







# Welcome

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

Another month of hot weather across Europe and some more superb photos from around the globe. I've been back to the Czech Republic (sorry Czechia as we are told to call it) this month and have to say that I was very very impressed with operator KZC who are currently operating some heritage services out of Praha hl.n. every weekend. If you are over there then please do give them some support, those locos won't look after themselves.

Some news from Italy this month where renitalia has awarded Hitachi Rail Italy a framework contract for the supply of up to 135 regional diesel multiple-units. Trenitalia said the international tender had attracted interest from the most important rolling stock suppliers in the market, and the winner had been selected on the basis of the most economically advantageous offer. The DMUs are to be built at Hitachi Rail Italy's plants in Pistoia, Napoli and Reggio Calabria, with the first expected to enter service in 2021. Trenitalia said they would offer improved reliability and passenger comfort. I wonder if they will be as 'Quality' as those being currently built in Italy for the UK.

In Austria, ÖBB has picked Siemens Mobility as the supplier of a fleet of inter-city rolling stock. Covering design and construction of eight

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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 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

At BHP's Boodarie depot on June 20th, an empty train hauled by two SD70's waits for a loco swap prior to heading back out to the mines for another load of iron ore.

*Mark Bennett*

### This Page

CD Cargo's Class 240.050 and 240.044 arrive into Havlickuv Brod on June 18th with a rake of cement trunks.

*Paul Godding*

### Next Page

At Rennes on June 16th, a double headed modal train heads through the station hauled by SNCF BB Nos. 426216 and 427159. *Ray Anslow*







trainsets for daytime services and 13 sets of overnight stock. The nine-car day trains are needed to replace EuroCity stock that ÖBB currently operates on services to and from Italy where updated fire regulations will prohibit their deployment from 2021. The overnight stock is destined to replace or augment the fleet that ÖBB currently uses on its Nightjet services. ÖBB's existing overnight fleet includes 42 sleeping cars and 15 couchette cars operated by Deutsche Bahn until it withdrew City Night Line services in 2016.

Some interesting news from Germany is the Digital S-Bahn Hamburg agreement to automate operations on a section of the city's suburban rail network. The partners have agreed to share the €60m cost of the pilot phase of the project, which aims to have four trains operating automatically on a 23 km section of Route 21 between Berliner Tor Bergedorf and Aumühle by the time the city hosts the World Congress for Intelligent Transport Systems in October 2021. Assuming the pilot phase is successful, the longer-term plan is to automate the entire Hamburg S-Bahn network.

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

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

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A Roy Hill Railway empty crosses the dry East Turner River about 40kms south of Port Hedland, hauled by RHA1012/CD4302 on June 17th. In Australia we call our railways 'railways', but the Pilbara Rail Road's were built with US equipment and to this day are run to the US blueprint, even calling wagons 'cars' and points 'switches' so have always been called Railroads. So, based in Port Hedland we have BHP (which took over the original Mt Newman Mining and Goldsworthy Mining railways), and the later new build railways for FMG (Fortescue Metals Group) and Roy Hill Railway. Based out of Dampier is Rio Tinto that runs over the extensive network of the former Hammersley Mining and Robe River Associates railways.

*Mark Bennett*













## Alstom to supply 5 additional X'Trapolis trains to Victoria

A new contract worth around €60 million in Australia

Alstom has signed a contract worth around €60 million with Transport for Victoria (TfV), the State's public transport authority, to supply five additional X'Trapolis trainsets for Melbourne's suburban rail network. This will expand TfV's fleet to 106 trains (636 cars) delivered from Alstom's manufacturing facility in Ballarat since 2002.

The Alstom X'Trapolis trains in Victoria is the largest fleet of single deck trains in Australia and have proven to be the most reliable rolling stock on the Melbourne network. The new trains will further enhance the network's capacity while also increasing the reliability of the entire system.

Composed of six cars, the 145 metre long train has been designed to optimise capacity (1,238 passengers) whilst maximising passenger experience, comfort and safety. The new trains will also feature enhanced accessibility and improved automated safety features. "We are pleased to supply the Victorian government a further 5 trains from our industrial base in Ballarat," said Mark Coxon, Managing Director of Alstom in Australia and New Zealand. "This contract will provide workload for the site between April and December 2019, while we continue to work with the State to secure the long term future of the Ballarat Workshops and the local supply chain." said Coxon.

X'Trapolis is Alstom's range of suburban trains, with over 4,600 X'Trapolis cars delivered over 10 years, in countries including Australia, Chile, Spain, South Africa and France.



The 1WB3 from Port Kembla to Brisbane steel products train runs through Telegraph Point on the NSW North Coast on Monday July 9th hauled by Pacific National locomotives Nos. NR45 and NR38. *Mark Bennett*

















## Alstom awarded long term rolling stock and signalling maintenance contract for Sydney Metro

Alstom has been awarded a 15-year maintenance contract by Metro Trains Sydney (MTS) for the maintenance of the 36km-long Sydney Metro Northwest railway.

The contract includes the maintenance of Alstom's 22 six-car Metropolis train sets, Australia's first fully automated passenger rail vehicles, Alstom's Urbalis 400 Communications Based Train Control (CBTC) signalling systems, point machines, operation and maintenance of the depot and the cleaning of the trains.

More than 50 full time people, which will include 5% apprentices, will maintain the system during the operational phase of the project which will utilise Alstom's industry leading HealthHub maintenance platform. HealthHub is an innovative maintenance approach designed to shift from traditional mileage-based maintenance to condition-based predictive maintenance, thus reducing the lifecycle cost for the operator. HealthHub is supported by various high technology data capture solutions including TrainScanner, Track Tracer and Catenary Tracer - an automated diagnostics portal capable of measuring in real-time the condition of the maintained assets. This real-time monitoring approach will result in increased reliability and availability of the fleet and associated infrastructure.

"Alstom is delighted to be providing long term maintenance support to the iconic Sydney Metro project," said Mark Coxon, Managing Director for Alstom in Australia and New Zealand. "The award of this contract further strengthens Alstom's position in the railway maintenance sector in Australia", said Coxon. Mobilisation of the Alstom teams is expected to start mid 2018 with the project fully operational in the first half of 2019.



Train No.4621, the Newcastle to Grafton cement train is seen at Pembroke hauled by Nos. 8205 and 4894 on June 30th. *Mark Bennett*





















## Wood chips from the Kaliningrad region arrive in the Czech Republic

In March of this year ČD Cargo representatives established the first contacts with representatives of the RŽD Kaliningrad Railway. One month later, a meeting between the Chief of Kaliningrad Railways and the management board of ČD Cargo and CD Cargo Poland took place, which led to the contract for the organization of transport between OAO RŽD and CD Cargo Poland. At the end of June, this partnership brought the first concrete results.

On June 29, a set of 19 Sgnss wagons with 54 XXL containers (Innofreight) left the Czech Republic and continued through the Braniewo / Mamonovo border crossing to the Dzerzhinskaja-Novaja terminal. The containers were loaded with wood chips there.

On July 9, after all necessary legal formalities had been completed, the train with wood chips arrived at the Hněvice station and was brought to unloading on MONDI's siding. In total, more than 2,000 cubic metres of chips were transported in this move.

Photo: © CD Cargo



On June 20th, taking a break from Railjet work, Class 1216.234 speeds through Rikovice with a rake of ore wagons. *Paul Godding*





 Czechia

▶ Class 754.050 is seen stabled at Hradec Králové hl.n. on June 1st. *Stearnsounds*

▶ Prague tram No. 9006 stands at Vltavska on June 1st with a line No. 25 service to Bila Hora. *Stearnsounds*

▶ Skoda built Prague tram No. 9347 crosses Most Legií with a service No. 9 to Sidliste Repy. *Stearnsounds*







## Sludge again on the tracks

ČD Cargo is the first company offering Innofreight technology on the Russian market.

In the middle of April this year, the pilot transport of sludge from the redeveloped lagoons in Ostrava (the former Ostramo plant) took place. The purpose of the redevelopment works in this locality is to remove about 90,000 tons of sludge. Sludge is loaded into Innofreight containers, which are then closed and transferred to railway wagons.

From Ostrava mined sludge is transported by railway by regular train formation to Nové Sedlo u Lokte stanice, kde Sokolovská uhelná hoř v areálu plynové elektrárny v Vřesové. Here, a unique technology is used against air pollution. About 200 tons of sludge should be handled in Vřesová every day.

All of the sludge should be removed from Ostrava by the end of this year.

Photo: © CD Cargo



▶ OBB's Class 1216.240 is seen on the rear of a Railjet service as it passes through Praha Klanovice on June 21st. *Paul Godding*





 Czechia



EP Cargo liveried Class 193.844 pulls into Pardubice on June 21st hauling a rake of GATX tanks. *Paul Godding*

ZSSK's Class 350.016 approaches Pardubice on June 21st working a Bratislava to Praha hl.n. service. *Paul Godding*

On June 20th, Class 460.080 stands at Hranice na Morave working a service to Olomouc. *Paul Godding*





 Czechia

On June 17th, KZC's Class 749.006 arrives at Vsetaty with a Msno to Prague service.  
*Paul Godding*

On June 16th, Class 749.121 departs Praha Hlavni Nadrazi with a service to Breznice.  
*Paul Godding*

KZC's Class 749.259 stands at Mlada Boleslav on June 17th working the Praha - Jince weekend service.  
*Paul Godding*







## ČESKÉ DRÁHY HAS ORDERED 50 SUPERMODERN EXPRESS VEHICLES

The Czechs can look forward to the most modern passenger cars in Europe. National transport company České dráhy has ordered them from the Siemens-Škoda consortium for its long-distance lines. The supermodern, comfortable vehicles combine the benefits and experience gained from the operation of high-speed units with the advantages of locomotive trains built from passenger cars.

“České dráhy is one of the leaders in railway innovation in the youngest member states of the European Union in the area of dispatch and introduction of modern services, as well as in the field of technology and vehicles. The contract for the supply of new passenger vehicles that we concluded with the Siemens-Škoda consortium confirms this. This is a new concept that offers passengers comfort and the equipment of high-speed trains, as well as the flexibility and advantages of trains built from individual cars. České dráhy will thus strengthen its competitiveness in long distance transportation in both the Czech Republic and throughout Central Europe,” says Pavel Krtek, Chairman of the České dráhy Board of Directors, emphasizing the importance of the contract.

