







# Welcome

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

Obviously the main news this month relates to Coronavirus and the fact that many railways around the world have reduced services vastly, and some have stopped running trains completely. This all relates to most countries being in lock down with people not supposed to travel unnecessarily. Lets hope that it all gets resolved within a reasonable time frame, but most of all I hope that everyone is staying safe.

Some sad news this month, and I know not everyone likes track machines, but Dr Josef Theurer, founder and long-standing CEO of track maintenance machine manufacturer Plasser & Theurer, has died on March 19th at the age of 91. Dr Theurer established Plasser & Theurer with Franz Plasser in 1953 and built up the business over the following six decades, to the point where the group and its subsidiaries now employ more than 4 000 staff in Austria and around the world. During his career Dr Theurer filed more than 1 000 patent applications for a wide range of technologies that have helped to support the mechanization of railway construction and track maintenance, delivering a significant improvement in productivity, safety and sustainability.

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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 to be sent to us via email, post or via the members section page on our website. Contact addresses are provided to the right or on the next page.

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

## Contact Us

**Editor: David**  
david@railtalkmagazine.co.uk

**Co Editor: Andy**  
editor@railtalkmagazine.co.uk

**Content Submissions**  
entries@railtalk.net

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

### Front Cover

On February 12th, No. EP2K.197 pauses at Novosibirsk with a Trans-Siberian train from Vladivostok to Moscow.  
*Mark Torkington*

### This Page

Have hut - will travel! This engineers train with its unique consist is seen heading through Breclav in Czechia. Just one example of how to repurpose things I suppose. *Class47*

### Next Page

Gysev Vectron Class 471.502 arrives into Heygeshalom with an intermodal service on March 7th. *Class47*







Following the announcement last month that Russian Railways had sold its majority stake in TransContainer to specialist Delo Group and had decided to withdraw from the Slovakian market, winding up its local subsidiary and ending its lease on the Dobra terminal five years early, Slovakian national freight operator ZSSK Cargo and its subsidiary Bulk Transshipment Slovakia have reopened the terminal and operated their first intermodal block train through the Dobrá transshipment terminal on the Ukrainian border. ZSSK Cargo said it now hopes to exploit the full potential of the terminal and take advantage of its close proximity to transshipment facilities at Čierna nad Tisou. 'With the usual border terminals being full, Dobrá will provide much needed capacity', said Chairman Martin Vozár. 'It might also help to ease the congestion at Polish cross-border stations.'

As most holidays have been scuppered for the foreseeable future, it seem pointless for me to even suggest 'remembering to take the camera'.

So until then, a massive thanks for all the excellent photos, please keep sending them in, if you can, and stay safe.

**David  
Editor**

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HAD-PRINT  
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Selby, North Yorkshire  
YO8 8BE  
info@had-print.co.uk | 01757 600211



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▶ ÖBB Class 1142.627 and a Class 1144 are seen at Linz Hbf on March 6th, both having arrived on terminating services. *Class47*

## Powering ahead with timber transport

A freight train with 40 wagons fully loaded with wood and a track section with enormous height differences – this was a like a walk in the park for the Vectron powerhouse, this Rail Cargo Hungaria consignment was a breeze.

Powerful, 6,400 kW, 90 tonnes in weight, a top speed of 160 km/h and internationally deployable – this is the Vectron locomotive and the powerhouse of the Rail Cargo Group.

Its performance capacity mean that a 2,120 tonne load of timber transported by Rail Cargo Hungaria between Rajka, a municipality in Western Hungary, and Curtici, Romania, can now be handled with ease – the process is straightforward and no additional traction services are needed. After all, trains on this section of the line in the Tatabánya region have to cope with topographical challenges such as enormous differences in altitude. The maximum permissible transport weight is 2,000 tonnes, which means that no other locomotive would have been capable of transporting this load on its own.

But for the Vectron powerhouse, transporting 40 Ea wagons fully loaded with wood posed no problems at all; it was a breeze. A Taurus locomotive then took over the transport in Ferencváros/Budapest, Hungary, as far as the Hungarian-Romanian border, from where the wood was brought to its final destination in Vintu De Jos, Romania.











On March 10th, OBB Class 1142.664 and 1142.640 have just passed Austria's largest shunting yard, the "Zentralverschiebebahnhof" in Kledering, next to Vienna. The train KGAG No. 53513 carries wood chips from Schwarzenau in the Waldviertel to St. Michael in Styria.  
*Thomas Niederl*

## Attractive new rail connection for Croatia

Rail Cargo Group's direct connection from and to Croatia in cooperation with HZ Cargo and SZ Cargo makes fast and direct freight transport possible at short notice

The Rail Cargo Group has developed a new direct route to and from Croatia that will help overcome the challenges currently facing international freight transport and facilitate smooth transloading to the rails. Services to Graz and Villach can be combined and brought to and from every region in Croatia without any detours being made.

What is more, this new route provides new connections to Germany, the Czech Republic, Slovakia, Poland and Hungary. Individual bookings can be made at short notice and the range of services on offer depends on existing demands. This new connection

means that customers' goods get delivered faster on account of shorter transport times and offers comprehensive, transnational handling services from a single source. This enables the Rail Cargo Group to keep the international flow of goods moving and make sure supplies are delivered to and from Croatia on the rails.

Unlike road freight transport, which has been affected by massive restrictions to cross-border traffic and an ever decreasing number of truck drivers, rail freight transport still has excess capacity.









