



Railtalk Magazine *Xtra*

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# Welcome

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

As winter sets in across Europe, many enthusiasts will be staying in and not venturing too far, and with the ever increasing number of webcams, many now in high definition and with sound, who can blame them in many ways, but nothing is better than going out and achieving that one truly great photo for the day, even if it does mean nearly freezing to death!

Of interest this month is that Genesee & Wyoming Australia has completed the acquisition of Glencore Rail for A\$1.14bn. Genesee & Wyoming will be remembered in the UK as the company that bought Freightliner, and it remains to be seen if both businesses will be brought together in Australia.

Also this month, good news for fans of overnight services, with as well as the start of the OBB Nightstar services, Russian Railways is to launch its Moscow – Minsk – Warszawa – Berlin Talgo train service in December, RZD says the Talgo service will initially operate twice a week, departing from Moscow on Saturdays and Sundays and arriving in Berlin the following morning. The return trains will depart from Berlin Ostbahnhof on Sundays and Mondays, reaching Moscow late afternoon the following day. Designed for operation at up to 200 km/h, the 20-vehicle locomotive-hauled trainsets are

## Content

- Pg 2 - Welcome
- Pg 4 - Pictures
- Pg 48 - World News
- Pg 52 - From the UK
- Pg 55 - 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 through 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 be sent to us via email, post or via the members section page on our website. Contact addresses are provided to the right or on the next page.

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

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### Front Cover

RhB Ge 6/6II No. 705 crosses the Schmittentobel Viaduct with a freight train heading from Chur to Samedan.  
*Steamsounds*

### This Page

In a beautiful Autumn sunset, a DB ICE set passes through Wunstorf.  
*Class47*

### Next Page

On October 6th, Trenord Class E464.192 stands at Domodossola between duties.  
*Steamsounds*





formed of 17 passenger coaches, a dining car and two technical cars. Offering a mix of first and second class seats and two-berth sleeping compartments, each train has a total capacity of 414 passengers.

With Christmas on the horizon, everyone here at Railtalk wishes all our readers and contributors a very Merry Christmas and a Happy New Year. We hope that you have all had a great year, lets hope that 2017 will be even better.

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**

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## With Thanks

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

These issues wouldn't be possible without: Brian Battersby, Mark Bearton, Mark Bennett, 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, Michael Lynam, Peter Marsden, Phil Martin, Denzil Morgan, 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.



 **Austria**

OBB Class 1144.257 waits at Semmering with a freight train, to allow a passenger train heading for Ceske Budejovice to pass. *Class47*

 Austria



Salzburger Lokalbahn shunting loco No. 62 is seen stabled on Salzburg Itzling depot.  
*Brian Battersby*



Working a REX service to Worgl, ÖBB Class 1144 No. 1144.244 stands at Salzburg Hbf.  
*Brian Battersby*

ÖBB Class 1144.243 is seen stabled at Salzburg Sam.  
*Brian Battersby*



## Freight Center Wien Sud: trial operations underway

On the southern fringe of Wien, ÖBB-Infrastruktur AG is building a new, multifunctional rail freight hub, one part of which is a new intermodal terminal that is set to open for business in December. Three years after the groundbreaking ceremony, trial operations at the new terminal have begun, with the first on-track movements visible in November. The transshipment facility - four tracks and two gantry cranes - has been ready for several weeks, and the finishing touches are now being put to the noise protection walls. A wayfinding system is also being installed in the terminal. The Wien Sud hub will be connected to the S1 motorway by a dedicated junction, where landscaping work is currently underway and a landmark is being erected.

All terminal processes need to be thoroughly tested in order to ensure smooth and problem-free operation. To test terminal operations under real conditions, Rail Cargo Austria is currently running one train per day into the terminal, on which all the processes are rehearsed: handling different types of load unit, operational interaction between processes and systems, and of course loading and unloading.

This way, procedures can be checked and fine-tuned a few weeks ahead of the official opening. ÖBB-Infrastruktur AG member of the board of management, Franz Seiser, is pleased with the success of the test runs: "What we are seeing here is the birth of an ultra-modern freight hotspot, which will turn the Vienna region into a hub connected to Europe's economic centres and the major sea ports. We are very proud of this showcase project."

For his part, Andreas Zwerger MBA, the branch manager of the logistics provider Gebrüder Weiss in the Viennese suburb of Maria Lanzendorf, is also satisfied: "The switchover to the new terminal has been perfect, and the collaboration between all involved has been highly satisfactory", he said. The proximity to the Wien Sud hub is a major advantage

and enables even more efficient rail transport for the international transport and logistics company. Wien Sud Freight Terminal opens in December. Once the test phase is completed, regular service will begin at Austria's biggest import/export transshipment hub. The terminal was officially launched on December 5.



ÖBB Class 2016.042 runs light engine through Bludenz on October 3rd. *Steamsounds*

 Belgium

SNCB EMU No. 08550 stands at Antwerp Central working an IC service to Bruxelles Airport. *Class47*



 Czech  
Republic

Class 754.015 calls at Hojsova Stráž-Brčálník whilst working a Klatovy to Železná Ruda-Alžbětín service. *Class47*





 Czech  
Republic



▶ KDS Class 770.541 and IDS Class 742.516 are seen stabled at Decin on September 22nd. *Class47*

▶ CD Cargo Class 130.024 leads a rake of GATX tanks through Ostrava. *Class47*



 Czech  
Republic

Class 180.020, in its DB livery, stands outside DPOV Prerov. *Class47*

## Track closure in the Elbe Valley

From November 7th until 14th, at the request of DB, the border crossing between Decin and Bad Schandau was completely closed. The reason for this was track work at Obervogelgesang station. Given the fact that this is one of the busiest border crossings, it was extremely important to organise diversions.

The majority of trains used either the border crossing in Cheb, at Vojtanov or at Ceska Kubice. However some operators detoured their trains and used the border crossing at Lichkov.

Transportation through Vojtanov was restricted due environmental constraints, and therefore was primarily used for intermodal or automotive trains.

Even though not everything went according to plan, it can be regarded that the overall outcome was a success.