“Škoda Transportation is currently producing six high-speed trains for German carrier Deutsche Bahn, and I am pleased to be able to share this experience with the delivery of high-speed cars for České dráhy. Our company will mostly participate in this contract in the assembly and activation of the vehicles, which provides work for both employees in production and Czech technicians,” adds Tomáš Ignačák, Deputy Chairman and Vice President of the Škoda Transportation group. České dráhy, and especially their passengers, need new comfortable cars to operate on important national and international routes, offering both high speed and pleasant travel. The value of the contract for the supply of 50 express cars for international lines of České dráhy is almost 3 billion CZK. The first cars will be

delivered within 32 months of the signing of the contract. “The consortium will deliver 50 passenger cars built into 10 non-traction units with five wagons that will be connected like a high-speed train. This will allow passengers comfortable, barrier-free access throughout the train, and offer them the further benefits of modern high-speed trains. However, the trains will end with a standard UIC for passenger cars at both ends. This will allow us to flexibly respond to operational needs and to connect several units to create a longer and higher capacity train, as well as connect individual passenger cars to create trains with different capacity and services. It will be possible to connect other 1st and 2nd class cars, restaurant cars, bicycle cars and control cars to passable trains.

This makes it possible for these untraditional trains to operate as a common locomotive train as well as a push-pull train, locomotive-hauled in one direction,” says Miroslav Kupec, Member of the Board of Directors responsible for technology, service and property, listing the advantages of the new České dráhy vehicles.

Photo: © Skoda



IDS Cargo’s Class 740.459 arrives into Olomouc on June 21st, hauling another Class 740.  
*Paul Godding*









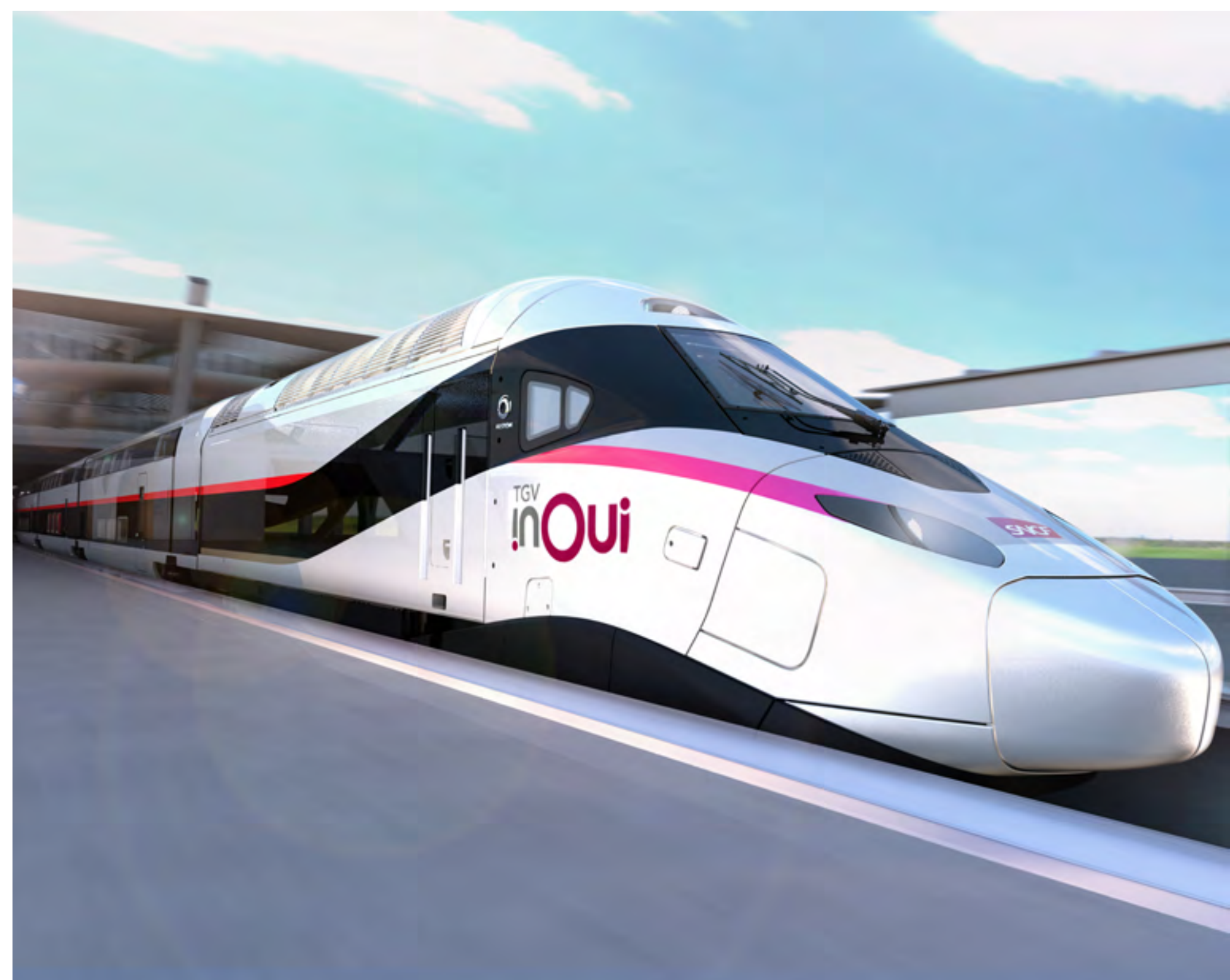
## Alstom receives an SNCF order for 100 next-generation very high speed trains

The Board of Directors of SNCF Mobilités has approved a firm order for 100 next-generation Avelia Horizon very high speed trains (TGV) at its meeting on 26 July 2018.

This new generation of very high speed trains addresses to ambitious goals in terms of competitiveness of the rail sector and profitability for SNCF, with a total acquisition cost 20% lower than that of the previous generation. The teams of experts working on this project for two years have risen to the challenge of specifying a new train at a reduced cost of €25 million per trainset, with an additional budget of €190 million for options and services.

Avelia Horizon will consist of two innovative power cars of reduced length, combining high performance and compactness, and articulated double-deck passenger cars. Their design allows for a 20% increase in passenger-dedicated areas, allowing the train to accommodate up to 740 passengers in the highest-capacity configuration chosen by SNCF.

Maintenance costs will be more than 30% lower than those currently recorded by SNCF. The train's maintainability is taken into account from the design stage, with a remote diagnostic system for predictive maintenance, which improves the trains' reliability and availability. Many of the components have an optimised design to simplify, reduce, and allow longer intervals between maintenance interventions. Thanks to its aerodynamic design and a more efficient traction drive, the next-generation TGV will consume 20% less energy than existing TGVs. "This order is the successful fruit of the collaborative work of SNCF and Alstom. Alstom's Avelia Horizon solution meets the technological, economic and competitiveness challenges of SNCF," said Henri Poupart-Lafarge, Chief Executive Officer of Alstom.



▶ A line 5 metro train crosses the River Seine on the approach to Austerlitz station on May 17th.  
*John Sloane*





## Bombardier to Supply 36 Additional Francilien Trains to Île-de-France Mobilités

Rail technology leader Bombardier Transportation has received an order for 36 Francilien train sets (270 cars) from the French national railway corporation, Société nationale des chemins de fer français (SNCF) on behalf of the Greater Paris public transport authority, Île-de-France Mobilités. The order, a call off from a contract signed in 2006 with SNCF for a maximum of 372 trains, is valued at approximately 261 million euro (\$303 million US). These trains, entirely financed by Île-de-France Mobilités, will be rolled out on lines L, J and P on the SNCF Transilien network to continue modernizing the fleet. Bombardier supports Île-de-France rolling stock renewal program by accelerating production pace from September 2019 onwards.

“This train, specially designed to meet the challenges of the dense and congested Transilien network, has proven its strengths. Fully adapted to this urban transportation ecosystem, it’s the most reliable fleet operating on the network. The trains offer exceptional energy efficiency, optimized maintenance costs and of course a sleek design with amenities that are particularly appreciated by travelers,” said Laurent Bouyer, president of Bombardier Transport France.

These new trains will feature upgrades to improve the comfort of passengers. They will be equipped with USB ports, new and more ergonomic handrails, and large panoramic screens to increase readability of passenger information. As best performing fleet in Île-de-France, the Francilien trains contribute to the punctuality of the lines where they operate. From the start of the project, Bombardier engineers focused on passenger needs and designed a modern spacious commuter train. The Francilien offers room for up to 1,000 people and includes large seats, wide doors and open gangways to increase passenger flow. In addition, they are equipped with the latest energy efficient and “intelligent” technologies as well as with improved security systems.

and J from and to Paris Saint-Lazare station; and 18 long trainsets, 144 cars, for line P from Paris Est station. Altogether, SNCF will operate a fleet of 313 Francilien commuter trains. To date, 230 Francilien trains are in operation.

Renowned as France’s first industrial rail site, about 2,000 people work on Bombardier’s facility in Crespin (Nord), including 500 engineers and managers. The company designs, builds and commissions different types of equipment and is specialized in double deck platforms. Three emblematic projects are now in production: 1) OMNEO (in the Premium and Regio 2N regional versions) is an extra-capacity, double-deck train for the Regions of France, which ordered 382 train sets in a contract signed in 2010. 2) Francilien is an ultra-modern commuter train for Greater Paris. Île-de-France Mobilités has ordered 313 trains. Operating since December 2009, it is the best performing train of the SNCF Transilien network, servicing the P, L, J, K and H lines 3) RER NG, under a contract signed in 2017 as part of a consortium for Île-de-France Mobilités, will operate on the E and D lines of the RER.



▶ A Transilien EMU treads the lengthy cutting between Pont Cardinet and St. Lazare with a service from St. Cloud on May 15th.

*John Sloane*





 France

▶ SNCF Ter DMU No. X73519 is seen stabled at Chartres. *John Sloane*



▶ Transilien EMU No. 20830 is about to depart Gare de Lyon with an outer suburban train on May 17th. *John Sloane*

▶ Thalys sets Nos. 4302 and 4305 stand at Gare du Nord on a strike day when few SNCF services were operating. *John Sloane*





## Alstom unveils the first tram for Caen la mer in France

Alstom has recently presented the first Citadis X05 tram, which will run on all three new lines Caen la mer (Normandy), in the presence of Joël Bruneau, President of Caen la mer, Rodolphe Thomas, First Vice-President of Caen la mer in charge of transport, travel and infrastructure, and Jean-Baptiste Eyméoud, President of Alstom France. 23 trams were ordered by Caen la mer in November 2016. The first deliveries will begin in October 2018 with entry into commercial service scheduled for September 2019. Alstom and its teams are proud to present this first tram only 18 months after having received the order. This innovative tram benefits from an elegant design and proven reliability, will answer the mobility needs of Caen la mer, says Jean-Baptiste Eyméoud, President of Alstom France.

