauls an IC service through Speiz Ghei. *Paul Godding*
- Basel BLT tram No. 189 heads along Munchensteinstrasse working a line No. 10 service to Dornach Bahnhof. *Paul Godding*
- SBB Class 420.139 hauls a passenger service through Eglisau. *Paul Godding*











OnOctober21st, four cylinder compound 2-10-0 steam locomotives Nos. C 5/6 2978 and C 5/6 2969 approach Goeschenen with a photo runpast whilst hauling a tour over the Gotthard pass. The steam in the distance is from No. B 3/4 1367 assisting on the rear. *Mark Pichowicz* 













- SBB Class 450.104 and 450.036 heads through Eglisau working a S9 service to Uster.

  Paul Godding
- SBB Class 460.028 is seen on the rear of a service through Itingen. *Paul Godding*
- A pair of SBB Cargo's Class 474s haul a container train through Speiz Ghei. *Paul Godding*















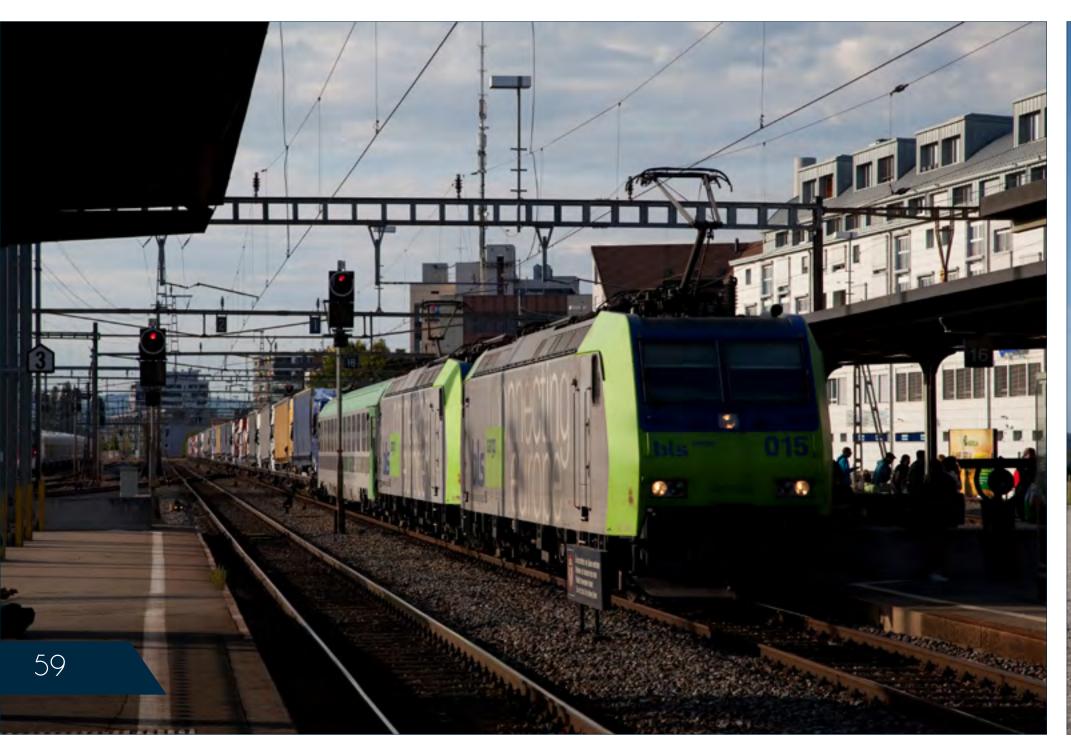


- SBB Cargo's Class 420.327, 421.374 and 420.279 haul an intermodal through Speiz Ghei.

  Paul Godding
- SBB Class 450.051, on the rear of a S9 service to Schaffhausen, is seen near Eglisau.

  Paul Godding
- BLS Class 485 015 leads another Class 485 through Thun with an intermodal service.

  Paul Godding











- Matterhorn Gotthard Bahn No. 52 approaches Lalden with a service to Brig. *Paul Godding*
- SBB Class 460.099 heads out of Itingen on the rear of a Basel bound service. *Paul Godding*
- Matterhorn Gotthard Bahn No. 94 stands at Brig with a Regio service to Andermatt.

  Paul Godding











- Class 460 008 approaches Lalden with a Brig bound service. *Paul Godding*
- SBBCargo's Class 620.062 and 420.276 approach Itingen with a container service from Prattelin.

  Paul Godding
- SBB Class 521.016 passes Itingen working a S3 service to Olten. *Paul Godding*











BLS No. 208 runs light engine through Lausen. The Ae 6/8 locomotives of the Bernese Alpine Railway Company Bern-Lötschberg-Simplon (BLS) were built in the years 1926-1943. Paul Godding







Paul Godding

Brand new BLS Vectrons Nos. 475.410 and 475.411 run light engine through Lalden.