Photo: ©CD Cargo



## Transportation of diesel from Krailling successfully continues



On October 13th, the first train carrying diesel from storage at Krailling, Bavaria arrived in the Czech Republic. This was fuel that had been long term stored in the area of the bankrupt company Viktoriagruppe. Transportation was made by deploying two complete wagon rakes.

The target stations in the Czech Republic are so far Třemošná near Plzen, Hajek, Včelná and Hněvice. But ČD Cargo is prepared to provide transportation of diesel into any of the storage facilities belonging to ČEPRO.

In the last 6 weeks, CD Cargo has transported almost 10,000 tons of diesel fuel. The first picture (left) shows a Class 742 handling tank wagons siding in at Hajek, then on the second night of operations (right) shows transport to Hněvice.



Photos: ©CD Cargo



On November 5th, SNCF Transilien liveried No. 27303, stands at Paris Montparnasse after arrival on an outer suburban service.  
*John Sloane*

A Bombardier built 4-car Pays de la Loire EMU stands at Chartres on November 5th.  
*John Sloane*

SNCF en voyage liveried No. 72138 stands at Paris Est after arrival at the head of an express service on November 8th.  
*John Sloane*



## The Government and Alstom present the progress of the commitments made for the maintenance of rail and industrial activities at the Belfort site

Christophe Sirugue, Secretary of State for Industry and Henri Poupart-Lafarge, Chairman and CEO of Alstom, presented on November 28th in Paris the progress of the commitments made by the Government and Alstom for the maintenance of rail and industrial activities at the Belfort site. On this occasion, they assembled the national monitoring committee for the first time, involving the State, the management and the trade unions of the Alstom group, as well as the elected representatives of the territory of Belfort and the Burgundy-Franche-Comté region.

The diversification of the Belfort site, in particular regarding the service and maintenance activities, is underway: since October, Alstom has already invested one million euros in a new industrial building for the maintenance of TGV trainsets, with the financial support of local authorities and the State. This activity will employ 20 people as of 2017.

Investment in the railway vehicles of the future has increased: the State is committed to supporting the programme to develop a new range of locomotive for an amount of four million euros, through the Investing in the Future

programme. This programme represents thirty million euros, directly benefitting the Belfort site. The TGV of the Future programme is continuing to make progress as part of the innovation partnership with SNCF.

The State has initiated the process of definitive validation of the order for thirty regional TET trains (Trains d'équilibre du Territoire), which will be registered with the Board of Directors of SNCF Mobilités in December alongside SNCF's order for six TGV trainsets for the Paris-Milan line. The order for 15 TGV trainsets for the Bordeaux-Marseille line will be submitted to the SNCF Board of Directors in January 2017. Last but not least, the order for 20 emergency locomotives will be confirmed by March 2017.

A local committee bringing together local elected representatives, trade union organisations, Alstom and the State services in the regions will be set up under the authority of the Prefect of the Territory of Belfort. It will provide a forum for dialogue, information and monitoring of the honouring of the commitments made, in conjunction with follow-up at a national level.

The Government and the Chairman and CEO of Alstom are delighted with the concrete implementation of the commitments made in October.

Henri Poupart-Lafarge declared: "The commitments made by Alstom on 4 October have made good progress. Investments have begun both for new service infrastructure and development programmes for the rail vehicles of the future. We note with interest the clarifications made regarding the order schedule, also announced on 4 October, which should ensure the continuity of industrial production on the sites of Belfort, La Rochelle and Reichshoffen."

"Through the concrete implementation of the announcements made on 4 October, the Government shows that it is fulfilling its commitments to the sustainability of the Belfort site and to defend the knowhow and expertise of the French railway industry. Two projects must be jointly carried out: in the short term, the development of service activities and orders that secure the workload, and in the long term, investment in railway equipment of the future. These two issues will be the focus of the Strategic Railway Committee, which I will call together on 5 December," said Christophe Sirugue.

On November 8th, SNCF diesel locos Nos. 72147 and 72189 stand at Troyes awaiting their respective return departures to Paris Est.

*John Sloane*



SNCF Shunter No. 9102 is seen stabled in Chartres yard on November 5th. *John Sloane*

SNCF No. 72130 departs Troyes with the 15:12 from Paris Est to Belfort on November 8th. *John Sloane*

Elderly SNCF electric loco No. 17098 stands in Paris Est after bringing in the empty stock of the 08:42 service to Troyes on November 8th. *John Sloane*

## Alstom to supply 22 Citadis trams to the STIF for line T9 in Ile-de-France

Alstom is to supply 22 Citadis trams to the Syndicat des Transports d'Ile de France (STIF) for line T9 in Ile-de-France, for an amount of 70 million euros. This is part of a framework contract which also covers the potential supply of 68 additional trams for lines T9 and T10. The trams will be delivered from mid-2019 onwards with commercial entry into service scheduled for October 2020. Lines T9 (10 km) and T10 (8.2 km) will respectively serve Porte de Choisy (Paris) to Orly ville, and Clamart to Antony. 95,000 passengers per day are expected on these two lines by 2021. 44 metres long, Citadis X05 for line T9 will be able to transport over 314 passengers. It will be equipped with Wi-Fi connection, 100% LED lighting, and large glass windows. It will be particularly energy-efficient and will offer a high level of reliability. The Citadis X05 tram, the latest in the Alstom Citadis range, is the lightest tram of its generation, thereby reducing its infrastructural footprint to a minimum.

Particular attention has been paid to the design of this new tram, developed as a partnership between the Design&Styling teams of Alstom and the agency Design

Saguez & Partners. Inside the tram, the route maps are dynamic and the information screens are positioned lengthwise. The passenger exchange ratio has been increased by over 20% thanks to the 8 double doors on each side. Interior comfort has also been optimised through bench seating and an improved visualisation of the opening of the doors. 100% eco-designed, the tram is 97% recyclable.

Seven of Alstom's twelve sites in France will be involved in the production of the trams: La Rochelle for the design and assembly, Orans for the motors, Le Creusot for the bogies, Tarbes for the modules and equipment, Valenciennes for the interior layout, Villeurbanne for the on-board electronics and Saint-Ouen for the design. In total, over 500 jobs will be secured with Alstom and its suppliers.

