

Railtalk Magazine Xtra



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## Submissions & Contributions

Railtalk Magazine Xtra, a Magazine written by the Enthusiast for the Enthusiast. So why not join the team. We are always looking for talented Photographers and Writers to join us at Railtalk. Be it though Pictorial Submissions or via a written article featuring an event or Railtour, we greatly appreciate any contributions to the magazine however big or small.

#### **Photographic Contributions**

All Photographic contributions should to be sent to us via email, post or via the members section page on our website. Contact addresses are provided 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**

SNCF BB No. 2241 and EMU No. 51569 are seen at Dijon Ville working services to Lyon and Belfort respectively. *John Sloane* 

#### **This Page**

On June 12th, CD Cargo's Class 230.018 hauls a loaded coal train through Breclav. Paul Godding

#### **Next Page**

NMBS No.2861 (Railpool's Class 186.183 and ex METRANS) stands at Amsterdam Centraal working a service to Bruxelles on July 13th. *Erik de Zeeuw* 







# Welcome

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

Yet another bumper month for photos, thanks to all once again for sending your contributions. Some excellent locations and plenty of variety.

Well just a short holiday in the South West for me this month as regular Railtalk readers will know that the end of July is the annual visit to Dawlish and the Devon area.

This year could be the last for the dominance of the HSTs in the South West and it certainly will be sad to see them go from the sea wall after all these years, but we have to remember that they are over 40 years old now and things just don't last for ever. I certainly don't see the IEPs lasting as long.

News from Europe this month sees that the Siemens built Vectron dominance continues with DB Cargo intending to deploy them on Rhein-Alpine corridor routes from the Netherlands to Italy via Germany, Austria and Switzerland, and they will also be used in Belgium from 2020.

'The multi-system locomotives will make it possible to operate a train from the Netherlands to Italy without changing locomotives', said Siemens Mobility CEO Jochen Eickholt. 'This will make European freight transport fast, efficient and environmentally friendly.'



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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, Mark Armstrong, 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,

Kevin McCormick,

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.



An order for up to 100 locos has been mentioned, with at least 60 already confirmed.

And in France, plans for the progressive introduction of competitive tendering in the regional passenger market have been confirmed by the government, and the proposals will be included in transport legislation due to be published in the first half of 2018. They should first look at the current chaos in the UK before breaking up the national system!

Meanwhile in Germany, the Abellio GmbH German subsidiary of Dutch state passenger train operator NS has reached an agreement to acquire the stakes in Westfalenbahn which are currently held by municipal partners moBiel, Mindener Kreisbahnen and Verkehrsbetriebe Extertal.

This months 'From the UK' is the Keighley and Worth Valley Railway's Small Engines 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 June 28th, a loaded BHP ore train drops down through the Hammersley Ranges in the Pilbara Region of outback Western Australia. SD70s Nos. 4359/4335 are at the front with 4475/4320 just visible at the edge of the photo. These are the remote B units and mark the halfway point of the mammoth 268 car, 42,000 tonne train. *Mark Bennett* 











Austria

Railtalk Magazine Xtra

## The Rolling Road picks up speed

- Rail Cargo Group transports more and more lorries by rail
- Tirol: sectoral traffic ban measures take effect
- Average occupancy of the Brenner shuttle increases to 93 %

Rail Cargo Group is consistently pursuing its objective to shift freight traffic from the road to the railway and thereby actively help protect the environment. Tirol is notably committed to reducing air pollutants and has put in place a specific environmental policy, the sectoral traffic ban, which is having an impact for the RCG. Increasing numbers of lorries are travelling by rail and using the Rolling Road (ROLA) - the flexible, rapid and simple alternative for transport companies. As a result of the increased demand for ROLA services, Rail Cargo Operator, in its role as conductor and link between the market and the operational RCG departments, is supplementing the wagon capacity. From July 3rd, the Wörgl–Brennersee Rolling Road service has been increased from 16 to 18 pairs of trains per day. By supplementing the wagon range, the Brenner shuttle will in future provide places for 648 lorries - an increase of 12.5 % or 72 lorries every day.

Since the beginning of May, the impact of the sectoral traffic ban, which bans the transport of certain goods by HGVs on a section of the Tirol Inntal motorway, has been clearly felt. For the first four months of the current year the average occupancy of the Brenner

shuttle was 81.8 %; however, the occupancy rate has increased to 93 % since May. The growing importance of the Rolling Road in Tirol can also be seen when comparing May 2016 and May 2017. Over this period, the RCG has recorded an increase in the use of the ROLA for goods affected by the sectoral traffic ban of 70.6%. This does not simply help protect the environment and relieve the motorways, but also provides numerous advantages for lorry transport companies. This is because ROLA customers bypass automatic driver rest periods, limitations on night driving and speed restrictions, and significantly, also avoid traffic jams, all while saving on fuel costs, toll charges and operating kilometres.

Thanks to the Rolling Road, Rail Cargo Operator, in its role as the coordinator of all the departments involved, transports many different types of lorries on special wagons with a consistently low loading area (low-floor freight wagons) and is also responsible for customer support, product management and scheduling, including transit monitoring. Cargo handling is carried out using mobile ramps in the terminals. Lorry drivers travel in the accompanying vehicle, which is equipped with beds and a lounge area and kitchen. In addition, lorry drivers are offered meals on every ROLA train. Photo: ©ÖBB



OBB Class 2016.064 awaits departure time at Simbach, working the 20:17 service to Braunau Am Inn. *Front Comp Vids* 







- OBB Class 2016.064 runs light engine through Linz after working train No. REX5961, 07:17 Simbach - Linz. Front Comp Vids
- OBB's Class 1144.048 stands at Innsbruck, working the 16:20 service to Landeck Zams. *Front Comp Vids*
- Class 1144.124 stands at Innsbruck Hbf working the 16:52 to Landeck Zams. *Front Comp Vids*











ÖBB line No. 142 (Mühlkreisbahn) from Linz Urfahr to Aigen Schlägl has been isolated from the rest of the ÖBB rail network since the closure of the Linzer Verbindungsbahn and the scrapping of the Danube bridge.

All traffic is operated by either Class 5047 or 5022 DMUs and in the summer season trains Nos. 3178, 3180, 3185 and 3187 are reinforced by bicycle transport wagons. This is also unique in the ÖBB network.

Thomas Niederl







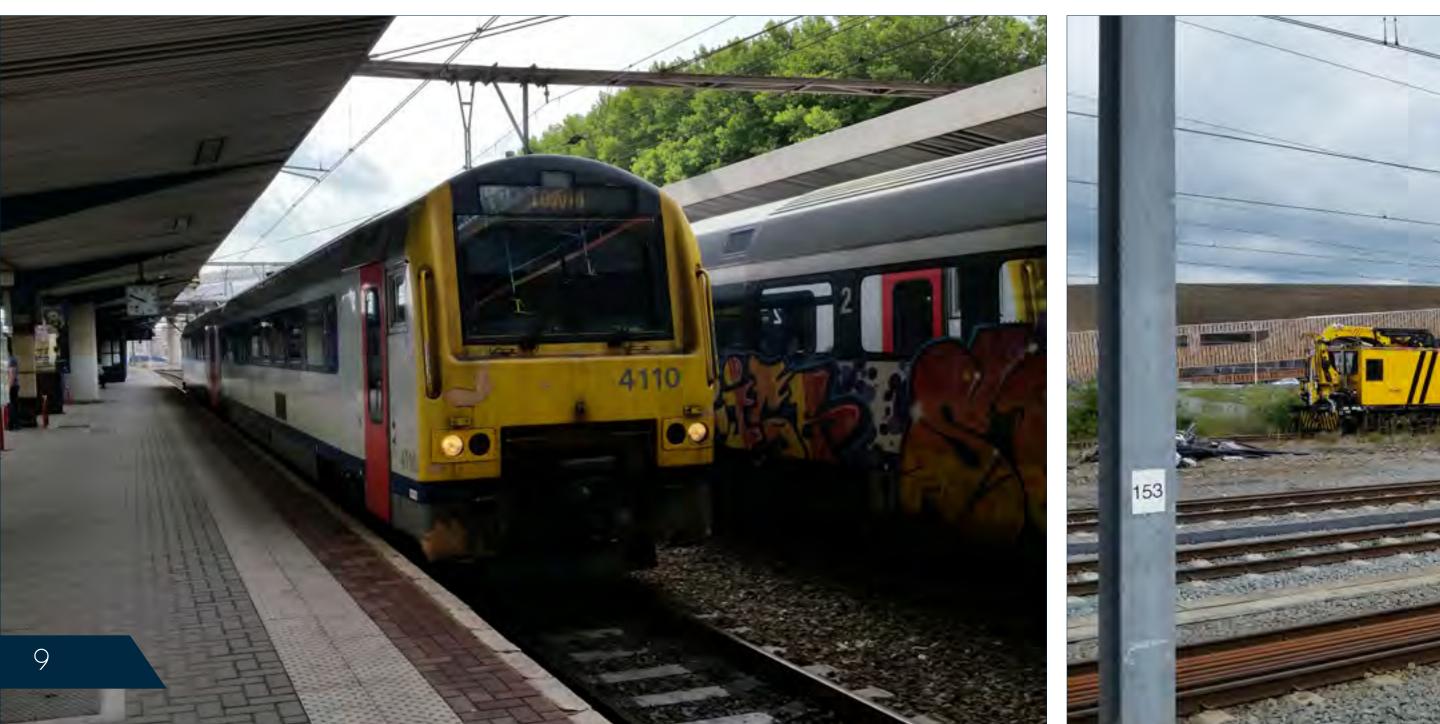




- Lijn tram No. 6009 working a service to Knokke stands at Blankenberg on June 29th.