Slovakian Vectron No. 383.102 passes the halt of Neudorf on the Bratislava Petržalka - Parndorf branch of the Ostbahn. This is train No. IC44 from Kosice and it is the only direct connection from Austria to destinations further away than Bratislava in Slovakia. Nobody thought that only three days later, this train and all other international services to and from Slovakia would be cancelled until further notice. *Thomas Niederl*

















On March 7th, OBB Vectron Class 1293.010 hauls a rake of PKP coal wagons through Breclav.  
*Class47*

## CD Cargo handles transport from northern Italy

The viral epidemic currently affecting almost the whole world is also significantly complicating the transport of goods. However, even in this difficult situation, ČD Cargo is ready to carry out the transport of any goods, even from the northernly affected northern Italy.

On March 30th 2020, two wagons loaded with wire coils were brought to the tracks of Ostrava Central Station's commercial area. They were sent from a smelting plant in Osoppo, Italy. Another three wagons were on their way to the Czech Republic.

Photo: ©CD Cargo







## The ETCS project in ČD Cargo goes on

Even in these difficult moments of viral pandemic, CD Cargo company, in cooperation with its suppliers of ČD - Telematika and CZ LOKO, is able to continue the project of equipping traction vehicles with the ETCS train control system. A big thank you belongs to all those involved both on the part of ČD Cargo and on the part of suppliers.

As early as March 18, 2020, the locomotive 163 022, which is the prototype of the locomotive series 163, was taken over from ČD - Telematika supplier after the physical installation of ETCS and all other related components. The locomotive will now be in trial operation, the conditions of which have been set by the Rail Authority of the Czech Republic and which is planned until the end of April at the latest. Training of ČD Cargo employees took place at the beginning of March so that nothing hinders the test operation. In particular, the newly installed equipment such as the national train control system LS06, electronic speedometer TELOC 3000 and others are subject to tests. The ETCS is currently in a secure state (called isolation mode).

On March 30th, locomotive No. 742.712 was taken over from the CZ LOKO supplier after the completion of the modernization including the installation of the ETCS train control system. Even in this case, the ETCS is still in a safe state (isolation mode) on the locomotive. At present, the engine is capable of operation on the nationwide and regional railways and sidings in the Czech Republic according to their standard conditions. The locomotive will reinforce the fleet in the Operational Unit at Prague, where the 742.711 engine is already in operation.

Equipping the locomotive series 163 and 742.71x with the ETCS train control system is co-financed by the European Union Connecting Europe Facility (CEF) in a project called Deployment of ERTMS / ETCS on-board components compliant with ETCS Baseline 3 in ČD CARGO, as vehicles on the Rail Freight / Core Network Corridors. The grant is provided by the EU Innovation and Networks Executive Agency (INEA) on the basis of a grant agreement, which is the result of a successful application for financial support submitted in 2015 CEF Transport Cohesion Call.

Photo:CD Cargo



CD Cargo's Class 230.110 appears to have suffered fire damage, seen at Breclav on March 7th. *Class47*





▶ CD Class 242.209 approaches Breclav on March 7th with a service from Brno. *Class47*





CD Class 362.163 speeds through Pečky on March 8th with a service to Praha hl.n. *Class47*

## CD Cargo helps the Diaconia social cooperative

The Diakonie Broumov social cooperative decided to launch a public collection to support the collection of used clothing from collections and public collection containers, and ČD Cargo, as a traditional partner of Diakonie Broumov, also decided to help.

“We transport about 350 wagons loaded with used clothes to Broumov every year and in the current difficult situation we decided to provide even more significant discounts on our tariff and to realize these transports at the level of necessary costs for a transitional period,” says Ivan Bednárik, ČD Cargo’s Chairman of the Board. “We also offered to Diakonie postponing the graduation of already issued invoices.”







## Wood transport in Austria

ČD Cargo has started transporting wood for a sawmill in Retz, Austria, on its own license - with locomotive and driver of ČD Cargo. The first consignment transported this way was a complete train made up of Sggmrrs wagons with GigaWood superstructures, loaded on March 11th 2020 in Pribram. The next complete train departed from on March 20th and others will follow.

Transport of this wood had previously been by road. One complete train thus saves 34 trucks journeys. In the current crisis situation, we have not only helped our roads, but above all, simplified and accelerated cross-border transport of goods to Austria.

The wagons are also fully employed in the opposite direction of wood from the Znojmo area to the paper mill in Štětí.

Photo: ©CD Cargo



▶ A pair of Unipetrol 'Goggles', with No. 753.741 leading, stand at Decin on March 8th. *Class47*





## The recent technical conference showed the future of CZ LOKO locomotives.

### The development is directed towards a combination of electricity, batteries and internal combustion engines.

The future of CZ LOKO locomotives is in the combination of various types of energy, ie electricity, batteries and internal combustion engines. “We are working on several versions of new locomotives, some of which should be on the market between 2022 and 2023,” said CEO Josef Gulyás at the Technical Conference on the Future of Shunting Locomotives in the Czech Republic, held on March 10th in Česká Třebová.

“We respond to new trends, legislative developments and market requirements. We hear from customers not only in Western Europe that they no longer want purely diesel locomotives. We respect current developments across the market and listen to the views of our clients and partners. The dynamics of inevitable change is enormous. For what decades were sufficient at the turn of the millennium, it is now necessary to deal with for years,” said Josef Gulyás. This should allow for a more significant expansion into Western markets.

The basis of these concepts was the last introduced HybridShunter 400, which uses battery power and for backup charging is also equipped with a combustion engine CAT C4.4. power of about 130 kW. On a battery recharged eight hours from the external power network is supposed to handle sixteen hours of operation. The trial operation of the prototype will begin this year and several leading Czech industrial companies have already expressed their interest in testing new technologies under normal conditions.