To date, over 2,300 Citadis trams have been sold to 55 cities worldwide, including 23 in France. Citadis in its X05 version has already been ordered by Nice, Sydney, and Caen. The trams of the Citadis range combine tried-and-tested technology with ease of modularity to offer reliability, comfort and customisation.

## Alstom to supply 23 trams to the agglomeration of Caen la Mer

Alstom is to supply, for an amount of approximately 52 million euros, 23 trams to the agglomeration community of Caen la Mer. The trams will be delivered from the summer of 2018 onwards, with entry into commercial service scheduled for September 2019. This first order could be extended, via the exercising of options, to include up to 9 tramsets by 2021. The trams will run on all three of the new lines, replacing the existing trams in reserved lanes.

33 metres long, equipped with 6 double doors on each side, the Citadis X05 of Caen la Mer will be able to transport over 210 passengers. It will be equipped with 100% LED lighting and large glass surfaces, and will offer USB recharging sockets, a first in France. It will be highly energy-efficient, and will offer a high level of reliability, thereby guaranteeing an improved alternative to Caen la Mer's existing system.

Citadis X05 is the lightest tram of its generation, thus reducing its infrastructural imprint to a maximum. The design, over which discussions have begun today and will be submitted to a vote by inhabitants by the end of the year, will highlight the identity of the region of Normandy. The Caen la Mer tram could reach full autonomy in terms of power supply, through its specially designed roof, without using infrastructure that affects the urban environment.

"I am very proud that the agglomeration community of Caen la Mer has chosen Alstom. The trams of the Citadis range, which have been adopted by 55 cities worldwide, combine tried-and-tested technology with ease of modularity to offer reliability, comfort and customisation," said Jean-Baptiste Eyméoud, President of Alstom France.

## Bombardier to Build 40 OMNEO Premium Double Deck Intercity Trains for Normandy, France

**Normandy is the first Region to choose the new version of BOMBARDIER OMNEO trains for its intercity services**

**200 km/h Premium version focuses on increasing passenger comfort with WiFi, redesigned wider seats and power outlets**

**The OMNEO platform is entirely designed and produced at Bombardier's Crespin site in Hauts-de-France**

"This is the first order for the newly-designed Premium version of our OMNEO double deck platform", said Laurent Bouyer, President of Bombardier Transportation in France. "Passengers will benefit from over 100 additional seats and a new-level of rail travel comfort and style. Designed by our teams in France, the OMNEO product family, which includes the Regio 2N train, is currently the key structuring project for our Crespin site and for the French rail industry."

Specifically designed to set a new standard for comfort on long intercity journeys, the OMNEO Premium trains can travel at 200 km/h and offer a range of amenities for long distance travellers. Passengers can now enjoy a spacious, WiFi-equipped train that features



Rail technology leader Bombardier Transportation has announced it has received an option order for 40 OMNEO Premium double deck EMUs from SNCF on behalf of the Normandy Region. This order is valued at approximately 585 million euro (\$620 million US) and is part of the contract signed in 2010 with SNCF to provide up to 860 double deck trains to the French Regions. The Normandy Region plans to roll out these new premium trains at the end of 2019 to improve comfort and capacity by over 20% on the frequently used Paris-Rouen-le Havre and Paris-Caen-Cherbourg lines, compared to the lines' existing fleets.

USB charging ports, standard power plugs, and a wider seat equipped with integrated lighting. Normandy's new trains will be 135m-long, offer 470 seats per train, and operate in multiple units. To date, the French Regions have ordered a total of 253 trains of the OMNEO product family under the 2010 framework contract: (40) OMNEO Premium for Normandy and 213 Regio 2N for Nouvelle Aquitaine (24), Brittany (21), Centre-Val de Loire (14), Hauts-de-France (25), Île-de-France (42), Occitanie (18), Pays de la Loire (13), Auvergne-Rhône-Alpes (40), Provence-Alpes-Côte d'Azur (16). Following the current state of orders, the last train will be delivered in early 2021.



# Germany



▶ DB 'Rabbits' Class 218.824 and 218.830 are seen stabled at Nuremberg. *Brian Battersby*

▶ Heavy Haul's Class 66 No. 29005 powers out of the sidings at Hamburg-Harburg on September 21st. *Class47*



# Germany

## DB Museum Nuremberg



▶ Class 110.002-3 is the second of five German locomotives built in the late 1950s with a top speed of 130 km/h. *Brian Battersby*

▶ The VT 614 was designed as a three-car unit, consisting of two traction units and a centre carriage. Class 614.005 comes from the first series of this model series and is the only remaining motor vehicle to have the colour pebble gray / orange, with which was put into service in 1973. *Brian Battersby*

▶ DB Class 218.217 is seen in the yard at the DB Museum, Nuremberg. The class represents the final major revision of the DB V160 family of locomotives; having the preferred features of the antecedent locomotives, including a hydrodynamic brake, and a single engine providing electrical train heating via a generator as well as tractive power. *Brian Battersby*





# Germany



▶ Ceske Drahy's Class 371.004 calls at Bad Schandau working train No. EC379 to Praha hl.n. *Steamsounds*



▶ Harzer Schmalspurbahnen Dampflok No. 99.7243 arrives at Eisfelder Talmühle with the daily Norhausen - Brocken train. *Steamsounds*

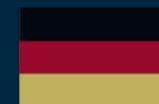


▶ Tatra built Leipzig tram No. 2194 working a line 3 service to Knautkleeberg, passes the Hauptbahnhof. *Steamsounds*



# Germany

AKE operated Class E10.1309 speeds a special charter train through Hamburg Harburg on September 21st. *Class47*



# Germany

▶ DB Class 143.626 stands at Nuremburg working an S2 line service to Roth. *Brian Battersby*



▶ DB Class 111.225 stands at Nuremburg working a DB Regio service to Munchen Hbf. *Brian Battersby*



▶ Bahn Touristik Express Class 110.491 is seen stabled with its stock at Nuremburg. *Brian Battersby*



Germany

DB Class 642.147 stands at Sebnitz with train No. RB5443 to Rumburk in the Czech Republic.  
*Steamsounds*

## Alstom obtains EBA certification for its concrete slab track solution for main lines

Alstom has received recognition from the Eisenbahn-Bundesamt (EBA), the German Railway Federal Authority, for NBT, its concrete slab track solution for high-speed and conventional rail systems. This non-ballast track solution has been developed for mixed traffic at a maximum operational speed of 360 km/h.