  Mark Armstrong
- Infrabel track machine No. ES901 is seen stabled at Mons on June 29th. *Mark Armstrong*
- SNCB 2 car DMU No. 4110 stands at Charleroi Sud on June 29th working a service to Couvin.

  Mark Armstrong





























## Municipal waste on rail

On Friday, July 14th, a group of three Slps class cars arrived at the Brno-Slatina station with a number of nine ATCS containers with municipal waste.

This was a pilot transport of municipal waste from Svitavy to the SAKO incinerator in Brno. This company, which is wholly owned by the statutory city of Brno, provides comprehensive waste management services.

The ACTS Container System offers easy handling of containers that are dragged from wagons to trucks and simply emptied in to the incinerator.

In the near future, the network of garbage collection lines to Brno should be expanded by other cities. Many cities have failed to approve the expansion of landfills and waste has to be incinerated. ČD Cargo is well prepared for the increase in rail traffic this should create.

Photo: © CD Cargo



CZ Loko's Class 741.734 and 741.733 haul a rake of fuel tanks northbound through Steti on June 12th. *Mark Enderby* 























- Heading out of Prague and towards the German border, Metrans Class 386.007 passes northbound through Kralupy nad Vltavou on June 15th. *Mark Enderby*
- CD Cargo's Class 122.001 hauls a Southbound coal working through Steti. *Mark Enderby*
- On June 13th, SD operated Class 130.048 hauls a rake of coal empties north through Roudnice nad Labem. *Mark Enderby*











On July 8th and 10th, 27 wagons of the Faccs series were loaded into the siding. The loaded substrate was determined for construction work on the Austrian railway network, for ÖBB INFRA recipient.

On July 10th, the two sets were joined and the next morning they left for Strasshof via the border crossing station at Horní Dvořiště.

Notwithstanding the March transport of military vehicles from the Boletice military area, it was probably the heaviest train, which in the last few years has travelled along the České Budějovice - Volary route.

The total weight of the train and locomotives was 1,343 tonnes.

Photo: © CD Cargo/Radim Činčala







On June 12th, OBB Class 1216.239 hauls a rake of PKP coal wagons through Breclav.

Paul Godding







The first eastbound container service from Praha to Yiwu in China's Zhejiang province left the Metrans container terminal at Praha-Uhříněves at 11:35 on July 19th, carrying 41 wagons loaded with 80 containers of export goods including beer, crystal glass and automotive parts with a total value of US\$5m.

The 40ft containers are expected to cover the 11 000 km route via Poland, Belarus, Russia and Kazakhstan in 16 days, with transhipment to and from 1520 mm gauge wagons at the Poland/Belarus border and at Dostyk on the Kazakhstan/China border.

The YXE CR Express service has been organised by a Czech subsidiary of China's Yiwu Timex Industrial Investment Co, with other participants including CR Express, China Railway Container Transport Co, China Centrum Czech Republic and ČD Cargo.

The partners hope this will mark the start of a regular direct service between the countries.

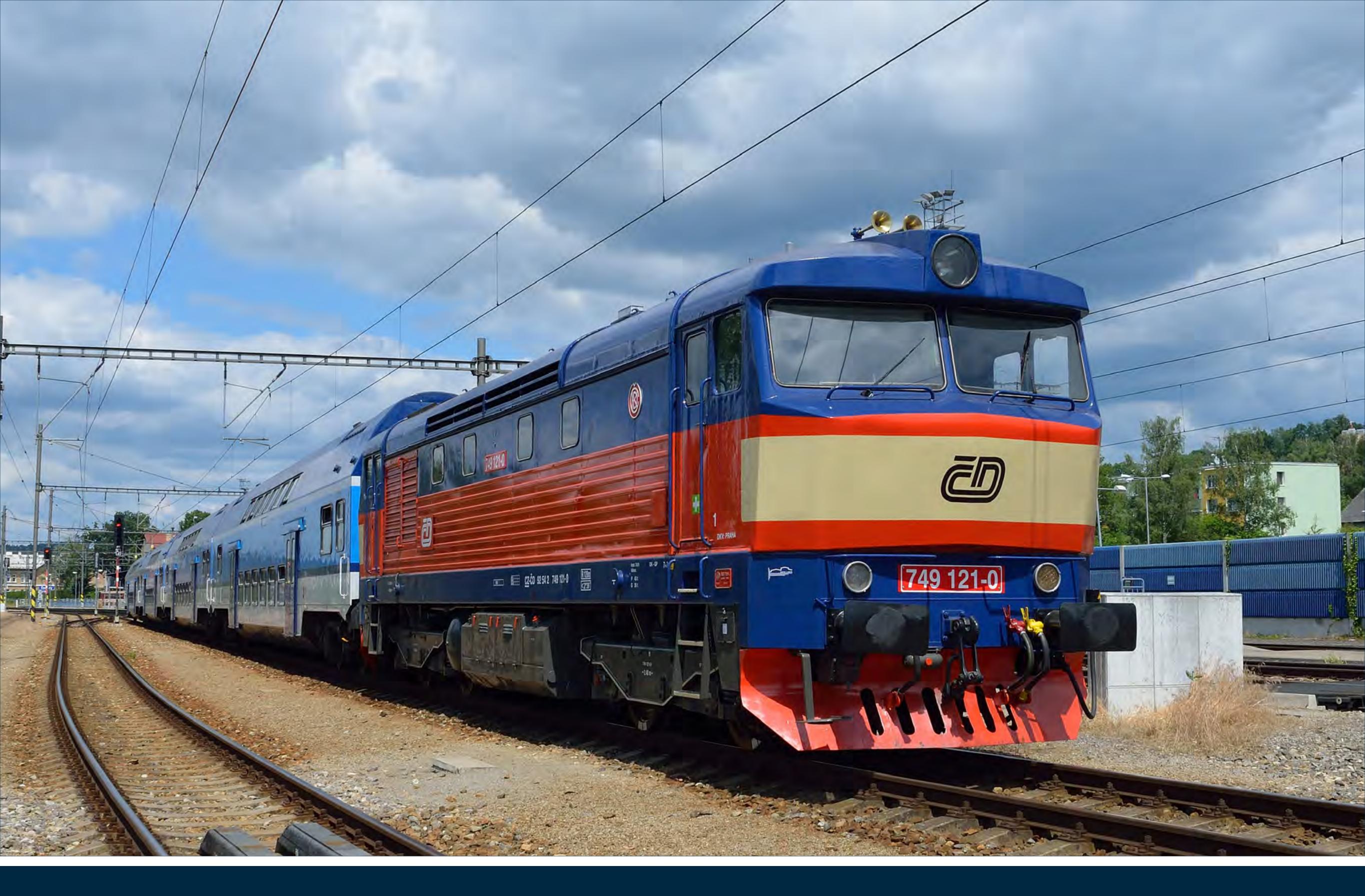
Photo: © CD Cargo







- On June 13th, TSS Class 180.020 rolls through Decin, running light engine. *Paul Godding*
- A very tidy Class 810.157 stands at a sunny Breclav on June 12th. *Paul Godding*













CD Cargo's Class 130.022 pauses at Usti nad Orlici on June 14th with a trip working to Lethorad. *Paul Godding* 

## Another new "Single Wagon Load"

From 11th to 13th July, a completely new shipment of glass bottles for the Microbrewer Clock in Potštejn in East Bohemia took place. This mini-brewery boasts a "craftsmanship" attribute, which is to prove the small-scale character of the production and the resulting unique parameters of brewed beer.

The realization of the transport is the result of the work of the regional business managers of ČD Cargo and they are very pleased that the brewery has chosen ČD Cargo to supply bottles.

The shipment took place from the glassworks in Nové Sedlo, which normally sends new bottles by rail, for example to Budweiser Budvar in České Budějovice.

The conventional car of the Kils class was used and the consignment travelled from the origin station to the destination at Potštejn by the regular Single Wagon System of ČD Cargo. Upon arrival the load was transferred to a truck and taken to the brewery.

Photo: © CD Cargo













- On June 15th, ZSSK's Class 350.016 speeds a Praha bound Eurocity service through Velim.

  Mark Enderby
  - Cesky Drahy's Class 162.011 is seen on the rear of a Kolin to Usti nad Labem Zapad service passing Strekov on June 13th. *Mark Enderby*
- PSZ's Vectron Class 193.820 heads south through Usti nad Labem Strekov on June 12th, heading towards Nymburk. *Mark Enderby*

















- Making a rare appearance in traffic, CD Cargo's Ckass 749.187 is pictured at Kralupy nad Vltavou on June 16th, having arrived with a short freight. *Class47*
- CD Cargo's Class 749.019 was employed on engineering duties at Beroun on June 17th.

