







# Welcome

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

Wow, what a month for photos received! This bumper edition truly is international this month with photos from all continents and we are so please to receive every single one of them.

Much talk this month here in the UK regarding various train operating companies issuing new timetables and not being able to keep to them due to either not enough rolling stock or not enough train crews. I really find this most unacceptable and as a train traveller and enthusiast myself, I just cannot understand how we get things so badly wrong.

Good news this month for train travellers to Italy with SBB and Trenitalia signing an agreement to increase the number of cross-border inter-city services. In an initial step the 2020 timetable will include an extra Basel – Milano service via Bern, giving four trains a day in each direction, with a fifth planned if demand warrants it. The Ceneri Base Tunnel is due to open at the end of 2020, and the 2021 timetable will offer 10 instead of eight return workings a day between Zürich and Milano, with journey times cut from 3 h 30 min to 3 h. Selected trains will run beyond Milano to serve Bologna or Genova.

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## Submissions & Contributions

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

**Photographic Contributions**  
All Photographic contributions should to be sent to us via email, post or via the members section page on our website. Contact addresses are provided to the right or on the next page.  
  
All images ideally should be provided at a resolution of at least 2048px x 1536px at 150dpi.

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### Front Cover

In Japan the Shonan Monorail with Mitsubishi built units Nos. 5606, 5205 and 5606 runs into Shonan-Enoshima Station.  
*David Pollock*

### This Page

On March 8th, waiting departure from Kyōto with service No. 44A for Nara is JR West 4-car series 103 1500V DC EMU. (DTSO) KuHa with No. 103-168 nearest/leading.  
*David Pollock*

### Next Page

Siemens/Krauss Maffei No. 5604 is seen departing Contumil Yard with empty stock on March 26th.  
*John Sloane*





Hot on the news that Siemens and Alstom are to merge transportation divisions is the news that Wabtec Corp has entered into a definitive agreement to merge with GE Transportation, the companies announced on May 21. The transaction is expected to close in early 2019, subject to approval by Wabtec shareholders, and regulatory authorities, making Wabtec 'a global leader in the rail equipment, software and services business, with operations in more than 50 countries'. General Electric CEO John Flannery had announced last November that the group was looking to dispose of its Transportation business unit during next two years, as part of a wider streamlining of the conglomerate. Wabtec has bought up many specialist companies across the rail sector, and last year completed the acquisition of Faiveley Transport.

And in Czech, the first of eight Bombardier Transportation Traxx multi-system electric locomotives ordered by open access operator RegioJet in April 2017 entered service on May 16. RegioJet plans to deploy the Traxx locomotives on services from Praha to Brno, Bratislava and Wien. RegioJet said this would be the first use of Traxx locomotives on regular passenger trains in the Czech Republic and Slovakia.

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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## ÖBB: RCG and DHL are expanding Silk Road network

Collaboration intensifies connections between China and Europe

Regular direct connections in future to Austria

The strategic project of the New Silk Road is of particular importance to ÖBB. With the first direct freight train from China to Vienna, Rail Cargo Group (RCG) - ÖBB's freight division - successfully launched its next train connection between Asia and Europe. A Memorandum of Understanding (MoU) has now been signed between Rail Cargo Group and DHL Global Forwarding with the aim of establishing regular connections along the Eurasian corridor.

### Opportunities of the One Belt – One Road Initiative

The New Silk Road consists of three routes: an in essence already existing Northern land link through the Central Asian states via Moscow and a Southern land link via Iran and Turkey to Europe. There is also a sea connection via the South China Sea, the Indian Ocean and the Red Sea to the European Mediterranean ports. The scale of the project is fascinating: 65 countries with a population of 4.4 billion people are located in the catchment area of the New Silk Road. Figures of up to 1.3 trillion dollars are cited as the investment volume.

### Perfect interaction

The New Silk Road holds enormous potential for the Austrian economy and direct access to a rapidly growing market. A major advantage for rail transport is that it is environmentally friendly, cheaper than air freight and faster than sea freight. The aim is to achieve a transport duration of around 10 days until the year 2020. DHL and RCG have already handled the first direct train from China to Austria. With the intensified cooperation, new connections between Europe and Asia will be implemented. A Memorandum of Understanding has now been signed between Thomas Kargl, Board Member for Sales of Rail Cargo Group, and Steve Huang, CEO, DHL Global Forwarding Greater China.

“Trade between China and Austria is booming. This makes it all the more important that we offer our customers attractive connections and a strong network. With the MoU and their collaboration, RCG and DHL are sending a clear signal. Together we are bundling our know-how and network,” explains RCG Board Member Thomas Kargl.

The aim of the cooperation is to expand rail transports on the Eurasian land bridge through the six countries of China, Kazakhstan, Russia, Ukraine, Slovakia and Austria. This includes the increase in freight transport capacity and the sustainable establishment of alternative routes to the existing China-Europe connections. Customers benefit from RCG's high-quality network in Europe and its expertise on the Transkazakh Silk Road routes, coupled with DHL Global Forwarding's international forwarding services.

“This key partnership comes in the wake of Austria's Economy Minister having signed 30 business deals worth USD1.9 billion with Chinese companies last month. The MOU combines RCG's deep expertise in regional rail infrastructure with DHL's end-to-end forwarding capabilities and one of the world's broadest multimodal networks, giving customers in Europe and China a potent new alternative to tap into the opportunities heralded by the Belt and Road,” explains Steve Huang.

### Thriving economic centre Chengdu

It is no coincidence that the Chinese province is the starting point for future transport operations. With an intended increase of one trillion yuan by 2022, especially in the biomedical, automotive, intelligent manufacturing and e-commerce sectors, the region has immense potential for high-end exports between China and Austria. The Chinese market is particularly attractive for us and Vienna is an important hub for transport operations to and from China. Starting from the Vienna South Freight Centre, the goods are distributed throughout Europe - between the North Sea, the Mediterranean and the Black Sea. In return, we offer customers from European industry a direct line to Asia with our shuttle services,” says Kargl.

### Rail Cargo Group: Freight traffic of the ÖBB

The Rail Cargo Group is one of the leading rail logistics companies in Europe with annual sales of 2.2 billion euros and 8,700 employees. Together with strong partners, the Rail Cargo Group offers a comprehensive network of door-to-door-logistics in Europe and far beyond to Asia. It connects European conurbations and ports with prosperous economic centers in Russia, Turkey and all the way to China. The Rail Cargo Group's lead operating company is Rail Cargo Austria AG.