The EBA classified NBT as "Zulassung zur Betriebserprobung", i.e. "Approved for operating testing". The EBA is recognised worldwide for its experience in the slab track homologation, which is carried-out in the past 40 years on the German high speed railway network. Two main actors of the railways German community have worked closely with Alstom to obtain this approval: The TÜV (TÜV Rheinland InterTraffic GmbH / ACR - Assessment & Certification Rail Office), a recognised international group that acts as Notified body (NoBo) and TUM (Technical University of Munich) with their Department of Civil, Geo and Environmental Engineering. Alstom co-developed NBT for main-line owners seeking a concrete track i.e. a railway track with extensive lifespan and high infrastructure availability, which can be installed faster than traditional slab track, and be operated for mixed traffic (both passenger-dedicated and freight transport). NBT has an innovative slab design inspired from concrete pavement experience. The construction process is derived from the service-proven Appitrack technology which

allows higher construction rates with 300 m of track laid per day and schedule of track laying reduced by 40%.





# Germany



▶ National Express' Class 442.861 stands at Köln Hbf. *Stearnsounds*

▶ DB Regio Class 648.203 calls at Koblenz Stadmitte with a service to Mayern Ost. *Stearnsounds*



# Germany



STEG operated Siemens Vectron Class 193.812 passes through Hamburg-Harburg on September 21st with a rake of empty container flats. *Class47*



CVAG operated Tatra T3DM tram No. 528 passes Bombardier 6NGT-LDE No. 602 at Chemnitz Hbf. *Steamsounds*



DB Class 218.471 stands at Köln Hbf with an infrastructure/test train. *Steamsounds*



## Germany

Class 218.491 is seen stabled with its stock at Lindau, prior to working a DB Regio service to Munich. *Class47*



## New features for award-winning “DB Train Simulator” app

### Energy-efficient train driving game is challenging and fun DB train drivers involved in development

The DB Train Simulator app for tablets and smartphones has already been downloaded more than 450,000 times since its launch in May. “Players sit up front in the driver’s cab and have a choice of trains, including an ICE. The aim is to drive as energy-efficiently as possible. The app makes protecting the climate fun,” says Andreas Gehlhaar, Head of Environment at DB. “The game is very realistic. On a trip from Hamburg to Munich and back, a train driver can save more

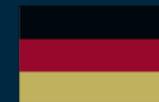
electricity than a family of four use in a year.”

The new update for the DB Train Simulator app is available free of charge from the App Store and Google Play right now – in both German and English. Players aim to save electricity using efficient driving techniques while still arriving on time at the virtual destination. The new features such as improved graphics, new routes and a new scoring system make the game even more appealing and realistic. Users can now drive an ICE, IC, RegionalExpress or regional train along eight routes from the redesigned cab.

The environment-themed game is based on the program used by Deutsche Bahn for more than ten years to train its drivers in energy-efficient techniques.

Train drivers also helped to create the latest version of the app.

The DB Train Simulator app took second place in the International Union of Railways’ (UIC) Sustainability Champion Award in October 2016.



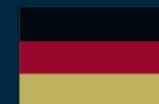
# Germany

DB Class 112.134 stands at Dresden Hbf with an RE18 service to Cottbus. *Stearnsounds*



Chemnitz Bombardier 6NGT-LDZ tram No. 411 arrives at the Theaterplatz stop. *Stearnsounds*

Nuremberg tram No. 1013 heads through the city working a Line 8 service to Tristanstrasse. *Brian Battersby*



# Germany



▶ DB Class 143.821 stands at Hof Hbf with a service for Dresden Hbf. *Steamsounds*

▶ DB Class 363.685 shunts an ECS out of the platform at Leipzig Hbf. *Steamsounds*



# Germany

In a beautiful Autumn sunset, DB Class 146.584 is seen pushing an IC 'Dosto' service on train No. IC2435 to Leipzig Hbf through Wunstorf. *Class47*





# Germany

## DB Freilassing Locomotive World

▶ Kraus-Maffei Kleinlok (Köf II), was built in 1941 these locos were, after testing, put into service by the Deutsche Reichsbahn and used at small stations for light shunting. *Brian Battersby*

▶ Wendelsteinbahn Lok No. 1 of 1924 from the Wendelstein Rack Railway in the Upper Bavarian Limestone Alps. Behind the loco is Trailer Car No. 3. *Brian Battersby*

▶ Built in the 1930s for the gradient-rich stretch of Freilassing to Berchtesgaden line, electric locomotive No. E 44 508 is now exhibited in the museum. *Brian Battersby*





# Germany



▶ DB Class 155.236 stands in the rain at Trier hauling a rake of empty point carriers. *Class47*

▶ DB Class 115.448 speeds through Hamburg Harburg on September 21st, hauling an assortment of stock. *Class47*



▶ Vossloh G2000 type B-B No. G2000.33 operated by FuoriMuro, passes through Zoagli. *John Sloane*

▶ Oceanogate's Class 483.007 heads through Zoagli working a northbound freight on September 14th. *John Sloane*

▶ FS Class E444.037 crosses Zoagli viaduct with a southbound express. *John Sloane*



▶ TFT 'Minuetto' EMU No. ETT 21 departs Poppi working a service to Arezzo. *John Sloane*

▶ FS Class E402.009 stands at Pisa working the Vienna to Livorno overnight sleeper service. *John Sloane*

▶ With the leading loco looking decidedly rough, FS diesels Nos. 345.1044 and 345.1103 run light through Pisa. *John Sloane*



▶ TFT (former FS No. 700.003 and originally LMS No. 7106) is seen stabled in the yard at Arezzo Pesciola. *John Sloane*

