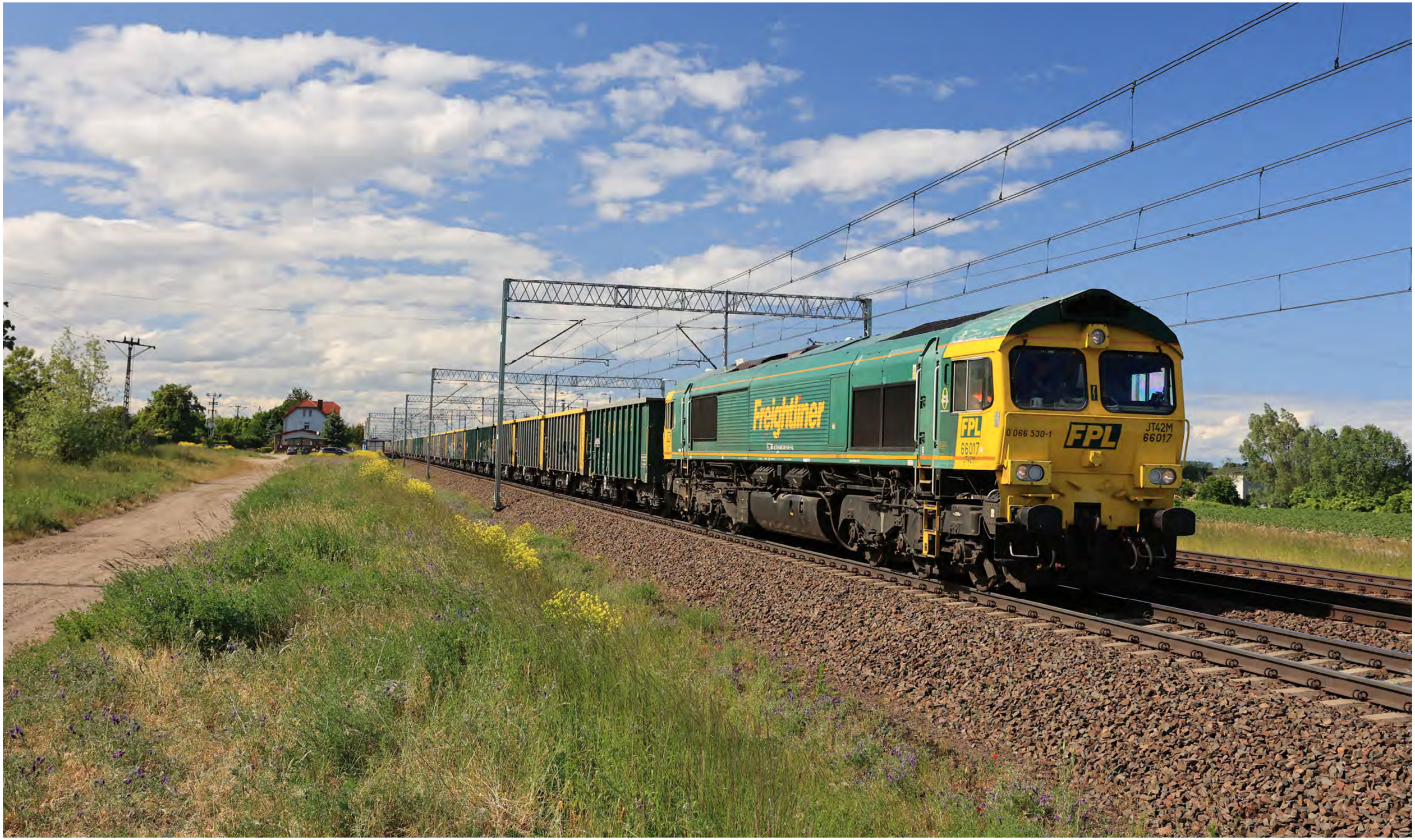

Railtalk Magazine *Xtra*

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Content

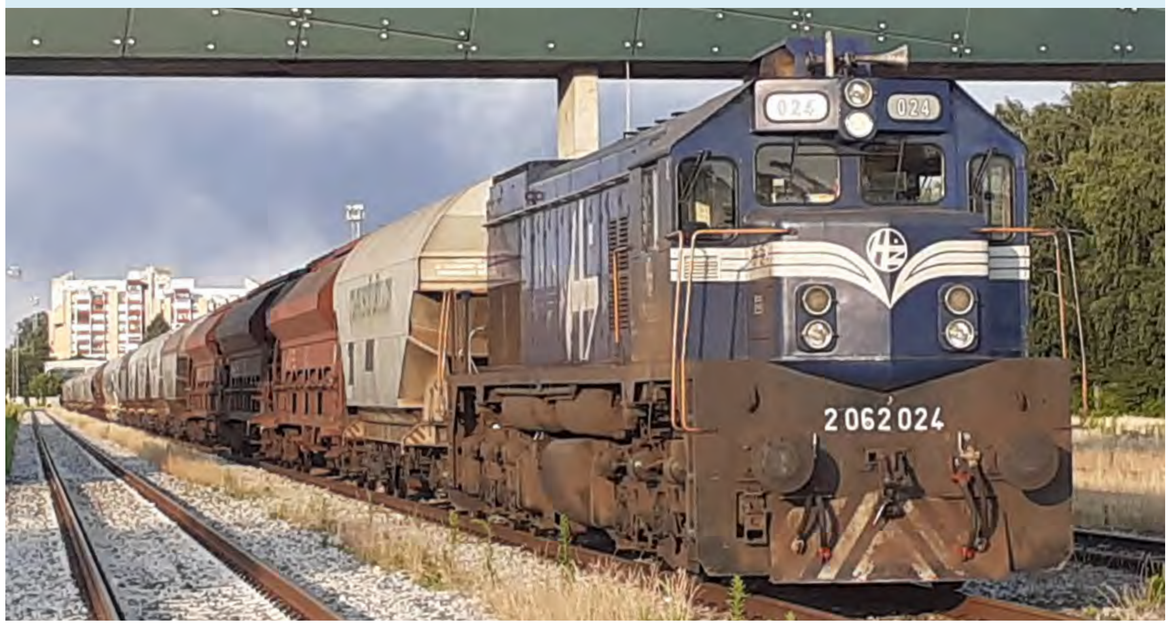
Submissions & Contributions

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 above.

All images should be provided at a resolution of at least 2400px x 1700px at 240dpi.



Welcome to Issue 203Xtra

After last months news on the progress of AI and digitalization in the rail industry, there's more this month with Eurostar announcing that it has rolled out a contactless, biometric check-in system at London St. Pancras station. The SmartCheck system, supplied by iProov, enables Eurostar's Business Premier and Carte Blanche passengers to avoid queues for ticket and UK exit checks when connecting between the UK and mainland Europe. To use this fast-track, ticketless service, passengers have to securely enrol their ticket, passport and face on their mobile device before they travel. At the station, they are then able to expedite pre-boarding processes by proceeding through a dedicated SmartCheck corridor with a walk-past facial biometric checkpoint.

This rollout makes Eurostar the first rail operator to adopt biometric boarding technology. Meanwhile, biometric face verification is also being trailed at London Heathrow Airport (LHR) to improve the boarding processes for international travellers at the airport.

Gwendoline Cazenave, Eurostar Group's CEO said: "Providing a seamless station experience to our customers is a priority for Eurostar: we continue looking for solutions to increase capacity in stations and simplify the passengers' flows. SmartCheck in St. Pancras International station is a solution for a faster and seamless check-in experience. By introducing SmartCheck, we become the first rail travel operator to adopt biometric face verification. This innovation will enhance our customer departure journey, which is crucial to provide Eurostar's unique travel experience."

This roll-out follows Eurostar's successful trial of the new biometric check-in system between December 2021 and April 2022.

Meanwhile in Germany and as part of the 'Digital Rail Germany' initiative, Deutsche Bahn, Siemens Mobility, Bosch and other partners are working on the digital future of the railway. Within the context of the AutomatedTrain research and development project, the partners will spend the next three years testing fully automated train services and stabling runs. Sensor technology is to enable the vehicles to recognise their surroundings and react independently to obstacles. The project is supported by the German Federal Ministry of Economic Affairs and Climate Action. Parliamentary State Secretary Michael Kellner presented a funding decision for around 42.6 million EUR in Berlin on July 5th.

By 2026, one train from Siemens Mobility and one train from the Stuttgart S-Bahn will be equipped with prototypes. The Mireo Smart train from Siemens Mobility will cover the distance from the depot to the first station fully automatically and without a driver. In the event of obstacles, the vehicle will brake automatically. The second train will collect data for obstacle detection, among other things. Both vehicle will have the same hardware, but will feature different software. This will allow the recorded sensor data and the software's reactions to special incidents to be compared with each other.

Daniela Gerd tom Markotten, DB Board Member for Digitalisation and Technology, said: "With innovative technology and state-of-the-art sensor systems, we can make an important contribution to more traffic on climate-friendly rail. Fully automated, driverless driving will enable us to operate our trains more frequently and flexibly in the future and thus offer our passengers an even more attractive service."

Andre Rodenbeck, CEO Rail Infrastructure, Siemens Mobility, said: "For the first time in Germany, we are testing fully automated, driverless driving based on ETCS in regional transport. That's why we are proud to be part of the 'AutomatedTrain' research and development project. We are equipping one of our Mireo Smart regional trains with the latest GoA4 technology for train preparation and provisioning. Hereby we continue our research and development activities on driverless trains and obstacle detection around rail transport. We thank the German Federal Ministry of Economic Affairs and Climate Action for supporting the project."

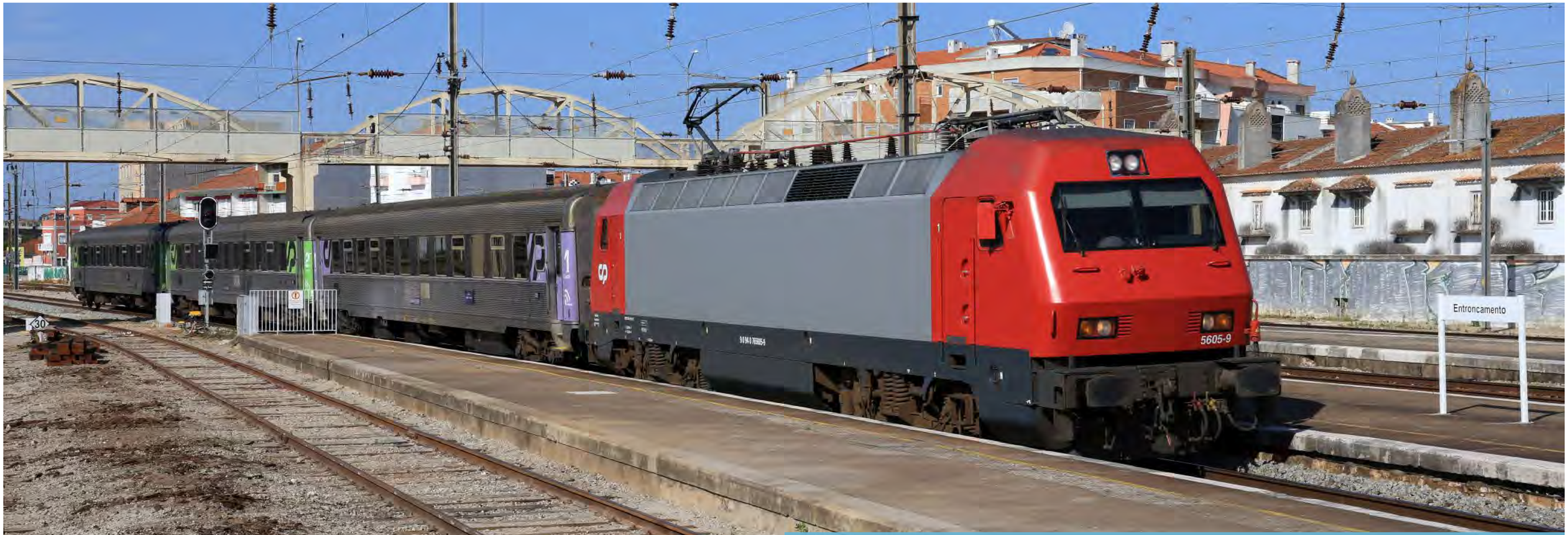
Until next month... **David**

This Page

HŽ Cargo Co-Co Class 2062.024 has been screwed down in the yard at Osijek station while it awaits a crew to work forward on July 10th. *Andy Pratt*

Front Cover

On June 2nd, Freightliner Poland's 92 70 0 066 530-1 (aka the former UK based 66 530) hauls a southbound rake of boxes through Różyny (PL). *Anton Kendall*



CP Class 5600 No. 5605 with train No. IC542 is seen arriving at Entroncamento. *Thomas Niederl*

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With Thanks

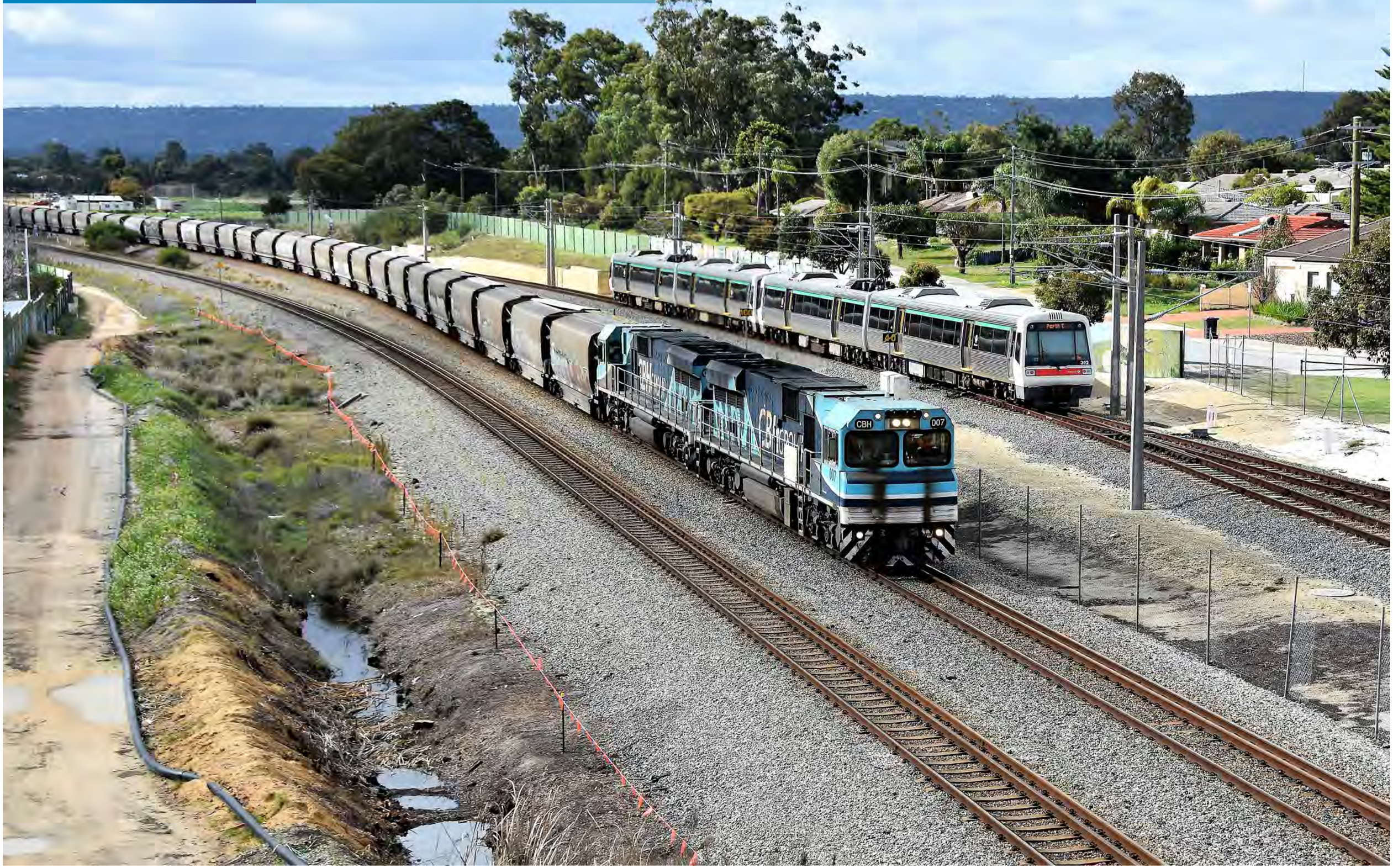
Once again many thanks to the many people who have contributed, it really makes our task of putting this magazine together a joy when we see so many great photos.

These issues wouldn't be possible without contributions from:
Ken Abram, Michael J Alderdice, John Alsop, Ray Anslow, Mark Armstrong, John Balaam, Brian Battersby, Mark Bearton, Steven Beesley, Tom Blanpain, Mark Bennett, Michael Bennett, Ben Bucki, Ian Callander, Keith Chapman, Steve Chapman, Julian Churchill, Nick Clemson, Keith Davies, Brian Dobbs, Derek Elston, Eddie Emmott, Mark Enderby, Colin Gildersleve, Vernon Goodey, John Goodrich, Greig Gibson, Carl Grocott, Richard Hargreaves, Dave Harris, James Haywood, Brian Hewertson, Stuart Hillis, David Hollowood, Keith Hookham, Derek Hopkins, Colin Irwin, John Johnson, Richard Jones, Anton Kendall, Colin Kennington, Ken Livermore, Mathijs Kok, David Lindsell, Barry Longson, Michael Lynam, Kevin McCormick, Phil Martin, Dave Mather, David Mead, Chris Morrison, Alan Naylor, Gerald Nicholl, Jeff Nicholls, Dave Peel, Chris Perkins, Mark Pichowicz, Colin Pidgeon, Neil Pugh, Andy Pratt, Andre Pronk, Alan Rigby, Charlie Robbins, Bryan Roberts, Dennis Rowland, Tim Saunders, Neil Scarlett, Paul Senior, Alan Sinclair, John Sloane, Laurence Sly, Stewart Smith, Lee Stanford, Steve Stepney, AllisonTwycross, Steven Thompson, Mark Torkington, Brian Turner, Gerard van Vliet, Wilko Wieffering, David Wood,Leuan Wood, Shep Woolley, Erik de Zeeuw

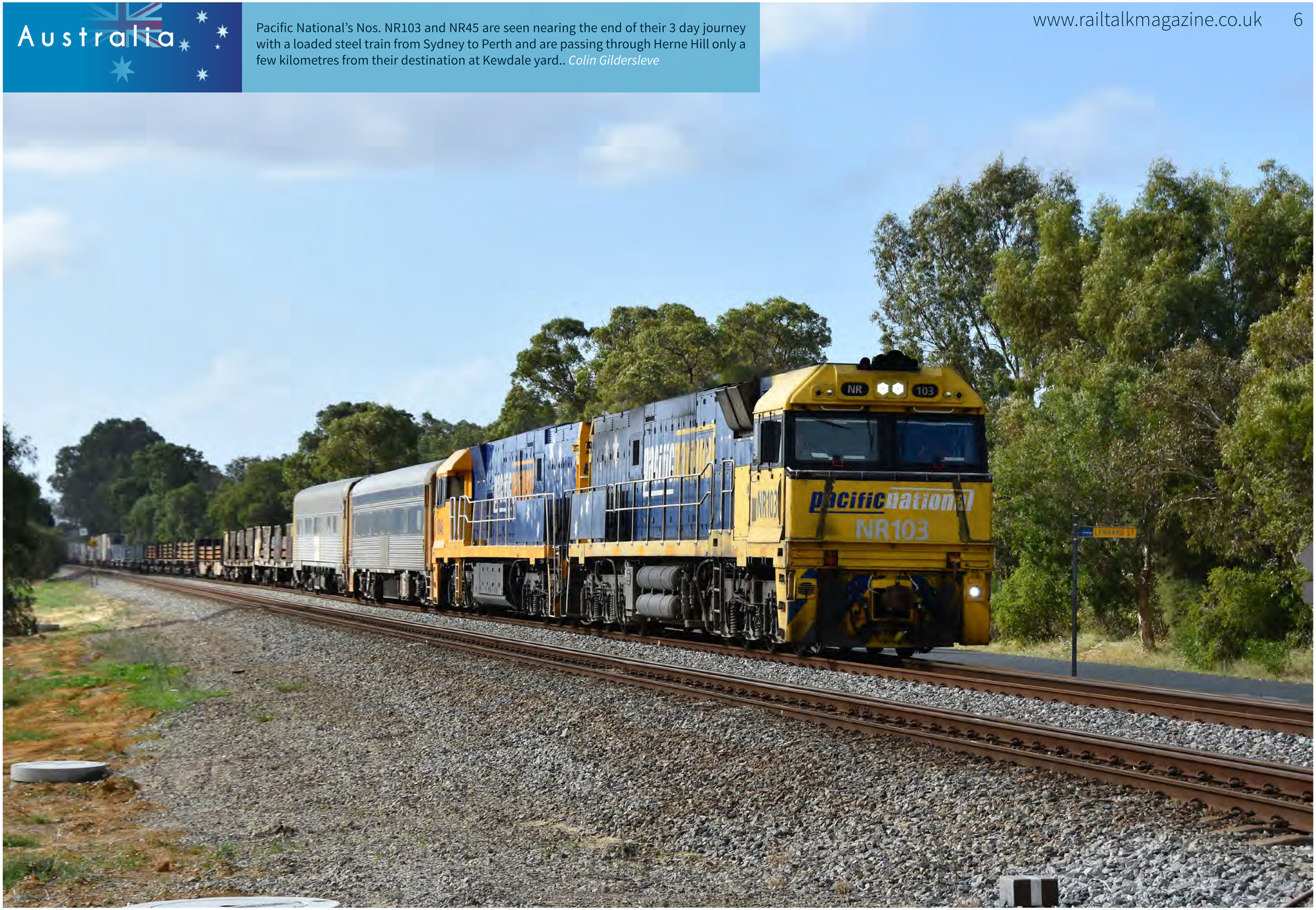
Australia

Transperth's 'A' series EMU No. 302 leads a 4 car unit onto the single track Thornlie branch and is seen at Kenwick. *Colin Gildersleve*

CBH Group's CBH007 and a classmate take loaded grain to Kwinana and are seen passing a Transperth 'A' series EMU on a Thornlie to Perth service. *Colin Gildersleve*



Pacific National's Nos. NR103 and NR45 are seen nearing the end of their 3 day journey with a loaded steel train from Sydney to Perth and are passing through Herne Hill only a few kilometres from their destination at Kewdale yard.. *Colin Gildersleve*

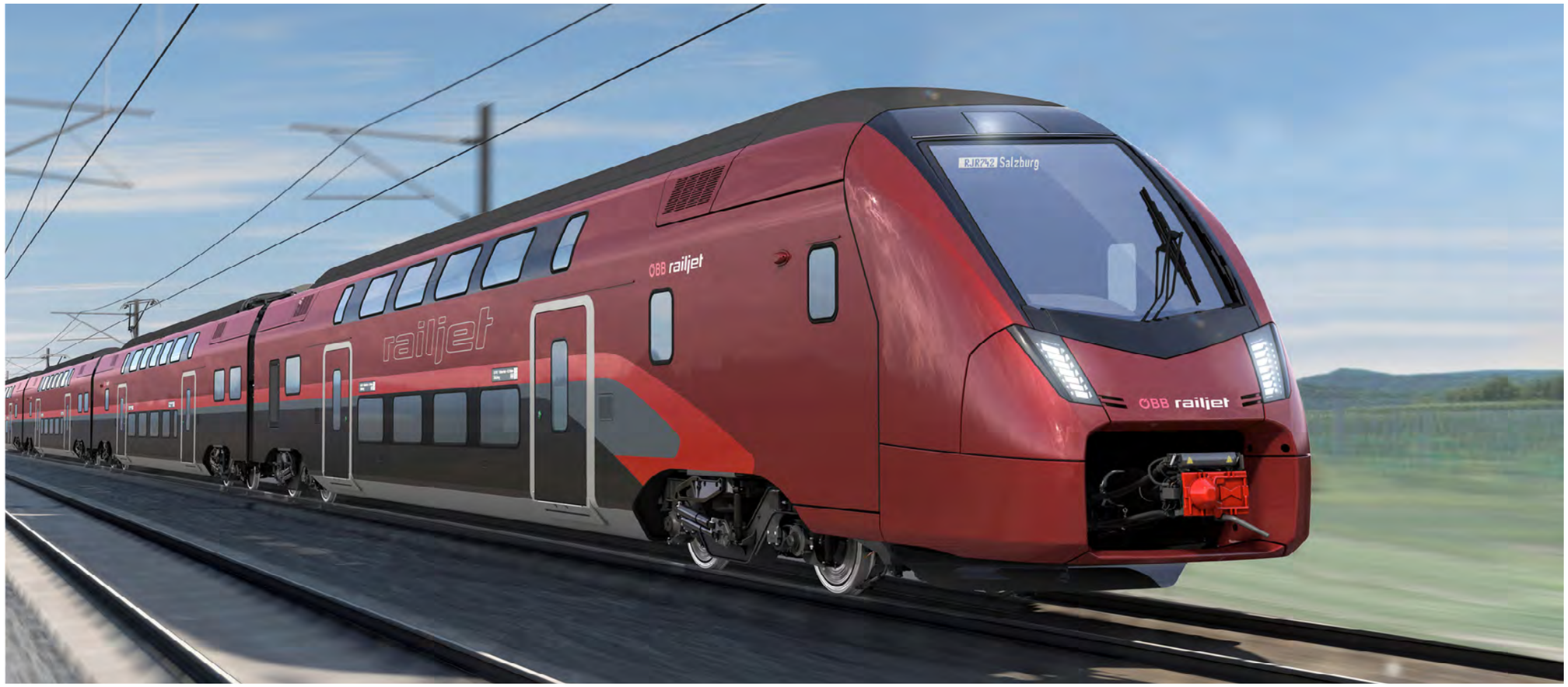


Australia

On hire to Watco Australia are RailFirst's Nos. C503, C508 and Watco's own HL203 seen here with a short acid train from Kwinana to Hampton, near Kalgoorlie. *Colin Gildersleve*

Austria

More capacity in local and long-distance transport: ÖBB orders another 35 new double-decker multiple units from Stadler



Austrian Federal Railways (ÖBB) is once again ordering 35 new KISS double-decker multiple units from Stadler. In addition to 14 trains for long-distance services, Stadler is also supplying 21 KISS vehicles for local transport. The order is part of the framework agreement signed in 2022 for up to 186 double-decker multiple units. Including the first call-off, 76 vehicles were thus ordered. Thanks to its high degree of innovation and generous space, the KISS has impressed customers in 14 countries.

ÖBB and Stadler are continuing the joint replacement of the Austrian local and long-distance transport fleet. Last year, ÖBB called off 41 KISS double-decker multiple units from a framework agreement for 186 trains. ÖBB and Stadler have signed the contract for exercising the next option with a volume of around 600 million euros. This comprises a total of 35 new double-decker multiple units, 14 of which are six-car trains for long- distance services and 21 are four-car KISS vehicles for local transport. The deployment of the new trains is planned in stages from mid-2026.

The KISS double-deck multiple units ordered as part of the first call-off in April 2022 will go into assembly on schedule and are scheduled for service in the eastern region as of 2026. For Stadler, it is a great vote of confidence and proof of the good cooperation that ÖBB is already calling off such a high number of further trains in this project phase.

“Stadler and ÖBB have set themselves the goal of jointly modernising Austrian rail transport. With its high degree of innovation, our KISS model is an essential solution for passenger- and environmentally-friendly rail transport – on both local and long-distance routes. We would like to thank ÖBB for their trust in us. We look forward to working together to deliver the next generation of double-decker multiple units for Austria,” says Peter Spuhler, Executive Chairman of Stadler’s Board of Directors.

“At ÖBB, the passenger boom continues: Long-distance transport recorded a total of 41.6 million passengers in 2022 - even surpassing our previous record year of 2019. Not only are we very proud of this result, but we are also implementing other measures to further increase capacity on our trains. We are investing in the heart of our long-distance service - the Railjet - and will be adding modern Railjet double-decker trains to the existing fleet for the first time,” says ÖBB CEO Andreas Matthä.

Maximum capacity for tomorrow’s rail transport

Since 2010, the KISS has been successfully operating as a local or long-distance train with a high passenger capacity from Western Europe to the Caspian Sea - and soon also in the USA. Since the first delivery, 620 double-deck trains have been sold in 14 countries. Under a wide range of climatic conditions, in climates from Silicon Valley to Azerbaijan, from suburban trains to long-distance transport, the KISS cover hundreds of thousands of kilometres every day. Hardly any other double-decker vehicle concept demonstrates such flexibility.

For the rail transport of tomorrow

The new double-decker multiple unit offers around 380 seats in the four-car configuration for local transport. The six-car long-distance trains provide around 480 seats in 1st and 2nd class, and have two catering zones. They can reach a maximum speed of 200 km/h.

When designing the new train, special consideration was given to the wishes and requirements of passengers for their daily journeys to and from work and during their leisure time. Every single car has a low-floor entrance and an optimised multi-purpose area with more space and accessibility for passengers with bicycles, pushchairs or luggage. This spaciously designed multi-purpose area is directly connected to the boarding and alighting areas, enabling passengers to enter and exit quickly.

In the new KISS vehicle, passengers can also expect a modern interior design, comfortable seats, automatic air conditioning and power outlets in every row of seats. In addition, the new trains are equipped with a modern passenger information system (monitors with real-time information) and video surveillance. For passengers with limited mobility, the middle car of the compositions has specially dedicated wheelchair spaces with new, height-adjustable side wall tables.
Stadler expands in Austria

Thanks to the increased presence of its vehicles and the rising volume of orders in Austria, Stadler is further expanding its location in Vienna. This will enable the company to focus even better on its customers in Austria. In addition to the sales office, an engineering hub is being established in Vienna to enable the efficient and rapid implementation of customized solutions for customers in Austria in the future.

The new competence center will create around 50 new qualified jobs for engineers in the fields of development, approval and service.

Austria

Green rail transport in Austria: Stadler wins a contract for battery - powered trains

Austrian Federal Railways (ÖBB) has awarded Stadler a framework agreement for up to 120 battery- powered trains. The FLIRT Akku vehicles are designed to replace the current diesel fleet and will enable sustainable operation on lines that are only partially electrified.

The signing of the framework agreement and the initial order for 16 FLIRT battery is expected to take place in autumn 2023. This contract and the recent successes in the USA, Germany and Italy once again confirm Stadler's leading position in battery and hydrogen green propulsion technology.

"If we are to meet the climate targets, rail transport in turn must become even more sustainable. That is why Stadler has invested heavily in green propulsion solutions to replace diesel fleets and has established its position as a leading provider of sustainable rail transport in recent years – both in Europe and the USA. We are delighted to be working with ÖBB to drive forward the decarbonisation of rail transport in Austria," says Peter Spuhler, Chairman of Stadler's Board of Directors.

The new trains are FLIRT Akku vehicles – the battery-powered version of Stadler's best-selling FLIRT model, which has already sold over 2,500 units worldwide. They are intended for use in the eastern region in Austria, where they will replace the current diesel fleet. The FLIRT Akku model allows sustainable rail operation on non-electrified line sections by charging the traction batteries while travelling under an overhead contact line.

Stadler: an innovative decarbonisation partner

Rail transport is the most sustainable mobility solution of all. Shifting passenger and freight transport to rail therefore plays a central role in combating climate change. However, the rail networks in many countries are only partially electrified or not electrified at all – as is the case in Austria. Stadler has consistently expanded its alternative propulsion portfolio in recent years and is currently assisting rail operators worldwide with the decarbonisation of rail transport. Depending on the area of application, Stadler offers its customers tailor-made solutions with battery, hydrogen or even hybrid propulsion.

Battery-powered FLIRT Akku: the world record-beating train

Stadler has more than 80 years of experience in the construction of battery-powered rail vehicles. Its modern battery-powered vehicles can run both with and without overhead contact lines, and can be recharged during operation or even when braking. The FLIRT Akku is the battery-operated version of Stadler's FLIRT model. The vehicle has an operating range of around 100 kilometres. This means that the regional train can be battery operated on almost all of the non-electrified routes in Austria, for example. After successfully covering 224 kilometres in battery-only mode, the FLIRT Akku holds the world record for the longest journey travelled by a regional train in battery-only mode without additional charging. As well as delivering new trains for ÖBB, Stadler is also supplying 55 FLIRT Akku vehicles for the Schleswig-Holstein local transport network, 44 trains for the Palatinate network and 14 trains for Deutsche Bahn's H-Netz. The vehicles for Schleswig-Holstein are currently undergoing approval tests and will start passenger service later this year. In addition, Stadler is also manufacturing six FLIRT Akku for the Lithuanian rail operator LTG Link.

Sustainable hydrogen propulsion

In addition to battery-powered trains, Stadler is also pushing ahead with the development of rail vehicles that run on hydrogen. These allow low-emission rail operation, especially on lines without an overhead contact line. Stadler designed and built the first multiple unit with hydrogen propulsion for SBCTA in California (USA).

After a successful test phase this spring, the vehicle is due to start operating in 2024. Stadler is also supplying the world's first narrow-gauge trains with hydrogen propulsion for the Italian regions of Calabria and Sardinia.