The Citadis X05 tram for Caen la mer is 33 metres long and equipped with 6 double doors on each side, enabling it to transport more than 210 passengers. It boasts an elegant design, with passenger comfort in mind, and will benefit from 100% LED lighting, helping create a homogeneous light source, 6 extra-large passenger information screens and large windows covering 45% of the tram. It will also offer USB charging points, a first in France. The Citadis X05 tram for Caen la mer is particularly energy-efficient and will also be able to climb slopes with gradients of more than 8%. It is equipped with standardised, proven and more accessible components, allowing Caen la mer's inhabitants access to reliable, readily available material and thus providing the urban community with all the guarantees for the advantageous replacement of its existing system.

We wanted the urban communities inhabitants to adopt this new tram, vital in an urban environment. So, with a view to co-creating the city of tomorrow, the design of the new trams was submitted to the opinion of all the inhabitants of the urban community, says Joël Bruneau,

President of Caen la mer.

A design committee, made up of elected representatives of Caen la mer, worked with Alstom's Design & Styling teams to submit three different trams to the vote. At the end of 2016, the inhabitants thus had the opportunity to vote for their favourite design via the dedicated website. The design chosen by nearly 40% of the population is efficient, simple and modern. The selected colours won't go out of style and aren't just the expression of a fleeting moment.

We've also worked on the brightness of the tram, with large glass surfaces that offer excellent visibility of the city, explains Rodolphe Thomas, First Vice-President of Caen la mer in charge of transport, travel and infrastructure.

Eight of Alstom's twelve sites in France are involved in the project.



▶ SNCF BB No. 26030 arrives at St. Lazare with an express from Caen on May 16th. *John Sloane*









## Alstom inaugurates first new-generation Citadis with innovative charging technology

Alstom has commissioned its new-generation tram Citadis X05, complete with its innovative SRS charging system, for the first time on Saturday 30 June on the Cadam-Magnan section of new tramway line 2 for the Métropole Nice Côte d'Azur. Presided over by Christian Estrosi, Mayor of Nice and President of the Metropole, the inauguration took place in the presence of Georges-François Leclerc, Prefect of the Alpes-Maritimes department, Renaud Muselier, President of the PACA region and Member of the European Parliament, Charles Ange Ginésy, President of the Alpes-Maritimes department and Jean-Baptiste Eyméoud, President of Alstom France. The first passengers were able to discover the design, created by Ora Īto, as well as the travel comfort provided by this new generation of 44-metre-long Citadis trams: 40% window surface, LEDs for soft, homogenous lighting, large individual seats, travel information on extra-wide screens and improved accessibility with double-doors along the entire length of the tram. The innovations of the Citadis X05 also make it easier to operate: passenger capacity has been increased by 10%, with a 20% increase in the passenger exchange rate at stations and a reduction of over 20% in preventive maintenance costs.

For the first time ever, Alstom has also commissioned its SRS ground-based static charging technology coupled with the Citadis Ecopack energy storage system. This system allows the tram to circulate without overhead contact lines throughout the entire journey. SRS automatically charges the tram when stopped at the station during passenger exchange (under 20 seconds), in complete safety. Electricity is stored in the onboard Citadis Ecopack devices, guaranteeing the trams autonomy between two charging points. SRS builds on the technical and safety principles of the proven APS solution (trams of Bordeaux, Reims, Dubai).

project, a catalyst for innovation and an international showcase of French railway sector expertise. A new generation of trams, a new charging system, the Nice tram will also be the first connected tram as of Spring 2019 with a tram-to-ground Wi-Fi communication system, said Jean-Baptiste Eyméoud, President of Alstom France.



Branded 'Conseil Regional de Bretagne', EMU No. 14611 stands at St. Malo with a service to Rennes on June 19th. *Ray Anslow*





## France approves controversial rail reform

**Frank Miram, Head of Economic, Political and Regulatory Affairs, explains the process for DB Cargo.**

Major changes to the French rail system are on their way. In an accelerated legislative procedure, the “Law for a New Railway Pact” was approved by the National Assembly on 13 June and by the Senate on 14 June, each time by a large majority. French President Emmanuel Macron signed the reform into law on 27 June. It entered into force on 28 June when it was published in the French official gazette. At the heart of the law is the transformation of France’s national railway company, Société nationale des chemins de fer français (SNCF), into a public limited company wholly owned by the French government.

The new SNCF will become an integrated group made up of wholly owned subsidiaries, similar to Deutsche Bahn AG. As in Germany, these will include the infrastructure and passenger transport divisions, as well as the freight division, Fret SNCF. To facilitate the transformation, the French government will also take on part of SNCF’s EUR 55 billion of debt – a total of EUR 35 billion in several stages by 2020. SNCF’s legal monopoly on rail passenger transport is expected to end after the summer break. France is thus following the European requirements set out in the Fourth Railway Package and making rail transport even more attractive thanks

to greater competition. However, long transitional periods are planned for market liberalisation in important regional transport networks, especially in the Greater Paris area – this is a major difference to the rail reform in Germany, where liberalisation of the rail transport market was completed in one step as early as 1994.

### Following through on reform in France is crucial

Newly recruited staff at SNCF will no longer have privileges similar to those of civil servants. This issue in particular has triggered public protests and strikes, led by the General Confederation of Labour (CGT), the largest trade union affiliated with the SNCF. The strikes also had a considerable impact on Deutsche Bahn AG’s activities in France. The suspension of industrial action (though some strikes may continue in July and August) is closely linked to concessions to the trade unions in the negotiations on the railway reform and the adoption of a new industry agreement. “In our view, it is important that competition is not impaired from the outset by burdensome regulations for newcomers – we are putting this point forward in many discussions with our French colleagues. The successful German rail reform of 1994 provides a useful reference point. This had an entrepreneurial focus, opened the market to competition, relieved pressure on public finances and consistently embraced social partnership,” says Frank Miram.





## Halle train formation yard opens

### New facility is the most state-of-the-art train formation yard of its type

It's ready! The new train formation yard in Halle (Saale) was brought into service on Friday 29 June, after a four-and-a-half-year construction period. On the site of the former Halle goods yard, one of the most up-to-date facilities in Europe has been built. The German government and Deutsche Bahn have invested a total of EUR 180 million. All shunting operations on the 36 tracks, including the hump, are managed and monitored fully electronically. With a planned capacity of 2,400 wagons a day, the yard has sufficient capacity to increase single-wagonload transport along the Berlin–Munich corridor, and in the direction of Southeast Europe.

### A clear commitment to rail freight transport

“Saxony-Anhalt has a history and a future as a trade hub. The train formation yard sets new standards in German and international freight transport. This modern marshalling yard will have a positive impact on the whole of central Germany, providing an important economic stimulus and securing jobs in the region,” says Thomas Webel, Minister for Regional Development and Transport in Saxony-Anhalt.

Dr Gerhard Schulz, Secretary of State in the Federal Ministry of Transport and Digital Infrastructure: “Halle has already developed into an important hub for high-speed rail. And now it is set to play the same role for freight transport in central Germany. The German government’s investment of around EUR 150 million is helping to handle the growth in goods transport and moving more freight traffic to environmentally friendly rail.”

Eckart Fricke, Management Representative at Deutsche Bahn for Saxony, Saxony-Anhalt and Thuringia, says: “For the first time in over 25 years, we are putting a new marshalling yard into operation. The modern train formation yard in Halle (Saale) is Deutsche Bahn’s clear signal for the future and shows our commitment to single-wagonload transport in Saxony-Anhalt, in central Germany, in Germany as a whole and across Europe. With its long railway tradition, Halle is once again at the centre of traffic flows.”

Dr Roland Bosch, CEO of DB Cargo: “Our customers in the steel and chemical industry will see particular benefit. The new train formation yard, connected to the central German chemical industry triangle and well-placed for steel transport to and from the Czech Republic, will be an important hub in European rail freight.”

“This makes the city of Halle (Saale) one of the most important freight transport centres in Europe. There has been a marshalling yard in Halle for precisely 130 years. By opening this new state-of-the-art train formation yard, Deutsche Bahn is reconnecting with its traditions in Halle (Saale) and writing a new chapter for the future,” says Mayor Dr Bernd Wiegand.

DB Class 294.622 hauls a loaded steel train into the yard at Volklingen. *Class47*





 Germany

▶ DB Class 151.095 and 151.112 run light engine through Hamburg Harburg, heading for the docks. *John Sloane*

▶ DB Class 146.265 propels a Koblenz Hbf service south out of Koblenz Lutzel. *John Sloane*

▶ MRCE Class 182.519 departs Koln Gremberg hauling a northbound freight. *John Sloane*







## Bombardier Presents the New TRAXX 3 Locomotive Platform at Customer Event

Ahead of its time, the innovative TRAXX 3 platform's energy efficiency and proven ability to pull high train loads responds to the global freight market's demand for higher productivity  
Improved maintainability addresses customers' needs for increased flexibility and availability

Mobility leader Bombardier Transportation officially introduced its new BOMBARDIER TRAXX 3 platform at their Kassel site in Germany recently. At the event, more than 100 of Europe's leading transport operators and stakeholders learned more about the three different versions of the versatile TRAXX locomotive platform as well as enjoyed a ride on the new TRAXX MS3, one of the most innovative locomotives to enter the rail freight transportation market.

Michael Fohrer, President of the CEC region and Head of Bombardier Transportation in Germany, said, "As a mobility innovation pioneer for 18 years, and with over 2,200 units sold, our TRAXX locomotive platform's success has been proven beyond question. The TRAXX MS3 locomotive is the only locomotive on the market with the Last Mile function, letting it easily bridge non-electrified track sections often found in ports or freight terminals. It's a key advantage, enabling our customers to offer an alternative to road-based freight traffic throughout its entire journey."