▶ ÖBB Class 1116.144 and 1116.065 are seen on the rear of a eight loco lash-up running through Wien Hbf on April 22nd. *Class47*













▶ A SD operated Class 130 heads south past the Masarykovo dam at Usti nad Labem with a loaded coal working on April 20th. *Class47*

## ETCS equipment of locomotives

On 28 May 2018, ČD Cargo cancelled four procurement procedures for the delivery and installation of the mobile part of the ETCS safety device into selected driving vehicles. During the year 2018, all the 6 procurement procedures to equip the locomotives with ETCS are in progress.

With the four procurement procedures, the tenderers did not fully comply with the terms of the procurement procedure and the Act on Public Procurement. This formal deficiency causes the risk of infringement of legal procedures if the procurement procedure continues. After considering all the risks associated with it, including the co-financing from the European CEF funding instrument, the contracting authority has decided to cancel these procurement procedures and to launch new procedures.

ČD Cargo estimates approximately two-month delays associated with this fact.

Ivan Bednárik, Chairman of the Board of Directors, adds: "It is a very unpleasant finding for us, but the exposure to legal proceedings and the possible reduction of the grant is so high that we have to cancel the procurement procedures and launch new ones. We were at the stage of the procurement procedure where all the processed documents both on the part of the contracting authority and on the part of the tenderers can be used as a basis for the new procurement procedure. We are pleased with the interest of potential suppliers and we firmly believe that this delay will not affect the overall implementation time of the subsidized project. "ETCS equipment of locomotives is our priority."





## Trains from Yiwu to Lovosice fully directed by ČD Cargo

On May 12th, the first block train with containers from Yiwu in China arrived in the Czech Republic. This is the third train, although the first one is fully directed by ČD Cargo. Further trains will be dispatched from Yiwu once a week on Wednesday with arrival at the Lovosice terminal scheduled on a Tuesday. Of course everything depends on the current volume order.

The trains are terminated at the ČD-DUSS Terminal in Lovosice, where the containers are transferred to trucks and delivered to final customers. Trucking for the largest customer of the train is provided by another subsidiary of ČD Cargo - ČD Logistics.

In this case, the transport time was recorded as only 13 days.

Realization of this regular connection is the result of the ČD Cargo negotiations, in particular the East-Asia Department with the Mayor of Yiwu City and other subjects, including the train operator on the Chinese territory.

Currently, negotiations on backhaul capacity utilization are in full progress.



On April 21st, Class 749.121 stands at Praha hl.n. working a 'Cyclovlak' service to Breznice.  
Class47





▶ CD Railjet liveried Class 1216.250 speeds through Ostrava hl.n. on April 21st at the head of a rake of PKP coal hoppers. *Class47*

## CEPRO optimises its fleet

The joint-stock company ČEPRO decided again to invest in its rolling stock fleet after three years. At the end of last year, a tender for a comprehensive modernization of its locomotive 740.891 was launched. CZ LOKO made a bid for the modernization of the vehicle on its EffiShunter 700 line and in March 2018 it officially won the tender. On Wednesday, April 18th, a contract was signed at CZ LOKO in Jihlava. The Chairman of the Board of Directors Mgr. Jan Duspěva, for CZ LOKO then Vice-Chairman of the Board of Directors and Chief Executive Officer Josef Gulyás and Member of the Board of Directors Ing. Jan Bárta.

“I very much appreciate the pragmatic approach of ČEPRO to the renewal and maintenance of its fleet. Very often, we encounter cases where the operator chooses to repair the original vehicle instead of its comprehensive modernization. In the short term, this may seem more economical, because the cost of repair is roughly a third compared to a comprehensive upgrading, but it is only a matter of delaying the problem. We are already struggling with the disastrous lack of spare parts on the original CKD vehicles, and when the parts are available, their quality is very poor. I am sure that ČEPRO will very quickly verify the correctness of its decision with the operation of the vehicle.

Operationally, the EffiShunter 700 is a virtually new locomotive. We know from experience that the return on such an investment over a mere repair is in the 5-10 years, which is a very good result for the thirty-year life cycle of the vehicle,” says Mr. Josef Gulyás, Deputy Chairman and CEO of CZ LOKO.

EffiShunter 700 from the EffiShunter family of displacement locomotives is designed primarily for shifting in demanding heavy industry conditions, shifting to intermodal terminals or harbours. It is a complex modernization of the CKD 740 or 742 shunting locomotives. The locomotive is equipped with a 709 kW CAT C27 combustion engine and meets all the operational and technical demands placed on the 21st century locomotive.

The joint-stock company ČEPRO provides transportation, storage and sale of petroleum products. It also operates a network of its own petrol stations under the trade name EuroOil. There are 11 locomotives of different types and performance categories on their sidings.









 Czechia

On April 21st, CD Cargo Class 753.766 hauls a rake of wagons through Ostrava hl.n. *Class47*



Arriva Class 945.104 waits departure time at Praha hl.n. with a service to Nitra. *Class47*



CD City Elefant No. 471.081/971.081 calls at Ostrava hl.n. on April 21st working a service to Studenka. *Class47*









 Czechia

▶ Class 380.011 with advert for CD Nostalgia livery works train No. Rex1541 near to Kefermarkt station on April 19th. *Thomas Niederl*

▶ Cesky Drahy's Class 380.001 hauls train No. Rex1543 near the Austrian/Czech border between stations of Horni Dvoriste and Summerau on April 14th. *Thomas Niederl*

▶ On April 8th, Class 380.014 hauls train No. Rex1544 past Lasberg/St. Oswald. *Thomas Niederl*











▶ OBB Class 1216.238 stands at Praha hl.n. on April 21st waiting departure time with a Railjet service to Graz. *Class47*

## Legios Loco ceremonially opened a new production line in Nymburk

On April 5th, Legios Loco held a ceremonial opening of a new production line in its Nymburk plant. Almost sixty guests, including key business partners, representatives of banks and the Municipal Authority in Nymburk, met in the production hall.