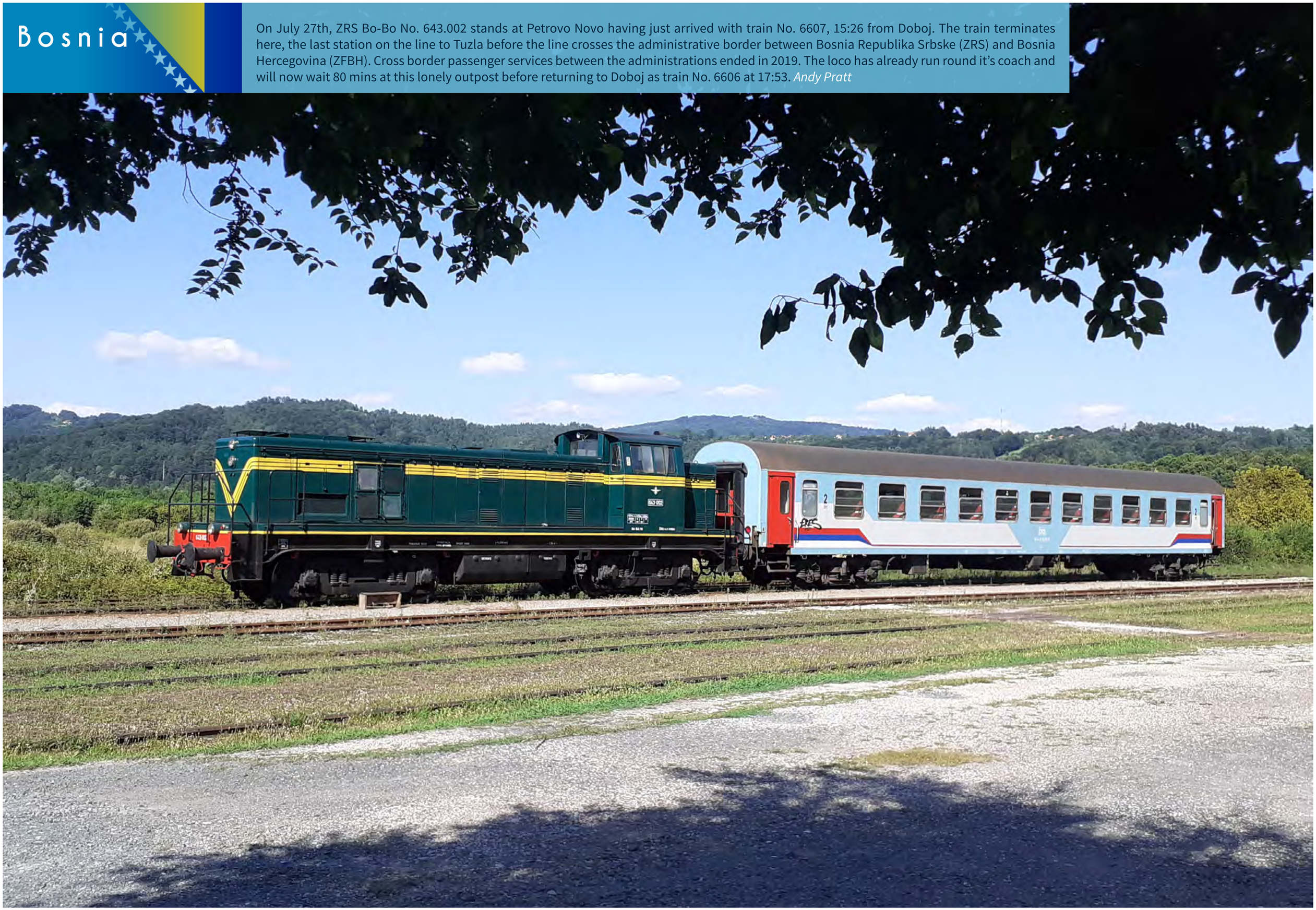
On July 10th, SNCB Class 1800 No. 1864 stands at Welkenraedt at the head of the 11:48 departure to Courtrai. *Chris Baldwin*

ZRS Class 441.808 stands at Banja Luka having just arrived with train No. 6425, the 14:56 from Dobrlijn. The Bo-Bo electric will run round the single coach and work back to Novi Grad at 19:20. *Andy Pratt*

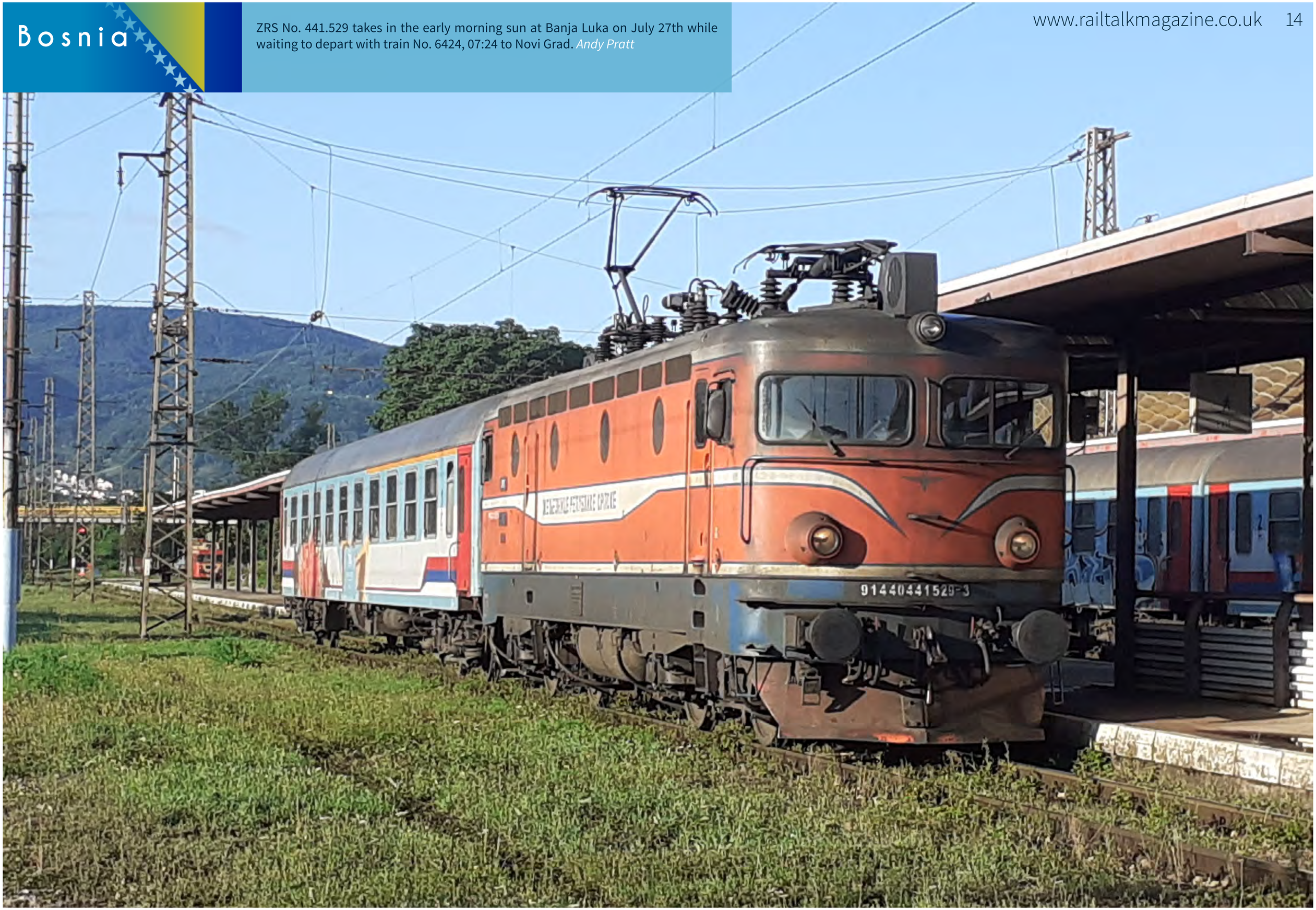
ZRS Bo-Bo electric Class 441.055 on the front with 441.531 on the rear stand at Dobrljin ready to depart with train No. 6425, 14:56 to Banja Luka on July 26th. Although Dobrljin is the frontier station on the Bosnian side of the Bosnian/Croatian border, regular cross border passenger trains ceased in 2016. No. 441.531 had returned from working a freight into Croatia and was added to the rear of the passenger train to save a path. *Andy Pratt*

Bosnia

On July 27th, ZRS Bo-Bo No. 643.002 stands at Petrovo Novo having just arrived with train No. 6607, 15:26 from Doboj. The train terminates here, the last station on the line to Tuzla before the line crosses the administrative border between Bosnia Republika Srbske (ZRS) and Bosnia Hercegovina (ZFBH). Cross border passenger services between the administrations ended in 2019. The loco has already run round it's coach and will now wait 80 mins at this lonely outpost before returning to Doboj as train No. 6606 at 17:53. *Andy Pratt*



ZRS No. 441.529 takes in the early morning sun at Banja Luka on July 27th while waiting to depart with train No. 6424, 07:24 to Novi Grad. *Andy Pratt*



HŽPP Class 2044.017 stands at Split having just arrived with the overnight train from Osijek on July 13th. *Mark Torkington*

HŽPP A1A-A1A Class 2044.029 arrives at Split on July 12th with the previous evening's train No. 1204, 18:45 from Budapest Keleti. The train terminated on time at Split after it's near 14 hour journey at 09:44. *Andy Pratt*

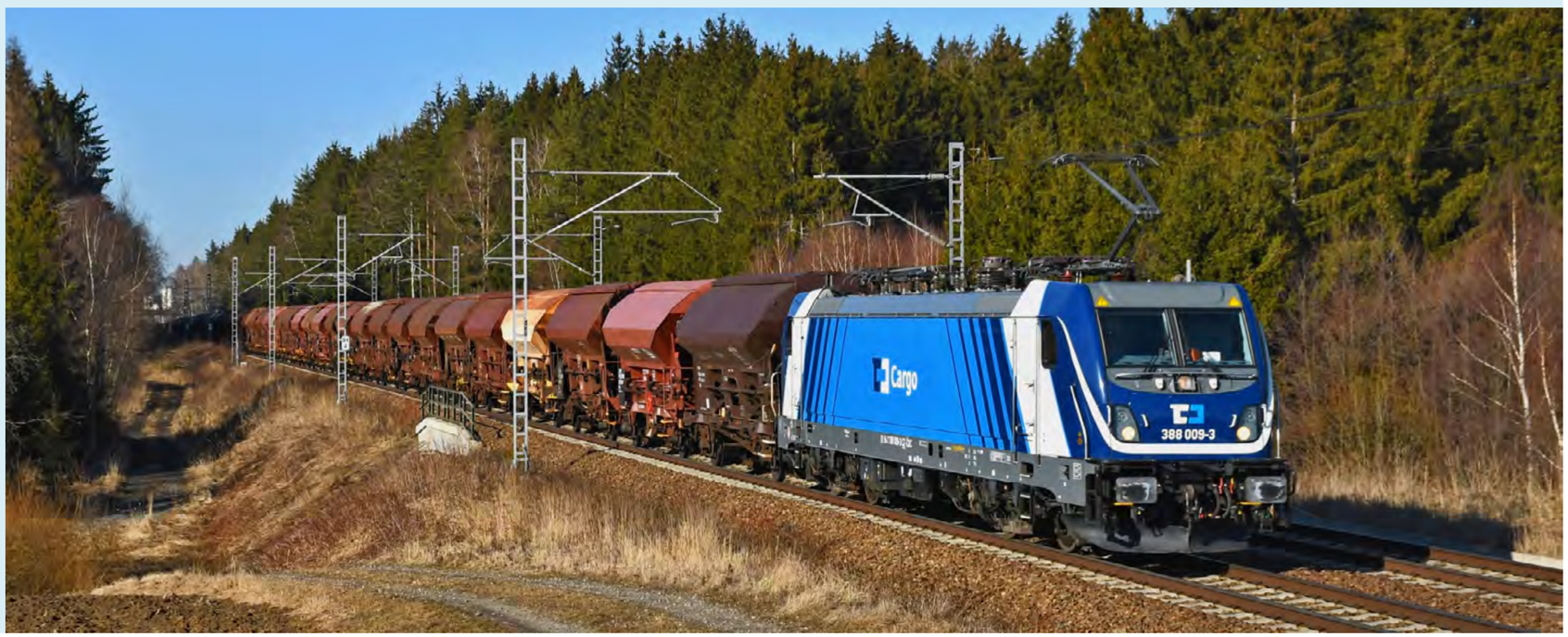
HŽPP Class 2044.016 rounds the famous embankment curves between Sadine and Labin Dalmatinski on July 15th with the overnight service to Vienna and Bratislava. *Mark Torkington*

Class 2044.013 passes Prgomet on July 17th with the Adria sleeper to Budapest, formed of MAV coaches. *Mark Torkington*

HŽPP Class 1142.010 awaits departure time at Vincovci with an Intercity service to Zagreb on July 12th. *Mark Torkington*

Czech Republic

Agreement for delivery of 12 more TRAXX locomotives signed



ČD Cargo has ordered 12 more TRAXX 3 MS locomotives equipped with the Atlas on-board system (ETCS Level 2, Baseline 3). The locomotives should be delivered in the first half of 2026 at the latest. The contract value amounts to EUR 45 million. These 12 TRAXX 3 MS locomotives will expand the current fleet of 16 Alstom locomotives already in use by the carrier and the 21 locomotives that will be gradually taken over in 2024 and 2025. In total, ČD Cargo will own 49 of these modern interoperable locomotives by mid-2026.

“The signing of the contract for the delivery of additional locomotives will enable us to further expand into foreign markets where ČD Cargo continues to grow its market share. Last year we transported more than 10 million tonnes of goods abroad. The 12 locomotives will be used by our subsidiaries CD Cargo Poland and CD Cargo Slovakia,” said Tomáš Tóth, Chairman of the Board of Directors of the company ČD Cargo on the occasion of the contract conclusion.

Photo: ©CD Cargo

BULGARIAN CAPITAL BUYS EIGHT MODERN METRO TRAINS FROM ŠKODA GROUP

Škoda Group has been awarded a contract to deliver eight metro trains to the Bulgarian capital Sofia. The value of the contract exceeds EUR 65 million. The production of four-car trains for the carrier Metropoliten EAD will take place at the group’s production sites in Ostrava and Pilsen. Conceptually, the metro is a continuation of the one delivered to Warsaw, however, the Sofia one will be equipped with air conditioning. The new vehicles will enter service in 2026 and will run on lines 1, 2 and 4. This is not the first time Škoda is delivering vehicles to Bulgaria. Since 2010, the group has delivered 210 trolleybuses to five Bulgarian cities.

“We are very proud to deliver new, modern, and spacious metro trains to the people of Sofia. After Warsaw in Poland, the Bulgarian capital is the next destination for our metro. We have extensive experience with the metro, having previously modernised the Prague metro and supplied complete traction equipment for the subways in Kiev, Budapest and also in South Korea,” says Zdeněk Sváta, President Region Central East at Škoda Group. “This success highlights our expertise in public transport. We offer a complete portfolio of environmentally friendly vehicles for public transport. I am confident that, based on this cooperation, we will establish a strong relationship with Metropoliten EAD that will support the future development of Sofia’s public transport system. I strongly believe that the Sofia metro trains will exceed expectations and further strengthen our reputation as a reliable partner in urban mobility solutions,” he adds.

“The opening of the new metro station, located between Slivnica and Obelia stations, will shorten the running interval of trains on the second metro line, which is necessary due to the increased passenger flow during peak hours. This, together with the necessary partial reduction of peak intervals on lines 1 and 4, will be made possible by the 8 new trains. To ensure the future efficient operation of lines 1, 2 and 4, it is expected that the start of operation of the new station will take place simultaneously with the delivery of the aforementioned Škoda trains,” says Stoyan Braotev, Executive Director of Metropoliten EAD.

I am confident that, based on this cooperation, we will establish a strong relationship with Metropoliten EAD that will support the future development of Sofia’s public transport system. I strongly believe that the Sofia metro trains will exceed expectations and further strengthen our reputation as a reliable partner in urban mobility solutions. Zdeněk Sváta, President Region Central East at Škoda Group

Air-conditioned metro

The Sofia metro carries more than one million passengers a day, who will soon be able to use modern 80-metre trains from Škoda Group for their journeys. In the Bulgarian capital, the metro also runs partly on the surface, for which the vehicle design is adapted. Given the warm climate of the region, the new vehicles will be equipped with powerful air conditioning, ensuring high comfort even during the warm summer months. Of course, two wheelchair compartments are provided to guarantee accessibility and comfortable transport for all persons. The trains will be equipped with a safety system with automatic speed control. This system ensures a safe journey on the route by regulating the speed of traffic and preventing trains from catching up. The trains will be powered by traction three-phase asynchronous motors, with recuperation – i.e., returning electricity back to the power grid – used during braking. The metro trains for Sofia will be manufactured at the Škoda Group’s production sites in Ostrava and Pilsen. The Sofia metro operates on a standard gauge of 1 435 mm and is powered via a contact (third) rail. The power supply is DC, and the nominal voltage is 750 ± 250 V. The design speed of the new trains is 90 km/h.

A key means of transport in large cities

The metro has become an important form of transport in cities around the world. It is particularly popular for its efficiency and reliability. Metro systems offer high-capacity solutions that provide reliable transport with minimal delays thanks to dedicated lines. They are also known for their environmental friendliness. By winning this contract, Škoda Group further strengthens its position as a major European manufacturer in the transport industry. The group remains ready to push the boundaries of quality and promote sustainable urban mobility through its technically advanced and innovative solutions.

France

The ORA Consortium, led by RATP Dev, wins the contract to operate and maintain Line 15 South of the Grand Paris Express public transit network

The Board of Directors of Île-de-France Mobilités (IdFM), the public transit authority of the Greater Paris region, has awarded the contract to operate and maintain Line 15 South of the Grand Paris Express to the international ORA Consortiumwhich comprises RATP Dev as majority shareholder, Alstom, and ComfortDelGro.

The new automated metro line will cover 33 kilometres, pass through 22 municipalities, and serve 16 stations in the Greater Paris region. It is scheduled to enter service in late 2025. The six-year contract, which can be extended to nine years, includes operation of the automated metro trains, stations, and centralized control center, as well as the maintenance and upkeep of the rolling stock. The consortium's scope of action will also include management of the passenger relations and traveller information system.

Line 15: a vital artery of the Grand Paris Express network
Line 15 will be the central link in the Grand Paris Express, an ambitious project to extend the Greater Paris region's public transit network with over 200 kilometres of new metro lines. Upon completion, Line 15 will form a 75 km circular line around Paris, linking 45 municipalities and carrying over 1.5 million passengers every day.

The ORA Consortium, led by RATP Dev, will support the entry into service of Line 15 South, its first 33-kilometre section.

International expertise in the operation and maintenance of automated metro systems
As a global operator of urban and intercity transportation systems, and an expert in the operation and maintenance of automated metros, RATP Dev will coordinate the ORA Consortium's activities with the aim of supporting the entry into service of an important line for the residents of the Greater Paris region, thus confirming the region as a global reference for automated metros.

Thanks to its experience in managing complex interfaces, RATP Dev will coordinate all operation and maintenance activities in the contract. "This extension of a historic public transit network will transform the daily lives of millions of residents in the inner and outer suburbs of Paris, and contribute to the efficient interconnection of several districts in the region. Alongside our partners, we will put RATP Dev's recognized expertise in the operation of automated metros at the service of Île-de-France Mobilités and the people of the Greater Paris region, providing a travel experience focused on service quality," states Hiba Farès, CEO of RATP Dev.

The ORA Consortium: three global leaders in transportation and mobility
RATP Dev is recognized by transportation authorities across the world for its design and operation of large-scale automated metro projects, and management of complex interfaces. Recent references include Belgrade, Serbia (design phase), Riyadh, Saudi Arabia and Sydney, Australia (project phase), and Doha, Qatar (operation).
For the entry into service of Line 15 South, RATP Dev will rely on the expertise of Alstom, a pioneer in sustainable and smart mobility solutions and a leader in predictive maintenance, to see to the maintenance of the rolling stock: "This contract marks a new collaboration with the RATP group and we are delighted to be joining forces with RATP Dev and ComfortDelGro for this project. Alstom is proud to have the opportunity to bring to line 15 its latest innovations in digital and predictive maintenance, already deployed in Sydney, Dubai and Montreal. Combined with Alstom's international expertise in automated metros and transport system maintenance, they will guarantee passengers a reliable and efficient service", adds Jean-Baptiste Eyméoud, President of Alstom France.

For its part, ComfortDelGro, renowned for its first-rate customer service in the Singapore metro, will contribute its best practices and expertise in the passenger experience, service standards, and team training to ensure high-quality care and attention.

ComfortDelGro's Managing Director and Group CEO, Cheng Siak Kian, says: "At ComfortDelGro, one of our key strengths lies in providing a delightful and inclusive commuting experience for our customers. We are therefore pleased to contribute our expertise in partnership with RATP Dev and Alstom to deliver a safe, reliable and caring commuting experience to the residents of the Île-de-France region."

The awarding of the contract for Line 15 South reflects the relentless commitment of all our teams over the last three years, and the confidence of Île-de-France Mobilités in the expertise of RATP Dev and its partners.

France

Akiem signs a new framework agreement for 100 Traxx multi-system locomotives with Alstom

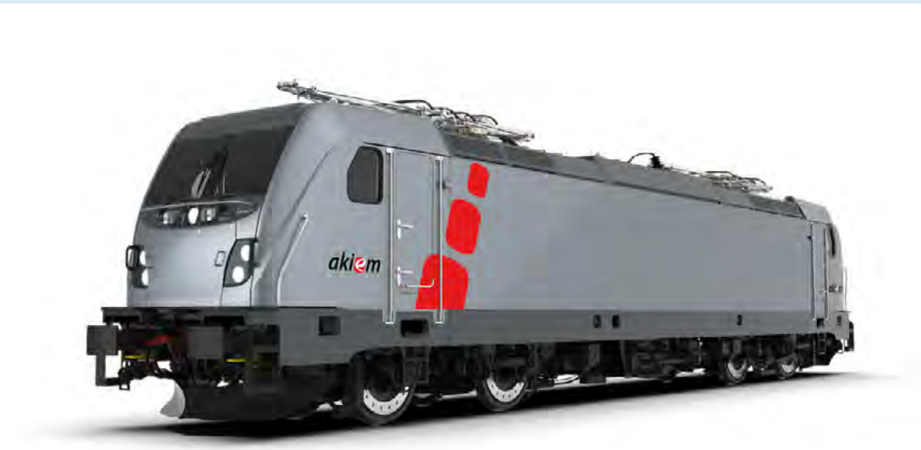
Alstom, global leader in smart and sustainable mobility, and Akiem European rolling stock leasing company have signed a framework contract for 100 Traxx Universal multi-system (MS3) locomotives. The firm part of the order includes 65 locomotives. The total amount of the framework agreement is up 500 million euros. Akiem confirms its leadership on the leasing European market and its ambition to contribute to the rail market's accelerating activities, with major investment on corridors from France to 12 other European countries.

The Traxx Multi-system locomotives benefit from optimised energy consumption and can run both Freight and Passenger operations at a speed of up to 160 kilometres per hour. They will cover operations in 12 European countries: Germany, Austria, Switzerland, France, Italy, Belgium, Netherlands, Luxemburg, Hungary, Poland, Czech Republic, Slovakia. As a unique feature for multi-system locomotives, a part of them will be delivered with the last mile feature enabling to access ports, terminals or industrial sites without the need of a shunting locomotive.

All locomotives will be equipped with the leading signalling system ATLAS, Alstom's onboard solution for the European Train Control System (ETCS). This system comes with the broadest coverage of countries and lines, both in ETCS as well as for legacy system operation, and superior two-out-of-three architecture.

Kevin Cogo, Vice-President, Rolling Stock, Locomotives & Components, Alstom DACH, said: "We are very proud that Akiem extends their locomotive fleet with their biggest single order of Traxx locomotives for an important number of countries. Thanks to this agreement, both Akiem and Alstom will reinforce their strong position for locomotives in various corridors including their home market."

Fabien Rochefort, CEO of Akiem added "Akiem is thrilled to place this new order with Alstom. We are constantly investing in our locomotive portfolio to serve our customers and develop new market positions. This stock investments will allow to offer new efficient and sustainable routes which will contribute to increase the modal shift towards rail in Europe. 55 locomotives as part of this order will operate from France towards Europe in a context when no deliveries were experienced for the past decade. We are intending to contribute to the rejuvenation of rail Freight and intercity passenger transport in France and ease innovation and competition with the support of our maintenance and service teams."



Final assembly is planned to take place at the Alstom site in Kassel, Germany. Deliveries of the units are scheduled to take place between 2025 and 2028.

Akiem orders 15 locomotives from Siemens and increases fleet to 100 Vectrons

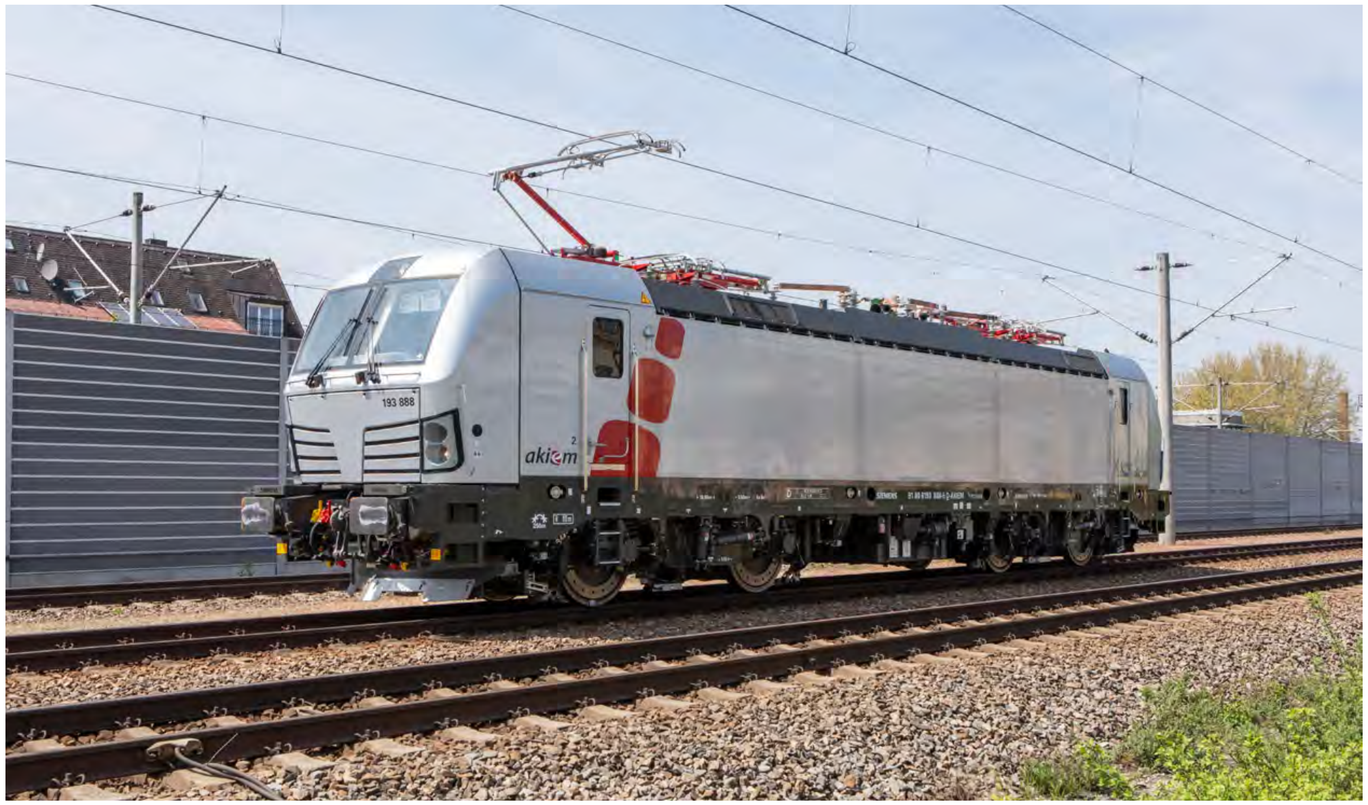
Akiem, a leading European rolling stock leasing company, has ordered an additional 15 Vectron AC and Vectron MS locomotives from Siemens Mobility. The order was placed as part of a framework agreement for the purchase of locomotives that was signed in December 2021. Locomotives from this new call will be delivered between 2025 and 2027. Akiem previously ordered 20 Vectron locomotives from Siemens Mobility in December 2021 and an additional 65 units last August.

"We are very pleased that Akiem has decided to place another call from our framework contract and that we continue to be their trusted partner. In Akiem's fleet, the Vectron is making a significant contribution to the company's transport performance for cross-border, European freight and passenger traffic", said Albrecht Neumann, CEO Rolling Stock at Siemens Mobility.

"We are delighted to be increasing our fleet by 15 Vectron locomotives and pursuing this fruitful business relation with Siemens," said Fabien Rochefort, CEO of Akiem. "We look forward to offering passenger and freight operators throughout Europe the fleet they need as a sustainable and reliable service. With this fleet of 100 Vectrons we will address the needs of freight and passenger operators in 11 countries and further support sustainable rail transportation in Europe."

The ordered locomotives have a maximum power of 6.4 megawatts and can be delivered with a top speed of either 160 or 200 km/h. They can be used for cross-border freight transport as well as fast passenger service in a number of European countries.

To date, Siemens Mobility has sold more than 1,800 Vectron locomotives to 66 customers in 16 countries, and the fleet has covered over 750 million kilometers in service. Locomotives based on the Vectron platform have been approved for operation in 20 European countries.



Germany

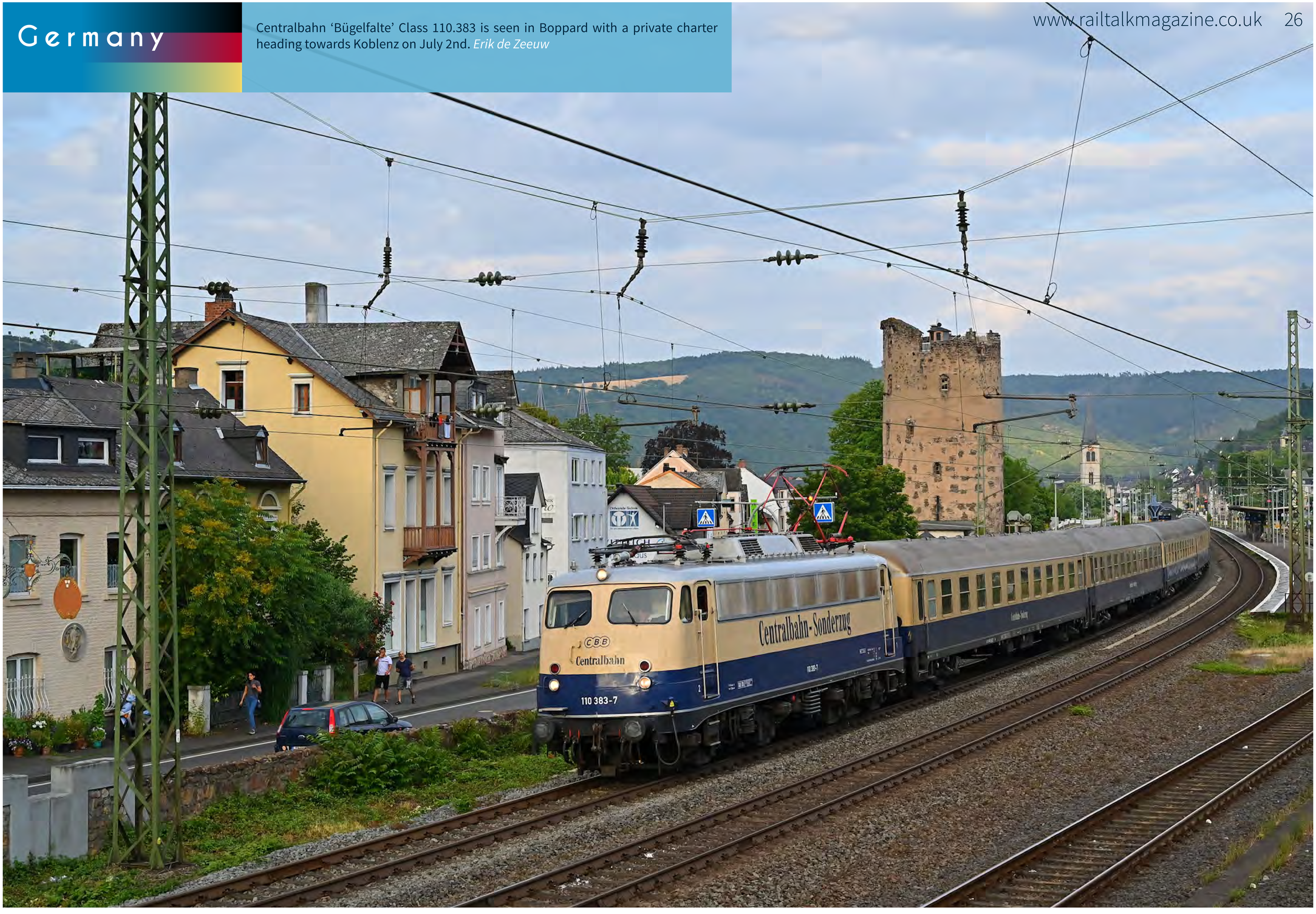
On July 10th, OBB Class 1116.064 is detached from the 19.35 Wien Hbf to Bruxelles Midi NightJet service, now running over two and a half hours late at Aachen Hbf. *Chris Baldwin*

SNCB Class 18 No. 1887 takes over a late running NightJet service to Bruxelles Midi at Aachen on July 10th. *Chris Baldwin*

Germany

A pair of SNCB two-car EMUs (No. 648 leading) waits to depart Aachen on July 10th with the 15:04 to Spa-Geronese.
Chris Baldwin

Centralbahn 'Bügelfalte' Class 110.383 is seen in Boppard with a private charter heading towards Koblenz on July 2nd. *Erik de Zeeuw*



Germany

Alstom and RAILPOOL sign a contract for 50 Traxx Universal locomotives

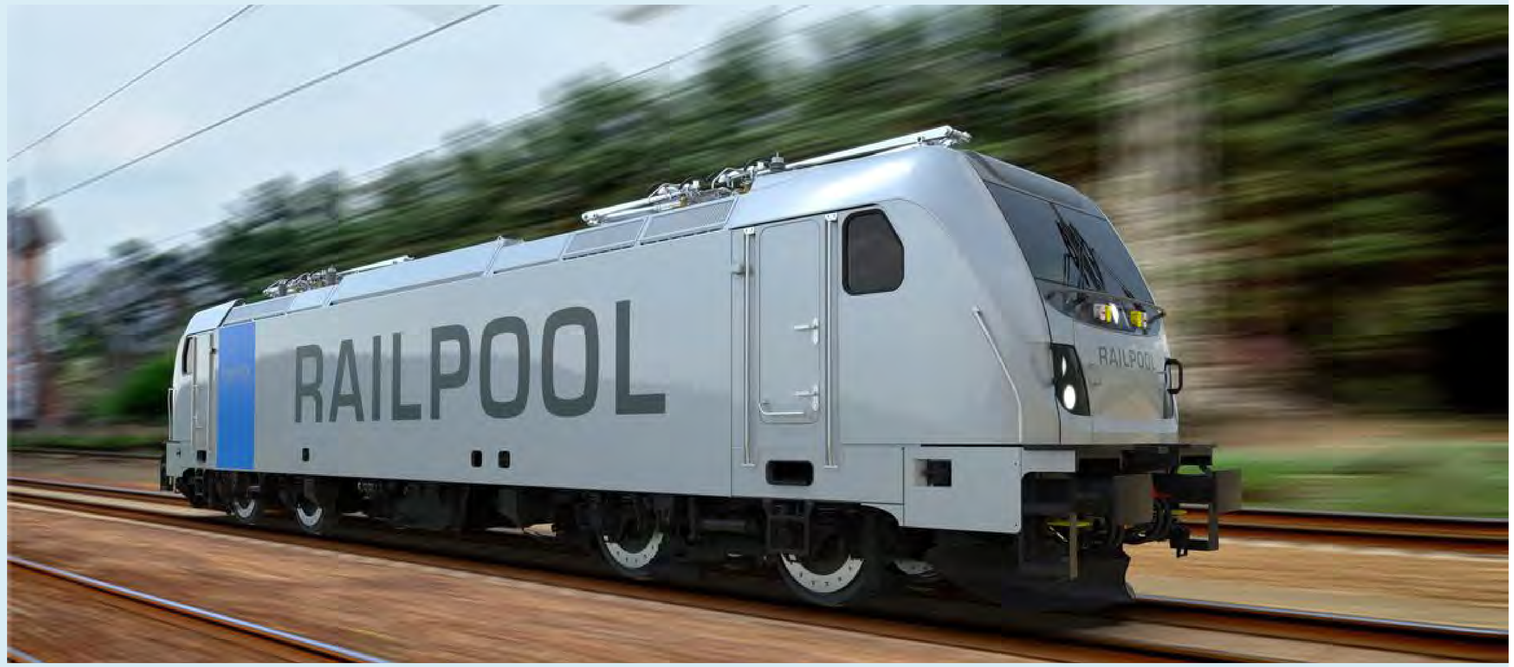
Alstom, global leader in smart and sustainable mobility, and RAILPOOL, one of Europe's leading rail vehicle leasing companies, have signed a contract for 50 Traxx Universal multi-purpose locomotives. The contract is valued at up to 260 million euro.