The DualShunter 2000 with an output of around 2 MW is based on the EffiShunter 1000, the first CZ LOKO locomotive approved according to international TSI standards. The engine should remain in it, but there will be a pick-up and complete traction equipment for driving under dependent traction. Its weight should not exceed 80 tonnes. The nearly 2000 kW EffiLiner 2000 concept includes a diesel-electric drive with an additional 400 kW equivalent battery. The third new locomotive in the CZ LOKO plans is the DualLiner 2000 allowing operation in both 3kV and 25 kV 50 Hz traction systems as well as from an internal combustion engine as needed. Both solutions are expected to offer nearly the same power of 2,000 kW and a speed of 120 km / h. Here, too, the weight should not exceed 80 tonnes. Higher weight means limitations in the track class, and locomotives could not run on smaller regional lines. The combination of dependent and independent traction will allow carriers to serve the so-called “last mile”, ie to drive on an unelectrified track or to serve a siding.

“We intend to develop these performance parameters of our locomotives in the coming years. However, our main business is and will be shunting locomotives and locomotives for medium-haul service,” added Jaroslav Plhák. According to him, creativity in the development of today is mainly limited by national and European standards and legislation, more must also address the design of the locomotive, affecting marketability. This was the case, for example, with the modernization of brejlovky to the so-called bisons bearing the trade name EffiLiner 1600.

“If we want to keep our products alive for the next thirty years, we need to continuously innovate them, always be one step ahead of the competition and set trends in the segment,” said the technical director. Times are very short - from the study to the start of mass production should not pass more than four years.

Prague Tatra T3R.PLF tram No. 8252 is seen working service No. 26 to Nadrazi Hostivar and has just called at Masarykovo. *Class47*





CD Class 754.049 approaches Praha hl.n. on March 8th with one of the regular Sunday morning services to Cercany. *Class47*

## CD Cargo moves Ethanol by rail

On March 24th, a set of another six wagons loaded with ethanol left Ethanol Energy's siding in Vrды. It headed to ČEPRO's warehouses in Šlapanov, where it arrived in less than 16 hours, thanks to ČD Cargo.

CD Cargo have transported 720,000 litres of ethanol in recent weeks from Vrды.

Photo: ©CD Cargo















## Alstom to supply 17 additional Citadis trams to the Eurometropole of Strasbourg

Alstom will supply 17 additional Citadis trams to the Strasbourg Transport Company (CTS) and the Eurometropole of Strasbourg for the sum of €52 million. This order will complete the fleet of 63 trams delivered by Alstom between 2003 and 2019, and confirms a partnership of almost 20 years between Alstom and CTS. The last option exercise, signed in March 2016, was for 10 Citadis trams for the extensions of lines A and D.

These 17 new trams will reinforce the existing lines, including line D, which serves the city centre of Kehl in Germany. The Citadis tramway is the first to cross a border in France and is approved according to the BOStrab, the German federal decree on the construction and operation of trams in Germany.

“With this new order, CTS is the French customer that will own one of the largest Citadis tram fleets with a total of 80 trainsets ordered. We are very proud to be continuing this partnership initiated in 2003, proving that the Citadis range meets the evolving needs of our customers,” says Jean-Baptiste Eyméoud, Managing Director of Alstom in France.

The Citadis trams for Strasbourg are 45 metres long and have a capacity of 288 passengers. They are fitted with LED lighting and all-glass doors to enhance comfort and safety for passengers. Complying with the latest standards, the trams are equipped with double doors accessible to PRMs (People with Reduced Mobility), wider seats and areas reserved for wheelchair and stroller users.

These trams will be designed and manufactured mainly in France: La Rochelle (design and assembly of the trainsets), Le Creusot (bogies for the intermediate modules), Tarbes (components of the traction chain), Villeurbanne (electronic equipment) and Saint-Ouen (design). The bogies situated under the driver cabins will be manufactured at Alstom’s site in Salzgitter, Germany. In total, more than 2,600 Citadis trams have been sold to more than 50 cities in 20 countries.



Colourful SNCF Ter EMU No. 27704 is seen stabled at Forbach on a very wet March 7th.  
*Class47*

























## Alstom to supply 30 Coradia Lint regional trains to Hessische Landesbahn

Alstom has been awarded a contract to supply 30 Coradia Lint regional trains to Hessische Landesbahn (HLB). The contract is worth approximately €120 million. The trains, which contain 120 seats, are spacious and bright, equipped for disabled passengers and offer a unique travel experience thanks to their large windows. They will run on the Wetterau West-East subnetwork from 2022.

“We have been using Coradia Lint vehicles successfully in our networks for many years. We appreciate the continuity in the cooperation with Alstom and would like to emphasize that we have been supplied punctually and completely in all projects so far. We are convinced that Alstom will succeed in doing the same in the Wetterau region”, explained Veit Salzmann, HLB Managing Director.

“The new order by HLB is a further success for our proven and best-selling Coradia Lint. We look forward to accompanying HLB in the delivery of reliable and comfortable train services to their passengers in the Wetterau area,” says Jörg Nikutta, Managing Director of Alstom Germany & Austria.

The Coradia Lint 41 DMUs each possess two multi-purpose areas for wheelchairs, prams and bicycles as well as barrier-free universal toilets. In addition, they are equipped with Wi-Fi, power outlets in the seats, a passenger information system with monitors for real-time data and video surveillance to ensure a high level of passenger safety. The trains are the first Coradia Lint 41 to be equipped with diesel engines fulfilling the new European Stage V emission standard. They are to be manufactured in Salzgitter, Germany, at one of Alstom’s largest production sites worldwide.

The Coradia Lint have a maximum operating speed of 140 km/h and boast high acceleration. After their delivery, they will operate on the routes Gießen - Gelnhausen, Wölfersheim-Södel - Friedberg (- Frankfurt), Nidda - Friedberg (- Frankfurt) as well as on the routes of Horloffalbahn (Wölfersheim-Södel to Hungen) and Lumdatalbahn in case of reactivation.



