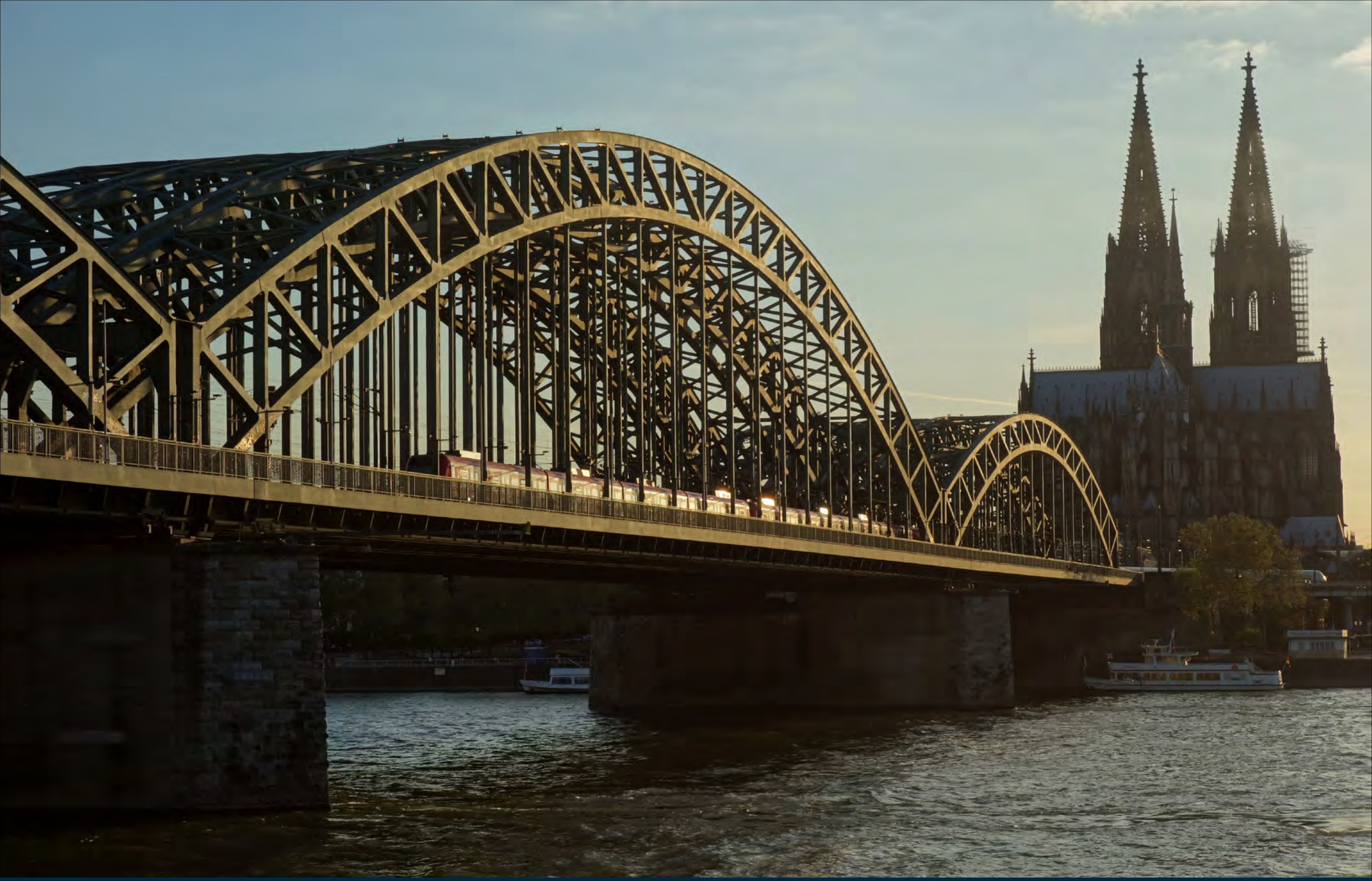

Railtalk Magazine Xtra

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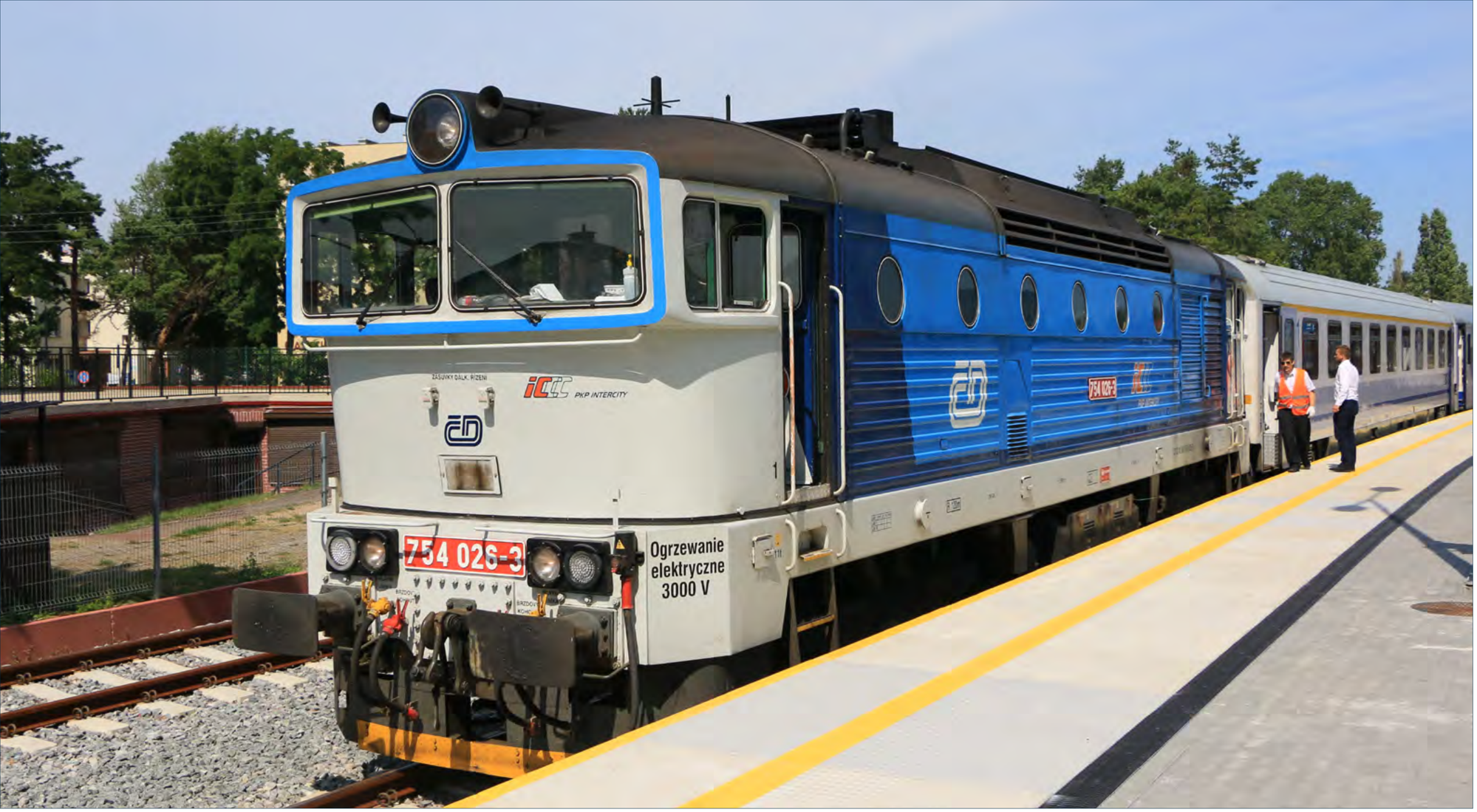

Content

Submissions & Contributions

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

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

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

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Front Cover
An S-Bahn EMU is seen crossing the Hohenzollernbrücke, Köln.
Steamsounds

This Page
On hire from Cesky Drahy to PKP, Class 754.026-3 stands at Hel awaiting uncoupling from its Warsaw service on August 3rd. *Julian Churchill*

Next Page
CD Class 210.021 leads 210.059 on a Vyssi Brod to Lipno Nad Vltavou train, especially strengthened and loco hauled due to a local canoe event. *Mark Torkington*

Railtalk Magazine Xtra

Welcome

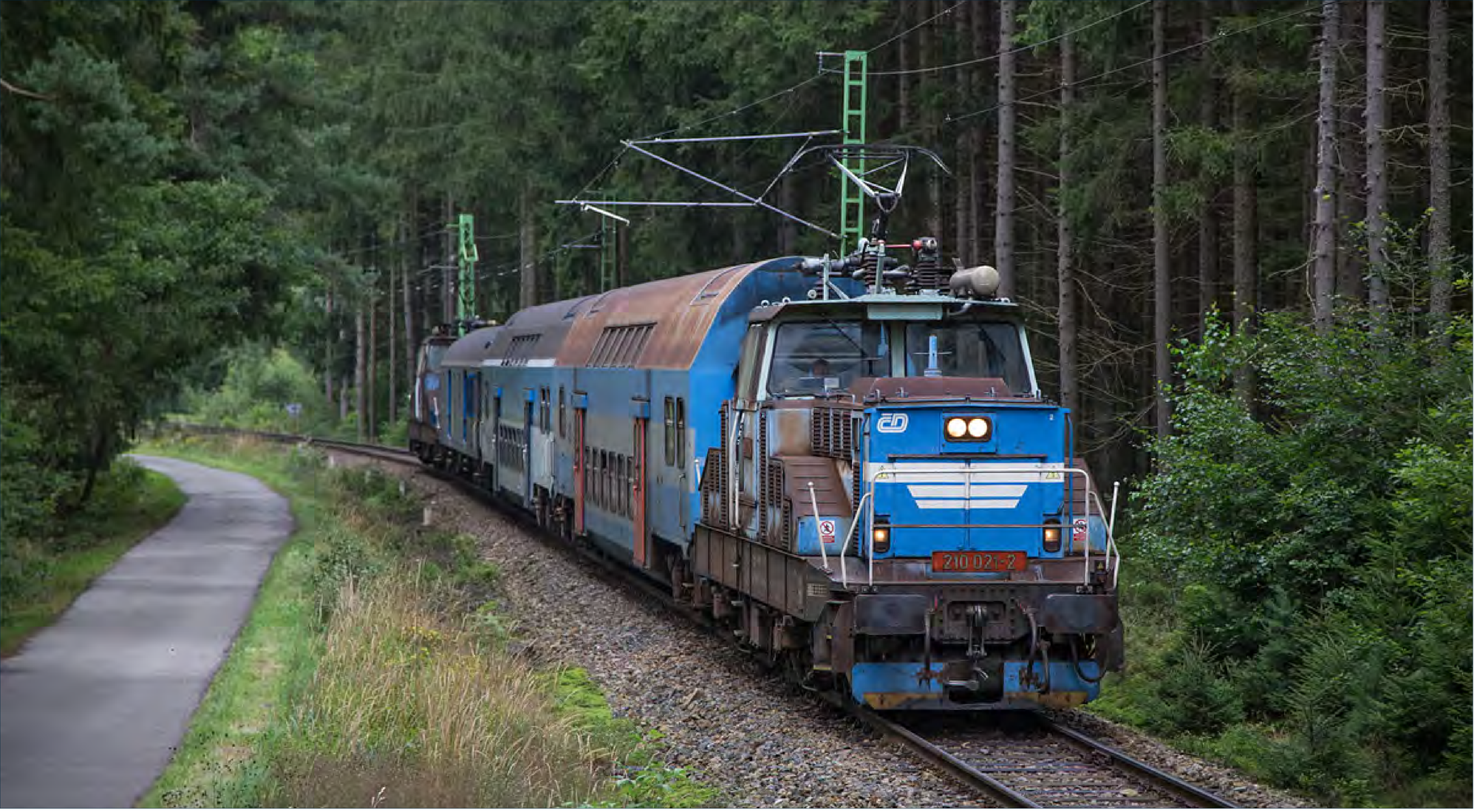
Welcome to another edition of Railtalk Xtra, the monthly magazine that predominantly features railways outside the UK.

As I write this, I'm just back from another spin around Europe, with the obligatory visit to Czech for both the Railway Day and the last of the Summer weekend diesel turns.

My first observation at the well organized Railway Day, this year held in Cheb, was that many of the trains to the event had been strengthened, something that we used to do in the UK but with the advent of many fixed formations, then it just simply isn't possible. So I have to ask, where did we go wrong?

The other factor at Cheb was that it was a free event and at no stage once inside the locomotive depot were we overcharged for food or drink. I remember only this year at the St. Philips Marsh HST event, that food prices were extortionate. Yet here I was, at a free open day ,and the price for a Hot Dog for example was around £1. Beer was certainly less than £2 a glass. Again I have to ask, why are prices so high at these events? Do we just live in rip-off Britain.

As I mentioned, the other reason for heading to Czech, was to have a final ride behind the summer Sunday's 'Grumpy' diesel turn. As has been for most of this year, it was Class 749.006



which if the rumors are true then it was to be one of its last runs before entering preservation. The enthusiasm for the loco from the crew, polishing it and providing a wreath and headboard for the final run was exceptional. The support along the line was also amazing, with several large crowds seen. An experience not to be forgotten in a rush and I would like to say, well don to all concerned.

Back in the UK this month and I was disappointed to see that the original Eurostars are slowly being withdrawn and scrapped. I would have thought that there was still some life left in them for other operators, even re-use overseas but perhaps not. It seems that these days we replace rather than re-use, and that doesn't just apply to the railway.

Our from the UK section has, a visit to the Kirklees Light Railway, a beautiful line with some exceptional scenery and if you haven't been then it does come highly recommended from all at Railtalk.

Anyway thats it for now, thanks for all the excellent photos we've received this month, as always please keep sending them in, and remember if you are going on holiday, don't forget to take your camera.

David
Editor

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With Thanks

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

These issues wouldn't be possible without: Brian Battersby, Mark Bearton, Mark Bennett, Keith Chapman, Julian Churchill, Nick Clemson, Derek Elston, Mark Enderby, Tim Farmer, Dave Felton, FrontCompVids, Paul Godding, Richard Hargreaves, Keith Hookham, Colin Irwin, John Johnson, Anton Kendall, Jyrki Lastunen, Michael Lynam, Peter Marsden, Phil Martin, Denzil Morgan, Peter Norrell, Chris Perkins, Mark Pichowicz, David Pollock, Andy Pratt, Railwaymedia, Alan Rigby, Neil Scarlett, Stephen Simpson, Laurence Sly, Stewart Smith, Steamsounds, Steve Stepney, Mark Torkington, and Andrew Wilson.

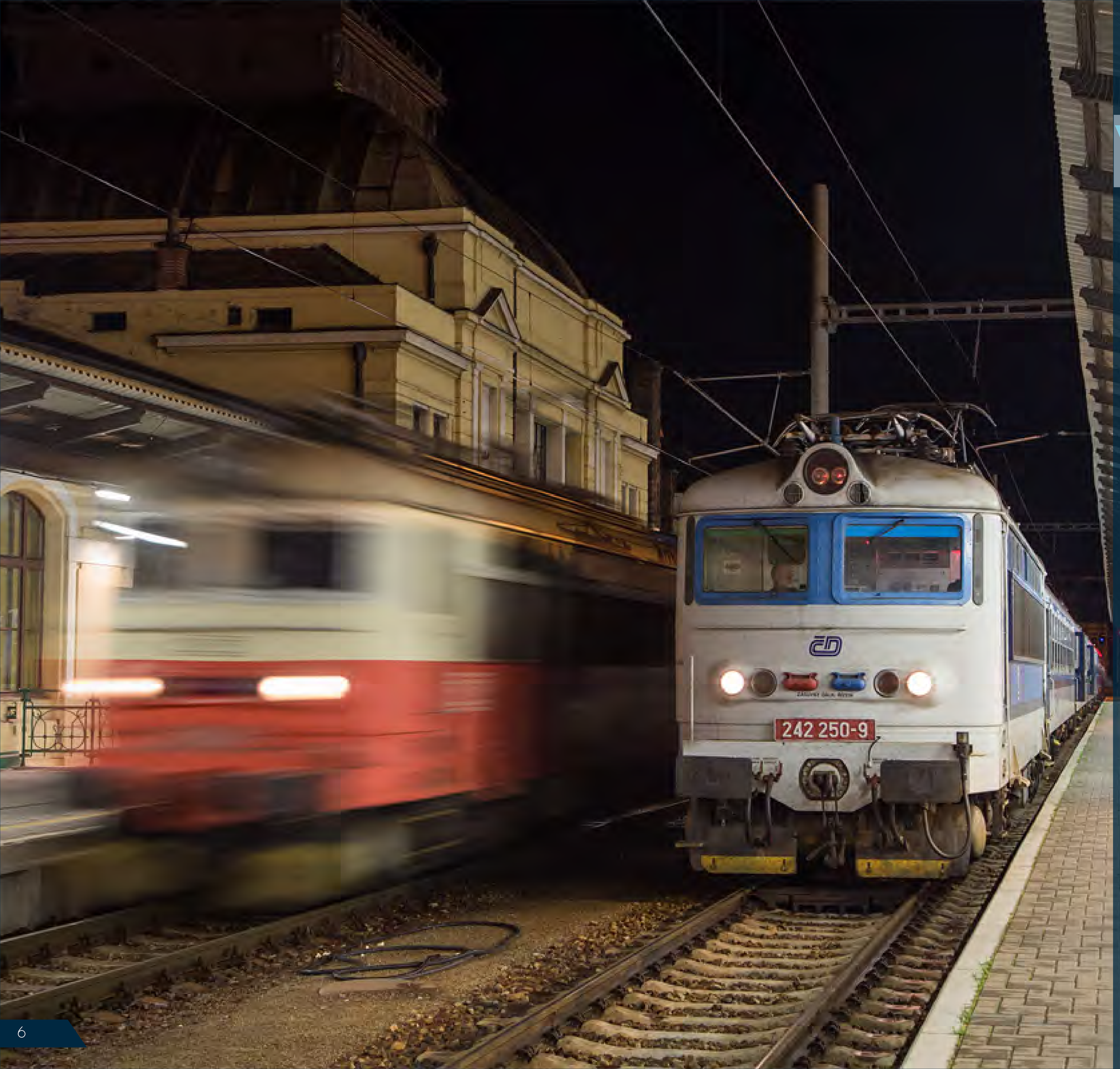
Austria

Österreichische Gesellschaft für Eisenbahngeschichte (ÖGEG) Class 1010.15 is seen reversing onto the ‘Majestic Imperator’, a private charter at Linz Hbf. *Class47*

Belgium

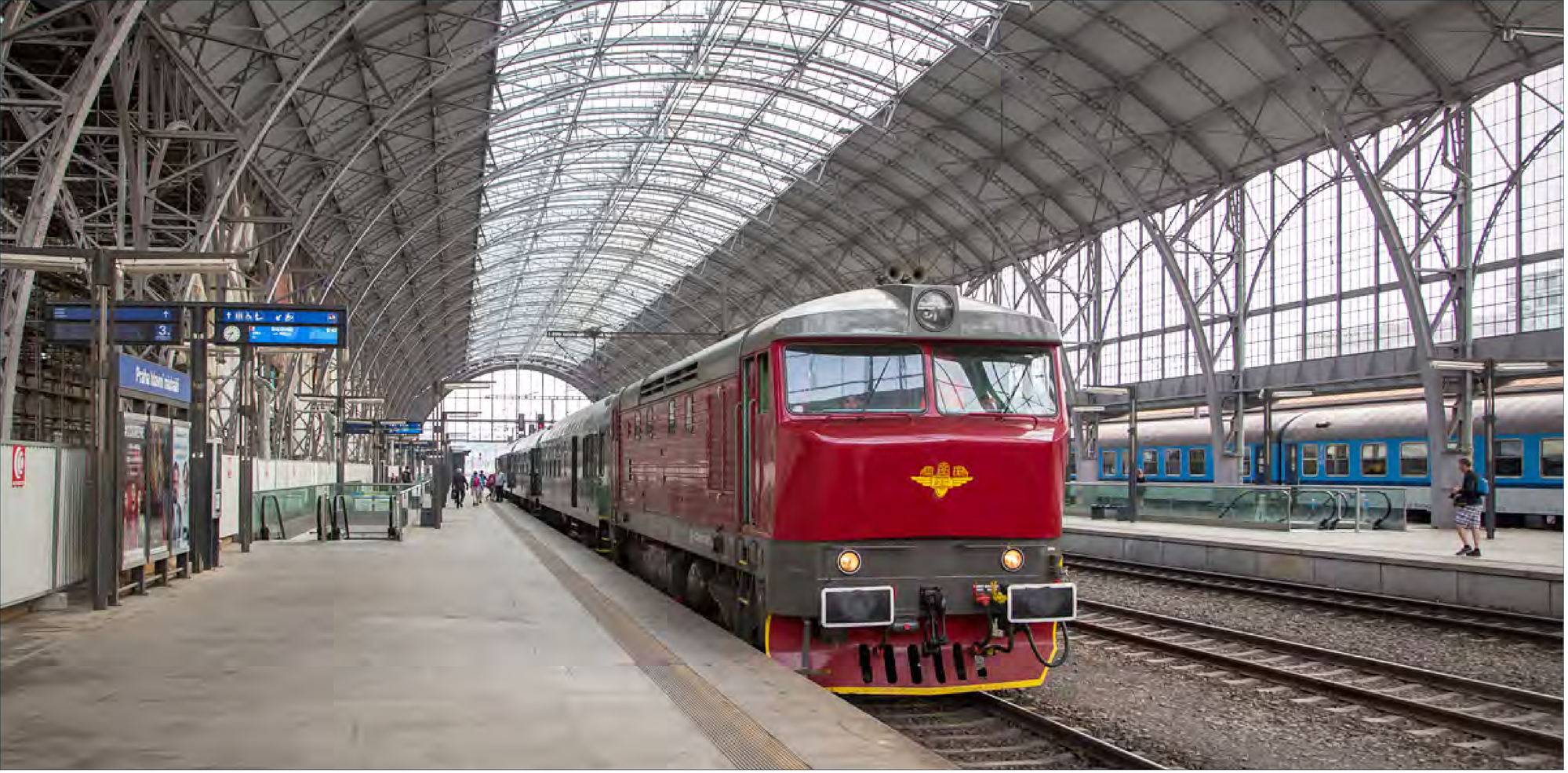
SNCB Class 18 No. 1878 stands at Verviers Central. *Steamsounds*

Czech Republic



On August 21st, CD Class 242.250 arrives into Ceske Budejovice as another classmate moves off. *Mark Torkington*

Czech Republic



On August 20th, KZC's Class 749.253 waits to depart from Praha Hlavni Nadrazi with the train to Rakovnik. *Mark Torkington*

Škoda Transportation has received a new order in Turkey for modern battery-powered trams

Škoda Transportation will deliver a unique battery-powered tram to the Turkish city of Eskişehir – this is a follow-up to the previous delivery of 72 vehicles to the Turkish city of Konya. The Pilsen-based company will produce a total of fourteen low-floor modern ForCity Classic trams for the transport company in Eskişehir. The order is worth more than 26 million Euros.

"We will deliver a new, supremely comfortable tram to our Turkish customer within nineteen months from signing the contract. The order for Eskişehir is another major export success for Škoda in recent times and confirms the superior quality of our vehicles," said Tomáš Ignačák, Chairman of the Board of Škoda Transportation.

The vehicles, manufactured by Škoda, will be equipped with powerful traction batteries – this will allow the transport company in Eskişehir to operate without the overhead catenary line on more than a kilometer segment which the city is planning to build. Generally, the battery drive of the tram will mostly be used in cases when the tram is required to follow routes where the electric trolley line has not been installed, for example, for aesthetic reasons in the historic centers of cities. The drive can also be used if there is a failure in the upper catenary lines so that the tram keeps moving smoothly in the regular flow of street traffic.

Turkish Eskişehir, which has undergone dynamic development in recent years, currently has roughly 700,000 inhabitants and lies in the west of the country on one of the main connecting lines between Ankara and Istanbul; it is one of Turkey's major cities. "The more than thirty-meter long, completely air-conditioned tram will offer space for up to 276 passengers. The trams have a unidirectional design and fit a gauge of 1000 mm. There will be no stairs inside the cars and getting on and off will be through four double-doors and two single-doors.

The vehicles have an elegant design, which will go well with the local colors of Eskişehir," adds Olesea Lachi, Sales Area Manager in Škoda Transportation.

The order for Eskişehir, which Škoda won over local manufacturer Bozankaya A.S., builds on therecent crowning achievement in Turkey. Passengers have been getting around the city of Konya since 2015 in fully low-floor Škoda ForCity Classic trams. A part of the fleet in this city is also adapted for independent drive on catenary-free lines. Škoda Transportation delivered sixty modern low-floor trams to Konya along with another twelve trams with battery drives.

Czech Republic

Regiojet's Class 162.118-4 speeds a service through Ostrava Marianske Hory. *Anton Kendall*

Czech Republic

On August 21st, Class 749.006 pauses at Samechov with the regular Summer Sundays Zruc nad Sazavou to Praha train. *Mark Torkington*

Skoda EMU Transported to Lithuania

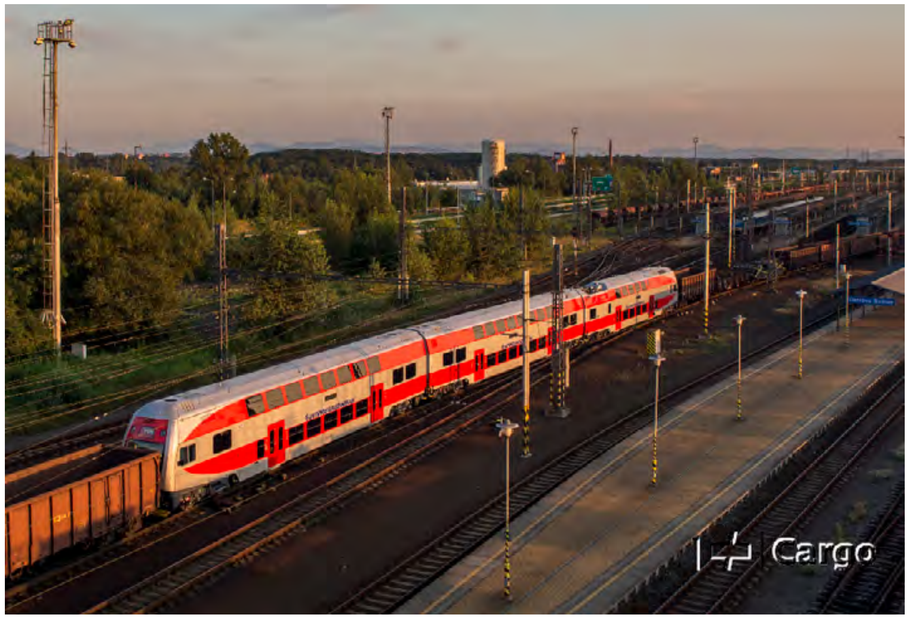
On August 18th, from Skoda Vagonka in Ostrava, departed another type 575 three car double decker electric unit, ordered in December 2014 by Lithuania Railways. These units are Intended for interstate traffic on the route between the capitals of Lithuania and Belarus, Vilnius and Minsk.

This set comprised of Nos. 211.011, 444.011 and 307.011 and is pictured in the evening sunlight at the station Ostrava-Svinov, heading along the Ostrava-Vítkovice - Mosty u Jablunkova - Haniska route.

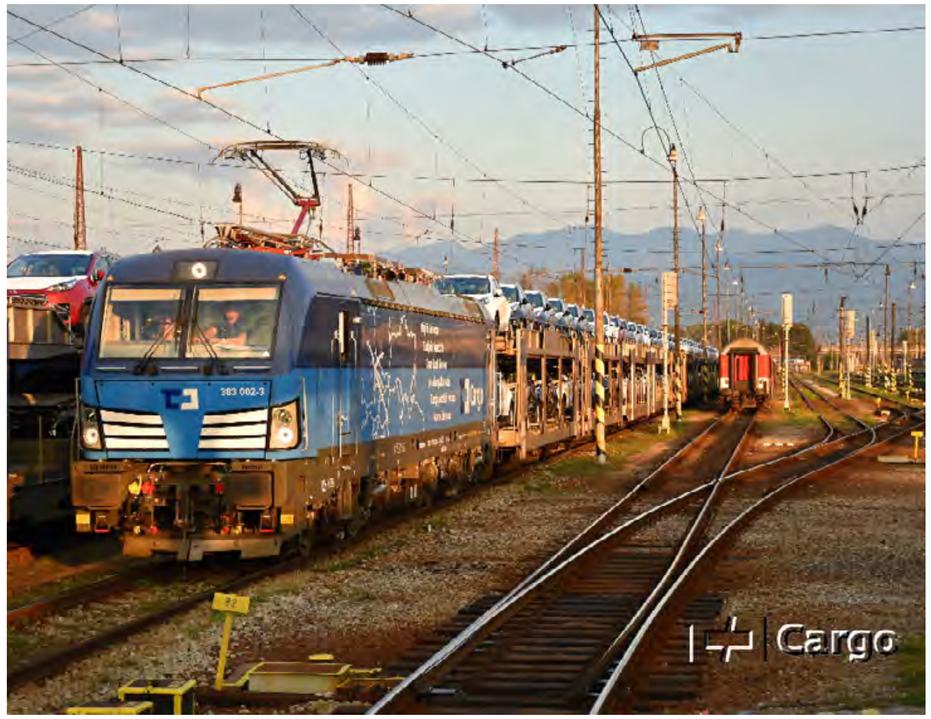
Behind the unit is visible a flat wagon,which was loaded with the broad gauge bogies. The whole transport was covered by ČD Logistics, which specializes on these kind of shipments.