Paul Godding

#### Alstom's Pendolino connects three countries for SBB

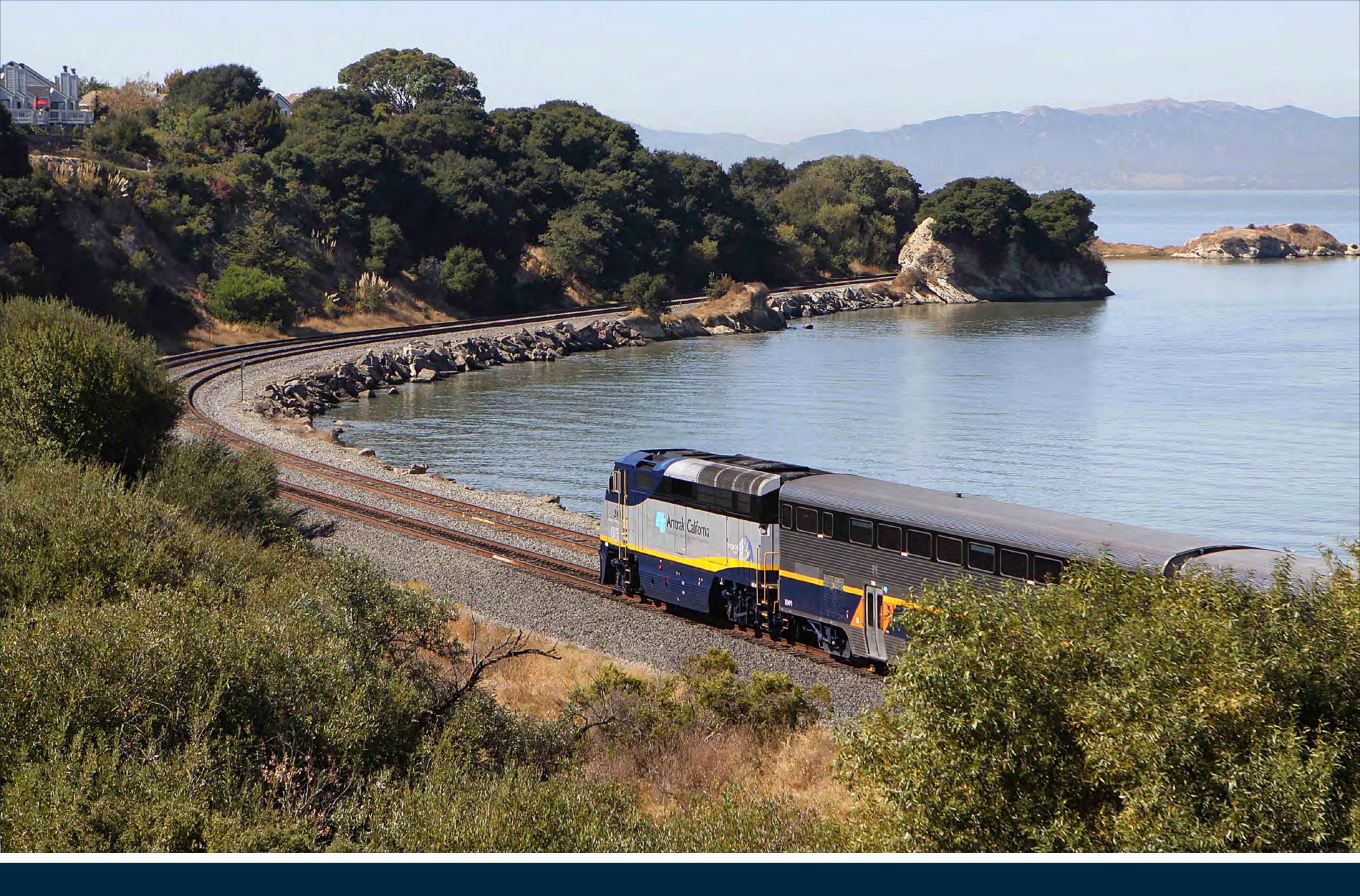
Alstom's high-speed train Avelia Pendolino will connect Germany, Italy and Switzerland from December 2017. SBB, Deutsche Bahn and Trenitalia will be offering a new direct service between Germany and Italy via Switzerland beginning with the timetable change in December. At the beginning of 2017, Alstom delivered the last Pendolino ETR 610 high-speed tilting train ordered by SBB, thus increasing their fleet to 19 Pendolino trains. The vehicles have so far been operated as Euro City trains on the Gotthard and Simplon routes to Milan and Venice. From the end of 2017, these vehicles will now connect three countries, running from Frankfurt to Milan via Basel. The vehicles are therefore equipped with three different train protection systems. 12 of them received the respective approval in May 2017.

Alstom's Avelia Pendolino for SBB is a seven-car train that can transport up to 420 passengers at a maximum operating speed of 250 km/h. The train offers its passengers easy access and high comfort thanks to, among other features, wide gangways and corridors, adjustable seats, individual reading lamps and sockets as well as large panoramic windows. The train is equipped with the latest generation of flexible bogies reducing track and wheel wear. It also benefits from Alstom's unique tilting technology, which allows trains to run 35% faster and more safely through curves on conventional lines.