At the event, Peter Amman, Head of Global Ecosystem Freight Corridors at Bombardier Transportation commented, "Our new TRAXX 3 platform responds to the demands

of the global freight market. With its energy efficiency, proven ability to pull higher loads than comparable locomotives, customized configuration, simplified interface with the European Train Control System and improved maintainability, this locomotive addresses our customers' need for improved profitability, increased flexibility as well as for more reliable performance and availability during its whole lifecycle." For greater planning efficiency and most economical operation, the TRAXX 3 platform 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. The TRAXX Service Group is located in Kassel, the industrial lead site for locomotive production at Bombardier Transportation which is celebrating its 170th birthday this year. Since 1848, around 35,500 locomotives have been built in this proven production site.



DB Class 155.015 approaches Hannover Linden with a rake of empty car transporters.  
*John Sloane*









## Upward trend in rail transport continues: more passengers, higher revenues and greater investment

Rail transport in Germany continues to grow. In the first half of 2018, patronage rose by 3.8% year on year in Deutsche Bahn's long distance segment, with a record 70.9 million passengers using the company's long distance trains from January through June.

"People are more mobile than ever before," said DB CEO Dr. Richard Lutz at the company's interim results press conference for 2018. "For more and more people, rail is becoming the key to an effective climate change fight and a successful transition to sustainable transport." Lutz said that DB had made it a top priority to foster digitalization and launch new services and mobility options for its customers. DB was working hard on ideas and solutions to this end and would be presenting an updated Group strategy by the end of the year. At EUR 21.5 billion, adjusted revenues at the DB Group were 2.3% higher in H1 2018 than in H1 2017. Calculated in comparable terms (that is, adjusted for currency effects and changes to the group of consolidated companies), the increase was a full 3.8%. For 2018 as a whole, DB expects to see a comparable increase in revenues to some EUR 44 billion. DB generated earnings before interest and taxes (EBIT) of EUR 974 million in H1 2018, a year-on-year decrease of EUR 205 million, or 17.4%. This decrease was due in particular to special charges resulting from inclement weather, a drop in rail freight transport volumes, and higher investment in punctuality.

In 2018 alone, DB plans to increase investment by over EUR 100 million to raise its on-time rate. For 2018 as a whole, the DB Management Board expects full-year EBIT to be at the same level as EBIT in 2017 (adjusted figure for 2017: EUR 2.15 billion).

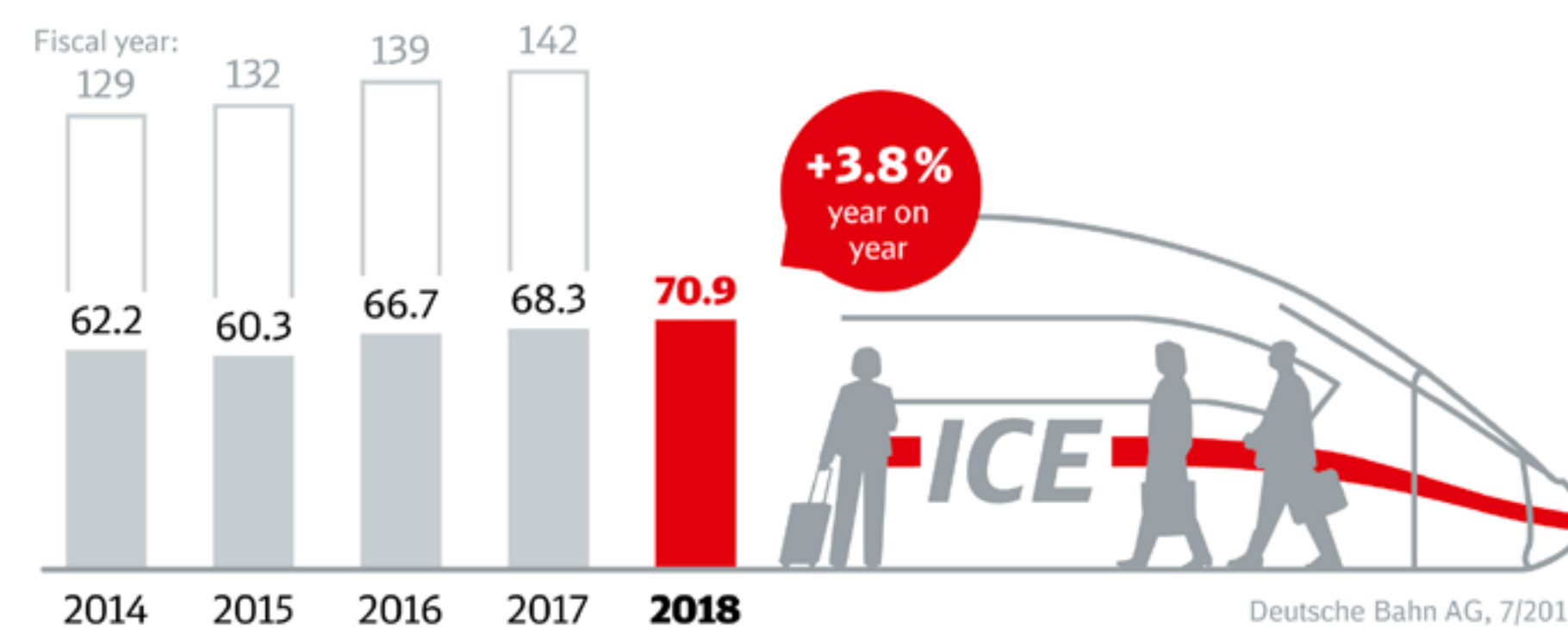
DB Arriva and DB Schenker, DB's international business units, continued to grow. "Our international subsidiaries both play an important role in driving success at the Group as a whole," said DB CEO Lutz. All DB's logistics segments were up in the first half of the year; air freight volume saw a year-on-year increase of 5.9%. DB Schenker generated revenues of EUR 8.3 billion in H1 2018, an increase of 2.8%. DB Arriva saw revenue growth of 1.7% to a total of EUR 2.7 billion. Transport volume in long distance passenger service grew considerably in the first half of 2018, rising 6.0% year on year to 20.6 billion passenger kilometres.

Rail freight transport, on the other hand, saw a 6.7% drop in volume. The first six months of the year were not easy for DB Cargo. The company plans to respond by making lasting changes, which will include addressing problems of its own making.

Infrastructure usage continued to grow, with demand for train paths rising 1.1% to 540 million train-path kilometres. At 31.9% in H1 2018 (up from 30.8% in H1 2017), the percentage of infrastructure usage attributable to non-DB rail companies rose once again. Net capital expenditure was up considerably in the first half of 2018, from EUR 1.5 billion to EUR 1.9 billion. This increase of EUR 0.4 billion is part of the largest investment campaign in the history of Deutsche Bahn, which continued in the first half of 2018.

### Passengers, DB long distance transport (rail)

H1 figures in millions



Deutsche Bahn also hired additional employees, recruiting 13,300 people in Germany in the first half of the year. The company plans to have roughly 19,000 new hires by the end of the year. As of the end of June, DB employed some 202,500 people in Germany (compared with some 196,500 at the same time last year) and 329,600 worldwide (compared with 319,700 at the same time last year).

"Things are moving in the right direction," said CEO Lutz. "Traffic is shifting to rail. And we on the DB Management Board are confident that the coming years will bring excellent opportunities for DB as a company in a growing industry and as the most eco-friendly mode of transport by far."

DB Regio Class 111.115 calls at Schwelm with train No. RE10424 to Aachen Hbf on June 3rd. *Steamsounds*





 Germany

▶ A Woltersdorfer Straßenbahn tram arrives at Rahnsdorf with a service from Woltersdorf on May 22nd. *Stearnsounds*



▶ Dampflok No. 99.7237 stands at the Brocken on May 25th ready to depart with a service for Wernigerode. *Stearnsounds*

▶ DB Class 155.236 passes through Magdeburg Hbf on May 23rd with a loaded pipe train. *Stearnsounds*





▶ A very clean DB Class 187.128 speeds through St. Goarshausen with a rake of vans. *John Sloane*

## Even easier, even more customer friendly

New functions make it easier to access the “myRailportal” DB Cargo customer platform. DB Cargo is making ordering transport services as easy as shopping online. New functions in “myRailportal” will offer extra service for customers and make it easier to get freight consignments onto the rail network. The most important innovations:

- Engineering works displayed: customers can now view changes to the regular timetable well in advance and plan accordingly.
- Map function: track cargo with a map displaying an overview of all consignments every step of the way (available later this year).
- Pilot version of damage app: instead of reporting damaged wagons manually on a paper form, digital documentation with photos will be available in future.

This way, DB Cargo will not only improve companies’ access to rail and offer them additional services; the platform will keep developing on an ongoing basis in collaboration with customers. For instance, we are planning completely new benefits such as dependable information on estimated time of arrival. Once registered in “myRailportal”, DB Cargo customers can already follow their consignments using Track&Trace, search loading points and choose wagons and routes. The aim is for “myRailportal” to automatically support customers every step of the way from order placement and empty wagon orders to consignment tracking and billing.

### Even more innovation through cooperation with start-ups

DB Cargo is entering new partnerships: six start-ups have been working in the DB Mindbox since June on innovative solutions for rail freight transport. They include young companies using artificial intelligence to support decision making in the logistics chain. Another promising start-up is creating models for processing spatial data to enable predictions that can improve empty wagon management.





▶ IDS Class 742.529 and 742.516 stand at Bad Schandau on May 29th, heading across the border to Decin in Czechia. *Stearnsounds*

▶ DB Class 146.014 approaches Königstein with a Bad Schandau bound S1 service. *Stearnsounds*

▶ MRB Class 223.055 stands at Chemnitz Hbf after having only got as far as Wittgensdorf ob Bf with train No. RE27777 due to a line closure further on. The train returned to Chemnitz a mere 3 hours after leaving. *Stearnsounds*







## Coradia iLint hydrogen train receives approval for commercial operation

Alstoms Coradia iLint, the worlds first hydrogen fuel cell passenger train, has been granted approval by the German Railway Office (EBA) for passenger service in Germany. On 11 July, Gerald Hörster, President of EBA, presented Alstom with the certificate of homologation at the Federal Ministry of Transport and Infrastructure in Berlin. The ceremony was attended by Enak Ferlemann, Parliamentary State Secretary to the Federal Minister of Transport and Digital Infrastructure and member of the German Parliament.

“A world premiere in Germany: With the approval of the German Railway Office (EBA), we are sending the first passenger train with fuel cell technology onto the tracks. This is a strong sign of the mobility of the future. Hydrogen is a true low-emission and efficient alternative to diesel. Especially on secondary lines, where overhead lines are uneconomic or not yet available, these trains are a clean and environmentally friendly option. That is why we support and promote the technology, in order to bring it to the surface, said Enak Ferlemann, the German Federal Governments authorised delegate for rail transportation.