CEO Petr Vlček introduced the company and thanked all the partners who carried out the project. Then, Břetislav Gallas, Miroslav Lenkvik and Rostislav Hanuš, who were in charge of the project, presented the first phase which was successfully completed in March 2018 (in just 6 months) and aimed at the reconstruction of the production halls and the installation of new technologies to put the production line for container wagons into operation. They then mentioned the planned second phase the completion of which is expected in September 2018.

After the presentation of the investment project, the ceremonial cutting of the tape by Deputy Mayor of Nymburk, Jan Richter, Artesa Deputy Sales Manager, Olga Jancurová, and CEO Petr Vlček, followed. Then the guests had an opportunity to have a look at the premises where the production lines are and get first-hand experience how the wagons are

manufactured.

The investment costs of the first phase of the project reached CZK 85 million. The first container wagons started to leave the production line in April. The line has a capacity of 450 container wagons per year and will provide a job opportunity for 125 new employees.

“We expect this investment to increase the number of manufactured rail freight wagons designed to transport containers. The new technologies we have installed in the refurbished production halls will also allow us to increase productivity and product quality. Another key factor is the interest of our customers - this year’s production capacity of the Nymburk line has been sold out and we have signed contracts for 2019 as well,” said Petr Vlček.

























On May 8th, SNCF 'Region Aquitaine' EMUs Nos. 81842 and 84649 are seen stabled at La Rochelle station. *Michael Lynam*

A SNCF TGV and Bombardier built Class 81XXX EMU are seen at La Rochelle station. *Michael Lynam*

SNCF fret locos No. 460.025 and 460.139 are seen stabled at Port Atlantique, La Rochelle. *Michael Lynam*







SNCF 'Region Normandie' Class 26500 unit No. 562 stands at Paris St. Lazare. *John Sloane*

## Planned combination of Siemens Mobility and Alstom reaches further milestones

French Ministry for the Economy and Finance gives green light  
France's financial markets regulator grants Siemens exemption

The planned combination of Siemens' mobility business, including its rail traction drive business, with Alstom has reached the next milestones. In connection with the transaction, the French Ministry for the Economy and Finance (MINEFI) has granted Siemens foreign investment clearance. The Ministry can restrict or prohibit foreign investments in specified industries in France.

In addition, France's financial markets regulator Autorité des Marchés Financiers (AMF) granted Siemens an exemption from the mandatory filing of a takeover offer for the remaining shares of the new company after completion of the deal.





## MRCE orders 25 locomotives from Siemens

Mitsui Rail Capital Europe (MRCE), a full-service locomotive leasing company, has ordered a further 25 Vectron locomotives from Siemens. Ten of these units will be multisystem Vectron locomotives, used for operating across Europe from the Netherlands to Southeast Europe, and will be delivered at the end of 2018. Ten further Vectron MS locomotives are planned for service on the Rhine-Alps Corridor, and will be delivered in the second half of 2019. Five additional units will be equipped as direct-current locomotives (Vectron DC) and are to operate exclusively in Italy. Delivery of these five is planned beginning in March 2019.

“The long-standing trust of MRCE underscores the quality and reliability of our locomotives. With this new order, the MRCE Vectron fleet will grow to a total of 136 locomotives. The flexibility of the Vectron platform enables our customers to profit from tailored solutions for cross-border transport,” says Sabrina Soussan, CEO of the Mobility Division.

“We are glad to have concluded this additional order for 25 Vectron locomotives with Siemens. With this order we are further expanding our existing fleet for the North-South corridor and the Eastern European markets. This extended market coverage is allowing us to provide the best and most flexible services to our customers,” says Junichi Kondo, CEO of MRCE.

The ordered multisystem locomotives have a maximum output of 6,400 kW and a top speed of 160 km/h, and the Vectron DC has an output of 5,200 kW. Both versions are equipped with national train control systems and the Vectron MS locomotives also have the European Train Control System (ETCS).

Since its introduction, Siemens has sold the Vectron over 700 times to 37 customers in 15 countries, and the fleet has accumulated over 110 million kilometres in service to date. The locomotives are currently authorized to operate in Austria, Bulgaria, the Czech Republic, Croatia, Finland, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland and Turkey.



▶ A Hamburg S-Bahn line S1 service to Airport/Poppenbüttel departs Hamburg Hbf.

*John Sloane*













 Germany

▶ On April 18th, DB Netz Class 225.010 speeds through Hamburg Harburg. *Class47*



▶ DB Class 152.118 heads an intermodal through Kaub. *John Sloane*



▶ SNCB TRAXX No. 2837 (Class E186 229) leads a tank train north out of Gremberg yard. *John Sloane*





 Germany

## Bahnbetriebswerk Lutherstadt, Wittenberg

Several preserved and mainline locos are seen at the Bahnbetriebswerk Lutherstadt in Wittenberg, including on the left, Class 221.106. *Class47*

Loco liveried Class 1228.656 stands in the museum yard at Wittenberg on April 19th. *Class47*

EGP liveried Class 109.028 is seen at Wittenberg on April 19th. *Class47*



























## Alstom's hydrogen fuel cell train wins 2018 GreenTec Mobility Award

Alstom's Coradia iLint, the world's first hydrogen fuel cell powered regional train, has won the GreenTec Award 2018 in the category Mobility by Schaeffler. Alstom was officially presented with the award at its largest production site, located in Salzgitter, Germany, during an advance award ceremony ahead of the GreenTec Awards gala to be held in Munich.

"We are extremely pleased about winning this award. With the Coradia iLint, Alstom is the first railway manufacturer in the world to have produced completely emission-free technology ready for series production," said Jörg Nikutta, Managing Director of Alstom in Germany and Austria. "Indeed, we have achieved more than this: an innovative mobility concept that is sustainable and competitive, and which includes not only the trains and service, but also the infrastructure necessary for fueling them."

The Coradia iLint is a completely emission-free regional train that offers an alternative to diesel trains for operation on non-electrified railway lines, which currently make up more than 40 percent of the railway network in Germany. Powered by a fuel cell in which hydrogen is converted into electrical energy, the Coradia iLint only emits steam and water condensate. The train will enter regular service on the Cuxhaven-Bremervörde route during 2018.