The Traxx Universal multi-purpose locomotives can be operated for freight and passenger corridor services. Characterised by both high reliability and flexibility in combination with an optimised power consumption, the locomotives are a proven solution for efficient cross-border operations. Extended maintenance intervals allow for less interventions to ease operational planning, reduce costs and increase availability. The locomotives will cover operations in eight countries, namely Germany, Austria, Switzerland, France, Italy, Belgium, Luxemburg and Poland.

All locomotives will be equipped with the leading signalling system Atlas, Alstom's onboard solution for the European Train Control System (ETCS). This system enables operation on extended corridors with the broadest coverage of countries and lines, both in ETCS as well as for legacy system operation.

Kevin Cogo, Vice-President, Rolling Stock, Locomotives & Components, Alstom DACH, said: "We are delighted that RAILPOOL has chosen Alstom to expand their operations in several parts of Europe. This contract marks the continuation of a long-standing and successful partnership. With our proven Traxx locomotives and our state-of-the-art Atlas signalling solution, we are proud to contribute to a more efficient and sustainable freight and passenger transport."

Torsten Lehnert, CEO of RAILPOOL, added: "With this purchase we solidify our commitment to develop our one-of-a-kind full-service offering in the French market on top of the recent office opening in France under the leadership of Frédérique Erlichman. All 50 locomotives ordered from our partner Alstom will cover operations in France and along the most important European corridors, contributing to the further advancement of sustainable high-performance rail transportation out of France."



The engineering of the locomotives will be done at the Alstom site in Mannheim, Germany, while final assembly is planned to take place in Kassel, Germany.

Other sites involved are Wroclaw, Poland (carbody shell production), Siegen, Germany (bogies production), and Zurich, Switzerland (project management).

Image: A look at a Traxx Universal multi-system locomotive equipped with Alstom's ATLAS ERTMS system, which will be delivered to Railpool – Non-contractual design for illustration purposes (©Alstom Advanced & Creative Design)

High-capacity battery transport by rail

DB Cargo Logistics transports cell modules to the Czech Republic for Volkswagen Group Logistics and the Škoda brand.

Electric vehicles are among the most important and visible factors in the transition to new drive technologies. But a true measurement of their carbon emissions should include not only the energy used to charge them but also the vehicles' production and transport – a view on which DB Cargo Logistics and Volkswagen Group Logistics agree.

Automotive RailNet: the perfect foundation
With its strategic vision of "zero impact logistics", Volkswagen aims to make its entire logistics chain as carbon neutral as possible. As a provider of battery transport services, DB Cargo Logistics is playing an important part in helping VW achieve that goal. Heavy goods such as batteries are well suited to rail transport.

Using DB Cargo's Automotive RailNet, DB Cargo Logistics has been transporting cell modules by rail from the port of Magdeburg to Mladá Boleslav in the Czech Republic since July. "With standardised and tested battery transport processes, we can respond flexibly to the needs of our customers," says

Sören Labyk, account manager at DB Cargo Logistics. "Our plug-and-play approach plays an important role here by allowing us to add new transport services to the existing network quickly and easily."

Connecting with the existing battery network
From their manufacturer's warehouse in Magdeburg, the cell modules are brought to Magdeburg's port by lorry. Once they arrive at the port, the lithium-ion cell modules are protected from the elements while being transhipped, prepared for rail transport, and loaded into sliding-wall wagons. From there, the modules are taken directly to the Škoda plant in Mladá Boleslav, 370 kilometres away, where they are built into batteries for electric vehicles. These are either installed in the Škoda vehicles produced locally or transported by rail to the Volkswagen plant in Emden.

Three trips per day eliminate eight lorries
Up to three wagons per day are currently sent to the Czech Republic, and the volume could increase to more than ten wagons a day in the future. The figures are enough to avoid a significant volume of road haulage. A freight wagon can hold up to 64 tonnes – two and a half times more than a lorry. Specially designed battery racks allow the sliding-wall wagons to be used to their full capacity. Three freight wagons per day means eight fewer lorry trips, an important step towards a carbon-neutral cell module supply chain.

Environmental and safety considerations favour rail transport
Avoiding lorry trips is not the only reason to favour rail. A significantly higher level of safety also makes rail the ideal mode of transport for batteries and cell modules. Both these components are classified as dangerous goods that need to be transported in the most non-polluting way possible, and also quickly and safely. In terms of accident frequency, transport by rail is 42 times safer than by road. This mode therefore ensures safe, fast and low-emission shipments of one of the most important components for decarbonising transport.

On July 15th, NeSA's Class 218.105 is in charge of the SVG Freizeitexpress Südbahn from Stuttgart Hbf to Singen (Hohentwiel). The train is seen here awaiting departure from Friedrichshafen Stadt with the Rabbit pushing to Singen. *Andy Pratt*

On July 3rd, SBB Cargo International Class 193.658 'Vierwaldstättersee' passes through Rüdesheim am Rhein working a Melzo Scalo (I) to Rotterdam (NL) container train. *Erik de Zeeuw*

TXLOGISTIK (MERCITALIA GROUP) Class 193.997 heads a Verona to Köln Eifeltor 'Klv' (Combined traffic) on July 4th. *Erik de Zeeuw*

On July 6th, BELog Baustoffe Class 1272.205 passes Dehnsen with a rake of E-cars from Alfeld to Lehrte. *Erik de Zeeuw*

HLG Stadler Eurodual Class 159.216 is seen in Dehnsen working a Bokeloh to Werra-Kalirevier lye empties. *Erik de Zeeuw*

Preßnitztalbahn Class 140.017 and 140.037 runs passes Banteln at speed with a München-Freiham to Wilhelmshaven-Ölweiche fuel empties on July 7th. *Erik de Zeeuw*

Germany

Alstom to supply 40 Coradia Stream trains to NAH.SH in Germany

Alstom, global leader in smart and sustainable mobility, has signed a contract to supply 40 Coradia Stream high-capacity electric multiple units to Nahverkehrsverbund Schleswig-Holstein (NAH.SH), the integrated transport association that organises the railway passenger transport in Schleswig-Holstein, on behalf of the state. The order also includes a full-service package for the trains' maintenance over a period of 30 years to ensure their seamless availability. The contract is valued at close to 900 million euros. Furthermore, an option to order up to 55 additional trains with a corresponding full-service package is also part of the contract.

The four-car trainsets consist of two double-deck end cars and two single-deck cars. They are 106 metres long and can operate in multiple traction. The trains have a maximum speed of 160 km/h and will be operated in two networks, each with an individual vehicle layout providing 360 and 390 seats, respectively, and thus considerably increasing the capacity compared to the trains in service today. Wide double-leaf doors facilitate a fast passenger exchange.

"The Coradia Stream high-capacity train optimally combines our expertise in green and digital mobility with the objective of maximizing capacities in these important networks in the state of Schleswig-Holstein. It provides a state-of-the-art solution for the region's present and future mobility needs," said Müslüm Yakisan, President of Alstom Region DACH. "We are delighted that NAH.SH is giving us the opportunity to make an important and long-term contribution to the future of mobility in Northern Germany. Our high-capacity concept is the perfect match for their requirements, and we look forward to help advancing regional transport to the next level."

Claus Ruhe Madsen, Minister of Transport Schleswig-Holstein, said: "An important milestone has been reached: these rail lines have the highest number of people in Schleswig-Holstein travelling by public transport. We have to offer these people a strong service in the future. This includes a reliable timetable and modern, high-performance vehicles that impress with their design and travel comfort. We have now created the framework for this and are sending out a clear signal for the transport turnaround in the True North."

A more comfortable, more connected and more accessible train

The trains are built in accordance with the requirements of NAH.SH and introduce various features to improve the passenger experience. With air conditioning using antibacterial and antiviral filters, power sockets and Wi-Fi as well as improved mobile phone reception, they offer numerous amenities to ensure an excellent level of comfort. A seat reservation system and a live occupancy display function further contribute to a pleasant journey experience.

Thanks to multi-purpose compartments in each car, the trains provide ample space for prams and large luggage as well as room for 2 wheelchairs and up to 24 bicycles. The trains' accessibility ensures an equally high standard of travel comfort for all passengers. In the entrance areas of the single-deck cars, there are neither steps nor height differences that would require ramps. Each train is equipped with 3 lavatories, one of which is accessible to wheelchair users. Furthermore, each train set provides more than 40 dedicated seats for passengers with reduced mobility.

A future-proof train, made in Germany

Modern signalling and automation technology ensures the trains are future-proof for the operational requirements of tomorrow. They are equipped with the European Train Control System (ETCS) and vehicle devices for Automatic Train Operation (ATO). In addition, they are also predisposed for the Future Railway Mobile Communication System (FRMCS).

Final assembly as well as train testing and commissioning takes place in Salzgitter, Germany. The engineering is carried out at several sites in France under the lead of Valenciennes as the Train Development Site. The Coradia Stream regional train is a state-of-the-art, low-floor, high-performance electric multiple unit (EMU) that offers a modular design to allow operators to choose their best configuration and interior. Developed for the European market, Coradia Stream is capable of operating on all the main European power supply systems. In total, over 1,000 trains based on the Coradia Stream train family have been ordered by Italy, Luxembourg, the Netherlands, Germany, Denmark, Romania and Spain, ensuring a well-proven product. The train family also offers direct CO2 emission-free traction solutions such as battery or hydrogen for non-electrified lines.

Germany

Looking to the future with camera gantries
Nationwide launch of AI applications in rail freight transport.

In 2022, camera gantry technology for freight wagon diagnostics was successfully tested and made the transition to a series concept at DB Cargo as part of the Shift2Rail European funding programme. The Germany-wide rollout of the camera gantries was successfully completed on schedule at the end of 2022 when the last camera gantry went into operation in Kornwestheim. The camera gantries create images of passing freight wagons from different perspectives. These images are then sent to employees, who use them to order maintenance services at DB Cargo maintenance depots.

The first camera gantry was tested at the Nuremberg marshalling yard in 2017, and now another milestone has been reached. Dr Sigrid Nikutta, Member of the Management Board for Freight Transport at Deutsche Bahn, and Judith Gerlach, Bavarian Minister for Digital Affairs, launched the nationwide use of AI applications in practice in rail freight transport on July 5th. These applications are used to analyse the images taken by the cameras and provide information on the condition of the freight wagons and load.

“Rail freight transport offers tried and tested logistics and already saves us seven million tonnes of CO2 every year,” says Dr Sigrid Nikutta, Member of the Group Management Board for Freight Transport. “Artificial intelligence will now become an integral part of our operations, starting today. It will help us get more freight wagons and thus more freight onto climate-friendly rail.”

There are now a total of 13 camera in eight DB Cargo locations, which are gradually being equipped with the new AI technology. They will record up to 300,000 high-resolution images from about 10,000 daily freight wagon movements. After the AI software was successfully piloted for photo analysis in rail freight transport, it is now being used at DB Cargo locations throughout Germany. AI provides information on the condition of brake blocks, for example. The camera technology also creates an additional perspective from above. Automatic scrap type detection is currently being tested with the first customer from the steel industry. The camera gantry at the Nuremberg marshalling yard allows careful analysis of the freight wagon on screen. Artificial intelligence methods also increase efficiency for maintenance commissioning employees. This has created a new, attractive job profile, the digital diagnostics expert. AI will also reduce the future workload of wagon inspectors, who are responsible for trackside diagnostics of freight wagons. Without the technology, it currently takes more than an hour to inspect a freight train, depending on the train’s length.

AI model supports freight wagon diagnostics

As part of another research and development project of the Shift2Rail European funding programme, the images from the camera gantries were used for automatic freight wagon analysis, including analysis of brake blocks. Specifically, the thickness of the brake blocks is recorded. The artificial intelligence (AI) model developed was tested, and comparative measurements were also carried out to assess the quality of the values calculated by the AI model.

Camera gantries and artificial intelligence will equip us for the rail freight transport of the future.

The aim of the tests within the project was to evaluate the user-friendliness of the system, test the functions and specifically check how helpful the AI model’s suggestions are in order to preventively replace brake blocks. The ultimate aim is to increase the availability of rolling stock. In addition, business processes were identified that could be optimised in the future using data from continuously measured brake blocks.

Close cooperation with users

In the future, digital freight wagon diagnosticians will have AI to help them. AI will provide support during the technical analysis of the vehicle’s condition, allowing employees to order exactly the high-quality maintenance services that are needed. This solution was developed in close cooperation with specialists from the industry.

Feasibility successfully demonstrated

The project supported by Shift2Rail demonstrated the feasibility of AI in the freight wagon inspection process. During the tests, it was shown that the system can be used in the process and that it simplifies diagnostics with additional information. One of the next steps is to optimise the model further in order to integrate it into the standard rail freight transport process. This success based on digitalisation and automation is part of the path towards establishing a smart rail freight transport system in order to bring more goods onto environmentally friendly rail.

DB presents study on the expansion of high-speed traffic in Europe

Proposal for “Metropolitan Network” includes connection of two-thirds of Europeans by 2050
Fast network will be expanded from today’s 11,000 to 32,000 kilometres
“Green Deal” goals in the transport sector will be tackled

Together with European partner railways, Deutsche Bahn (DB) has drawn up a study on the expansion of high-speed transport (HGV) in Europe. The proposal for the “Metropolitan Network” includes the concrete expansion of routes for fast passenger trains across the entire continent and the simulation of the possible increase in transport performance on environmentally friendly rail. The starting point of the study is the “Green Deal” of the EU Commission.

With a planned doubling by 2030 and a tripling by 2050, the European HGV should make an important contribution to reducing CO^2 in the transport sector. In the study, the specialists analyzed what such a “Green Deal” network must look like in order to achieve the EU goals.

Michael Peterson, DB Board Member for Long-Distance Passenger Transport: “It is possible to triple high-speed traffic in Europe. If the infrastructure is there, millions of people on the continent will benefit from attractive connections and shorter travel times. The railway countries in Central and Western Europe and even more so in Southern and Eastern Europe benefit from this in particular. According to our calculations and simulations, there are attractive travel times on completely new axes and via new transport hubs on the rails.”

The most important facts and figures about the “Metropolitan Network”:

- It connects all 230 metropolitan regions and the large cities in Europe to the HGV at least every hour (agglomerations of more than 250,000 inhabitants are defined as metropolitan regions).

- Around 60 percent of Europeans live in the metropolitan regions and thus have direct access to the HGV - even in regions where there is still no fast rail traffic.

- The key lies in the infrastructure: a total of 21,000 kilometres of rail network need to be built and expanded throughout Europe. The routes designed for the HGV would almost triple from today (Eurostat 2019) around 11,300 kilometres to 32,000 kilometres by 2050. The network should enable speeds of 300 km/h.

- For Germany, this means that if the route were expanded, including the routes already under construction and planned, the high-speed infrastructure in Germany would increase to a good 6,000 kilometres. Another winner would be Poland, which would increase its network more than tenfold from today’s 224 kilometres by 2,760 kilometres.

If the “Green Deal” is to succeed, the EU and the member states will have to make considerable additional investments and invest in network expansion throughout Europe. The railway companies involved want to exchange information with politicians next autumn. The infrastructure measures currently being planned or under construction are not sufficient to achieve a doubling of high-speed traffic by 2030.

Germany

Boom in train journeys
More expenditure on infrastructure reduces profits

The boom in local and long-distance transport continues. Demand on Deutsche Bahn (DB) trains continued to rise in the first half of 2023 – by double digits. The Deutschlandticket has already fuelled this trend in the first two months of sales with around eleven million subscribers across the industry in regional transport. Compared to the first six months of 2022, the transport performance in rail passenger transport in Germany has grown even more strongly than the number of passengers - and with it the number of kilometres that travellers have covered by train in a climate-friendly manner. DB Fernverkehr even achieved a historic record in traffic performance.

Despite more difficult framework conditions such as persistent inflation and falling prices on the international freight markets, the DB Group once again achieved a positive operating result (adjusted EBIT) of EUR 331 million in the first half of the year. However, the operating profit fell by more than 500 million euros (around 62 percent) compared to the first six months of 2022, also due to high advance payments by DB for infrastructure improvements. Group sales (adjusted) amounted to around 25 billion euros in the first half of 2023 (same period last year: around 28 billion euros).

“Our demand potential is far from exhausted,” said DB CEO Dr. Richard Lutz in Berlin: “This is good news for DB and for the climate.” He emphasized: “The tailwind for the railways shows that it is essential to continue investing in more traffic on the climate-friendly railways, even in challenging times . At the same time, we are working resolutely to increase our profitability.”
Bahn boss Lutz: The key are improvements in the rail network

The deviations in the consolidated result compared to the first half of 2022 are mainly due to the industry-wide normalization of freight rates in air and sea freight, in addition to the general increase in costs and the significantly increased expenses of DB for the rail network. As expected, this global development also affected the logistics subsidiary DB Schenker. “Despite the normalizing freight rates in air and sea freight traffic, DB Schenker achieved a significant operating profit of 626 million euros in the first half of 2023,” said Lutz.

The positive contribution of the logistics subsidiary to the group result is therefore almost three times as high as before the corona pandemic. In 2022, DB Schenker had achieved the largest profit in its company history, among other things due to the extremely high freight rates worldwide at the time.
In the core business of DB, the integrated railway system, all areas increased their sales in the first half of 2023, some significantly. The increased demand for passenger transport has contributed to this. In the first half of 2023, more than 808 million passengers used regional rail services in Germany - around 11.5 percent more than in the first six months of 2022. More than 68 million passengers used DB long-distance services in the same period, an increase of over 9 million travellers or 15.4 percent.

The increase is particularly visible in the transport performance, which also takes into account the length of the journey and is measured in so-called passenger kilometres: With around 21.7 billion passenger kilometres, DB long-distance traffic here was well above the same half of the previous year (18.3 billion passenger kilometres) and above the record half-year of 2019. In terms of operating profit, DB Fernverkehr improved by more than 130 million euros in the first half of 2023. The rail freight subsidiary DB Cargo continues to make losses. Among other things, the deterioration in the competitive environment for rail freight transport with significantly higher electricity prices compared to fuel and low market dynamics had a negative impact. Overall, the integrated railway system recorded a loss of 339 million euros in the first six months of 2023. The main driver was the significantly higher spending by the DB Netze Track business unit for infrastructure improvements. The operating performance on the rail network remained at a very high level in the first half of 2023 with around 558 million train-path kilometres. Compared to the first six months of 2022, it fell slightly by 0.9 percent.

Because construction and modernization is at a record level across Germany, punctuality in long-distance transport fell to 68.7 percent in the first half of 2023 (first half of 2022: 69.6 percent). “Even if this is currently demanding a lot from everyone involved: the key to sustainable improvements for our customers lies in the infrastructure,” said Bahn boss Lutz.

CFO Holle: Become more productive in all areas
In the first half of 2023, DB made massive advance payments for the infrastructure and spent significantly more money on maintenance. “Despite the tight financial situation, we have significantly increased our use of funds for improvements in the rail infrastructure. This is a one-off effort until the announced increase in federal funding takes effect next year,” said CFO Dr. Levin Holle. In the first six months of 2023, DB increased its net investments from its own funds by 13.1 percent year-on-year to EUR 3.1 billion - the highest level in the first half of the year. Gross investments together with the federal government grew by 16.7 percent to 6.3 billion euros, also a record. More than 90 percent of all funds continue to flow into the railways in Germany - for example into tracks, stations and new trains.

“In order to secure our future investments, we have to work more productively and efficiently in all areas,” emphasized Holle. Additional costs would have to be offset by increased productivity and higher yields.

Holle referred to the framework conditions that have deteriorated for DB in 2023, such as lower global freight rates, higher interest rates and persistent inflation. Pending wage agreements are also likely to lead to higher costs in the future.
Due to these burdens, the DB Group expects a clearly negative operating result for the full year 2023 - as already forecast in March. The operating loss is now expected to be a little less than one billion euros. Group sales are expected to be around EUR 51 billion. All forecasts are subject to major uncertainties due to continued volatile market developments.

Netzwerkbahn Sachsen strengthens German rail transport with second EuroDual

The European Loc Pool AG (ELP), a leading provider of locomotive leasing services, and Netzwerkbahn Sachsen GmbH (NeS) are pleased to announce their agreement for a second EuroDual locomotive under a 10-year full-service leasing agreement. Following the success of the first EuroDual, which is already in operation throughout Germany, NeS aims to expand its fleet and further strengthen rail transportation in the country.

“We deploy ELP’s EuroDual locomotive nationwide to transport heavy trains and serve even the most remote connections. Connection service is our top priority,” emphasizes Felix Hils, CEO of NeS.

The EuroDual locomotive from ELP has already demonstrated its performance in practical operations. NeS has deployed the first EuroDual locomotive to serve previously challenging routes and connections that were difficult to access due to the lack of overhead lines. With its high performance in diesel mode, flexible transition to electric mode, and improved traction with its six axles, the EuroDual meets the requirements of modern rail transport.

“To accelerate the modal shift and and transfer more goods to rail, it is extremely important to serve additional branch lines. NeS creates new transportation opportunities for companies to make their logistics more sustainable. The EuroDual, with its dual-mode capability (electric and diesel), is naturally the locomotive that can enable this,” says Willem Goosen, CEO of ELP.

ELP and NeS are eagerly looking forward to their collaboration and are confident that the second EuroDual will further strengthen and improve German rail transport. As a proud partner, ELP provides NeS with access to new, powerful hybrid locomotives. The delivery of the second EuroDual to NeS by the end of 2024 will support the company in continuing efficient and environmentally friendly freight transport.

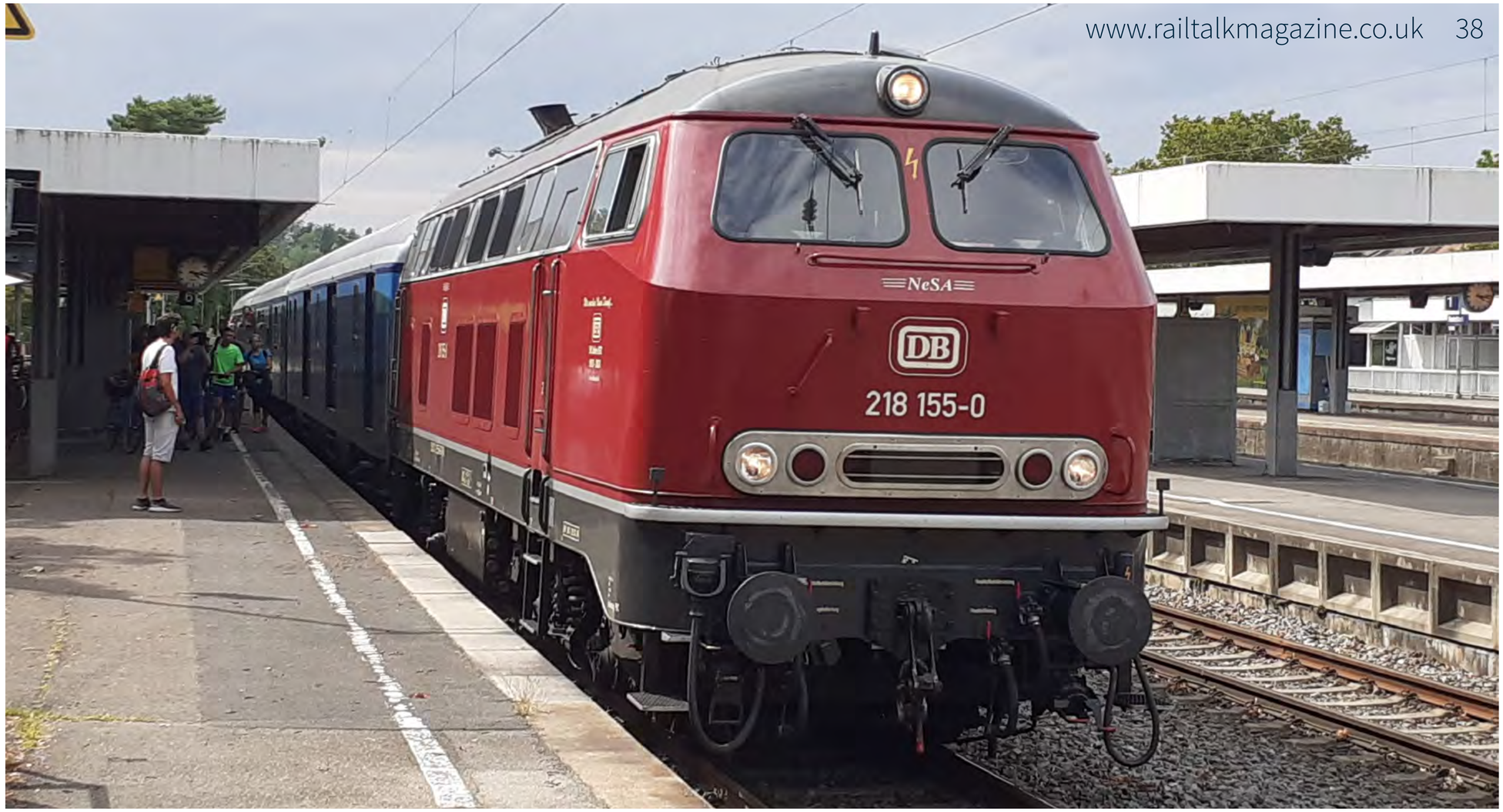
More about the hybrid locomotives
Starting in mid-2023, the second generation of ELP’s dual locomotives, the Euro9000, will be put into service as a hybrid multi-system electric locomotive designed for use in all European corridors. As the “launching customer,” European Loc Pool ordered the first ten Euro9000 locomotives from Stadler in May 2019. The first version with 1.9 MW of diesel and 9 MW of electric power at 500 kN tractive effort will be used in Germany, Austria, the Netherlands, Italy, Belgium, and Switzerland. Subsequently, the locomotive’s area of operation will be expanded to other countries and corridors.

Germany

Dodging the showers on a dull July 24th, Class 218.446 has run round it's stock and is waiting to depart Immenstadt for the last leg of it's journey to Oberstdorf. Train No. IC2085 set off on it's long distance journey from Hannover Hbf at 08:07 that morning. By the time it departed Imnenstadt it had accrued 84 minutes of delay. *Andy Pratt*

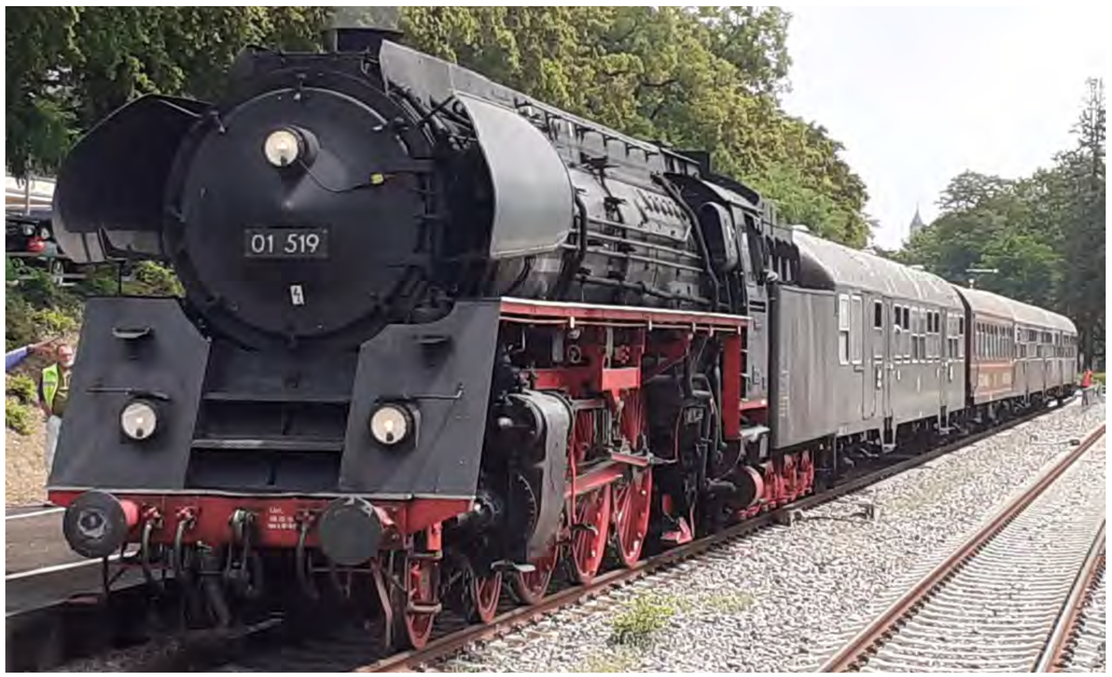
Germany

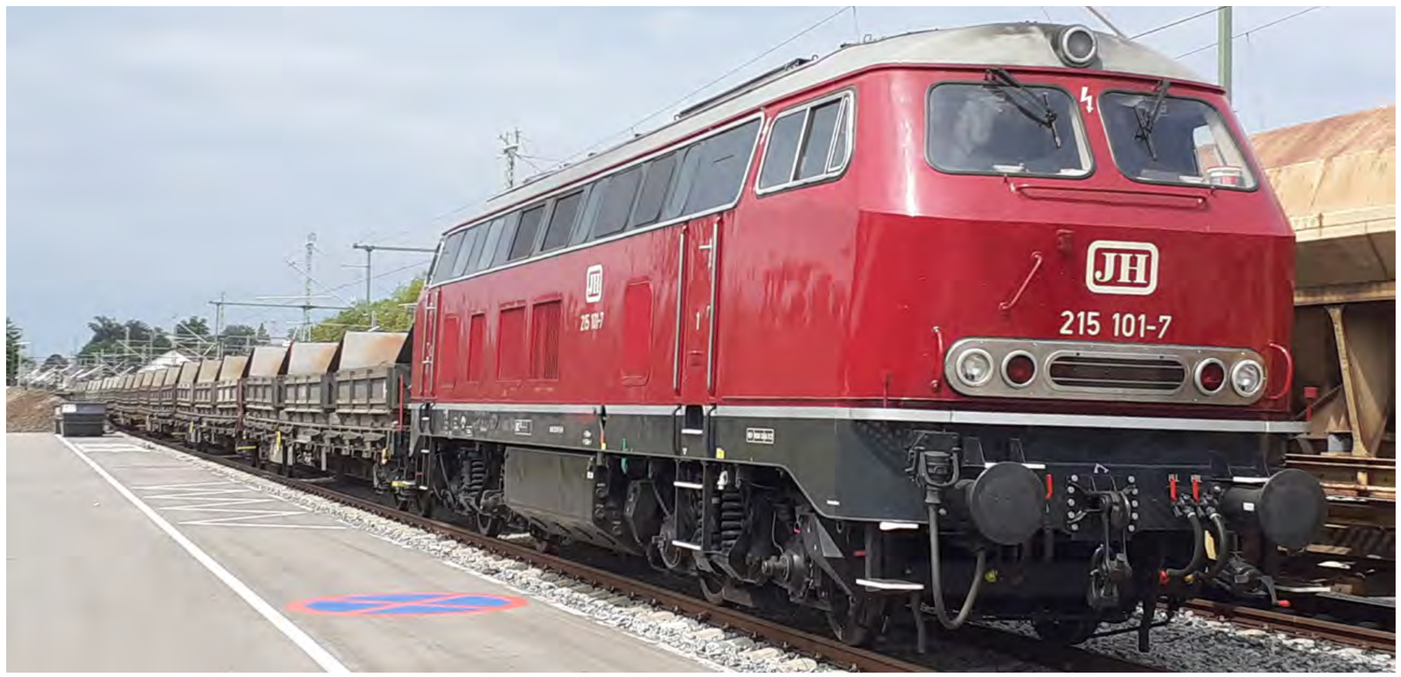
The SVG operated 16:07 Singen (Hohentwiel) - Stuttgart Hbf Freizeitexpress Südbahn, commonly referred to as the Singen Bike Train, arrives at Radolfzell on July 23rd July behind NeSA owned Class 218.155. *Andy Pratt*



Privately owned Class 225.101 displaying it's old number 215.101 is stabled between ballast workings at Lindau-Reutin on July 24th. *Andy Pratt*

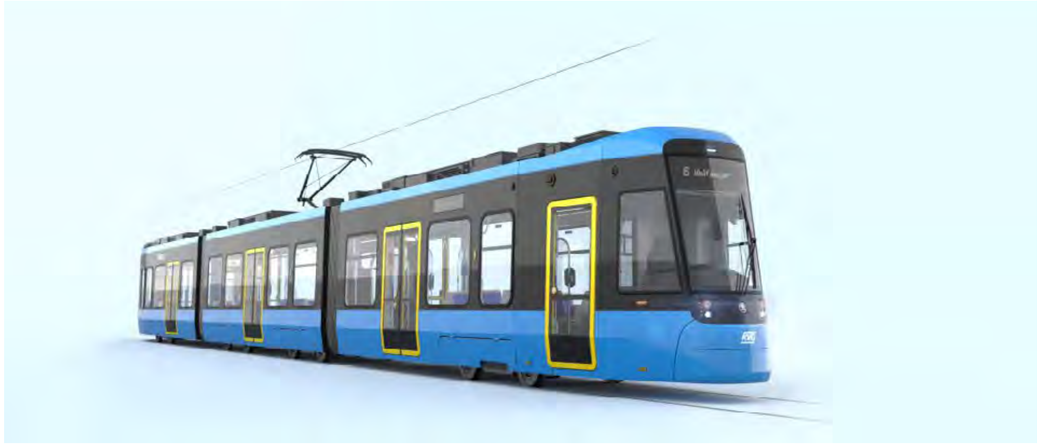
Eisenbahnfreunde Zollernbahn e.V. operated a special from Rottweil to Überlingen-Therme on July 23rd, using former DR Pacific No. 01.519. During it's 5 hour layover at Überlingen the train operated a shuttle to Radolfzell and is seen waiting to depart with this train No. DPE68876 13:20 Überlingen-Therme - Radolfzell. *Andy Pratt*





Germany

ŠKODA GROUP TO DELIVER UP TO 40 NEW TRAMS FOR THE GERMAN CITY OF KASSEL



Passengers in another German city will be using Škoda trams in the future. The supervisory board of the local transport company Kasseler Verkehrs-Gesellschaft (KVG) has signed an order for 22 new 30-metre two-way trams from the workshops of the Škoda Group with an option to purchase another 18 trams. The value of the contract (not including the option to purchase more trams) is EUR 88 million and is the largest investment in vehicles in the history of KVG. The first trams are scheduled for delivery in 2026.

Public transport in Kassel is built on trams. They carry 48 million passengers a year, i.e. 80 percent of the total number of passengers. The rest of the transport is provided by buses and trains.

Production of the new two-way trams for Kassel is scheduled to start at the end of 2024. Just like the existing trams, the new vehicles will have a length of 30 m and an Albert coupling which allows for attachment of an additional motor car or trailer. Each of the trams will have four doors on each side for passengers to board and alight and, as a matter of course, a low-floor design to facilitate boarding and alighting for people with reduced mobility.

The anti-collision system will offer a higher level of safety for passengers

The trams for Kassel will be among the first from the Škoda Group to be equipped with Škoda's advanced anti-collision system which increases safety and protects passengers and pedestrians. Inclusion of this technology demonstrates the Škoda Group's clear focus on innovation and its commitment to prioritising passenger safety. Škoda presented this new safety feature for the first time at the InnoTrans 2022 trade fair.