This approval is a major milestone for the Coradia iLint and a decisive step towards clean and future-oriented mobility. Alstom is immensely proud of this hydrogen-powered regional train, a breakthrough in emission-free mobility, and the fact that it will now go into regular passenger operation, said Wolfram Schwab, Alstom Vice President of R&D and Innovation.

In November 2017, Alstom and the local transport authority of Lower Saxony (LNVG) signed a contract for the delivery of 14 hydrogen fuel cell trains, along with 30 years of maintenance and energy supply. The 14 trains will be produced by Alstom for LNVG’s vehicle pool and

will transport passengers between Cuxhaven, Bremerhaven, Bremervörde and Buxtehude from December 2021. Following this approval granted by EBA, the two Coradia iLint prototypes will enter pilot operation in the Elbe-Weser network. Passenger service is scheduled for late summer. Coradia iLint is the worlds first passenger train powered by a hydrogen fuel cell, which produces electrical power for traction. This zero-emission train emits low levels of noise, with exhaust being only steam and condensed water. The Coradia iLint is special for its combination of different innovative elements: clean energy conversion, flexible energy storage in batteries, and smart management of traction power and available energy. Specifically designed for operation on non-electrified lines, it enables clean, sustainable train operation while ensuring high levels of performance.

The Coradia iLint was designed by Alstom teams in Salzgitter (Germany), centre of excellence for regional trains, and in Tarbes (France), centre of excellence for traction systems. This project benefits from the support of the German ministry of economy and mobility. Alstom’s development of the Coradia iLint was funded with 8 million from the German government as part of the National Innovation Program for Hydrogen and Fuel Cell Technology (NIP).



▶ CFL’s No. 4012 heads through Volklingen with an intermodal service, heading towards Saarbrücken. *Class47*





## Siemens tram for Ulm wins the Red Dot Award

Award for the Avenio M  
Tram convinces in the category “Product Design”  
Second Red Dot Award for the Avenio family

The Siemens Avenio M tram, designed for Ulm, Germany, has won the prestigious Red Dot Award. SWU Verkehr GmbH had ordered twelve articulated Avenio M trams from Siemens in May 2015. The trams are optimized for operating on the Ulm routes with their steep grades and will serve on Line 1 and the new Line 2.

The tram’s design enhances passenger experience and convenience and was, as with its predecessor model Combino, especially tailored for Ulm by Busse Design+Engineering, the design partner of SWU Verkehr. The new tram’s front and rear end design differs from that of the previously used Combinos. The new trams have adapted the current SWU design and are finished in the familiar colors of blue, light gray and white. The typical curved side profile on the front end has been further refined. The interior is light and friendly. The style and interior design of the basic tram were created by a team from Siemens and the design studio “Yellow Window.” The Avenio M also sets standards regarding safety: the “Siemens Tram Assistant” collision warning system helps the driver to avoid accidents.

“In many respects, we succeeded in further improving the visual appeal of Ulm with the new tram series. Ulm’s trams will now stand out even more for our residents,” said André Dillmann, Managing Director of SWU Verkehr.

“In developing the Avenio, we believed the trams should harmonize well with the urban landscape, be optimally adapted to the existing urban infrastructure and meet all the requirements for capacity as well as interior and exterior design. That we succeeded in our work has now been confirmed by the second Red Dot Award for our Avenio family,” said Sabrina Soussan, CEO of the Siemens Mobility Division.

Siemens previously received the Red Dot Award for Product Design in 2015 for the Velaro high-speed train. Last year, the company’s design for the Avenio trams for Doha, Qatar, won the award. The Design Zentrum Nordrhein Westfalen has been honouring outstanding international product design with its famed “Red Dot” since 1955. Numerous manufacturers and designers of a wide variety of industrial products enter the annual competition for the internationally renowned seal of quality for design. This year, the jury received entries from 59 countries. Only designs with the most convincing “high quality of design” receive the coveted “Red Dot” from the jury. The awards were presented in Essen, Germany.

Euro Cargo Rail’s Class 247-050 and DB Class 143.925 are seen at Koblenz on June 12th.  
*Class47*

















On June 14th, Trenord 'Goggles' Class DE520-008 arrives into Rovalo light engine to take a DMU to Milano for attention. *Class47*

## Alstom and Italo sign contract for Pendolino EVO trains and maintenance

On July 31st, Italo - Nuovo Trasporto Viaggiatori and Alstom signed a contract worth €330 million for the purchase of five additional Pendolino EVO trains, exercising an option to the contract signed in October 2015. The contract also includes 30 years of maintenance. These five new trains will bring the total Italo Pendolino EVO fleet to 22 trains. With this further investment, Italo, the first private Italian operator to operate on high-speed lines, will be able to expand the current network and respond to the growing needs of the market, offering new routes and increased frequencies.

Italo's Pendolino EVO train is part of Alstom's Avelia range of high-speed trains, representing the culmination of 35 years of expertise and with more than 1,100 trains in service around the world. The five new Pendolino trains will include the same features and technical specifications as the five Pendolinos previously ordered. The train is the first proven high-speed train fully compatible with the latest Interoperability Technical Specifications (TSI 2014), common conditions and standards established by the European Union.

Running at a maximum speed of 250 km/h, the 7-car trains will be 187 metres long and can accommodate around 480 passengers. The front end of the Italo EVO train, with its futuristic lines is designed to improve crash protection and enhance aerodynamics.

The Italo Pendolino EVO train is designed to be environmentally friendly, thanks to its high recyclability and reduced CO2 emissions. Moreover, its optimised distributed traction system enhances efficiency and acceleration and regenerates energy while braking.

Alstom's teams in Savigliano (CN) will work on the design and manufacture of these trains in collaboration with Sesto San Giovanni site (MI) for traction systems and Bologna site for signalling systems. With its 22 Pendolino EVO trains, half of which are already in service, Italo is today able to connect northeast Italy with the rest of the country. These trains, added to the 25 Italo AGVs operating since 2012, will allow the company to double its fleet and expand its network.







 Luxembourg



▶ MaK 1000BB diesel shunter No. 1106 is seen shunting the stock from the incoming Brussels service out the way to allow the loco to run around at Luxembourg station on June 26th. *Mark Armstrong*



▶ Forming a six car service, CFL EMUs Nos. 2009, 2006 and 2008 are seen at Luxembourg station on June 26th. *Mark Armstrong*

▶ CFL Class 2000 (SNCF Z11500) EMU No. 2020 stands at Ecsh on June 26th. *Mark Armstrong*





















▶ A pair of NS Traxx Class 186s top and tail a service across the high speed bridge at Moerdijk on June 30th. *Stephen Simpson*

▶ NS Traxx Class 186.038 stands at Rotterdam on June 28th. *Mark Armstrong*

▶ NS VIRM EMU No. 9478 calls at Utrecht Centraal on June 27th with the 14:58 service to Schagen. *Mark Armstrong*











 Netherlands



On July 4th, DB Netherlands No. 2000.6428 'Dirk' is seen loading coal for Germany at Rietlanden Terminals BV in Amsterdam. *Erik de Zeeuw*



On July 7th, NS IC EMU No. 3928 arrives into Amsterdam with a service from Maastricht to Den Helder. *Erik de Zeeuw*

On June 30th, DB Netherlands diesel loco No. 6479 crosses a service road on the Klaverpolder. *Stephen Simpson*















 Portugal



▶ 'Pendolino' No. 4007 arrives at Porto working a service from Braga to Lisbon. *John Sloane*



▶ Siemens ES46 B1, CP No. 4722 is pictured stabled in Vila do Gaio yard. *John Sloane*



▶ Former RENFE EMU No. 592.607 stands in Porto sao Bento station. *John Sloane*





 Portugal

▶ Former RENFE EMU No. 592.254 awaits departure time at Viana do Castelo with a service to Nine. *John Sloane*

▶ One of the cars on the funicular railway in Porto. *John Sloane*

▶ A Porto metro train stands at Matosinhos Market with a service from Porto Trindade. *John Sloane*











 Slovakia

▶ ‘Goggles’ Class 754.034 passes Dolna Stubna whilst working train No. FT952 15:02 Zvolna - Zilina. *Laurence Sly*

▶ ZSSK Cargo’s Class 131.078 and 131.077 pass Strba whilst hauling a loaded coal train. *Laurence Sly*

▶ Class 763.013 and 763.015 enter the sidings at Divaky whilst hauling a local freight. *Laurence Sly*













 Slovakia



ZSSK's Class 754.003 diesel locomotive crosses the viaduct at Dolna Stubna whilst working train No. R344 09:34 Banska Bystrica - Ostrava-Svinov. *Laurence Sly*



Class 163.110 approaches Turany whilst working train No. 3230 16:49 Poprad Tatry - Zilina. *Laurence Sly*



ZSSK Cargo's Class 131.035 and 131.036 pass Ganovce whilst hauling an empty coal train. *Laurence Sly*









▶ Class 131.055 and 131.056 approach Turany whilst hauling an empty ore train. *Laurence Sly*



▶ ZSSK Class 754.071 approaches Telgart whilst working train No. 1780 06:48 Margecany - Banska Bystrica. *Laurence Sly*



▶ Class 754.014 passes Divaky signal box whilst working train No. R341 07:13 Vrutky - Zvolen. *Laurence Sly*





## Stadler is investing in Switzerland as a business location and builds a new production plant in St. Margrethen



Stadler recently held the ground breaking ceremony for its new plant in St. Margrethen together with Benedikt Würth, member of the cantonal government of St. Gallen, Reto Friedauer, president of the municipality of St. Margrethen, and other guests from business and politics. The Swiss rail vehicle manufacturer is transferring its centre of expertise for double-decker multiple units from Altenrhein to St. Margrethen. The new production site is designed to optimise production conditions and to strengthen Stadler's competitive abilities as a result. The planned investment of 86 million Swiss francs clearly demonstrates the company's commitment towards Switzerland as a business location and towards the border triangle area. A small part of the production process will remain in Altenrhein. After the settling of the final objection to the project, Stadler is now able to start construction of the new production plant in St. Margrethen. Chairman of the Board of Directors Peter Spuhler and Markus Sauerbruch, Head of Division Switzerland and CEO of Stadler Altenrhein AG, held the ground breaking ceremony and laid the foundation stone for Stadler's new plant in St. Margrethen together with Benedikt Würth, member of the cantonal government of St. Gallen, Reto Friedauer, president of the municipality of St. Margrethen, and other guests from business and politics. Investments in the new centre of expertise for double-decker multiple units stand at around 86 million Swiss francs. Construction work is being carried out by HRS AG and will last until early 2020, although the company will be able to move into the first halls at the end of 2019.