Successfully developing cooperation between Czech and Lithuanian railways was confirmed by the signing of a Memorandum of Cooperation between ČD Cargo and Lithuanian railways which occurred on May 23rd 2016 in Prague.

Photo: ©CD Cargo



ČD Cargo Vectron in Hamburg

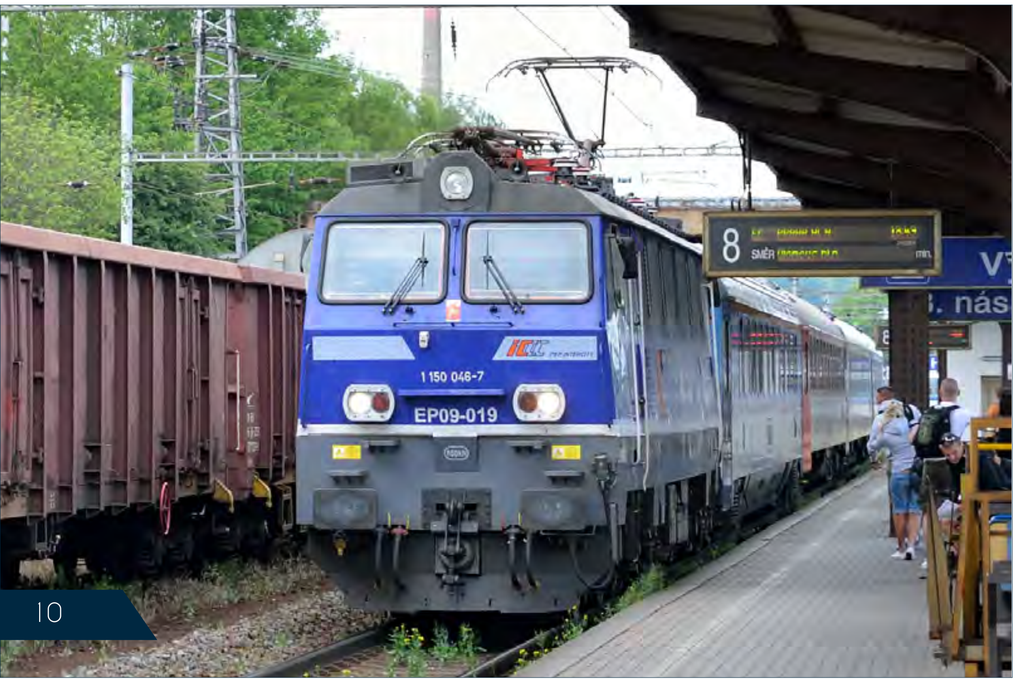


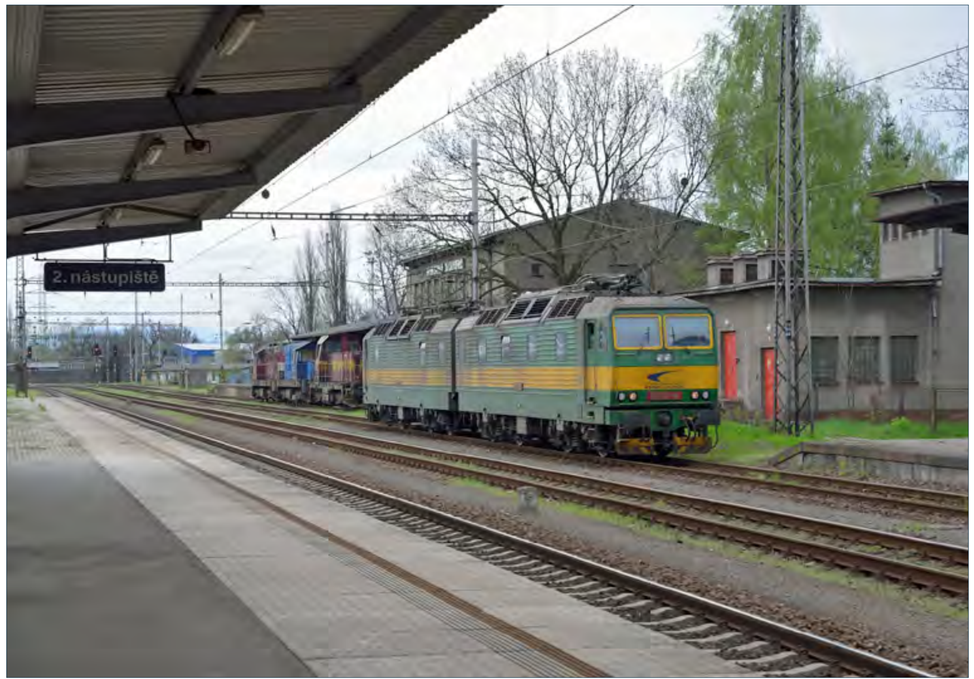
In the early evening on Monday, September 26th, the ČD Cargo locomotive Class 383.002 reached the end of its more than a thousand kilometres long journey from Zilina to Hamburg, carrying a fully loaded train of Kia cars.

The destination station, which is the port of Cuxhaven was then transported by a diesel locomotive. The Vectron then headed back to the Czech Republic with a set of empty 'autovozů' for loading. Transport on German territory was implemented in cooperatiowith the carrier HSL.

From December this year, Vectron's will be regularly deployed hauling car train's between Slovakia, Czech Republic and Germany.

Photo: ©CD Cargo





ZSSK Cargo's Class 131.021 and 131.022 run light engine through Ostrava Kuncice. *Class47*

PKP Intercity's Class EP09-019 arrives into Hranice na Moravie with a Praha hl.n. bound service. *Class47*

Germany

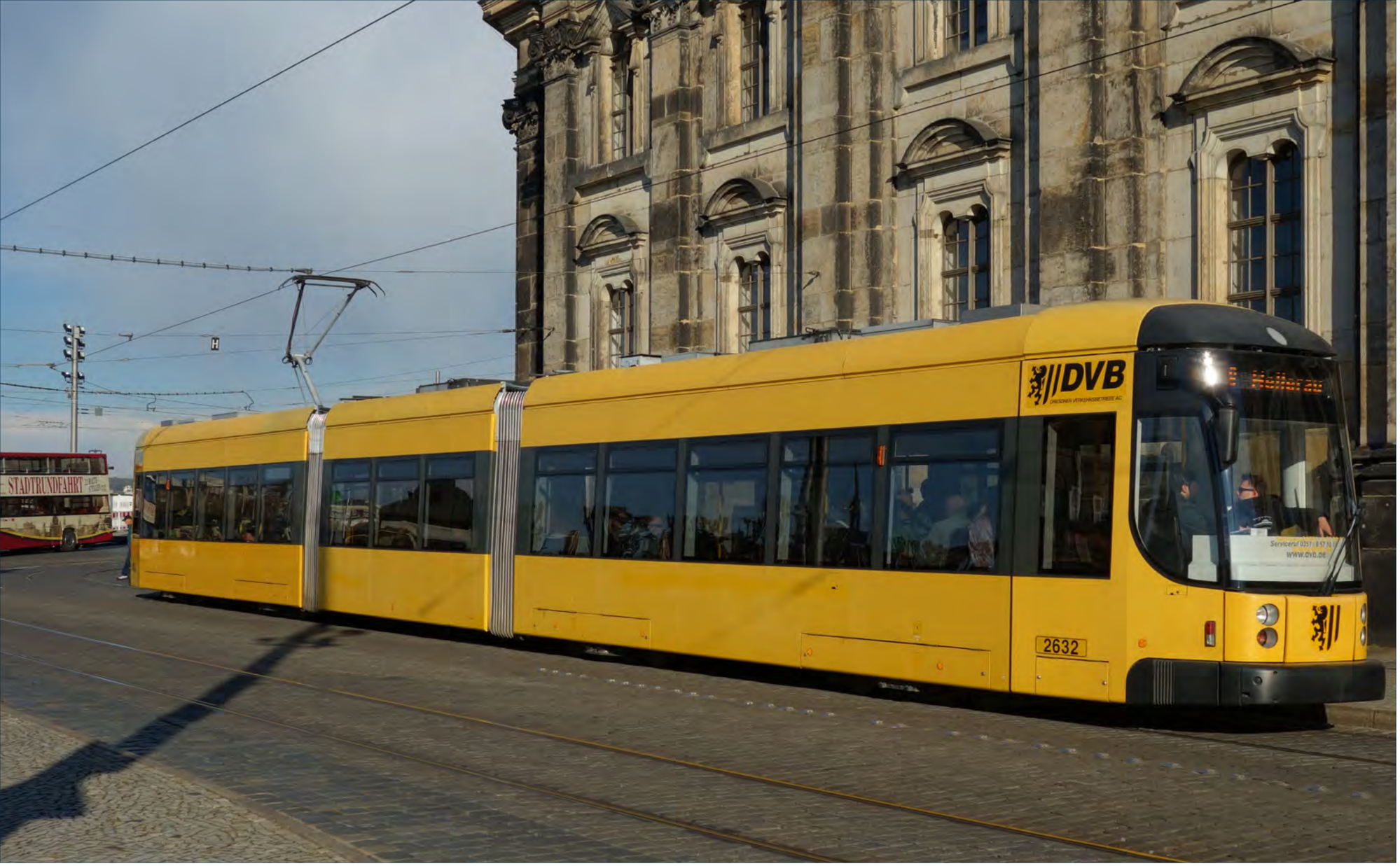
SBB Cargo's Class 482.013 works a container train through Hanover Linden on July 5th. *Alan Rigby*

Europorte's Vossloh DE18 is seen arriving into Völklingen on June 15th. *Class47*

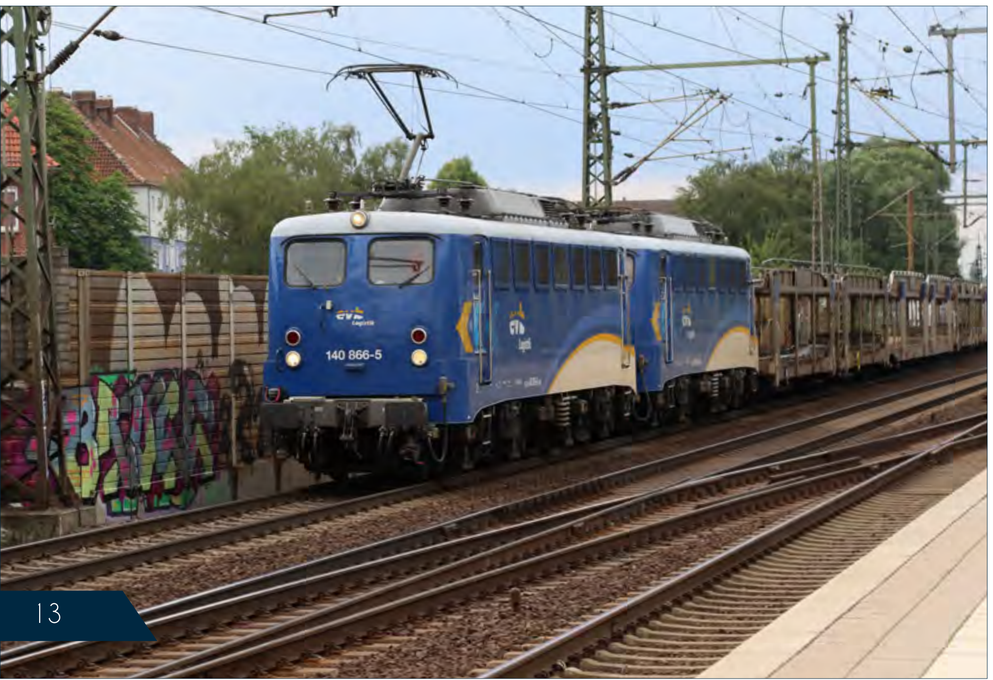
Germany

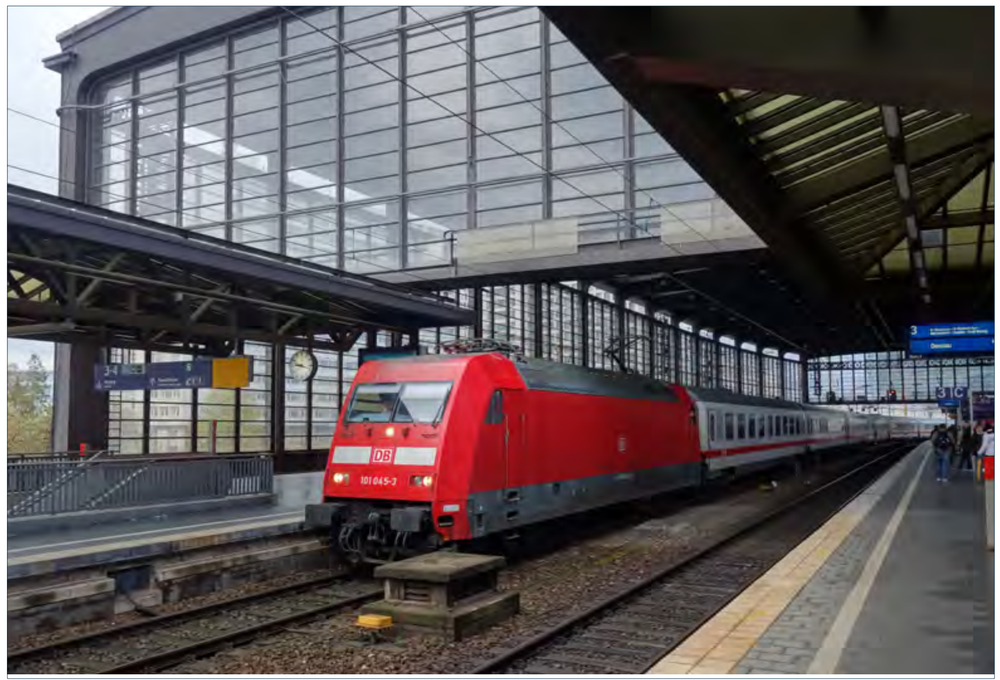
PCT Altman's Class 223.155-3 hauls a loaded car train through Dedensen Guemmer.
Anton Kendall

Germany



Dresden tram No. 2632 calls at Theaterplatz working a line 8 service to Hellerau. *Steamsounds*





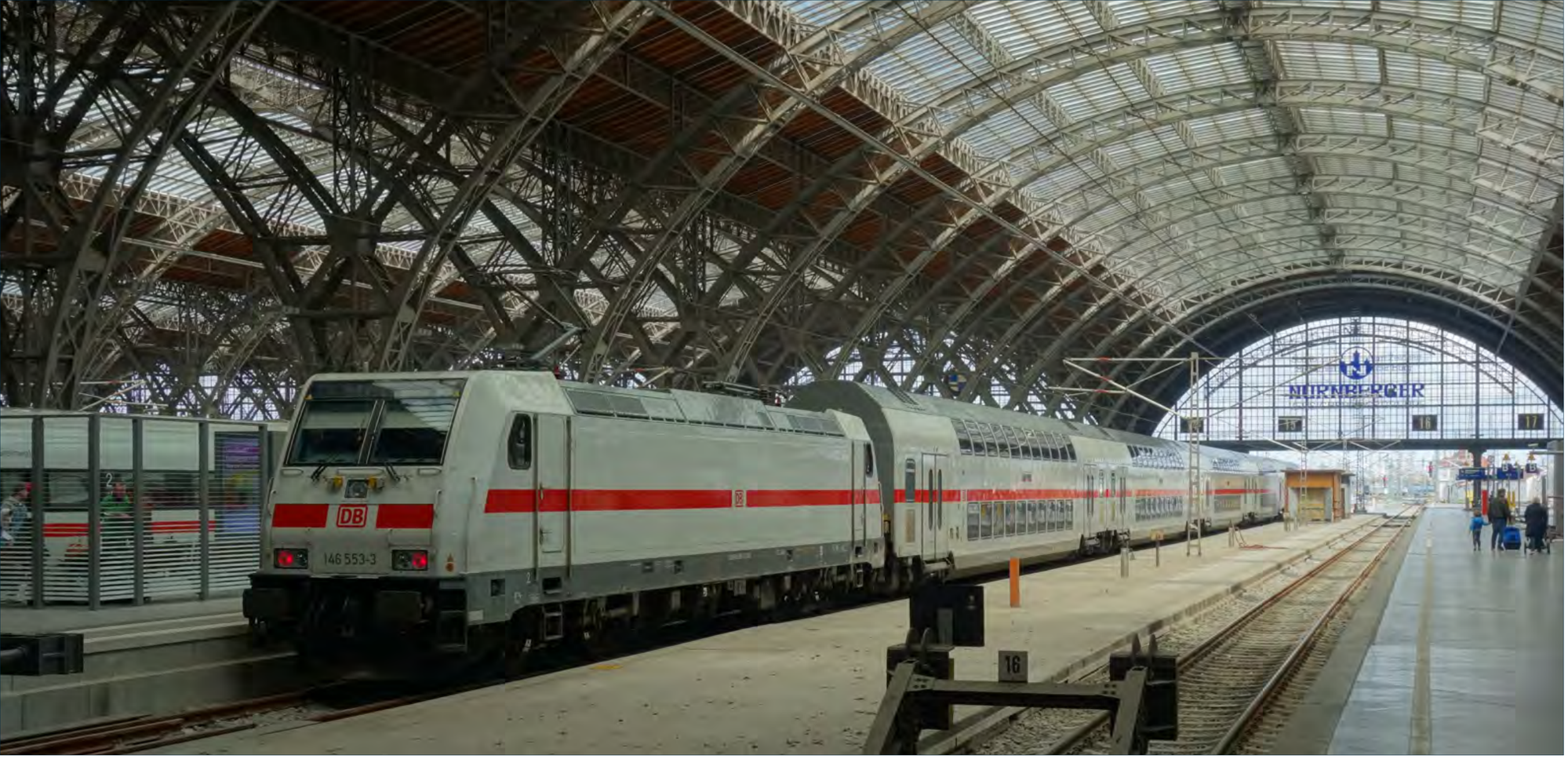
DB Class 101.045 is seen passing through Berlin Zoologischer Garten with an ECS. *Steamsounds*

Former DB locos. now operated by EVB Logistik's Class 140.866 and 140.759 pass through Hanover Linden working a rake of empty car transporters. *Alan Rigby*

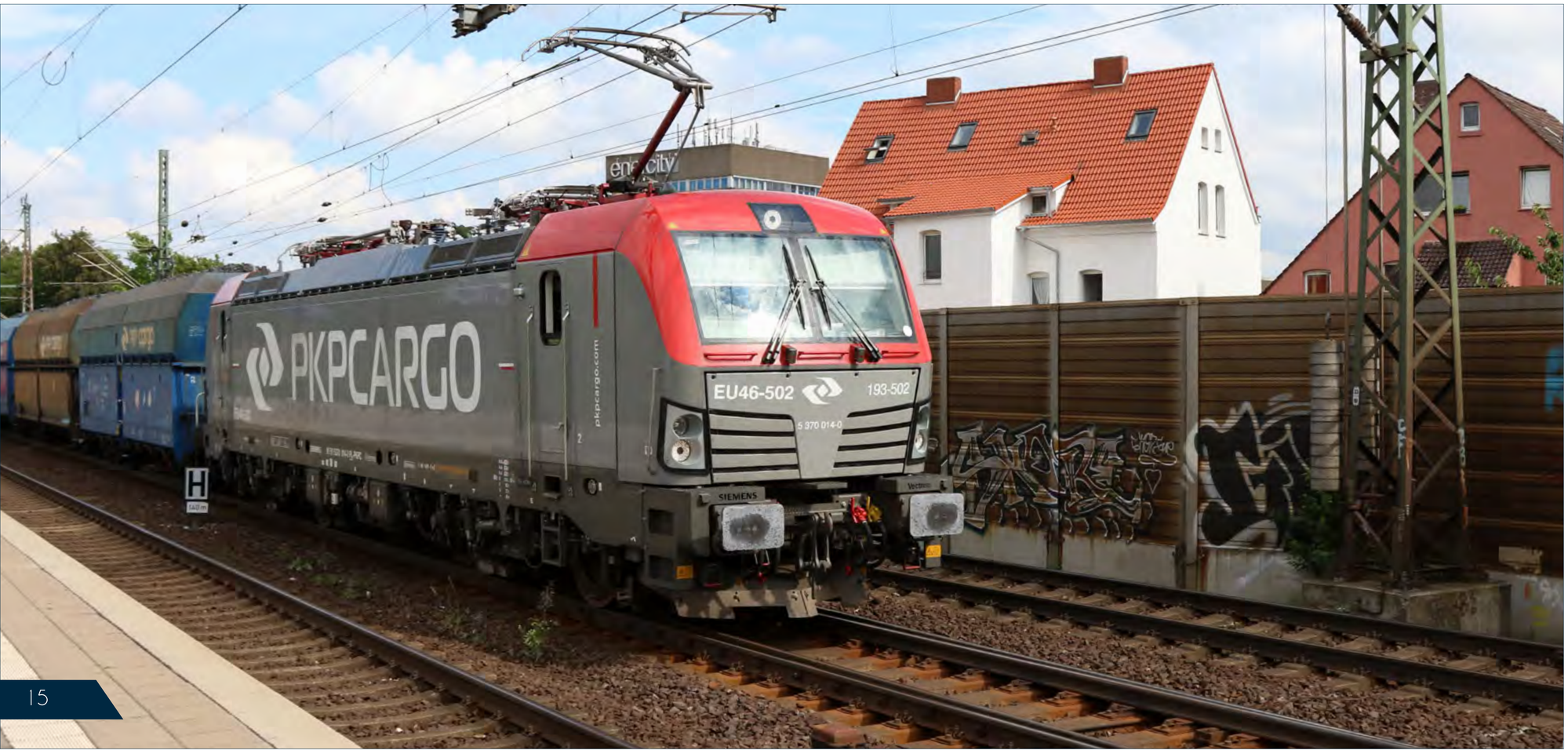
Germany

A Meißen bound S-Bahn service, is photographed running alongside the River Elbe near Kurort Rathen, as seen from the Bastei.
Steamsounds

Germany



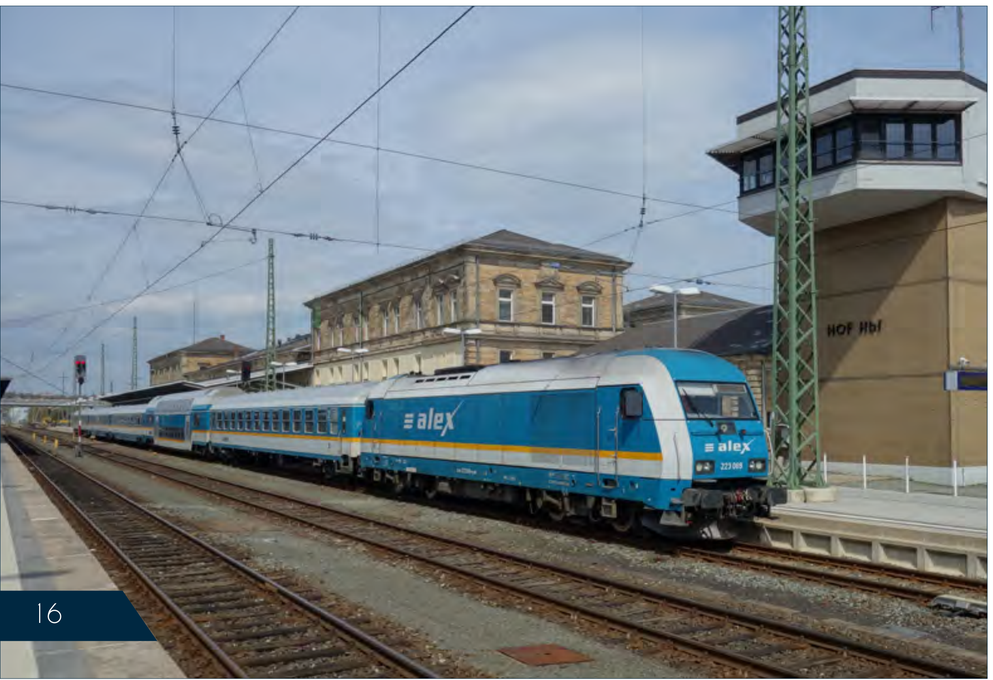
Class 146.553 stands at Leipzig Hbf with an IC2 set. *Steamsounds*



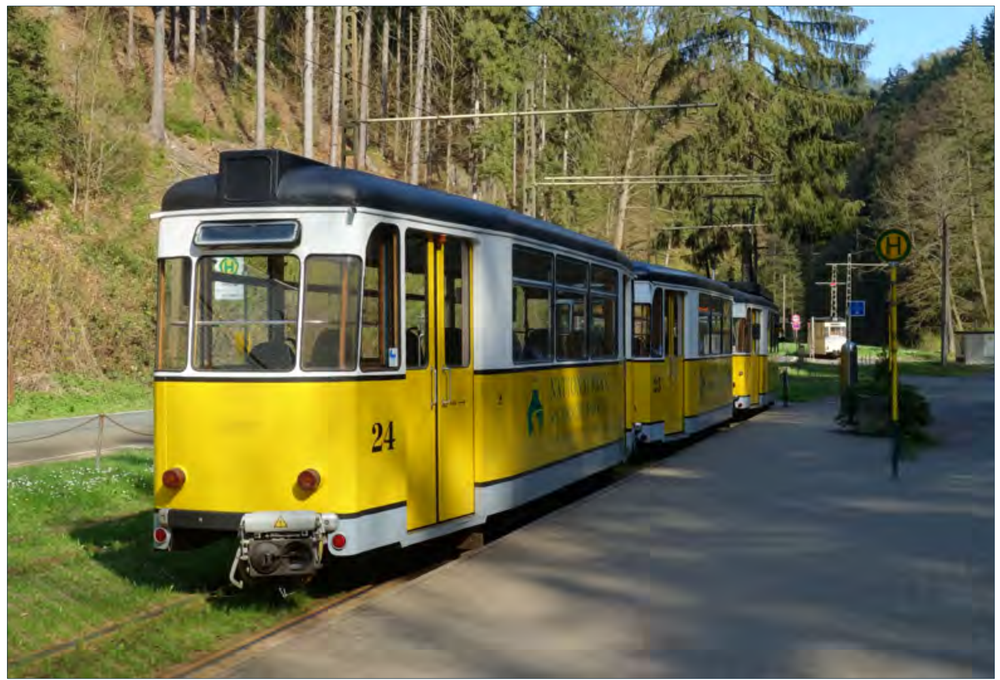
PKP Cargo's Vectron Class 193.502 speeds through Hanover Linden on July 5th with a coal train . *Alan Rigby*

Germany

On July 6th, BoxXpress's Class 193.843 speeds a container train through Wurzburg. *Alan Rigby*



Kirnitzschtalbahn tram No. 24 stands at the Lichtenhainer Wasserfall terminus. *Steamsounds*



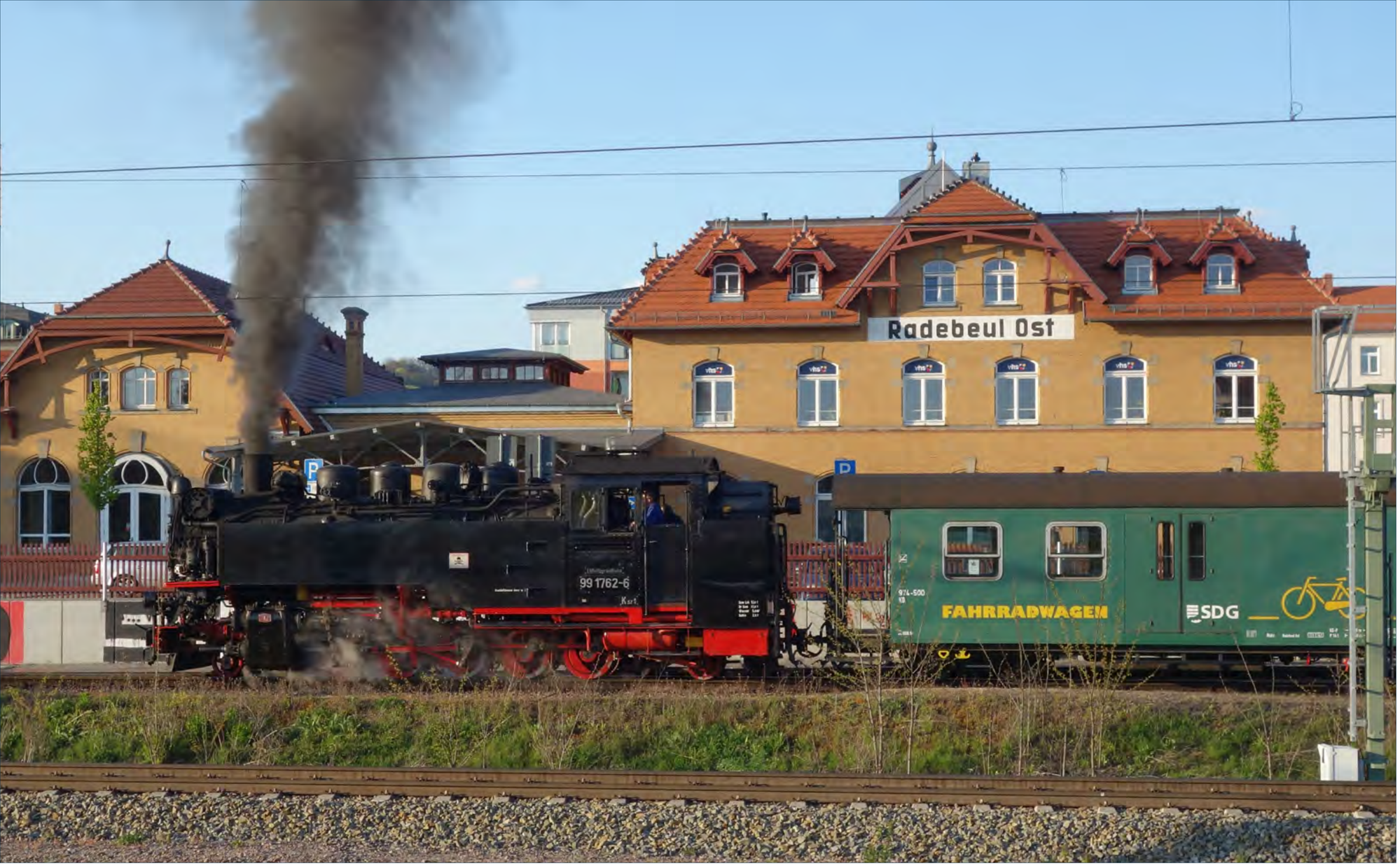
ALEX Class 223.069 stands at Hof Hbf with a service for München Hbf. *Steamsounds*