Similar to the CD ‘Regioshark’, DB Class 632.534 is seen awaiting its next duty at Frankfurt Hbf on March 9th. *Class47*





## DB 2019: Long distance patronage over 150 million for the first time

With some 151 million long distance passengers, Deutsche Bahn (DB) has set a new passenger record, exceeding the 150 million mark for the first time. Following an already strong previous year, an additional 2.8 million passengers (an increase of 1.9%) used DB's ICE and IC trains in 2019. It was the fifth consecutive year in which patronage increased. The DB Group's adjusted revenues rose to EUR 44.4 billion in 2019, an increase of just under 1%. DB expanded the largest investment program in its history, investing substantially in the rail network, stations and trains. Adjusted earnings before interest and taxes (EBIT) fell by 13% year on year to EUR 1.8 billion as a result of this high level of investment in the future of rail.

"DB's aim is to substantially increase the performance of rail in Germany," said DB CEO Dr. Richard Lutz with regard to the balance sheet for the 2019 fiscal year. "Investment in the future of rail will take priority in the coming years, which will be visible in our bottom line in the medium term."

Positive patronage figures confirmed that DB had chosen the right course with its Strong Rail strategy. In addition to long distance rail patronage, regional rail patronage in Germany also rose in 2019, climbing 1.6% to almost two billion. "We are seeing clear signs of a modal shift towards rail, an environmentally friendly mode of transport," said Lutz.

Total rail passenger transport volume rose by 695 million passenger kilometers year on year in 2019, to a total of 98.4 billion. DB Regio increased its net order book again for the first time in 2019, winning more train kilometers for future service than it lost to competitors. Volume produced on the rail network increased again in 2019, with demand up 0.4% to 1.09 billion train path kilometers. The percentage attributable to non-DB operators rose to 33.8% (2018: 32.2%).

Net capital expenditure rose considerably in 2019, increasing by 41% year on year to EUR 5.6 billion. That was a new record, though a change in accounting methods meant that it was only comparable to the previous year's figures to a limited extent. Gross capital expenditure also rose, with a focus on infrastructure. As before, the lion's share of the funds will be used to expand and modernize the German rail system, boosting quality and reliability and adding new trains and additional staff. At EUR 24.2 billion, net financial debt was slightly better than expected and remained below the debt limit agreed with the German government.

"Our task," said Dr. Levin Holle, DB's Chief Financial Officer, "is to continue to ensure DB's financial stability despite a very high level of investment and additional challenges posed by the coronavirus pandemic." What exactly the negative economic impact of the global coronavirus crisis will be is still unclear.

### Logistics and freight transport

With an EBIT of EUR 538 million, DB Schenker achieved record results in 2019 for the third year in a row. With the exception of air freight, which saw declines throughout the industry, all business sectors showed improved figures last year. DB Arriva, DB's European local transport subsidiary, faced a highly competitive environment in 2019, with EBIT falling slightly year on year.

DB Cargo's transport volume fell by 3.7% year on year. Because demand in cyclical sectors such as steel and automotive is declining, it is likely that sustained growth in rail freight transport will still take some time despite all efforts.

Three ICE services await departure at a busy Frankfurt Hbf on March 9th. *Class47*









## Siemens Mobility receives first order for battery-powered trains

Landesanstalt Schienenfahrzeuge Baden-Württemberg (SFBW) has ordered 20 Mireo Plus B trains from Siemens Mobility. The two-car electric trainsets with 120 seats can operate on rail routes with or without overhead power lines thanks to their battery hybrid drive, and are scheduled to operate in Network 8 of the Ortenau regional system. The contract also includes maintenance of the trains by Siemens Mobility for a period of just under 30 years. State Minister for Transport Winfried Hermann said: “This marks the first time battery-powered trains will be used in the state. With this innovative technology, the electrification of rail routes without continuous overhead power lines will also be possible.”

Delivery of the trains is scheduled to be completed by December 2023. The trains will be built at the Siemens Mobility factory in Krefeld, Germany. The KfW IPEX Bank is financing the trains for Nahverkehrsgesellschaft Baden-Württemberg (NVBW). The financing of €77 million has a term of 28 years.

“With this order, the state of Baden-Württemberg is investing in the future of mobility. Our battery-powered train Mireo Plus B makes climate-friendly, locally emission-free passenger transport possible, thus offering a sustainable alternative to the use of diesel-powered trains on non-electrified rail routes. We will guarantee the availability of the fleet with our maintenance of the trains over their entire lifecycle,” said Sabrina Soussan, CEO of Siemens Mobility.

“In the interest of sustainability, we’ve deliberately opted for a “lifecycle model;” said Winfried Hermann, Minister for Transport in Baden-Württemberg. “We’re breaking new ground in converting to climate-friendly propulsion systems in local transport by introducing this new technology and want to commit the company to this technology through contractual arrangements. Siemens is also responsible for energy consumption and energy costs over the entire contract period of 29.5 years. In this respect, we are entering new territory regarding public transport tenders in the state of Baden-Württemberg.”

along electrified sections and by recuperating the train’s braking energy. The battery system is mounted underfloor and is installed in two battery containers. Lithium-ion batteries with a long service life are used in the system.

The Network 8 Ortenau comprises the routes:

- Offenburg –Freudenstadt/Hornberg
- Offenburg – Bad Griesbach
- Offenburg – Achern
- Achern – Ottenhöfen and
- Biberach (Baden) – Oberharmersbach-Riersbach and serves an annual volume of around two million train-kilometers.