In the presence of GreenTec Awards initiator Sven Krüger, jury members Professor Tim Hosenfeldt, Head of the Centre for Innovation of Schaeffler, and Dr. Joachim Damasky, Managing Director of the German Association of the Automotive Industry, handed over the GreenTec Award certificate to Alstom. Also present at the award ceremony

in Salzgitter were representatives of TÜV NORD and NOW (National Organisation Hydrogen and Fuel Cell Technology) as partners of the GreenTec Awards.

"Hydrogen technology shows new ways to CO2-free mobility in a sustainable and de-fossilized energy chain, especially in areas such as railway engineering and heavy goods transport. Alstom impressively puts this into practice with the hydrogen train Coradia iLint," said Professor Hosenfeldt.

"Our sector is on the move towards sustainable mobility solutions. The example of Coradia iLint shows that our possibilities are manifold!" remarked Dr. Damasky.

"Fuel cells are a promising technology for further developing alternative drive systems in rail technology. Alstom's Coradia iLint project is a good fit for forward-looking, green mobility," added Silvio Konrad, Managing Director at TÜV NORD Systems.



▶ A pair of Hamburg S-Bahn Class 472 units are seen at Hamburg Bergedorf on April 19th, working S2 services to Altona. *Class47*





















On March 13th, a metre gauge passenger service hauled by YDM4 No. 6751 approaches Bahraich with a train from Mailani - the longest current operational metre gauge run. *Mark Torkington*

A pair of ALCOs, Nos. 11498 and 11296, have a breather at sunrise with the Kamrup Express at New Jaipaguri on March 19th. *Mark Torkington*

No. 602 runs through the streets of Kurseong on March 20th, on its way up the Darjeeling Himalayan Railway from New Jaipaguri to Darjeeling. *Mark Torkington*















## Bombardier Presents the New TRAXX DC3 Locomotive

The innovative TRAXX DC3 locomotive sets new standards in terms of tractive effort, energy efficiency and Last Mile support diesel engine

Dedicated maintenance services minimize operational costs and maximize performance and capacity over an extended asset lifetime

Mobility leader Bombardier Transportation officially presented its new BOMBARDIER TRAXX DC3 locomotive at their Vado Ligure site in Italy. The event gave some of Italy's leading transport operators an up-close look at one of the most innovative locomotives to enter the rail freight transportation market.

At the event, Peter Amman, Head of Global Ecosystem Freight at Bombardier Transportation commented, "We are happy to present this innovative locomotive to the Italian and global freight market. Its flexibility and our strong maintenance offering will not only reduce total cost of ownership, but also enable Italian freight operators to expand their business."

Luigi Corradi, CEO and Managing Director of Bombardier Transportation Italy, commented "The new TRAXX DC3 represents a generational leap in the market, a state-of-the-art locomotive, able to maximize energy efficiency, ensuring greater load, traction capacity and lower energy consumption. One of the locomotive's most interesting features is its Last Mile function that offers new logistical concepts by enabling the locomotive to easily bridge non-electrified track sections often found in ports or freight terminals. This optional feature can even be installed as a post-delivery upgrade."

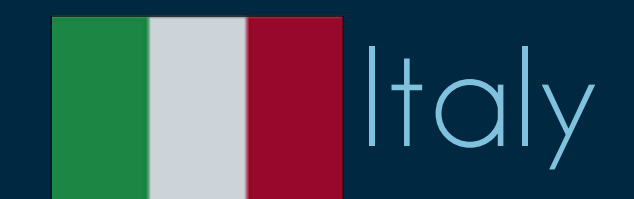
For greater efficiency and lower operation costs, the TRAXX DC3 has also been designed around the freight industry's latest digital maintenance solutions. Intelligent platforms based on Conditional Based Maintenance, Big Data and IoT technology correlate data coming from the vehicle and the rail infrastructure to monitor the vehicle's health in real-time, predicting maintenance interventions, while guaranteeing maximum fleet performance and availability. Italian rail operators, Mercitalia Rail, Captrain Italy and GTS are the first to have enhanced their freight service by purchasing the new TRAXX DC3. In addition to the 190 BOMBARDIER TRAXX DC locomotives delivered, there are currently 50 locomotives in the pipeline at Bombardier's Vado Ligure production site.

Since 1908, the site has received orders to produce more than 2,000 locomotives for the Italian and global freight market, confirming Bombardier's leadership and reputation for service excellence, from construction to post-sales maintenance, guaranteeing continuity and efficiency throughout product life.



Trenitalia Class 464.345 passes Castiglioncello with a service from Livorno. *John Sloane*





## Museum San Donato, Pistoia

▶ Preserved 2-8-2 'Mikado' steam locomotive, No. 746 038 awaits restoration at the Museum San Donato in Pistoia. *John Sloane*

▶ Class 214 diesel loco No. 214.4047 (214 347) is seen at Pistoia Shed. *John Sloane*

▶ Snowplough Vnx No. 806.211 converted from an 0-10-0 electric loco No. E550.022 is seen at Pistoia. *John Sloane*















 Japan



▶ The Kanazawa seaside line at Yokohama is an automated guideway transit. Here Mitsubishi-Nippon Sharyo car No. 31 nearest at the rear of 5-car consist heads between Kanazawa Hakkei and Nojimakoen. *David Pollock*

▶ On March 12th, Odakyu Electric Railway 6-car 3000 series 1500V DC EMU set No. 3263 departs from Katase-Enoshima. *David Pollock*

▶ Departing from Awa-Ikeda with the 15:39 to Tokushima are a pair of JR Shikoku single car DMSOL DMUs built by Niigata Transys. *David Pollock*









 Japan

Calling at Shin-Imamiya (Osaka) working rapid service A0150 to Kansai International Airport and Kishūji is JR West series 223-0 8-car 1500V DCEMU, with (DTSOL) KuHa No. 222-106 nearest / leading. *David Pollock*



Waiting departure from Teramae on March 8th with service A57 the 18:06 to Himeji is Banton Line 2-car series 103 1500V DC 2-car EMU set BH7 formed of (DMSO) KuMoHa No. 103-3507 and (DMSOL) KuMoHa No. 102-3507 (nearest at rear). *David Pollock*

On March 12th on the Kanazawa seaside line, in Yokohama, the automated guideway transit sees Mitsubishi-Nippon Sharyo car No. 42 leading into Nojimakoen. *David Pollock*





























































DB Class 189.069 hauls a tank train through Deventer, heading towards Bremen. *Class47*

## CAF SELECTED AS PREFERRED BIDDER FOR THE NEW AMSTERDAM METRO

GVB Activa B.V., the Amsterdam public transport company, has selected CAF as preferred bidder for the supply of a series of new metros. The order includes the supply of 30 metros, designated M7, options for up to 30 additional metros, as well as the optional extension of the ordered metros from 3-cars to 6-cars.