### Commitment towards the border triangle area

Stadler continues to face considerable pressure on margins due to the currency situation and wage levels in Switzerland, combined with the company's high proportion of exports. The plant in Altenrhein was established by Claude Dornier just under 100 years ago for aircraft construction. Consequently, it is not ideal as a centre of expertise for double-decker multiple units. Efficiency needs to be increased in order to maintain operations in Switzerland, and this is the aim of the new plant in St. Margrethen. The rail vehicle manufacturer found the Altfeld construction site thanks to extensive support from the Canton of St. Gallen, the municipality of St. Margrethen and the landowner HIAG. The plot of land measures approximately 65,000 square metres and already has a rail connection, making it perfect for its new purpose. Stadler plans to build a production and warehousing facility covering 35,000 square metres along with 5,000 square metres of air-conditioned office space and meeting rooms. The new plant will ensure process optimization and result in increased efficiency thanks to optimal production possibilities. The transfer offers the added benefits of a modern staff canteen and excellent public and private transport connections. The investment clearly demonstrates the company's commitment towards Switzerland as a business location and towards the border triangle area. "It shows that we believe in Switzerland as a business location and continue to defend it, even in difficult times", says Peter Spuhler. The relocation only concerns the production site in Altenrhein. The head office in Bussnang, centre of expertise for bogies in Winterthur and commissioning centre in Erlen are not affected.

### "Economic impetus for the region"

Benedikt Würth, member of the cantonal government of St. Gallen, confirmed during the ground breaking ceremony in St. Margrethen that Stadler's success story in the Canton of St. Gallen had reached a new milestone: "The company's rapid growth initially brought new life to the industrial area of Altenrhein. The next chapter is now being written in St. Margrethen. It will bring significant economic impetus and opportunities for the entire region. Once again, this project also illustrates the importance of good relations between businesses and the authorities." "Stadler's move to St. Margrethen will enable the Altfeld site near the railway station to be put to use again for a high-quality, future-oriented purpose. We are anticipating major impetus for the development of the municipality", explains Reto Friedauer, president of the municipality of St. Margrethen.

### Centre of expertise for double-decker multiple units

The Stadler site in Altenrhein is currently home to the centre of expertise for KISS double-decker multiple units. The factory was originally founded in 1924 by Claude Dornier as Dornier-Werke Altenrhein AG. The airfield was built in Altenrhein to enable the aircraft built there to take off directly from the factory. The airfield commenced operations in 1927. The largest seaplane ever built in the world, the Do X, was assembled in Altenrhein and tested in Switzerland. From 1949, Dornier grew into Flug- und Fahrzeugwerke Altenrhein AG (FFA), and the company started to build rail wagons. Wagon building became one of FFA's core areas of work; for instance, all the vehicles operated by Rhaetian Railway (RhB) have been built in Altenrhein up to the present day. FFA was sold to Schindler Holding in 1987. Rail wagon building was kept at the site, and Schindler formed a second rail wagon building subsidiary, Schindler Waggon Altenrhein (SWA). In 1997, Stadler rescued the factory from closure and took it over from SWA, including the workforce of 67 employees. Two years after the launch of the articulated railcar (GTW), the Stadler workforce had doubled in size. The Altenrhein site covers over 49,000 square metres of production and warehouse space, where around 1,000 employees currently work on the development, manufacturing and assembly of KISS trains, as well as that of trams, metre-gauge rail vehicles and passenger coaches for the Swiss and international markets. The engineering department, with its 250 highly qualified employees, provides services for the entire Stadler group, partly through its role as a centre of expertise for all calculations and approvals. It also carries out development work for the vehicles produced on site. Detailed manufacturing of car bodies will continue to be carried out in Altenrhein by a workforce of approx. 50 to 70 employees.



SBB EMU Class 511.021 arrives at Sargans working an RE service to Wil. *Class47*





 Switzerland



▶ On June 10th, Ge 2/4 No. 222 and Ge 4/6 No. 353 climb towards Pontresina during an event to celebrate the 10th anniversary of the RhB becoming a UNESCO World heritage site.  
*Mark Pichowicz*

▶ On June 11th, RhB Ge 4/4ii No. 625 heads towards Schiers with train No. RE1323 08:20 Landquart - St. Moritz. *Mark Pichowicz*

▶ A SBB Re 10/10 combination of Class 620.079 and 420.345 head a southbound intermodal working at Lagenthal on June 14th.  
*Mark Pichowicz*





















## Alstom delivers its two first metro trains for Santo Domingo Line 2B

Alstom has delivered the two first out of 6 Metropolis trains for Line 2B of Santo Domingo's Metro. The train sets are composed of three cars each with wide doors, wide corridors and a low floor for an optimal flow of passengers.

In 2015, OPRET (Office for the Reorganization of Transportation), awarded Alstom to supply 6 additional Metropolis trains to line 2B, an extension of 4.6 kilometres and four additional passenger stations from Eduardo Brito up to Carretera Mella.

"Alstom is very proud to continue being a strategic partner to OPRET and the city of Santo Domingo and also to be delivering a project that will improve the quality of life for its residents and will allow the city to take a step further in becoming a more sustainable city", declared Ludovic D-Hauthuille, North LAM Managing Director at Alstom.



These Metropolis trains are part of Alstom's Metropolis range, which transports approximately 10,000,000 passengers daily in all over the world. To date, more than 5,500 Metropolis cars have been sold in different cities such as Barcelona, Warsaw, Singapore, Buenos Aires, Lima and Santiago de Chile.



## Major overhaul of northrail's Gravita locomotives in just eight weeks

- Manufacturer's comprehensive expertise decisive factor for award of order
- Short lead times reduce downtimes
- Product improvements enhance ease of use and availability

As part of a major inspection and overhaul of 13 Gravita 10BB locomotives from the northrail fleet, Voith is upgrading the vehicles with state-of-the-art technology. A decisive factor in the award of the order was Voith's comprehensive expertise. It is this proficiency that allows a lead time of just eight weeks per locomotive, which cuts downtimes for the operator.

Voith will be carrying out the overhaul of 13 Gravita BB locomotives till the end of 2018. The vehicles belong to northrail, which specializes in the leasing of diesel and electric locomotives. The Gravita locomotives are being used at various locations in Germany and Scandinavia for heavy-duty shunting service and regional freight traffic. Depending on the kind of service they perform the vehicles will have spent between 12,000 and 28,000 hours in operation.

Voith built the Gravita locomotives between 2008 and 2013. It therefore made sense for northrail to rely on the extensive expertise of the OEM for the scheduled general inspection and overhaul of its vehicles. Any other service provider would have had to familiarize themselves with the details of the design, which would have meant longer downtimes. In addition, Voith Service in Kiel has sufficient capacity to work on three of the locomotives at the same time. Following a mutually agreed schedule the rail vehicle rolls into workshops and leaves again after just eight weeks. "The short lead time was a major element of the contract and another reason for awarding the order to Voith," stresses Dr. Volker Simmering, Managing Partner of northrail GmbH. This is because for northrail, a subsidiary of the Hamburg-based Paribus Group, every shutdown means a loss of leasing income. The first Gravita 10BBs have already been overhauled and delivered to a highly satisfied customer.

The scope of the order also includes the integration of state-of-the-art technical components that improve the ease of operation of the Gravita 10BB at various levels. For example they help to further improve the reliability of the vehicles and therefore increase their availability. The precise scope of works depends on the condition of the individual locomotives as evaluated by both parties. Depending on the level of wear Voith is also replacing the wheels of the locomotives.

Photo: ©northrail GmbH







## Contract Signing with Arriva Netherlands Will See Stadler Provide Service and Maintenance for 69 Trains in the North of Holland

Stadler has sealed a deal with Arriva Netherlands to maintain and service 18 WINK trains and 51 GTW trains, which will rely heavily on battery technology and boast enviable environmental credentials. They will operate in the Noordelijke Lijnen concession in Friesland and Groningen and are managed by Arriva.

The contract, starting in 2020 and running till 2035, builds on the 15-year service and maintenance contract already in place since 2006. Today's signing follows the announcement in November 2017 that Stadler will manufacture 18 new WINKs and refurbish 51 GTW.

Hein van der Schoot, Managing Director of Stadler Service for the Netherlands and UK, commented: 'We are thrilled to be awarded this contract. It sees Stadler blazing a trail within the industry for cutting edge, green technology and is testament to our commitment to mitigating the effects of climate change. We are also proud to continue the long term partnership with Arriva Netherlands, which has already proved successful for many years and resulted in excellent passenger satisfaction.'

Anne Hettinga, Chairman of the Board of Directors of Arriva Nederland, also emphasizes the importance of the new contract: 'The cooperation between Arriva and Stadler is an economic driver for the northern part of The Netherlands. This contract is a big step in the preparation for the new concession. We look forward to working together for 15 more years. We apply our innovative approach to developing new trains as well as service and maintenance.'

### WINK propelled by Bio-diesel and batteries

The new WINK trains will run on the renewable fuel Hydrotreated Vegetable Oil (HVO) as well as battery power. HVO is a renewable fuel (second generation bio-diesel), which is made of vegetable oil and fat waste, such as frying fat. By 2025, the Leeuwarden-Groningen route will be partially electrified. From then on, on the non-electrified parts the WINKs will only use the stored energy in the batteries. The use of (bio-)diesel will no longer be required.

### GTW with comprehensive overhaul

In 2020, the GTW trains will receive a comprehensive overhaul. They will be renovated inside and out and be converted to battery operation, bringing emissions down and making them far greener than previously.

### More jobs in Leeuwarden

In preparation for the new fleet, Stadler will expand the depot at Leeuwarden. In order to accommodate the new trains to be serviced and maintained, a third track will be added and a number of additional mechanics will be hired.

The WINK is Stadler's two-car multiple train unit. These trains are suitable for lines with lower passenger volumes and are designed as bi-modal units, meaning they are powered by a diesel engine with hydrogenated vegetable oil. WINK is a German acronym that stands for convertible, innovative, short train for local transport. The GTW is a family of articulated rail vehicles, available in diesel-electric configurations and electric versions for all common voltages.