▶ FS Class 145.2019 passes through Pisa hauling a train of new cars. *John Sloane*

▶ FS Class E402. 104 arrives into Pisa with a Rome - Ventimiglia service. *John Sloane*



# Netherlands

NSSprinter EMU No. 2993 arrives into Amsterdam  
Centraal working a service to Uitgeest.  
*Class 47*





# Netherlands



▶ NS Class 17 No. 1753 arrives into Amsterdam Centraal with a rake of DB stock, heading for Berlin. *Class47*

◀ Built in 1955 by Allan - Heemaf, NS Class 2200 No. 2205 stands with a works train at Amersfoort. *Class47*



# Netherlands



▶ Railpro shunter No. 603 is seen at work in the yard at 'Stapelplaats Crailoo' near Hilversum.  
*Class47*

▶ NS TRAXX No. E186.017 stands at Breda working a diverted Amsterdam Centraal service.  
*Class47*

▶ A pair of refurbished NS ICM trains are seen departing Breda.  
*Class47*



# Netherlands

On November 5th, new FLIRT commuter train, No. 2508 is seen in the station at Arnhem under test. From December 2016, these units should be in regular service. *Mart Brouwers*



 Portugal

On November 15th, CP Suburban EMUs Nos. 3150, 3250 and 3255 approach Lisbon with a service from Estoril. *Michael Lynam*

Siemens built tram No. 501, working route 15 to Alges, is photographed on November 15th. *Michael Lynam*

Siemens built tram No. 509 enters The Praca do Comercio on a route No. 15 service to PC Figueira. *Michael Lynam*





 Portugal



▶ Carris tram No. 568 (previously No. 254) approaches the terminus at Belem on route 18, November 15th. *Michael Lynam*

▶ Siemens built tram No. 503 working a route No. 15 service to PC Figueira, stands at The Praca do Comercio. *Michael Lynam*

 Slovakia



MVA Class 242.246 and Railtrans International Class 242.557 head a rake of GATX tanks through Bratislava Hlavna Stanica. *Class47*



With snow on the Tatra mountains in the background, a ZSSK Class 731 stands at Poprad-Tatry. *Class47*



ZSSK Cargo twin No. 131.089 and 131.090 hauls a rake of empty wagons through Poprad-Tatry. *Class47*



# Switzerland

- ▶ MGB Deh 4/4II No. 91 departs Brig Bahnhofplatz with a service to Göschenen on October 6th. *Steamsounds*
- ▶ On September 27th, RhB Allegra EMU No. 3512 arrives at Chur with a service from Arosa. *Steamsounds*
- ▶ RhB Ge 3/3 No. 214 is seen shunting coaches at Chur on September 28th. *Steamsounds*



# Switzerland

SudOstBahn EMU Class 526.060 departs St. Margrethen working an S6 service to Sargans. And the dark cloud in the background was just as bad as it looked, resulting in heavy rain for the rest of the day. *Class47*



# Switzerland

On October 4th, a Pilatus Bahn train heads between the Eselwand Tunnels.  
*Steamsounds*



# Switzerland



▶ BLS Re 4/4II Class 420.505 stands at Interlaken Ost with a service for Zweissimmen on October 9th. *Steamsounds*

▶ Wengernalpbahn Bhe 4/8 No. 143 and BDhe 4/4 No. 108 wait departure time at Kleine Scheidegg on October 9th. *Steamsounds*

▶ On October 9th, a Wengernalpbahn Bhe 4/8 from Grindlewald climbs towards Kleine Scheidegg. *Steamsounds*



# Switzerland

SBB Re 4/II No. 11244 waits departure time at Zurich working an IR service to St. Gallen.  
*Class47*





# Switzerland

▶ RhB Ge 4/4III No. 642 approaches Cellerina with an RE service for St. Moritz, seen from Muotas Muragl on September 29th. *Steamsounds*

▶ RhB Ge 4/4II No. 616 stands at Lanquart on October 2nd with a service from Scuol Tarasp. *Steamsounds*

▶ On September 30th, RhB Ge 4/4II No. 622 stands at Pontresina with a service from Scuol Tarasp. *Steamsounds*





# Switzerland

A pair of Wengernalpbahn Bhe 4/8s are pictured on the final part of the climb towards Kleine Scheidegg on October 9th. *Stearnsounds*



# Tenerife



At Santa Cruz on November 13th, Tranvia Alstom Citadis tram No. 09 departs Fundación on route No. 1, heading for La Trinidad. *Michael Lynam*

Tranvia Alstom Citadis tram No. 22 departs Fundación on November 13th working route No. 1 to La Trinidad. *Michael Lynam*

Tranvia Alstom Citadis tram No. 25 approaches Fundación, working on route No. 1 to Intercambiador. *Michael Lynam*



## Bombardier Wins Fleet Operations and Maintenance Contract in Montréal

**First Contract strengthens Bombardier's position as industry-leading rail services provider**

**New agreement continues long-term partnership with Agence Métropolitaine de Transport (AMT)**

**Increases scope of work to operate AMT's fleet on all of its commuter rail lines**

**Latest contract strengthens Bombardier's position as industry-leading rail services provider**

Rail technology leader Bombardier Transportation has announced that it has been awarded an eight-year contract by Montréal's Agence Métropolitaine de Transport (AMT) for the Operations and Maintenance of the AMT commuter rail fleet on all of its six lines in the greater Montréal area. The contract is valued at approximately \$331 million CAD (\$246 million US, 231 million euro). The agreement includes a two-year option. The new contract took effect on November 18, 2016.



"AMT's commuter rail service is one of the most important in North America and has been a growing success story for many years, and Bombardier is honoured to be a partner in its development." said Benoît Brossoit, President, Bombardier Transportation, Americas Region, "This continued confidence in the quality of our services confirms Bombardier's leadership position and highlights our strong services portfolio."