Germany

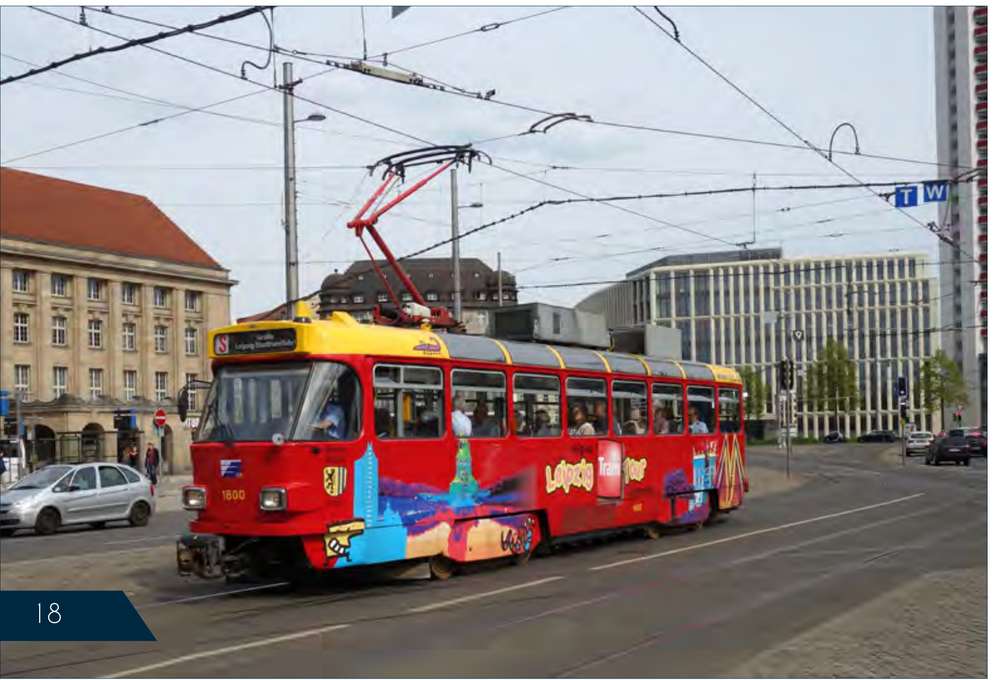
NIAG's G1700BB No. 1277.803 is pictured shunting wagons at Oberhausen Yard on July 8th. *Alan Rigby*

NIAG's MaK DE 2700-04 departs Oberhausen Yard on July 8th hauling a coal train. *Alan Rigby*

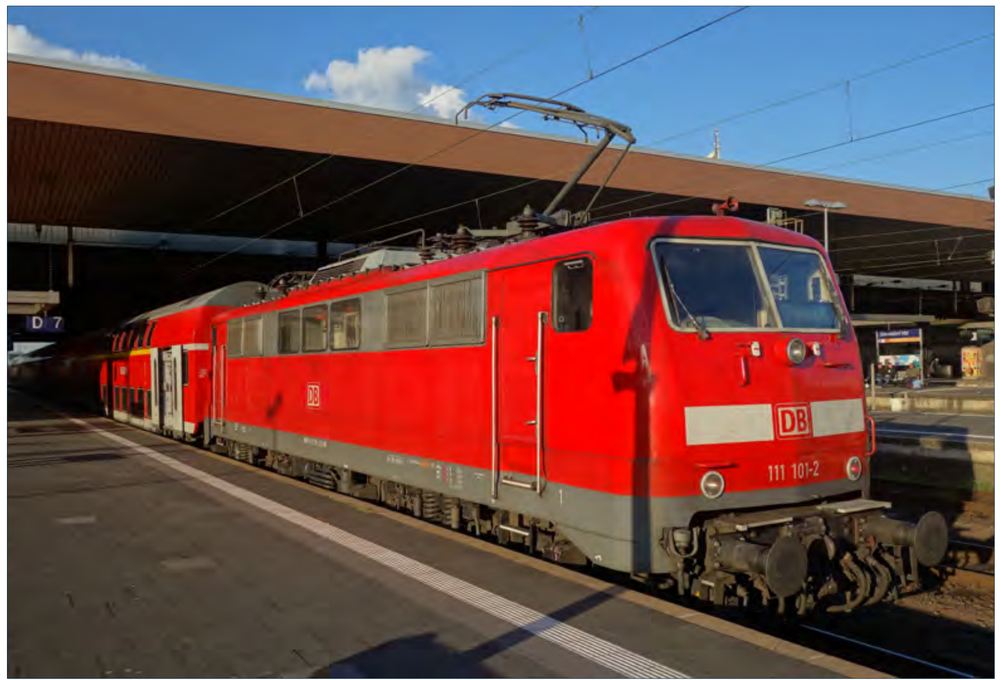
Germany



DR No. 99.1762 is seen departing Radebuel Ost with the last Lösnitsgrundbahn train of the day. *Steamsounds*



A Leipzig tour tram, calls at Leipzig Hbf. *Steamsounds*

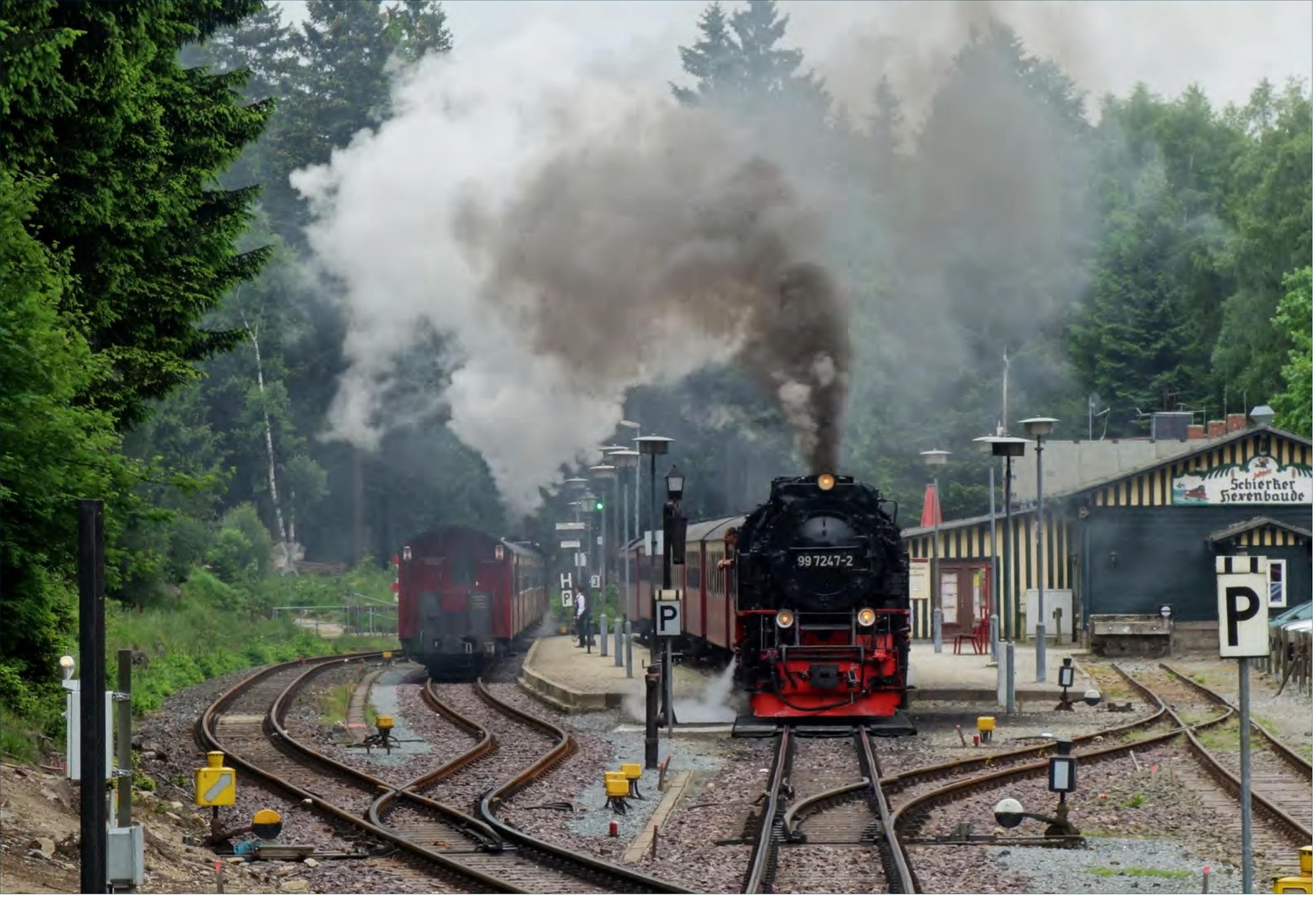


DB Class 111.101 stands at Düsseldorf Hbf with an RE4 service from Aachen Hbf to Dortmund Hbf. *Steamsounds*

Germany

Car No. 2 is seen on the lower section of the Heidelberger Bergbahnen, approaching Molkenkur station. *Steamsounds*

Germany



DR No. 99.7247 departs from Schierke.
Steamsounds

Joint DB-SNCF digitalization initiative

Dr. Rüdiger Grube, CEO of Deutsche Bahn AG, and Guillaume Pepy, President of French National Railways (SNCF), signed a memorandum of understanding in Berlin at InnoTrans, the leading international trade fair for transport technology. They agreed to bring together their know how and learnings generated so far in order to inspire and delight their respective customers even further in the future.

"When we look in particular at the major opportunities that digitization offers for transport companies," said Grube, "it makes obvious sense to share ideas and methods with SNCF. I believe in doing so, our customers will benefit.

"With the digital revolution now underway, we need to be as strong as we possibly can —especially in light of the operational and customer challenges," said Pepy. "This

is the purpose of our new cooperation agreement with Deutsche Bahn, on aspects ranging from the way we cooperate with startups to Industrial Internet solutions and further on to onboard connectivity. Working together will not only serve the interests of SNCF's and DB's customers, but also those of the mobility community at large."

Another goal is to identify the requirements that digital data transmission in rail transport will need to meet in the future, so that rail companies can work with the telecommunications industry to improve connectivity for customers and employees.

Both companies have already gained some insight into what it means to work together with startups. Now they intend to learn from each other on how to deal with these new forms of collaboration. They plan to foster innovation by creating joint-event-formats and agree on topics and challenges to be solved by the tech scene accordingly.

Germany

DB Class 1442.615 working an S1 service, calls at Leipzig Wilhelm-Leuschner-Platz. *Steamsounds*

Premiere in Berlin: the ICE 4 has arrived

DB CEO Grube: “ICE 4 is the backbone of our new long-distance transport system”; Transport Minister Dobrindt: “Upgrade for high-speed train travel”; Siemens Board Member Busch: “Numerous technical innovations”; World premiere celebrated at Berlin Hauptbahnhof as Dr. Rüdiger Grube, Chairman of the Management Board and CEO of Deutsche Bahn, and Alexander Dobrindt, German Minister for Transportion and Digital Infrastructure, presented the ICE 4, Deutsche Bahn’s new long-distance train, to the public.

“The ICE 4 ushers in a new era: it is the backbone of our future long-distance transport system. We are planning to expand our range of long-distance rail services by 25 percent by the year 2030, linking up more and more cities and regions. This new flagship will make a lasting contribution towards the future viability of the DB Group,” commented Dr. Grube, who was accompanied by Berthold Huber, DB Management Board Member for Traffic and Transport, Birgit Bohle, Chairwoman of the Management Board of DB Fernverkehr AG and Dr. Roland Busch, Member of the Managing Board of Siemens AG.

Minister for Transportion Alexander Dobrindt said, “25 years ago, the ICE heralded the dawn of a new mobility era and quickly became an export hit. Today, the ICE 4 is the most modern and customer-friendly upgrade of high-speed train travel, thanks in part to free WiFi in the first and second class cars.

I am confident that the ICE 4, like its predecessors, will become another showcase for quality made in Germany and an example of Deutsche Bahn’s innovative leadership. The ICE 4 is a key step towards the digital railway, a modern mode of transport for the Gigabit society.”

Birgit Bohle: “The ICE 4 sets new standards for our passengers: ergonomic seats, plenty of space for baggage, an elegant restaurant car and an innovative lighting scheme ensure a high level of comfort for passengers. This is the first ICE on which passengers can take their bicycles. Thanks to a completely revamped family area and parent-and-child compartment, families can now look forward to an even more relaxing journey.”

Dr. Roland Busch: “The ICE 4 sets new standards for rail travel in Germany. It contains the entire expertise and energy of our engineers. The train features numerous technical innovations: a completely new traction system, significantly lower energy consumption and more comfort for passengers. Moreover, the project is right on schedule, thanks to the hard work put in by Siemens and Deutsche Bahn. The 12-car ICE 4 can run at a top speed of 250 kilometres per hour and has an overall length of 346 meters. It has a total of 830 seats, 205 of which are in first class and 625 in second class. Its low weight and optimized aerodynamic design reduce energy consumption per seat by 22 percent compared with a modernized ICE 1. The innovative traction system uses powercars and permits flexible train formation.

Long introductory phase guarantees quality

The ICE 4 stands for a new dimension of quality assurance. This is the first high-speed train in Europe to undergo an introductory phase that will last several months before it goes into regular service in December 2017. The reason for this is that DB wishes to test the reliability of the train’s technical components and systems under real operating conditions. Before this even starts, the train already have run 250,000 test kilometres in the course of the project. During the introductory phase, which is about to begin in late fall, two ICE 4 trains will be used occasionally on the Hamburg–Hanover–Nuremberg–Munich line.

Project on schedule thanks to new approval procedure

The ICE 4 will be approved on the basis of the new procedures in force in Germany, in which technical standards are specified for a period of seven years. In addition to the Federal Railway Authority, various other bodies are now authorized to issue test certificates. With the exception of two test items, the Federal Railway Authority merely checks that the documents are complete in such cases. The countless documents and certification procedures required for the ICE 4 project could therefore be spread amongst various test service providers at an early stage, enabling compliance with the planned time schedule.
DB and Siemens assume that approval will be granted in time for the introductory phase. Siemens is the general contractor for the ICE 4 trains and responsible for the approval process. Bombardier Transportation contributes a supplier share of around 30 percent.

Improved passenger comfort

Many new features guarantee a high standard of comfort and relaxing journey for passengers. These include a modern passenger information system which will in the future display real-time information about the course of the journey and the connecting trains available at each station. The air-conditioning system has been improved and is designed to cope with temperatures of up to 45 degrees Celsius. The newly designed parent-and-child compartment and family area are spacious, turning a train journey into a fun experience. The ICE 4 has space for eight bicycles and four wheelchairs. Two on-board hoists ensure that wheelchair users can board and leave the train at all stations.
The innovative lighting scheme is adjusted according to the time of day and creates a pleasant atmosphere inside the cars. Clear signage for the different train areas makes it easier for passengers to find their way around the train, and seat numbers and reservation signs are now integrated in the seat headrests. The ICE 4 already has state-of-the-art WiFi and telephone technology, which DB will have installed in its entire ICE fleet by the end of the year. This means that passengers in second-class cars now also have access to WiFi .

DB has ordered delivery the first of 130 trains from the total of up to 300 trains covered by the framework agreement signed with Siemens in May 2011. With a volume of roughly €5.3 billion, this is the largest investment in rolling stock in the history of Deutsche Bahn.

Germany

Deutsche Bahn singles out its best suppliers

DB CEO Grube: “Reliability and innovative capacity of our partner companies are key quality factors for meeting our service commitment.” Deutsche Bahn presented its seventh Suppliers’ Award in Berlin at InnoTrans 2016, the leading international trade fair for transport technology. The DB Supplier Innovation Award, which singles out outstanding innovative products and services, was presented for the first time.

The winners received their awards from Dr. Rüdiger Grube, Chairman of the Management Board and CEO of DB, Dr. Richard Lutz, DB Board Member for Finance and Controlling, Berthold Huber, DB Board Member for Traffic and Transport, Frank Sennhenn, Chairman of the Management Board and CEO of DB Netz AG, and Uwe Günther, DB Chief Procurement Officer (CPO), during the ceremony.

Dr. Rüdiger Grube: “Reliability and innovative capacity of our partner companies are decisive factors in ensuring the quality of our services is right for our customers and making rail even more competitive.” With the corporate award, DB singles out highly committed, high-performing suppliers that have beaten the competition in the market segment and have fulfilled their contractual obligations in exemplary fashion. With their products and services, the award-winning companies have made an important contribution to implementing the ambitious DB2020+ Group strategy. Uwe Günther, the Group CPO, stressed: “The DB Suppliers’ Award and the Supplier Innovation Award reflect the high regard in which DB holds its suppliers.”
DB is one of the largest customers on the German market with an annual purchasing volume of more than 20 billion euros and maintains business relationships with over 30,000 suppliers worldwide.

The winner of the Supplier Innovation Award 2016:
Siemens AG, Mobility Division

The award was for the overall ICE 4 project, which combines a host of innovative technologies. These include flexible train configuration using the innovative powercar drive concept and interior fittings that optimize usable space. Other innovative characteristics of the ICE 4 include lower car weight, more seats and the new ETCS train protection system. The jury also singled out the resource and energy efficiency of the new train’s construction. New internally-supported bogies and the aerodynamic exterior design reduce energy consumption on the ICE 4 per seat by 22 percent compared with a modernized ICE 1.

The winners of the DB Suppliers’ Award 2016:
General Requirements and Services Category: Ferdinand Gross GmbH & Co. KG

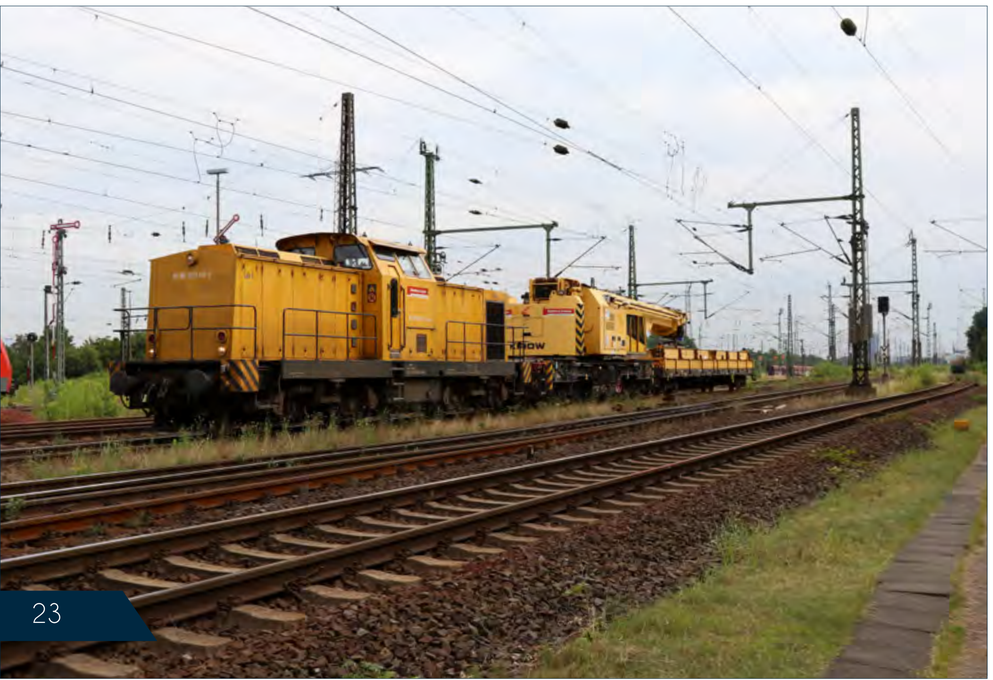
Since 2012, the company has been DB’s sole supplier for connectors of all kinds such as screws, studs and plain washers, reliably providing DB with over 22,000 parts. The rapid availability of these parts in sufficient quantities is crucially important for DB Heavy Maintenance, among others. To this end the supplier has included binding provisions concerning DB’s quality requirements in agreements with all its suppliers and can respond flexibly when new requirements emerge. Furthermore, Ferdinand Gross has rolled out an innovative system that optimizes the service for production-controlled material consumption for around 120 production warehouses and the company has itself pushed forward innovations in this area.

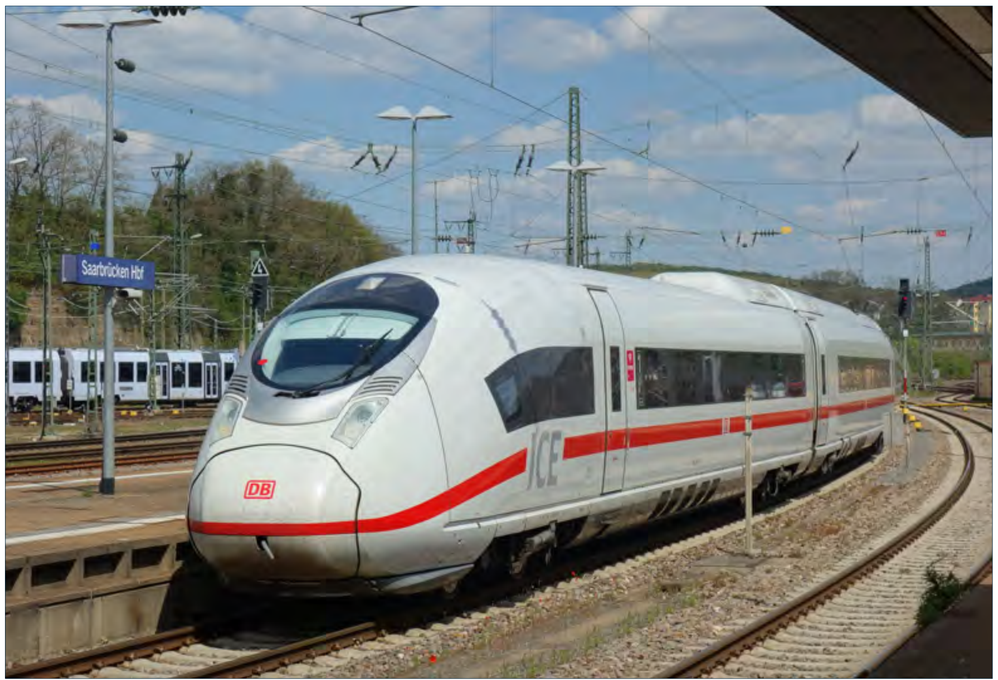
Rail Vehicles and Rail Vehicle Parts Category: ALSTOM Transport Deutschland GmbH

With its Diesel Network South-West project for regional and local rail passenger transport in Rhineland-Palatinate and Saarland, ALSTOM successfully delivered 38 LINT 41 and LINT 54 type diesel multiple units with virtually zero defects and on time for entry into service in December 2015. The rail manufacturer’s responsible management team adopted end-to-end transparency for production. DB was able to check production progress at any time. The jury singled out the strong signal ALSTOM sent to the industry with the punctual delivery of the vehicles, following the problems of the past few years in the regional and local rail passenger transport segment.

Infrastructure Category: Shenzhen SED Wireless Communication Technology Co., Ltd.

Since 2012 the Chinese company has been a DB supplier for mobile devices (cell phones), which are used as part of the DB-internal GSM-R (Global System for Mobile Communications-Rail) mobile network. The devices boast high quality combined with extensive services from SED Wireless. For instance, the company offers DB German-speaking service locally, extended warranty services and a simple replacement pool for devices. The company also stood out with its in-house development of a dual-SIM smartphone, which met DB’s extensive specifications. The smartphone can be used both for safety-critical GSM-R radio and for the public mobile network.





An ICE bound for Paris Est calls at Saarbrücken Hbf. *Steamsounds*

Bahnbau Gruppe’s Class 293.011 departs Oberhausen Yard hauling a Kirow crane and match wagon. *Alan Rigby*

Germany

Alstom presented its zero-emission train at InnoTrans

Despite numerous electrification projects in several countries, a significant part of Europe's rail network will remain non-electrified in the long term. In many countries, the number of diesel trains in circulation is still high – more than 4,000 cars in Germany, for instance.

Coradia iLint is a new CO2-emission-free regional train and alternative to diesel power. It is powered by a hydrogen fuel cell, its only emission being steam and condensed water while operating with a low level of noise. Alstom is among the first railway manufacturers in the world to develop a passenger train based on such a technology. To make the deployment of the Coradia iLint as simple as possible for operators, Alstom offers a complete package, consisting of the train and maintenance, as well as also the whole hydrogen infrastructure out of one hand thanks to help from partners.

This launch follows the Letters-of-Intent signed in 2014 with the German Landers of Lower Saxony, North Rhine-Westphalia, Baden-Württemberg, and the Public Transportation Authorities of Hesse for the use of a new generation of emission-free train equipped with fuel cell drive.

"Alstom is proud to launch a breakthrough innovation in the field of clean transportation which will complete its Coradia range of regional trains. It shows our ability to work in close collaboration with our customers and develop a train in only two years," declared Henri Poupart-Lafarge, Alstom Chairman and CEO.

Alstom's Coradia range of modular regional trains has a proven service track record spanning more than 16 years. Over 2,400 trains have been sold around the world and demonstrate a high availability rate. Coradia iLint is based on the service-proven diesel train Coradia Lint 54. It will be manufactured in Salzgitter, Alstom's largest site.

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

MDB Cargo and Chinese city of Hefei to collaborate on rail transports from China

Memorandum of understanding signed Initial weekly freight train from Hefei to Hamburg Service to start in October

At the beginning of September, DB Cargo and the Hefei municipal government signed a memorandum of understanding. The both partners pledge to initiate rail freight transport from Hefei to Hamburg and then expand operations along the route. The initial plan foresees one train per week starting at the beginning of October.

Dr. Jürgen Wilder, CEO of DB Cargo, says, “We are thrilled that we can continue to expand rail transport with Hefei along the traditional Silk Road route. The constantly rising transport volumes of the trans-Eurasian land bridge demonstrate that railway has established itself as a competitive alternative to other modes of freight transport. I firmly believe that more customers will use rail services to transport their goods to and from China in the future.” Running via Dostyk in Kazakhstan, Moscow and Warsaw, the route to Germany covers the total of 10,600 km and each freight train requires 15 days to complete the trip.

Due to its nodal position in the eastern Chinese province of Anhui, Hefei is a freight hub for customers from eastern and southern Chinese regions. Freight is varied, including wares such as photovoltaic components, computers and textiles.

The transports are organized by Trans Eurasia Logistics, a joint venture between Deutsche Bahn and Russian Railways. Trans Eurasia Logistics has been offering viable train connections between Europe and a host of Chinese regions for several years.

Hefei’s municipal government wants the undertaking to be its contribution to Beijing’s Silk Road project of One Belt – One Road. China intends the use the project as an opportunity to shape infrastructure activities in other countries and thus play an active role in over 65 different national markets.