The metros will replace older generation of metros still in service and provide extra transportation capacity on the busy Amsterdam metro network. The capital of the Netherlands has a population in excess of 800,000, and is one of Europe's main economic and touristic poles of attraction. The public transportation system of the city is challenged by an increasing number of passengers, due to new residential areas, growing economic activity and increasing number of tourists. With the opening of the new North-South Metroline, the metro is consolidated as Amsterdam's backbone of the public transportation system.

The new metros for Amsterdam consist of 3 cars, and can be coupled in pairs of two, resulting in a 6-car train. The metros are prepared for driverless operation. Furthermore, the metros are fitted with state-of-the-art equipment and passenger information systems, they are energy efficient and easy to maintain.

This order marks a new step in the long-lasting relationship between GVB and CAF. Back in 1994 CAF was awarded a contract for the supply of 37 metros. These vehicles are since then providing service on Amsterdam's metro network. In 2016 GVB awarded CAF a contract for the supply of 63 trams (15G), a project currently in execution.

Moreover, this new project adds to ongoing contracts currently being executed for other customers in The Netherlands: 118 commuter trains or 'Sprinters' for Dutch Railways, and 27 + 22 trams for the Province Utrecht. It therefore substantiates evidence of CAF's stronghold in the European market, where the company has scored important wins with contracts in United Kingdom, Italy and Belgium.

All in all, CAF's tied-up contracts in the first 4 months of the year amount to approximately €350m, including also the recent contracts of Metro Barcelona, Vitoria Trams and the Naples Metro extension, bringing the company's orders on hand up to an amount shy of the record figure posted at year-end 2017.













# Portugal



CP four cylinder Borsig built 4-6-0 No. 248 stands plinthed in Contumil depot on March 26th. *John Sloane*



Refurbished railcar No. 0466 stands outside Contumil Works on March 26th. *John Sloane*



Rebuilt Allan railcar No. 0367 is seen in store at Contumil. *John Sloane*







 Portugal



CP Eurosprinter No. 4720 is seen at Porto Campanha with a southbound container train from Leixoes on March 29th. *John Sloane*



CP 1960 series No. 1967 stands stored at Contumil depot. *John Sloane*



Refurbished Alfa Pendular No. 4009 stands at Guimaraes with a through train to Lisbon on March 29th. This used to be a small metre gauge station on the line to Fafe, however the line from Lousado has now been converted and Guimaraes is now a substantial terminus. *John Sloane*



 Portugal



Derelict 4-6-0's Nos. 294 and 282 along with 2-6-4T No. 072 continue their long wait for restoration in Vila Nova de Gaia Yard.  
*John Sloane*



A line of six derelict steam locos stands high above the valley of the Duoro at Vila Nova de Gaia with Porto visible in the distance. 2-8-0 No. 701 is the first loco. *John Sloane*

Long derelict SLM built No. 072 stands in Vila Nova de Gaia yard, reserved for the museum.  
*John Sloane*