Bombardier has been providing Maintenance services for AMT since 2010. With this new contract, Bombardier's scope of work will not only cover the maintenance of AMT's entire fleet of 264 coaches and 41 locomotives, but will also extend to

the Operations of AMT's commuter rail services. Over the past 12 months, Bombardier's average on-time performance for maintenance of the AMT fleet has been 99.87 percent, offering market-leading results even in harsh winter conditions. "Agence métropolitaine de transport is happy to continue its partnership with Bombardier", said Stéphane Lapierre, Vice president Operations, at AMT. "We have a longstanding positive relationship that is based on the common objective of bringing state-of-the-art mobility solutions to the Greater Montréal area". As a world-leading supplier of third party rail services, Bombardier offers added-value to its customers by providing integrated fleet support and solutions. Our comprehensive asset management services help deliver lower life-cycle costs for vehicle fleets, while maintaining high availability rates and on-time performance. By offering dependable and steadfast services to AMT and its entire customer base, Bombardier works at offering the quality of service and enhanced passenger experience necessary to help increase ridership and improve regional mobility.

Bombardier Transportation is the only global rail manufacturer with an important presence in Canada, with a workforce of more than 4,000 highly qualified employees. Every day, millions of Canadians in Montréal, Ottawa, Toronto and Vancouver rely on Bombardier urban rail vehicles and services to provide comfortable, safe and reliable public transit. An established Bombardier customer, AMT is the second largest commuter train transit system in Canada and the sixth largest region in terms of traffic in North America, with an annual ridership of more than 19,000,000 on its commuter rail service. In addition to operating the commuter trains in the metropolitan area, AMT is the organization responsible for planning, integrating and coordinating mass transit services in the Greater Montreal area. Over the years, Bombardier has provided AMT with commuter rail cars, electric multiple units, dual-powered locomotives, as well as BOMBARDIER BiLevel and multilevel commuter rail cars.

Worldwide, Bombardier maintains more than 9,000 rail vehicles. In North America, Bombardier provides maintenance and/or operations services to transit systems including the Southern California Regional Rail Authority (Metrolink), the Central Florida Commuter Rail Transit project (SunRail) train service, the Maryland Area Regional Commuter (MARC) Train Service, Metrolinx/GO Transit in Toronto, New Jersey Transit, North County Transit District in North San Diego County, OC Transpo in Ottawa, the South Florida Regional Transportation Authority and TransLink's West Coast Express commuter rail system in British Columbia. Bombardier also supports transit systems with overhaul and refurbishment programs as well as with material and technology solutions.



## Škoda Electric has succeeded in Brazil

In recent weeks, Škoda Electric scored a major export success in the overseas market. The Plzeň-based company will participate in the production of new monorail vehicles for public transportation in the Brazilian city of Sao Paulo. Monorail public transport vehicles, which combine the favourable properties of the tram and metro, ride on special bridge structures situated above the regular city infrastructure.

„Škoda Electric will produce mechanical engines for monorails in Sao Paulo for over 100 million crowns. We will deliver the engines to the final vehicle manufacturer, Scomi Engineering, based in Malaysia," explains sales manager of Propulsion&Controls East and Asia Škoda Electric, Jaromír Hájek. Škoda Plzeň concluded a cooperation contract for the joint development of vehicles for public transport and light rail vehicles with Scomi Engineering last year. „We see potential for further projects in Brazil, as well as in Turkey, India, Malaysia, or Thailand," adds Jaromír Hájek.

The vehicles with Škoda equipment will be used on the new line No. 17 in Sao Paulo. Škoda Electric will supply engines for a total of ten five-car monorail units, and each unit uses ten engines. The advantage of monorails is that they are not dependent on other public transport; they drive completely automatically without a driver, and they are increasingly gaining popularity in large cities. This is mainly due to the high transport capacity similar to the metro, but with significantly lower costs.

For Sao Paulo monorails, Škoda Electric has developed a completely new type of aluminium high-speed traction engine, whose advantages include its high efficiency and low weight. The delivery will also include gear units. „We will deliver the engines to the manufacturer in several stages, starting in 2017," says Jaromír Hájek.

Scomi Engineering Bhd is a leading supplier of public transport systems. It is currently involved in several monorail projects in Malaysia, Brazil and India, including the operation and maintenance of the first stage of a monorail track in Mumbai, India. In addition to the supply of monorail vehicles for line 17 in Sao Paulo, Scomi Engineering is also planning the construction of a factory for further monorail and other rail vehicle projects in Brazil.



## CAF SELECTED AS PREFERRED BIDDER FOR THE NEW FLEMISH TRAMS

Flemish Transportation Company De Lijn has selected CAF as preferred bidder for the supply of new trams. The order includes the supply of approximately 146 new trams for the provinces East and West Flanders as well as for Antwerp, which will be produced in seven consecutive call-offs.

De Lijn is the Flemish public operator for buses and tramways, transporting about 530 million passengers per year. The three tram networks of De Lijn total approximately 175 km and are located in the cities of Antwerp, Ghent and along the Belgian coast. The new tramways will operate on the three networks.

The tramways proposed by CAF for De Lijn are low-floor trams, both uni-directional and bi-directional vehicles, and combine modern aesthetics with state-of-the-art equipment. These new

trams provide maximum accessibility without compromising comfort, performance and ease of operation.

For CAF, this project stands for a consolidation in the Benelux rolling stock market in general and the Belgian rolling stock market in particular. This summer, MIVB/STIB of Brussels awarded CAF a new contract for the construction of its 43 new metro vehicles and GVB of Amsterdam awarded CAF with a contract for 63 new tramways.

Currently tramways for the cities of Utrecht and Luxemburg, and Civity units for NS (Nederlandse Spoorwegen) are being produced in CAF's Plants, and in recent years, CAF also delivered 21 metro vehicles to the city of Brussels.

This new project for the De Lijn underpins CAF's consolidation in the European tramway market where CAF recently developed tramways for cities such as Besançon, Belgrade, Birmingham, Budapest, Cagliari, Debrecen, Edinburg, Freiburg, Granada, Malaga, Nantes, Saint-Etienne, Seville, Stockholm or Tallinn.

The new project adds to an aggregate of new contracts awarded in 2016 in excess of €2,800 million, strengthening CAF's committed strategy towards growth over the next few years.