Thanks to its environmentally friendly design, the Pendolino is recyclable up to 95% and is equipped with an electric brake system allowing reducing energy consumption by almost 10%.

The trains are produced in Italy. Alstom's site in Savigliano is responsible for the design and manufacturing of the trains, whereas the design and production of the traction system are made in Sesto San Giovanni (Milan) and the signalling systems in Bologna.





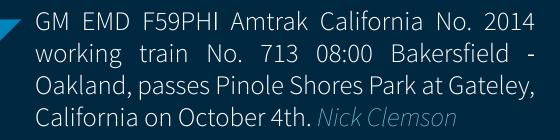


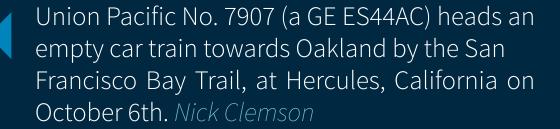




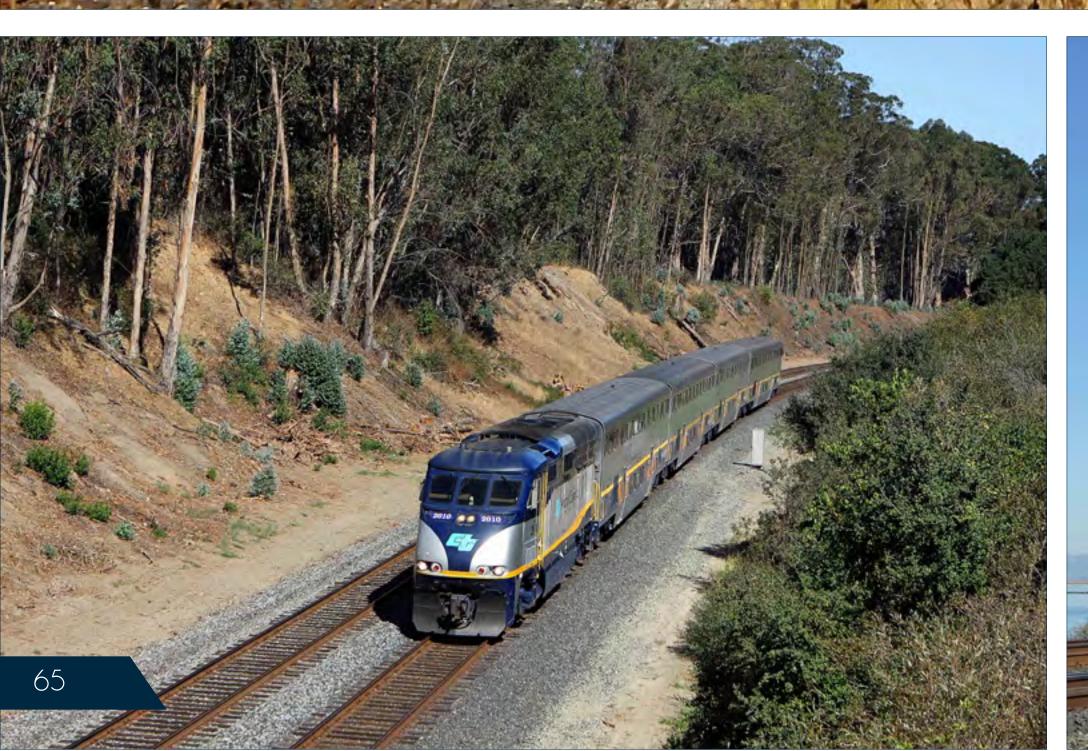








GM EMD F59PHi Amtrak California No. 2010 with train No. 701 06:00 Bakersfield - Oakland passes Point Pinole Regional Park, California on October 4th. *Nick Clemson* 











- BNSF No. 7656 (GE ES44DC) leads 7 other locos through Modesto with trailers and double stack containers heading south on October 9th. *Nick Clemson*
- Union Pacific No. 2598 (GE ET44AH) brings up the rear (dpu) of an empty car train by the San Francisco Bay Trail, Hercules on October 6th. Nick Clemson
- On October 9th, GE P42DC 'Genesis' Amtrak No. 161 departs Modesto station with train No. 715 10:25 Bakersfield - Oakland. *Nick Clemson*













## Alstom to supply signalling system for Singapore Circle Line Stage 6

Alstom has signed a contract with Singapore Land Transport Authority (LTA) to supply the signalling system for Singapore Circle Line (CCL) final phase, stage 6. This includes the supply of its Urbalis driverless signalling system, the equipment of news trains and locomotives of the existing line and upgrade of the Automatic Train Supervision system (ATS). Besides, Alstom will almost double the capacity of the existing Kim Chuan Depot with new stablings.