  Class47
- Summer 2017 regular on the Zruc working so far has been Class 749.107, seen here at Ledečko, heading the Sunday afternoon turn to Cercany on June 18th. *Class47*











Alstom has presented to a delegation of RTA, headed by HE Mattar Al Tayer, Director General & Chairman of the Board of Executive Directors RTA (Roads & Transport Authority), the mock-up of the Metropolis trains for the Route 2020 project in Coignères in Paris.

A full-size mock-up of the Dubai Metro was unveiled to HE Mattar Al Tayer and his accompanying RTA delegation. During this successful visit, the RTA took the opportunity to inspect the aesthetic design and the interiors of the train and validated all comfort aspects. They are the result of the joint development between RTA architectural experts and Alstom one of the members of the ExpoLink Consortium.

The Alstom-led consortium ExpoLink, also composed of ACCIONA and Gulermak, has signed a contract with RTA (Roads & Transport Authority) to design and build the extension of Dubai's Red metro line and upgrade the system of the existing line. The total value of the project, also called Route 2020, is €2.6 billion, of which Alstom's share represents half and the civil works, led by ACCIONA including Gulermark represent the other half. The extended line, which will connect the city to the Expo 2020 site, is expected to start commercial service in 2020 for the World Expo.

Alstom – as a part of ExpoLink consortium - will provide and integrate the whole metro system including 50 Metropolis trainsets, power supply, communication, automatic fare control, track works, platform screen doors and a three-year warranty on the whole system. Additionally, Alstom will enhance the existing metro line by upgrading power supply, signalling systems, miscellaneous communication and track works. The Metropolis trainsets for Dubai are 88 meters long and composed of five cars per trainset. They will be able to carry up to 700 passengers each. The train offers an excellent level of passenger experience, thanks to wide gangways, large doors and windows, new video broadcast systems and three

specific areas for Silver, Family and Gold Classes. Eco-friendly, the train is equipped with a full electrical braking system, smooth LED lighting and other innovations to reduce energy consumption.







SNCF Fret diesel BB No. 75414 speeds through Beaune with a northbound freight. *John Sloane* 











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## France

## Alstom and SNCF Réseau: a beneficial collaboration for greater traffic fluidity

Alstom and SNCF Réseau are working together to develop and deploy new regulation and control systems for railway traffic. Following a call to tender launched in 2016, SNCF Réseau has selected Alstom, the leader in traffic control systems on high speed lines, to design a new operational traffic management tool. Alstom will provide its Iconis system, which detects and proposes solutions to manage traffic conflicts, while anticipating the impact of disruptions. Iconis combines the reliability of a standardised solution with the flexibility required for all future evolutions. It is already in use on 15,000 kilometres of track worldwide, notably in Italy and Denmark, and is currently being deployed in Sweden, it will be

adapted to the French network by Alstom's site at Saint-Ouen.

Initially, the tool will be deployed on the railway lines connecting Paris, Lyon and Marseille, with commissioning planned for 2019.

An ambitious programme to modernise traffic management SNCF Réseau has launched an extensive programme to modernise operational traffic management with a view to supervising train circulation both in normal conditions and during disruptions. The aim of the programme is to improve traffic regularity, incident management and the information provided by rail companies. Operational traffic management is currently organised on three levels: the national centre for traffic operations, the 21 regional operational centres and signal boxes at the local level.

"This collaboration with Alstom represents an important step in the programme to modernise operational traffic management launched in early 2016. This programme will optimise traffic management and therefore the fluidity of railway traffic." said Patrick Jeantet, CEO of SNCF Réseau.

"Alstom is delighted to collaborate with SNCF Réseau on these major projects which involve advanced and connected technologies for the modernisation of the network. Alstom's Iconis solution will improve the punctuality of the trains on the network and ensure signalling control for even more responsiveness. It is a first in France." said Jean-Baptiste Eyméoud, Managing Director of Alstom in France.



SNCF diesel BB No. 67220 stands at Paris Gare du Lyon on rescue duty. John Sloane









- A pair of DB Class 186s with No. 186.339 leading, passes Dijon Perrigny with a southbound intermodal service on May 13th. *John Sloane*
- Transilien EMU No. 20923 exits the burrowing junction east of Viroflay Rive Gauche.

  John Sloane
- Withdrawn and looking in a sorry state, SNCF Fret No. 9242 stands at Dijon Perrigny depot. *John Sloane*















- SNCFBB No. 22232 is seen about to depart Paris Gare du Nord on May 19th. *John Sloane*
- SNCF Ter No. 7295 passes through Viroflay Rive Gauche with a service to Le Mans. *John Sloane*
- Thello No. 36007 stands at Paris Gare du Lyon having brought in the stock for a service to Venice. *John Sloane*















## Germany

## Alstom modernizes 26 Coradia Lint regional trains for LNVG

Alstom has handed over the first modernized regional train, type Coradia Lint 41, on schedule to the Landesnahverkehrsgesellschaft Niedersachsen (LNVG). Starting in August, the regional train will operate in the Elbe-Weser network of Eisenbahnen und Verkehrsbetriebe Elbe-Weser GmbH (evb). The contract signed earlier this year between Alstom and LNVG includes the modernization of a total of 26 diesel trains until the end of 2019. Modernization, modification and acceptance are performed at the Alstom services location in Braunschweig, Germany. The Coradia Lint trains have been in operation since 2003 for Nordwestbahn GmbH and Eisenbahnen und Verkehrsbetriebe Elbe-Weser GmbH. The control system and the brake control, as well as the exterior and interior design are being modernized after 15 years. Alstom will equip the vehicles with WIFI, LED lighting, video recording in the interior, sockets and USB



connections. The seats as well as the side wall and ceiling panelling will be renewed. In addition, an entirely new outside paint coating will be applied. New door systems equipped with a light grid and gap bridging, as well as improved multi-purpose areas including a wheel chair space with intercom and socket, contribute to improving the safety and comfort of the passengers. A separate area with fastening options is available for bicycles. The installation of a new vehicle control system will ensure that the train electronics are updated and prevent possible unavailabilities of spare parts in the future.

"The modernized vehicles offer passengers a state-of-the-art ambience and a contemporary comfort. This includes in addition to WIFI also charging opportunities for smart phones and laptops as well as video recording in the vehicles. The modernization activities are decisive for the longevity of a rail vehicle and they represent sustainability. This means that the vehicles of our fleet are operable with high quality for an additional 15 years", says Hans-Joachim Menn, President of LNVG. LNVG, which is in charge of the organization of the regional rail transport between North Sea and Harz, spends almost €300 million annually for this purpose.

"This order is another milestone in our good and long-term cooperation with LNVG. Jointly, we offer passengers modern regional trains for an economical and sustainable transport. The modernized trains offer passengers the same level of comfort as any comparable new Coradia regional train currently produced in Salzgitter", says Daniel Croonen, Managing Director Services for Alstom in Germany.

Starting in December 2019, a total of 15 upgraded vehicles will be used in the Elbe-Weser network and 11 on the Weser-/Lammetalbahn.

In Braunschweig, Alstom Service offers services such as accident repair, maintenance and upgrading of trains and employs currently more than 140 employees.

RBB Class 145.023 passes Herford with a train load of logs. *Steamsounds* 



# More customers, more revenues and more profit: Deutsche Bahn posts growth in the first half of 2017

CEO Dr. Richard Lutz: "Our Zukunft Bahn program is raising quality, and our customers are rewarding us for that"

New long distance patronage record

Success at DB subsidiaries Arriva and Schenker as well

Deutsche Bahn AG reported broad based growth today for the first half of 2017. The company set a new patronage record in its long distance segment, transporting over 68 million people in the first half of the year, a year-on-year increase of 1.6 million, or 2.4%. Total revenues at DB rose by EUR 1.0 billion, or 5.2%, in the first six months of 2017, to nearly EUR 21.1 billion. Adjusted earnings before interest and taxes (EBIT) rose by 17.1% to EUR 1.18 billion. Our figures from the first half of the year show that we are on the right track, said Dr. Richard Lutz, the CEO of Deutsche Bahn. Zukunft Bahn, our multi-year quality improvement program, is raising quality, and our customers are rewarding us for that. Our progress here is one of the reasons we chose to raise our revenue and profit forecasts for 2017.

Lutz was pleased with the positive trend in on-time rates in DB's long distance segment, but noted that DB also faced challenges: "DB Long Distance delivered an on-time rate of 81.0% in the first half of the year, 2.6 percentage points up from last year. We are not yet satisfied with punctuality as a whole, however. There is more to be done to make our service

better and more reliable for our customers, and we will continue our work to this end with discipline and determination."