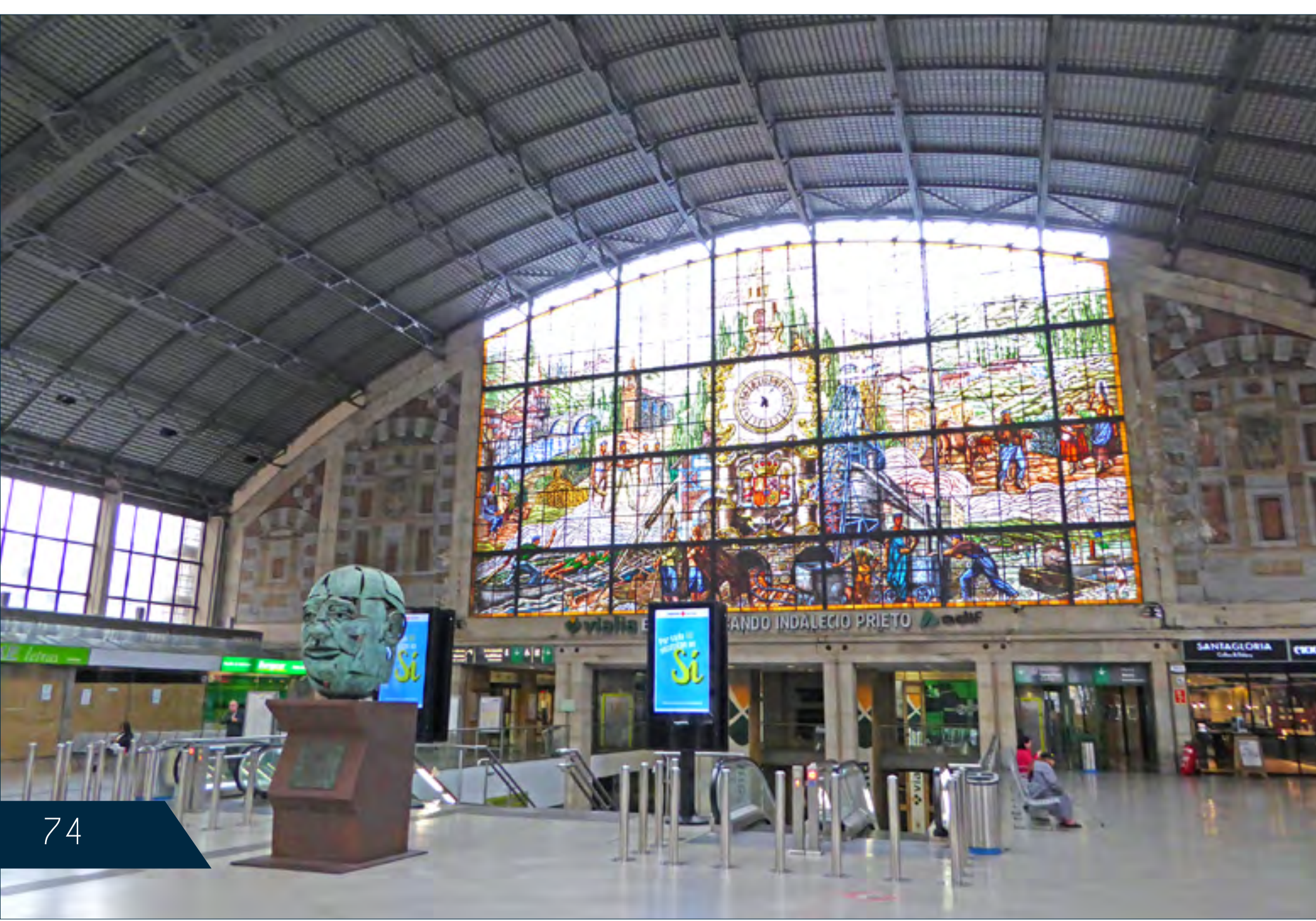




 Spain



On May 9th, Renfe Class 446 EMU No. 110M arrives as empty stock into Bilbao station.  
*Michael Lynam*



CAF tram No. 404 calls at the Uribitarte stop in Bilbao en route to La Casilla.  
*Michael Lynam*



The main stained glass window at the RENFE station in Bilbao.  
*Michael Lynam*









CAF trams Nos. 402 and 407 at Bilbao's Arriaga stop waiting for access to the single line tracks in both directions. *Michael Lynam*



Renfe Class 446 EMU No. 117M has just arrived at RENFE station Bilbao with a service from Llodio on May 9th. *Michael Lynam*

On May 9th, CAF tram No. 403 calls at Euskalduna en route to Atxuri Station. *Michael Lynam*









RhB Allegra EMU No. 3507 arrives at Poschiavo station with train No. R1637 from St. Moritz to Tirano. *Steamsounds*

## Bombardier Unveils New FLEXITY Zurich Tram Design

Bombardier and VBZ unveil their 1:1 FLEXITY tram model, made exclusively for the city of Zurich, to journalists and special guests

The FLEXITY trams are a cost-effective solution to improve capacity, accessibility, efficiency, and passenger comfort for Zurich commuters

Recently, Zurich public transport operator Verkehrsbetriebe Zürich (VBZ), hosted a special event unveiling the design of the new BOMBARDIER FLEXITY tram. VBZ presented a mock-up model of the trams to journalists and special guests at a VIP event with Bombardier Transportation's President, Laurent Troger, among the guests. In March of last year, Bombardier Transportation and VBZ signed a contract to deliver 70 FLEXITY low-floor trams, exclusively tailored to Zurich's needs and landscape.

The FLEXITY tram's design features make it a remarkably accessible, convenient, efficient, and comfortable vehicle. Its 100% low-floors improve entry and exit for passengers and an energy efficient HVAC heat pump makes it environmentally friendly, while a driver's assistance system improves safety for passengers and pedestrians. For convenience



and comfort, passengers will be able to recharge with USB connectors, and an LED light system will indicate whether the doors are locked or released. The tram also features elegant and hygienic wooden seats and lots of open space, further increasing the transits system's capacity without the need for additional infrastructure.

In his presentation, VBZ Director Dr. Guido Schoch said that VBZ was looking for a cost-effective mobility solution that still delivered a premium travel experience. This exclusive VBZ model, unique to the city of Zurich, answers their needs and the contract includes an option for 70 more vehicles. FLEXITY trams are scheduled to enter service in Zurich in May 2020.





























 Ukraine

▶ On April 12th, No. 2M62-0618 heads to Lviv depot after working the morning intercity service from Ivano Frankiv's'k. *Tim Farmer*

▶ A single end of a twin 2M62 loco is attached to a push-pull set working a local from Ivano Frankiv's'k. *Tim Farmer*

▶ ChS7 twin electric arrives at Slavske on April 13th working train No. 81 from Lviv to Uzhorod. Behind the locos is a through sleeping car to Budapest. *Tim Farmer*



























## Bombardier's Real-Time Passenger Load Display Software Solution Launches in Singapore

Innovative software designed to improve travel experience and maximize operational efficiency by monitoring vehicle passenger load

The system implementation is the first on Singapore's rail network to improve passenger distribution for each car

Rail technology leader Bombardier Transportation has announced the launch of its software solution installed on the Singapore Downtown Line's (DTL) existing Train Control Monitoring System (TCMS). This innovative technology maximizes passenger comfort and the system's operational efficiency by displaying real-time passenger load information on LCD screens at station platforms. The system has entered service following the completion of comprehensive testing by Singapore's Land Transport Authority (LTA).

The software solution features an onboard system designed to detect passenger weight load from the vehicle's braking system and then transmit the information to the passengers waiting at the next stop via a third-party vendor.

LCD screens at the platform use a series of colors to indicate the capacity of each car: green represents a high probability of available seating, yellow for partially full and red for full.

The implementation, the first of its kind in Singapore, seeks to better distribute passenger load while also improving the trains' efficiency and reliability.

The TCMS solution was part of a four-year collaboration between Bombardier and the Singapore Economic Development Board (EDB), which started in 2012, to develop a regional team to enhance software programming capabilities throughout Southeast Asia.

Bombardier is committed to continually developing regional expertise in the rail industry to help shape mobility in cities across the globe.



## Arriva to power UK bus and rail sites with 100% renewable electricity

Arriva to power stations, depots and offices with electricity from 100% renewable sources after signing supply contract with SSE Business Energy in the UK

Contract makes Arriva first major transport operator in the UK to switch to 100% renewable electricity supply  
Forms part of Arriva's Europe-wide 'Destination Green' environmental strategy

Arriva, one of Europe's leading passenger transport providers, has announced that almost all its UK bus and rail sites will be powered by 100% renewable electricity after entering a three-year electricity supply contract with SSE Business Energy in the UK.