Singapore CCL Stage 6 will be 4km long and will add 3 stations, Keppel, Cantonment and Prince Edward, to the existing line of 30 stations across 35.5km. Once completed around 2025, it will close the loop of CCL by connecting HarbourFront Station to Marina Bay Station. By then, commuters will enjoy overall connectivity between areas in the West and key employment areas in the CBD (business district), as well as upcoming developments in the Marina Bay area.

So far, Alstom has been supplying signalling systems for three metro lines in Singapore, in total representing over 100km. They are North East Line (20km), the first full underground driverless metro line in Singapore, the entire Circle Line (39.5km) and Thomson East Coast Line (43km), which will start revenue service in five stages from 2019 until 2024.

"Alstom is pleased to win this contract to continue supporting our customer, LTA, to develop the Circle Line. By closing the loop of the line with a service-proven signalling system, commuters will have an easier and faster travel experience from the western to the eastern part of Singapore. Alstom will work closely with LTA to execute this project in order to deliver the highest level of excellence", said Ling Fang, Managing Director of China & East Asia, Alstom.





# Alstom will install its latest generation ERTMS technology in Adif's laboratory trains

Alstom has been awarded a project by the Spanish railway infrastructure manager Adif to equip three auscultation trains with its latest ERTMS technology solution Atlas. This upgrade of the onboard signalling systems on ADIF's monitoring trains will contribute to increase its services portfolio and improve performance. With this new on board solution, Adif laboratory trains will be fully aligned with the new European technical requirements for safety and interoperability.

The new on-board equipment supplied by Alstom incorporates the latest version (baseline 3) of ETCS Level 2 technology in these rolling laboratories for the validation of new and on-going trackside ERTMS projects and for routine inspections along the entire Spanish ERTMS-equipped rail network. Adif's laboratory trains monitor the Spanish high-speed network to guarantee quality and safety, ranging from aerodynamic behaviour in tunnels to infrastructure (catenary and track), mobile communications and signalling systems.

With over 15 years of experience installing ERTMS solutions, Alstom is a global pioneer in its development and implementation and a worldwide leader in on-board equipment. With projects in 30 countries, Alstom has equipped 18,000 km of tracks and over 6,000 trains of 130 different types with its Atlas ERTMS solution. Atlas is a scalable solution that can be adapted to all types of traffic and operational needs: passengers and freight, high-speed or suburban.

Alstom's signalling technology centre in Spain executes national projects and take part in some international projects. Highlights of ERTMS references recently awarded in Spain include the high-speed lines of the West Coast corridor (Albacete-Alicante), the Mediterranean corridor (connection with the French border), the Zaragoza-Huesca link and the Northwest corridor (Valladolid-León-Burgos). Alstom has also installed or is installing the on-board equipment for the suburban networks of Madrid and Barcelona; for Renfe Ave high-speed trains (Series 100, 104 and 114) and for the Haramain project high Speed trains.

ERTMS programme (European Rail Traffic Management System) was launched in the early 1990s by the European Union to standardise and modernise the design of train signalling and protection systems. ERTMS are one of the keys elements of railway signalling systems to enhance safety and manage railway traffic control and ensure interoperability among European railway networks.



#### Alstom's Citadis trams arrive in Dublin from La Rochelle

Alstom has successfully delivered the first longest Citadis trams ever to Dublin from its factory in La Rochelle, France. Seven, 55-metre trams, purchased for €35 million by Transport Infrastructure Ireland (TII), will run on the extension of the Dublin tram network as part of the LUAS Cross City transport project. They can carry up to 344 passengers. Once all seven trams have arrived from La Rochelle, they will be fully assembled at Alstom's site in Sandyford, and then undergo safety testing and commissioning. They are expected to enter service in February 2018.

"Seeing these fantastic Citadis trams arriving into Dublin was an incredibly proud moment for us at Alstom. It is another important milestone in our long and successful partnership with Transport Infrastructure Ireland. Dublin was amongst the first cities in the world to order our first tram in the Citadis range 15 years ago, and will now be the very first to try our longest model. We look forward to starting work on the final assembly and testing so that passengers in Dublin can enjoy these trams." said Nick Phillips, Customer and Operations Director at Alstom UK&I.

Following the successful delivery from La Rochelle, Dublin's Alstom Citadis fleet will comprise 73 trams in total. Alstom also maintains the trams and the network infrastructure. Alstom holds a strategic position in the tram and light rail



vehicle market with around 15 years of return on experience, more than 50 customers, 2,500 Citadis sold and 1,900 vehicles in revenue service throughout the world.

Citadis trams and light rail vehicles are suited to all urban environments, meeting the different expectations of passengers

and cities, whether the requirement is for a new tramway network or the modernisation of existing networks. They boast impressive environmental credentials, being up to 98% recyclable, and can be equipped with several electric power systems.



#### Alstom to deliver 27 additional Coradia Meridian "Jazz" trains to Trenitalia

Alstom will start delivering from summer 2018, 27 additional Coradia Meridian "Jazz" regional trains to Trenitalia, the Italian national train operator for the Italian regions. This new order is worth €170 million and is exercised as an option to the contract signed in 2012, brings

Trenitalia's fleet of "Jazz" trains to 118 units. The deliveries are planned to finish in the summer 2019.