Stadler unveils the new Citylink tram-train for Chemnitz at InnoTrans

At Innotrans, Stadler, Vossloh Kiepe and Verkehrsverbund Mittelsachsen GmbH (VMS) jointly presented the new Citylink hybrid light rail vehicle produced for the German city of Chemnitz. The first order from VMS is for the delivery of 8 Citylink type tram-trains. The vehicles have been developed and produced by a consortium of Stadler Valencia and Vossloh Kiepe. The consortium received a second follow-up order in summer last year. Chemnitz is investing into its mobility and executing a multi-stage investment project called “Chemnitzer Modell” to develop an extensive transport network. Tramway- and railway tracks will be linked and connectig points are to be created between the city and the region of Chemnitz. For this the consortium of Stadler and Vosloh Kiepe provides the perfect vehicle. The Citylink tram-train precisely meets the requirements of a city with advanced mobility. Following the first order in 2012, VMS placed a follow-up order for additional 4 units in July 2015 . These vehicles will enter service in the second stage of the transport project in Chemnitz executed for further improvement of mobility. The modular low-floor light rail vehicle family has not only been designed for urban transport, but also to connect downtown with the suburbs. In addition, Citylink is one of the first low-floor tram-trains satisfying the German regulations BOStrab and EBO .The modular Citylink tram-train can operate both on the tramway network under 600/750V DC and on the regional non-electrified railway lines with diesel traction. The maximum speed of the vehicle reaches 100 km/h. The Citylink tram-train to be used in Chemnitz can operate on 1.435 mm standard gauge. The vehicle is 37.2 m long and 2.65 m wide and consists of three articulated sections with four bogies, two of them powered. The vehicles can drive on a minimal railway curve radius of at least 25 meters and can climb inclines up to 6%. The stations on the urban and regional network of Chemnitz have six different platform heights. Therefore the concept of the Citylink vehicle for boarding provides four double-leaf doors at different level per side , with two doors located in each end-car. This allows people with reduced mobility to board easily from different platform heights. The inner ones are for access from platforms of the urban tramway network with heights of either 190 mm or 380 mm, while the end doors are for boarding from platforms of either 380 mm or 550 mm height on DB lines. In addition, the boarding areas are equipped with automatic sliding steps and with a manual ramp for bridging the gap between the vehicle and the platform at the stops.

Fast and flexible train procurement: DB offers rail vehicles for purchase, lease or rent

Find vehicles DB no longer requires on the online platform www.db-usedtrain.com

Deutsche Bahn (DB) is using an online platform www.db-usedtrain.com to offer used passenger rail vehicles. The platform enables transport companies, local transport authorities and dealers to find the used vehicles they need quickly and easily or to rent trains on a temporary basis. “Deutsche Bahn is continually modernising its fleet. DB Regio alone has invested approximately half a billion euros per annum in new trains over recent years. This has freed up older rolling stock, and we now want to offer these vehicles for purchase, lease or rental,” says Oliver Terhaag, the Management Board member responsible for operations at DB Regio AG. “Naturally, we do not eat into our reserves and we only sell vehicles that we no longer need for operations or stand-by.” DB Regio is responsible for putting the vehicles on the market and sells them using a bidding process. With a comprehensive fleet modernisation also underway at DB Long Distance, trains designed for longer routes are also on offer. In addition to sales, DB provides rental and leasing options. Possible uses include extra or special train services, new operations and transitional services.

Vehicles for regional and long-distance transport

For regional and local transport, the main vehicles on offer include classic single-decker passenger cars (“n-coaches”) and a variety of diesel multiple units.

Though these vehicle types no longer meet today’s levels of comfort, they are still regarded as particularly reliable and economical stock. The long-distance vehicles on offer are older passenger cars previously used on InterRegio and Intercity services, as well as sleeper and restaurant cars.

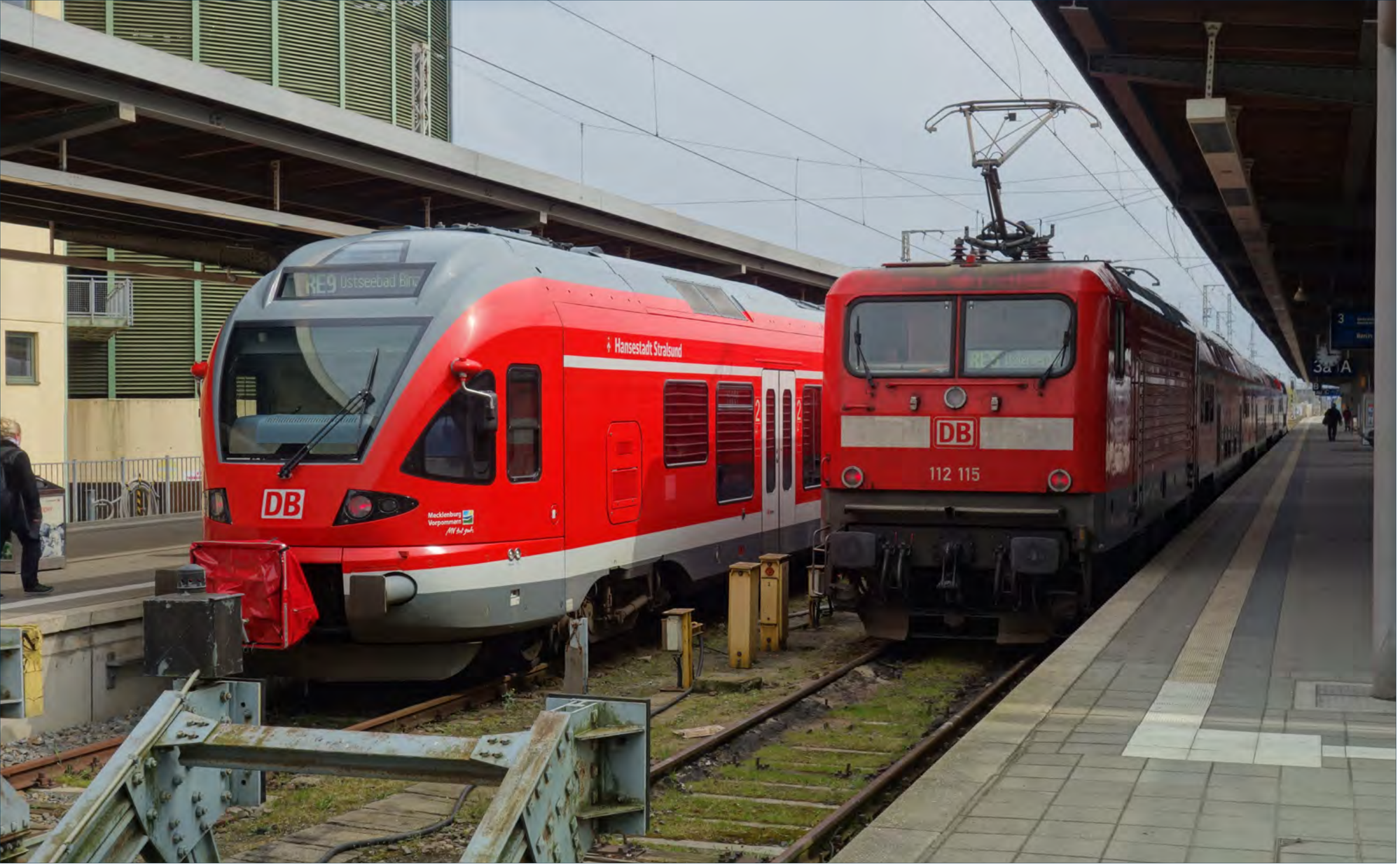
230 customers already registered in Germany and other countries

Some 230 companies from Germany and beyond have already registered on the website. Rail companies both in Germany and abroad are taking advantage of the opportunity to bolster their fleet with used DB vehicles. Many of DB’s former long-distance coaches are now in service in Eastern Europe, while some have found their way to other continents. Companies are particularly interested in purchasing DB vehicles because of the technical documentation provided and the advising offered by DB rolling stock experts.

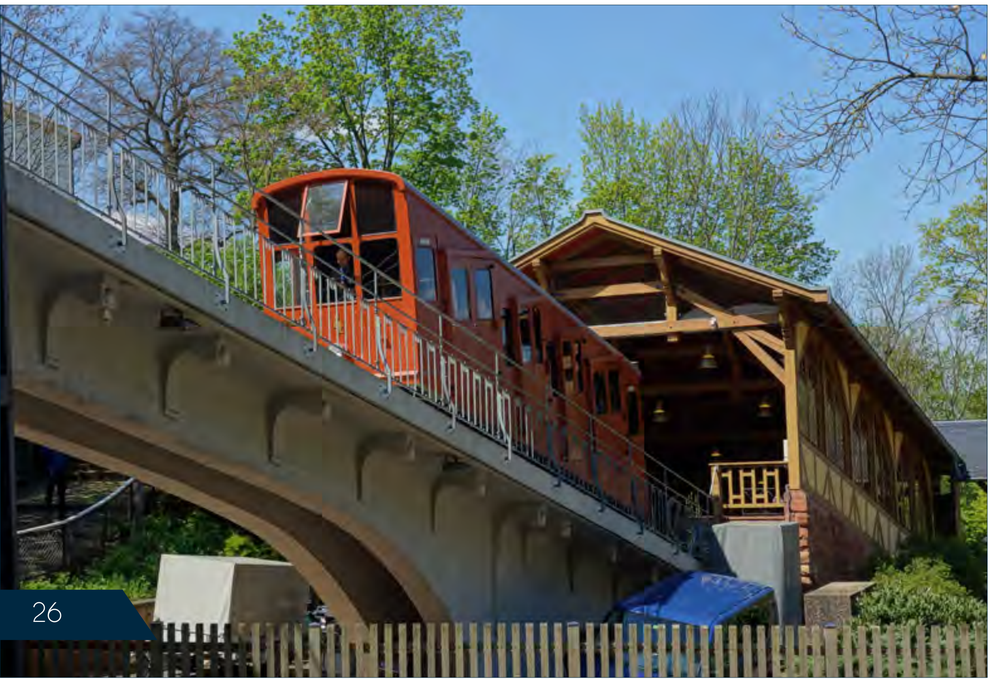
Rented rolling stock covers short-term demand

The online portal www.db-usedtrain.com is also the place to go to rent DB vehicles. Where availability permits, DB offers rental of rolling stock from its operational reserve. DB Regio vehicles based in fixed locations can generally be obtained at short notice. In order to cover longer-term requirements, DB Regio is currently developing a leasing model. In leasing, unlike in vehicle rental, the lessee is responsible for maintenance and keeping the rolling stock in full working order.

Germany



A DB BR429 EMU working an RE9 service to Ostseebad Binz stands alongside Class 112.115 working an RE5 service to Elsterwerda at Stralsund Hbf. *Steamsounds*



Chemnitz tram-train No. 433 working a line No. C14 service to Mittweida, stands at Chemnitz Hbf.
Steamsounds

Car No. 4 is seen at the top section of the Heidelberger Bergbahnen, Molkenkur station. *Steamsounds*

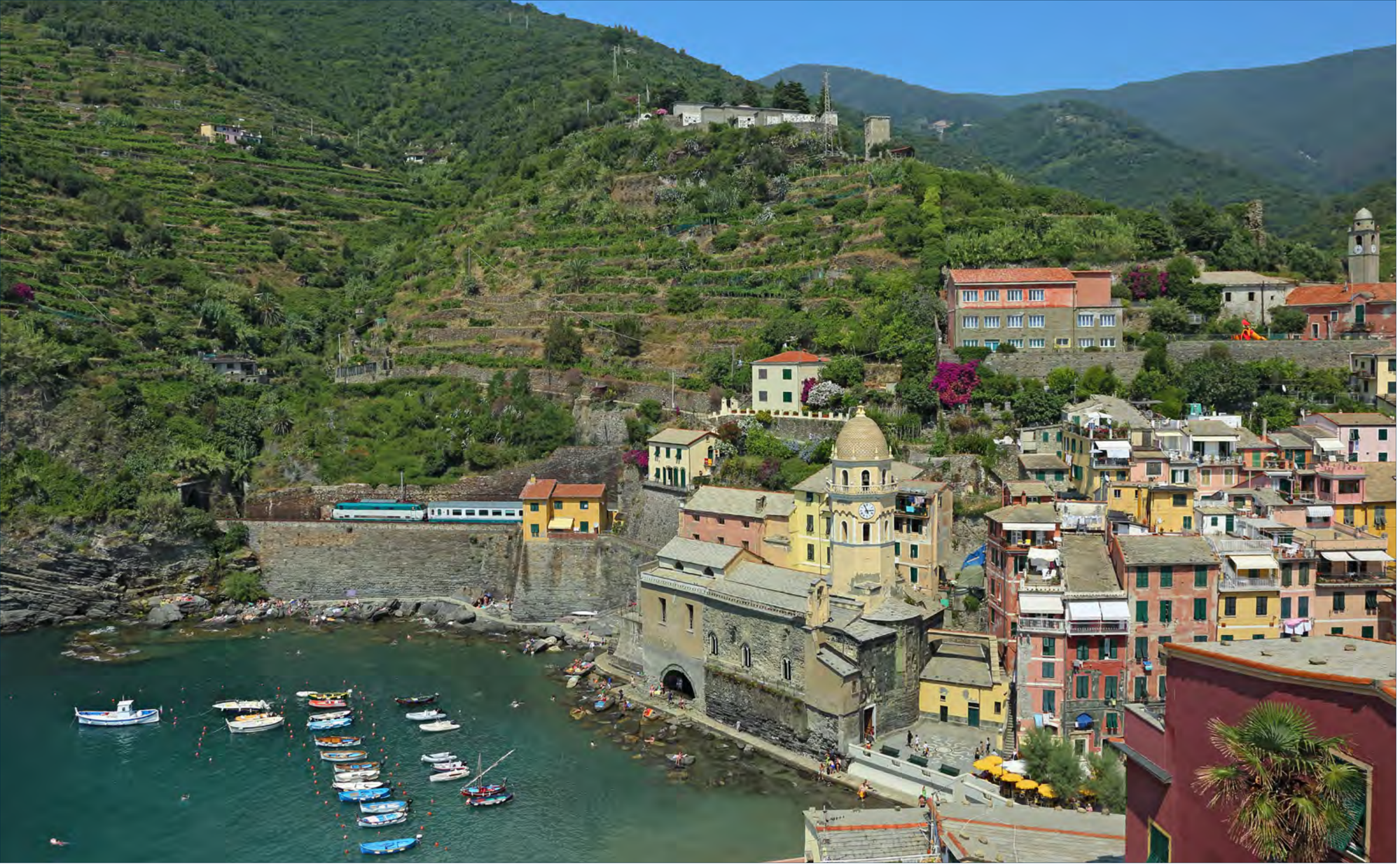
Italy

Class 483 021 & 483 022 approach Isola del Cantone whilst hauling an empty steel train from Novi Ligure to Genoa. *Laurence Sly*

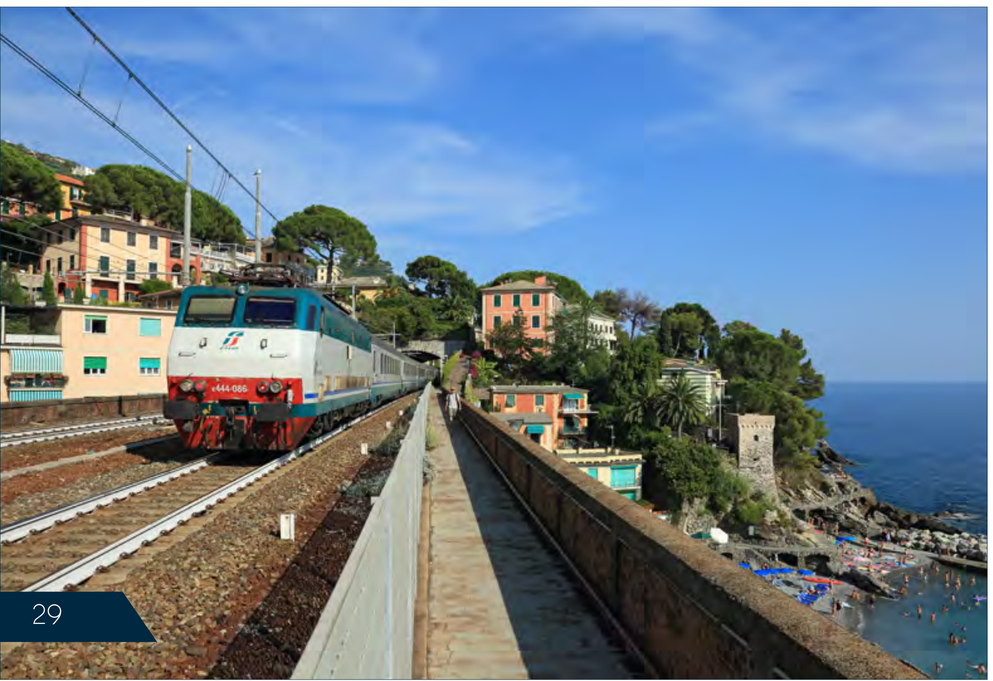
Italy

Trenitalia's Class E655.178 passes Isola del Cantone whilst hauling the Messina Line container train from Reggio Emilia to Genoa on August 1st. *Laurence Sly*

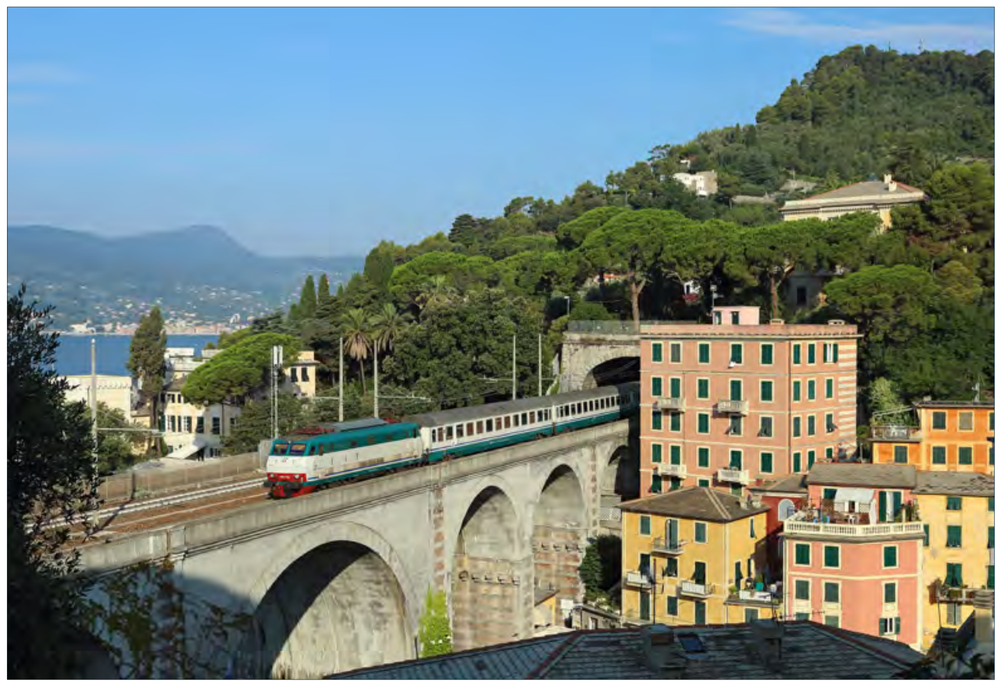
Italy



On July 27th, a Class E444 passes Vernazza whilst working train No. IC35674 13:24 Livorno Centrale - Milano Centrale. *Laurence Sly*



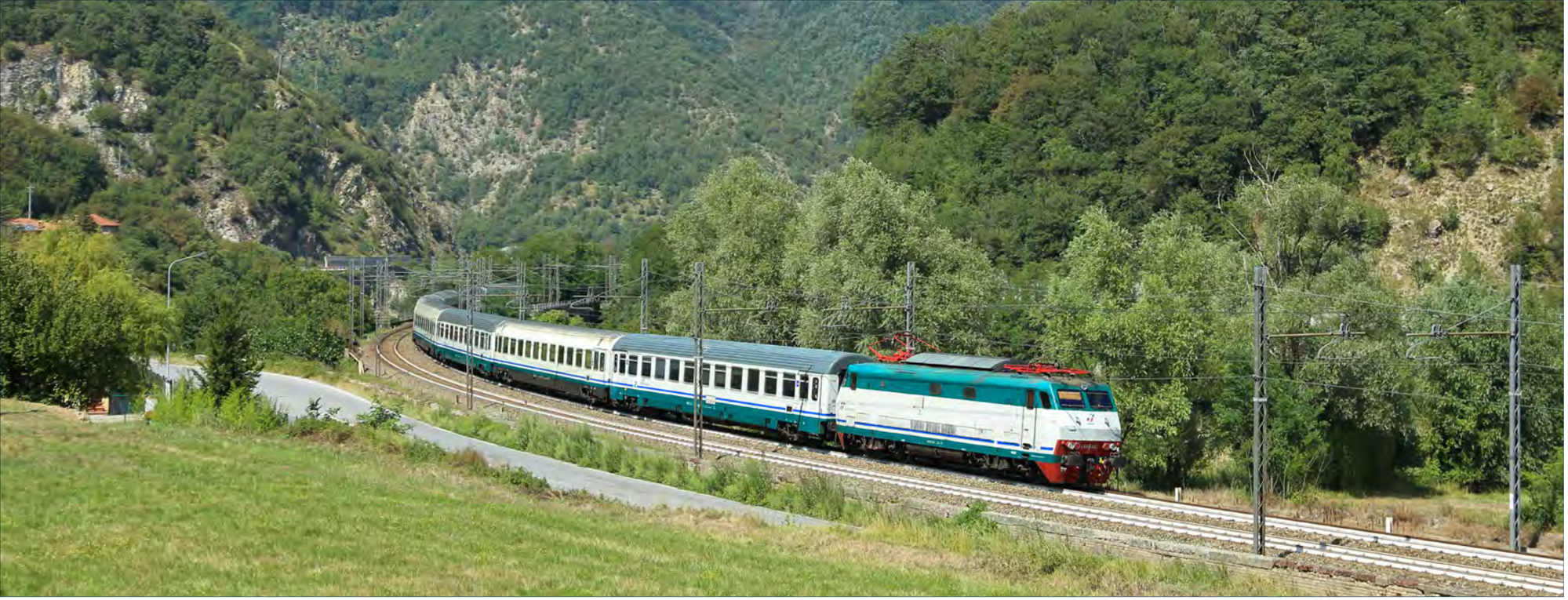
Class E444.103 passes Zoagli whilst working train No. IC35631 06:10 Milano Centrale - Livorno Centrale on July 27th. *Laurence Sly*



Trenitalia's Class E444.086 passes Zoagli whilst working train No. IC35680 16:40 La Spezia Centrale - Milano Centrale on July 26th. *Laurence Sly*

Italy

Trenitalia Class E402.127 passes Isola del Cantone whilst working train No. ICN35362 14:56 Catania Centrale - Milano Centrale on August 1st. *Laurence Sly*



Italy

Alstom to deliver four additional Pendolino high-speed trains and related maintenance services to NTV

Alstom and NTV have signed a contract for the purchase of four Pendolino trains and related maintenance services. The contract was signed in Rome by Andrea Faragalli, President of NTV and Michele Viale, Managing Director of Alstom in Italy. It also includes the extension of maintenance services for NTV's entire fleet of Pendolino trains from 20 to 30 years. NTV thus leverages two options included in a previous contract signed with Alstom in October 2015 for the purchase of eight Pendolinos high-speed trains and associated maintenance. The first trains are currently under construction in Savigliano (CN) and are scheduled to be delivered in late 2017, and will be ready to enter service in early 2018.

Pendolino is part of Alstom's Avelia range of high-speed trains. The four new trains will include the same features and technical specifications as the eight Pendolinos previously ordered. 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 with its futuristic lines is designed to improve crash protection and enhance aerodynamics. The train is fully compatible with the very latest 2014 TSI [1] regulations established by the European Union. The 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.

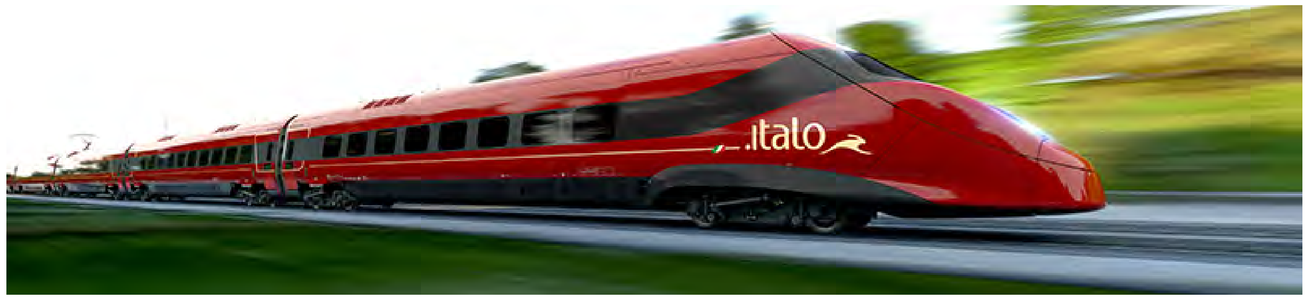
The Pendolino trains, in addition to the existing fleet of 25 AGVs, will bring up the NTV fleet to a total of 37 Avelia trains. This will allow the private Italian operator to expand its current network and respond to an increasing demand for new routes and higher frequencies. NTV passed the 9-million-passenger milestone in 2015 and is on track to reach 10 million in 2016, all travelling on board Alstom's trains.

"We are proud to be taking this next step with Alstom, our trusted historical partner," said Andrea Faragalli, President of NTV. "The expansion of the fleet to include 37 trains is part of our project for industrial renewal begun last year. Alstom's Pendolino, thanks to its excellent performance on both high-speed and conventional lines, is perfectly suited to our needs. We want to increase the presence of high-speed services in the country and thanks to these four additional trains, we will serve new destinations and strengthen existing routes such as Milano-Napoli."

"We are very pleased with NTV's renewed confidence in our expertise, allowing us to further consolidate our partnership established in 2008. With its fleet of 12 new Pendolinos, NTV is joining the club of rail operators who have already chosen this train. Pendolino is one of Alstom's flagship products, made in Italy in our centre of expertise for high speed, Savigliano. This new train will give us the opportunity to adapt Pendolino to the latest safety standards and interoperability in Europe, opening up more opportunities in foreign markets," said Andreas Knitter, Senior Vice President of Alstom Europe.

The site of Savigliano (CN) is already working on the design and manufacturing of the train in collaboration with Sesto San Giovanni (MI) for traction systems and Bologna for signalling systems. The 30-year maintenance of the Pendolino trains for NTV will be performed in Alstom's depot in Nola (NA), already in charge of maintenance for AGV.Italo.

The Avelia range is based on four current flagship products – Pendolino, Euroduplex, AGV and Liberty – representing the culmination of 35 years of expertise and more than 1,050 trains in service around the world.



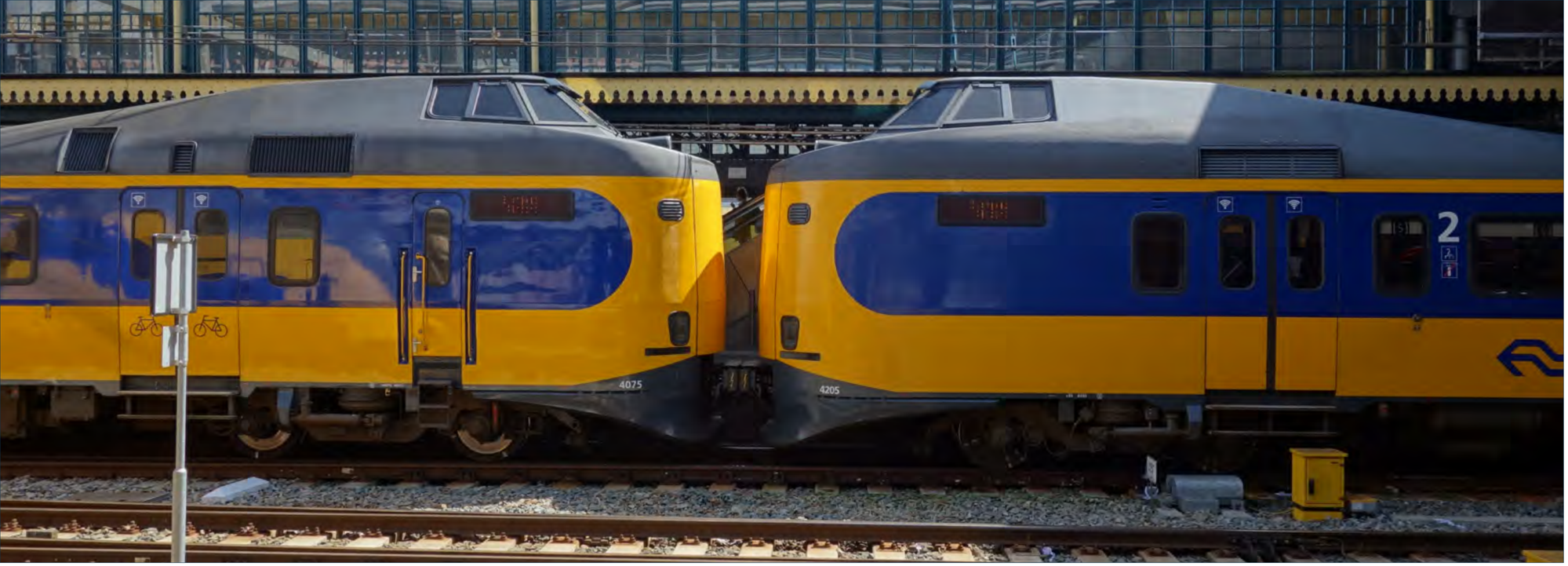
Trenitalia's Class E444.102 passes Giretta whilst working train No. IC35669 14:05 Milano Centrale - La Spezia. *Laurence Sly*

Italy

An ETR460 EMU passes Framura whilst working train No. FB35174 13:57 Roma Termini - Genova Piazza Principe on July 29th. *Laurence Sly*

Netherlands

An NS VIRM (Verlengd Interregiomaterieel), EMU arrives into Arnhem.
Steamsounds



Netherlands

Stadler and Nederlandse Spoorwegen present the FLIRT in its most colorful shape and form

Stadler, together with Nederlandse Spoorwegen (NS), is presenting the electric, low-floor multiple-unit FLIRT train in its most colorful shape and form to date as NS Sprinter.