The Škoda Group's new anti-collision system creates a virtual tunnel in front of the tram in which it detects all static and dynamic obstacles and, if it detects one, alerts the driver and activates the emergency brake. The entire surrounding area is monitored by a suite of sensors which includes LiDAR, an IMU unit and a camera. The LiDAR is responsible for 3D mapping of the surrounding area within a range of 100-150m in both horizontal and vertical fields of view. The IMU unit feeds information about the vehicle's tilt into the system and helps the sensor output from the anti-collision system to reflect the profile of the track. The camera provides high-resolution 2D images which capture more detail.

Deployment in 2027

Delivery of the first tram to Kassel is scheduled for 2026. This should be followed by technical tests and trials on the streets of the city. After approval by the Technical Supervisory Authority (TAB) of Darmstadt Regional Council, the first new trams can be put into regular operation from 2027. They will run within the urban network operated by KVG which, in addition to Kassel itself, also includes Vellmar, Baunatal, Lossetal and other neighbouring areas.
Trams from the Škoda Group are, for example, currently operating in the German cities of Chemnitz and Schöneich and Škoda is currently producing new vehicles for seven other cities.

Talgo's ICE L for Deutsche Bahn begins testing in Germany

The first ICE L long-distance and high-speed train, manufactured by Talgo for Deutsche Bahn, has arrived this week in Germany, where certification tests will begin imminently with a view to its entry into service between Berlin and Amsterdam (Netherlands) at the end of 2024. This is the first of 79 units that Talgo will manufacture for the German operator, as part of a framework contract for 100 units and within the strict schedule agreed with the customer. Manufactured entirely in Spain, this unit of 17 passenger carriages has been transported by rail track on a journey of some 2,000 kilometres in length and several days in duration, crossing France and a large part of Germany. The initial destination of this composition is the Zughotel (literally, "hotel for trains") in Braunschweig, Lower Saxony.

Static tests for the ICE L's homologation will begin there. As soon as this phase is completed, the trainset will head to Poland, specifically to the Żmigród test track, 50 km from Wroclaw. At this facility, dynamic tests will be carried out at speeds of up to 160 km/h. In a later phase, the train will undergo on-track tests in Germany under conditions very similar to real operation, up to 230 km/h. On homologation runs it even has to reach a top speed of 253 km/h.

Climatic tests in Vienna

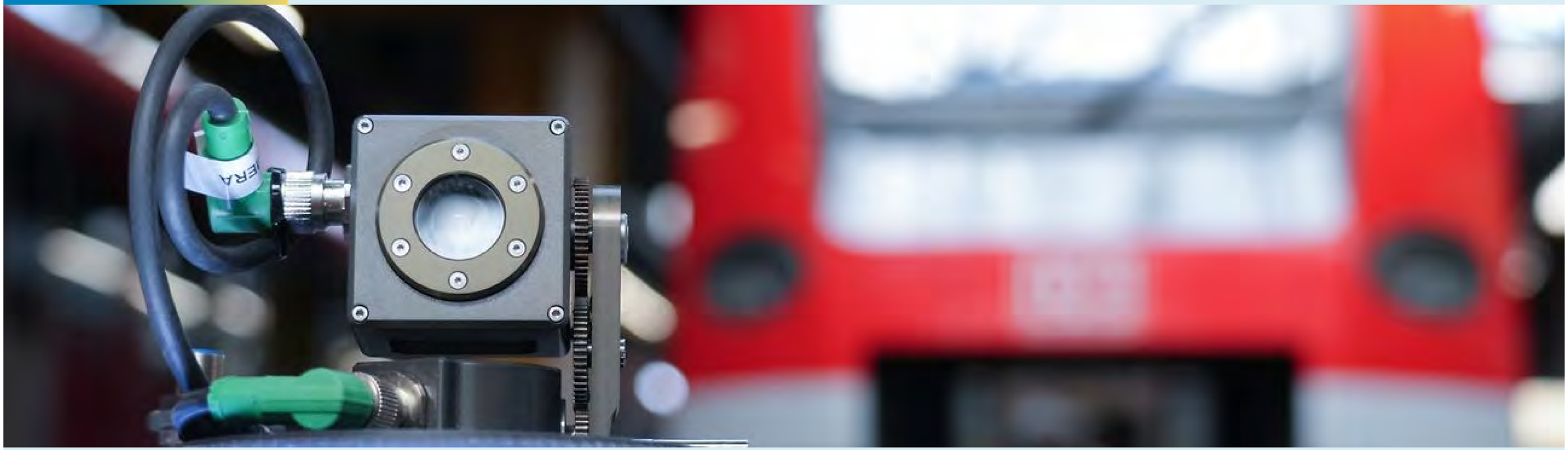
In parallel, a second ICE L set has already arrived in Austria, in the aerodynamic and climatic test tunnel that Rail Tec Arsenal (RTA) has in Vienna. These facilities, unique in the world, will allow Talgo to subject the train to all kinds of atmospheric conditions, from extreme solar radiation to rain, snow and ice, and all of this combined with wind simulations at the same speed that the train will experience on the track. The trains, which belong to the Talgo 230 technology platform, will be operated by Deutsche Bahn throughout Germany and on international routes under the ICE L trademark, which designates long-distance and high-speed services that will also have 100% low-floor at platform level in all their carriages (Intercity-Express Low-Floor) and will therefore be fully accessible, a unique feature of the Spanish company within the global railway industry and which is also a new feature in the German operator's extensive network of services. The first ICE L passenger service will connect Berlin to Amsterdam starting at the end of 2024, connecting with Denmark and Austria later.
In addition to easy access to the cars, the trains have other features that improve passenger comfort: power sockets and tablet holders in all seats, both in second and first class; separate baby compartment; eight bicycle racks; information monitors in all doors; seat reservation displays; intelligent lighting; touchless technology in the toilets to flush the toilet, use the soap and disinfectant dispensers and open or close the waste bin without pressing a button; and powerful air conditioning systems to withstand outside temperatures of more than 40ºC. Each train features a total of 562 seats, 85 of them in first class and 477 in second class, including a bistro/cafeteria car and another for people with reduced mobility (PRM), and incorporates a new interior design scheme with newly developed seats characterised by combining functionality and durability with the luminosity and warmth of the materials. The new carriages also incorporate a new type of window designed to improve telephone and mobile data coverage on board the train.

The largest order in Talgo's history

Deutsche Bahn unveiled its ambitious plan to renew and enlarge its ICE high-speed train fleet in mid-May, resulting in the largest train supply contract in Talgo's more than 80-year history. The German operator ordered 56 new units for around €1.4 billion, an amount that was in addition to the 23 units initially ordered under the 100-trains framework contract signed in 2019.
In total, Talgo will manufacture ICE L 79 units that will gradually come into operation from autumn 2024: state-of-the-art trains, with more space and a high level of comfort, consisting of a multisystem locomotive that provides traction to the 17 passenger carriages, of which the last one incorporates a driver's cab to make operations more flexible, in a configuration unknown in Spain, but quite common in Germany.
Image: © DB AG/Dirk Wittmann

Germany

Digital maintenance gets trains back on track faster



Technology that saves time: Deutsche Bahn (DB) is increasing the use of digital tools in its plants. With AI-supported camera gates, mobile robots and digital wheelset measuring systems, the group ensures more efficient maintenance and ensures that the trains are available to passengers again more quickly.

Already today, up to 20 hours of time-consuming routine work per day can be saved per S-Bahn plant. This relieves the employees and thus creates more capacity for the targeted maintenance of the growing vehicle fleets. Digitization, automation, the use of artificial intelligence and a group-wide hiring offensive are also Deutsche Bahn's means of countering the impending shortage of skilled workers.

The Munich-Steinhausen S-Bahn plant is a pilot plant for digital maintenance at DB Regio. There today DB Technology and Digital Director Dr. Daniela Gerd tom Markotten and Evelyn Palla, DB Board Member for Regional Transport, three of the digital tools that ensure maintenance capacities even in times when skilled workers are becoming scarcer. Munich's S-Bahn fleet alone will grow by 16 to 289 vehicles this year, and they will also be serviced at the DB regional plant in Steinhausen.

dr Daniela Gerd tom Markotten, DB Board Member for Digitization and Technology: "Punctuality starts at the factory. The digitization of maintenance is therefore central to a successful turnaround in traffic. When activities can be carried out more quickly and in a more targeted manner, passengers also benefit. After all, shorter maintenance times lead to higher vehicle availability."

Evelyn Palla, DB Board Member for Regional Transport: "The workshop in Munich is the first where we are using the new digital tools. If our other metropolitan S-Bahn trains also work with it, we will be able to service around 400 S-Bahn trains of a single design faster in the future - that's more trains than there are ICEs. Two million passengers will benefit from this every day in the future."

Automatic all-round analysis with three digital tools

The digital tools presented today work in three areas: an AI examines images taken through a camera gate during train journeys for damage and irregularities on the train, the laser system measures the profile values of the wheelsets and the robot inspects the trains from below. This results in a detailed overall picture of the vehicle condition and the need for maintenance. Thanks to the evaluations, the employees in the plant will in future know exactly where they need to lend a hand and can focus on the necessary work. Time-consuming routine tasks, such as inspecting the train roofs, are no longer necessary. The visual inspection of the entire vehicle with the human eye often takes several hours per train, with the camera gate it can be done in just a few minutes.

DB introduces digital tools in five additional plants for regional transport

New tools for the future of maintenance have been tested and implemented at the Munich-Steinhausen plant since 2019. In the next few years, DB Regio will use the digital tools at five more of its locations, initially including the S-Bahn plants in Hamburg, Frankfurt and Stuttgart. In this way, digitization is targeted at locations with the largest uniform vehicle fleets and can thus quickly have the greatest effect. In the three S-Bahn plants in Munich, Stuttgart and Frankfurt alone, employees service around 400 vehicles of one type.

The location in Steinhausen will remain a digital pioneer, because here and in the west of Munich the most modern regional plants in Germany will soon be built for the S-Bahn. Experiences with the digital tools flow into the planning right from the start. The rapidly growing fleet of the S-Bahn will continue to be reliable for passengers in the future and enable the traffic turnaround in the German commuter capital.

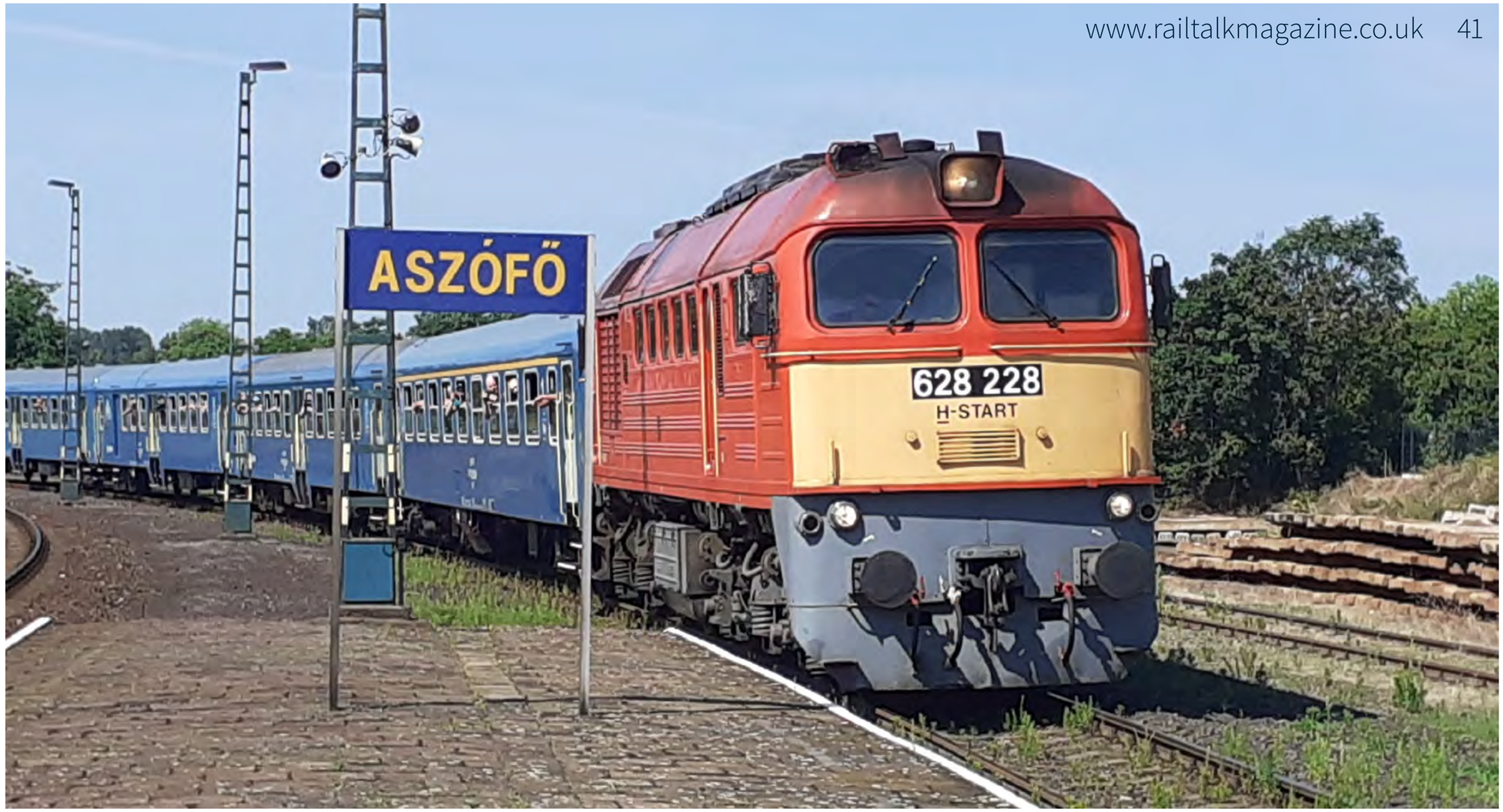
Throughout Germany, Deutsche Bahn is digitizing its maintenance on a large scale. The group currently uses a total of 14 camera gates at nine locations. An additional nine camera gates will be put into operation by the end of 2025. In addition, Deutsche Bahn currently uses ten automatic wheelset measuring systems. A total of 14 wheelset measuring systems will be in use by mid-2024.

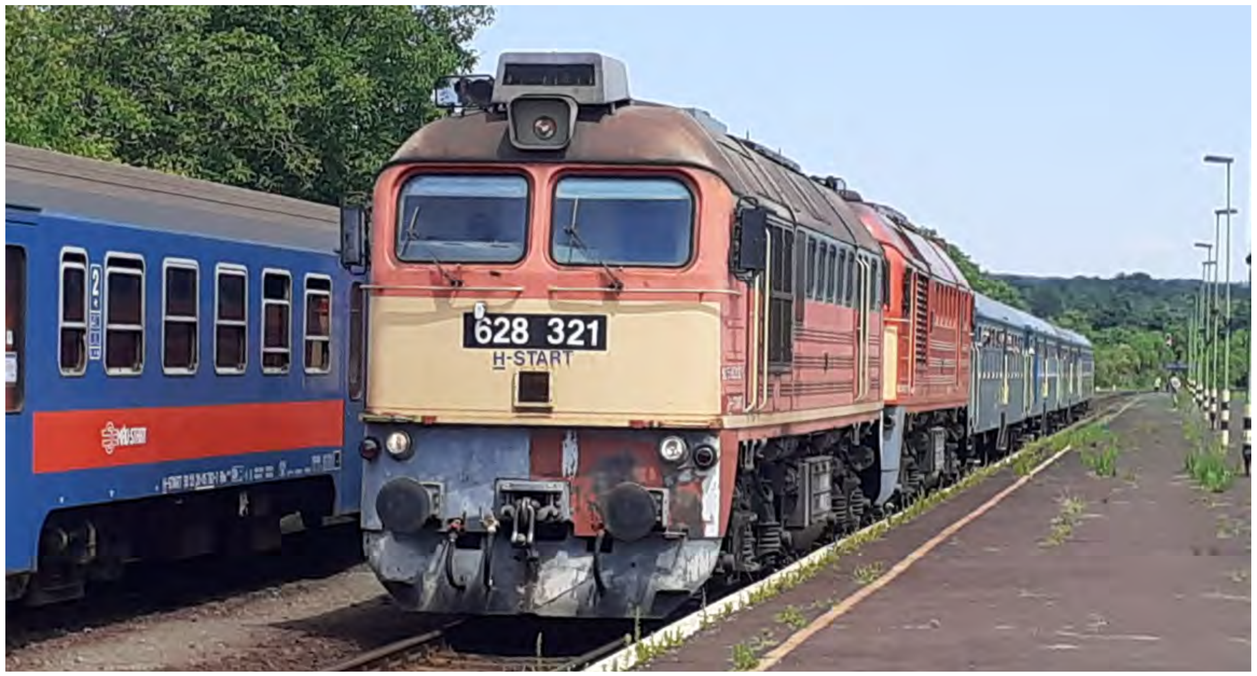
Hungary

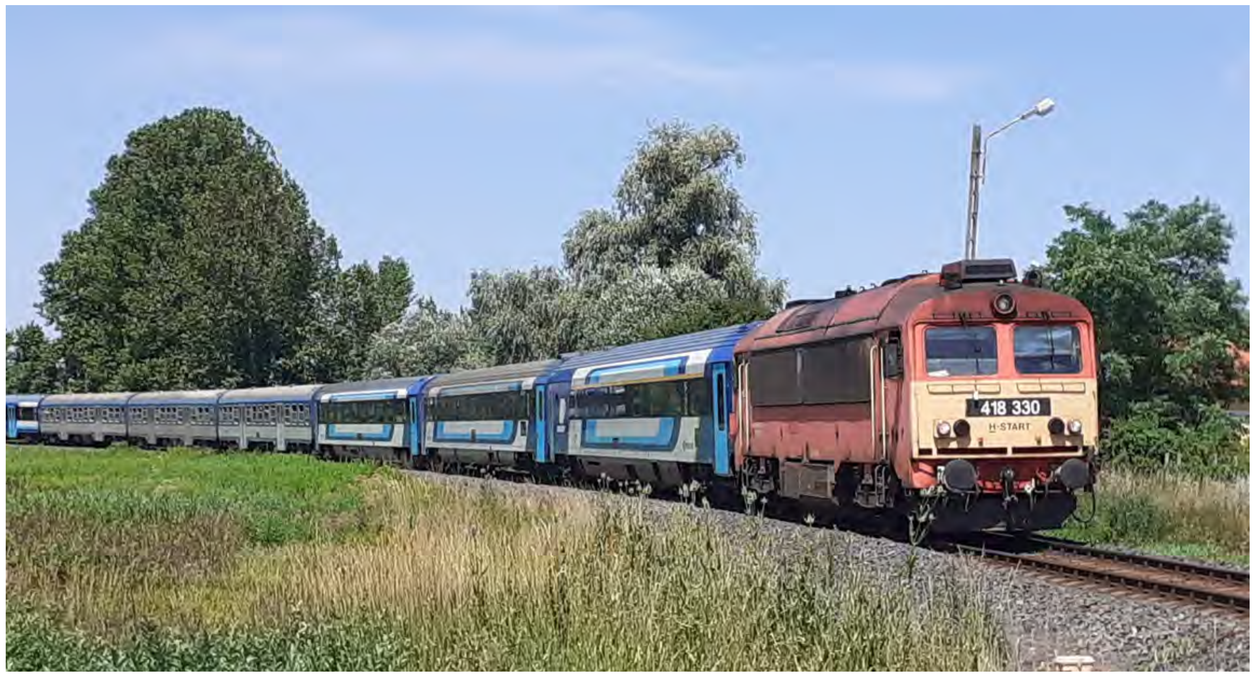
Shortly before being declared a failure and working no further trains over the weekend, M62 No. 628.228 arrives at Aszófö with train No. 19787, the 08:47 Tapolca to Balatonfüred on Saturday July 8th. *Andy Pratt*

M41 No. 418.330 runs into Nemesgulács-Kisapáti at the head of train No. 19795 13:38 Tapolca - Budapest Deli on July 8th. *Andy Pratt*

Class 628.321 with failed M62 No. 628.228 arrive at Zánka-Köveskal on July 8th with train No. 19774, the 11:55 Balatonfüred to Tapolca. *Andy Pratt*





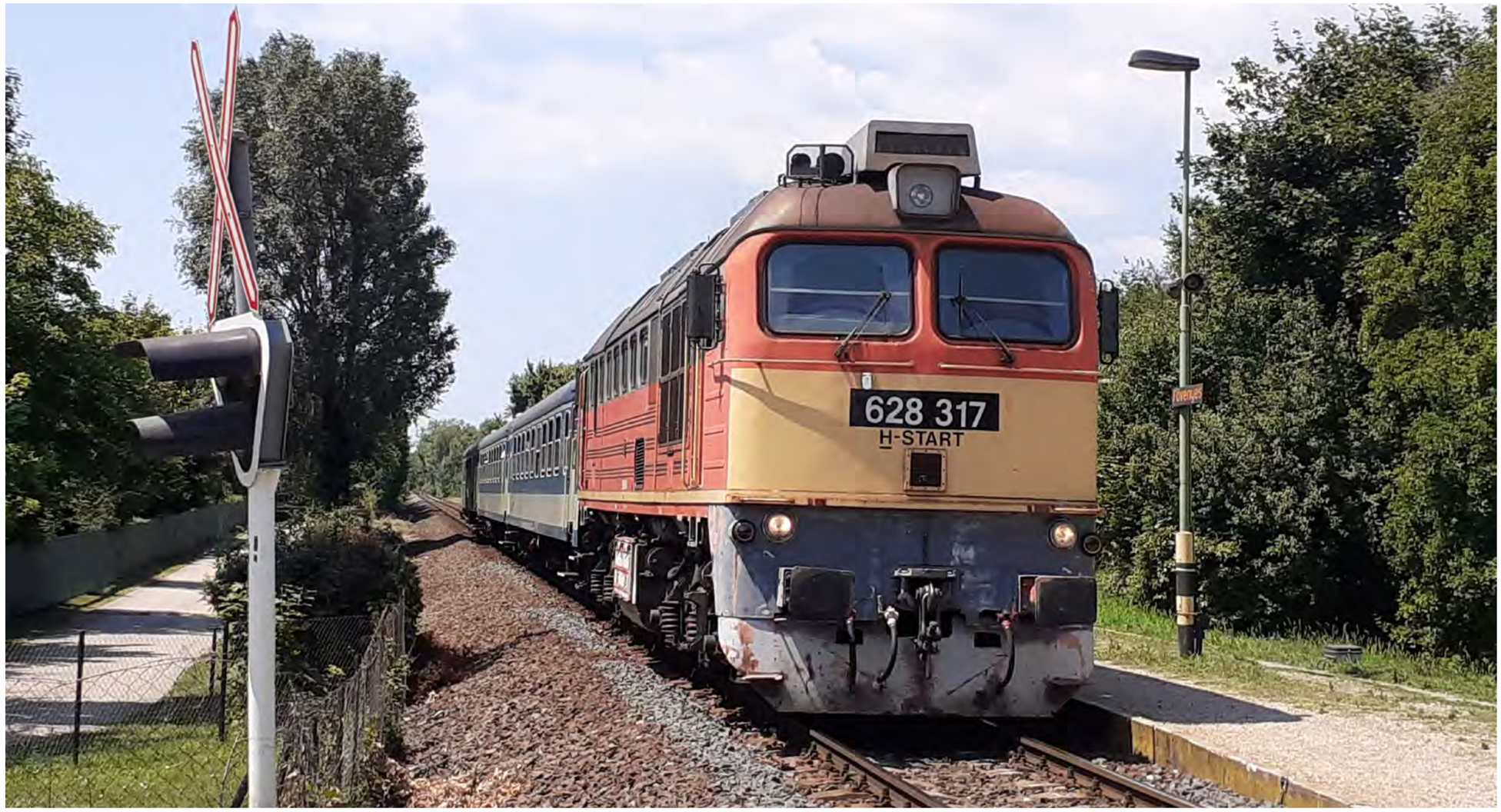


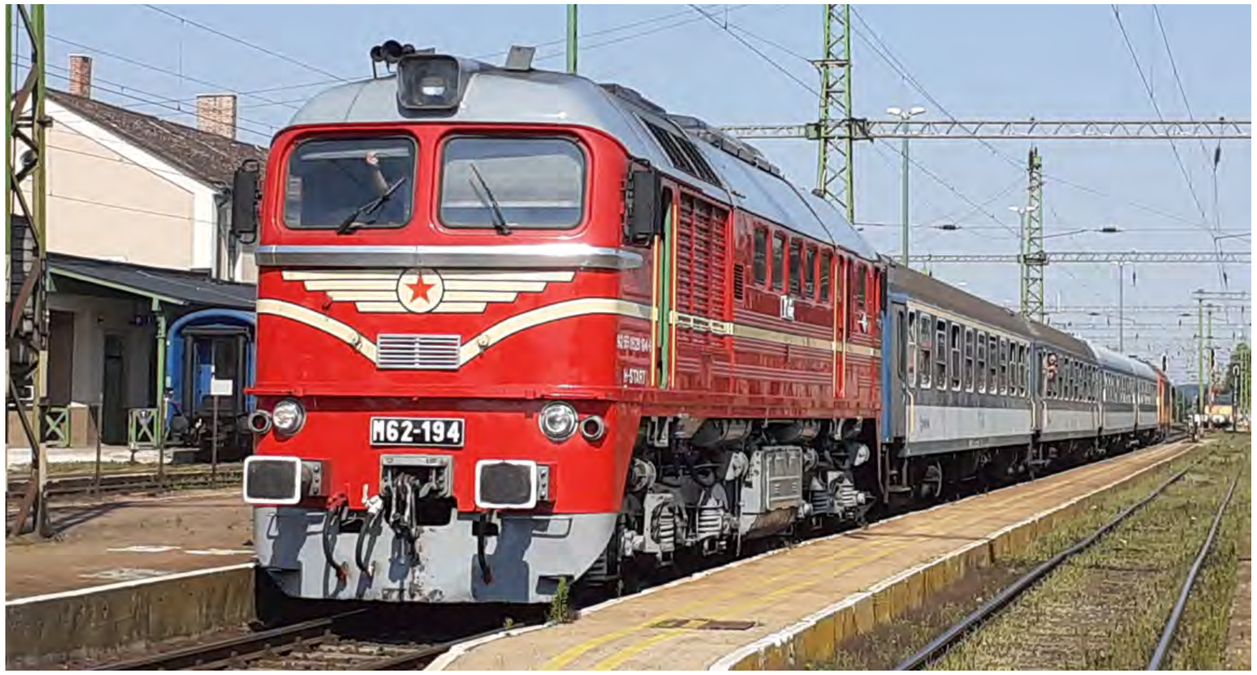
Hungary

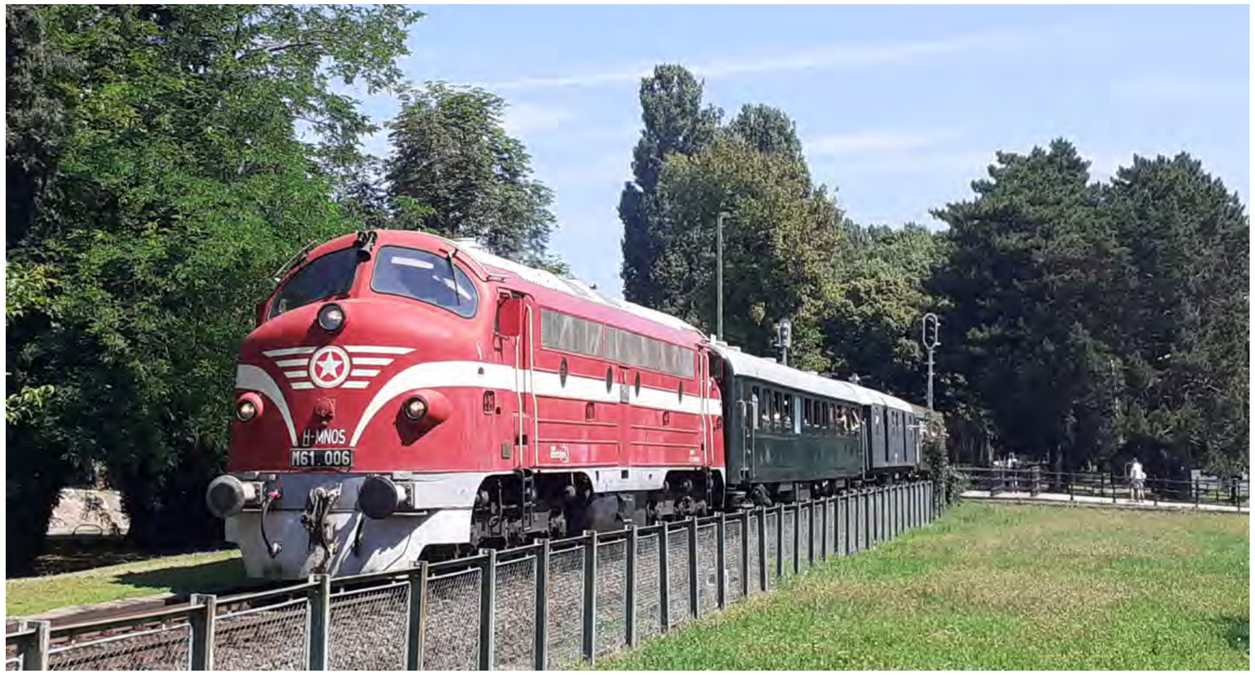
Class M62 No. 628.317 departs Fövenyes on July 9th with train No. 19775 the 10:47 Tapolca to Balatonfüred. *Andy Pratt*

M61.006 departs Badacsony with train No. 19782 09:55 Balatonfüred to Tapolca on July 8th as part of the MAV Balaton Retro Weekend. *Andy Pratt*

M62.194 clears it's throat while departing Abrahamegy with a dead M41 on the rear working train No. 19792, the 09:05 Budapest Deli to Tapolca on July 8th as part of the MAV Balaton Retro Weekend. *Andy Pratt*

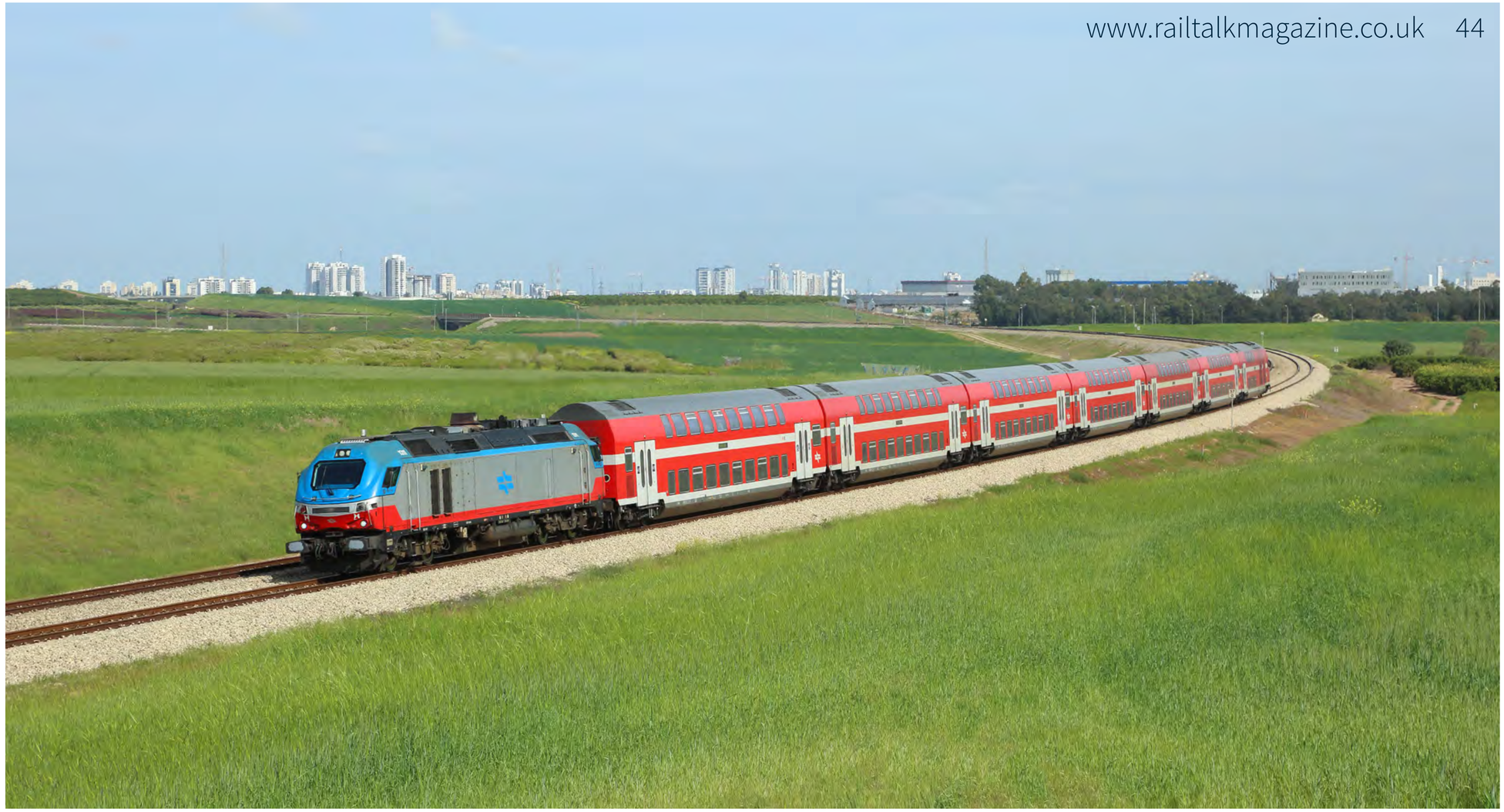






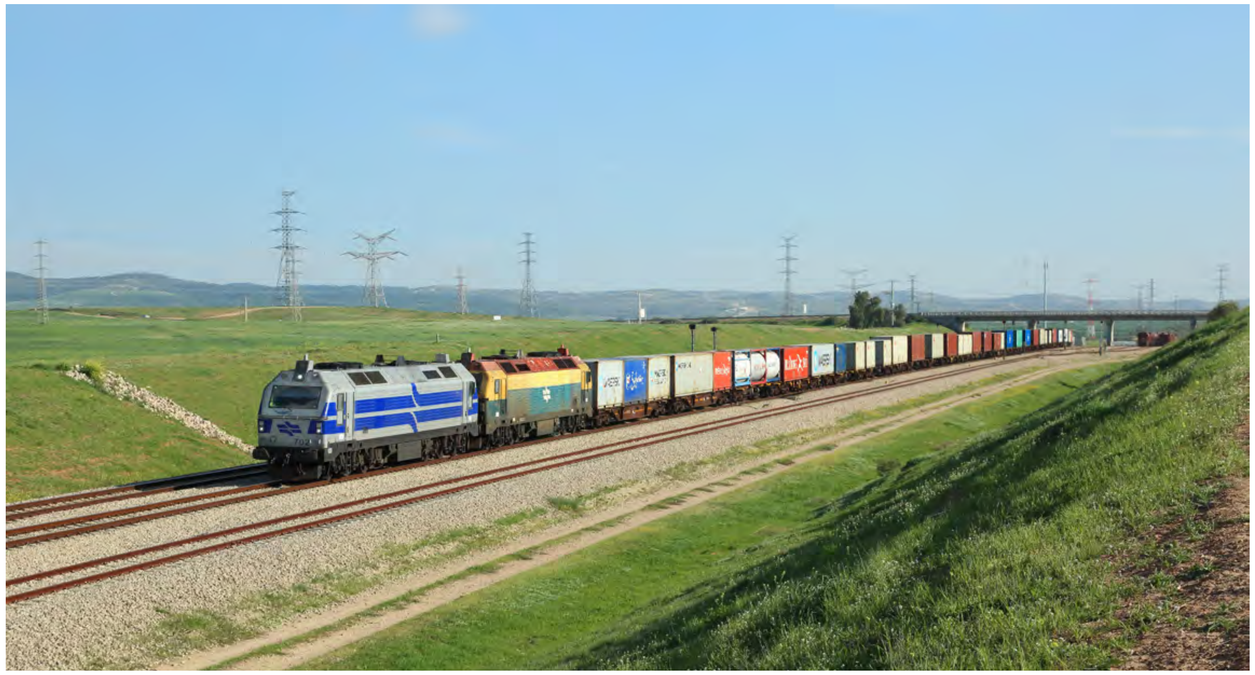
M62 No. 628.329 pilots failed 628.265 at Révfülöp with train No. 19774 11:55 Balatonfüred to Tapolca running some 41 minutes late at this point on July 9th during MAVs Balaton Retro Weekend.
Andy Pratt