The new train will be an Electric Multiple Unit (EMU) that can run at a maximum speed of 160 km/h, offering accessibility for all thanks to its low floor. Designed to be eco-friendly, Coradia Meridian is 95% recyclable. The new trains feature spacious interior fittings and are equipped with different onboard services, such as video surveillance system, info point for passenger information, sound system, braille writing and 220 volt power outlets for cell phones and laptops.

"Jazz has proven to be a reliable train appreciated by passengers and already in service in 11 Italian regions. We are pleased that Trenitalia renewed its confidence in Alstom, recognising the commitment of the Company to deliver ontime and on quality. This additional order is an opportunity to continue working with the Italian regions and with Trenitalia to improve local transportation in the country", said Michele Viale, Managing Director of Alstom in Italy.

The Coradia Meridian "Jazz" trains are designed and manufactured by Alstom in Italy. Project 69 development, most of the manufacturing as switchers are designed and manufactured at Alstom's plant in Sesto San Giovanni (near Milan). Trainborne signalling systems are delivered by the Bologna site.

well as certification are performed in Savigliano site, in Cuneo. Traction systems and auxiliary







#### Alstom to deliver 3 more trains to Östgötatrafiken

Alstom will supply three more Coradia Nordic trains to Östgötatrafiken in addition to their current fleet of 15. The new trains will be delivered in spring 2019. The trains will be built in Alstom's site in Salzgitter, Germany.

The Coradia Nordic train delivered to Östgötatrafiken consists of four cars, is 74 meters long in total, and has a capacity for up to 510 passengers. The train will run at a maximum speed of 160 km/h. The Coradia family is characterized by modularity, safety and performance, more than 97% of of the train is recyclable.

Alstom is currently delivering an additional 30 trains to Skånetrafiken and these new units for Östgötatrafiken will be an add-on to that production line notably regarding the car body shell production.

"I am very proud that our trains are to the full satisfaction of our customer, and that Östgötatrafiken now chose to increase their fleet of Coradia Nordics, co-producing with Skänetrafiken," says Björn Asplund, Managing Director for Alstom in Sweden. Since 2002, 280 regional Coradia EMU single deck trains have been sold in the Nordic region. In total, more than 3,000 regional trains have been sold in Europe, and they are currently running in Denmark, France, Germany, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK.





World News



#### Arriva delivers world's first zero emission train for partially electrified tracks

Arriva to provide 18 of the world's first zero emission train on line that isn't fully electrified

Remainder of the Northern Lines fleet in the Netherlands will be converted into hybrid trains

Arriva – a leading pan-European passenger transport company has announced that it has signed a contract with train manufacturer Stadler for the construction of 18, world-first zero emission trains suitable for use on partially electrified tracks. The total contract value amounts to 170m euros for trains in the north of the Netherlands.

The Flirtino is a flexible train that - once partial electrification is finished - can be transformed from a HVO (Hydrotreated Vegetable Oil) hybrid diesel train into a zero-emissions train that uses partial electrification to charge batteries that keep the train running on the parts of the tracks without electrification. This train is the first of its kind in the world that combines regenerative technology with an HVO engine that can be replaced with an extra big battery for non-electrified parts of the track.

Partial electrification is a cost effective option to reach zero emissions operation for railway lines where it is not possible or the business case cannot be made to deliver full electrification. This is often the case on railway lines where there is a high number of bridges and viaducts. The Flirtino is the first Zero-Emissions train to run in the world that runs on only partially electrified railway lines and the first train that runs on HVO until partial electrification is finished.

The Flirtino train formed part of Arriva's successful bid for the Northern Lines contract in the Netherlands in July 2017, and the first trains on HVO will be introduced in 2020. It is expected that construction of partial electrification can be finished in 2025 after which the trains will be transformed into Zero-Emissions trains. In addition to the 18 brand new zero emissions trains, the existing 51-train fleet is being completely renovated and also equipped with advanced battery packs. This creates a complete fleet of 69 hybrid trains.

Arriva first presented its plan for the future of sustainable public transport during the Climate Conference North NL at Groningen in the Netherlands on 9th November.

Commenting on the announcement, Arriva Group CEO Manfred Rudhart said: "As one of Europe's largest transport operators, we are proud to be delivering into service world-first Flirtino trains for our Dutch customers. This is a major step towards creating a future where transport across Europe is cleaner, greener and more sustainable. Our investment in these new green technologies shows our commitment to ensuring that the environment remains top of the transport agenda across our operations in mainland Europe - an area which is an important growth engine for Arriva."





## Siemens-built light rail vehicles ready to begin revenue service in San Francisco

A total of 219 light rail vehicles built at Siemens Sacramento manufacturing hub

Largest order for light rail vehicles ever received by Siemens in the United States

The first Siemens-built light rail vehicle for San Francisco, U.S., entered revenue service. The new light rail vehicles will be built at the Siemens plant in Sacramento, California.

schedule."