DB boosted volumes in rail passenger transport in the first half of 2017. In long distance transport, passenger kilometers rose by 3.3% to 19.5 billion. In regional transport, they were up 2% to 20.5 billion. In DB's rail freight segment, which is currently being realigned, metric ton kilometers were essentially unchanged at 47.8 billion, and the first indications of growth in five years were visible in Germany.

The signs continued to point to growth at DB Arriva. Patronage on its trains and buses rose by 145.3 million, or 17%, to nearly one billion passengers in the first half of 2017. Rail volume produced rose by 22.9%, bus volume by 5%. Total revenues rose 5.3%, or EUR 133 million, to EUR 2.7 billion. Adjusted earnings before interest and taxes (EBIT) rose 3.8% to EUR 110 million. In logistics, DB Schenker generated growth across the board, and especially in air freight (up 11.4%) and ocean freight (up 8.9%). Contract logistics grew again as well, raising its revenues by 5.7% to nearly EUR 1.3 billion.

There was also growth in DB's infrastructure segment. Transport volumes on the German rail network rose again year on year, by 0.5%, with non-DB rail companies raising their share from 29.8% to 30.8%.





Class 218.424 arrives into Buchloe with train No. RE57564 from Augsburg. *Steamsounds* 













VAG Nurnberg No. 739 is seen at Sündersbühlh on June 29th. This is one of the latest batch of trains for Nürnberg's U-bahn. They are driverless and used on lines U2 and U3. *Steamsounds* 





Railtalk Magazine Xtra

#### Germany

#### DB Cargo maintains drive to digitalise vehicle fleet

Contract with Siemens for technology to transform more main-line locomotives into TechLOKs

Experts from DB Cargo and Siemens collaborate on creating data analytics models

DB Cargo is pushing digitization of its vehicle fleet forward, and the company has now made substantial progress towards achieving its aim of fitting 2,000 locomotives with diagnostic technology by 2020. At present, almost 1,000 of these high-tech locomotives, in service around Europe, provide information about the vehicles' condition. It has signed a cooperation contract with Siemens to upgrade its existing class 152 electric main-line locomotives and thus transform them into what DB Cargo calls "TechLOKs". In addition, class 170 and 191 Vectron locomotives from Siemens will also be connected to the TechLOK system.

Based on those telematics units installed in locomotives, DB Cargo uses the TechLOK system to collect, visualise and process diagnostic and constantly generated sensor, no matter where they are in Europe. This information enables the company to make further improvements to its daily operations, and it also forms the basis for approaches towards condition-based, predictive maintenance. In contrast to the current, conventional approach of performing maintenance mileage or time based, locomotives will now be maintained when the data shows that this is necessary. Thanks to this, DB Cargo can continue to increase vehicle availability,

transport quality and savings.

Dr. Jürgen Wilder, CEO at DB Cargo, says, "Our fleet digitalization activities have one main focus: further improvements in quality for our customers and optimization of the vehicle value chain. The TechLOK system already comprises almost 1,000 locomotives operating on international routes. The deal we have now signed with Siemens and especially the connection of operational knowledge with the knowledge of the vehicle manufacturer ensures that we will keep speed towards our project goals."

The contract covers not only connecting locomotives to the TechLOK system but also joint activities on developing data analytics models based on the technical insight the locomotive sensors provide. This will result in new algorithms and technical rules to maintain locomotives more flexible and condition-based.

In addition, experts from Siemens and DB Cargo will work conjointly at Deutsche Bahn's Asset und Maintenance Digital Lab in Frankfurt am Main. Johannes Emmelheinz, head of the rail service business at Siemens, says, "This long-term partnership with Deutsche Bahn is of strong strategic relevance to Siemens. Linking data analytics with locomotive specific knowledge allows us to support Deutsche Bahn on its path towards digitization as well as the overall target to improve asset availability."

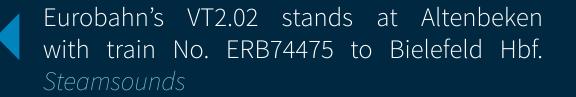
VAG Nurnberg tram No. 504 is seen on June 29th approaching Muggehof between Nürnburg and Fürthz. The U1 line still operates with drivers and older stock very similar to that used on the München U-bahn. *Mark Bearton* 











RTS Rail's Class 221.105 is seen stabled at Tuttlingen. *Steamsounds* 











Nürnberg has a moderate sized tram network with three batches of trams, two from Adtranz such as this GT6N No. 1012 seen at Steinbühl near the former main DB goods bahnhof. *Mark Bearton* 





#### Germany

#### Prototype of the Rhine-Ruhr Express presented

Siemens starts Rhine-Ruhr Express test program Digitized train technology Service planned beginning in late 2018

On July 12th, Siemens presented the first prototype of the Rhine-Ruhr Express (RRX). The testing of the multiple-unit electric train will now begin at the Siemens Test and Validation Center (PCW) in Wegberg-Wildenrath. All seven pre-series trains will be commissioned at the PCW and complete extensive tests in the coming months before undertaking their first test runs in the public railway network. The RRX is scheduled to enter service in the greater Rhine-Ruhr region at the end of 2018.

"The start of tests at the PCW shows that we're right on schedule with the RRX project. We're testing here whether the trains are fit for their daily service in and between the cities in North Rhine-Westphalia. Each train of the entire RRX fleet will be commissioned right here, virtually on the doorstep of the public rail network," said Sabrina Soussan, CEO of Siemens' business with high-speed and regional trains and locomotives.

Siemens was commissioned in March 2015 by the special-purpose associations Nahverkehr Rheinland (NVR), Nahverkehr Westfalen-Lippe (NWL), Schienenpersonennahverkehr Rheinland-Pfalz Nord (SPNV-Nord), the Verkehrsverbund Rhein-Ruhr (VRR) and the Nordhessischer Verkehrsverbund (NVV) to deliver 82 multiple-unit electric Desiro HC trains and provide their maintenance for a period of 32 years. The order has a total volume of over €1.7 billion.

Siemens has developed a new design for the RRX fleet based on the successful Desiro platform. The train's concept combines premium features with state-of-the-art technology. Each train consists of four cars; the first and last as end car and driving trailer have one

passenger deck, while the two middle cars are double-deckers. Each train has a seating capacity

of 400. The trains are designed in a white, grey, black and orange color scheme. The design of the RRX continues into the interior, where generous sight lines and large windows provide a pleasant atmosphere. In addition, the RRX has Wi-Fi access and socket outlets throughout the train, folding tables and reading lights in first-class, as well as advanced information systems and energy-



efficient traction units and air-conditioning.

The trains not only offer excellent passenger comfort, but optimal availability throughout their lifecycle. Modern data communication provides a continuous dialogue between the trains and their service facility. As part of the predictive maintenance concept, potential technical faults can be rectified before they actually occur. By taking over the lifecycle service and maintenance of the RRX, Siemens guarantees over 99-percent availability for scheduled operation. With a top speed of 160 km/h and a driver assistance system for look-ahead braking and acceleration, the RRX will ensure optimal traffic flows on heavily travelled routes in the Rhine-Ruhr region.

DB Regio EMU Class 425.279 arrives into Hameln with an S5 service to Hannover Flughafen. Steamsounds



































CAF MiiRA is the CAF Business Unit dedicated to the design and manufacture of wheels, axles, gearboxes, wheelsets and couplers for all types of rail vehicles. With more than 80 years' experience, this company has become a leading supplier of these products to all the major manufacturers and operators around the world, reaching annual turnover levels of 120 M€ over the last few years.

The strategic plan defined by CAF MiiRA for the next few years is in line with the one set by the CAF Group, with growth and diversification as its pivotal points. This takeover therefore represents a step towards the achievement of both objectives, by strengthening MiiRA's position in the wheelset maintenance service business while offering the possibility of providing other related services and increasing the spares turnover, wheels in particular.

RIFER, as Italy's leading provider of wheelset and railcar maintenance services, is based in Milan, very close to the Swiss border, at an important rail and intermodal transport hub. Thanks to this strategic location, CAF MiiRA will be ideally positioned to offer products and services to Central European countries. With a headcount of more than 60 employees and an annual turnover of close to 10 million euro, this company has experienced considerable growth over the last few years thanks to its commitment to modernising its facilities, production processes and methods.

This transaction will allow CAF MiiRA to expand and strengthen the company's portfolio of services, by enhancing its positioning in the Italian and Central European markets, increasing its possibility to offer integrated services that go beyond mere product supply, while laying the foundations for the CAF Group to gain a significant foothold in the wheelset maintenance services sector, at an international level.

Furthermore, CAF MiiRA has also acquired a minority shareholding in Cosmef WM, a company that is part of the RIFER group and is of a similar size, dedicated to heavy maintenance work on railcars. This ensures that full advantage is taken of the synergies between both companies and that the railcar maintenance business also remains within the CAF Group's orbit.

Likewise, it should also be noted that this transaction strengthens the Group's position in the freight car maintenance service business. It should not be forgotten that CAF is a licensed rail transport operator in Spain, for passengers and freight alike, while it has recently announced its interest with regard to the call for proposals made by the Ministry of Public Works and Transport relating to the high-speed rail project in mainland Spain.