Railtalk Magazine  
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## World News



## Alstom to supply traction and train control monitoring systems for the phase 2 of Shanghai metro line 10

Alstom has been awarded a contract worth 31 million euros to supply traction systems and train control monitoring systems (TCMS) for 156 metro cars of the Shanghai line 10 phase 2. The line is expected to start revenue service in 2018.

Line 10 is the first driverless metro line in Shanghai. It includes two phases: phase one, which started revenue service in 2010 and is 36km long with 31 stations, and phase 2 which will add 10 kilometres and 6 stations. For phase 1, Alstom supplied the signalling and traction systems, including auxiliary system TCMS, and was also involved in the metro design.

All traction systems and TCMS for phase 2 will be manufactured by Alstom's local joint venture (JV), Shanghai Alstom Transport Electrical Equipment Co. Ltd. (SATEE), with motors manufactured by another Alstom local JV: Xi'an Alstom Yongji Electric Equipment Co. (XAYEECO). Alstom Tarbes and Villeurbanne sites in France will provide components, and Alstom Sesto site in Italy as well as Charleroi in Belgium and Valenciennes in France will provide software for the traction, auxiliary converter and TCMS system.

"Alstom is pleased to be awarded another contract and to pursue this collaboration that will enhance Shanghai metro network. With its technology proven internationally, 17 years presence in Shanghai and localized manufacturing, Alstom will continue providing efficient, reliable and environment friendly urban transport solutions to Shanghai, an important market for Alstom both for metro and tramway lines" said Ling Fang, Managing Director of China & East Asia, Alstom.

In 1999, Alstom won its first

metro contract in China to supply 168 metropolis metro cars to Shanghai Line 3. So far, Alstom has supplied 1,222 metropolis metro cars for seven Shanghai metro lines. In 2015, Alstom was awarded its first tramway contract in China to supply 30 trams for Shanghai Songjiang lines. Alstom has two other JVs in Shanghai: Shanghai Alstom Transport Co. Ltd which is manufacturing and maintaining rolling stocks since 1999, and CASCO Signal Ltd. which is equipping signaling systems and services for metro trainsets and mainlines since 1986.





## Siemens to manufacture 45 light rail vehicles for San Diego

**First vehicles are expected to arrive in late 2018**  
**Currently 128 Siemens' light rail vehicles are operating in San Diego**  
**San Diego Metropolitan Transit System (MTS) is**  
**Siemens' largest U.S. light rail vehicle customer**

Siemens has received an order for 45 new S70 light rail vehicles (LRVs) from the San Diego Metropolitan Transit System (MTS). The new vehicles will allow service enhancements on existing rail lines and provide the necessary LRVs to operate the 11-mile extension of the UC San Diego Blue Line that is now under construction. This order will bring the total number of vehicles supplied to MTS to 244, making MTS the largest U.S. light rail customer for Siemens. The S70s will be built at the Siemens rail manufacturing hub in Sacramento, California. The first vehicles are expected to arrive in late 2018.

“Our relationship with Siemens is a true partnership,” said MTS Chief Executive Officer Paul Jablonski. “We work together at every step to design the best-possible vehicle for our system and, more importantly, our riders.”

“This order marks another milestone in our successful 35-year relationship with MTS. These California-built vehicles will help continue MTS' legacy of outstanding service to its riders and help accommodate riders on their growing rail system,” said Jochen Eickholt, Chief Executive Officer of Siemens Mobility Division.

The new order of low-floor LRVs will feature a redesigned middle section of the vehicle to improve passenger flow including greater wheelchair accessibility and bicycle storage. MTS will use 36 of the 45 new LRVs on its Mid-Coast Trolley expansion, a new service to help manage current and future travel demand to and from the University City community. The additional nine vehicles will be used to increase frequency on the UC San Diego Blue and Orange lines. Siemens has been providing LRVs to MTS since 1981. MTS recently sold or retired 71 Siemens U-2 vehicles, which were the original vehicles on the nation's first modern light rail system. The original 15-mile segment from the International Border to downtown San Diego has since grown to more than 53 miles of double-tracked railway that serves the entire urbanized area of San Diego.



## Rail Cargo Group sets new standards in Turkey

### Planned expansion on routes between Western Europe and Turkey

The Rail Cargo Group has been active on the Turkish market for many years. Rail Cargo Logistics' local subsidiary and the several operator routes they already offer to and from Turkey ensure optimum rail connections with Central and Western Europe. The next step in their strategy: from 2017, they will be extending their range of rail logistics services.

### A wider range of operator services from 2017

Whereas currently Rail Cargo Operator runs a thrice-weekly service from Sopron-Halkali, with all traction supplied in-house as far as the Turkish border, an expansion is foreseen as of 2017. The new Poland-Budapest (BILK Terminal)-Istanbul route will add a rapid, high-quality service to Rail Cargo Group's product portfolio. The terminal BILK of RCG in Budapest offers a wide range of onward connections to other points across their network, for example to Germany's Ruhr Valley and Romania.

### Cooperation with Turkish state railways

The cooperation with the Turkish railways TCDD (Türkiye Cumhuriyeti Devlet Demiryolları) is also set to be bolstered in future. For some time now, RCG and TCDD have been actively discussing potential joint projects to promote rail freight in Turkey and link the country with the broader rail network. Currently, rail carries only 0.85 % of rail freight flows, but this is set to grow

strongly in the next few years. Recently, RCG and TCDD discussed the varied options for the Istanbul urban area and beyond, and defined a number of future projects.





## Alstom supplied traction system to newly opened Xi'an metro line 3 in China

The Xi'an metro line 3 phase one for which Alstom supplied traction system for the metros that circulate on, has commenced revenue service. The contract was signed in 2013 between Alstom and Xi'an Metro Company to equip 246 metro cars with OptONIX traction system. That was the first transport contract for Alstom in Xi'an city. Phase one - which is 39.1 km long

Electric Equipment Co. (XAYEECO).