Andreas Ufer, Managing Director of KfW IPEX Bank, said: “The financing not only contributes to an immediate reduction in CO2 emissions, but also promotes innovative and climate-friendly technologies in rail transport.” By financing these trains, KfW IPEX Bank is underscoring its commitment to using such technologies in Germany and Europe.

### Financing with the Network Ortenau model

Landesanstalt Schienenfahrzeuge Baden-Württemberg (SFBW) is responsible for the procurement and financing of trains needed for the tendered network (Network Ortenau model), on behalf of the State of Baden-Württemberg, which is responsible for regional rail transport. The Network Ortenau model calls for the manufacturer to not only produce and deliver the trains, but also ensure that they are permanently available for service. SFBW is thus the owner of the trains and makes them available to the rail operator for the duration of the transportation contract. SFBW is financing the train purchase price through loans that are secured by a guarantee from the State of Baden-Württemberg.

▶ A NS ICE unit speeds through Duren on March 9th with a service to Frankfurt Hbf. *Class47*

The Mireo Plus B has a range of around 80 kilometers in battery operation under real conditions. The batteries can be charged via the overhead line while operating









## Success in Berlin: Stadler wins tender for the delivery of up to 1,500 new underground cars for the Berliner Verkehrsbetriebe

Stadler has come out on top in another international tender. The company has just won the largest tender to date from the Berliner Verkehrsbetriebe (BVG) for the delivery of up to 1,500 new underground cars for use on the Berlin underground network. The framework agreement, of a total approximate value of up to three billion euros, is also one of the largest supply contracts ever awarded in Europe. An unsuccessful bidder had initiated a review procedure, which was rejected in the last instance of appeal by the Berlin Court of Appeal. This clears the way for the contract to be formally awarded and the order to be placed by the Berliner Verkehrsbetriebe.

The framework agreement includes a fixed minimum order quantity of 606 cars. Stadler will therefore supply 376 cars for two- to four-car vehicle units for the small and large profile sections of the network in a first call-off order from 2022 onwards. A further 230 cars have been ordered on a firm basis, but the corresponding call-off order will be placed at a later date. The framework agreement also provides for another optional call-off order for 894 additional cars. The volume of the firm order amounts to around 1.2 billion euros and includes the supply of spare parts.

This contract to renew the fleet for the Berlin underground network is a new opportunity for Stadler and BVG to work together. The Swiss rail vehicle manufacturer is already ensuring environmentally friendly mobility in the German capital thanks to its IK series, with Stadler trains in use for BVG on underground lines U1, U2 and U5. The new series, which is referred to as J/JK by BVG, is based on the familiar Stadler-METRO vehicles. The energy-efficient vehicles with noise reduction have been optimised in various ways. The depth of the door pillars has been adjusted to improve access, for example. Passengers will be able to board and alight even faster in future. Stadler also intends to relocate the information screens from the door area to the curved

intercar connection between the side wall and ceiling, which will give a better view throughout the interior of the vehicle.

“We are delighted that BVG has decided to continue its successful cooperation with our company. We are very proud to have won one of the largest delivery contracts ever awarded in Europe and to be able to complete the order in Berlin for Berlin. We have decided to bring forward our planned investments in the Stadler location in the German capital in order to create an optimal basis for the implementation of this major project”, explains Jure Mikolčić, CEO of Stadler in Germany.

Stadler had already announced that it would invest up to 70 million euros in the Berlin-Pankow site. The new operating concept not only includes the construction of a new production hall, but also the creation of new, optimised space for logistics and commissioning. The investment is a clear commitment to the location in Berlin: besides building a new production and commissioning hall, the first step of the project will involve creating additional office space and a modern canteen for employees.



▶ Lokomotion's Class 139.310 hauls an intermodal working through Rosenheim on March 7th, heading towards Munich. *Class47*

















































 Netherlands

On February 20th, Rotterdam Rail Feeding No. PB01 (nickname Bumble Bee) stands in Botlek Yard ready for its next job. *Erik de Zeeuw*

On March 3rd, Railexperts runs through The Hague Laan van Nieuw Oost Indië station with the Alps Express (from Austria to The Hague) using Lineas rented Class 186.293. *Erik de Zeeuw*

On March 4th, LTE Class 193.735 runs through Dordrecht working a container shuttle from Rotterdam to Linz (Austria). *Erik De Zeeuw*





 Netherlands



Two-car trainset No. NSM 273 (built in 1952) has just departed the railway museum and is on the way to Horst-Sevenum to pick up the Minister of Infrastructure and Water Management, Cora van Nieuwenhuizen-Wybenga. The Minister was delivering new and adapted rail in Greenport Venlo. The festive delivery marked the moment when the entrances and exits of the existing main line were completed and the construction of what can become the largest inland rail terminal in the Netherlands gets underway. Seen here at Utrecht on March 5th.  
*Erik de Zeeuw*



With a wave from the driver of NS VIRM trainset No. 8648 as it passes the village of Schalkwijk working a service from Maastricht to Alkmaar on March 5th.  
*Erik De Zeeuw*

Rotterdam Rail Feeding No. 21 shunts a rake of tank cars at the gate of Koole Tankterminals Botlek Rotterdam on February 20th.  
*Erik de Zeeuw*

























On March 12th, a bit of a milestone as CP No. 1438 returned to service, working its first trains since 2003. The loco was overhauled for export to Argentina, however the sale fell through and after a long legal battle the loco returned to CP ownership. It returned to mainline service with CP Regional based in Porto and is seen arriving at Paredes station with train No. IR866 11:08 Pocinho - Porto Campanha on it's first day back in mainline service.