OBB's Class 1216.032 stands at Venice Santa Lucia station, having arrived with a service from Wien. *Class47* 







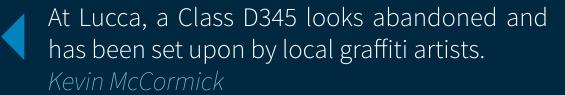
On July 6th, at Pistoia station (between Lucca and Florence), heritage locos Nos. E656.023 (with a D445 - probably D445.1011) have just arrived with a short train and quickly reversed into the Pistoia railway museum. Kevin McCormick











A modern, Alstom built ETR 324 'Jazz' unit stands at Lucca on July 5th. *Kevin McCormick* 















#### Netherlands

GVB Combino No. 2041 heads along the 'gauntlet' track on line No .2 at Amsterdam 'Leidsestraat' on July 13th. *Erik de Zeeuw* 

#### Stadler wins service contract in the Netherlands and builds a new depot in Hengelo

On 18 July, the Dutch public transport company Syntus awarded Stadler the contract for the maintenance of 16 Stadler FLIRT. The service contract has a term of 15 years. For vehicle maintenance, Stadler is investing in a new depot in Hengelo.

Stadler will be responsible for the maintenance of 16 Stadler FLIRT railway vehicles from 2017 to 2032. The Dutch public transport company Syntus ordered the FLIRT electrical low-floor multiple units from Stadler in January 2016. The vehicles are currently being tested between Amersfoort and Zwolle, and will operate in regional transport on the line that runs between Zwolle and Kampen/Enschede. Commercial operation will begin in December 2017. At this point, Stadler Service Netherlands will take over every aspect of maintenance.

staff. All of the maintenance will be performed by Stadler employees who are familiar with the vehicles and can ensure that the work is completed quickly and cost-effectively. With this new location, Stadler is continuing to expand its service activities in the Netherlands.

The nine 3-car and seven 4-car 1.5 kV FLIRT multiple units for Syntus offer exceptional comfort thanks to pneumatic suspension, an inviting seating arrangement and the HVAC system. The vehicles can reach a top speed of 160 km/h. The FLIRT is a tried and tested, modern and efficient train for successful deployment in public transport.

In order to ensure high availability of the vehicle fleet throughout the entire year, Stadler is building a new depot in Hengelo where they will employ a five-person



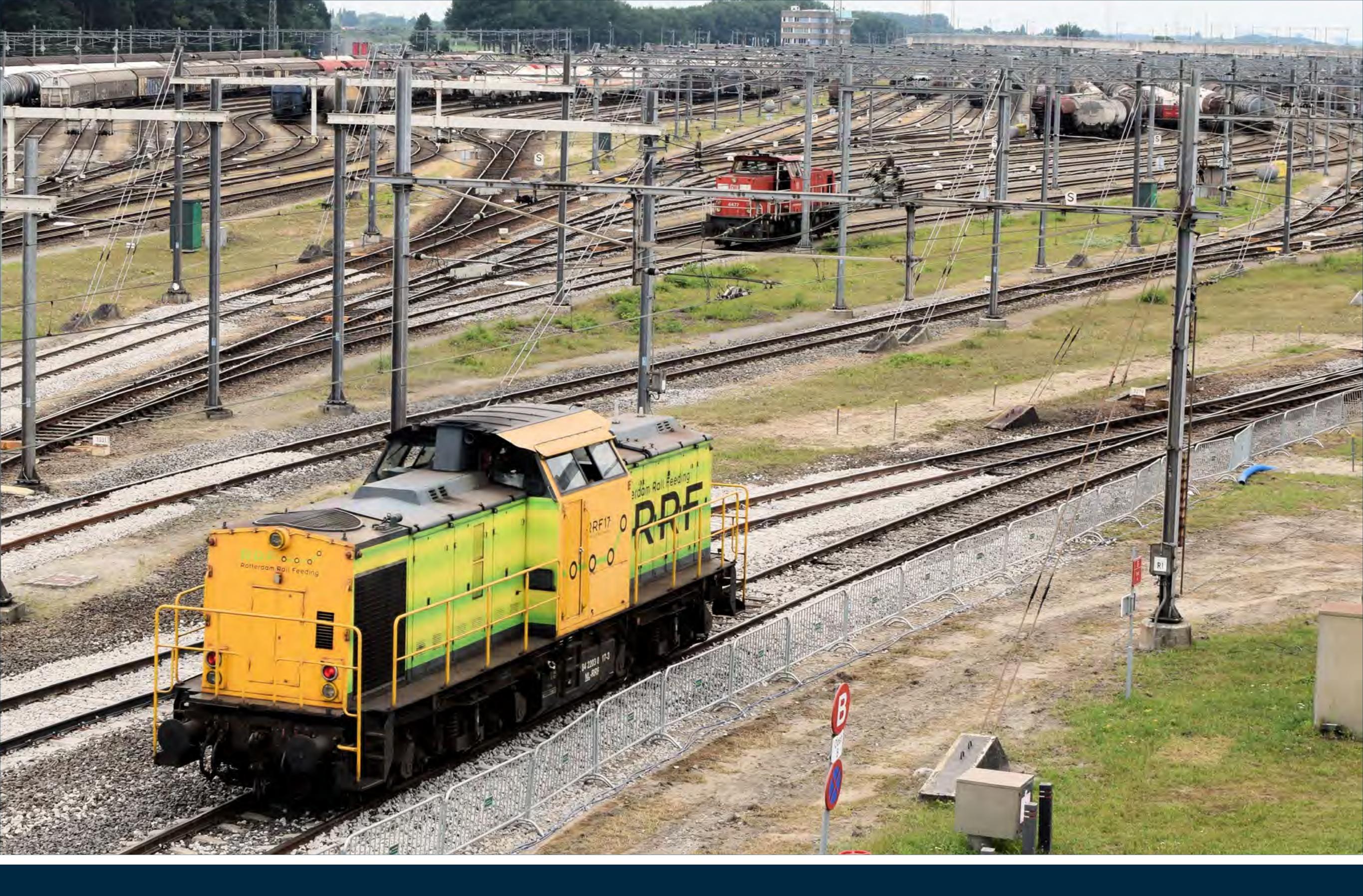




- NS Class 17 No. 1741 waits at Baarn with train No. R5536 to Utecht Centraal. *Steamsounds*
- NS DDZ-6 No. 7645 calls at Enkhuizen with train No. IC4557 for Amsterdam Centraal. Steamsounds
- NS TRAXX No. 186.016 and a SNCF Thalys set, with power car No. 4305 leading, stand at Amsterdam Centraal. *Steamsounds*

















- NS Syntus Buffel DMU No. 3437 stands at Zwolle on June 28th. *Mark Armstrong*
- NS TRAXX locos Nos. 186.025 and 186.116 are seen at Den Hag Central on June 28th.

  Mark Armstrong
- NS Class 17 No. 1765 stands at Amsterdam Centraal on June 26th with a service to Cologne.

  Mark Armstrong































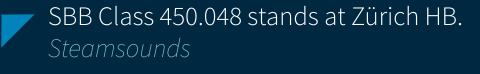












RhB Ge 4/4 II No. 630 approaches Scuol-Tarasp with train No. R1932 from Pontresina. *Steamsounds* 

RhB Ge 4/4 III No. 649 arrives at Filisur with train No. R1825 from Davos Platz. *Steamsounds* 



















- On May 20th, RhB ABe 4/16 No. 3102 departs Chur with a service for Schiers via Landquart. Peter Marsden
- RhB Allegra ABe 8/12 No. 3506 'Anna von Planta', in ABB advertising livery, on a service from Chur to St Moritz, leads a new AGZ trainset on May 20th. *Peter Marsden*









- RhB Ge 4/4 III No. 651 approaches Bergün/ Bravogn with train No. RE1149 for St. Moritz.