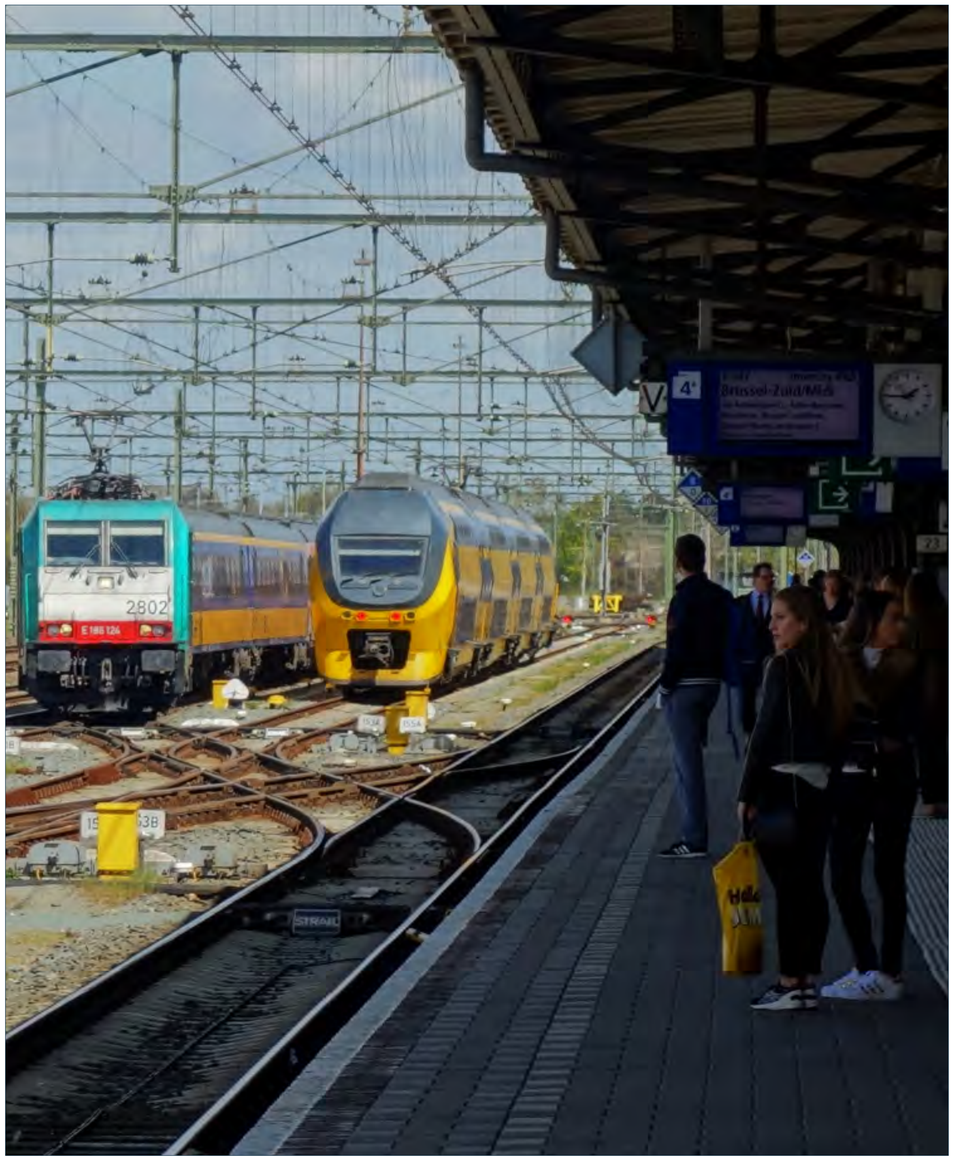
The 58 3- and 4-carriage trains ordered by NS will be operated by NS Reizigers in regional service on routes in the Netherlands from 2017. The completion of the order for the new NS Sprinters is further confirmation of Stadler's agility and unbeatable order compliance.

NS ordered 58 electric, low-floor multiple-unit (EMU) FLIRT trains from Stadler in April 2015 in order to quickly fill an unexpected gap in its rolling stock. Within 12 months, and in close cooperation with NS, Stadler designed and built a train that is tailored specifically to meet the needs of passengers on regional routes in the Netherlands. Thanks to the exceptional teamwork of NS and Stadler, the first completed train was presented to NS on 13 April 2016 – one year after the order was issued – during a roll-in in Maastricht.

The electric, low-floor trains from the latest FLIRT generation are extremely comfortable thanks to the air suspension on the bogies, attractive seating, air conditioning for passengers and drivers, and a closed toilet system. Furthermore, the regional trains meet TSI PRM requirements for people with restricted mobility as well as the EN15227 requirements regarding collision safety and can reach a maximum speed of 160 km/h. Each of the 33 3-carriage trains has an overall length of 63.2 metres, while the 25 4-carriage versions are 80.7 metres long each. In addition to their technical specificities, the trains are distinguished by their fresh interior design and high level of comfort.

Stadler has sold more than 1300 FLIRT electric multiple units (EMUs) and diesel multiple units (DMUs) in Europe, North Africa and the USA. The trains are based on a tried-and-tested platform system and can be adapted in a cost-effective manner. They can be operated with a high level of reliability in climate zones ranging from +40°C to –40°C. A further 131 articulated multiple-unit trains (GTWs) are also in operation in the Netherlands.

The Dutch market is extremely important for Stadler, as underlined by the current presence of three service locations in Venlo, Leeuwarden and Nieuwegein.



A pair of NS Koploper (ICM) (Intercitymaterieel) EMUs stand at 's-Hertogenbosch. *Steamsounds*

SNCB Class 186.124 (No. 2802) is pictured arriving at Roosendaal with an IC service to Brussels. *Steamsounds*

CAF SELECTED AS PREFERRED BIDDER FOR THE NEW AMSTERDAM TRAMS

GVB Activa B.V., the Amsterdam public transport operator, has selected CAF as preferred bidder for the supply of new trams. The order includes the supply 63 new trams, as well as options for up to 60 additional trams.

The trams will run on the 213.3 km long Amsterdam Metropolitan network. The network consists of 16 lines with 490 stations in total. The capital of the Netherlands has a population in excess of 800,000, and is one of the main European touristic and economic poles of attraction.

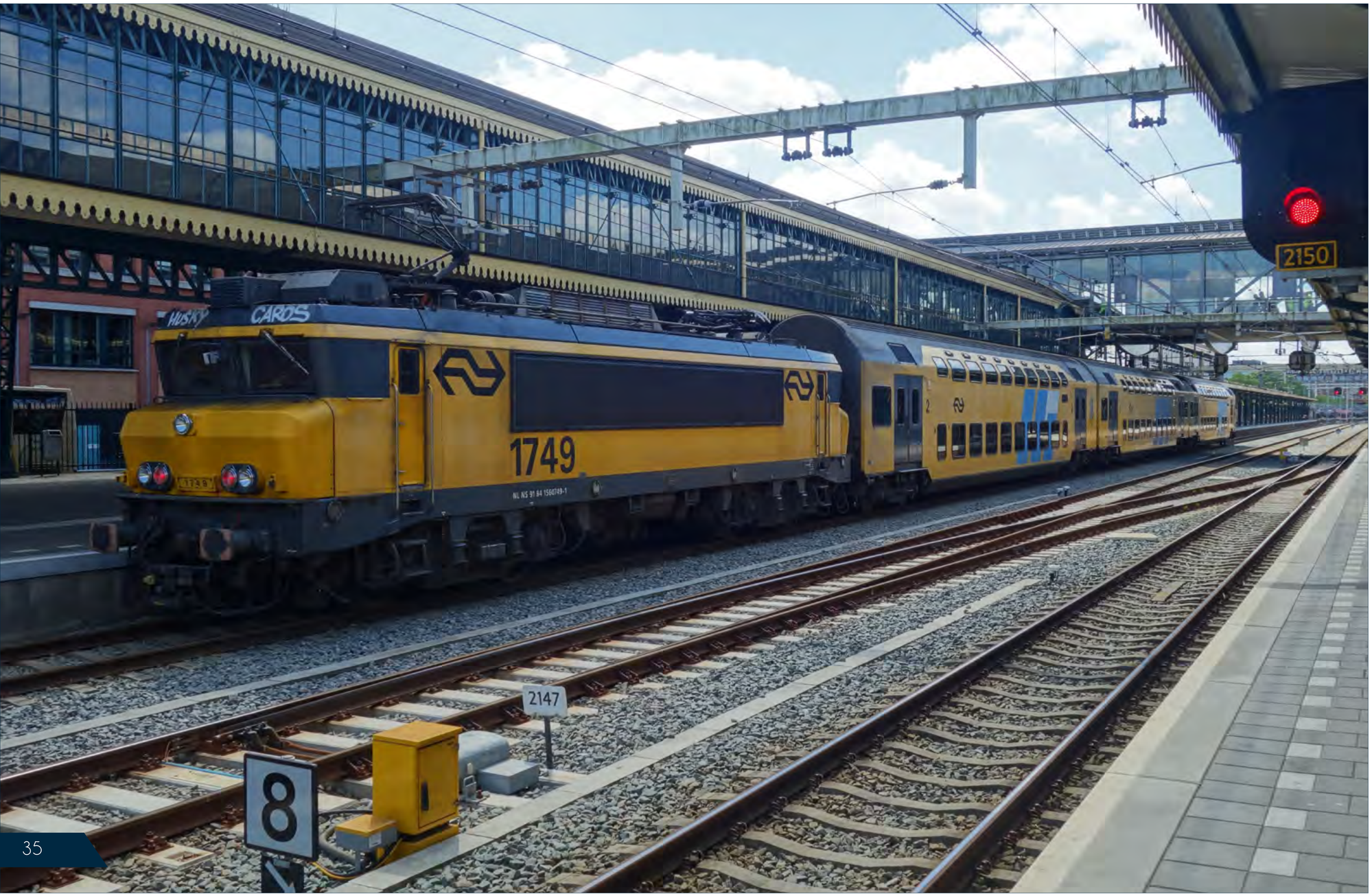
The trams proposed by CAF for Amsterdam are low-floor, bi-directional vehicles, and combine modern aesthetics with state-of-the-art equipment. These new trams provide maximum accessibility without comprising comfort, performance and ease of operation. They provide sound evidence of CAF's capacity to cater for the unique requirements of each customer.

Significantly, GVB Activa B.V. already awarded CAF a project for the supply of 37 LRVs in 1994. These units are since then providing service in Amsterdam's underground network.

This project for the Dutch capital clearly underpins CAF's consolidation in the European Market, where the Company has won important contracts in United Kingdom, Italy and Belgium this year.

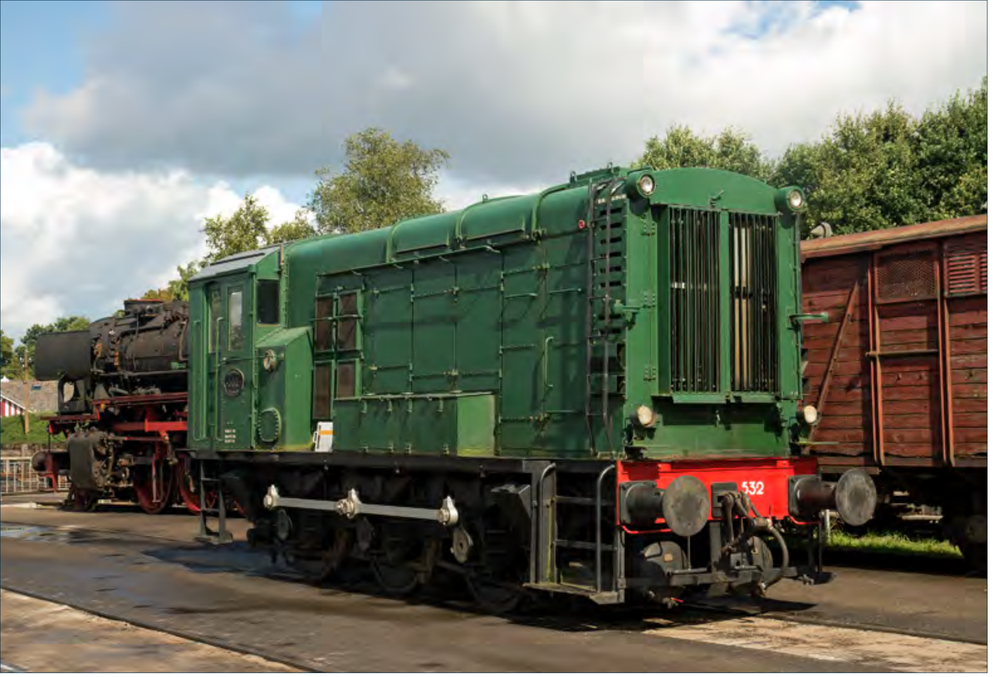
In this regard, the large number of LRV supply projects developed by the Company in recent years deserves special mention. These have been implemented in cities such as Budapest, Freiburg, Tallinn, Birmingham, Nantes, Besançon, Stockholm, Belgrade, Edinburg, Antalya, Cagliari, Luxemburg, Utrecht and Saint-Etienne.

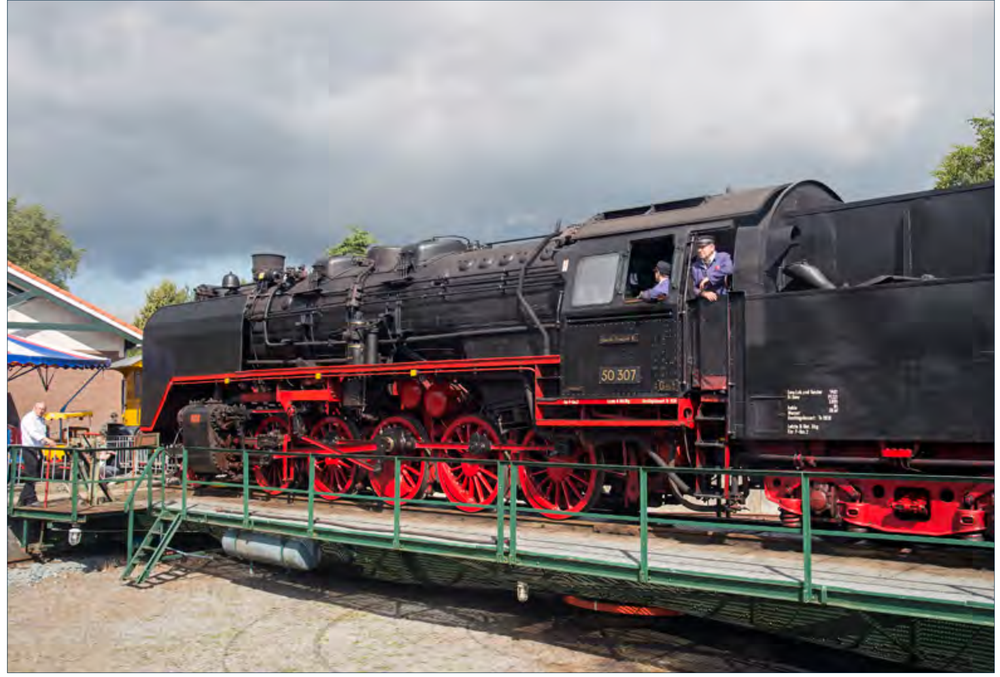
The new project adds to an aggregate of new contracts awarded in 2016 in excess of €2,500 million, this would add to the Company's backlog to circa €6,500 million, including the most recent contracts which have not yet been signed, strengthening CAF's committed strategy towards growth over the next few years.



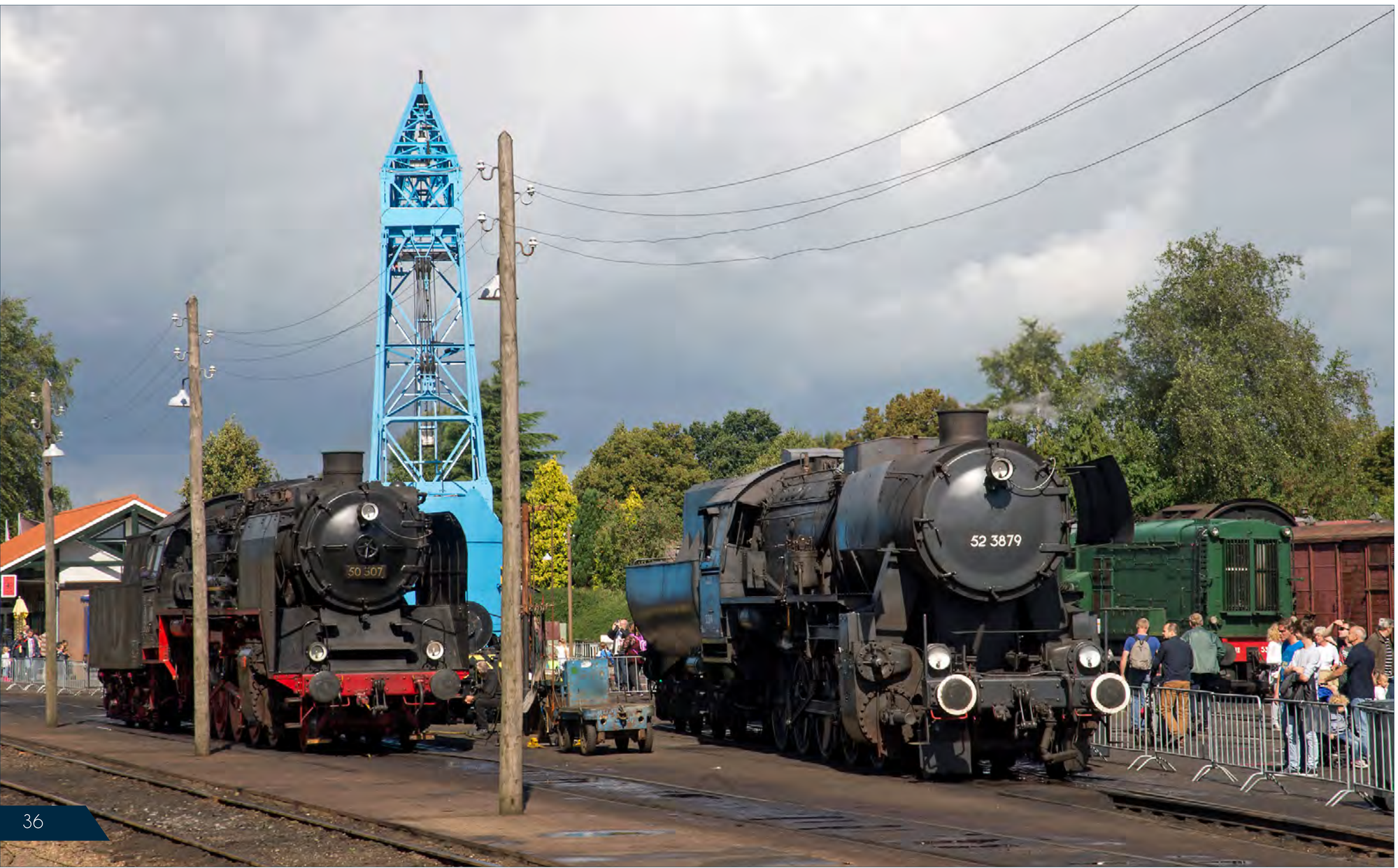
Netherlands

NS No. 1749 calls 's-Hertogenbosch with a service from Nijmegen. *Steamsounds*





Netherlands



Now preserved by VSM, 500 class No. 532 stands in the sun at Beekbergen depot. *Mark Pichowicz*

On September 4th, German heavy freight loco No. 50.307 (ex DR 50.3564) is turned on the shed at Beekbergen during the annual VSM steam gala. *Mark Pichowicz*

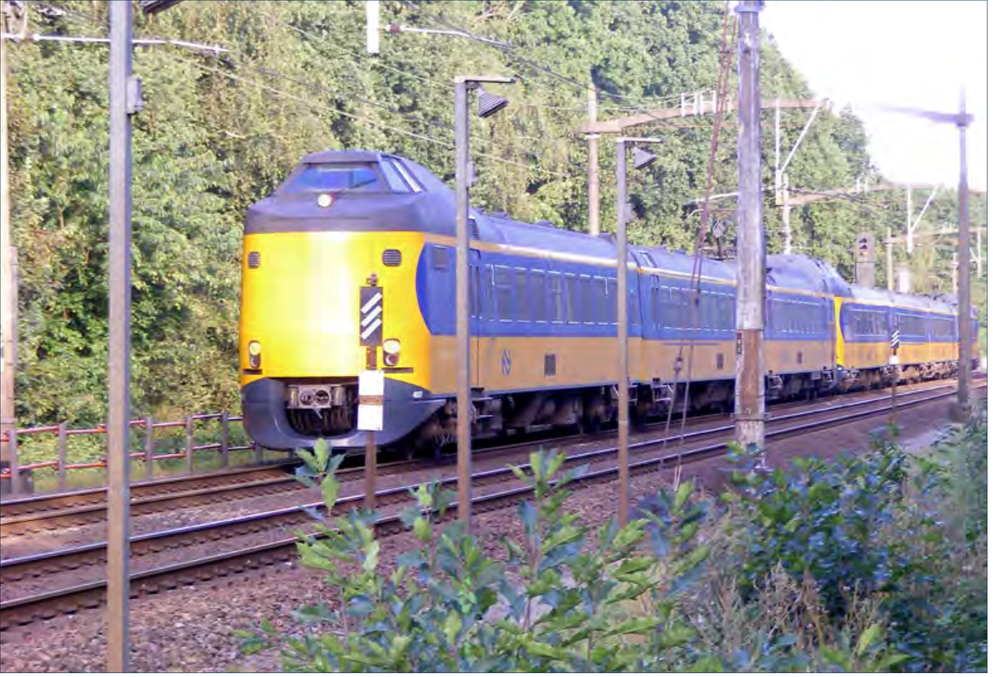
2-10-0 freight locos Nos. ÖBB 52.3879 and 50.307 (ex DR 50.3564) stand on shed at Beekbergen during a rare sunny moment during the VSM gala held on September 4th. *Mark Pichowicz*

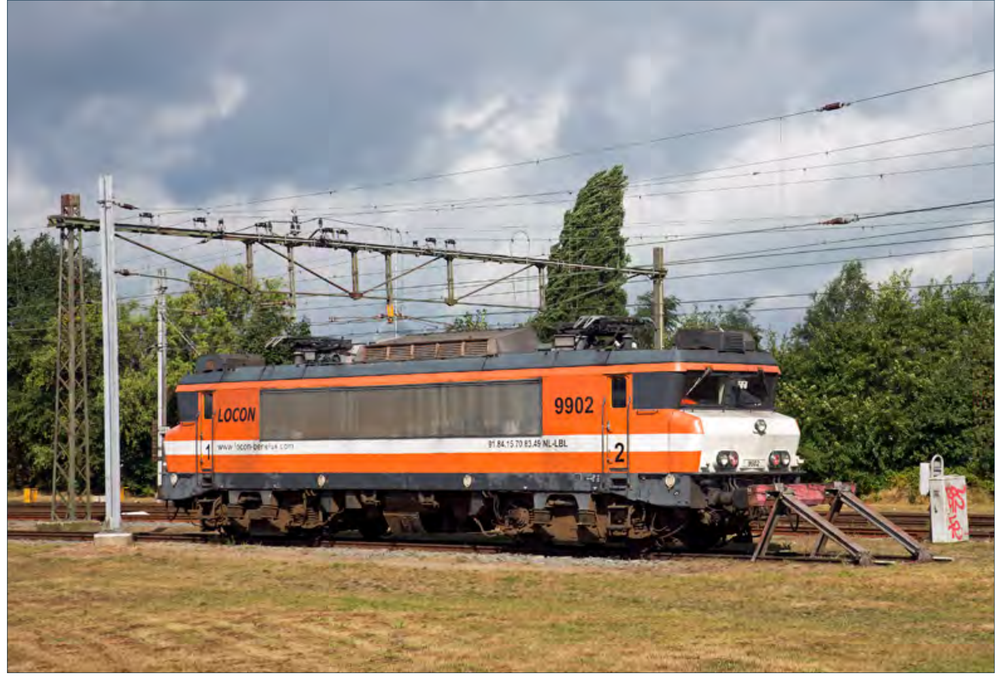
Netherlands

SNCB TRAXX No. 2806 stands in the sun at Amsterdam Centraal with the 16:52 service to Brussels Midi. *Mark Pichowicz*

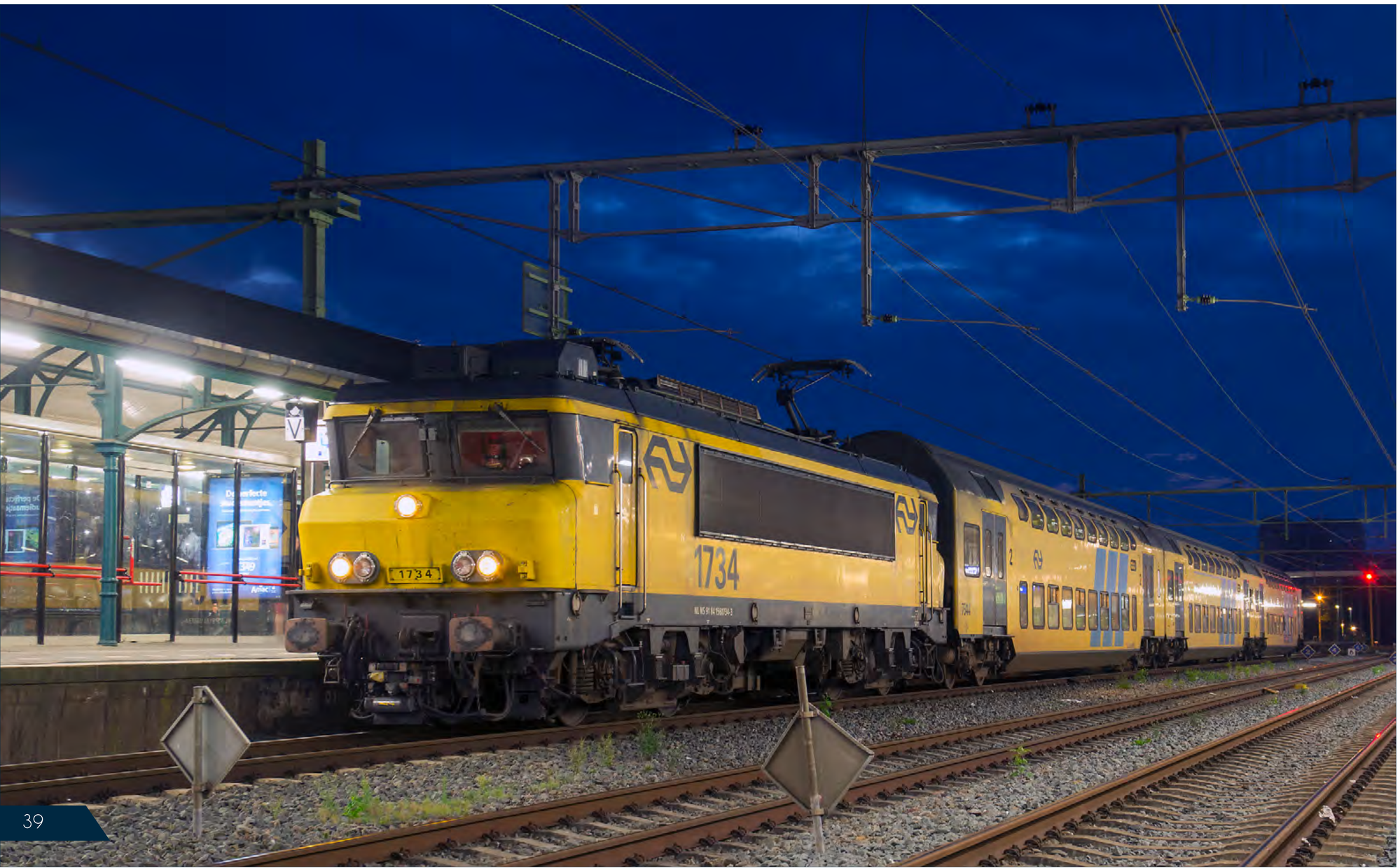
Netherlands

On September 3rd, NS No. 1739 brings empty stock into Amsterdam Centraal ready to work an InterCity service to Berlin. *Mark Pichowicz*





Netherlands

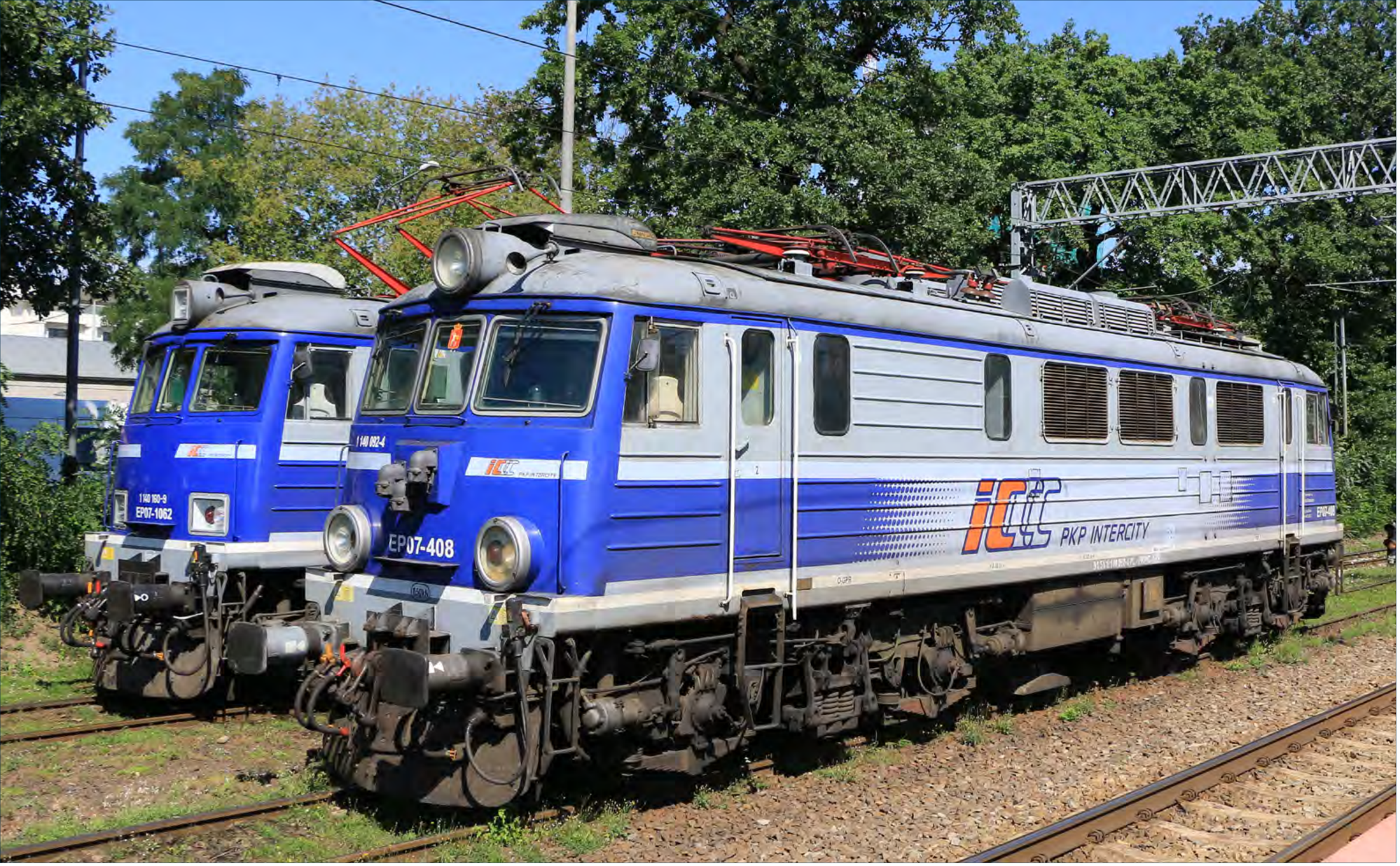


ANS 'Koploper' EMU speeds past Zwartvenseweg crossing, west of Tilburg on September 10th. The 'Koploper' is the inter regional units recently voted the most comfortable stock on NS. Originally these units had a connecting door for use when working as multiple sets, though these are not used now and often sealed with fixed panels. 'Koploper' means frontrunner!
Stephen Simpson

Locon No. 9902 (the former NS No. 1842) is seen stabled at Apeldoorn on September 4th.
Mark Pichowicz

On September 3rd, NS No. 1734 waits to depart Apeldoorn with a Sprinter service to Enschede.
Mark Pichowicz

Poland



In glorious sunshine, PKP Intercity locos Nos. EP07-1062 and EP07-408 stand on the stabling point at Poznan Glowny, August 8th.
Julian Churchill

Stadler and Solaris to establish partnership for light rail vehicles

Solaris Bus & Coach S.A. and Stadler Polska Sp. z o.o. are enhancing their cooperation for light rail vehicles. To strengthen their market positions, companies will establish the consortium. Cooperation will be inaugurated with the joint offer in Krakow tender to supply trams. Additionally Stadler and Solaris together are planning to take part in the other tram tenders in Poland and other European markets.