*Andy Pratt*

















































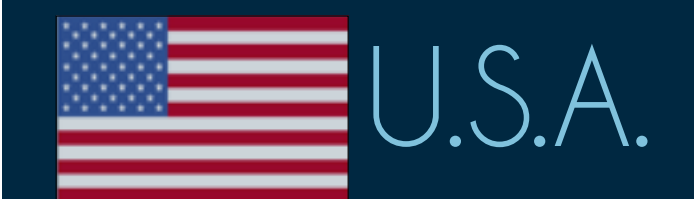












United States Sugar Corporation EMD GP11 No. 302 passes South Bay whilst hauling a local freight to Belle Glade on February 14th.  
*Laurence Sly*



Florida East Coast EMD SD40-2 No. 716 passes New Smyrna Beach whilst hauling the Norfolk Southern geometry train from Jacksonville to Miami on February 10th. The geometry train visits once or twice per year  
*Laurence Sly*



Florida East Coast EMD GP40-2 No. 422 passes Turnbull Bay whilst working the Bowden local (train No. FEC905) to New Smyrna Beach.  
*Laurence Sly*





USSC EMD GP40-2 No. 505 departs Bryant heading for Clewiston on February 16th.  
*Laurence Sly*



Florida East Coast's GE ES44AC Nos. 818 and 823 approach New Smyrna Beach whilst hauling train No. FEC101-12 from Jacksonville to Miami on February 12th. GP40-2 No. 411 is being hauled south in the consist.  
*Laurence Sly*

Seminole Gulf GE Dash 8-39BE No. 573 approaches theyard at Fort Myers aftershunting tank wagons on 'Propane Alley'.  
*Laurence Sly*









▶ FEC GP40-2 No. 432 crosses the Eau Gallie River near Melbourne whilst hauling FEC local train No. 920 from Fort Pierce to Pineda. *Laurence Sly*



▶ First Coast Railroad's EMD GP10 No. 1810 and GP16 No. 1602 run light through the yard in Fernandina Beach. *Laurence Sly*



▶ Just after dawn, FEC EMD SD40-2 No. 720 and EMD GP40-2 No. 425 cross Crane Creek, Melbourne whilst hauling train No. FEC336-05 from Medley to City Point. *Laurence Sly*









## Alstom's hydrogen train Coradia iLint completes successful tests in the Netherlands

**The world's first hydrogen fuel cell passenger train takes its first steps abroad after commercial success in Germany**

“The tests in the Netherlands demonstrate how our hydrogen train is mature in terms of availability and reliability, providing the same performance as traditional regional trains, but with the benefit of low



Alstom has performed ten days of tests of the Coradia iLint hydrogen fuel cell train on the 65 kilometres of line between Groningen and Leeuwarden in the north of the Netherlands. The tests follow 18 successful months of passenger service on the Buxtehude–Bremervörde–Bremerhaven–Cuxhaven line in Germany, where total of 41 Coradia iLint have already been ordered. The latest tests make the Netherlands the second country in Europe where the train has proven itself a unique emissions-free solution for non-electrified lines.

Last October, Alstom and the Province of Groningen, local operator Arriva, the Dutch railway infrastructure manager ProRail and the energy company Engie signed a pilot project agreement to test the Coradia iLint, the world's first passenger train powered by hydrogen fuel cells, in the Netherlands. DEKRA, an independent testing inspection and certification company, has been appointed test leader. This series of tests is being performed at night at up to 140 km/h without passengers. For the purpose of the tests, a mobile filling station has been erected by Engie for refuelling the Coradia iLint with completely green – sustainably produced – hydrogen.

noise and zero emissions. It is also easy to integrate in an existing fleet and is compliant with all safety regulations. The Coradia iLint hydrogen train is a reliable emission-free train ready to help transport us to a carbon-neutral Europe,” said Bernard Belvaux, Managing Director, Alstom Benelux.

The Coradia iLint is the world's first regional passenger train to enter service equipped with fuel cells to convert hydrogen and oxygen into electricity, thus eliminating pollutant emissions related to propulsion. The completely train is quiet, and its only emission is water. Purpose-built for use on non-electrified lines, it provides clean, sustainable traction with no sacrifice in performance. It has a range of approximately 1000 kilometres – the same as equivalent-size diesel multiple units. The train is developed and produced by the Alstom teams in Salzgitter, Germany and Tarbes, France.

The Dutch railway network has approximately 1,000 kilometres of non-electrified line on which around 100 diesel trains currently operate daily.

Photo: ©Coradia iLint R. Frampe



## Alstom to equip 77 regional trains with ERTMS onboard train control system in Sweden



Alstom has been awarded a contract by AB Transitio, Region Skåne through Skånetrafiken, Region Blekinge, Hallandstrafiken AB, and DSB SOV to equip a fleet of 77 X31 regional trains with ERTMS onboard train control system, with an option of an additional 34 trains. All trains will be ready by end of 2023. The contract is worth about 35 million euro. The trains are running in the growing Öresund region in the South of Sweden, and Eastern Denmark. Alstom will install a solution that features an integrated dual system enabling the trains to run on legacy lines equipped with ATC-2 system in Sweden, whilst being also able to run on lines newly equipped with the ERTMS Level 2 system both in Sweden and Denmark. Furthermore, the trains are also equipped to run on the existing ZUB 123 system in Denmark. The design of the dual system minimizes hardware equipment by sharing some on-board components, and the wheel sensors. Alstom is the ERTMS market leader and is currently delivering a similar solution in Norway on over 400 trains, to be completed in 2026.

“We are very pleased to deliver an onboard control system solution for AB Transitio and their fellow vehicle owners for Öresundstrafiken. This contract is a strategic win for Alstom in Sweden, where its longstanding international ERTMS experience now will be applied to a major part of the train fleet in southern Sweden,” said Björn Asplund, Managing Director of Alstom Sweden.