"The start of the revenue service is an important milestone not only for Siemens and SFMTA, but also for the more than 700,000 passengers who use San Francisco's transportation system per day. The new trains will contribute to the growing demand for mass transit in the booming metropolis," said Sabrina Soussan, CEO of the Siemens Mobility Division.



In total, the company will deliver 219 light rail vehicles for San Francisco's Municipal Transportation Agency (SFMTA), Siemens' largest order for light rail cars placed in the U.S.

In January 2017, the first production Light Rail Vehicle (LRV) of the 2015 cars based on Siemens' model S200 was delivered in San Francisco.

"An incredible amount of work went into making sure these state-of-the-art, once-in-a-generation vehicles are going to work well for Muni riders for many years to come," said SFMTA Director of Transportation, Ed Reiskin. "When we initiated the contract, it was the largest light rail vehicle contract ever awarded in the United States and we are pleased that this project is ahead of

Siemens newly-developed light rail vehicle is based on its Model S200 and is especially energy-efficient thanks to a light-weight drive system that recuperates braking energy and an LED lighting system that uses up to 40 percent less electricity than standard neon lighting. The trains for SFMTA include features informed by public input including a new seating configuration, new interior color schemes, and new exterior design.



## Eurostar celebrates 10 years at St Pancras International

#### Departures area to be enhanced with new retail in 2018

Eurostar has marked the 10-year anniversary of relocating to St Pancras International, with the improved station facilities and reduced journey times supporting passenger growth of 25% from 8 to 10 million travellers a year.

Throughout 2017, the Eurostar departures area has been upgraded to further improve the experience for travellers to Europe. eGates are now in place to speed-up the security process and the departure lounge will soon welcome a new Pret A Manger and World Duty Free, due for completion early 2018. As traveller numbers have grown, so has the choice of destinations on offer. A direct service to Lyon, Avignon and Marseille launched in May 2015, and the new service to Rotterdam and Amsterdam will soon provide a seamless connection to the Netherlands. Since 2015, the Eurostar fleet has been transformed with the introduction of brand new, state-of-the-art e320 trains, and the complete refurbishment of a number of Eurostar's original trains, fitted out with the same Pininfarina designed interiors as the e320 and also featuring free wi-fi and on board entertainment.

St Pancras International, voted the nation's favourite station in

every year since it reopened in 2007, provides domestic and international travellers with high quality customer service, a unique retail offer, a range of food and drink options and regular art and music events to create a vibrant public space which attracts approximately 48m visits a year.



Eurostar's move into the redeveloped St Pancras International stimulated the improvements to the wider area. Since 2007 Argent started work on London's flagship regeneration project, creating one of its most eclectic and successful mixed use neighbourhoods. The Kings Cross estate now consists of 1.3 million sq ft of office space, housing 70 businesses, employing 12,000 people across 67 acres.

Nicolas Petrovic, CEO, Eurostar, said: "The move to St Pancras International 10 years ago reduced journey times by over 20 minutes, making Eurostar even more attractive to business and leisure travellers. With continuing investment in our trains, stations and service, customers are increasingly choosing high-speed rail over plane to a range of destinations."





#### CAF TO SUPPLY 30 LRVs TO MANILA (THE PHILIPPINES)



The Republic of the Philippines Department of Transportation and Communications has awarded Mitsubishi Corporation and CAF (as train manufacturer) a new rolling stock supply contract for Manila Light Rail Transit (LRT) Line-1. The €225 million worth contract is funded through a Japanese ODA Loan Agreement subscribed by the governments of Japan and the Philippines.

Manila, the capital of the Philippines is considered one of the cities with highest population density in the world. This project aims to improve the line capacity, contributing to cater for the growing number of passengers, improving service quality as well as helping to reduce pollution levels in the city.

LRT Line-1, elevated track line which covers 20Km in length and crosses Manila from north to south. The line is currently being extended with a further 12Km section towards the Cavite Province. CAF's scope includes the manufacture of 30 LRV-type units to be delivered within the 2020 - 2022 period.

These units will be bi-directional trains with catenary power supply (750 Vdc) and sixteen doors on each side, which will provide access for passengers to board and exit the train comfortably. The units, designed to run at a design speed of 70km/h, will have a length of 106m and offer a 276-seat layout which will in turn maximise capacity for standing passengers.

It is worth mentioning the relationship between CAF and Mitsubishi Corporation has led to the development of several joint projects in recent years. Some of these joint projects include the

supply of automatic underground units for Istanbul (Turkey) and trams for Canberra (Australia).

This is the first contract awarded to CAF in the Philippines and confirms the company's expectations of securing a significant order volume during the second semester of 2017. During this period, as well as this contract in Manila, CAF has won other contracts to be added the company's backlog of orders which include the supply of trams for Stockholm, De Lijn, Consenza, Seattle and Kansas; metro units for Alger; and trains for the UK and New Zealand.