Components came from Alstom Tarbes site in France and software from Alstom Charleroi site in Belgium. "Alstom is proud to have participated in the Xi'an metro line 3 project which will greatly enhance and improve passenger experience of Xi'an commuters. With



and includes 26 stations – connects the city from southwest to northeast, passing through important landmarks including Xi'an International University, Qinglong Temple, Chanba Ecological District, Xi'an International Harbor Affairs Area, Xi'an Economic & Technological Development Zone and Xi'an Free Trade Zone. A further extension of the metro line toward the south is planned.

The OptONIX traction system is specifically designed and developed for the Chinese market. The traction systems for line 3 of Xi'an metro were manufactured by Alstom's local joint venture, Shanghai Alstom Transport Electrical Equipment Co. Ltd. (SATEE), with motors manufactured by another Alstom local joint venture, Xi'an Alstom Yongji

its internationally proven technology, localized manufacturing and excellent execution of projects, Alstom is the preferred partner to accompany Xi'an in its upcoming mobility projects" said Ling Fang, Managing Director of China & East Asia, Alstom.

Alstom has delivered traction solutions for more than 4,000 metro cars of 23 metro lines in 9 cities in China and abroad including Xi'an, Chengdu, Beijing, Shanghai, Nanjing, Qingdao and Hong Kong. Its joint venture in China, SATEE, has had more than 16 years' experience manufacturing traction system for metro cars.



## Alstom and Carbone 4 measured the carbon footprint of the tramway versus Bus Rapid Transit systems

Alstom and Carbone 4, a leading consulting company specialised in climate-resilient and low-carbon strategy has presented the results of a study demonstrating that tramways have a smaller footprint than Bus Rapid Transit (BRT) systems. This occurred in the lead up to COP22 that was recently held in Marrakech, Morocco, in which Alstom participated.

With global urban transport emissions expected to double to nearly 1 billion tonnes of CO2 equivalent per year by 2025, favouring transport modes with the lowest carbon footprints is crucial. Rail can be a key contributor in the fight to reduce greenhouse gases (GHGs) and reach the target set at COP21 in 2015 to keep global warming below 2°C.

The tram, for example, has been identified as one of the greenest urban transport modes due to its low environmental impact when in operation. The study conducted by Alstom and Carbone 4 compares the carbon footprint of tramways and

BRT systems, enabling a better understanding of their comparative performance over the entire lifecycle including construction, operation and maintenance of the two systems. An analysis conducted on a typical 10 km line operated in Belgium demonstrated that for equivalent transport capacity, over a 30-year lifetime, a tramway system emits about half as much CO2 as a BRT system operated with diesel buses, and about 30% less CO2 than a BRT system operated with hybrid buses.

Julien Blanc, associate director of Carbone 4, declared « Reducing greenhouse gas emissions from transportation is both a key issue and an exciting challenge. It should be achieved through relevant urban planning, energy efficiency, clean energy and of course modal shift. Tramways are of course part of the solution and these infrastructures will benefit from all the

improvements in « cleaning » the electricity mix. »

Cécile Texier, Sustainable Development Director at Alstom, said: "At Alstom, we are constantly working to promote sustainable mobility, striving to reduce the operational cost from energy for the benefit of our customers and committed to reducing the carbon footprint of transport. The survey conducted with Carbone 4 illustrates that rail systems have a lower carbon footprint than other motorised modes. It also shows that optimised system like Attractis, an innovative integrated tramway system that is simpler to operate and cost-effective, can significantly reduce CO2 emissions from the construction phase."



Alstom contributes to the visibility of transportation issues and the promotion of sustainable transport in international negotiations on climate change through its support of the Paris Process on Mobility and Climate (PPMC).

Alstom participated in the PPMC's Transport Day on 13 November at COP22 in Morocco where its Citadis trams have been adopted by Casablanca and Rabat since 2011. In Rabat, up to 120,000 people travel every day aboard the trams, a great success which has led the city to decide to extend the network. Studies have shown that two tramway lines should lead to a CO2 emissions reduction of about 30,000 tonnes per year.

## From the UK

### Severn Valley Railway

The Severn Valley Railway is a heritage railway in Shropshire and Worcestershire, England. The 16-mile (26 km) heritage line runs along the Severn Valley from Bridgnorth to Kidderminster, crossing the Shropshire/Worcestershire border, following the course of the River Severn for much of its route. At the beginning of November the line held an Autumn Steam Gala.

▶ Former Port Talbot Railway saddle-tank No. 813, recently restored to working condition stands gleaming at Highley on November 5th. *Richard Hargreaves*

▶ Great Western Railway 28xx 2-8-0 No. 2857 and SR West Country Class 4-6-2, No. 34027 "Taw Valley" are seen stabled at Bewdley on November 5th. *Richard Hargreaves*

▶ On November 5th, Great Western Railway (GWR) 1500 Class 0-6-0 pannier tank steam tank No. 1501 arrives at Kidderminster with stock from the carriage shed. *Richard Hargreaves*



## From the UK



▶ Great Western Railway 7800 Class No. 7812 'Erlestoke Manor' heads past the engine house at Highley hauling a Kidderminster bound service on November 5th. *Richard Hargreaves*



▶ GWR 0-4-2-T No. 1450 sandwiched between 'Autocoaches' Nos. W238 and W178, departs Highley on November 5th, heading to Arley. *Richard Hargreaves*



▶ GWR Small Prairie No. 4566 heads into Kidderminster for a water stop on November 5th. *Richard Hargreaves*

## From the UK



▶ LMS Hughes Crab 2-6-0 No. 13065, visiting the line from the East Lancs Railway, arrives into Highley on November 5th. *Richard Hargreaves*

▶ LNER A1 No. 60163 'Tornado' arrives into Arley on November 5th, working a Bridgnorth to Kidderminster service. *Richard Hargreaves*

From the  
Archives:

 Czech  
Republic

CD Class 751.095 (with another Class 751 tucked in behind it) stands at Liberec on February 14th 2007, with a mixed freight working. This pair of Class 751s were actually on the rear of this freight, assisting the Class 742 that can be seen in the distance. *Class47*



From the  
Archives:

 Czech  
Republic

On February 14th 2007, CD Class 751.166 is pictured stabled outside the depot at Kralupy nad Vltavou. The loco had arrived on a freight working from Kladno. *Class47*