Israel



No. 1311 passes Kiryat Gat whilst working train No. 405 06:59 Karmi'el - Be'er Shever Center. *Laurence Sly*

Nos. 702 and 705 pass Lehavim whilst hauling a northbound freight train. *Laurence Sly*



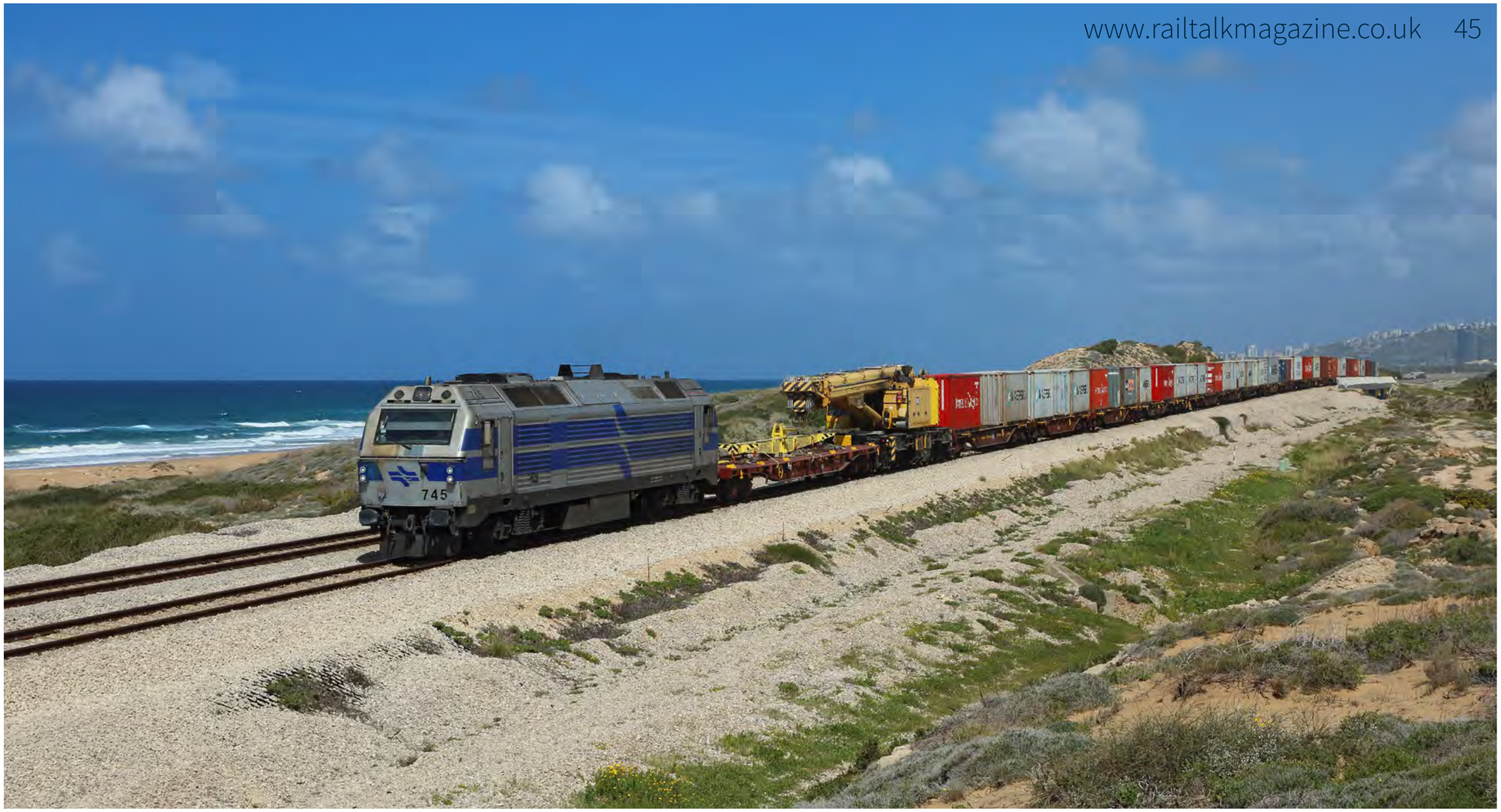
Nos. 610 and 615 pass Kiryat Gat whilst hauling a refuse train to Dimona. *Laurence Sly*

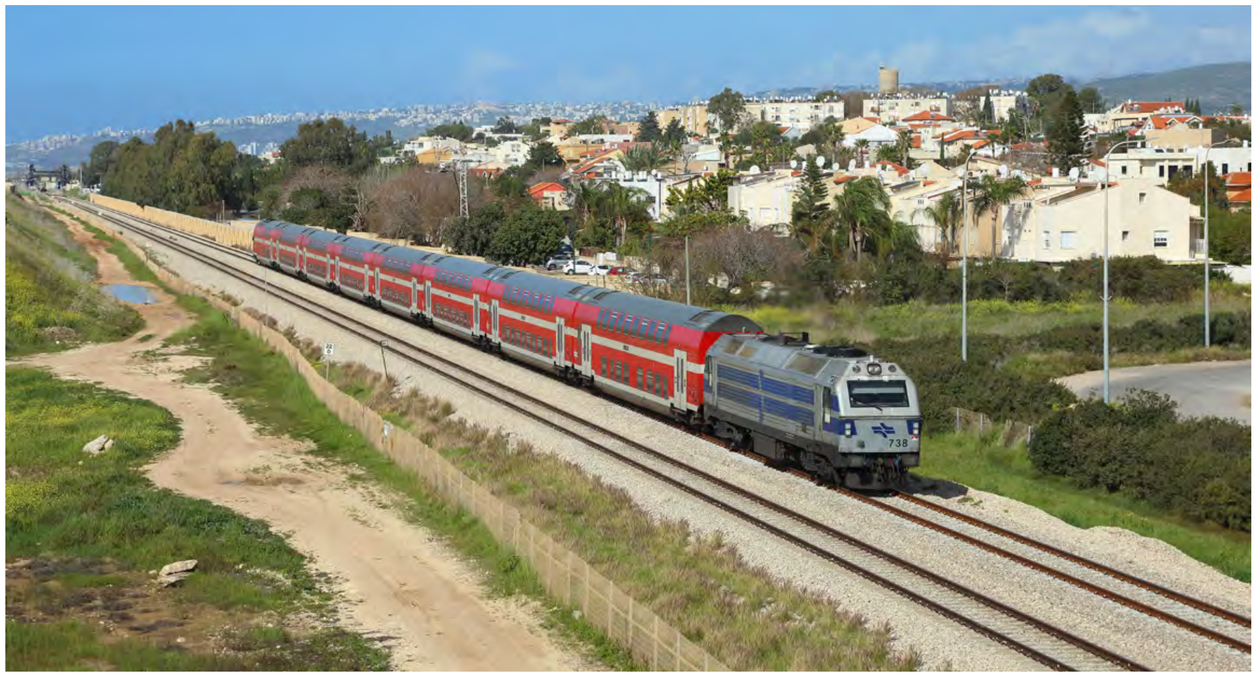
Israel

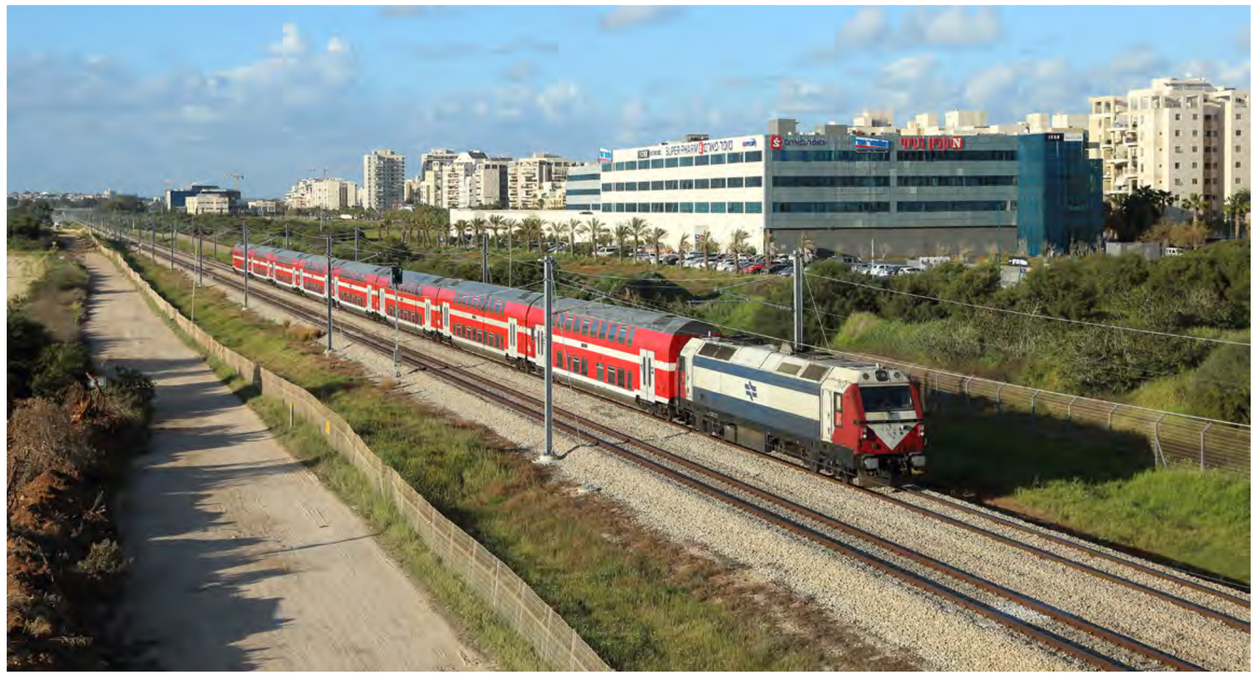
No. 745 passes Atlit Beach whilst hauling a southbound freight train. *Laurence Sly*

No. 768 passes Netanya whilst hauling train No. 171 15:15 Nahariya - Modi'in Center. *Laurence Sly*

No. 738 departs Atlit whilst working train No. 167 13:15 Nahariya - Modi'in Center. *Laurence Sly*







Italy

FS Italiane: TX Logistik acquires Exploris, a German group operating in railway freight transportation

TX Logistik AG, a company belonging to the Logistics Business Units of FS Italiane Group, has signed the purchase agreement for the acquisition of Exploris Deutschland Holding GmbH Hamburg ("Exploris" or the "Exploris Group"), a European rail freight transportation company, thus becoming the second largest freight operator in Germany by tonne-kilometre.

Thanks to this transaction, FS Logistics Business Unit will be in the position to operate in rail freight transportation in eight European Countries through the companies of Exploris Deutschland Holding GmbH Hamburg, including Via Cargo, HSL Logistik and Delta Rail.

The closing of the deal is subject to the occurrence of some standard conditions related to this type of transaction, including the authorization of the relevant Antitrust Authorities.

International rail connections of Exploris are strongly oriented to east-west transportation axis, therefore completing the TX Logistik network, already widely present along the north-south European transportstion axis.

This acquisition also strengthens FS Group presence in the European market, enhancing traffic to and from Italy, for the benefit of Italian industry import and export services.

"We are very proud of this transaction - states Sabrina De Filippis, CEO of Mercitalia Logistics, the leading company of the Group's Logistics Business Unit, holding a 100% stake of TX – wich allows us expanding our European presence by offering a more in-depth and efficient services to Italian companies, as well as the market in general. Furthermore, we will be able to achieve synergies and scale economies, both in commercial and operational terms, for the benefits of the whole FS Group".

Stadler is to deliver the first narrow-gauge trains with hydrogen propulsion for Italy

Italian railway operators Azienda Regionale Sarda Trasporti (ARST) and Ferrovie della Calabria (FdC) have awarded Stadler two framework agreements for the supply and maintenance of 10 hydrogen trains for ARST in Sardinia and 15 similar vehicles for FdC in Calabria. This will make Stadler the first train manufacturer in the world to supply narrow-gauge trains with hydrogen propulsion. In addition, after delivering the FLIRT H2 for American passenger transport, Stadler is now also supplying hydrogen trains to Europe for the first time. As initial call-off orders from the framework agreements, ARST and FdC signed two contracts with Stadler in Rome today for the delivery of the first 12 hydrogen trains, 6 for each of the Italian companies.

Following two public tenders launched in June, Italian railway operators ARST in Sardinia and FdC in Calabria have each awarded Stadler a framework agreement for the design, production, delivery and maintenance of 10 and 15 trains respectively. The vehicles will be equipped with ecological fuel-cell and hydrogen propulsion and be dedicated to regional and suburban services for the narrow-gauge (950-mm) network in the two Italian regions. Both projects are being financed with EU funds from the National Recovery and Resilience Plan (PNRR). Initial call-off orders from these framework agreements have been placed for the supply of 6 hydrogen trains for ARST and a further 6 vehicles for FdC. The vehicles will be developed and built at Stadler 's headquarters in Bussnang (Switzerland).

The two framework agreements and initial call-off orders will enable Stadler to further strengthen its leading role in the decarbonisation of rail transport. Stadler is the world's first railway manufacturer to develop, build and deliver narrow-gauge multiple units with hydrogen propulsion. For Stadler, this is also the first order for hydrogen trains in Europe. It follows Stadler's delivery of the FLIRT H2, the world's first hydrogen train, for American passenger transport. The two orders from ARST and FdC are also the first contracts for narrow-gauge multiple units with hydrogen propulsion for use in Italy.

Ansgar Brockmeyer, Executive Vice President Marketing & Sales of Stadler, commented: "Stadler enjoys a long and innovative partnership with ARST and FdC. We are proud to be working together to drive forward the decarbonisation of rail transport in Italy. The new narrow-gauge trains with hydrogen propulsion are a world premiere and will pioneer sustainable rail transport on narrow-gauge lines worldwide. We would like to thank ARST and FdC for their trust in us and look forward to expanding our partnership even further in the future."

More about the trains

The vehicles consist of two passenger cars, whose lightweight aluminium construction helps to increase the train's energy efficiency, and a power pack to house the fuel cells and hydrogen tanks, as well as other technical equipment.

With an overall length of around 50 metres, the new trains have 89 seats per vehicle for a total of 155 passengers transported, and are fully accessible for people with reduced mobility. Furthermore, the new vehicles offer specific areas for wheelchairs, pushchairs and bicycles positioned near the access and exit doors, as well as a PRM toilet compliant with TSI standards.

Stadler: a reliable partner for Italian rail transport

The new contracts confirm Stadler's leadership in Italy for the design, supply, commissioning and homologation of narrow-gauge railway vehicles. The company has now received orders for more than 130 trains that have been or are being supplied to operators such as Ferrovie Appulo Lucane in the Apulia and Basilicata Regions, Ente Autonomo Volturno in the Campania Region and Ferrovia Vigezzina-Domodossola in the Piedmont Region.

Stadler is strengthening its position in Italy in all segments of rail transport. It has recently received new orders for the supply of bimodal locomotives for Trenitalia, a new series of trams for ATM in Milan and an additional fleet of metro narrow-gauge vehicles for EAV.

Italy

FS Group, the new company “FS Treni Turistici Italiani” is established

This new company will propose a range of rail services designed and calibrated for quality, with sustainable tourism that seeks to rediscover the riches of the Italian territory. At the helm of the company are Alessandro Vannini Scatoli as Chair and Luigi Cantamessa as Chief Executive Officer. The Ferrovie dello Stato Group presents “FS Treni Turistici Italiani”. This new company was founded with the mission of proposing a range of rail services specifically designed and calibrated for quality, with sustainable tourism that is attentive to rediscovering the riches of the Italian territory. A form of tourism that can experience rail travel as an integral part of the holiday, a quality component of the overall tourist experience.

FS Treni Turistici Italiani was presented by Ferrovie dello Stato CEO Luigi Ferraris, at the Museo Nazionale Ferroviario di Pietrarsa in Naples, in the presence of authorities and stakeholders who arrived aboard a train comprised of prototype wagons that will form an essential part of the fleet. Illustrating the company’s mission and characteristics was FS Treni Turistici Italiani CEO Luigi Cantamessa, part of the FS Group since 2002 and General Manager of the Fondazione FS Italiane since 2013.

Amongst those at the presentation were Monsignor Liberio Andreatta, President of the FS Fondazione, Trenitalia President Stefano Cuzzilla, Trenitalia CEO Luigi Corradi, Infrastructure and Transport Deputy Minister Edoardo Rixi, along with Karima Delli, President of the Committee on Transport and Tourism of the European Parliament. The new company shall be part of the Passenger Business Unit of the FS Italiane Group, with Trenitalia at the helm. The Board of Directors, chaired by Alessandro Vannini Scatoli, consists of Liberio Andreatta, Luigi Cantamessa, Maria Luisa Grilletta and Cinzia Marzoli.

Three service areas have been introduced by FS Treni Turistici Italiani:

- Luxury, with the traction of prestigious high-end trains, firstly the Orient Express La Dolce Vita, a luxury Italian train that will début in 2024, or the legendary Venice Simplon Orient Express by Belmond, already operating on European routes.
- Express and Historical Trains, with the introduction of new connections, including night trains, on medium- to long-haul routes between the main Italian cities and places of significant tourist attraction (such as Night or Day trains from Rome/Milan to Calalzo/Cortina, San Candido, Milan-Genoa with branches to Ventimiglia/ Livorno; Rome-Metaponto-Catanzaro via Jonica and Reggio Calabria). The connections offered by the Express trains shall consist of 1980s and 1990s wagons that will undergo complete upgrading and modernisation in the Rimini railway workshops, solely for tourist use. These workshops will become a sort of refitting atelier for this segment, consisting of wagons offering differentiated service environments (restaurant cars with express cooking on board, sleeping wagons, meeting wagons, luggage carriages for transporting bicycles, skis and vehicles for sustainable mobility). FS Treni Turistici Italiani will also manage the trips on historic trains, owned by the Fondazione FS, in various regions and areas of historical and scenic interest throughout the peninsula, with ad hoc programmes and more regular frequencies, tours that combine train travel with stops for guided visits, walking routes and tastings.
- Omnibus-Regional, services that will guarantee the circulation of regional trains on weekends, at favourable fares and accessible to all, along lines that cross territories rich in history, replete with villages and areas of scenic and naturalistic interest, distinguished by unique wine and food traditions. Also here, planning the trip, the stops and the timetable will be designed with tourism and experience in mind.

FS Treni Turistici Italiani will acquire the assets and rolling stock from Trenitalia’s commercial fleet, set to be modernised before forming a fleet of Italian trains specifically designed for the needs of tourists and which will also include wagons for religious tourism. At a later stage, the new company will even acquire real estate assets such as workshops for overhaul, fit-out and maintenance operations. It will have its own staff including train operators, train conductors and maintenance personnel, trained according to the new tourism standards. FS Treni Turistici Italiani shall operate in synergy with the Fondazione FS Italiane, which thus remains the owner of a fleet of almost 400 historic and protected vehicles, and above all with Trenitalia’s Business Divisions: High Speed, Intercity and Regional trains along with the entire Passenger Business Unit of the FS Group. In addition to responding to the growing demand for rail tourism in our country, FS Treni Turistici Italiani will therefore help to promote a new, truly sustainable kind of tourism, to reach both well-known destinations and those off the classic routes. It is estimated that by 2030, travellers around the world will reach 2 billion. Most of these tourists will choose Italy, with a growth in influxes expected especially from Asia. Italy is fifth in the world for the number of tourists with about 56 million international arrivals in 2022 and a forecast of over 75 million trips from abroad in 2023. According to a recent study, carried out by the Bocconi University of Milan on behalf of the Fondazione FS, for every 1 euro a passenger spends on purchasing historical-tourist train services, they will also spend at least 1.50 euro and up to 3.18 euro on goods and services offered by the territory traversed – a multiplier effect that will help generate wealth for the country’s inland areas.

NEW BERGAMO TRAMS WILL BE FROM ŠKODA GROUP AND WILL HAVE ANTI-COLLISION SYSTEM

Škoda Group, a leading global provider of transport solutions, has secured a momentous contract to produce 10 bidirectional trams for the city of Bergamo, including 3 years of full-service. The delivery of the trams is part of the larger contract that contains whole turnkey project of building new tram line. New second tram city line T2 will lead from the city centre to the northwest part of the city. The project is financed from PNRR (National Recovery and Resilience Plan). The trams are specifically designed for the new track set to be constructed in the city and out of its boundaries, marking a significant investment in sustainable urban transportation. The deliveries of the trams are scheduled to take place over the course of the next three years, enabling the city of Bergamo to enhance its public transport infrastructure and meet the growing demands of its residents. A proven platform type of Škoda Group’s tram – ForCity Classic, chosen for this project – represents the epitome of modern tram technology. Bidirectional tram will have five sections and three bogies, two of which are equipped with traction motors.

“This success on the Italian market is a testament to our relentless pursuit of excellence and our unwavering dedication to meeting the evolving needs of our customers. I am very glad, that Bergamo has chosen our well proven platform solution that has even better parameters, than previous models. Opening our office in Florence last October has allowed us to better understand the Italian market and tailor our solutions to its specific requirements. We further emphasize Škoda Group’s commitment to providing sustainable and efficient transport solutions that contribute to the overall well-being of communities,” stated Jan Harder, President Region West at Škoda Group.

With the announcement of this contract, Škoda Group solidifies its position as a key player in the international tram manufacturing industry. The delivery of these advanced trams to Bergamo represents a significant step towards enhancing the city’s public transport system and underscores Škoda Group’s unwavering commitment to innovation, safety, and customer satisfaction. As the group continues to expand its global footprint, it remains poised to provide cutting-edge transportation solutions that shape the future of urban mobility.

Increased safety with anti-collision system

Notably, these trams will be the first of Škoda Group’s production to feature an advanced anti-collision system, enhancing safety and protecting passengers and pedestrians alike. The inclusion of this groundbreaking technology is a testament to Škoda Group’s unwavering commitment to innovation and its dedication to prioritizing passenger safety.

Technical details

Škoda Group’s tram specifically adapted for Bergamo sets a new standard in urban transportation with its exceptional features. A proven platform fully adapted for the Italian conditions will be 100% low-floor and is designed for persons with reduced mobility (PRM). Boarding of PRM passengers is eased by mean of automatic door extension operated by driver located at the doors closest to PRM places. This device will overlap distance between door edge and edge of the platform.

No. TE33AC-3001 is seen after arrival at Chisinau with train No. 402 from Bucuresti Nord on the morning of June 11th.
Mark Torkington

A pair of TE33ACs Nos. 3011 and 3005 pull into Chisinau with an oil train on June 11th.
Mark Torkington

Netherlands

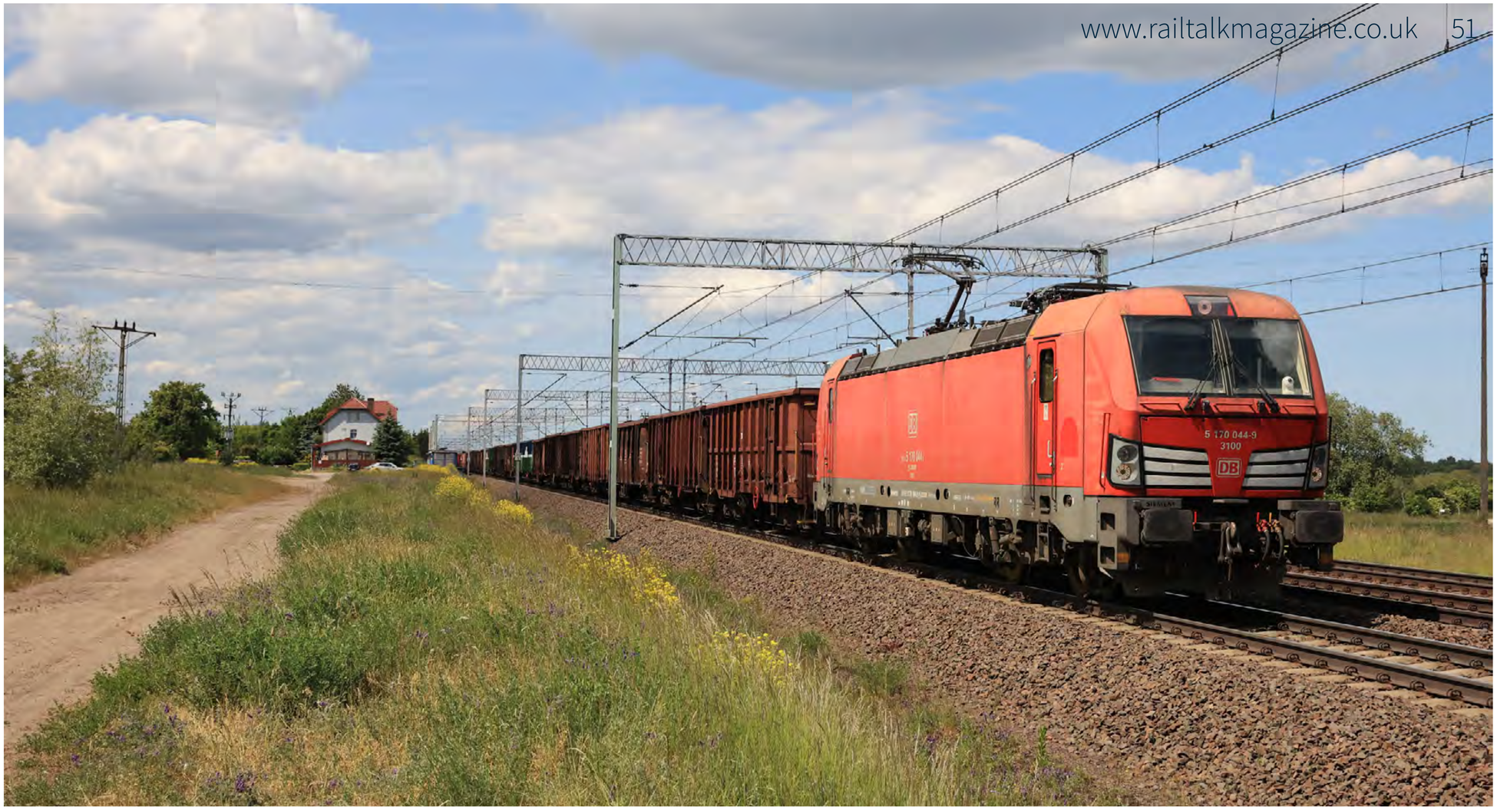
Rail Adventure No. 9903 passes through the nature reserve ‘Naardermeer’ with a Bad Bentheim (Germany) to Amsterdam empty stock movement on July 23rd. *Wilko Wieffering*

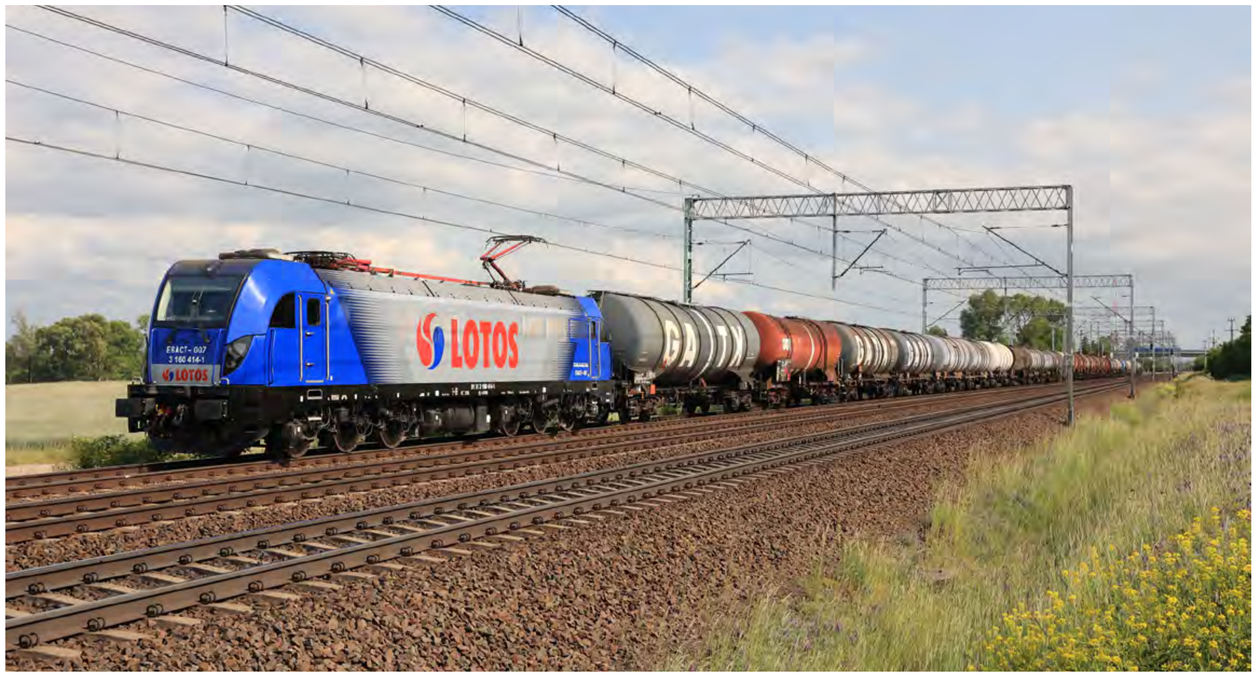
Poland

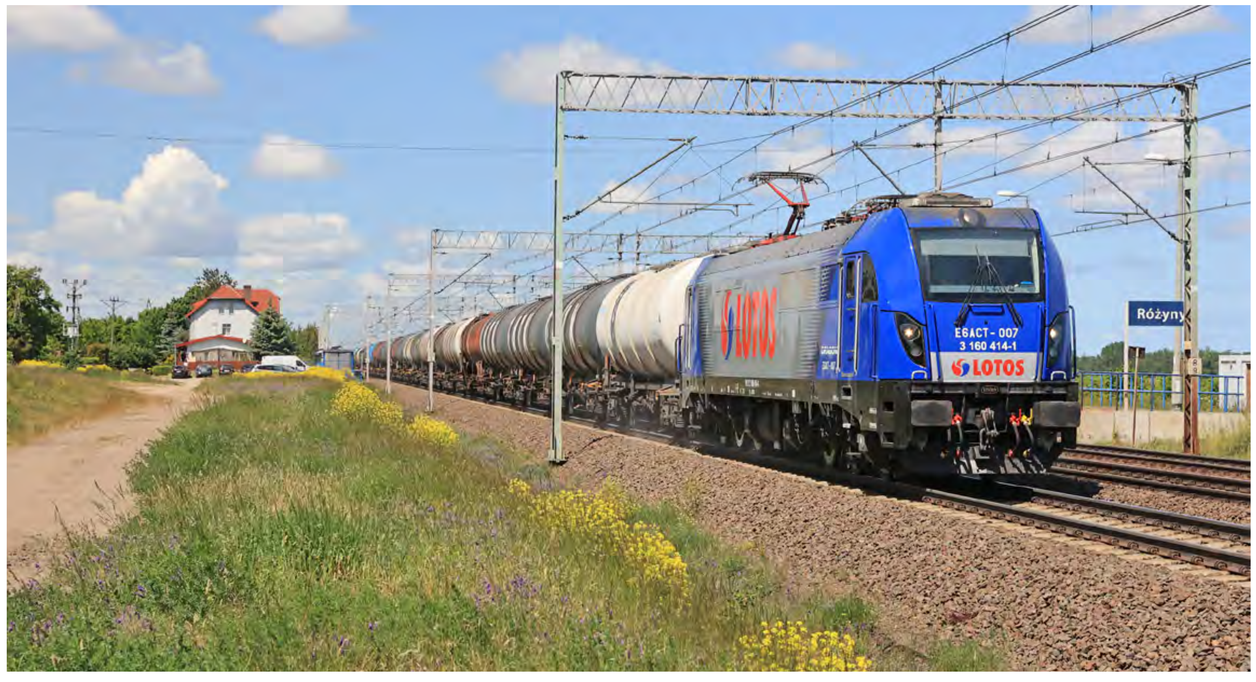
On June 3rd, DB Schenker Poland's 91 51 5 170 044-9 hauls a rake of box wagons southbound through Różyny (PL). *Anton Kendall*

On June 2nd, and working for LOTOS, NEWAG Dragon No. E6ACT-007 hauls a southbound tank train through Różyny (PL), having shortly earlier left the refinery complex in Gdansk. *Anton Kendall*

On June 1st, NEWAG Dragon No. E6ACT-007 hauls a northbound tank train through Różyny (PL). *Anton Kendall*