#### CONTRACT FOR NAPLES METRO

On the other hand, CAF has entered into a contract with Naples City Council for the supply of 10 units of 6 cars for Line 1 of the city underground to be delivered during 2019.

This project award was provisionally announced in mid 2016 for an approximate amount of €90 million and envisages an extension of the original scope of supply with 10 additional trains.

CAF has a strong presence in Italy and has carried out the following projects, among others: Rome Metro; the supply of commuter units for Bari and the north region of Friuli Venezia Giulia which will also cover the link of the Transalpine region with Austria and Slovenia; the supply of diesel trains for Sardinia regional lines; as well as retrofitting E-401 Locomotives for Trenitalia.



#### Siemens to upgrade South Western Railway fleet

#### Refurbishment of existing 172-strong Class 444 and Class 450 Desiro fleet Order volume worth more than €56 million

Siemens has received an order to upgrade the fleet of the British train operating company South Western Railway (SWR). Siemens will refurbish the existing 172-strong Class 444 and Class 450 Desiro fleet of trains, which currently operate across the SWR network. The contract is worth more than €56 million.

The enhancement programme, with work beginning in December 2017, will deliver a full interior refurbishment of all trains; including Axminster carpets, at seat power points for mobile devices and real-time information displays. Additional benefits for First Class customers include new leather seats and new tables incorporating innovative inductive charging. The refurbishment is expected to take around 12 months to complete.

The train enhancement programme is part of South Western Railway's investment plan to transform the customer experience during its tenure. The plan includes the introduction of new and as-new train fleets to increase capacity; longer, more frequent trains; quicker journey times and better connectivity; and station improvements and a better ticket buying experience.

"We are delighted to have appointed Siemens to carry out the refurbishment of our Class 444 and 450 Desiros. This significant investment in our fleet of trains will see a step change for our customers, and investment in local facilities and suppliers. We have a long relationship with Siemens, who I am confident will deliver a high quality product," said Neil Drury, Engineering Director, SWR.

"The UK is one of our core markets. With the refurbishment of the SWR fleet we will make an important contribution to improving passenger experience through renovations which will deliver better trains with more seats for travellers across the region," said Johannes Emmelheinz, CEO of Customer Services at Siemens Mobility Division.







## Stadler won the overhaul of up to 195 railway bogies in Finland

After winning an international public procurement, Stadler has signed a contract with Junakalusto Oy for the overhaul of railway bogies running in the four-car electric FLIRT trains, which had been delivered by Stadler to Finland between 2009 and 2014.

The agreement covers a total number of up to 78 motor and 117 trailer bogies as well some exchange components. The overhaul of the bogies is due after a mileage of about one million kilometers and will be done in a condition based approach. In this approach Stadler checks the condition and will react together with its broad experience and technical know-how accordingly, to ensure safe and well maintained bogies. The contract period with the overhaul of the first bogies is to start in January 2018 and lasts until the revisions of all bogies are executed, but not later until the end of 2022. The works will be managed by the specialists of Stadler's bogie revision center of competence located in Szolnok, Hungary.

Yrjö Judström, Managing Director of Junakalusto Oy, commented the contract: "Bogie overhauls are an important part of the life cycle management of the train, with this contract we will be able to reach the qualitative and financial goals we have set for the overhaul and we are really eager to start this new project with Stadler."

Jürg Gygax, Executive Vice President of Stadler responsible for the Service Division added: "Providing services for the vehicles it is an important business segment for us, in addition we have an excellent feedback channel about our trains. Therefore winning tenders relating to our products is always a priority task. We are also very proud that we managed to submit the best offer in price and quality within an exceptionally strong competition.

Stadler's Service Division is responsible for the maintenance of vehicle fleets in 16 countries made up of over 680 vehicles that cover a combined annual distance of more than 115 million kilometers. In addition to the full service Stadler Service concentrates on modernization of trains and on overhauls of components. Therefore Stadler introduced in the year 2013 a bogie revision competence center in Szolnok, Hungary.