## Alstom to supply integrated metro system for Taipei Metro Line 7

Alstom together with Taiwanese engineering and contracting services company CTCI has won a contract from Systemwide E&M Project Office Department of Rapid Transit System Taipei City Government (SEMPO) to supply an integrated metro system for Taipei Metro Line 7 phase one. The total contract value is 378 million euros, while Alstom's share is worth close to 220 million.

Taipei Metro Line 7, also called Wanda Zhonghe Shulin Line, is a medium capacity rapid transit line. Phase one is 9.5 km long with 9 stations connecting Taipei City with New Taipei City Zhonghe district and Tucheng district in 15 minutes.

As consortium leader, Alstom will supply 19 Metropolis trains, Urbalis CBTC driverless signalling system, Supervisory Control and Data Acquisition (SCADA) system, and platform screen doors. Besides, Alstom will work together with CTCI on project management and system integration. CTCI will provide the track work, power supply, depot equipment, Telecommunication and Ticketing systems.

Alstom is very pleased to win this contract, supporting Taipei to extend its efficient, reliable and sustainable transport system. With its international and domestic service proven references in integrated metro systems, and its local presence in Taiwan market, Alstom is confident to deliver this project with a high level of excellence, said Ling Fang, Senior Vice President, Asia Pacific at Alstom.

Alstom is world leader in integrated metro systems. So far, Alstom has won 20 integrated metro system projects in 16 countries across four continents, including Singapore Circle Line, Montreal Réseau express métropolitain (REM) line, Hanoi Line 3 and Riyadh metro yellow, green and purple line.

Alstom also plays a leading role in driverless metros worldwide. So far, 26 driverless metro lines worldwide have ordered Alstom signalling and/or rolling stock solutions. 12 driverless metro lines are in Asia Pacific, including Taichung metro line, Singapore North East Line, Circle Line and Thomson East Coast Line and Hong Kong South Island Line.

Alstom has been in Taiwan for over 37 years. It provides signalling systems to all but one of Taipei's metro lines, and is currently supplying driverless signalling

system for Taichung metro line.

In 2017, Alstom won its first tramway project in Taiwan, supplying its latest Citadis tram to Kaohsiung tramway line phase two.







## CAF WELCOMES INVITE TO JOIN HS2 ROLLING STOCK CONTEST IN UNITED KINGDOM

CAF has welcomed an invite from HS2 Ltd to join the list of companies invited to participate in their procurement programme for state-of-the-art high speed trains to operate on the UK's new high speed network and beyond.

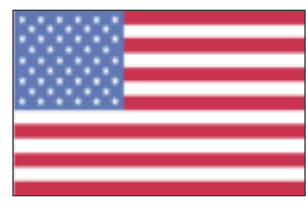
Operating at speeds of up to 225mph (360kph), the new fleet will deliver unparalleled levels of reliability, speed and comfort as well as providing much-needed extra capacity between the UK's major cities and giving a boost to high tech skills and expertise in the UK.

The contracts will be for the design, build and maintenance of at least 54 trains, coming into service from 2026.

Welcoming the news, Richard Garner, CAF UK Director said: "We are extremely pleased to be included in the HS2's procurement programme. Our Oaris high speed trains use the latest technology offering high speed travel which is comfortable, safe and provides digital connectivity to facilitate the busy world that we live in.

The new high speed trains will meet the highest international standards for passenger experience, noise reduction, and environmental sustainability.

CAF plan to build the trains in its manufacturing facility currently being constructed in Newport, Wales."



## NCTD Board Approves Purchase of New Locomotives to Serve San Diego County

The North County Transit District (NCTD) Board of Directors approved the purchase of five new Siemens locomotives at the June Board meeting. The five locomotives being replaced were originally built between 1975-1992 and were purchased as used by NCTD. These five locomotives have reached the end of their useful life.

"These new locomotives will help support our mission to provide reliable public transportation to passengers throughout San Diego County," said Bill Horn, NCTD Board Member and County Supervisor for the 5th District. "In addition to increased reliability, they will also incorporate new technologies that release lower emissions and will improve air quality in the region."

The new locomotives will allow NCTD to improve operational efficiency while contributing to local and state sustainability and air quality goals, with an estimated 90% reduction in emissions (compared to the existing engines) and 16% reduction in fuel consumption.

"Businesses and commuters throughout San Diego County benefit from the convenience and the presence of the COASTER and they will benefit even more from these updated vehicles," said NCTD Board Chair Rebecca Jones.

"Our Board is happy to welcome the new fuel-efficient and lower-emission vehicles to NCTD! We look forward to the enhanced service our passengers will receive from them," said NCTD Board Vice-Chair John Aguilera.

Siemens provides rail vehicles, locomotives, components, and systems to more than 25 agencies in cities such as Washington D.C., New York, San Francisco, Portland, and Sacramento. In addition, Siemens provides traction-power substations and electricity transmission, as well as signaling and control technology for freight and passenger rail systems.

Janet Rogers, from the Train Coalition at Santa Fe Depot, noted, "The benefit of having cleaner-burning engines is of utmost importance to residents along the corridor. The new dependable equipment will thrill the thousands of COASTER passengers who rely on the trains every day."

Approval from the Board enables NCTD to purchase the diesel-electric Siemens Charger locomotives as part of a multi-state procurement with the California and Illinois Departments of Transportation. This joint agreement saves money for the District due to lowered procurement costs. Additionally, the size of the procurement aids in the future acquisition of needed parts for continued operations as the same type of vehicle has already been purchased in multiple states.

"We are most grateful to NCTD for this order and extremely proud to supply these Californian built locomotives from our Sacramento facility, which currently has more than 1,300 dedicated and passionate employees," said Michael Cahill, president of Siemens Rolling Stock in the U.S. "It's a plant that is solar powered, making it even more energy efficient in terms of its overall sustainability footprint."

The purchase of new COASTER locomotives—priced collectively at over \$37 million—has been made possible by State of California funding provided by new revenues generated from Senate Bill 1 (SB1): The Road Repair and Accountability Act of 2017 and \$10 million of Carl Moyer grant funds provided from the Air Pollution Control District. Once the locomotives are received, NCTD is slated to add 36 additional COASTER trips each week to the current schedule—six on each weekday, three on Saturday, and three on Sunday. NCTD anticipates delivery of the first vehicle in March of 2021, and the last vehicle in June of 2021. It is estimated that vehicles will be put in-service three to six months after the delivery of each vehicle.







## Maximum driving comfort and minimal running costs: Helsinki receives ten more low-floor trams with electric drive systems from Voith

Energy efficiency, reduced life cycle costs and increased availability

The successful operation of the current fleet further assisted in securing this order

A total of 70 Artic trams will be operating with electrical drive systems from Voith, by 2019

A total of 70 low-floor trams equipped with Voith's electric drive system will be driving through the streets of Helsinki, by 2019.

Transtech Oy, the Finnish rail vehicle supplier and part of the Skoda Transportation Group, relies on Voith Digital Solutions Austria's electric drive system for an additional ten ForCity Smart Artic low-floor trams. The drive systems from St. Pölten have proven themselves in the existing Helsinki trams with an availability rate of more than 99 percent, after having driven more than 2.2 million kilometres.

Transtech Oy commissioned the first 40 low-floor trams with an electric drive system from Voith, during the latter part of 2017. An additional 20 vehicles are scheduled for delivery. The delivery of the new series is scheduled to take place during 2019 with the last orders arriving by mid-2019. The scope of supply and services provided by Voith remains unchanged from the vehicles that have already been delivered. The package includes the entire drive system including traction inverters, drive motors, final drives and complete wheelsets, as well as parts of the vehicle control such as diagnostic and monitoring system.

The Artic® low-floor tram achieves low-floor configuration despite a freely pivoting bogie. A separate motor-gear unit with a continuous output of 65 kW drives each of the eight axles of the 27.6 m long vehicle. The traction motors receive their input power via two EmCon double traction inverters with a continuous output of 2 x 220 kVA each. The integrated drive control ensures excellent control and optimum coordination of the components of the drive system. This affects important parameters of the rail vehicle, such as safety, energy efficiency and the vehicle's lifespan.



“The specifications to be met by trams in the Finnish capital are especially stringent due to the challenging weather conditions and the knock-on affects of the transport network”, explains Alfred Gmeiner-Ghali, Vice President Sales & Marketing at Voith Digital Solutions Austria. “Alongside maximum driving comfort and minimal running costs, the particular robustness of the vehicle coupled with their reliable traction system were the decisive factors in awarding us the order for our electrical drive systems. We are delighted about this follow-up order and regard it as confirmation of our successful collaboration to date with Transtech Oy”.



## Choose stress-free travel to the slopes

### Eurostar tickets for winter services to the French Alps on sale from 18th July

Eurostar, the high-speed passenger rail service linking the UK with mainland Europe, is opening sales for tickets to the French Alps on 18th July 2018. The direct journey takes travellers from the centre of London to the side of the slopes, whilst they sit back and relax avoiding airport stress and time-consuming transfers to resorts.

From London St Pancras and Ashford International stations, passengers benefit from a stress-free journey, comfortable and spacious surroundings, as well as a generous baggage allowance of two suitcases plus hand luggage, and skis or snowboards at no extra cost.

Eurostar services direct to the French Alps stop at Moûtiers, Aime-la-Plagne and Bourg-St-Maurice, making it easy to access many of Europe's top resorts including Courcheval, La Plagne, Tignes, Meribel, and Les Arcs. A variety of services allow passengers to pick the one which suits them best:

- Friday overnight: Make the most of every minute on the slopes by arriving on a Saturday morning ready for a day on the snow.
- Saturday daytime: Sit back and enjoy the journey, with a relaxing start to a holiday as the countryside passes by.
- Saturday overnight: Providing more capacity during peak weeks. Combine it with a Friday overnight service to squeeze in an extra two days of quiet pistes.

The 2018/19 seasonal ski services will run weekly from 21 December 2018 until 6 April 2019, with fares from £75 each way.

This ski season, Eurostar has partnered with Maeva to offer travellers a curated range of chalets and rentals across the resorts of Moûtiers, Aime-la-Plagne, Bourg-St-Maurice, Val Thorens, Val d'Isère, Courcheval, Tignes, Méribel and Les Menuires. To save skiers from searching for the perfect place to stay, the selection of properties are all safety vetted, well-equipped and close to the pistes.

Eurostar travel, accommodation, lessons, lift passes and equipment can be booked together through holiday-rentals.maeva.com from 21st July.