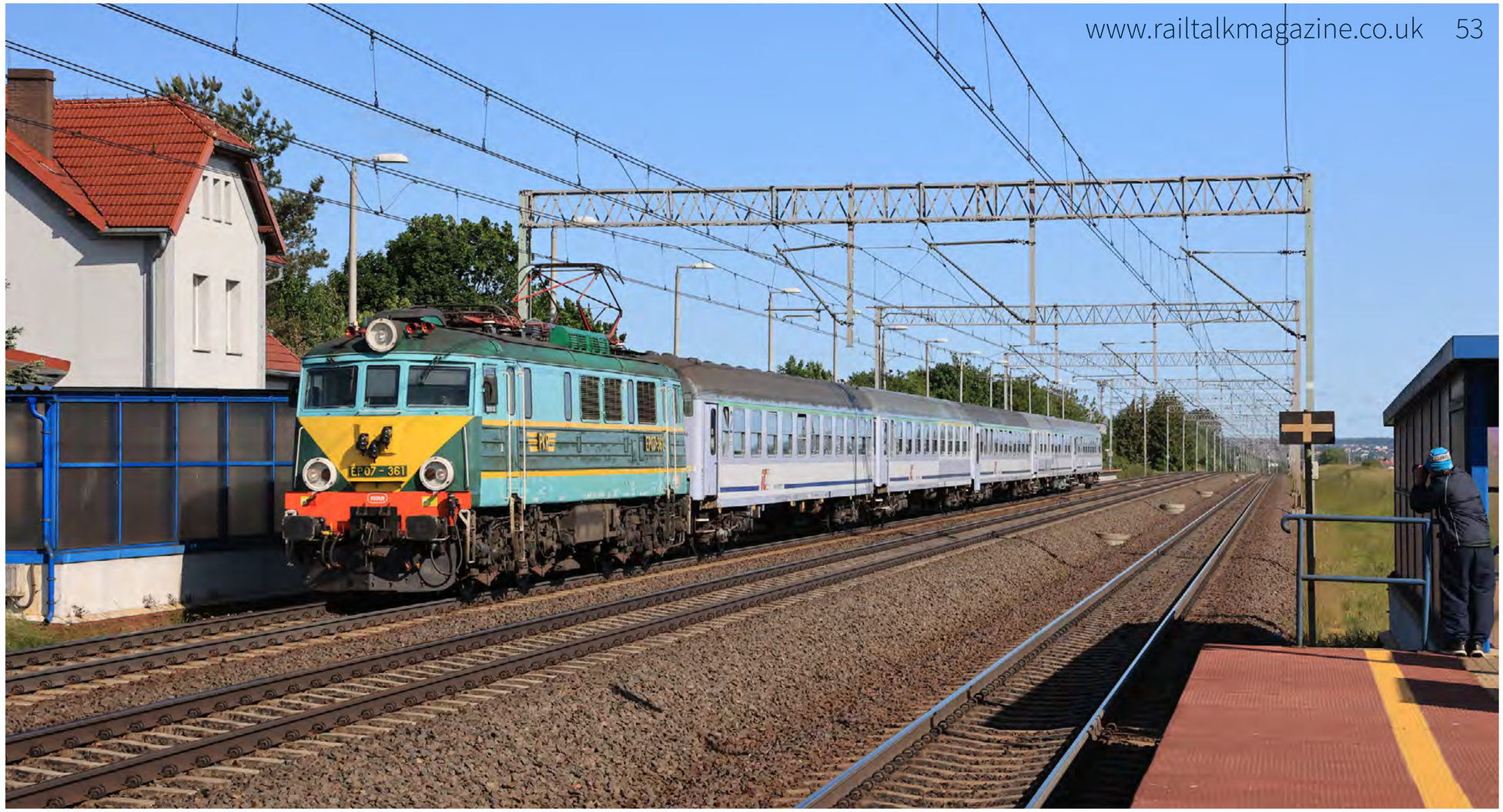
On June 2nd and working for Cargounit, NEWAG Dragon No. E6ACTa-005 hauls the much older EU07-242 on a northbound tank train through Różyny (PL). *Anton Kendall*

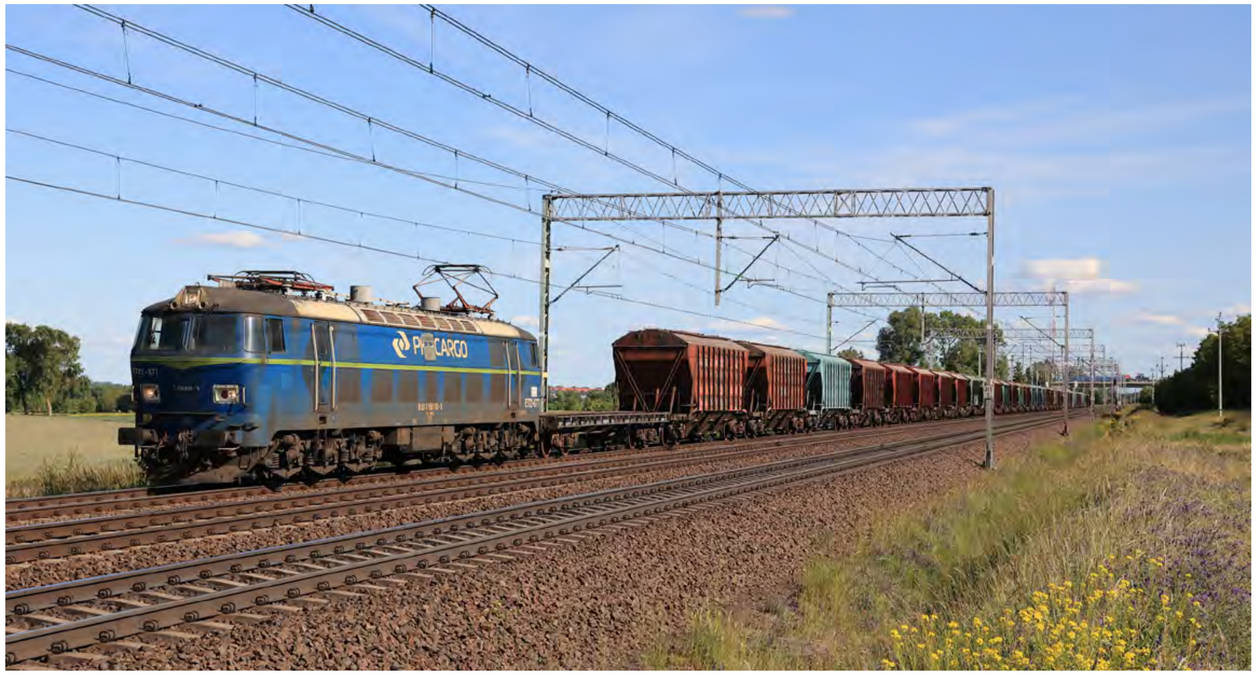
Poland

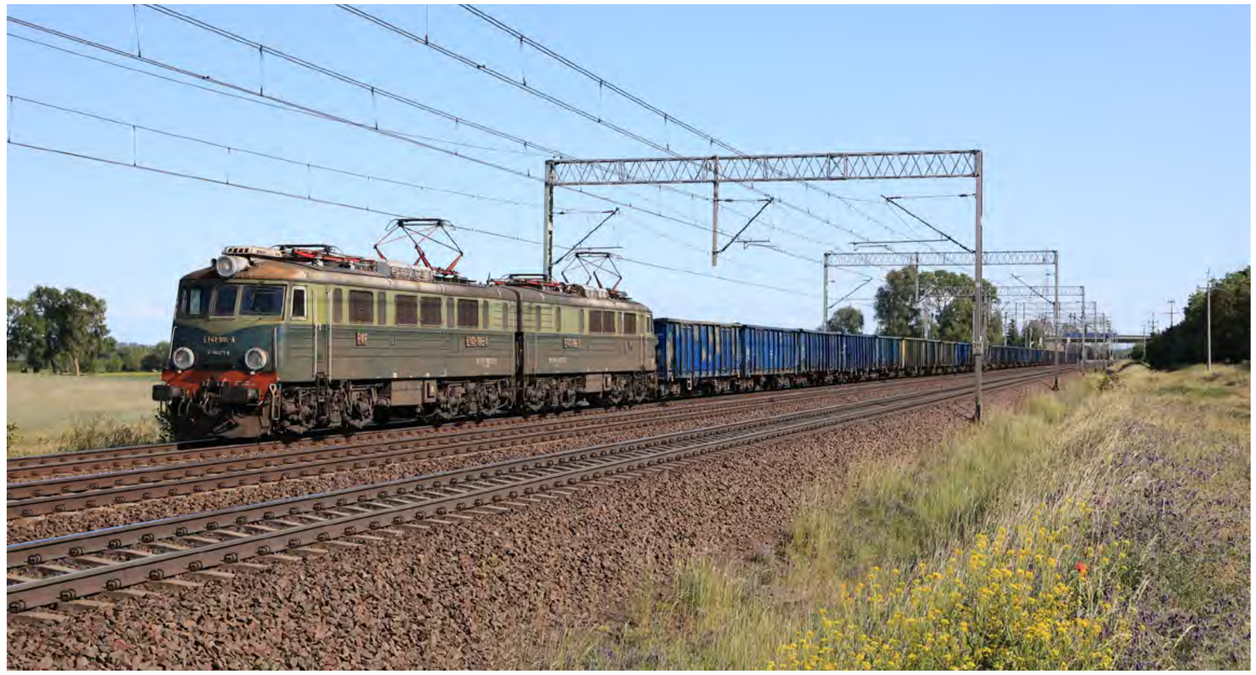
On June 2nd, PKP IC's green liveried Class EP07-361 passes through Różyny (PL) on a southbound passenger train. *Anton Kendall*

On June 2nd, older liveried twin locomotive No. ET41-186 hauls a northbound rake of boxes through Różyny (PL). *Anton Kendall*

On June 3rd, No. ET22-677 hauls a rake of Ukrainian grain wagons northbound through Różyny (PL). The rake included wagons to allow the locomotive to haul a rake of automatic coupling wagons. *Anton Kendall*







On June 1st, Captrain Poland's Class EU07-327 hauls a southbound tank train through Różyny (PL). *Anton Kendall*

PKP IC loco No. EP07-1017 with train No. TLK51102 'BIEBRZA' is seen at Olsztyn Glówny on July 27th, where this locomotive will be replaced by a diesel locomotive to continue the journey via the non-electrified route. *Gerard van Vliet*

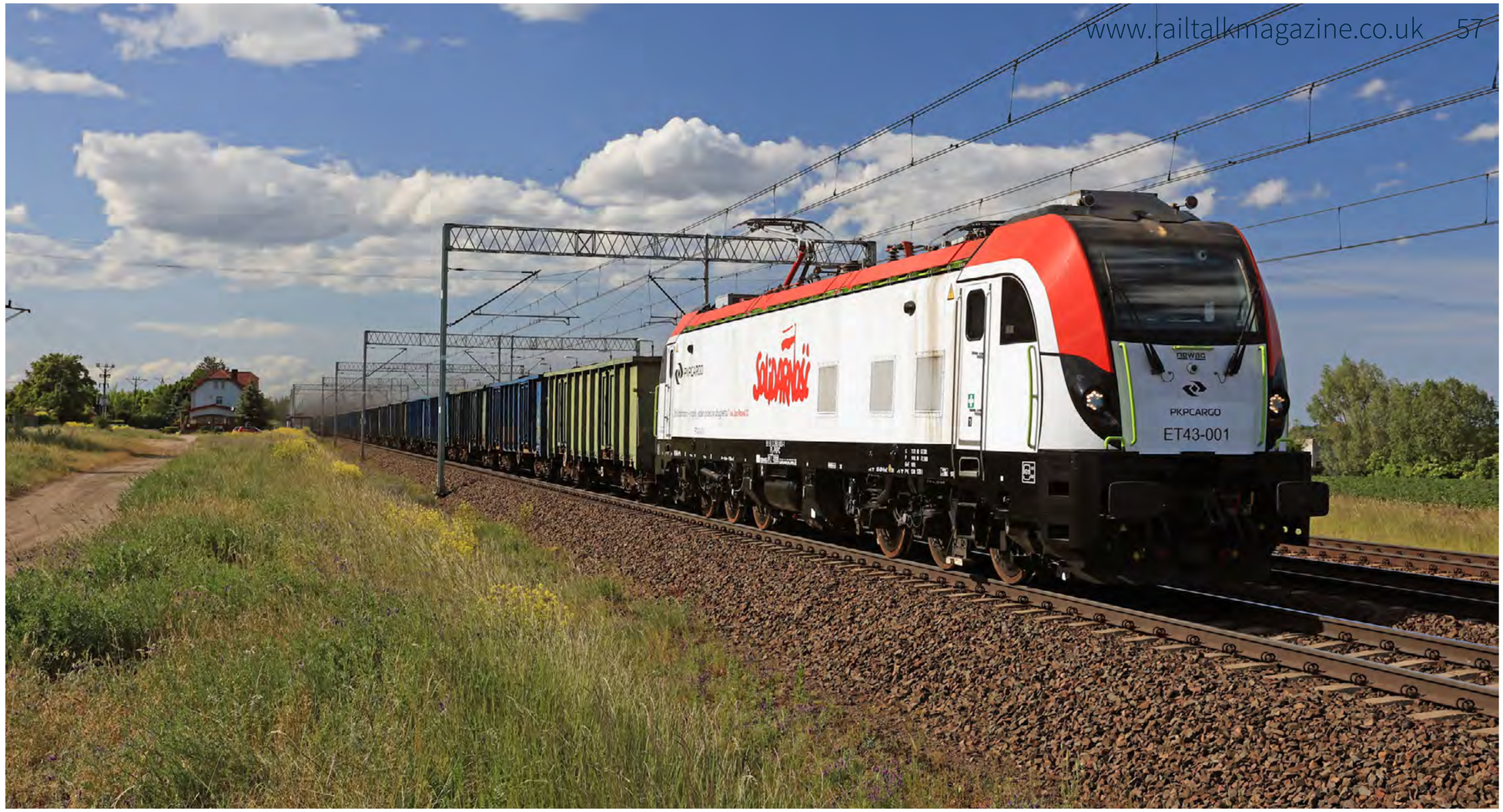
ZPK Natrix locos Nos. 15D.111 and 15D/A.120 with a crushed stone train are seen at Olsztyn Główny on July 27th. These locomotives are modernized locomotives of the type SM48, the well-known Russian TEM2. *Gerard van Vliet*

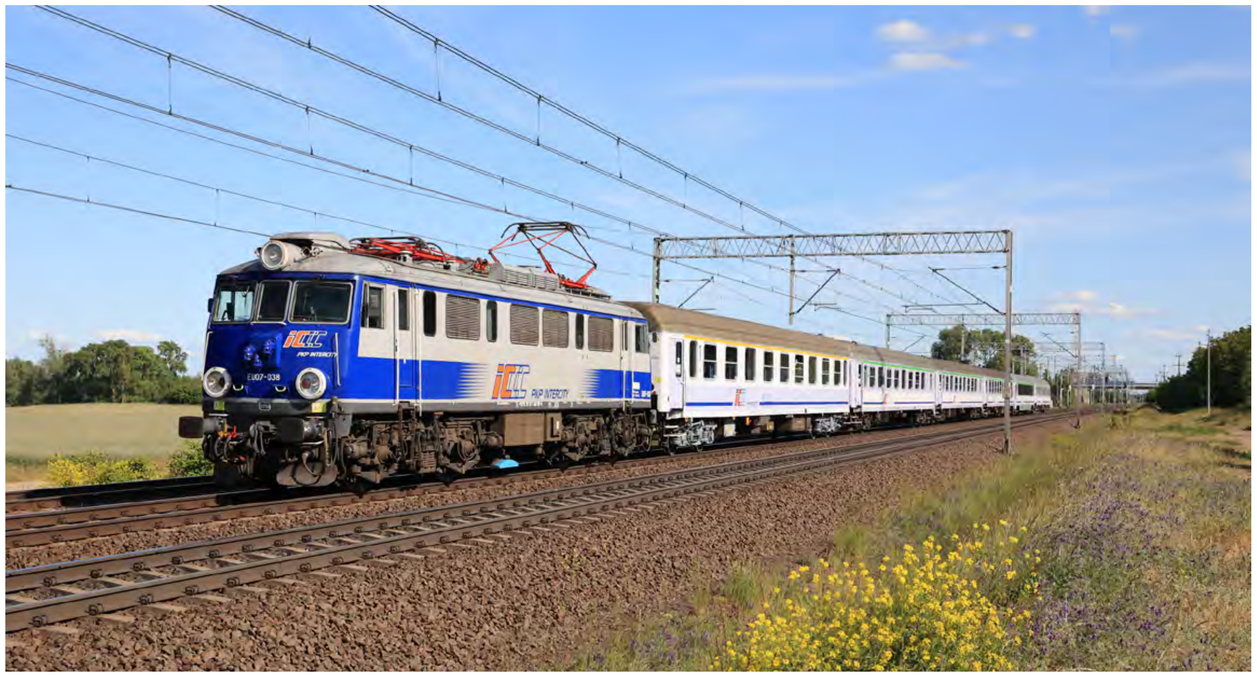
Poland

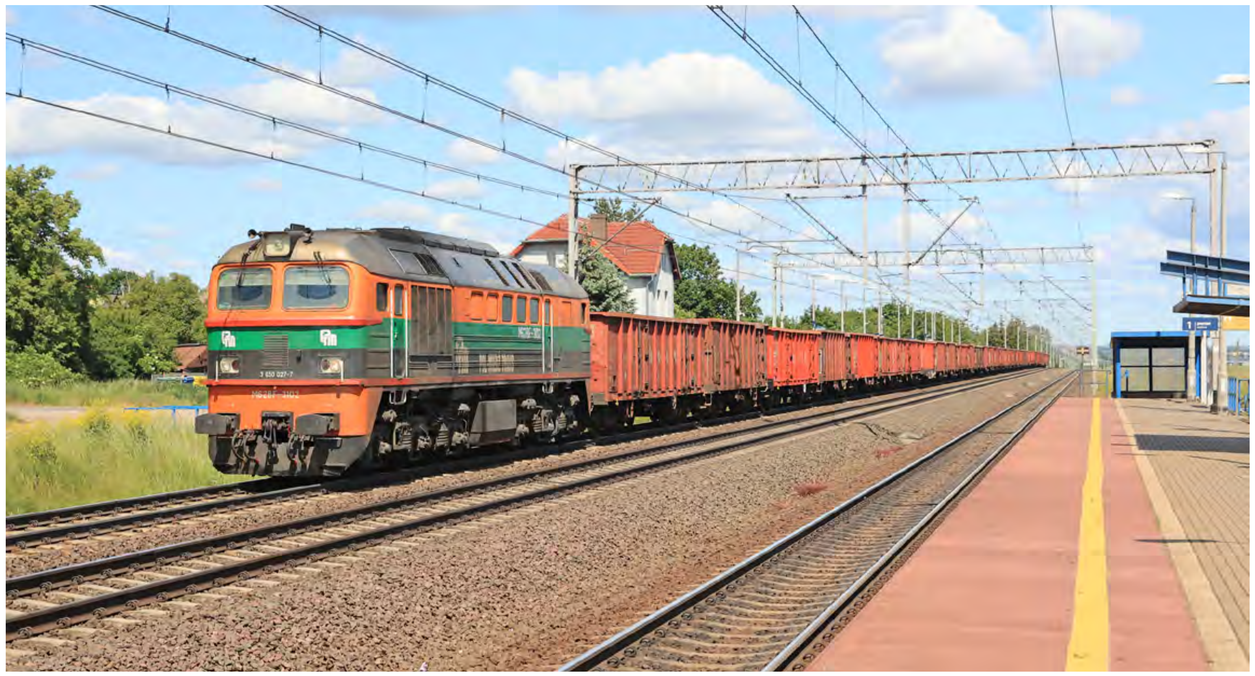
On June 3rd, one of PKP Cargo's newest locomotives, NEWAG No. ET43-001 hauls a southbound coal train through Różyny (PL), leaving a cloud of coal dust in its wake. *Anton Kendall*

On June 3rd, M62 loco No. M62BF-3102 (aka 92 51 3 650 027-7) working for PMT (POL-MIEDŹ TRANS) hauls a southbound rake of boxes through Różyny (PL). *Anton Kendall*

On June 3rd, veteran Class EU07-038 speeds through Różyny (PL) with a northbound PKP IC passenger train. *Anton Kendall*







On June 1st, M62 loco No. M62M-015 (aka 92 51 3 630 270-8) hauls a northbound rake of EP Cargo boxes through Różyny (PL). *Anton Kendall*

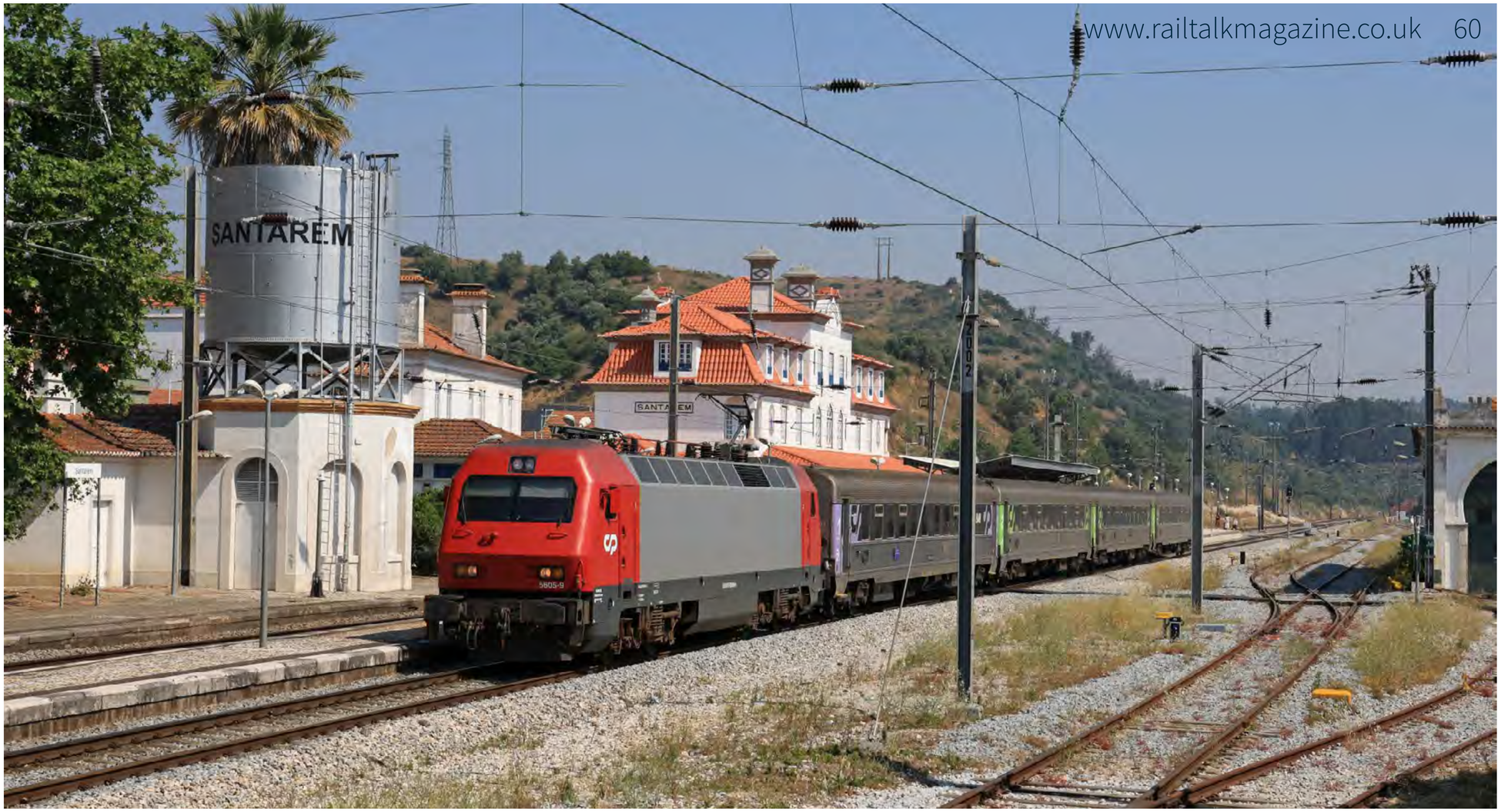
On June 2nd, 6Dg No. SM42-1260 working for PKP Cargo hauls a rake of woodchip containers southbound through Różyny (PL), having commenced its journey in Pruszcz Gdanski. *Anton Kendall*

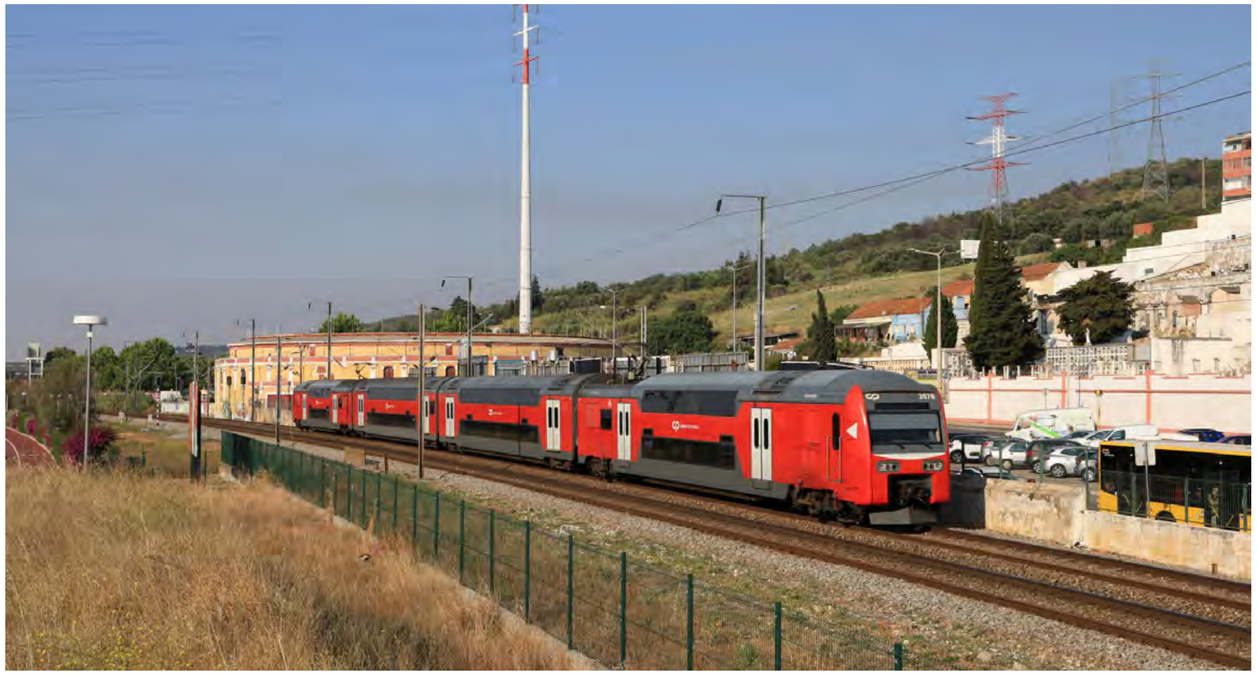
Portugal

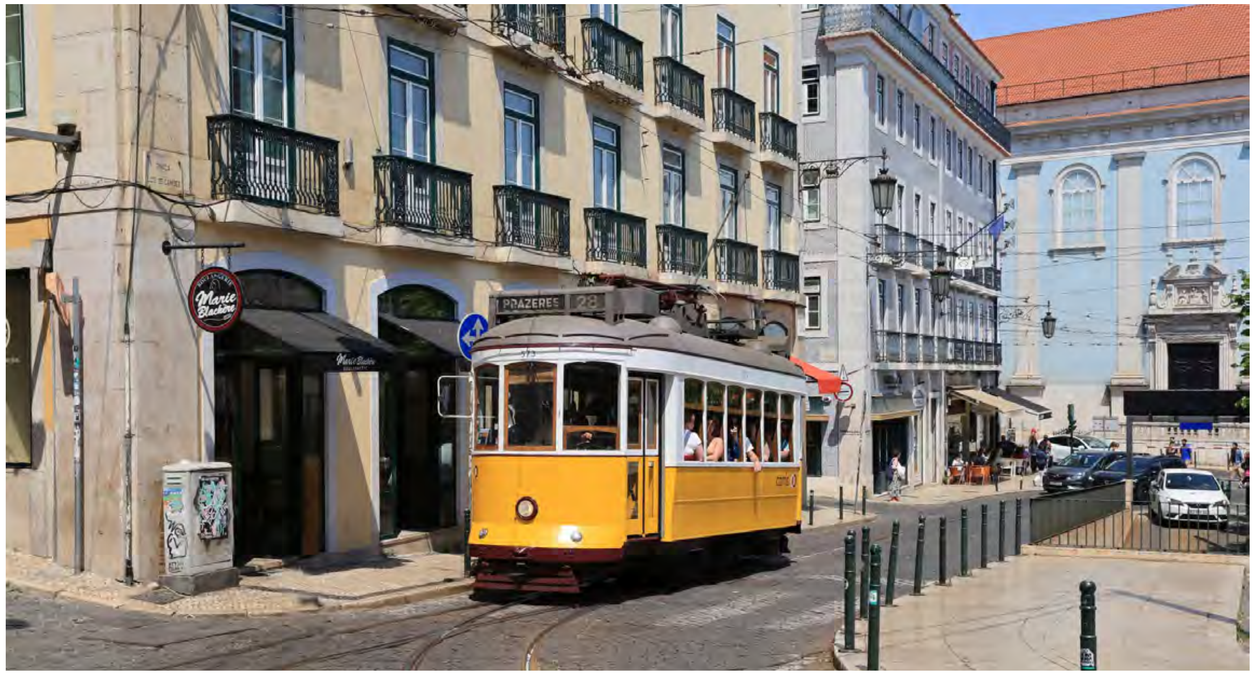
CP No. 5605 working train No. IC540 calls at Santarém on May 19th. *Thomas Niederl*

Carris tram No. 573 working a line 28E service to Prazeres is sen at Lisboa Pç. Luis Camões. *Thomas Niederl*

CP EMU No. 3576 working a regional service No. R16408 is seen at Vila Franca de Xira on May 19th. *Thomas Niederl*





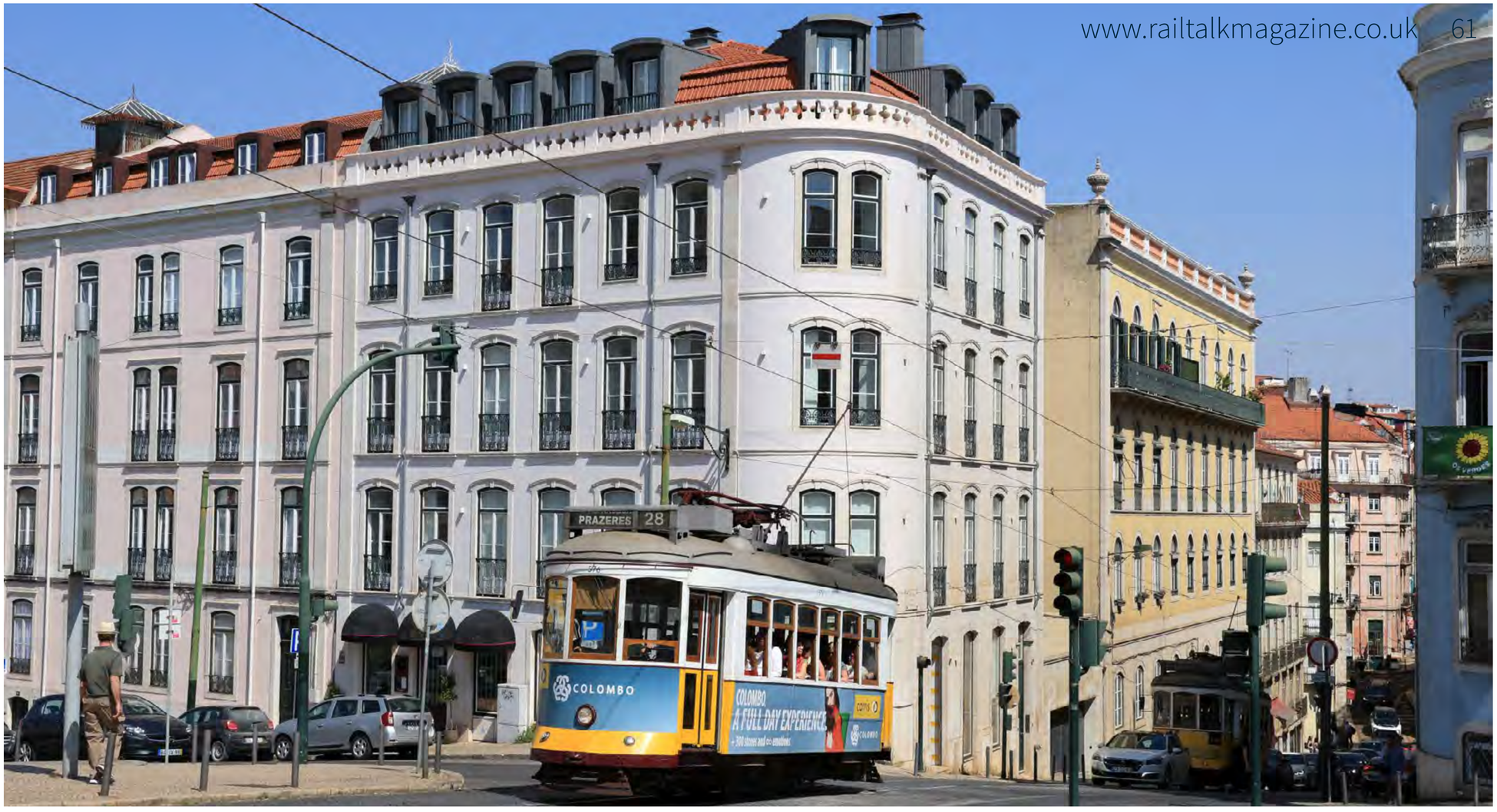


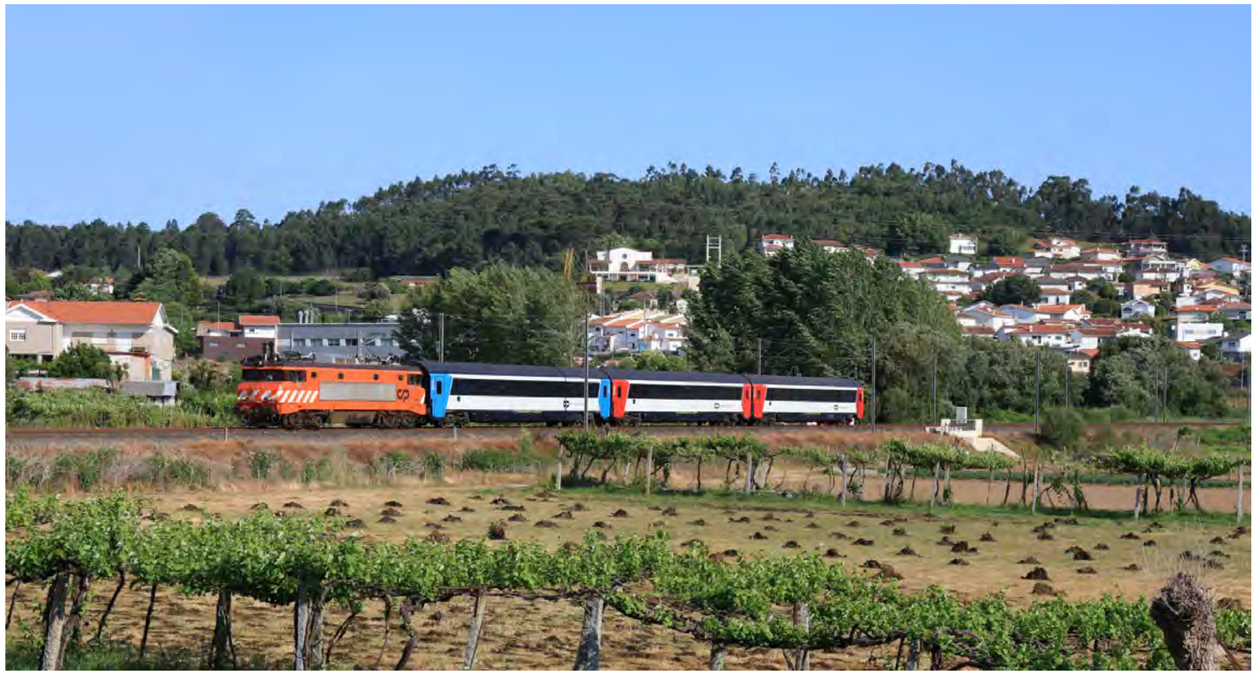
Portugal

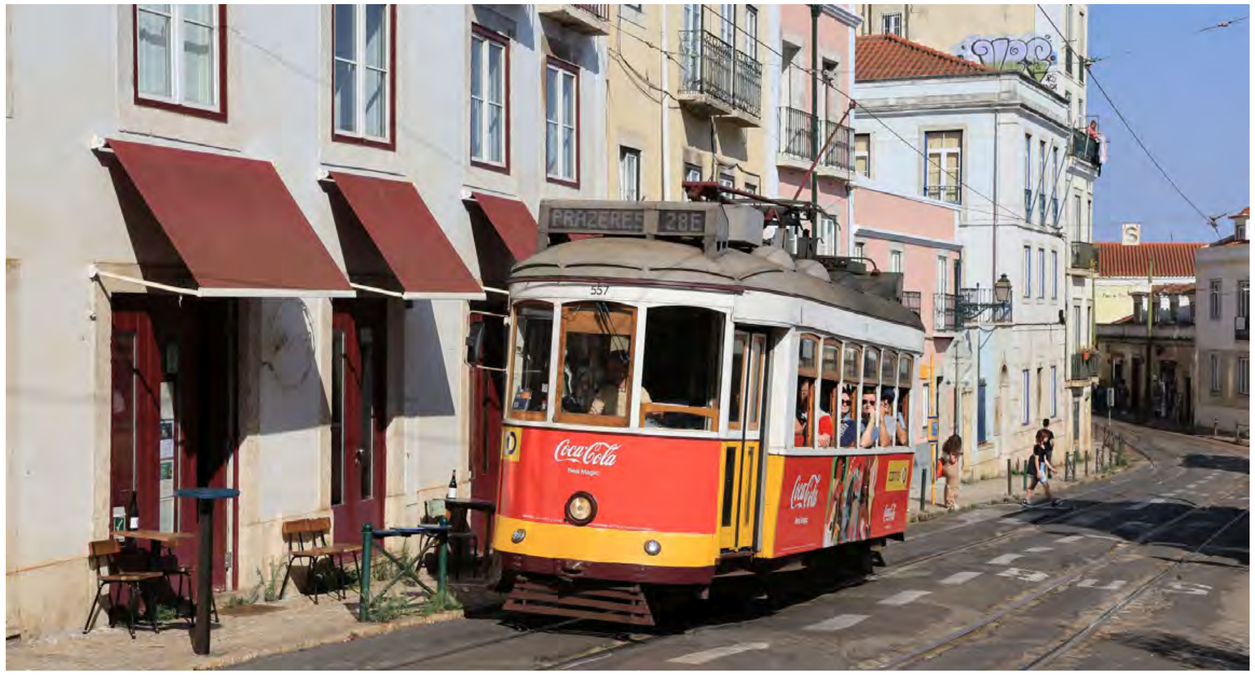
Carris tram No. 576 working a line No. 28E service to Prazeres is seen at Lisboa R. S. Bento / Cç. Estrela on May 19th. *Thomas Niederl*