“To us, an updated and modern train fleet is important as we see a steadily increasing flow of passengers to a region that continues to grow. With a new digital signalling system, the trains will continue to provide a very safe railway service in the Öresund region”, says Stefan Kallin, CEO of AB Transitio.

The project will be delivered by Alstom Sweden together with Alstom center of excellence for ERTMS in Charleroi, Belgium. Installation design and supply chain will be performed by the Alstom team in Copenhagen, Denmark. Alstom's Atlas is the worldwide number one in on-board ERTMS equipment, representing 70% of the on-board systems in service in ERTMS Level 2. Today, across 20 countries, trains under Atlas supervision have covered over 150 million kilometers, including Deutsche Bahn's ICE3 fleet recently equipped in Germany. Alstom has also delivered the first ERTMS Level 3 in commercial service in the world in Germany.



# Alstom to provide digital train control and infrastructure solutions in Romania

Alstom, as leader of a consortium, has been awarded a contract to provide digital train control, traffic management and electrification infrastructure as part of the rehabilitation and modernisation of a section of the European Rhine-Danube rail corridor in Romania. Alstom's share of contract amounts to more than €120 million. The contract was signed by CFR SA, the Romanian state rail carrier, and the Asociera RailWorks consortium[1], which Alstom is leading. The project is expected to last four years.

The work will take place on the subsection Sighisoara-Brasov, part of the European Rhine-Danube Corridor, which links Nuremberg-Prague-Vienna-Budapest-Curtici-Simeria-Brasov-Bucharest-Constanta. Alstom has been active in ongoing rehabilitation works on the Romanian part of this corridor since 2012.

The contract covers the modernisation of approximately 170 kilometres of railway infrastructure for passenger trains operating at up to 160 km/h. It includes infrastructure and superstructure rehabilitation, electrification, signalling and telecommunication systems, including GSM-R, as well as civil works. Alstom is directly responsible for the implementation of a traffic control centre in the city of Brasov, the digital interlocking and ERTMS Level 2 deployment, passenger information systems and catenary upgrades and electric traction substations.

"This contract reaffirms Alstom's leading position on the Romanian railway market, for both digital train control and electrification. After installing the first modern traffic management system in Romania, we are now ready to extend

such high-level performance to the new sections. This project will be another strong reference for Alstom. Bucharest has become a strategic hub for Alstom's train control expertise, not just for local projects, but also the rest of central and eastern Europe," explains Gabriel Stanciu, Alstom Managing Director for Romania, Bulgaria and the Republic of Moldova.

Alstom is a global pioneer in the development and implementation of on-board digital train control equipment. ATLAS 200 is Alstom's ERTMS level 2 solution allowing trains to run at higher speeds without physical lineside signals. Alstom will also deliver the traffic management system for the train control centre and implement the GSM-R telecommunications system.

For the upgrade of the catenary systems, Alstom will supply its OCS3 catenary solution for main lines, leveraging its inhouse



capabilities at the manufacturing facility in Lecco, Italy, and its worldwide experience of OCS3 in commercial operation. Alstom has been present in Romania for over 25 years and currently employs 450 people in the country. The company's ongoing activities include railway rehabilitation projects in various phases of implementation, as well as the maintenance of Bucharest metro trains.

[1] Asociera RailWorks consortium consists of consortium leader Alstom and three companies providing civil and rail works: Aktor, Arcada and Euroconstruct.

# Tampere Tramway Ltd orders a HSG-city grinding machine for its tram network

When it comes to the rails of its tram network, which is scheduled to start operations in the late summer of 2021, the Finnish city of Tampere has its money on prevention right from the outset. Tampere Tramway Ltd has ordered a HSG-city.

The city of Tampere in Finland is currently preparing to commission a tram network totaling almost 15 kilometers in length. A wholly-owned subsidiary of the city of Tampere, Tampere Tramway Ltd is in charge of building the network's infrastructure, purchasing the trams and other equipment, organizing the project's financing and granting the running of the tram system when it commences operations in 2021.

The company has purchased one of the compact HSG-city grinding machines for its rail maintenance. The contract also includes a spare parts package and a service agreement for the machine's annual maintenance. The grinding machine, which was designed with light-rail networks in mind, was delivered by Vossloh in December of 2019.

"We want to be well prepared for the traffic" explains Tampere Tramway Ltd's fleet manager, Ali Huttunen. "We were referred to a customer in Germany, where we were able to observe the HSG-city in action and see for ourselves the benefits in terms of extending the service life of rails."

Grinding off the mill scale is the first important step for the company in this regard. Other areas of application include head check prevention and the removal of greasy residues, which are primarily the result of fallen leaves, air pollution or rainfall after a long period of dry weather. A greasy film builds up on the rails and becomes a safety hazard e.g. when accelerating from a standstill or braking. Grinding off these greasy residues improves traction between wheel and rail and increases the rail's electrical conductivity.

"We're very happy to have Tampere Tramway as a new customer in Finland" adds Pekka Rautanen, Managing Director of Vossloh Rail Services Finland Oy.







## CD Cargo Germany branch activated

On 5 March 2020, a new branch was registered in Germany: ČD Cargo, as, Niederlassung Deutschland. It is another step on the road to expansion into foreign markets. It was preceded by the issue of the B certificate by the German Rail Authority EBA with effect from 1 March this year, which made ČD Cargo and fully-fledged carrier on the German network.



## Gotthard train Giruno granted type approval for Italy

The Railway Agency of the European Union (ERA) has granted authorisation for the new high-speed train SMILE from Stadler, called Giruno by SBB, to run in double traction in Italy.