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## Bombardier and Austrian National Railways Sign Call-off Order for 25 TALENT 3 Trains

Six-car electrical multiple units for use in Tyrol and South Tyrol  
With the second call-off, a total of 46 TALENT trains have been ordered for Austria

Bombardier Transportation and the Austrian Federal Railways (ÖBB) signed a call-off order for the delivery of 25 BOMBARDIER TALENT 3 trains on June 29, 2018. This second call-off is based on a framework agreement signed in 2016 for up to 300 trains. The total value of this order is approximately 188 million euro (\$218 million US dollars). This call-off includes an option for an additional five trains.

Of the 25 new six-car electric multiple units, 19 vehicles will be used in Tyrol. The remaining six trains will be used in South Tyrol for cross-border traffic to Italy. This will increase the transportation options on the major connections between rural and urban areas in the Austrian region of Tyrol, and in South Tyrol and Italy. The delivery of the trains for Tyrol is scheduled for 2020, with the trains for South Tyrol scheduled for 2021.

“With this procurement, ÖBB is systematically continuing its fleet renewal”, says Evelyn Palla, Board Member of ÖBB-Personenverkehr AG. “This ensures both accessibility and a state-of-the-art comfort standard in local and regional transport for Tyrol.”

“It is a huge gesture of trust for Bombardier and a great confirmation of the new TALENT 3 regional train that ÖBB decided to purchase a second order before the first trains were even delivered,” says Christian Diewald, Head of Bombardier Transportation in Austria. “We are looking forward to continuing our trusting collaboration with ÖBB. Together, we will successfully implement the expansion and modernisation of the transportation options in Austria.”

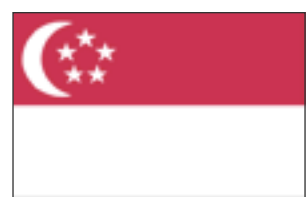
With its particularly wide railcar body, the new TALENT 3 allows for up to 50 per-cent higher

seating capacity in comparison to the previous generation.

Thus, this train allows for a more rapid passenger changeover and maximum travel comfort. The trains are capable of strong spurts and score points with six driven axles for high acceleration capacity. In total, around 1,400 trains from the TALENT family are already in use in Europe and Canada. Of those, 187 vehicles are operated by ÖBB in Austria.



Bombardier’s products ensure mobility in Austria. Modern BOMBARDIER FLEXITY trams are in use in large cities like Linz, Innsbruck, Graz and, in the future, Vienna. In addition, city trains for the Vienna subway line 6 and commuter trains for ÖBB, as well as locomotives for several private cargo companies come from Bombardier. The Vienna site is Bombardier’s centre of expertise for trams. Around 500 employees are employed there.



## Bombardier Wins Contract to Provide 396 MOVIA Metro Cars for Singapore’s North-South and East-West Lines

New order of 396 metro cars bring the number of MOVIA vehicles in Singapore to 672, making it one of Bombardier’s largest metro fleet in the world

The two high-capacity Mass Rapid Transit (MRT) lines total 102 km and serve 61 stations with an average daily combined ridership of 1.8 million

Bombardier Transportation has announced that it has signed a contract with Singapore’s Land Transport Authority (LTA). The contract’s scope covers the supply of 396 BOMBARDIER MOVIA metro cars for passenger services on the high-capacity North-South (NSL) and East-West (EWL) Mass Rapid Transit (MRT) lines. The contract is valued at approximately 827 million SGD (\$607 million US, 519 million euro). The contract includes an option for long-term service support, and if exercised by SMRT Corporation Ltd, the total contract could be worth up to 1.2 billion SGD (\$881 million US, 753 million euro).

Commenting on the award, Laurent Troger, President of Bombardier Transportation, said, “The proven MOVIA metro is a world leading high-performing

mobility solution designed to improve public transport reliability in densely populated and fast-growing cities. For more than 20 years, Bombardier has been a strategic mobility partner to the Singapore Land Transport Authority, built on a strong track record of delivery performance, best-in-class rail technology and service excellence. Bombardier is proud to be a significant contributor to Singapore’s public transport network and to support LTA’s ambitious expansion plans to grow its rail network to 360 km by 2030.”

The modern MOVIA metro vehicles integrate some of the world’s most advanced mobility technologies including the BOMBARDIER MITRAC propulsion and control system that manages the flow of both onboard and subsystem information as well as data between the vehicle and the rail infrastructure. In its six-car configuration, the new order of 396 metro cars bring the number of MOVIA vehicles in Singapore to 672, making it one of Bombardier’s largest metro fleet in the world and provide a much-needed reliability improvement on two of LTA’s high-capacity lines. Combined, the two lines, running both above and underground, total 102 km in length and serve 61 stations, with an average daily combined ridership of more



than 1.8 million.

Over the last 20 years in Singapore, Bombardier has delivered 276 driverless MOVIA metro cars for Singapore’s Downtown Line and 13 INNOVIA APM 100 automated people mover cars for the Bukit Panjang Light Rail Transit (LRT) system. Earlier this year, a new asset replacement contract was awarded to supply 19 new INNOVIA APM 300 cars, to retrofit 13 existing APM 100 cars, as well as to deliver a signalling system upgrade for 13 stops on the Bukit Panjang LRT Line.





## Amsterdam Metro North-South Line enters service with Alstom train control and signalling



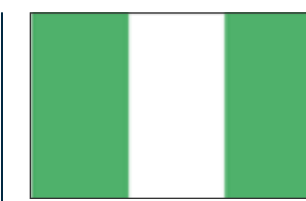
Alstom's Urbalis 400 communications-based train control (CBTC) solution is the train control and signalling system behind the Amsterdam Metro North-South Line, a new line adding ten kilometres to the existing network, which opened on Saturday 21st of July with eight new subway stations. The new line was inaugurated by the new Mayor of Amsterdam, Femke Halsema, and Sharon Dijksma, Alderwoman of Traffic and Transport for the City of Amsterdam.

Alstom was awarded the contract to install Urbalis 400 on the line by the MET, the city's metro and tram authority, in 2012. The complete project scope includes the deployment of CBTC across the new North-South Line (line 52) and the existing lines 50, 51, 53 and 54, totalling 39 kilometres of track and 40 stations, as well as a new control centre and the installation of CBTC equipment aboard 90 trains.

"Alstom is very pleased to be part of this unique project and to support GVB and MET in their commitment to offer their passengers improved service, namely faster and more reliable travel on the busiest lines of the system. Our team remains ready to continue to ensure the performance expected of the network," said Gian-Luca Erbacci, Senior Vice President Alstom Europe.

Alstom's Urbalis solution will help the Amsterdam operator GVB not only reduce headway and provide 25% additional line capacity, but also increase operational performance and reliability. Lines 50, 51, 53 and 54, on which some of the original signalling equipment dates back to 1977, are expected to be in operation with CBTC by 2019.

Alstom boasts over 15 years' experience in radio CBTC solutions, which give operators precise control in the movement of their trains, allowing them to run on the line at higher frequencies and speeds in total safety - with or without drivers. Alstom's Urbalis accounts for over 25% of all radio CBTC solutions in operation around the world. There are over 90 Urbalis CBTC metro lines in 25 countries, covering more than 1,600 kilometres. References include lines in Sydney, Beijing, Nanjing, Shanghai, Milan, Sao Paulo, Toronto, Panama, Riyadh and many more.



## Alstom signs agreement for Lagos Blue Line metro in Nigeria

Alstom has signed a Head of Agreement with Lagos State Government represented by Lagos Metropolitan Area Transport Authority (LAMATA) for both Phase 1 and Phase 2 of the Lagos Blue Line metro. The signature took place at the France-Nigeria Business Forum attended by Mr Emmanuel Macron, President of the French Republic, and His Excellency, Mr Akinwunmi Ambode, Executive Governor Lagos State.

As part of Phase 1, Alstom will ensure the electrification of a portion of the line with third rail as well as substations. After phase 1, Alstom and the Lagos State Government intend to work jointly on Phase 2 of the project by structuring financing from Export Credit Agencies (ECA) to provide metro trains, CBTC based signalling, the operation and control centre, passenger information services and the ticketing system in the stations.

The Blue Line project is of strategic importance for the city of Lagos as it allows our people to travel safe and fast across longer distances. The integration with existing transport systems like our bus or boat lines, and future metro lines will largely contribute to our global transport plan for Lagos to reduce traffic congestion and make Lagos a smart city, said Engr. Abiodun Dabiri, Managing Director, LAMATA.

Alstom would be proud to participate for the first time with the Lagos local authorities and Lagos Metropolitan Area Transport Authority to the achievement of this important milestone for the city, building on our experience as a global leader in metro projects. Equipped with proven reliable and ecological solutions, the Blue Line will contribute to positioning the city among the showcases of sustainable mobility in Africa, stated Didier Pflieger, Senior Vice President Middle East and Africa.

The Blue Line when complete will be composed of a 27km line with 13 stations from Okokomaiko to Marina. The phase 1 and 2 of this line will cover a distance of 12km out of which 4km on viaduct and 5 stations. This project is the first reference for Alstom in Nigeria. The city of Lagos counts 22 Million inhabitants and is facing severe traffic congestion.

Considering the increasing transport demand in the city of Lagos, the Blue Line metro construction aims to address mobility challenges, stimulate economic growth and job creation while improving the environment and air quality of the city. It will carry 400,000 passengers daily with capacity increased to 700,000 passengers daily at completion.





From the UK

## DRS Open Day Crewe

On July 21st, DRS held an open day at Crewe Gresty Bridge. As always, enthusiasts came from all over the country and with some excellent weather, attendance figures were very good. All money raised through the event will go towards the DRS Sponsorship and Donations Fund which supports local causes and charities.

▶ The oldest locos in the fleet, Class 20 303 and 20 302 are seen outside at Gresty Bridge.  
*Paul Godding*

▶ Recently returned to service after a long time in storage/preservation, Class 37 407 stands gleaming on July 21st.  
*Paul Godding*

▶ Showing off its TransPennine colours, Class 68 019 'Brutus' puts in an appearance at the open day on July 21st.  
*Jeff Nicholls*









From the UK

## DRS Open Day Crewe

▶ Class 57 007 and TPE liveried Class 68 021 are positioned in the yard. *Paul Godding*

▶ An immaculate Class 68 029 is seen on display inside the main repair shop at Gresty Bridge. *Brian Battersby*

▶ Class 37 259 is seen inside the main workshop. *Paul Godding*