Coca-Cola liveried Carris tram No. 557 is seen in Lisboa Rua das Escolas Gerais on May 19th with a line No. 28E service. *Thomas Niederl*

CP Class 2600 No. 2610 working train No. IR850 passes Barrimau on May 23rd. *Thomas Niederl*





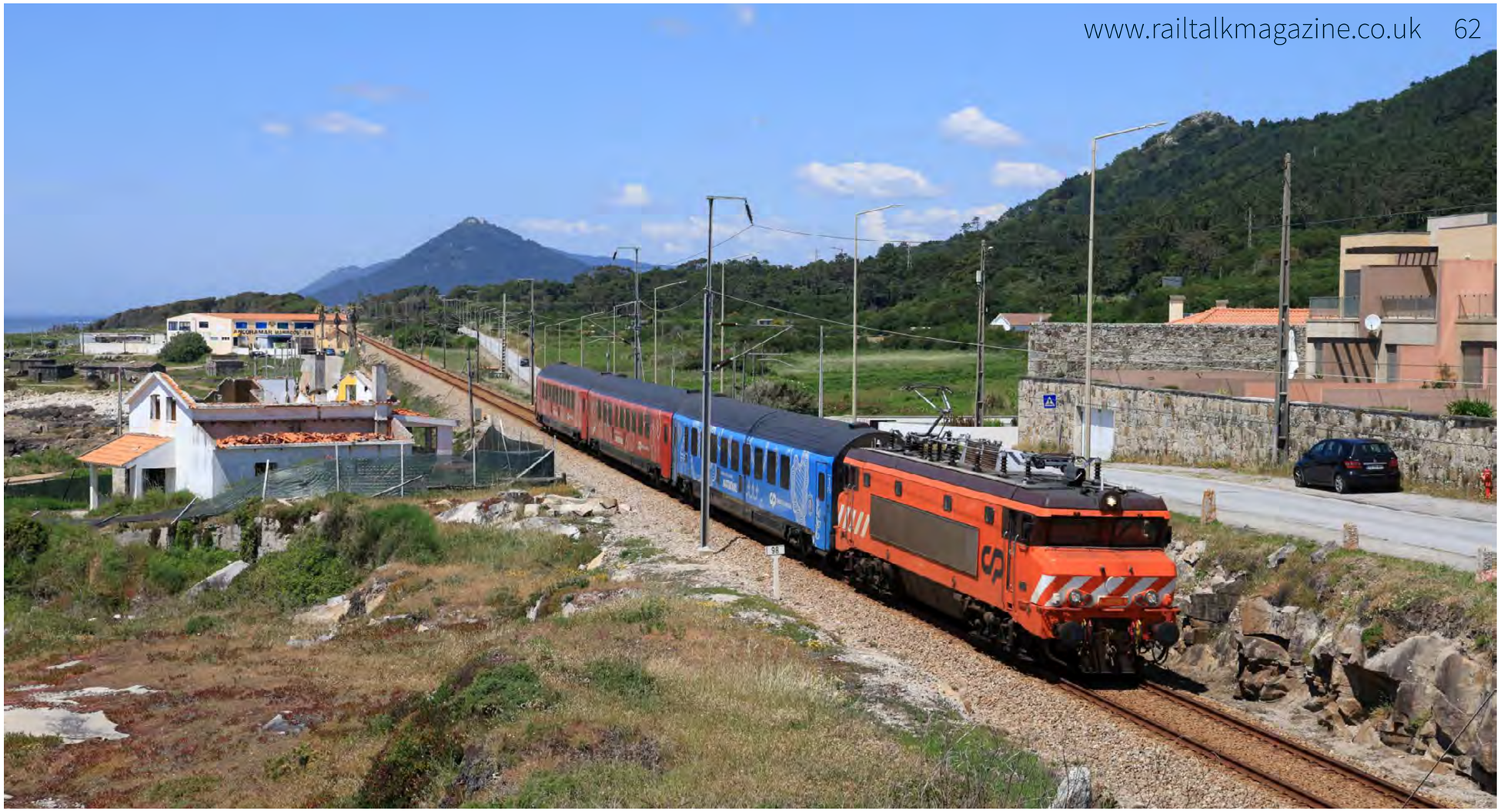


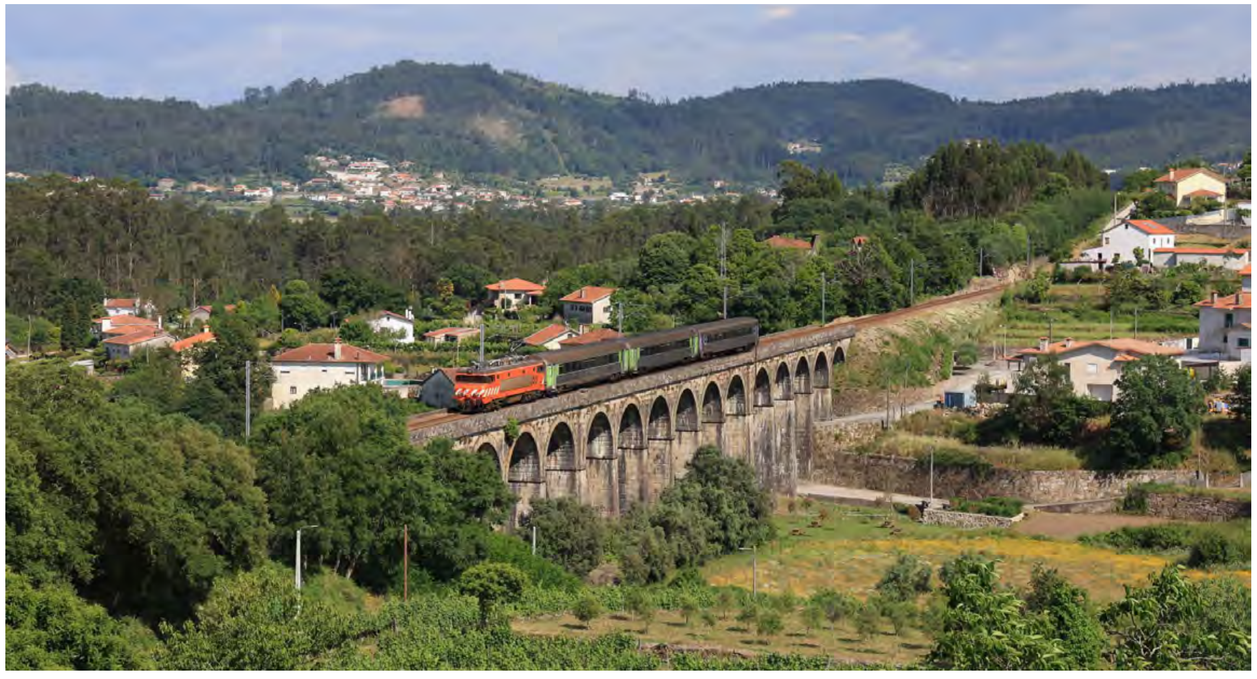
Portugal

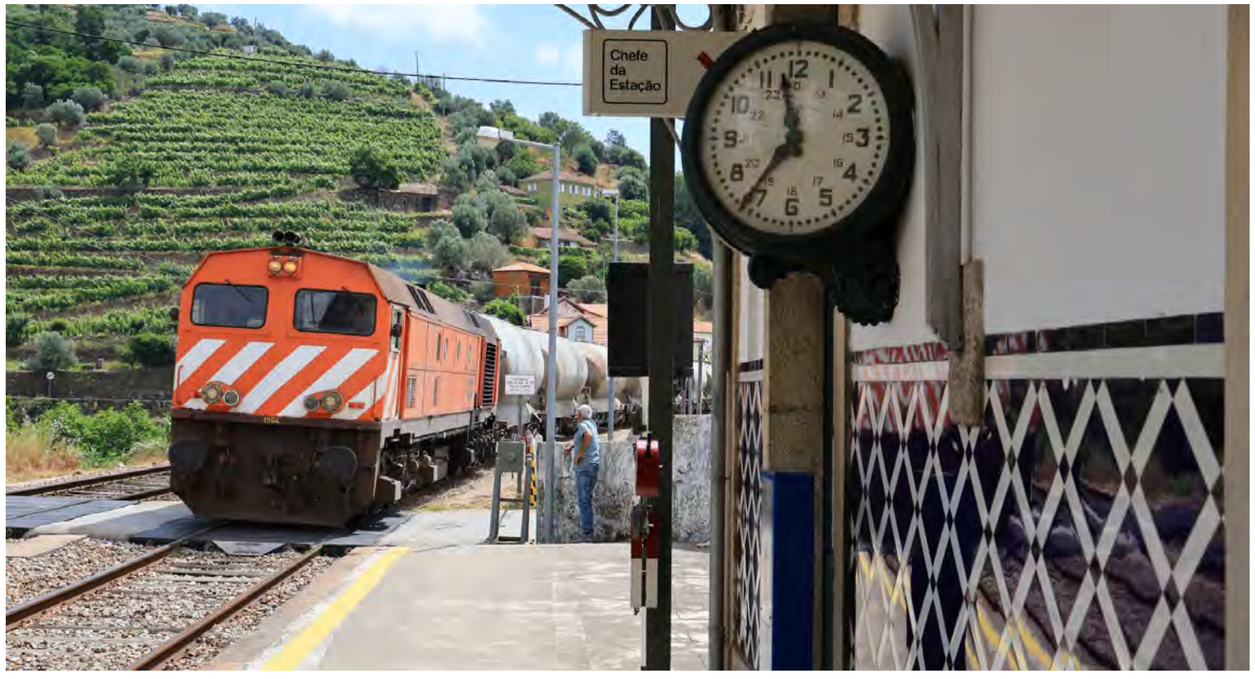
CP Class 2600 No. 2602 working train No. IR854 passes Âncora on May 23rd. *Thomas Niederl*

CP diesel loco No. 1964 with freight train No. M50232 approaches Rede on May 24th. *Thomas Niederl*

CP Class 2600 No. 2612 working train No. IR855 crosses the viaduct at Durraes on May 23rd. *Thomas Niederl*







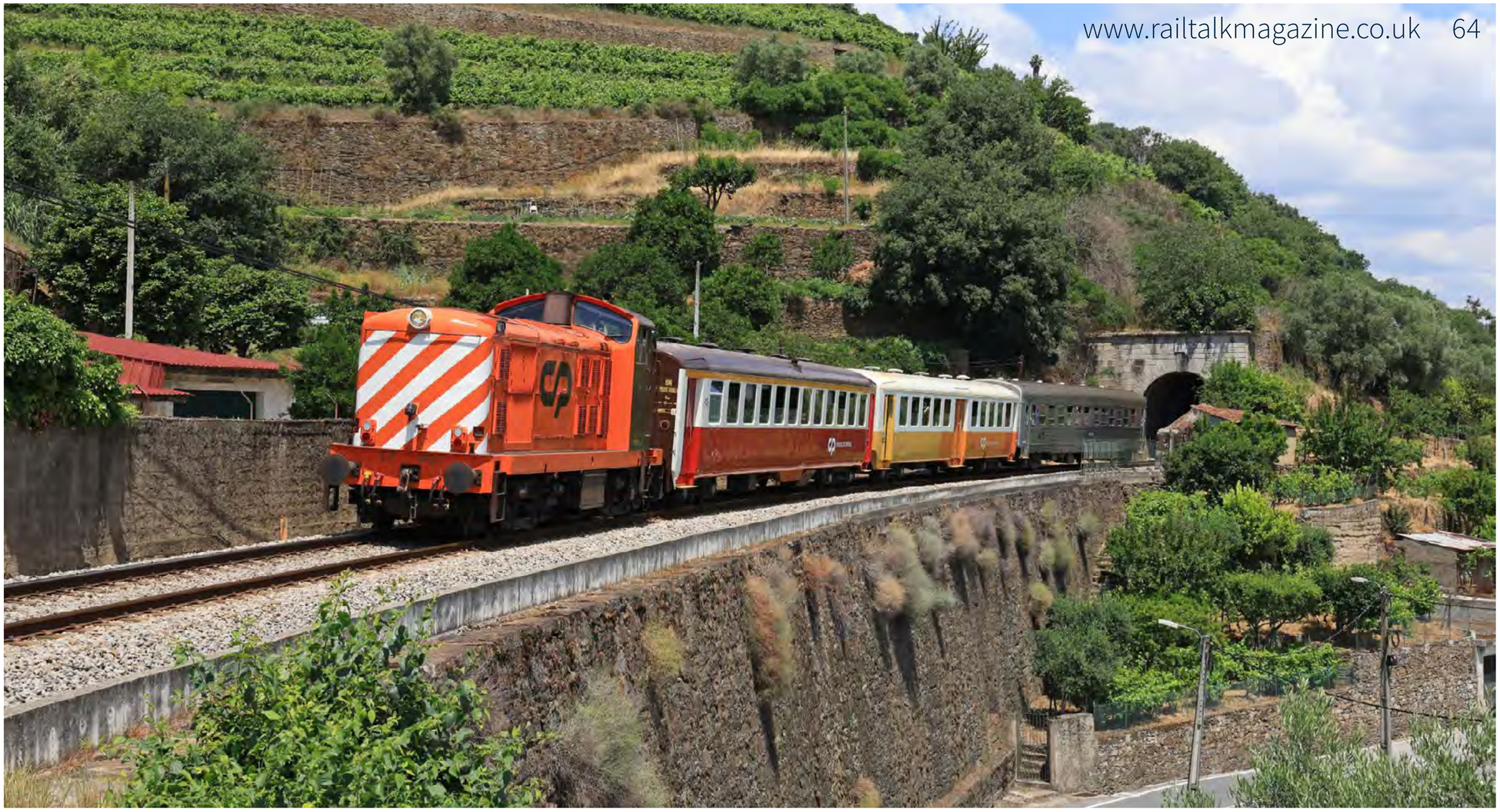
CP Class 1900 No. 1964 with freight train No. M50321 passes Caldas de Moledo on May 24th.
Thomas Niederl

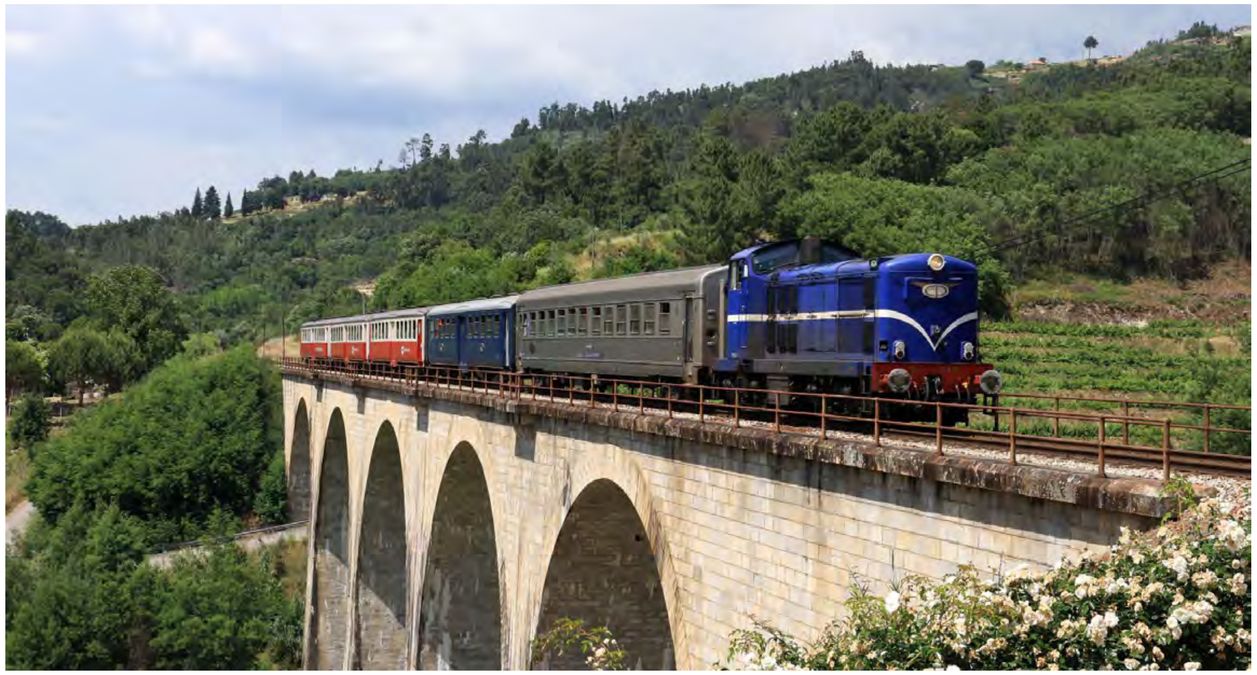
Portugal

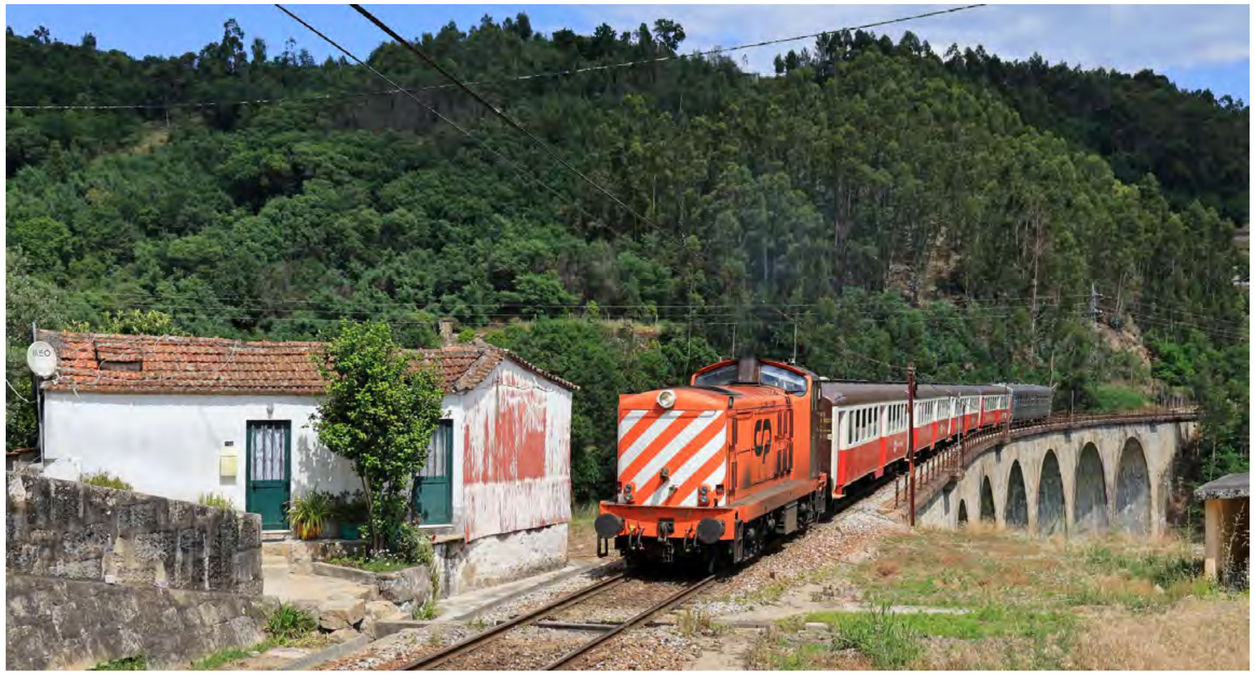
CP Class 1400 No. 1427 with train No. IR866 passes Godim on May 24th. *Thomas Niederl*

CP Class 1400 No. 1461 with train No. IR868 passes Pala on May 24th. *Thomas Niederl*

Blue liveried Class 1400 No. 1427 working train No. IR 869 passes Pala on May 25th. *Thomas Niederl*





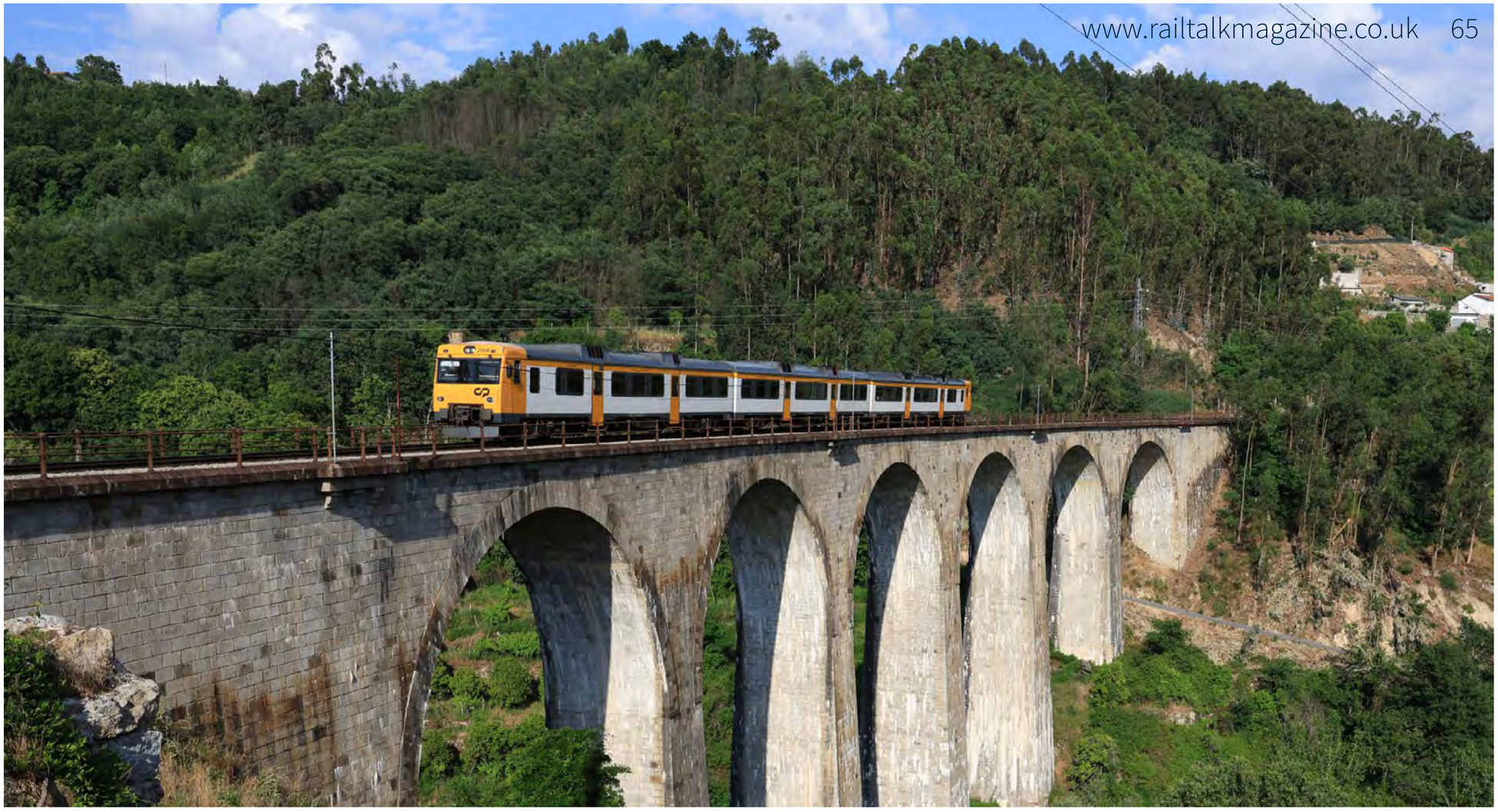


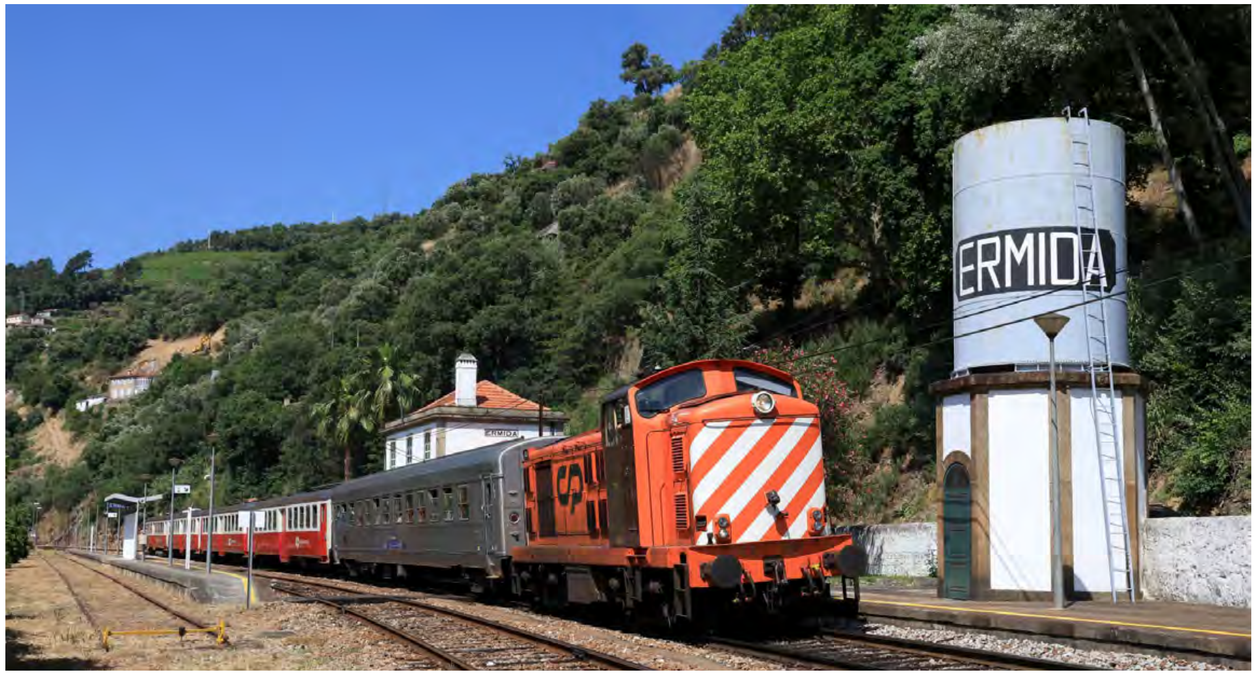
Portugal

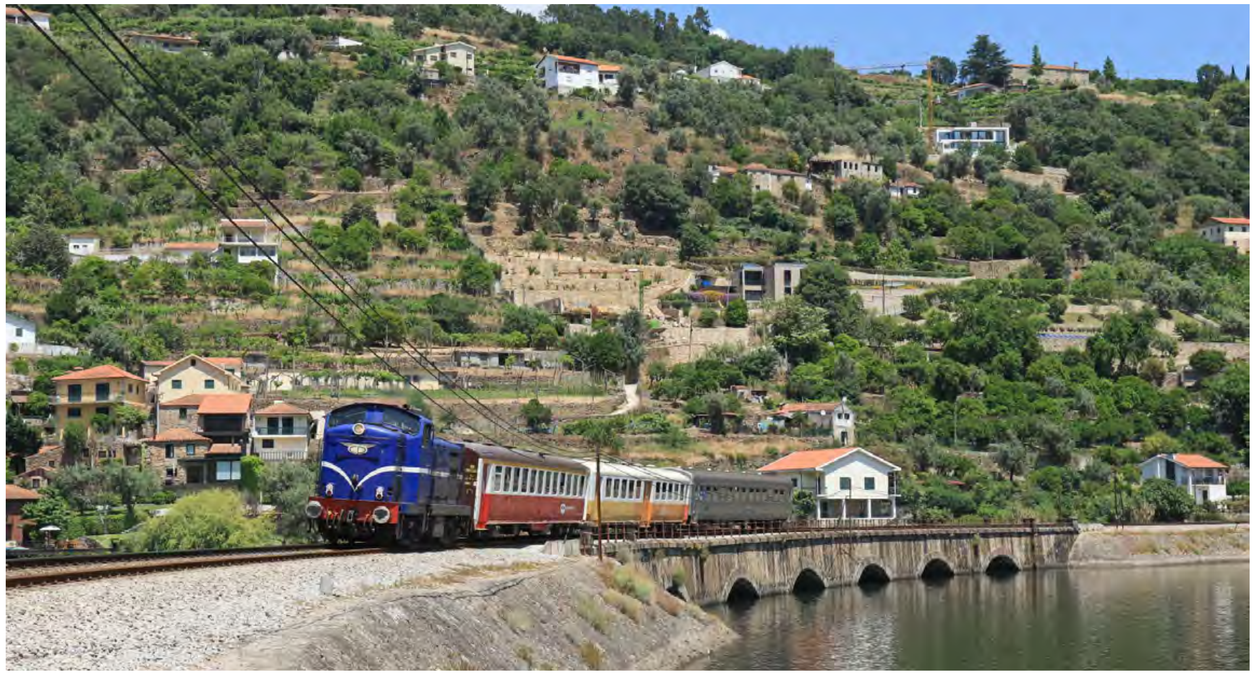
CP DMU No. 592.206 working train No. IR874 is seen at Pala on May 24th. *Thomas Niederl*

No. 1424 with train No. IR866 is seen at Aregos on May 25th. *Thomas Niederl*

CP Class 1400 No. 1461 working train No. IR865 calls at Ermida on May 25th. *Thomas Niederl*