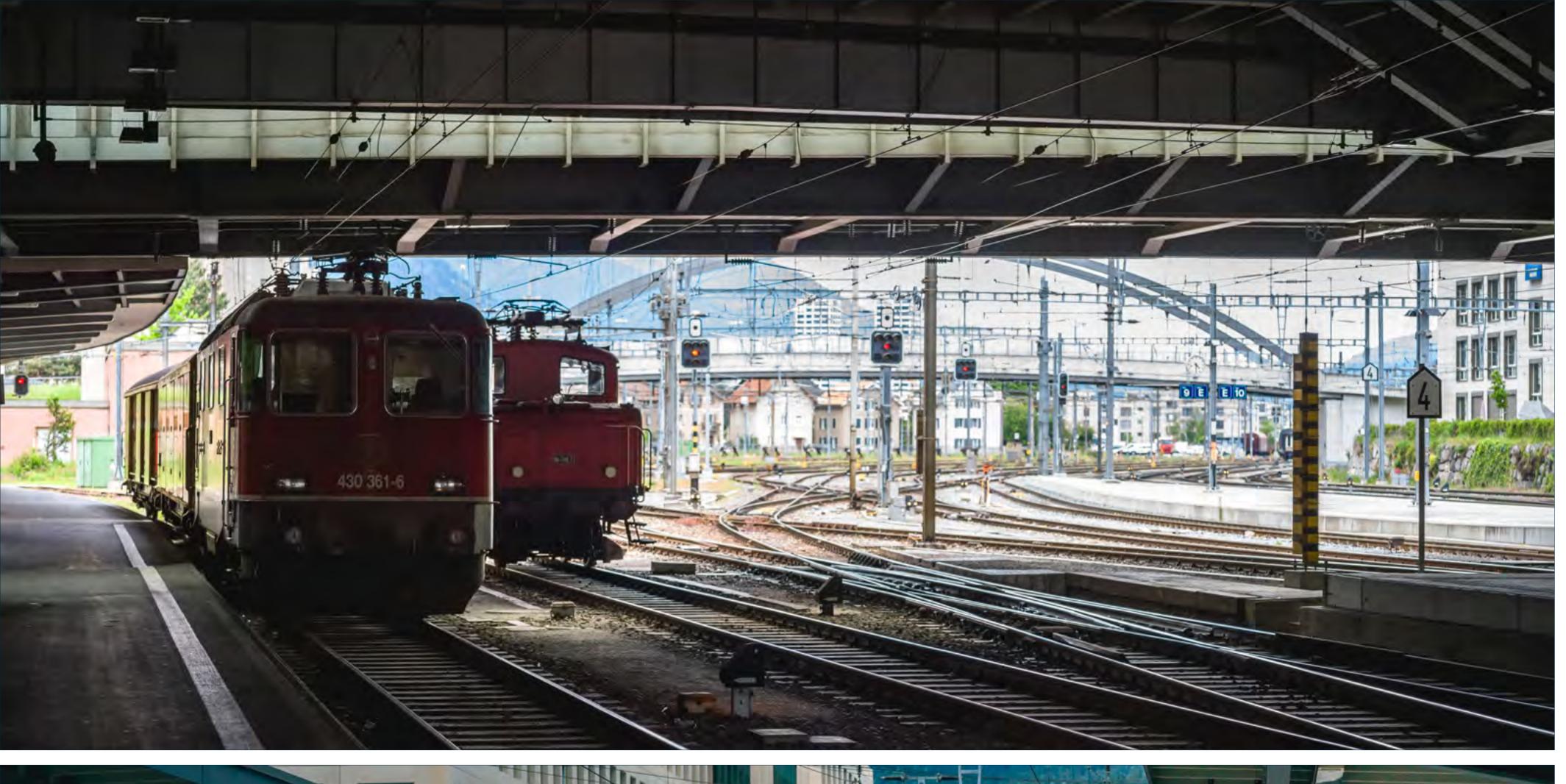


- It's Friday May 19th, and the rain has cleared from Zurich to leave a wonderful sunset, Empty SBB Pendolino ETR 610.114 departs Zurich Hauptbahnhof after arriving from Milan, and separated from the front portion. *Peter Marsden*
- SBB Re4/4 locomotives Nos. 420.150 and 420.138 standby in the early evening on May 19th at Zurich Hardbrücke. *Peter Marsden*













- SBB Re4/4 No. 430.361 sits under the bridge at Chur alongside Shunter Ee 3/3 No. 16383 on May 20th. *Peter Marsden*
- RhB ABe 4/16 No. 3103 awaits departure time at Chur on May 20th with a service to Thusis.

  Peter Marsden















- SBB Re4/4 No. 420.161, having brought the Nightjet stock into Zurich Hauptbahnhof, heads out of the station once it had departed.

  Peter Marsden
- SBB Pendolino ETR 610.010 departs Zurich Hauptbahnhof with train No. IC 889 to Chiasso. *Peter Marsden*









On July 19th, BLS duo Class 465.002 and 465.009 work an Ambrogio Intermodal service through Pratteln. *Paul Godding* 

#### EC250 makes its first journey through the Gotthard Base Tunnel

On Sunday, 2 July, the EC250 completed its first crossing of the Gotthard Base Tunnel. The next stage of high-speed trial runs for the Giruno will be carried out on the railway test circuit in the Czech Republic.

For Swiss rail vehicle manufacturer Stadler, the EC250's first crossing of the longest rail tunnel in the world was a complete success – despite the top speed reaching only 100 km/h. The journey has demonstrated that the EC250 meets the standards required to operate in the extreme environmental conditions in the tunnel. The Giruno will now be thoroughly tested in the Czech Republic. It will complete high-speed trial runs of 100 km/h and more on the Velim railway test circuit. The speed of the vehicle will be gradually increased during these test runs. These tests are part of Stadler's commissioning procedure, pre-commissioning safety inspection and network approval for the new Stadler high-speed multiple unit train. Further extensive testing will subsequently be carried out in the four countries in which the train will operate: Switzerland, Germany, Italy and Austria.

May in Bussnang. The occasion was celebrated in the presence of Doris Leuthard, Head of the Federal Department of the Environment, Transport, Energy and Communications (DETEC); SBB CEO Andreas Meyer; and many other important names in politics and business.

The Giruno was designed with a special focus on comfort and customer-friendliness, in particular for families, senior citizens and persons with restricted mobility. The low-floor access – a first for a high-speed multiple unit train series – transforms climbing aboard for passengers to simply stepping inside. In the interior, passengers can expect a spacious and bright interior design with a state-of-the-art lighting solution. In order to keep passengers occupied and happy on long trips through tunnels, the Giruno also features a range of additional amenities: a 3G/4G mobile communications amplifier, sockets at every seat, large luggage racks and separate toilets for men and women, as well as special toilets for disabled passengers. The trains are 202 metres long and contain seats for 405 passengers, 117 of which are in first class and 288 of which are in second class. Multifunctional zones and a special compartment for bicycles allow for efficient use of space in the train.







- On July 21st, BLS EMU Class 566.236 nears is destination at Spiez. *Paul Godding*
- Basel tram No. 155 is seen heading along Munchensteinerstrasse on July 22nd with a line 11 service to Aesch Dorf. *Paul Godding*
- Railpool's Class 187.008 hauls a liner through Pratteln on July 21st. *Paul Godding*













## Alstom's Citadis tram enters commercial service in the city of Sidi Bel Abbes, Algeria

Alstom's tram in Sidi Bel Abbes, north-west Algeria, was inaugurated in July by the Minister of Transport and Public Works Abdelghani Zaalane in the presence of Aomar Hadbi, CEO of the EMA and Henri Bussery, President of Alstom in Algeria.

In December 2013, Alstom was awarded a contract for the supply of 30 Citadis trams. The trams are made up of seven modules, with a total length of 44 metres and the capacity for 302 passengers. Their fully low floors and 12 side doors facilitate passenger movement and make them universally accessible, notably people with reduced mobility.

The tram is equipped with air conditioning, surveillance cameras, space for buggies and wheelchairs, LED lights and latest-generation screens for broadcasting video content. Its golden yellow livery represents the colours of the wheat fields, a symbol of the region. The tram sets were assembled by Cital – Alstom's local joint venture – at its manufacturing site in Annaba.

"With Sidi Bel Abbes, we are pursuing our partnership with Algeria to provide its inhabitants with the most environmentally friendly, comfortable transport system in existence: the tram.

To date, the cities of Algeria have ordered 128 Citadis tram units to meet the mobility needs of passengers," said Henri Bussery.



Alstom, which has already delivered 98 Citadis trams to the cities of Algiers, Constantine and Oran, is currently working with Cital to finalise the delivery of Citadis trams for the cities of Ouargla, Mostaganem, Sétif and Constantine for its second line.

Alstom is present in Algeria with more than 300 employees. In July 2015, the company was awarded a contract by the SNTF for the supply of 17 Coradia Polyvalent intercity trains.



## Two Eurostar power cars to be donated to National College for High Speed Rail

Alstom is working with Eurostar to support the donation of two Eurostar power cars to the National College for High Speed Rail.

Alstom built the UK's first high speed trains for Eurostar, the classic original e300/ Class 373 – or Trans-Manche Super Train (TMST) – which have carried over 160 million passengers between the UK and mainland Europe.

Following Eurostar's decision to retire some of these hard-working vehicles, two of the power cars will be given to the National College for High Speed Rail in Doncaster and Birmingham. The two cars are being fully refurbished by Alstom. The National College for High Speed Rail has two campuses, in Doncaster and Birmingham, and provides young people with the specialist training, skills and qualifications that are required to build HS2 and future rail projects. The donation gives the students at the college, who are set to play a pivotal role in the development of HS2, the vital chance to study, in-depth, existing high-speed technology.

"HS2 will bring huge benefits to passengers, but even more crucial is the legacy of skills, apprenticeships and jobs it will create, all over the country. This is why Alstom and Eurostar are donating these two trains to the National College for High Speed Rail, which is set to play a crucial role in developing the skills necessary for the successful delivery of HS2," said Jason Baldock, HS2 Director at Alstom.