The new contract will allow Arriva to report zero carbon emission electricity, preventing an estimated 27,000 tonnes of CO2e from entering the atmosphere each year. The volume of carbon saved is the equivalent to powering almost 25,000 homes with green electricity, or taking almost 95 million miles driven by an average car off the road. SSE Business Energy will supply the sites operated by the Group's UK businesses – including, for example, UK Bus, Arriva Rail North, Arriva Rail London, Chiltern Railways and Grand Central - with electricity fully backed by Renewable Electricity Guarantee of Origins (REGOs) and independently verified by Carbon Clear, a CDP Accredited Provider. This makes Arriva the first major private transport operator in the UK to switch to a 100% renewable electricity supply, and marks a major milestone in its journey towards 'Destination Green' - a Europe-wide environmental sustainability programme aimed at reducing the Group's environmental impacts. As part of the contract, Arriva's UK rail and bus sites will also have access to SSE's online energy monitoring portal, Clarity, enabling them to monitor energy consumption and implement effective energy-saving practices.

Lorenzo Visentin, Head of Environment, Health and Safety, Arriva Group, said: "The signing of this contract marks an exciting step forward in our journey towards 'Destination Green' as we strive to reduce our environmental impacts. SSE has backed the electricity supply for our UK sites with generation from 100% renewable sources, supported by Renewable Energy Guarantees of Origin certificates. As well as the actions we're taking to reduce the environmental impact of our vehicle fleets, the new contract helps us achieve our goals relating to our wider business impacts. It's a clear example of our commitment to decarbonising the transport sector and helping the UK meet its sustainability targets."

Amber McEwen, Head of Marketing, SSE Business Energy said: "There is an increasing demand in the market for organisations to be more sustainable and environmentally conscious. SSE has the broadest portfolio of renewable energy generating assets in the UK and Ireland, and we're delighted to be able to use these assets to offer SSE Green. This contract makes Arriva the first major transport owning Group to switch to 100% renewable electricity supply in the UK and we hope that their switch to SSE Green encourages other transport organisations to follow suit and invest in renewable energy."

As part of its 'Destination Green' strategy in the UK, Arriva operates a range of low emission vehicles, including hybrid, gas and fully electric buses with zero tailpipe emissions. Arriva began operating London's first all-electric bus route in 2014, and during 2017 introduced nearly 500 new buses, all Euro VI standard, hybrid, gas or electric. Arriva UK Bus has invested heavily in new vehicles and technologies to run a greener, cleaner fleet. Since 2010, average emissions from Arriva's UK bus fleet have reduced by over 50% (Particulate Matter) and over 40% (Nitrogen Oxides).





## Alstom to provide Signalling System for the new San Martín Viaduct, in Buenos Aires, Argentina

Alstom has signed a contract worth around 5 million euros to provide the signalling system for the new viaduct of the San Martín Line, as subcontracted by Unión Transitoria GREEN SA-ROTTIO SA-VFE-UNIÓN TRANSITORIA, within the framework of the project Viaducto Ferrocarril San Martín Palermo-Paternal stretch of Autopistas Urbanas SA.

The San Martín line is one of the 7 suburban train lines of the Metropolitan Area of Buenos Aires. Currently, it provides passenger services between the Retiro and Dr. Cabred stations (76 km), transporting 170,000 passengers per day. It composes a total of 22 stations, starting from the City of Buenos Aires crossing Tres de Febrero, Morón, Hurlingham, San Miguel, José C. Paz, Pilar and Luján areas.

The San Martín Viaduct will run through 5 kilometres of the current route of the San Martín Railroad, connecting Retiro

and Paternal in an elevated railway. Thus, 11 barriers will be eliminated and 9 additional safe crossings will be generated, optimizing mobility in the City.

Alstom will provide its interlocking technology at a joint level with the traditional signalling system products: point machines, signals, local control post and track circuits.

“We are very pleased to celebrate this new contract in Argentina. Alstom is proud to work on projects that mean a substantial change in the functioning of the Buenos Aires public transport, optimizing the operation and making it safer for the thousands of passengers who use it every day,” said Ernesto Garberoglio, Managing Director of Alstom Argentina.

“We continue our efforts, investing more and more in the country and in the region to improve signalling and the

modernization of transport systems. For Alstom, it is an honour to provide equipment of excellence to the rail lines of Buenos Aires”, added Luciano Barbieri, Managing Director of Signalling for Alstom in Latin America.

Alstom has been present in Argentina since 1993 supplying signalling systems for the Buenos Aires Metro, as well as the maintenance and modernization of the metro and suburban rail lines. Recently, Alstom signed a new signalling contract for the suburban Belgrano Norte line in Buenos Aires, Argentina.



## ŠKODA TRANSPORTATION IS 100% OWNER OF TRANSTECH



“The long-term intention of the Škoda Group is to consolidate its position in the markets of Western Europe. This is also the intention of the new owner, the international investment group PPF, under whose leadership we have succeeded in finalizing the acquisition of the Finnish company Transtech,” says Škoda Transportation Chairman and CEO Petr Brzezina.

This deal was closed on the occasion of Prime Minister Andrej Babiš visit in Finland, accompanied by a business delegation, including representatives of the Škoda Transportation Group. “In less than 3 years, we have managed to successfully restructure and stabilize Transtech. We have received new orders and currently delivering trams from Transtech to Helsinki or Tampere. We also supply new cars for Finnish Railways. During this period, we have also increased the number of employees from 500 to 750.

The company’s annual sales reached 3 billion crowns. Transtech became a significant player in the Škoda Transportation group and opened for us further opportunities in the Western markets,” adds Zdeněk Majer, vice president of Škoda Transportation Group and Chairman of Transtech.

The Škoda Transportation Group has become the 100% owner of the only Scandinavian manufacturer of rolling stock in Finland, the Transtech company. The majority stake in Transtech was purchased by Škoda in August 2015. The agreement to buy the remaining 25 % of the company was signed in May by the original owner, the Sinituote Oy

company. Transtech was founded in 1985. Today Transtech has portfolio of products both low-floor trams and electric units, but also wagons. Currently supplying trams to the Finnish metropolis of Helsinki, the city of Tampere, or rail cars for Finnish Railways.





## Alstom confirms plans to bring hydrogen trains to the UK

Alstom has confirmed plans to bring its world leading hydrogen technology to trains in the UK. This is the first substantive industry response to the Government's challenge to remove diesel rolling stock by 2040. The company is working with Eversholt Rail on plans to convert Class 321 electric trains to hydrogen operation, fitting hydrogen tanks and fuel cells to upcycle trains that are some of the best proven on the network into Britain's most advanced rolling stock.

"The potential for hydrogen trains is enormous. The Government has set a clear objective of removing diesel rolling stock by 2040 and this requires a bold and innovative response from the industry. I am very proud that, working with Eversholt Rail, we are able to take the lead in that respect.