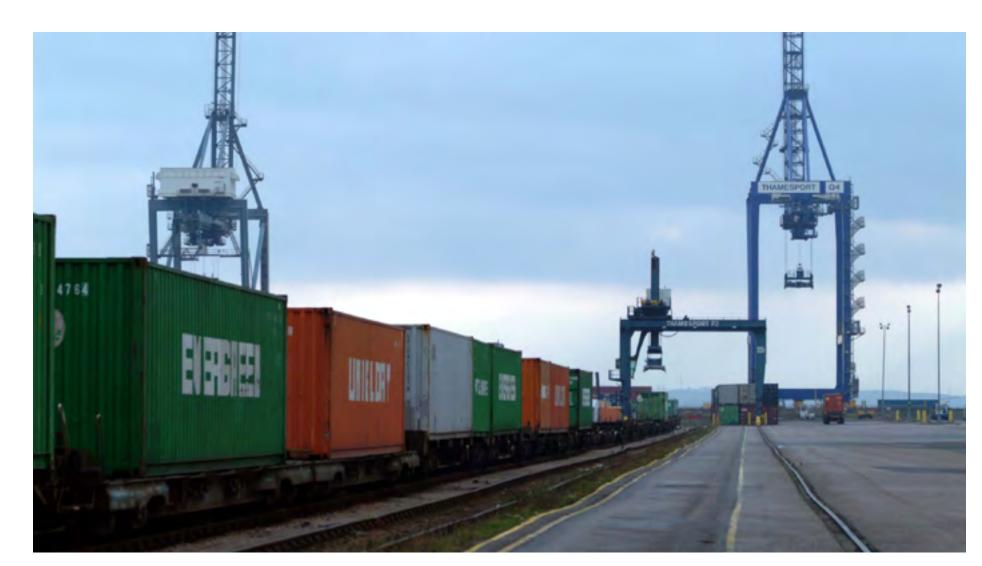
#### To London Thamesport by rail

#### DB Cargo UK delivers steel coil to the expanded port

The British rail freight company DB Cargo UK has operated the first ever rail service to Armitt Group's new handling facility at Hutchinson Ports London Thamesport. The first train, carrying steel coil, arrived in mid-August.

"We are delighted that, with this train, we've shown once again the excellent rail freight services we offer to the British steel industry and its logistics partners," said Sonia Hampton, Account Manager Metals at DB Cargo UK. The 1,000-tonne trailing weight originated from the Tata Steel plant in South Wales and was transported onwards from Thamesport to customers across Europe.

Thamesport was built in 1990 on the Isle of Grain near Rochester, to the south of London. It became a deep-water port in 2001 and is connected to the national rail network via a single-track line. It now has a capacity of 635,000 TEU standard containers.



Allan Seedhouse, Managing Director at Armitt Group, said: "The Armitt Group is delighted to have delivered a long awaited 'deep sea' rail connected Specialist Steel Terminal as the first part of our three terminal strategy to provide a complete supply chain solution to the UK steel industry."



#### Bombardier Signalling Technology Improving Moroccan Rail Service

Bombardier's INTERFLO rail control successfully operating on the first section of the 360 km Casablanca to Tanger-Med Line

Project to upgrade the entire line to European standards supports national agenda for economic growth by increasing railway capacity

Bombardier Transportation has reached a significant milestone in its rail modernisation projects with the Moroccan State Railway, ONCF. After almost four months of successful operation, the first 30 km stretch of the Casablanca to Tanger-Med Line upgrade is benefitting from the state-of-the-art BOMBARDIER INTERFLO 250 advanced rail control solution.

Upgrading the entire 360 km Casablanca to Tangier-Med line forms part of ONCF's programme to increase capacity on Morocco's most important passenger and freight rail corridor as part of the national agenda to promote infrastructure development and economic growth.

To reduce travel times and increase capacity, Bombardier is currently upgrading the line in two parts with its globally-proven mainline solution. The sections comprise the Casablanca to Kénitra section (130 km) and the Sidi Yahya to Tangier-Med (230 km) stretches of the line. Bombardier will also provide maintenance through its BOMBARDIER OPTIFLO rail control services solution. The project is being delivered by Bombardier's Spanish Centre of Excellence and Morocco-based project management team.

Bombardier Transportation has had a local presence in Casablanca since 2011 following the award of a contract to rehaul 14 ONCF electric trains operating on the Casablanca-Rabat line and then the signalling contract to equip the ONCF line between Casablanca-Kenitra and Sidi Yahya-Tanger with ERTMS Level 1. Bombardier Aerospace has operated a state-of-the-art manufacturing facility in the Nouaceur Midparc free zone near Casablanca since 2014, which currently employs 300 people and produces aircraft components and sub-assemblies for Bombardier business and commercial aircraft.









#### From the UK

#### East Lancs Railway

In early November the line held a DMU gala which featured a return to service of some very long withdrawn railcars. The event drew huge crowds and many services were full to bursting. A novel feature of the gala was the hauling of a unit by a Class 40 loco.

- Visiting the line from the Llangollen Railway, Class 109 Nos. 56171 and 50416 catch some sunshine at Ramsbottom whilst working a service to Heywood. *Richard Hargreaves*
- For several runs, the DMU's towed parcels van No. M32978M as far as Ramsbottom, recreating a scene that was once commonplace.

  Paul Godding
- Class 105 Cravens DMU Nos. E51485 and E56121 stands in late afternoon sunshine at Ramsbottom on November 4th. *Paul Godding*









#### From the UK

- On November 4th, Class 40 135 arrives into Ramsbottom with a Rawtenstall bound DMU drag. *Richard Hargreaves*
- Class 104 BRCW Nos. M50455 and M50517 call at Ramsbottom on November 4th.
- Richard Hargreaves
- Class 117 Pressed Steel Nos. W51339 and W51382 along with Class 122 Gloucester 'Bubble Car' No. W55001 calls at Ramsbottom with a Rawtenstall to Heywood service on November 4th. *Paul Godding*

