"We are very pleased that the power cars of two of our original Eurostar trains will play a key role in developing the skills and expertise of the rail engineers of the future. These iconic high speed trains were ground-breaking and have transformed travel between

the UK and mainland Europe," said Philippe Mouly, Chief Operating Officer at Eurostar. "This generous donation of two power cars allows us as a world-class college to offer our students the opportunity to develop real-life skills using industry-leading technology. Support like this is crucial for us to ensure that we can properly train and prepare the future workforce for the rail and infrastructure industries.

"We are very grateful for the support we have received so far from business and industry leaders. As an employer-led college, we are still keen to hear from employers wishing to show support in addressing the current engineering and rail skills gap. If you'd like to get involved and work with us to give our young people an insight into the opportunities in this industry, then please contact the college," said Clair Mowbray, Chief Executive at the National College for High Speed

Rail. Working closely with the National College for High Speed Rail,

Alstom is also building its own training academy in Widnes as part of a new technology centre in the region. The Alstom Academy for Rail will open in September 2017 and initially support 65 apprenticeship places.





#### World News



## Eurostar unveils world's first onboard virtual reality experience: 'Eurostar Odyssey'

Taking travellers on an adventure to the depths of the sea bed, with immersive smartphone headsets available throughout the summer

Eurostar has announced 'Eurostar Odyssey', the first virtual reality experience designed to enhance a journey through an immersive onboard adventure, with specially designed headsets distributed throughout the summer at peak travel periods for families.

As travellers make their way at high-speed under the channel, they'll enter the hidden depths of the sea bed for the first time, looking into a virtual world of sea creatures, sunken treasures and mysterious sea-scapes.

As the summer holidays begin, the unique experience has been created to help the young and the young-at-heart see the journey to Europe in a new dimension. The free adventure is accessed by logging on to Eurostar's onboard entertainment system on a travellers own Apple or Android device, and opening up the voyage of discovery.

As travellers take their seat, the roof of the virtual train transforms into a glass ceiling revealing the underwater world around them. Guided by two ocean explorers, Rose and Benoit, the journey is packed full of stories from pirates' legends of lost treasures, to

meetings with mermaids and an encounter with a charismatic octopus. A gaming element allows voyagers to count different species along the way, for those that like to compete.

Nick Mercer, Commercial Director, Eurostar, said: "Travellers are always asking if they can see the fish when travelling through the channel tunnel, and we're really excited to make it possible as the first travel company to give its customers an immersive 3D experience. Throughout the summer we'll be giving younger travellers free headsets so they can enjoy an exciting adventure under the channel, so as the summer holidays begin, why fly when you and your family can have so much fun travelling by Eurostar?"

Available on all of Eurostar's new e320 and refurbished e300 trains through the on board entertainment system directly to a user's own device, the experience will be accessible on services between London and Paris, Lille, Brussels, Lyon and the South of France.

All Eurostar e320 and e300 trains offer wifi connectivity with over 300 hours of onboard entertainment streamed to customers' personal devices, providing travellers with a variety of TV shows, films, documentaries, games and news whilst travelling at high-speed across the European countryside.



#### World News



#### Alstom inaugurated first locomotive repairing centre in Kazakhstan

Alstom has inaugurated its first repairing centre in Astana, Kazakhstan. The corrective and overhaul preventive works, including spare parts and repairing of traction and brake systems, for the Prima T8 (KZ8A) and Prima M4 (KZ4AT) locomotives will be performed there for a period of 25 years.

"The inauguration of the first repairing centre in Kazakhstan is a very important milestone for Alstom in the country. Through implementation of new technology and developing local expertise, we are proud to get Kazakhstan's industrial base to a new level, which opens new promising prospects for the country as an important hub linking Europe, Middle East, Asia and Russia through new Silk Way. Being the only repairing centre for modern traction and braking system in the Central Asian region, Alstom strengthens its long presence, developing local competencies, contributing to the economic development of Kazakhstan and opening new opportunities for export in neighbouring countries", said Bernard Peille, Managing Director of Alstom in CIS.

With a total surface area of 2,660m2, the repairing centre comprises a repair and testing shop, warehouse, a spare parts shop and office space. The teams will be able to maintain products manufactured by Alstom, as well as equipment produced by other companies, such as pantographs, transformers and braking systems. The number of employees will grow from 18 including engineers and administrative staff today to 30 by the end of 2020.

Alstom is present in Kazakhstan with more than 600 people, two Joint Ventures and two plants, one 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 14,000 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.

#### Alstom starts overhaul of PKP Intercity's Pendolino trains

Alstom has started the operations of overhaul on the first of twenty Pendolino trains to have reached 1.2 million kilometres. After reaching this distance every Pendolino train will undergo a first level overhaul. The overhaul is performed by Alstom's team of Polish maintenance experts, in a maintenance depot located in Piaseczno. This depot has been specially adapted and equipped with state-of-the-art maintenance devices for the purpose of both this and future overhauls. Regular maintenance is conducted at Alstom's Train Technical Service Centre, in Olszynka Grochowska (Warsaw).

"Alstom has invested in a new unit in Piaseczno to perform these heavy maintenance activities. 30 new employees were hired and the purchased equipment will be used to carry out further stages of higher level overhauls. Alstom is pleased to further develop skills and maintenance expertise in the country", said Artur Fryczkowski, Director of Alstom Service in Poland. The overhaul of each train is going to take a month and the completion of works on all Pendolino trains is planned in 20 months. This schedule was adopted to ensure the maximum availability of Pendolino trains in normal service. The overhaul includes the replacement of wheels, inspection of bogies and traction motors as well as maintenance and service works on other elements of the trains.

The Pendolino vehicles are the first and only high-speed trains in Poland. They are characterised by exceptional reliability and availability, setting new quality standards on Polish railways.

Alstom's high speed Pendolino trains have reached almost 20 million kilometres in revenue



service since the service started in December 2014. Over 500 Pendolino trains have been ordered since 25 years. Part of Alstom's Avelia range of high-speed and very-high-speed trains, Pendolino is currently operating in 12 countries and crosses 7 borders.



#### World News



#### The new CAF plant in the United Kingdon will be built in Newport (Wales)

Midway through the previous financial year, CAF announced intentions to establish itself in the United Kingdom where it has recently secured a number of new important deals. Among these, the contract signed with the Arriva Rail North Limited operator for the manufacturing of two fleets of 43 electric trains and 55 diesel trains respectively, as well as the First Group Operator project for the supply and maintenance of 66 passenger cars and 12 5-car electric units deserve particular attention. Both projects total an aggregate amount of 900 million pounds (1 billion euros). The Company is also currently manufacturing 75 cars for the Caledonian Sleeper franchise, which operates transit services between Scotland and London, and these are envisaged to be delivered in 2018.

Since then, CAF has been thoroughly analysing the possibilities to establish itself in the country, searching for a location that could be adapted to meet the company's requirements. These operations were headed up by the Group subsidiary, CAF Turnkey Engineering, with assessment provided by specialist companies in said country, all deemed reputable within the sector.

The most significant factors in this search for the perfect location included the existence, or if applicable, the possibility of a railway network connection, as well as a location perfectly positioned in the country, with qualified staff available in said area.

This study, in which CAF analysed in excess of 100 possible sites in the United Kingdom, finally opted to locate their plant in the Celtic Business Park in the city of Newport, Wales. This is the third largest city in Wales, after the neighbouring cities of Cardiff and Swansea, with a population of 140,000. CAF will invest an estimated amount in excess of 32 million pounds (38 million euros), an operation in which subsidies will be received via the Foreign Investment Programme of the Welsh Government.

The future CAF plant will be situated on a plot of 46,000 m2. With a workforce expected to amount to as many as 300, this new plant is designed to produce all manner of rail vehicles, performing vehicle assembly and finishing activities as well as all the tests required before commissioning. The plant is also expected to have a significant effect on local

suppliers, creating additional indirect employment.

The plant would also enable the Company to tackle new contracts awarded in the United Kingdom, a country in which the company expects to contribute to railway development in the years to come, as well as maintenance and train servicing activities. The plant is expected to be operating by mid-2018.

Finally, the possibility of the future extension of the facilities must be pointed out, a factor that will depend on the aforementioned assignment of a volume of production contracts in the United Kingdom that will require greater production capacity at said facilities.

#### CAF in the United Kingdom

In the last few years, CAF has succeeded in expanding the company's operations in the United Kingdom with a broad range of vehicles and services. In the '90s, the company supplied units for the Northern Spirit line in the same region, as well as for the Heathrow Express link from the airport to Paddington Station in London.

More recently, in 2002 and subsequently in 2008, projects have been developed for NIR (Northern Ireland Railways) which include both the manufacture of the trains and the operation of maintenance services for 15 years. In terms of the tram sector, CAF has supplied units to the cities of Edinburgh and Birmingham.

The UK is currently one of the most active and competitive railway markets on the continent where, over the coming months and years, railway franchise renewal processes are envisaged, and CAF has plans to be a player in them. Furthermore, CAF is currently prequalified for the London Underground bidding process, and has confirmed interest also in next tender for the HS2 high-speed line that, in the first phase, will link the cities of London and Birmingham in one of the biggest infrastructure projects planned in Europe over the coming years.