"Not only are hydrogen trains zero carbon, they are near-silent and emit no particulates, which means they offer substantial air quality and noise pollution benefits too. On cost, hydrogen trains can help to avoid the necessity for line electrification, which represents a significant investment for customers.

"We think the potential long-term application of hydrogen in the UK is very significant. Less than fifty per cent of the UK network is electrified, and much that isn't electrified is unlikely ever to be so. Starting with this conversion, we think hydrogen could offer the right zero carbon solution for many parts of the network." Said Nick Crossfield, Managing Director, Alstom UK & Ireland.

Alstom is the first company to introduce a regional train based on hydrogen fuel cells and batteries. The Coradia iLint is the first Alstom hydrogen train, on test already in Germany. Nearly a third of all the UK's trains are diesel trains, which will need to be replaced or refurbished to hit the Government's target of no diesel rail vehicles by 2040.

Hydrogen can be produced using sustainable electricity and electrolysis or through industrial processes. The fuel cell on the train produces electricity through a combination of hydrogen and oxygen to create water. The electrical energy is intermediately stored in batteries and the train is powered by an electrical traction drive. The only exhaust is steam and condensed water. Hydrogen technologies and solutions will play a key role in our global vision for the future.



## Alstom starts testing of the 1st Coradia Polyvalent train for Senegal

Alstom has successfully started the test run of the first Coradia Polyvalent Train for Senegal at Alstom's site in Reichshoffen (France).

This event marked the start of an extensive testing campaign prior to its departure. These tests will allow Alstom to make adjustments to the train before its forthcoming delivery to Senegal. More than 40 people are mobilized at Alstom's Reichshoffen site to carry out the 6000 serial tests and the 50 validation tests to check and guarantee the correct functioning of the train.

The Coradia Polyvalent trains are part of the Regional Express Train Project (TER), a flagship element of President Macky Sall's Plan for an Emerging Senegal (PES) policy framework. The trains aim to satisfy the increasing need for mobility in Dakar and they will run on the new line that will connect the centre of Dakar to the new Blaise Diagne international airport (AIBD), in Diass. They will serve 14 stations over a distance of 55 km, which they will cover in 45 minutes. The number of daily passengers is estimated at 115,000.

"This test run is a significant milestone for Alstom and for the project. We are proud to conduct the tests in order to guarantee not only the smooth running of the trains but also the control of all norms to guarantee maximum safety for both APIX and its passengers", said Didier Pflieger, Senior Vice President for Middle East and Africa.

The Coradia Polyvalent train for Senegal is dual-mode (diesel/electric) and is capable of running at speeds of 160 km/h. With a total length of 72 meters, the train has four cars, a capacity of 400 passengers and a first and second class. It is adapted to the climatic and environmental conditions of the country and has a highly efficient air conditioning system. Its low floor provides easier access and on-board movement in particular for people with reduced mobility.

Alstom's site in Reichshoffen design, manufacture and validate the trains. Five other sites in France are involved in the project: Saint-Ouen for the design, Le Creusot for the



bogies, Ormans for the motors and alternators, Tarbes for the traction system and Villeurbanne for the on-board IT systems and passenger information.

Coradia Polyvalent, already adopted by SNCF and the French regions as well as by SNTF in Algeria, belongs to Alstom's Coradia range of modular trains, which benefits from over 30 years of expertise and proven technical solutions. More than 2,800 Coradia trains have been sold so far and around 2,300 are currently in service.





▶ Train No. 5 to Moscow is dispatched from Tashkent North station in Uzbekistan by the very smart staff, behind loco No. 0'Z ELR 0310 on May 17th *Mark Torkington*



## Siemens equips Hungarian railway line with European Train Control System

Siemens to equip the Hungarian line Százhalombatta - Pusztaszabolcs  
 26 km long two-track line

Planned commissioning expected by December 2020

The National Infrastructure Developing Private Company Limited has commissioned Siemens to equip the Hungarian line Százhalombatta - Pusztaszabolcs. Siemens will provide train control system type Trainguard 200, including installation of European Train Control System (ETCS) Level 2 and one Radio Block Center (RBC), as well as 2 electronic signal boxes type Trackguard Simis IS. This new order encompasses 6 railway crossings type Wayguard Simis LC, the entire electricity supply, assembly and telecommunications. The planned commissioning is expected by December 2020.

“As major programs have been launched to upgrade the railway system in Central and East-European countries, this project will ensure optimised capacity, improved service quality, as well as safety and security of the Hungarian public rail transport system. Being one of the pioneers of ETCS, Siemens – with its Trainguard solution – is providing field-proven systems and products of lineside, on-board and communication equipment for all ETCS applications”, said Michael Peter, CEO of the Mobility Division.

The 26 km long two-track line is an extension of the Kelenföld - Százhalombatta line. The Hungarian railway network is undergoing an important modernization and is part of a global project in order to upgrade and develop the Budapest Kelenföld - Croatian border railway line, in order to eliminate an important bottleneck along the Mediterranean corridor. The development of the overall network will be reflected in the optimization of travel times, the modernization of about 280 km of lines and in the public rail transport system.





From the UK

## Severn Valley Railway

Every year the line holds a huge diesel gala with many visiting locos from all over the UK, both preserved and main line registered. This year was no exception and the four day event produced plenty to see and travel on.

Visitors to the gala, Colas Rail's Class 56 078 and GBRf's Class 73 136 arrive into Kidderminster. *Richard Hargreaves*

Class 33 1018 departs Kidderminster on May 19th with a 'local' service to Bewdley. *Class47*

BR green liveried Class 20 007 runs past London Transport liveried Class 20 142 at Bridgnorth on May 19th. Class 20 007 would double head the train with 20 142 along the line to Kidderminster. *Richard Hargreaves*











From the UK

## Severn Valley Railway



Undergoing repairs in the diesel depot is English Electric Class 50 026 'Indomitable'  
*Richard Hargreaves*

Another English Electric loco operating at the gala was Class 55 019 'Royal Highland Fusilier' seen here departing Kidderminster.  
*Richard Hargreaves*

London Transport's 4TC set visited the line for the gala and is seen here at Kidderminster on May 19th.  
*Richard Hargreaves*