For the past 10 years Stadler Polska has been one of the leading rolling stock producers in Poland. The factory in Siedlce provides employment to ca. 800 people and cooperates with over two thousands Polish suppliers and partners. Stadler Polska is also the biggest exporter of rolling stock in Poland. Solaris is a leading European bus and trolleybus manufacturer. In 2009, the company entered the rail market and since then delivered trams to Poznań and Olsztyn, Poland as well as Jena and Brunswick, Germany. The contract for the delivery of 41 trams for Leipzig is in process of completion.
"Close cooperation between Stadler and Solaris will enable companies to strengthen their positions on the tram market in Poland and other European countries. Product portfolios of both companies are complementing themselves very well. We will be able to profit from one another also in our technology development. Therefore I am very pleased with the cooperation with Solaris" – stated by Peter Spuhler, CEO and owner of Stadler.

"We aim to still grow our activities in the light rail market and therefore we searched for a renowned strategic partner for the further development of our products and facilities in the Poznań area and also to utilize our excellent market contacts and even grow our engineering and car body manufacturing competence. For such cooperation there is no better partner than Stadler, which is a globally-recognized Swiss brand. What is more, Stadler vehicles are well-known in Poland" – said Solange Olszewska, owner of Solaris Bus & Coach S.A.

"The basis of our company philosophy is delivering the highest quality vehicles, characterized by reliability and low operating costs. Those features allowed FLIRT trains, also those produced in Siedlce, to succeed in many European countries. I am convinced, that establishing Stadler-Solaris cooperation and teaming our specialists will enable us to build modern trams, that soon will be appreciated on Polish and other selected markets" – added Christian Spichiger, Executive Vice President Division Central Europe of Stadler.
"This way we will create synergy effects for our future customers. What I would like to highlight is that the agreement will exert no impact on our activities within the bus and trolleybus market, which will continue as fully independent operation." – explained Andreas Strecker.

Poland

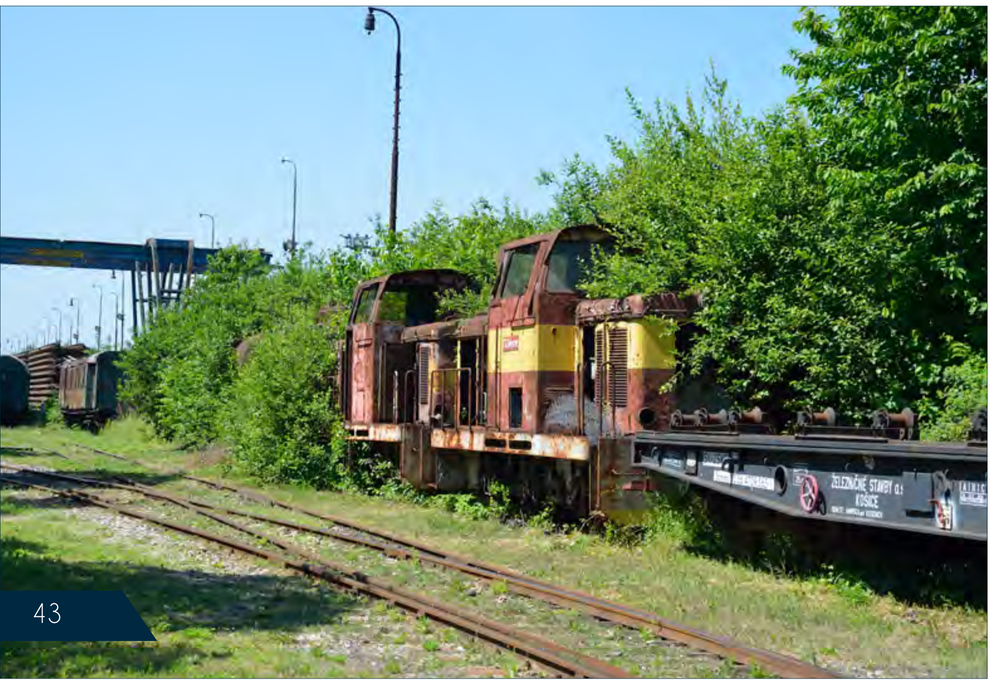
PKP Intercity Class SU42-1001 stands at Hel on August 3rd, having arrived with the ECS for a Krakow Glowny service. *Julian Churchill*

Poland

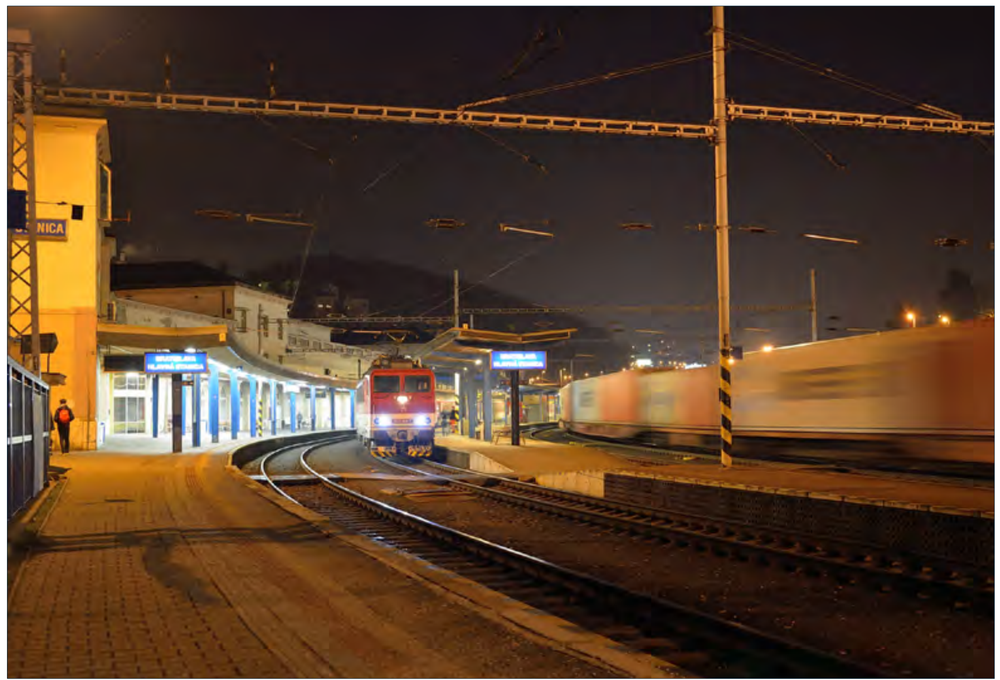
PKP Cargo loco Class ET41-063 is pictured passing Gdansk Glowny on August 2nd.
Julian Churchill

Slovakia

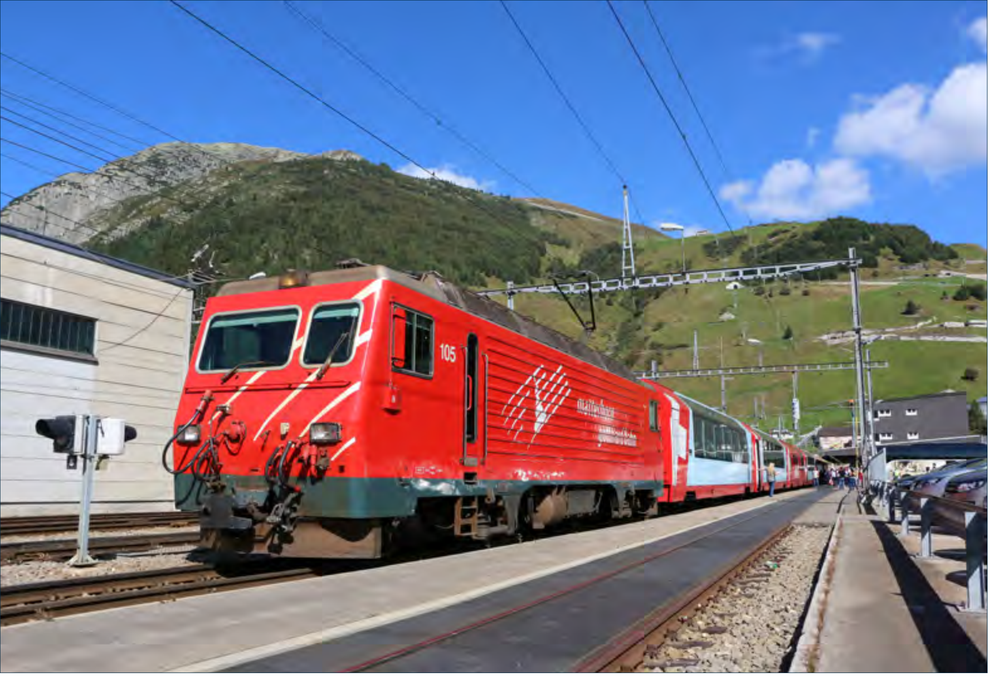
ZSSK Cargo Class 740.641 is seen shunting at Haniska pri Kosiciach. *Paul Godding*

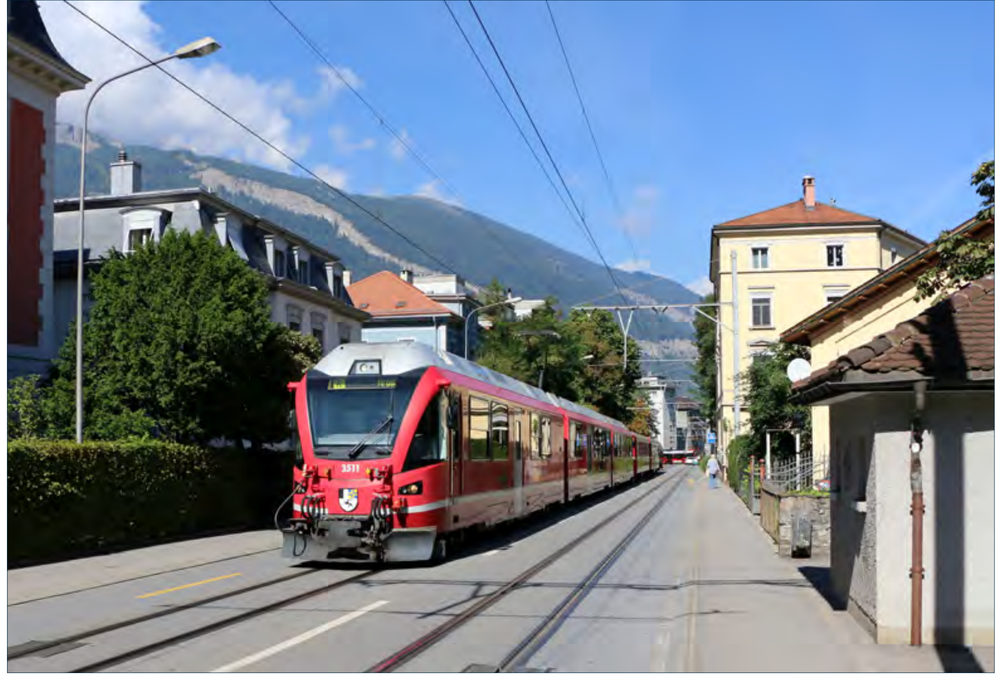


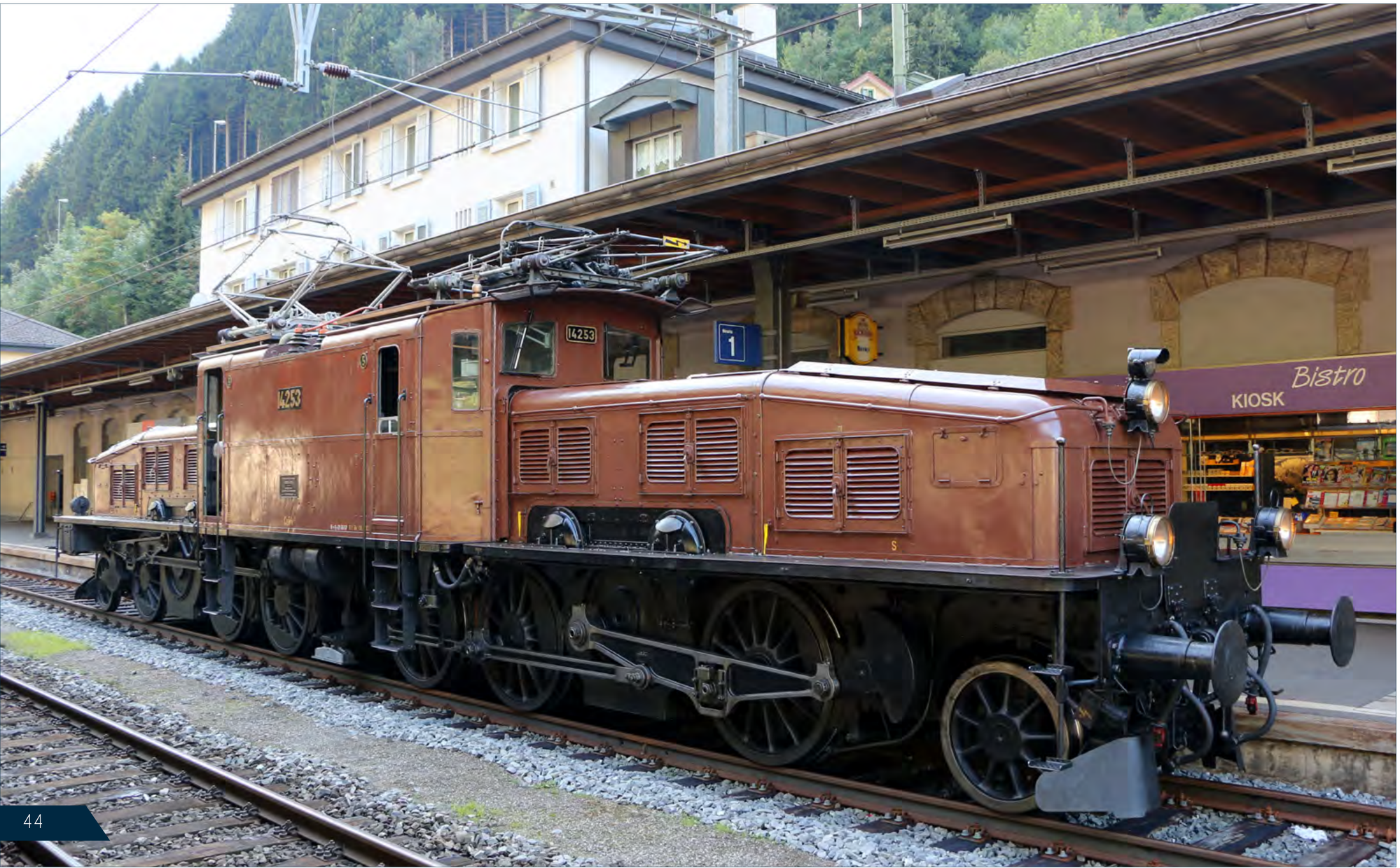
A pair of withdrawn Class T334 shunters are seen in the depot at Haniska pri Kosiciach. *Class47*



ZSSK Class 363.114 stands at Bratislava Hlavna Stanica with a late night train to Zilina. *Class47*







Switzerland

The Glacier Express stands at Andermatt with its St. Moritz to Zermatt service on September 24th. *Julian Churchill*

Rhatische Bahn unit No. 3511 is seen heading through the streets of Chur on the 'Arosa Express' service, September 22nd. *Julian Churchill*

On September 24th, Swiss 'crocodile' loco No. 14523 is seen stabled at Goschenen. *Julian Churchill*

Switzerland

At Tirano station, narrow gauge Rhatische Bahn Stadler unit No. 3510 stands alongside No. 3506 which is working the 'Bernina Express' service to Chur, September 20th. *Julian Churchill*

Stadler and SBB reveals EC250/Giruno the first serial-produced low-floor high-speed train

Peter Spuhler, owner and CEO of Stadler and Andreas Meyer, CEO of Swiss Federal Railways (SBB) jointly presented the new Eurocity train, which will operate from the end of 2019 through the Gotthard Base Tunnel connecting Basel/Zürich with Milan.

With EC250 Stadler has developed a high-speed train for SBB on the basis of the highly successful FLIRT. The initial order is for 29 eleven-car trainsets with an option for additional 92 units. Stadler's first high-speed train is the highlight of this year's InnoTrans, clearly demonstrating the innovative abilities of the company.

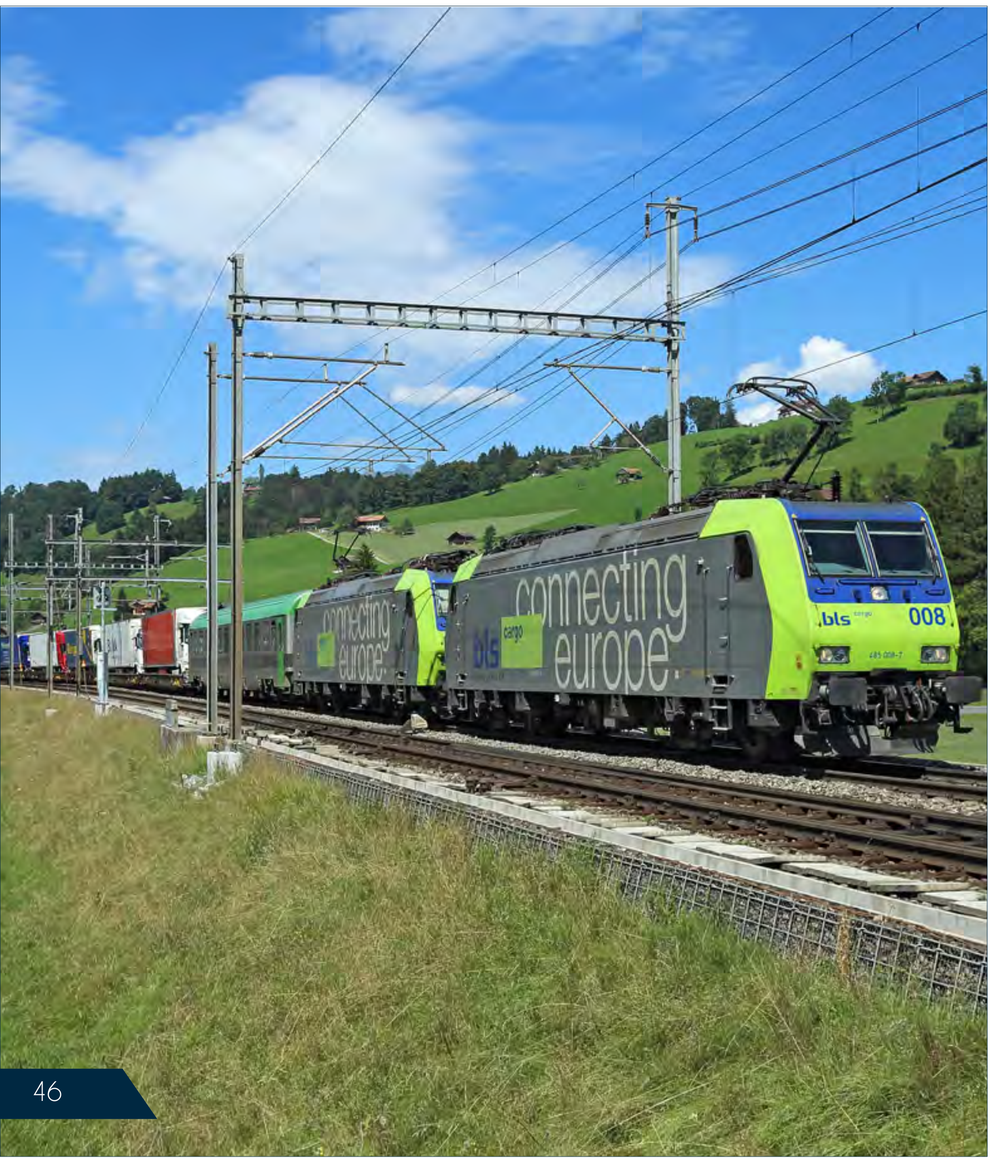
SBB awarded the contract to Stadler in October 2014 for the delivery of 29 high-speed EMUs to connect first Milan with Basel/Zürich and later Milan with Frankfurt from the end of 2019 through the Gotthard Base Tunnel. Barely two years after signing the delivery contract, Stadler is now able to present at InnoTrans a shortened, 5-car version of the trainset, named 'Giruno' by SBB. Proven technologies of the successful FLIRT product have been combined with the operational requirements of the new Gotthard Base Tunnel. Step-free access from both railway platform heights of 55 and 76 cm, pressure-tight design of the car bodies and advanced thermal and acoustic insulation set a new standard in long distance rail transport.

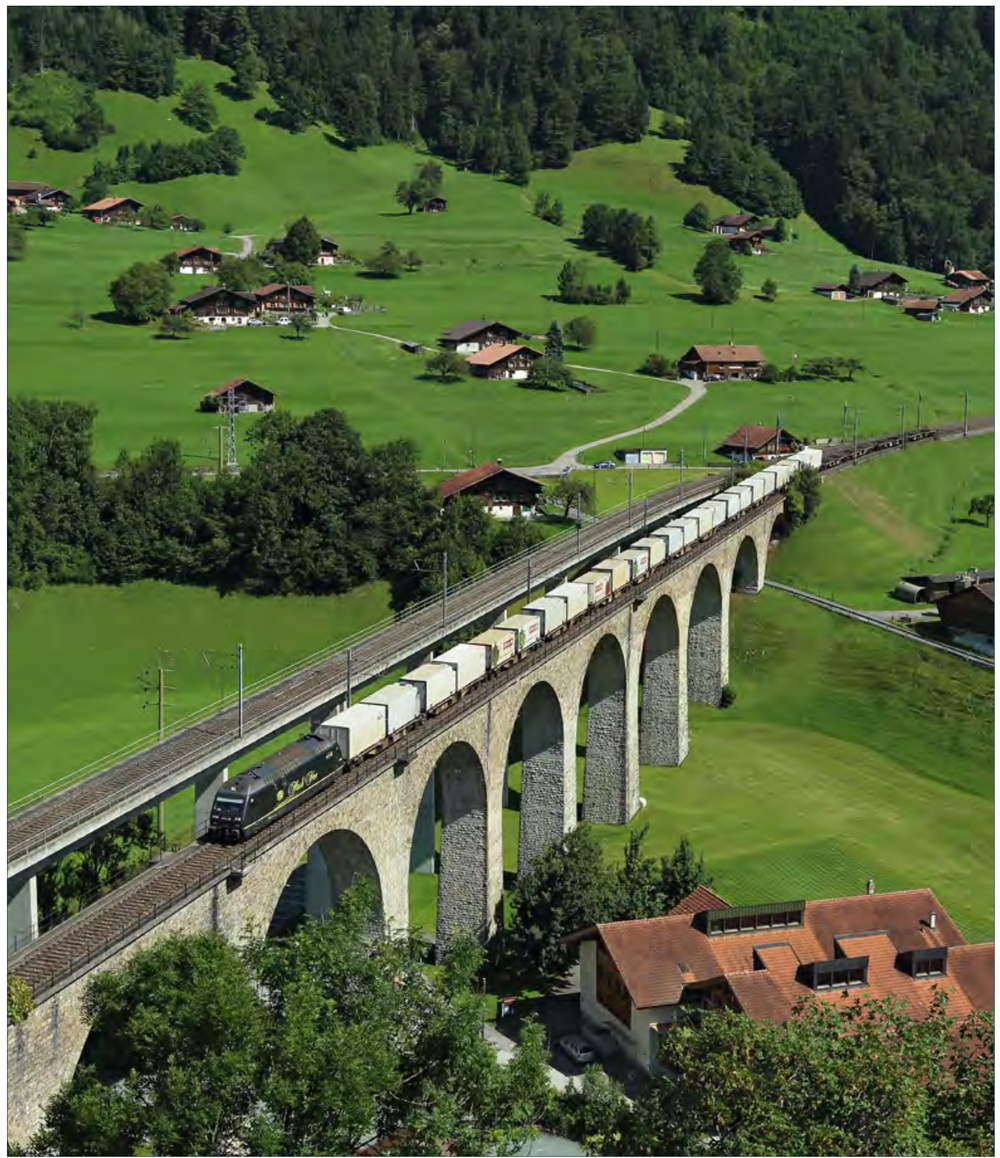
EC250 has been developed with special focus on comfort and customer convenience, particularly for families, seniors and passengers with reduced mobility. The low-floor entrance area is a novelty for serial-produced high-speed trains, making the boarding for passengers convenient. Inside the train passengers find a spacious and bright interior and a state-of-the art lighting concept. Boredom is not an option even in long tunnels, because the EC250 is equipped with other comfort features like WLAN 4G-/3G- cell phone signal booster for good reception, power sockets for all seats, large overhead luggage racks and gender-separated toilets. The 202 m long vehicle offers seats for 405 passengers: 117 in the 1st Class and 288 in the 2nd Class. Multifunctional and bicycle storage areas make the space utilisation optimal.

The EC250 will be certified according to TSI-High-speed and all requirements on collision-safety will meet the DIN EN 15227 norm. Before commissioning, the high-speed trainset will be tested in a climatic wind tunnel in Vienna. As its name also indicates, the maximum operational speed of the train is 250 km/h. The required power is transmitted to the track by four motorised bogies, where both wheelsets of the bogies are powered. The maximum power on the wheel-rims is 6000 kW. On the roof of the train four current collectors are mounted.