## Alstom has delivered 13 regional trains to Nordjyske Jernbaner in Denmark

Alstom has delivered on-time 13 Coradia Lint regional trains to Nordjyske Jernbaner, just two years after contract signature. The trains will be put into operation in autumn this year in Denmark, mainly on the Nordjylland network. The trains were built in Salzgitter (Germany), one of Alstom's production sites for regional trains.

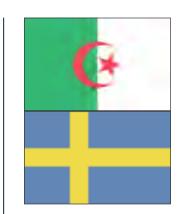
"Alstom is pleased to support Nordjyske Jernbaner's new operating lines with Coradia Lint, a modern regional train that offers full accessibility and increased passenger comfort thanks, to its large number of seats. Today, 97 Coradia Lint regional trains previously delivered by Alstom are successfully operating on the Danish network," says Christian Algreen-Ussing, Alstom's Managing Director in Denmark.

"Nordjyske Jernbaner is significantly increasing its operation activities and we are pleased to have received Alstom's 13 Coradia Lint on-time. We chose this train as it is a very reliable and well performing train and they fit well into our operational conditions to the benefits of our passengers "says Peter Hvilshøj, CEO, Nordjyske Jernbaner.

Coradia Lint has already shown great reliability and an overall high standard. Thanks to its lightweight construction, it has reduced fuel consumption. Its maximum operating speed is 140 km/h.

The 2-unit trains ordered by Nordjyske Jernbaner have a total of 125 seats and up to 135 places for standing passengers. The trains are also equipped with Wi-Fi, air conditioning, information systems and video surveillance for the full comfort and security of the passengers.





## The Algiers Metro Contract and the Contract Extension for the Stockholm

#### CAF TO SUPPLY 12 UNITS FOR THE ALGIERS METRO

CAF is to supply twelve 6-car units for the Algiers city metro. These are state-of-the-art trains, based on the INNEO metro platform, which are designed and built by CAF as a development of the trains recently supplied for the metros in Rome and Bucharest. Train building has recently commenced, following Algiers Metro's decision to opt for CAF as the supplier of the new vehicles.

The city of Algiers has one metro line which was opened in 2011. It is 13.5 km long and now has 13 stations after last year's recent opening of a 4 km extension from Haï El Badr to the El Harrach Centre.

The network is currently being extended with new extensions of Line 1 which is serviced by 14 units, also supplied by CAF under a former contract, carrying about 16 million passengers per year.

This is CAF's third rolling stock contract in Algeria, after the above mentioned project for the Algiers Metro, and the one signed with the Algerian Railways (SNTF) in 2005 for the supply of 17 diesel units for Regional passenger transport.

#### CONTRACT EXTENSION FOR THE STOCKHOLM

CAF has also signed an extension of the tram supply project with SL AB (Storstockholms Lokaltrafik), the company responsible for the transport network in the city of Stockholm. The contract involves the supply of eight new units, which add to the 22 units already built by CAF and now running in the Scandinavian capital.

In the framework of Stockholm's programme to develop a sustainable and demand-tailored transport model, the city awarded CAF with a contract for the supply of 15 trams in late 2010, which was subsequently extended by a further 7 units.

These are low floor bidirectional units providing optimum accessibility. They are offsprings of the URBOS platform with 3-car sets, providing an estimated capacity of 221 passengers (70 seated and 2 PRM places). In addition and similarly to previously supplied vehicles, they are particularly adapted for the extreme weather conditions in this Nordic country, and fitted with state-of-the-art comfort and safety equipment.

This is a particularly significant contract for CAF as it bears out the trust placed in CAF by the Swedish operator in a demanding market where collective transport and the environment are both deciding factors. It should also be pointed out that CAF trams are a benchmark in the international market. In fact, these operate in a number of cities around the world such as Budapest, Edinburgh, Belgrade, Kaohsiung, Freiburg, Besançon, Nantes, Houston, Cincinnati, Birmingham or Sydney.

The combined aggregate of these two new projects awarded to CAF exceeds € 120 million.



#### World News



#### Alstom completes the 20 first trains for PRASA manufactured in Brazil

Alstom announces the conclusion of the manufacture of the 20 first trains of the €4 billion contract, signed in 2013 to supply 600 X'Ttrapolis Mega trains over 10 years to PRASA (Passenger Rail Agency of South Africa) for the revitalisation of the rail industry in South Africa. These 20 first trains were manufactured in Brazil at the Lapa plant, in São Paulo, a reference in the production of stainless steel rolling stock, and sixteen trains are already in commercial operation in South Africa since May 2017, after the launch of the new, modern fleet by the South African president, Jacob Zuma.

To deliver the 580 remaining trains, Gibela - the consortium led by Alstom, with participation of local companies Ubumbano Rail and New Africa Rail is currently building a 600,000 sq.m. plant in Dunnottar, 50 kilometres away from Johannesburg,. The new manufacturing plant will also house a 4000 square metre training centre and, at peak production, will produce 62 trains a year, boasting around 200 South African suppliers. In ten years, the project will create over 1,500 direct jobs at the plant. Alstom Brazil will continue transferring technology to Gibela's technical staff until mid-2018. Training and development for engineers, designers, technicians, train drivers and technologists are key for the modernization of the rail industry in the country. "In addition to infrastructure, we are pleased to contribute with technical expertise for this project, providing access to modern rail technology systems and empowering Gibela employees with various facets of rail skills," says Rosângela Tsuruda, General Director of Lapa Unit.



The PRASA project reaffirms Alstom's goal of establishing itself as the leader in fast growing markets. It also represents a significant landmark in the strategy of increasing its presence globally and locally, thanks to its global industrial footprint and partnerships that allow the company to be close to its clients.



#### World News



#### Arriva wins northern rail concession in the Netherlands worth 1.6 billion euros

Continued success in mainland Europe for Arriva as it retains contract to run the 'Northern Lines' until 2035

15-year rail concession will see Arriva continue to serve the provinces of Groningen and Fryslân in north Netherlands with connections to Lower Saxony

A focus on sustainability was key to Arriva's winning bid with long-term plans to convert the fleet of trains to emission-free electrical operation

Arriva, a leading pan-European passenger transport company, has announced that it will operate the regional rail transport in the north of the Netherlands for another 15 years. The contract has a value of 1.6 billion euros and includes cross-border transport linking the provinces of Groningen and Fryslân with Lower Saxony. Arriva has been operating the 'Northern Lines' since 2005, and the new contract runs from 2020 to 2035. The 'Northern Lines' refers to the regional rail services operating around the provincial cities of Groningen and Leeuwarden (Friesland), with a connection from Groningen to Leer in Ostfriesland in Lower Saxony. Commenting on the award, Arriva Group CEO Manfred Rudhart said: "To be given the opportunity to continue operating the country's northern train services for a further 15 years is testament not only to the strength of our bid, but also to the great service we are providing under the current concession to the 32,000 passengers who use the regional transport network every day. Retaining this contact, and winning the Limburg contract in late 2015 demonstrates our commitment to delivering strong performance for our customers in the Netherlands." Under the contract, passengers will benefit from a fully refurbished fleet of 51 existing trains, and the introduction of 18 new trains to increase capacity on the network. There will also be more frequent services on key routes at weekends and in the evenings.

will be converted to energy saving, emissions lowering hybrid trains, and the 18 new trains will be powered by biodiesel. In the long term, a complete conversion to emission-free electrical operation is planned for the fleet of trains.

Retaining the 'Northern Lines' contract follows the award in late 2015 of the innovative, multimodal bus and rail contact in the province of Limburg in the south of the country. The contract, which runs until 2031, has a value of two billion euros. At the end of June 2017, Arriva also won a 550 million euro contract for rail transport in southern Sweden.











#### From the UK

# Keighley and Worth Valley Railway

The Keighley and Worth Valley Railway is a 5 mile long branch line that served mills and villages along the Worth Valley and is now a heritage railway line

- London and South Western Railway 0298 Class Beattie Well Tank No. 30587 is seen at Oxenhope having just arrived from Keighley with Taff Vale No. 85. *Richard Hargreaves*
- Mersey Docks & Harbour Board / Hunslet Diesel Mechanical 0-6-0 Shunter No. 32 'Huskisson' stands at Keighley with a couple of suburban carriages on July 8th. *Richard Hargreaves*
- Taff Vale Railway Class 02 0-6-2T No. 85 runs round its train at Oxenhope on July 8th.

  Richard Hargreaves







#### From the UK

- LNER Steam Crane No. DRG80111 'Grafton' is seen working in Oakworth Yard on July 8th. *Richard Hargreaves*
- In the workshops at Ingrow West, repairs are continuing to 'Olive' following fire damage last year. Richard Hargreaves
- Hudswell Clarke & Co. Ltd. 0-6-0T side tank No. 1704 'Nunlow' departs Keighley on July 8th, working a service to Oxenhope.

Richard Hargreaves







Class 08 shunters Nos. 08 266 and 08 993 (with cut down cab from when it was working on the Burry Port & Gwendraeth Valley line in Wales) arrive into Keighley having run from Oxenhope.

Richard Hargreaves