The ERA has granted type approval for the Stadler high-speed train SMILE for Italy. This means that the Giruno can run in double traction at 200 kilometres per hour in Italy, as provided for in the cooperation agreement between SBB and Trenitalia. The Giruno is the first multiple unit train to be granted European approval (extension of its area of use) by the ERA. Until mid-2019, this required an individual national approval by the Agenzia Nazionale per la Sicurezza delle Ferrovie (ANSF).

Step by step into timetable operation  
The Gotthard Base Tunnel – the longest railway tunnel in the world – has been in operation since the end of 2016. With the completion of the 15.4-kilometer-long Ceneri Base Tunnel, the flat track through the Alps will be completed. In December 2020, the tunnel will be officially opened. In view of the expected increase in demand, SBB ordered 29 high-speed multiple-unit trains from Stadler in October 2014 with options for up to 92 additional trains.



The train has already been presented to the interested public in September 2016 at the InnoTrans in Berlin. In May 2018 it celebrated its roll-out in Bussnang in the presence of many celebrities. This event also marked the start of extensive tests to obtain approval in four countries. In April 2019, the Giruno was approved for single traction in Switzerland, followed by double traction in May. On 8 May, 2019, the first commercial journey between Zurich Main Station and Erstfeld took place.

It was then used regularly on individual routes

in Switzerland to gain operational experience on the home network before entering regular passenger service on 15 December 2019. In the next few months Stadler will obtain approval for the individual vehicles and, together with SBB and Trenitalia, will make the Giruno ready for the planned Italian service. This also includes measures to improve the technical maturity and reliability in operation, in particular the ETCS system.

### 29 fast trains for the flat route through the Alps

The SMILE is an eleven-car electric multi-system multiple unit train with a length of 202 metres, which can travel at speeds of up to 250 kilometres per hour. It exceeds the requirements of the German law on equal opportunities for the disabled and has around twice as many wheelchair-accessible seats and toilets as specified. The Giruno offers comfortable seating for up to 810 passengers in double traction.





## Vossloh wins contract for new rail link in the United Arab Emirates

After the successful completion of Phase One covering the 264 km long freight line operated by Etihad Rail between the gas fields at Shah and Habshan and the port and industrial city Ruwais in Abu Dhabi, Vossloh was also able to win the contract for the supply of turnouts and rail fasteners for Stage Two of the new railway construction project. The customer is a joint venture of China State Construction Engineering Corp. and South Korea's SK Engineering & Construction.

Stage Two will extend 605 km from Ghuweifat on the border with Saudi Arabia to Fujairah on the east coast of the United Arab Emirates. Because of its dimension, the standard gauge and mainly double-track network will be constructed in five phases. Contracts for mainline civil and track packages will be awarded in geographical alignment with the emirates involved.

The first stage of the second phase of expansion (Package 2A) will link Ruwais with Ghuweifat at the border between the United Arab Emirates and Saudi-Arabia. Until end of October 2020, Vossloh will supply a total of 38 turnouts and 495,000 sleeper sets of the rail fastening system W 30 HH for this 139 km long new stretch. For the project, the specifications of the future integrated Etihad Rail network with mixed-use traffic have already been taken into account.

The line is rated for a max. load of 32.5 tonnes and speeds of up to 160 km in freight traffic and up to 200 km in passenger traffic so the desired cross-border interoperability will be ensured.

After the completion of all stages, the volume of goods transported across the network will increase from currently seven million tonnes to more than fifty million tonnes per year.



## Polish fuel coke smelts iron in Germany

The fuel used to fire furnaces in Singen, a city in southwest Germany, travels through three countries to get there.

Fuel coke has virtually disappeared as a means of heating homes, but it is still used to produce a range of modern materials in the industrial sector.



The end user of Polish fuel coke is Fondium, a company formerly known as Georg Fischer, which produces aluminium, magnesium and iron cast goods for the auto industry and other applications at its sites in Singen and Mettmann in the German state of North Rhine-Westphalia. Coke generates a similar level of heat as coal, which it is produced from, but it emits less smoke and soot, and it also contains less sulphur. Its chemical profile improves the quality of the resulting molten metal.

Fondium opted to have its fuel delivered by train after parallel test runs with lorries were unable to maintain the same quality as DB Cargo's services. The company was impressed by the timeliness of DB Cargo's deliveries.

The transport chain begins at a Polish coking plant in Częstochowa, not far from Katowice, where containers are loaded onto the wagons of a local rail operator. They first head to Ostrava in the Czech Republic, and then on to the German border town of Bad Schandau, southeast of Dresden. DB Cargo takes over transportation duties from there and hauls the groups, normally consisting of five to ten wagons, to the rail terminal in Singen. Lorries are used only for the final stretch from the terminal to what was formerly the Georg Fischer factory.

The main contact for this undertaking is Regensburg-based intermodal and bulk goods specialist NYYLO, which has handed off similar Sweden-bound transports to DB Cargo for many years. The freight is transported in 30-foot open-top containers.



From the UK

## East Lancs Railway

On one of the last events before Coronavirus crippled the heritage railway scene, the line held its Spring Steam Gala, with plenty of trains running over the three day event.

▶ Hudswell Clark 0-6-0T No. 32 'Gothenburg' piloting Hunslet Austerity 0-6-0 No. 2890 of 1943 arrive at Ramsbottom with a service to Rawtenstall. *Richard Hargreaves*

▶ Lancashire & Yorkshire locos. Nos. 53245 and 51456 run round their train at Rawtenstall. *Richard Hargreaves*

▶ L&Y Class 21 tank No. 51241 stands on display at Bury Bolton Street. *Richard Hargreaves*

