The trainsets can be operated in double-traction too. Beside Switzerland the EC250 shall be homologated for operation also in Germany, Austria and Italy.

Switzerland

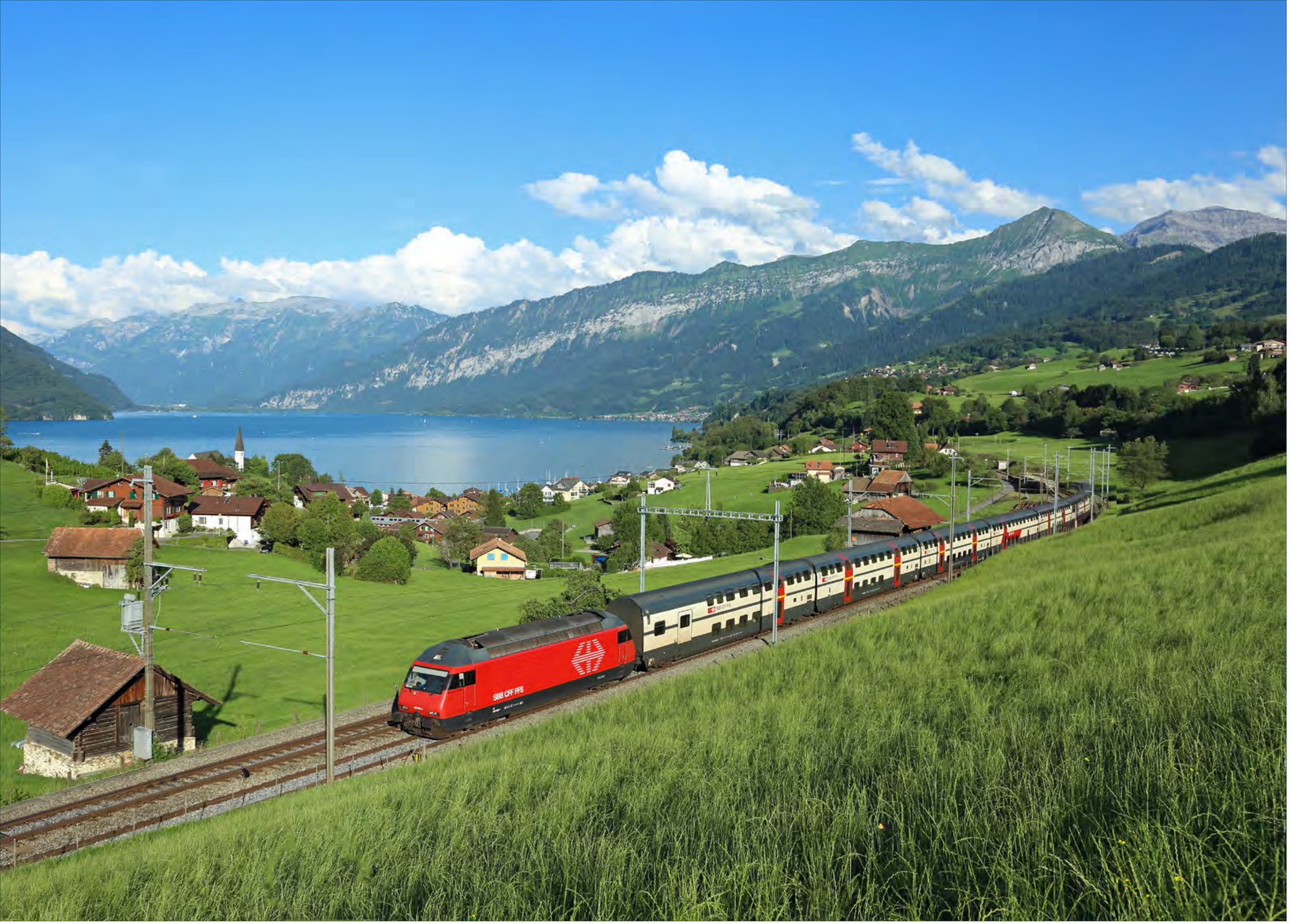




Class 465.018 crosses the viaduct at Kandergrund whilst hauling train No. 63688 from Brig to Niederbottigen on August 3rd.
Laurence Sly

BLS Cargo's Class 485.008 and 485.004 approach Reichenbach whilst working RoLa train No. 43619 from Freiburg to Novara on August 3rd.
Laurence Sly

Switzerland



SBB Class 460.039 passes Faulensee whilst working train No. IC1082 18:30 Interlaken Ost - Basel SBB on August 3rd. *Laurence Sly*

Railcare orders seven Vectron locomotives

25th customer for the Vectron
Planned for freight transport in Austria, Germany and Switzerland
Equipped with diesel power module

Siemens has just won its 25th customer for the Vectron locomotive: The rail freight operator Railcare has ordered seven locomotives of this type from Siemens. The contract also includes service and maintenance of the locomotives over a period of eight years. The AC-powered Vectron locomotives will be used to haul freight in Germany, Austria and Switzerland. The 6.4-MW locomotive has a top speed of 160 kilometers an hour.

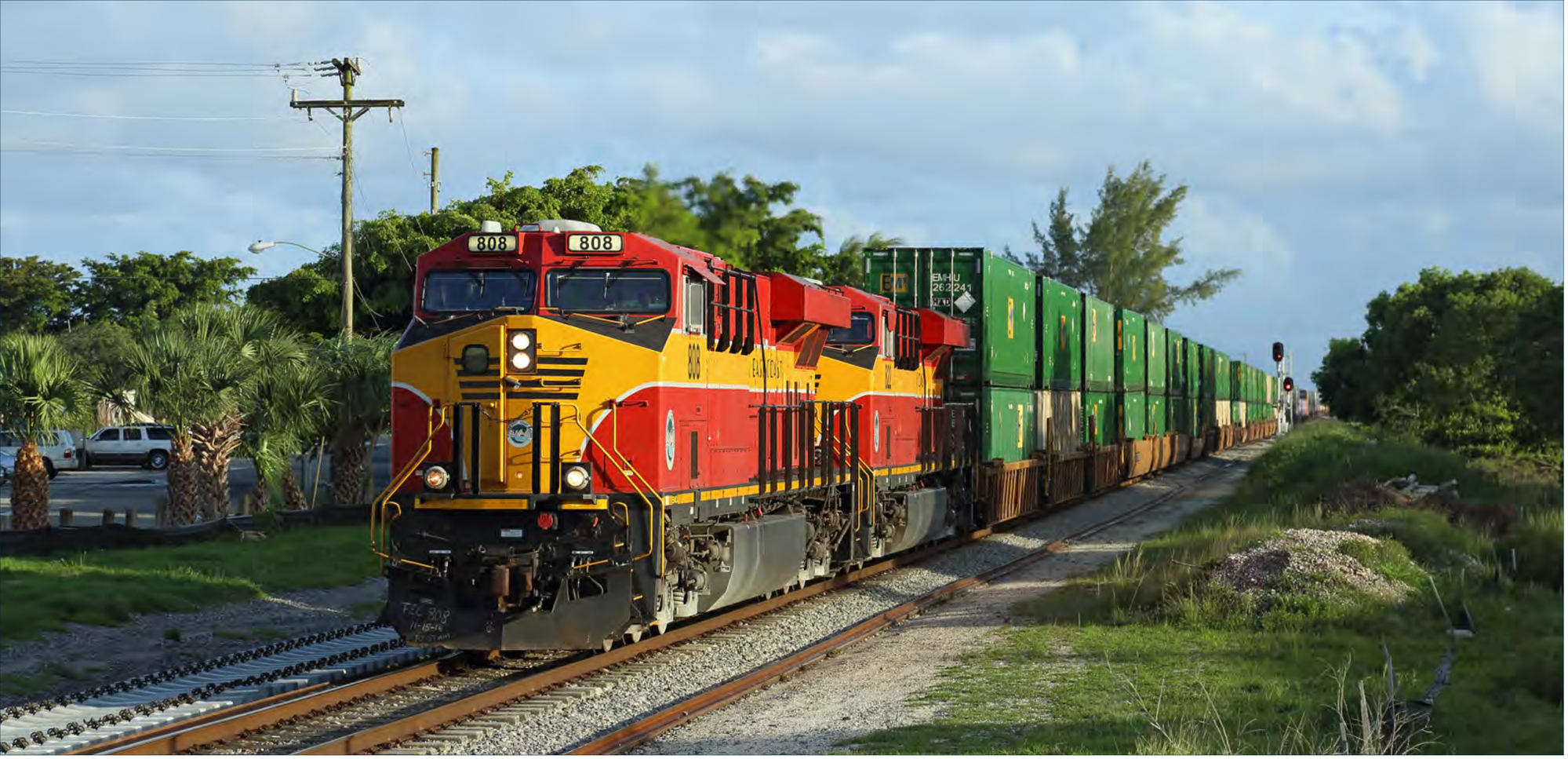
Railcare is a wholly owned subsidiary of Coop, the Swiss retailer and wholesaler, and transports freight for daily needs within Switzerland with its own trains and trucks. The new locomotives are to be used for distributing goods in unaccompanied combined transport (UCT).
All locomotives will be equipped with a diesel power module. With this option, the locomotive can operate for short stretches without overhead power lines, such as on sidings or while shunting in yards. By ordering the diesel power module, Railcare can do without operating supplementary shunting locomotives.

In addition to delivering the seven locomotives, Siemens signed its first full service contract in Switzerland, with Railcare. Over the coming eight years, all maintenance work on the Vectron locomotives will be carried out by Siemens.

Switzerland

Rhatische Bahn loco No. 642 is photographed running over the Langwasser Viaduct with the Zermatt to St Moritz ‘Glacier Express’ on September 21st. *Julian Churchill*

Class 185.536 and 185.527 pass Blausee whilst hauling CrossRail train No. 40126 from Milano to Zebrugge on August 3rd. *Laurence Sly*



Florida East Coast locos Nos. 808 and 822 approach Delray Beach whilst working train No. 222 17:45 Miami - Bowden Yard.
Laurence Sly

122 light rail vehicles for Seattle and Central Puget Sound area

Siemens has been awarded a contract to provide 122 new S70 light rail vehicles (LRVs) for Sound Transit, the regional transit system serving the Seattle and Central Puget Sound area in the US state of Washington. The order, the largest single contract in Sound Transit's history, will nearly triple the system's current fleet from today's 62 cars to 184. The S70s light rail vehicles will be built at the Siemens rail manufacturing hub in Sacramento, California. The fleet is expected to begin testing in 2019.

The new vehicles will be designed and built to help meet the needs of Sound Transit's growing light rail network and increasing ridership. The LRVs will feature a sleek appearance and include a more spacious interior with additional room for passengers. Additionally, the vehicles will include extra space for luggage and hooks to store up to four bicycles per vehicle.

"Passenger numbers in the Greater Seattle area are steadily climbing, and Sound Transit can adapt and further expand its traditionally excellent service with our modern light rail trains," said Jochen Eickholt, CEO of the Siemens Mobility Division. "I believe it's important that we can make this contribution toward expanding a highly efficient and environmentally friendly mass transit system in one of America's most dynamic metropolitan regions."

The new LRVs from Siemens are part of the 2008 voter-approved Sound Transit 2 Plan (ST2) which adds 30 miles of new light rail to create about a 50-mile regional system. With the new extensions, the Seattle-based system will stretch to Lynnwood in the north, cross Lake Washington to reach Bellevue and the Microsoft campus to the east and south to the Federal Way area.

USA

Minutes before sunrise, Florida East coast locos Nos. 819 and 816 cross the drawbridge at Stuart whilst working train No. 121 22:00 Bowden Yard - Miami. *Laurence Sly*

Bombardier Delivers the First Vehicle for Delhi Metro's Latest Order

Bombardier Transportation is celebrating the delivery of the first metro car from an order for 162 additional cars placed last year by Delhi Metro. In a ceremony held at InnoTrans 2016 in Berlin, Germany, Benoît Cattin-Martel, President, Asia Pacific Region, Bombardier Transportation presented a commemorative metro car key to the officials led by HS Anand, Director of Rolling Stock from Delhi Metro Rail Corporation Ltd (DMRC). The new trains will increase the number of DMRC's existing fleet of BOMBARDIER MOVIA metros from 614 to 776 and make it one of the largest Bombardier metro fleets in the world.

HS Anand said, "These new cars are being procured by Delhi Metro for services on its presently operational red, blue and yellow lines. These cars will be put into service in a phased manner after the mandatory tests and trials. The addition of these cars will go a long way in providing safe and comfortable travel to our valued commuters."

Benoît Cattin-Martel commented, "The high degree of localisation executed in the project at Bombardier's Savli and Maneja sites fulfils the requirements of the Indian government's 'Make in India' campaign and Delhi Metro's indigenous procurement plan that encourages local manufacturing."
He added, "Our energy efficient trains have helped the city of Delhi improve mobility and manage pollution levels as well as provided effective public transport during the 2010 Commonwealth Games. Our vehicles have also contributed to Delhi Metro receiving UN carbon credits, a world's first for a metro project."

Bombardier is also Delhi Metro's largest supplier of signaling systems and one of its largest suppliers of rolling stock with more than $1.2 billion worth of orders placed since 2007. Bombardier has delivered, or is in the process of delivering, signaling solutions for more than 120 track kilometers for Delhi Metro's Lines 5 and 6 with extensions and Line 7. The modern, high-capacity MOVIA metro vehicles integrate some of the world's most advanced mobility technologies specifically adapted to suit

Delhi's existing infrastructure. In its six-car configuration, these new vehicles will accommodate 1,740 passengers. Once configured into eight-car sets, the trains will carry as many as 2,400 passengers providing a much needed capacity increase on two of Delhi's main metro lines serving more than 50% of Delhi Metro's average current ridership of around three million passengers a day. From Savli, Bombardier is delivering high-quality trains for India as well as for important export markets, as demonstrated by manufacturing the new commuter trains for Queensland and metro cars for Delhi. In addition to 'Make in India', Bombardier also supports the Indian government's vision on 'Skill India' with locally-grown talent now delivering projects for both India and export, as well as supporting the 'Clean India Movement' by regularly arranging clean-up drives in Vadodara.

Bombardier Transportation has approximately 2,000 employees in India. It operates a railway vehicle manufacturing site and bogie assembly hall in Savli near Vadodara, Gujarat. This is in addition to a propulsion systems manufacturing facility at Maneja, a Rail Control Solutions Centre for project delivery and product engineering and an Information Services India hub near Gurgaon, Delhi NCR and an Engineering Centre in Hyderabad.

Stadler presents a new sleeping car for Azerbaijan Railways

Stadler and Azerbaijan Railways (ADY) have recently jointly presented the new sleeping car produced for use on the Baku-Tbilisi-Istanbul international line. To enable cross-border operation, Stadler has developed a bogie with gauge-adjustable wheelsets. The contract allowed Stadler to successfully enter the railway market in Azerbaijan.

Azerbaijan Railways awarded the contract to Stadler for the delivery of 30 sleeping cars in 2014. Stadler executed the development and production of the first car within two years in close co-operation with ADY, making it possible to present the vehicle for the broader public at InnoTrans for the first time.

The sleeping cars built for ADY are able to operate both in the CIS states (broad gauge 1520 mm) and on European standard gauge (1435 mm) due to the special gauge-changing bogies. Close to the Turkish border in the Georgian town of Akhalkalaki, a break-of-gauge is planned for switching bogies to enable efficient operation on the international Baku – Tbilisi – Kars – Istanbul line. The bogies are equipped with a RAFIL/DBAG type V system of adjustable wheelsets.

These are compatible with other variable gauge systems along the borders of the CIS states, facilitating the use of the same equipment. The cars are conform with the European loading UIC gauge profile. The contract is not only about the delivery of the cars between the middle of 2016 and the middle of 2017, but also includes an extensive spare-part package and the training of staff that will operate and maintain the vehicles. In addition, the contract also includes an option for 70 more units.

Azerbaijan Railways will create three 10-car trainsets from the 30 coaches. The order includes the delivery of 27 sleeping- and 3 dining cars. The sleeping vehicles will consist of 3 first class cars (16 beds, each compartment has its own sanitary unit with toilet and shower) 18 second class cars (34 beds, one toilet and one shower cabin) 3 first/second class cars (20 beds, sanitary units in the first class and family compartments), and 3 special cars (with a spacious compartment for disabled passengers, 4 second class compartments with 16 beds, and a train-master compartment). The 3 dining cars have 28 seats each. As a result, a 10-car trainset will typically include 257 beds. Each car is equipped with a closed-system vacuum-toilet and emergency power system with generator, which makes 24-hours operation possible. All cars are fully climatized with a redundant air-conditioning system.

For the Swiss railway manufacturer this contract was a major step forward, because the deal enabled the successful entry into the railway market of Azerbaijan, a new CIS country for the company. Conquering new markets is a core strategy for Stadler in order to keep its workforce in jobs in the middle run – especially because the euro and debt crisis has swept away the traditional Western European market since 2010.

This first success strengthened the partnership between Stadler and ADY, as a following step of which the railway company bought five double-decker EMUs. Two of the EMUs were already operating during the „European Games 2015" in Baku.

Alstom achieves a world first, with successful test of ETCS Level 2 baseline 3 application in Denmark

Alstom and Banedanmark, the Danish railway infrastructure owner, have successfully tested an ETCS (European Train Control System) level 2 baseline 3 application for the first time ever. The tests were conducted between Roskilde and Gadstrup, as part of the Danish Eastern network upgrade being delivered by Alstom.

Over the next ten years, Denmark will be completely equipped with ETCS level 2 baseline 3, the newest baseline of ERTMS (European Rail Traffic Management System). Banedanmark is the first infrastructure manager to apply this baseline. The application was validated by the European Union Agency for Railways (ERA) in July 2016.

"These were the first successful tests of the baseline 3 application. They demonstrate the potential for modern signalling to deliver a more reliable and higher capacity network in Denmark. Together with Banedanmark we have now taken a huge step forward. Good progress continues towards the completion of the first roll out line," said Pascal Cléré, Alstom Senior Vice President Digital Mobility.

The tests were performed on the Early Deployment line and conducted from Copenhagen's Traffic Control Centre equipped with Alstom's traffic management system. The operational test train from Alstom was equipped with ETCS L2, a STM (Standard Transmission Module) and legacy system. The tracks were equipped with Alstom's Radio Block Centre and interlocking system, using simulated inputs.

Banedanmark had awarded Alstom in 2012 a contract to replace the existing signalling system in the East region of Denmark with Atlas, Alstom's ERTMS based signalling solution. It will be implemented on 12 intercity and regional lines in Sealand and Fyn regions which cover half the country. This railway network consists of more than 734 km-long double track line and 90 stations. The contract also includes 25 years of maintenance.

Stadler presents the first Variobahn for Aarhus

Stadler and Aarhus Letbane I/S have jointly presented at InnoTrans the first Variobahn produced for Aarhus. The order includes 14 Variobahn light rail vehicles and 12 Tango tram-train vehicles. In addition to the production of Variobahns, Stadler will also take over the maintenance of the vehicles for the next six years in Aarhus.

Aarhus, the second largest city in Denmark, is the first town in the history of the country to build a completely new tramway-system. In this project Stadler delivers 26 vehicles: 14 Variobahn light rail vehicles and also 12 Tango tram-train vehicles for operation in Aarhus. Stadler is presenting the low-floor Variobahn, developed specifically for this project, to the international audience at InnoTrans for the first time.

„We are very proud of this order, which is the first in the segment of urban trams from our neighbor country Denmark", said Ulf Braker, Managing Director of Stadler Pankow GmbH. „This order confirms to us that with the Variobahn we have developed a state-of-the-art, powerful and flexible product. We are convinced that this vehicle will meet the high Scandinavian expectations for a modern, comfortable and economical tram. The tram, which bears any comparison in the world, is standing today here in front of you."

Claus Rehfeld, CEO of Aarhus Letbane I/S added: „The cooperation with Stadler is running very well and professional, and we are very satisfied with the final design and quality of the light rail vehicles. Aarhus is developing Denmark's first tramway system, introducing a modern tram- and tram-train system as part of the solution to the challenges posed by rapid growth of the city-region of Eastern Jutland.
The first line in Aarhus will open in 2017, same year Aarhus is Cultural Capital of Europe."
The first Variobahn is already in Aarhus for type and integration testing.
In addition to the production of Variobahn, Stadler will also take over the maintenance of the vehicles for the next six years in Aarhus.
The low-floor Variobahn is a modular and very flexible design in terms of length, width, gauge and also the catenary voltage. The top speed of the vehicle is 80 km/h. The standard-gauge (1435 mm) bi-directional vehicles produced for Aarhus have four doors on both sides. The vehicles can carry 84 seated and 132 standing passengers. Passenger areas and driver's cabs are air-conditioned, passengers may also use WIFI.

Alstom finishes the first car body shell for the Lucknow Metro

Alstom in India has unveiled the first car body shell of the Lucknow Metro at Sricity, Chennai, where the metro trainsets are produced. Attending the ceremony held in early September were the Lucknow Metro Managing Director, Kumar Keshav and Secretary Housing Pandhari Yadav from the U.P. Government.

Manufacturing of the first train commenced at the end of May and tremendous efforts have been put on site to ensure that the first car body shell was ready in record time. Alstom expects to deliver the first trainset of this order before the end of November 2016.

The Lucknow Metro contract was awarded in September 2015. Under this contract, Alstom will supply 20 Metropolis trainsets, each composed of four metro cars. Alstom is also providing Urbalis, its Communication Based Train Control (CBTC) solution which controls the movement of the trains, enabling them to run at higher frequencies and speeds in total safety.

The line is expected to carry about 430,000 passengers per day in the first year, increasing to over 1 million by 2030.
Following the Kochi

metro, this is the second 'Made in India' metro project that is being completely developed and manufactured by Alstom at the Bangalore, Sricity and Coimbatore facilities.

The facility has already delivered the first two trainsets of the Kochi Metro and 28 trainsets of the Chennai Metro

SNCF and Alstom launch their first innovation partnership to create the next generation of the TGV

SNCF and Alstom are combining their expertise with the launch of the first innovation partnership to create the next generation of the TGV, which will offer a unique, high-quality travelling experience while meeting the new economic and environmental challenges of high-speed travel. On Wednesday 7 September 2016 in Paris, Rachel Picard, CEO of Voyages SNCF, and Jean-Baptiste Eymeoud, President of Alstom France, inaugurated the shared workspace of this ambitious, innovative cooperation, embodied by a team of multidisciplinary experts from the two companies. The SNCF-Alstom innovation partnership will design and produce the new TGV with planned entry into commercial service in 2022. The partnership will lead to the definition of a new technological, commercial and industrial strategy for high speed. It will offer a real breakthrough in terms of competitiveness, with a major objective of reducing investment and operating costs and enhancing the train's appeal on the mobility market, providing a new experience for passengers in terms of comfort and onboard services.

A CHALLENGE FOR TECHNOLOGICAL, INDUSTRIAL AND COMMERCIAL INNOVATION

The ambitions for the new-generation TGV are high: Reduce acquisition and operating costs by at least 20%; Optimise the environmental footprint, with a material recyclability rate of over 90% and a reduction in energy consumption of at least 25%; Develop the commercial offer to improve passenger experience: a 20% increase in capacity enabling more onboard services and/or more passengers. The trains will also offer greater modularity in terms of interior layout and carriage composition, offering enhanced quality in terms of customer service, comfort and connectivity. The results of this collaboration will complement the high-speed trains of Alstom's Avelia range (partially developed in the context of the "TGV of the Future" programme co-financed by the state).

INNOVATIVE, AGILE AND COLLABORATIVE WORKING METHODS

The SNCF-Alstom innovation partnership will be conducted in three phases: Joint definition and specification of the new TGV, until the end of 2017; Detailed design, industrialisation and approval, for a duration of approximately 4 years; Production, train delivery, and entry into commercial service scheduled for mid-2022. An integrated, multidisciplinary team of 20 experts from SNCF and Alstom, fully dedicated to the project, is from now on working in a single, stand-alone site located on Avenue du Maine in Paris. This method of working enables rapid decision-making, simultaneously taking into account all aspects of the project: passenger services, operation and maintenance, technical and industrial feasibility, costs.

The SNCF-Alstom team, working in close conjuction with the internal resources of both companies, is also open to the outside. It regularly invites experts and guests to contribute their knowledge, particularly in terms of innovative working methods and advanced technical solutions. The team is thus enriched through successful collaborations with engineering and design schools, as well as other industrial companies and startups.

AN ALLIANCE BETWEEN TWO FLAGSHIPS OF FRENCH INDUSTRY

In order to carry out this major innovation project successfully, SNCF and Alstom will pool their expertise, knowledge and skills. SNCF will provide its wealth of experience and its knowledge of passengers. The new-generation TGV will be conceived on the basis of its customers and their changing habits. SNCF will share its ambitions in terms of service, its expertise in the commercial operation of high-speed trains accumulated over more than 30 years, and, more generally, its knowledge of the mobility market.

The entire expertise of SNCF is being put to use for this purpose, including engineering at Le Mans, technical centres, marketing, on-board services, maintenance centres and train operating services. Together, these contributors represent an experienced team of over 250 agents in support of the project. Alstom will provide its expertise in train design to accompany SNCF in its ambitions of passenger service, sustainability and profitability. Eight out of Alstom's 12 sites in France are involved in the design of the new train.

This project will generate a total of 4,000 jobs for the French rail sector.

Bombardier Wins Rolling Stock and Maintenance Contracts for Abellio's East Anglia

Rail technology leader Bombardier Transportation has signed a contract to supply 665 new BOMBARDIER AVENTRA vehicles to Angel Trains, for operation by Abellio on its East Anglia rail franchise in the United Kingdom. The contract signing follows on from Bombardier being named as preferred bidder for this rolling stock order, as announced on 10th August 2016. Bombardier has also signed a separate contract to provide ongoing maintenance services support to Abellio Greater Anglia for the new trains for the duration of the franchise. The rolling stock contract is valued at approximately £869 million GBP ($1.1 billion US, 1 billion euro) and the maintenance contract, which will run for 7 years (with an option to extend in line with any franchise extensions), is valued at approximately £83 million GBP ($108 million US, 97 million euro).

Per Allmer, President, Europe, Middle East & Africa, Bombardier Transportation, commented, "Our modern AVENTRA platform will greatly improve the journey experience for Abellio Greater Anglia's customers by delivering an enhanced interior environment and passenger comfort together with greater connectivity, shorter journey times and more reliable trains. These important contracts demonstrate Bombardier's ability to deliver high quality, integrated transportation products and services, providing value-adding long-term solutions for our customers. As a modular train, our AVENTRA product family offers maximum flexibility and hence has the capability to serve many different market requirements from metro to intercity, both in the UK and worldwide".

Dominic Booth, MD of Abellio UK, said, "We are pleased to have finalised the agreement with Bombardier as a key part of the largest-ever privately-procured train order in the UK. It will give the people of East Anglia high-quality trains as part of an ambitious transformation of the region's railway. We look forward to working with Bombardier and Angel Trains to deliver the 665 air conditioned Bombardier Aventra train carriages that will greatly improve the journey experience of millions of passengers". With reduced weight, increased capacity, improved energy efficiency and reliability, Bombardier's new AVENTRA EMU delivers a significant increase in performance and passenger experience. The AVENTRA product family can meet various market needs and major orders have already been placed for Transport for London's Elizabeth line (Crossrail) and London Overground's LOTRAIN projects, where this rapidly growing metropolis is facing an increased demand for improved mobility and connectivity to its surrounding cities.

Bombardier has been a key contributor in shaping the development of transportation in the UK and provides mobility solutions from metros to intercity trains as well as the full range of service and maintenance offerings. Bombardier remains committed to providing proven solutions along the rail industry value chain and this announcement reinforces Bombardier's commitment to providing long term customer value to operators and passengers worldwide. Abellio was announced as the new operator by the Department for Transport on 10 August and will operate the franchise starting October 2016. The new trains are expected to be delivered between January 2019 and September 2020.

World News

GYSEV orders from Stadler 10 new generation FLIRT trains

Hungarian regional operator GYSEV Zrt. and Stadler have signed a contract for the delivery of 10 four-car FLIRT type electric multiple units for regional operation. The first vehicles are expected to start service in 2018 in Western Hungary. With the current and earlier orders GYSEV will possess a fleet consisting of altogether 20 state-of-the-art FLIRT units.

GYSEV Zrt. issued an open public procurement for 10 low-floor electric multiple units in April this year. Manufacturers could apply until June, the winner of the procurement was Stadler Consortium formed by Stadler Polska Sp. z o.o. and Stadler Bussnang AG, the Polish and Swiss subsidiaries of the group.

According to the delivery contract, the first train will be delivered in March 2018 while the last one is due to arrive until January 2019. Between 2013 and 2015 the railway operator purchased already 10 EMUs from Stadler within the frames of two separate public procurements, which means that with this order GYSEV expands its fleet to a total number of 20 FLIRT trains. The existing fleet is currently operating on the Sopron-Szombathely-Szentgotthárd, Sopron-Győr and the Szombathely-Rajka lines.

The new vehicles for Gysev already meet the requirements of the newest TSI (technical specification for interoperability) standards of the European Railway Agency, and also suit the latest Crash (EN 15227) collision norms, providing more safety to the loc driver. During the development of the third generation, Stadler's engineers put special emphasis on low energy consumption, and maintenance friendly design was also an important aspect.

The new vehicles are 2.8 m longer than the first generation models, giving room for another classic toilet in addition to the one which meets TSI PRM standards for people with reduced mobility. The 77.1 m long and 2.82 m wide four-car EMUs have altogether 208 seats (194 fixed and 14 folding). Their maximum speed is 160 km/h, while their acceleration capacity is 1.2 m/s2 which means they will be able to speed up from 0 to 120 km/h in not more than only 39 seconds. The new generation FLIRTs also feature spacious, multifunctional boarding areas that enable rapid passenger exchange. Thanks to the multifunctional areas and the 90% low-floor share, the vehicles are easily approachable by passengers with wheelchairs, bicycles and strollers. Meeting the requirements of today's standards, the vehicles are provided with air-conditioner, camera system, WIFI, charging facilities for electronic devices, as well as box seats suitable for regional transport.

A large portion of GYSEV's order is to be fulfilled in Hungary, all of the 40 carbodies will be manufactured in Stadler's factory located in Szolnok. Due to the latest investments, not only the carbodies but also the bogies can completely be produced in Hungary. Similarly to the earlier GYSEV orders, final assembly of the new trains will also take place in Stadler's plant in Poland, Siedlce.

The new EMUs will also be able to operate in synchronous operation not only with each other, but also with the earlier purchased FLIRT models. The possibility of double or triple traction operation brings significant economic benefits to GYSEV. The project's value is 68.45 million EUR and is financed entirely from EU funds.

FLIRT is the most successful product of Stadler; the members of the vehicle family can be deployed on regional, commuter or intercity lines too. Stadler has already sold more than 1300 units in a total of 17 countries worldwide. With this order Stadler won orders for altogether 143 FLIRT units in Hungary, 123 for MÁV Zrt. and 20 for GYSEV Zrt.

Heavy metal: Stadler unveils the new EURODUAL Locomotive

At Innotrans, Stadler proudly presented, together with Direct Rail Services and Beacon Rail Leased Limited, the EURODUAL UK locomotive in her new livery. The Class 88 locomotive is a further development of the Class 68 platform. The Class 88 is a true dual-mode 4-axle locomotive adapted to UK gauge, with AC/ AC transmission and low axle load. The first order came from Direct Rail Services in partnership with Beacon Rail Leasing Limited for ten state-of-the-art Class 88 dual powered locomotives to be used in passenger and freight transport services in the UK, at speeds up to 160km/h, combining both 25kV electric and diesel operating modes.
The Class 88 locomotive fully complies with all European standards and with all British rail regulations regarding safety, emissions, environmental protection. It incorporates technical features such as a high-strength stainless steel monocoque structure, an improved brake system with disc brakes, state-of-the-art adhesion control system and two ergonomically designed driver´s cabs with air-conditioning that ensure enhanced safety and comfort for the driver.
The EURODUAL UK locomotive will soon start the authorization process in the UK after concluding two months in the Velim Test Center performing all homologation tests (TSI track, catenary characteristics, braking distances) and tests of the traction control software in different conditions, diesel engine and electrical power management, by stopping a train of 1500 tons and a locomotive. New functionalities of the control software have been validated such as the dynamic mode changing between electrical operation to diesel operation (and vice versa) and fine tuning of automatic speed control. The tests were completed ahead of schedule with the locomotive performing extremely well.
As part of the Stadler EURODUAL locomotive family the EURODUAL UK offers excellent flexibility and reduced transport costs, running with only one locomotive on main lines as well as on secondary lines. The EURODUAL is more than just a "last mile" locomotive. It is a versatile locomotive platform with impressive performance, both in diesel and in electrical mode, available in 4-axle and 6-axle configuration, different gauges and overhead voltages. The modular platform also offers several diesel engine modules to adequately meet individual customers' needs. With its avant-garde technology, the vehicle covers every need in an efficient and reliable way offering rail operators numerous economic and ecological benefits.

The 1000th FLIRT is on the rails

On September 16th, Stadler celebrated the handover of the 1000th FLIRT (Fast Light Innovative Regional Train) train. The 1000th Stadler FLIRT is a 4-car broad-gauge vehicle for Finnish customer Junakalusto Oy. A small ceremony marked the delivery of the landmark FLIRT at the VR Ilmala depot in Helsinki. The very first FLIRT was delivered to SBB in autumn 2004.

In autumn 2006, Junakalusto Oy ordered a first series of 32 FLIRT multiple-unit trains for the Helsinki suburban train network. Meanwhile, the fleet has grown to 81 trains, and connects Helsinki city centre and the airport on the newly opened route. It is an honour for Stadler to hand over the 1000th FLIRT in person during a small ceremony – 10 years after the contract was signed. At the VR Ilmala depot in Helsinki, Peter Jenelten, Executive Vice President Marketing & Sales at Stadler, handed over the train to Yrjö Judström, Managing Director of Junakalusto Oy, in the presence of Swiss Ambassador Maurice Darier and other invited guests.

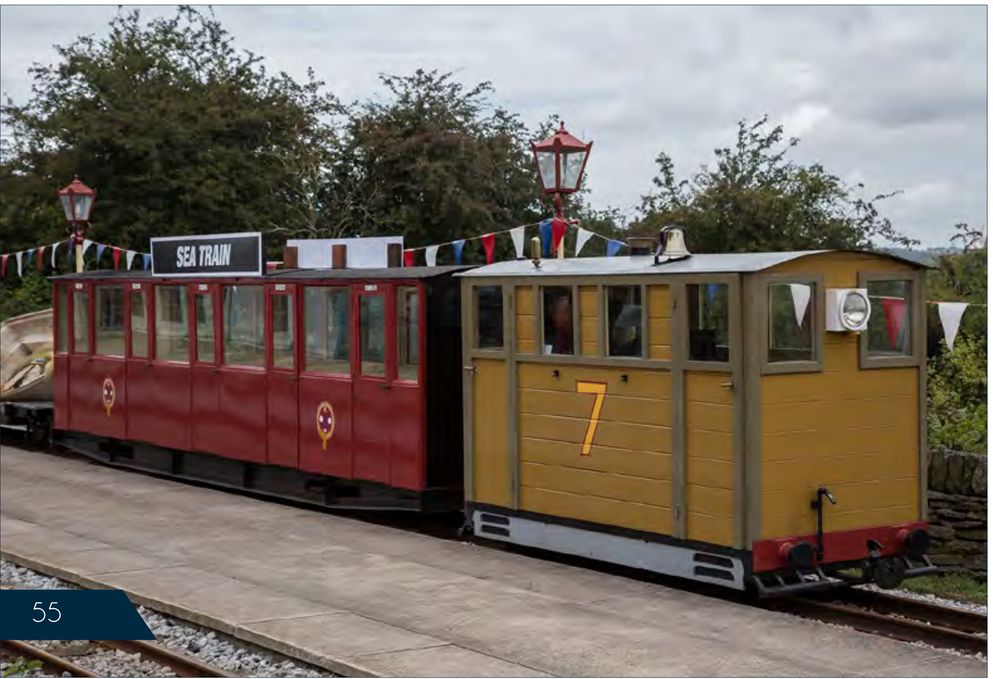
The FLIRT is a success story. Since it was first delivered to its first buyer, SBB, in autumn 2004, 1000 FLIRT trains have been developed, built and commissioned. The vehicles are operating successfully in various climate zones – from Africa to the Arctic Circle – on normal and broad gauges. The best-selling FLIRT vehicle has already sold 1339 units in a total of 15 countries.
Many rail operators have been convinced by the FLIRT's enticing combination of intelligent, innovative design and tried and tested technology. Time and again, Stadler succeeds in fulfilling a range of different requirements: more cost-effective, lower maintenance and more environmentally friendly operation for rail operators, and guaranteed reliable connections with high levels of comfort for travellers. The FLIRT is available as a regional train with a maximum speed of up to 160 km/h, and as an intercity train with a maximum speed of up to 200 km/h. Depending on the space required, it is available as 2- to 8-car train compositions.

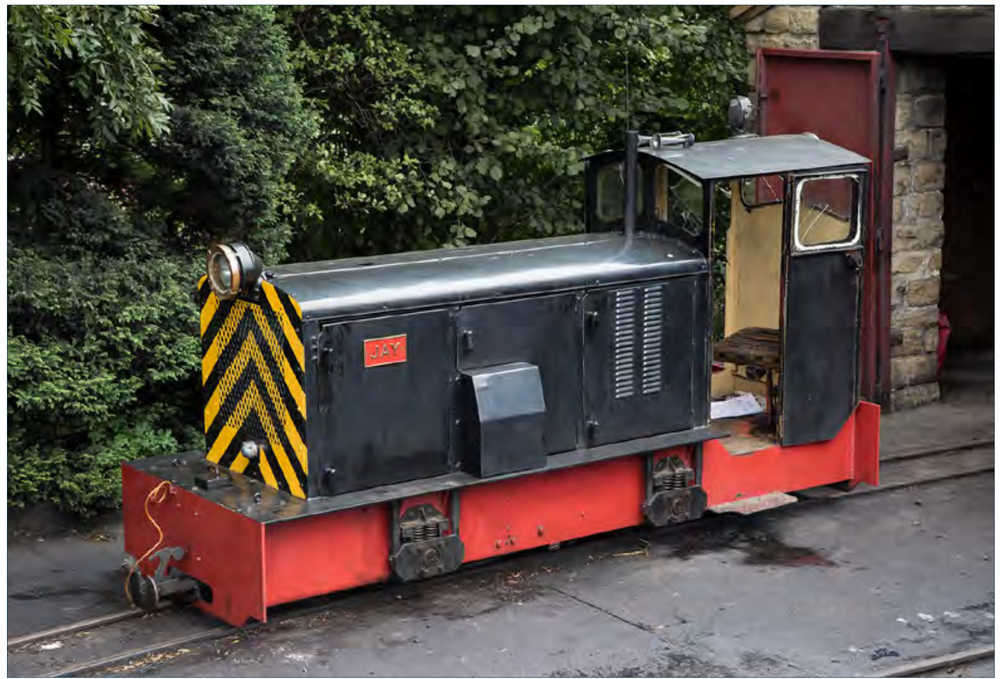
From the UK

The Kirklees Light Railway

The Kirklees Light Railway is a 3 1⁄2-mile long 15 in (381 mm) gauge minimum gauge railway. First opened on 19 October 1991, it runs along the trackbed of the Lancashire & Yorkshire Railway's now long closed/former branch line, from the village of Clayton West via Skelmanthorpe to the village of Shelley Woodhouse (a few yards close to the former Clayton West Junction.

'Badger' an 0-6-4 Saddle Tank loco was built by Brian Taylor in 1991 and finished in the Clayton West workshops. Seen here arriving into Clayton West. *Richard Hargreaves*

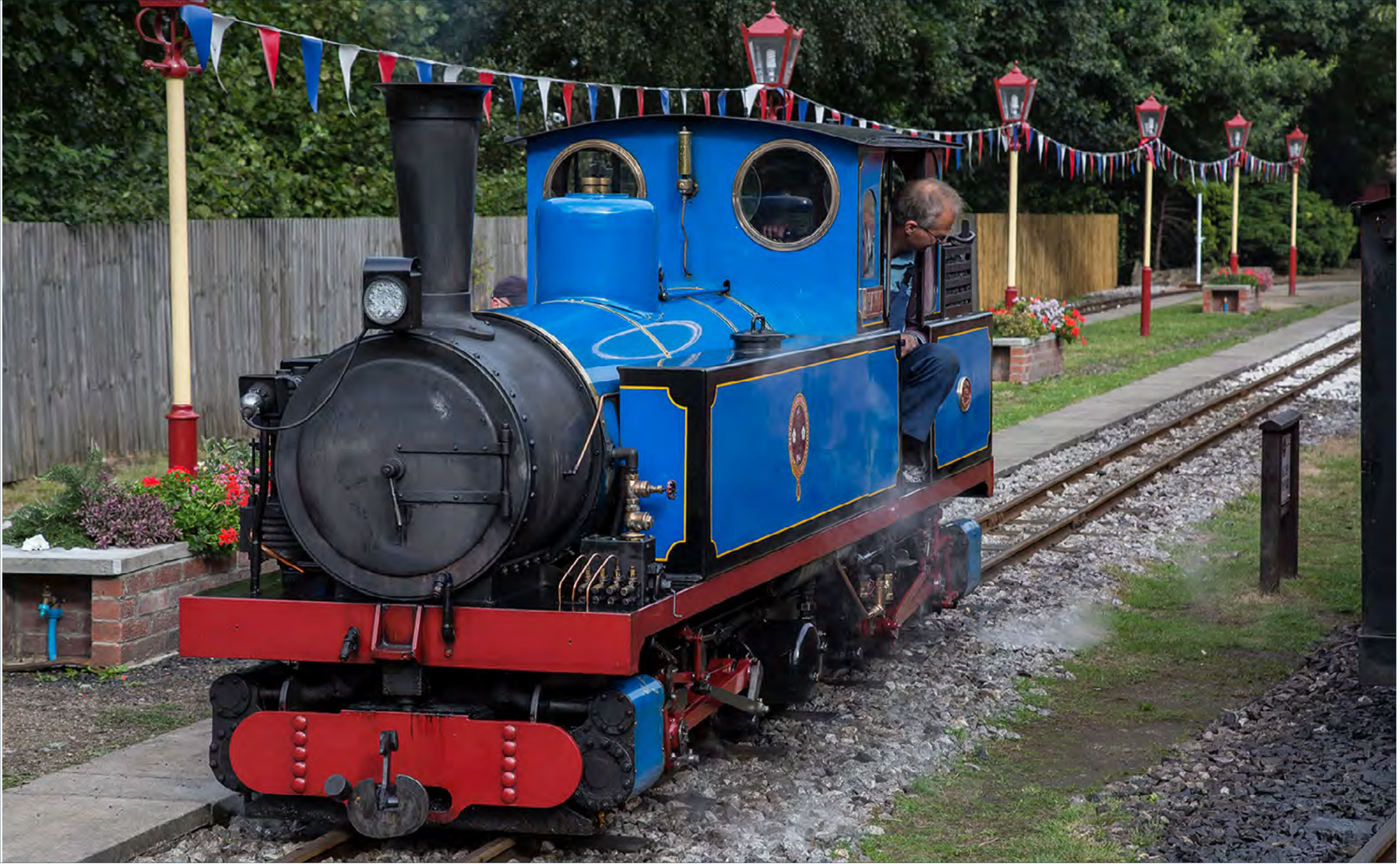




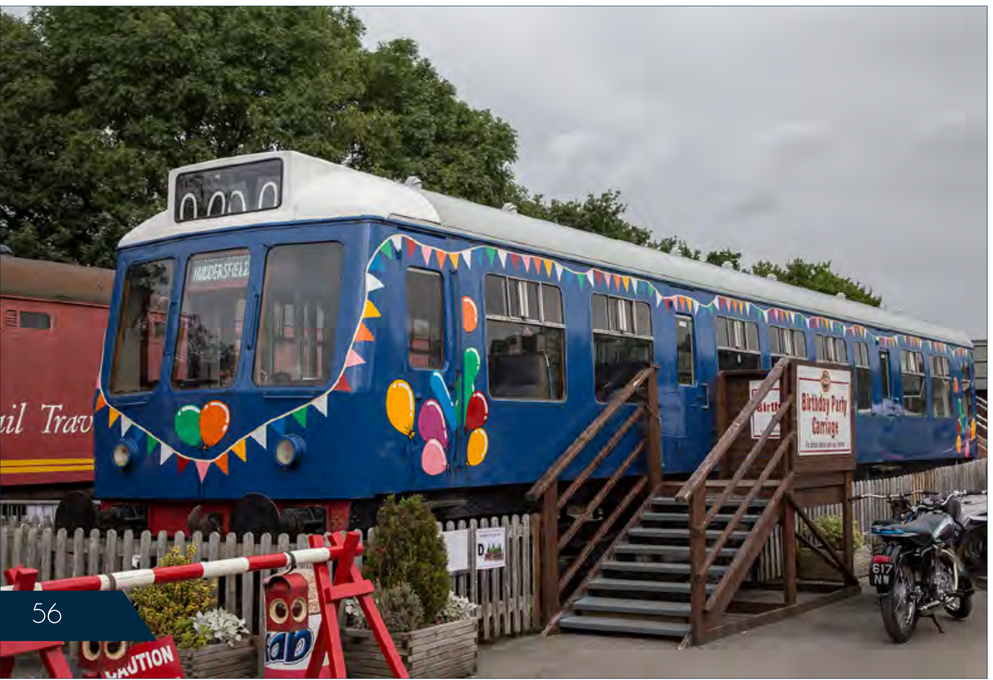
'Jay' was completed in 1992 and is a diesel hydraulic engine. Although not based on a specific prototype it is similar in appearance to many industrial diesel engines. *Richard Hargreaves*

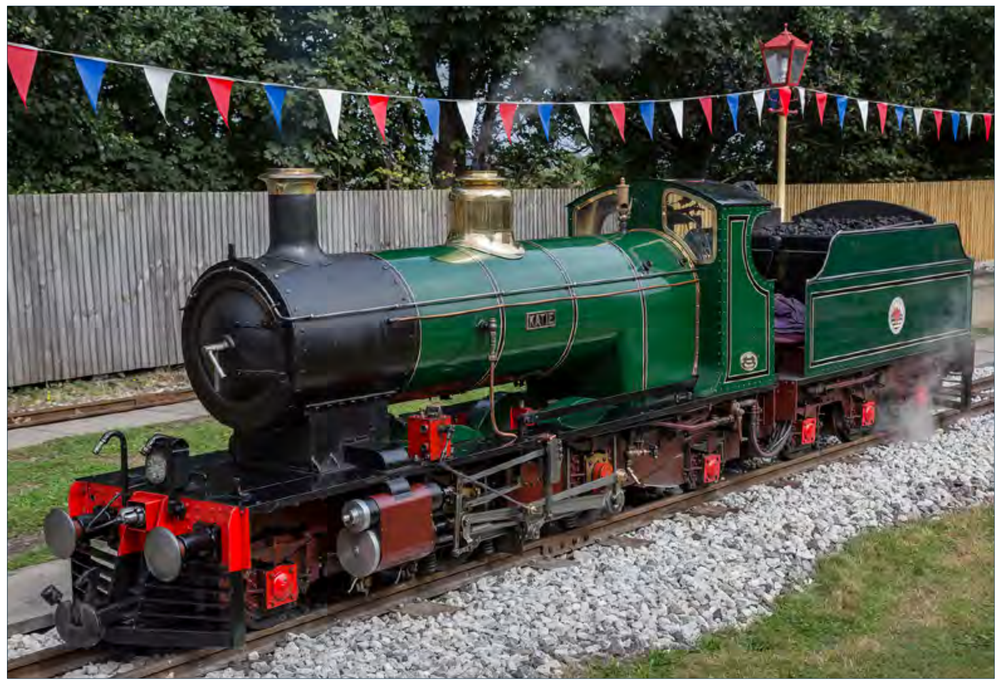
Tram No. 7 was built in 1991 by Brian Taylor to help with the construction of the Railway. It is a steam outline engine and is based on the famous Tram engines that were used on branch line and ports in East Anglia. *Richard Hargreaves*

From the UK



‘Hawk’ is the lines largest and most powerful engine, completed at Clayton West in 1998 by Brian Taylor and it is based on a Kitson Meyer type engine that was built in Scotland and exported to Chile in 1903. *Richard Hargreaves*

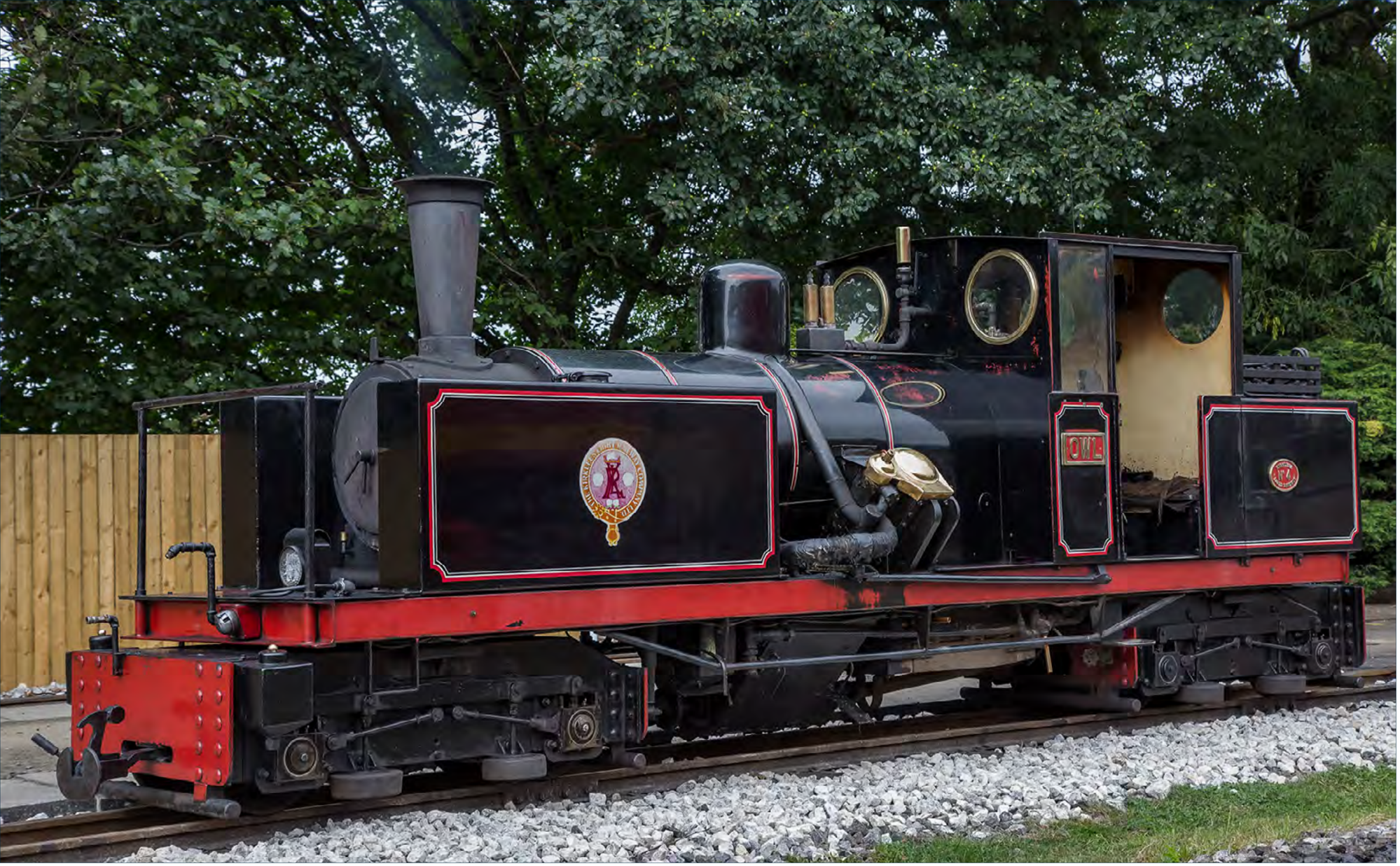




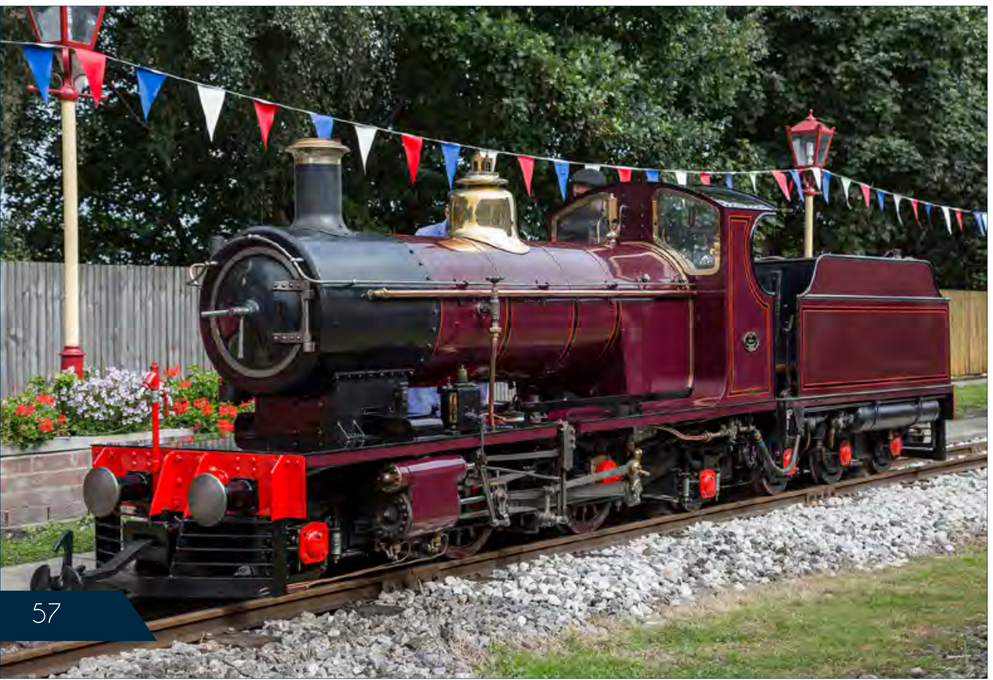
The lovely looking ‘Katie’, making an appearance after undergoing extensive restoration work by Austin Moss, stands in the station at Clayton West on September 10th during the lines ‘Fairbourne in the Hills’ gala. *Richard Hargreaves*

Former BR Class 108 DMU Driving Trailer Composite Lavatory No. 54495 stands at the entrance to the railway, in use as a party coach. *Richard Hargreaves*

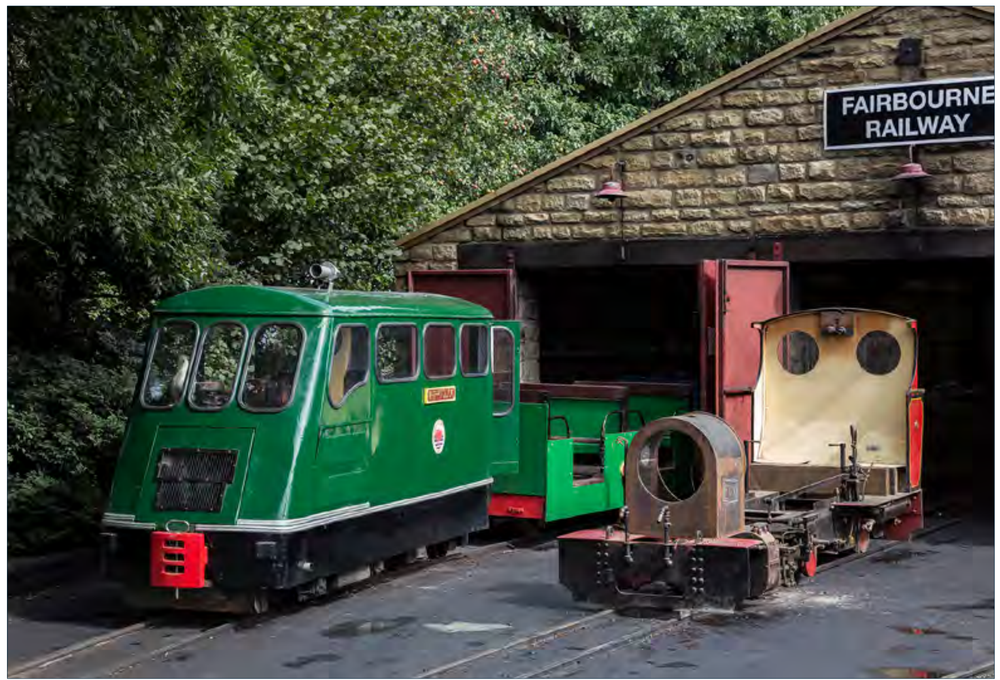
From the UK



Owl is a most unusual engine, it is based on an engraving of an engine that was never actually built, however similar engines were constructed in Bristol and Leeds and exported for use abroad. Its cylinders are arranged in an unusual 'V' formation and it moves itself along by an arrangement that is usually found on diesel engines – it has gears! *Richard Hargreaves*



'Whippit Quick', built by R A Lister and Company in 1935 and formerly at the Fairbourne Railway, visited Kirklees for the 'Fairbourne in the Hills' gala in September. *Richard Hargreaves*



'Siân', built by Guest Engineering in 1963, a 2-4-2 locomotive and resident at the Fairbourne Railway for many years. It was rebuilt extensively in 1984 to an American outline and renamed Sydney. Now owned by the Siân Project Group and restored to her original form and visiting the Kirklees line in September for their Fairbourne gala. *Richard Hargreaves*

From the UK

Visiting for the gala in September was ‘Count Louis’, a Bassett-Lowke ‘Sans Pareil’ Class 30. This locomotive was the flagship of the Fairbourne Railway for many years.
Richard Hargreaves

0-4-0 Lister engined works car ‘Gwril’ is seen between giving rides along the track at Shelley.
Richard Hargreaves

From the Archives:

Austria

On February 9th 2005, an OBB 4010/6010 EMU arrives into Schwarzach St. Veit. *Class47*

From the Archives:

India

Indian Railway locomotive No. E227 arrives at Kulem Junction (Goa) station with a passenger train on December 5th 1982. *Dave Felton*