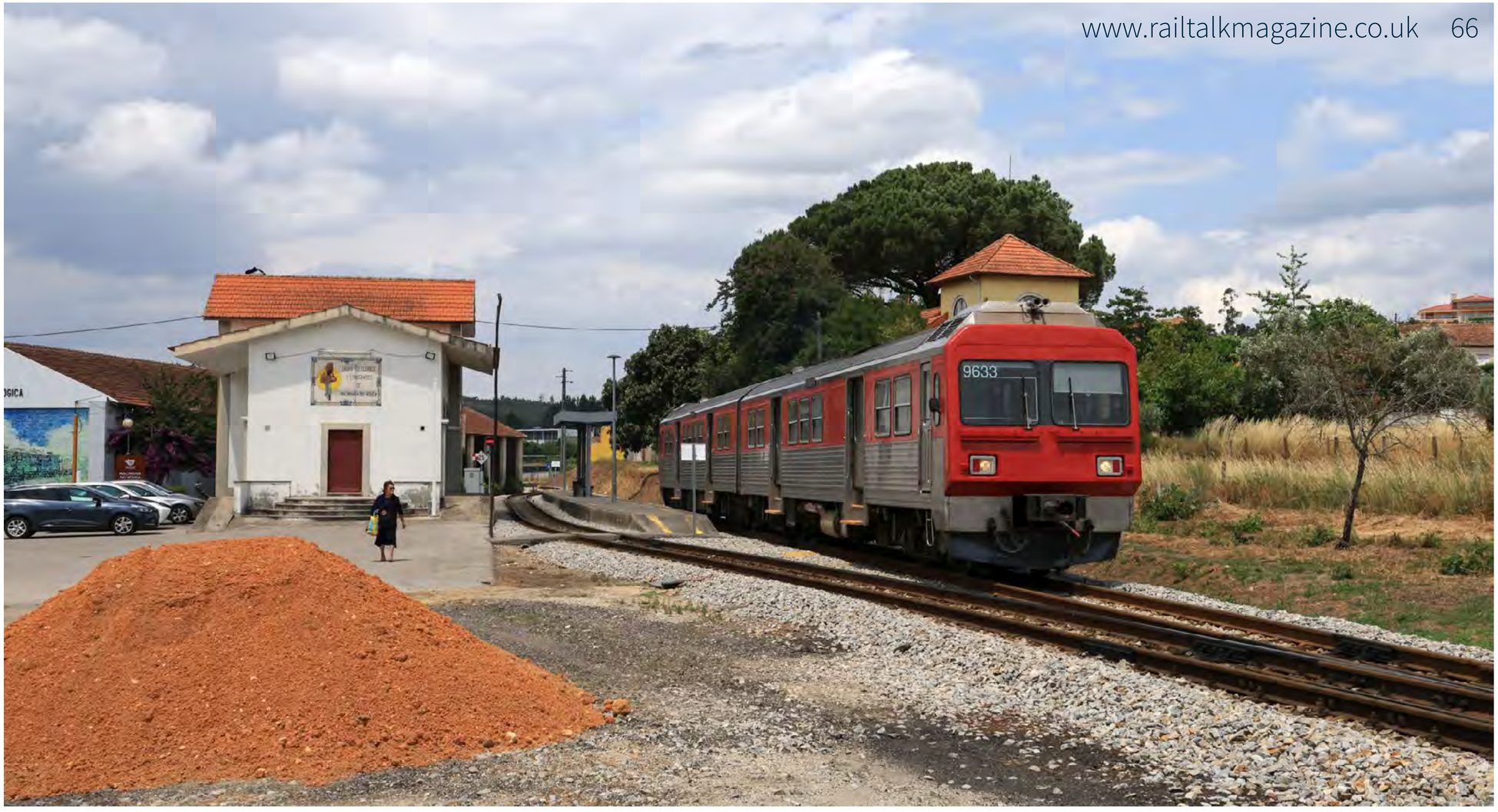


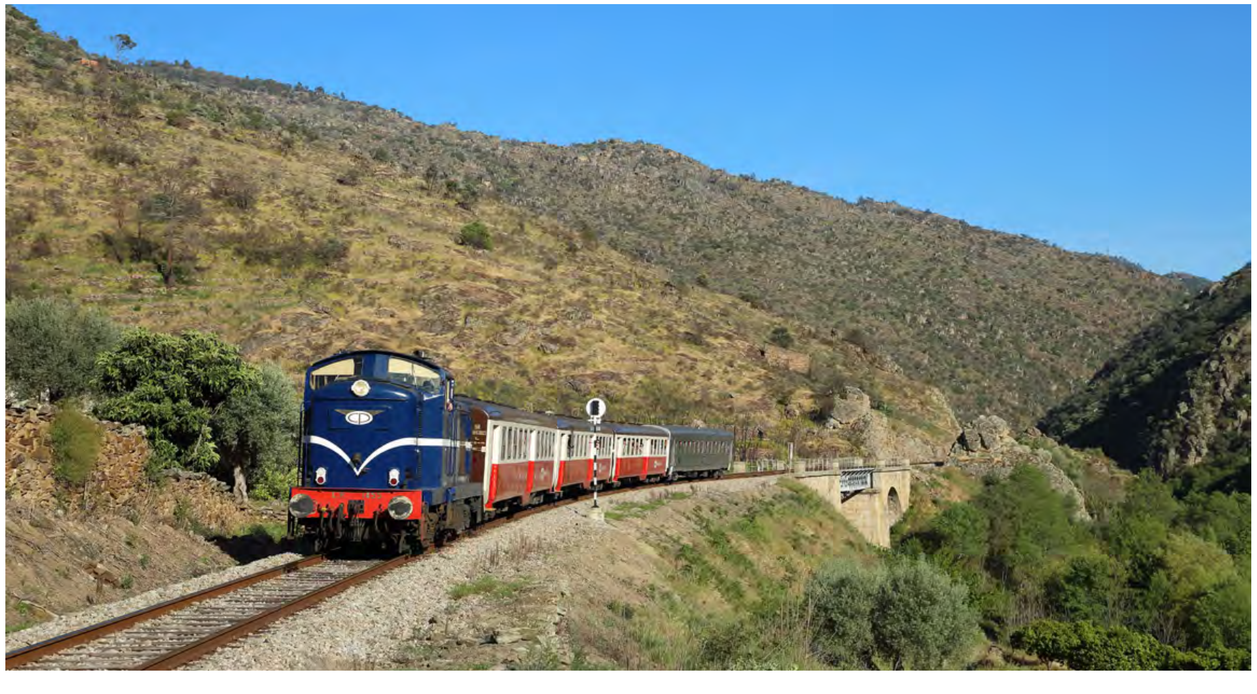
Portugal

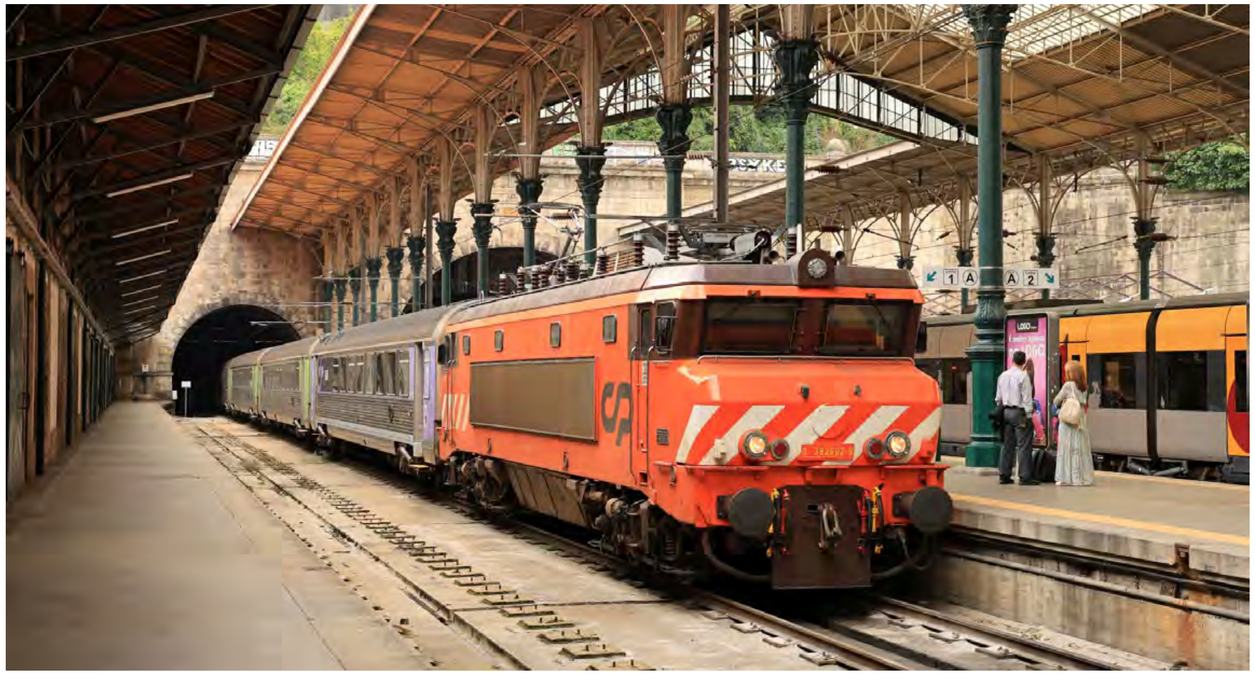
DMU No. 9633 working train No. R5112 is seen departing Macinhata on May 26th.
Thomas Niederl

CP Class 2600 No. 2602 with train No. LP27288 arrives at Porto São Bento on May 28th.
Thomas Niederl

CP Class 1400 No. 1455 approaches Tua whilst working train No. IR876 17:14 Pocinho - Porto SB. *Laurence Sly*





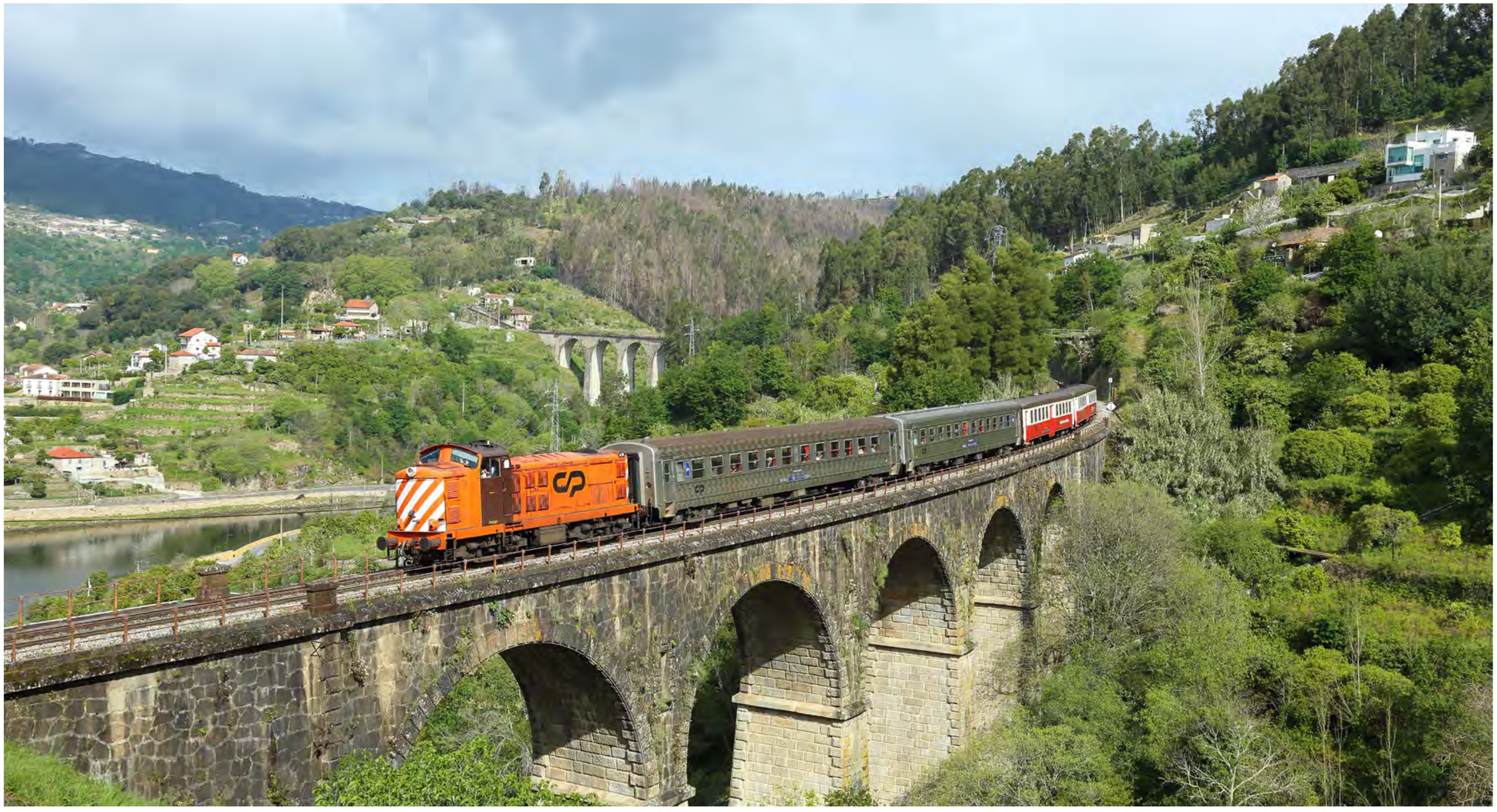


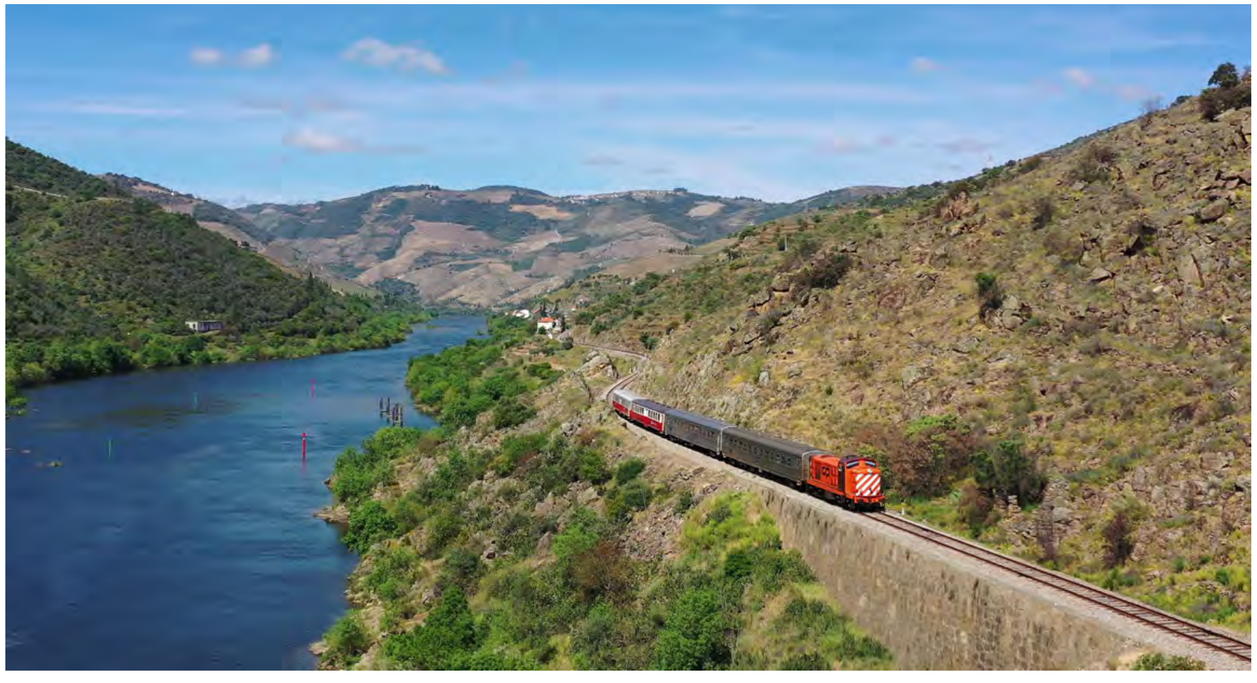
Portugal

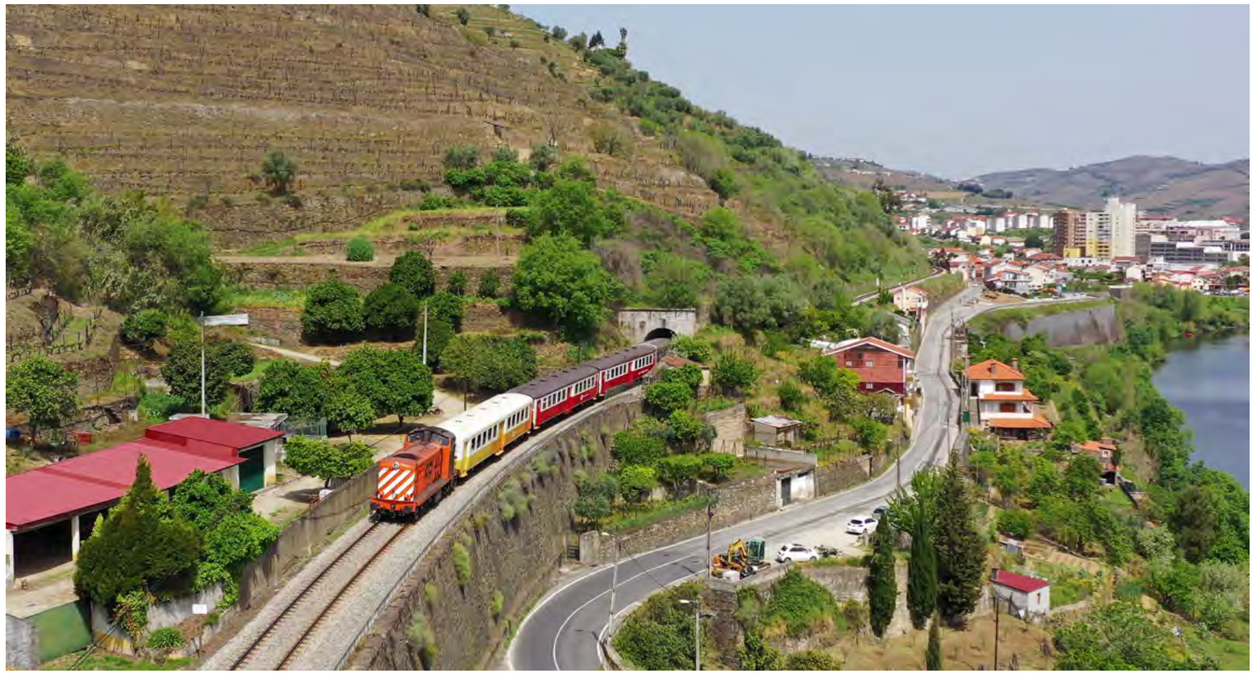
No. 1438 passes Ribadouro whilst working train No. IR865 09:20 Porto SB - Pocinho.
Laurence Sly

No. 1429 passes Gidim whilst working train No. IR866 11:08 Pocinho - Porto Campanha.
Laurence Sly

Class 1400 No. 1427 departs Tua whilst working train No. IR865 09:20 Porto SB - Pocinho.
Laurence Sly





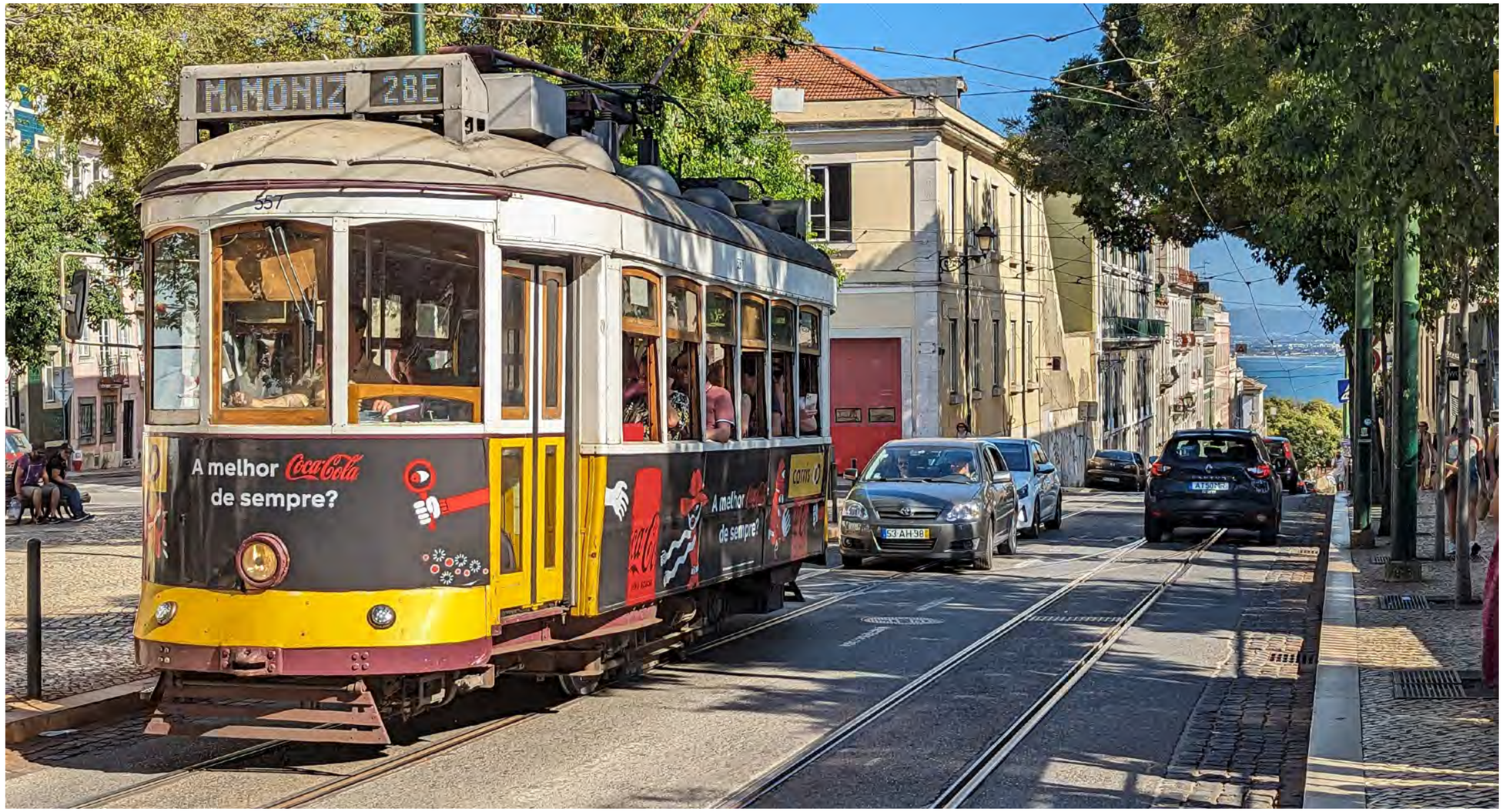


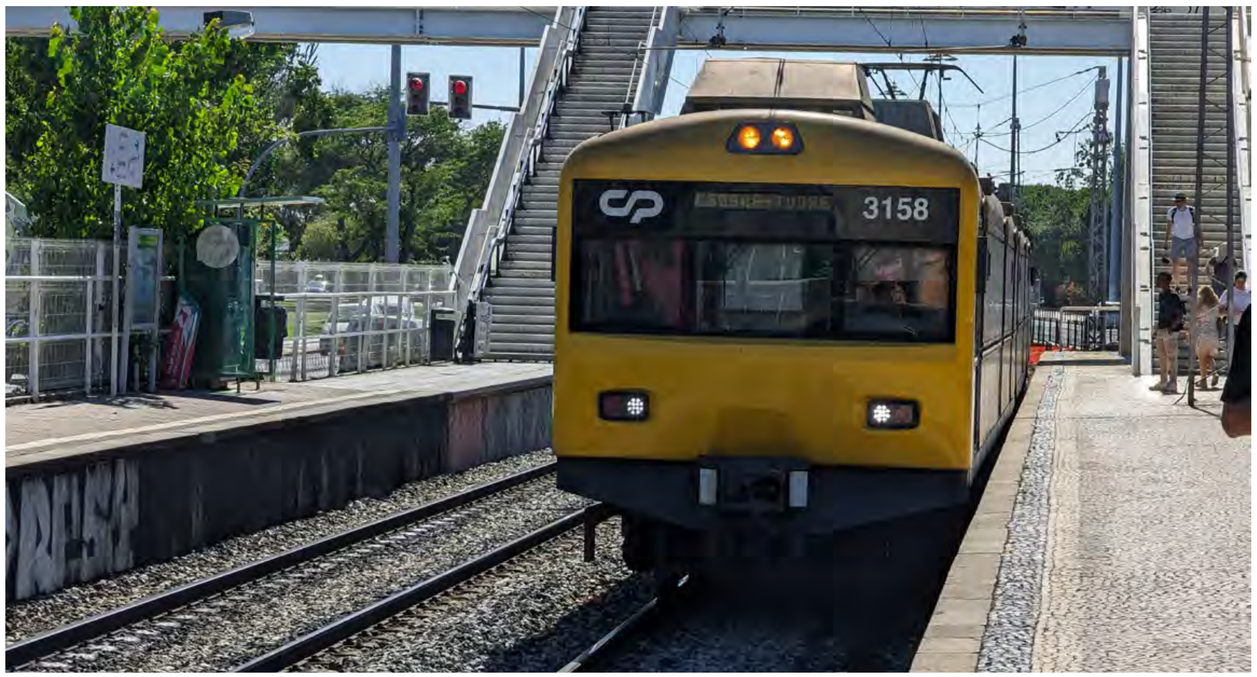
Portugal

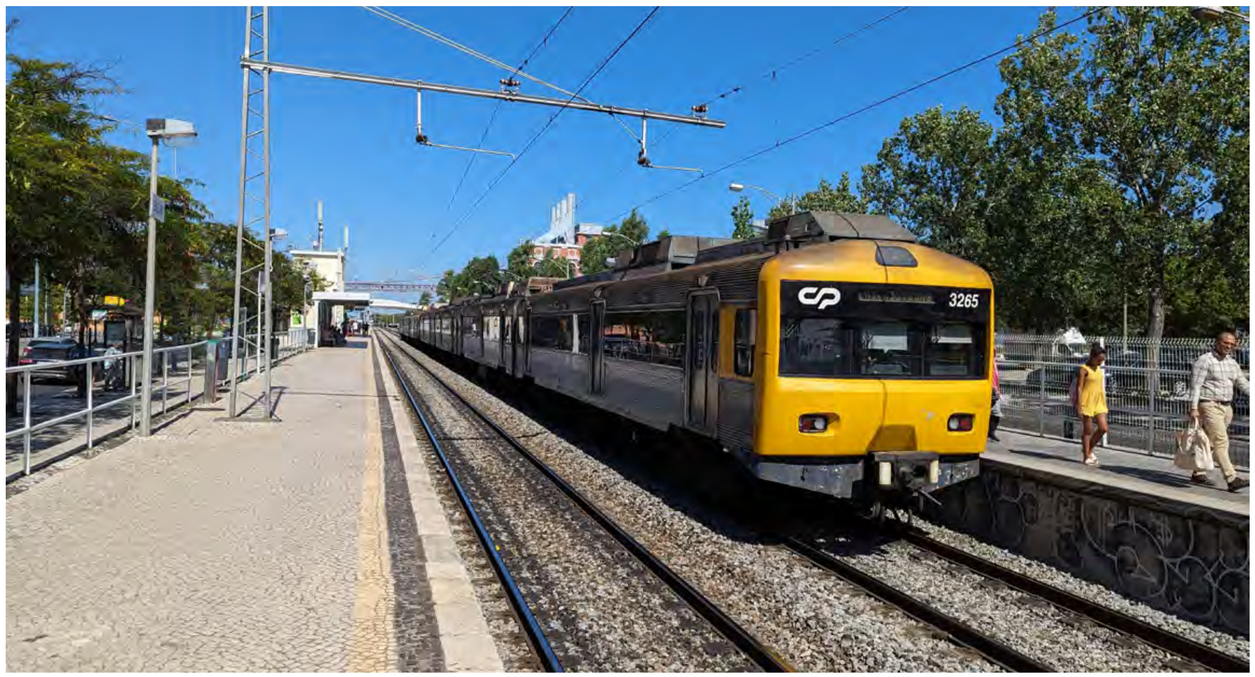
In Lisbon one of the famous route No. 28 trams is seen heading through the city on July 9th.
Kevin McCormick

On July 10th, CP EMU No.3265 calls at Belem station with a service to Cascais.
Kevin McCormick

On July 10th, CP EMU No. 3158 calls at Belem station with a service to Cais do Sodre.
Kevin McCormick





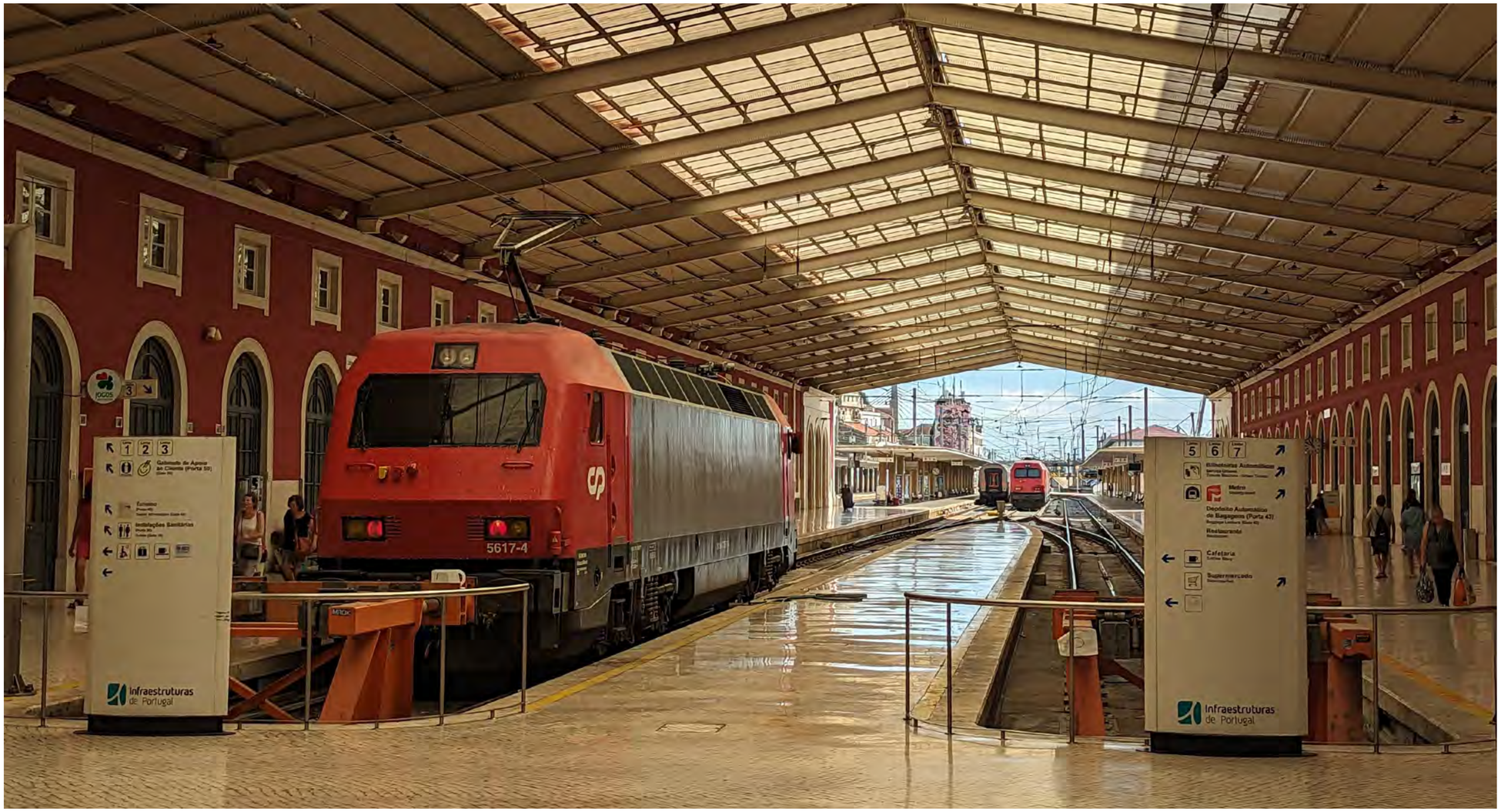


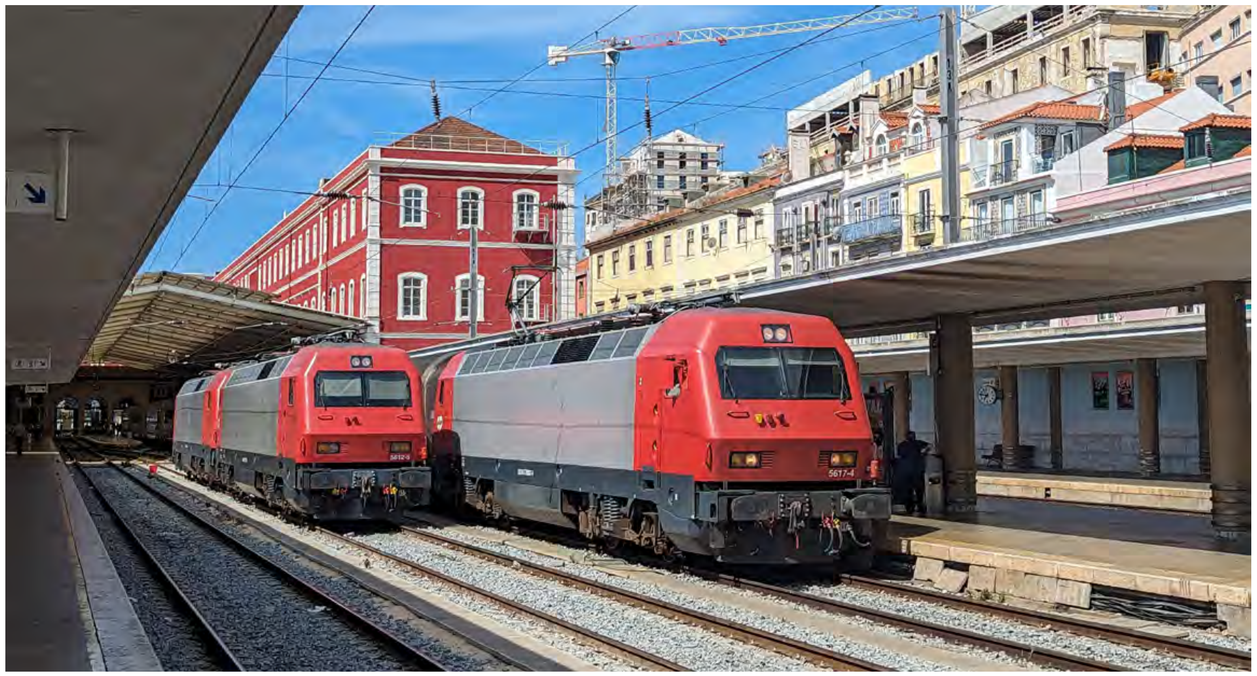
Portugal

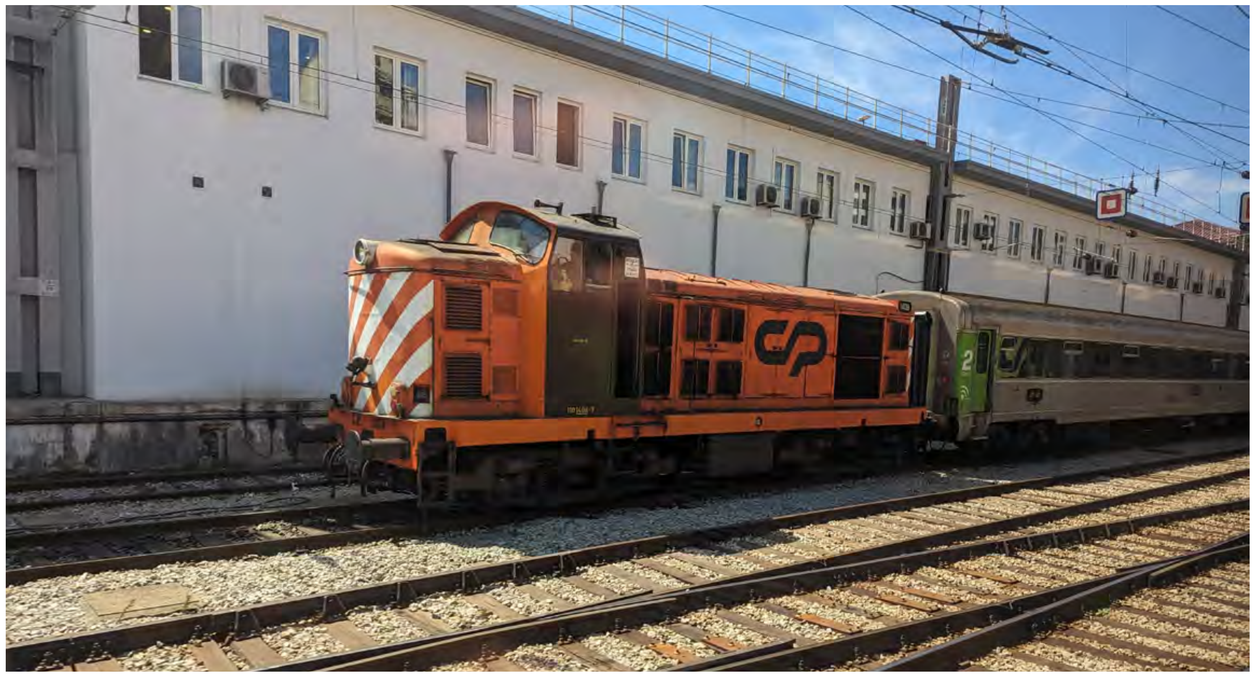
Siemens electric loco No. 5617 stands at Lisbon Santa Apolonia on July 12th having arrived on 06:37 Port Campanha to Lisbon service. *Kevin McCormick*

CP Class 1400 No. 1408 is the station pilot for the day at Lisbon Apolonia. No. 1408 is one of the locos built at Vulcan Foundry in Newton-le-Willows. *Kevin McCormick*

On July 12th, No. 5617 is seen at Lisbon Apolonia coupled on to its return service, the 11:30 Lisbon to Guimaraes service whilst the centre road holds Nos. 5612 (nearest) and 5618. *Kevin McCormick*





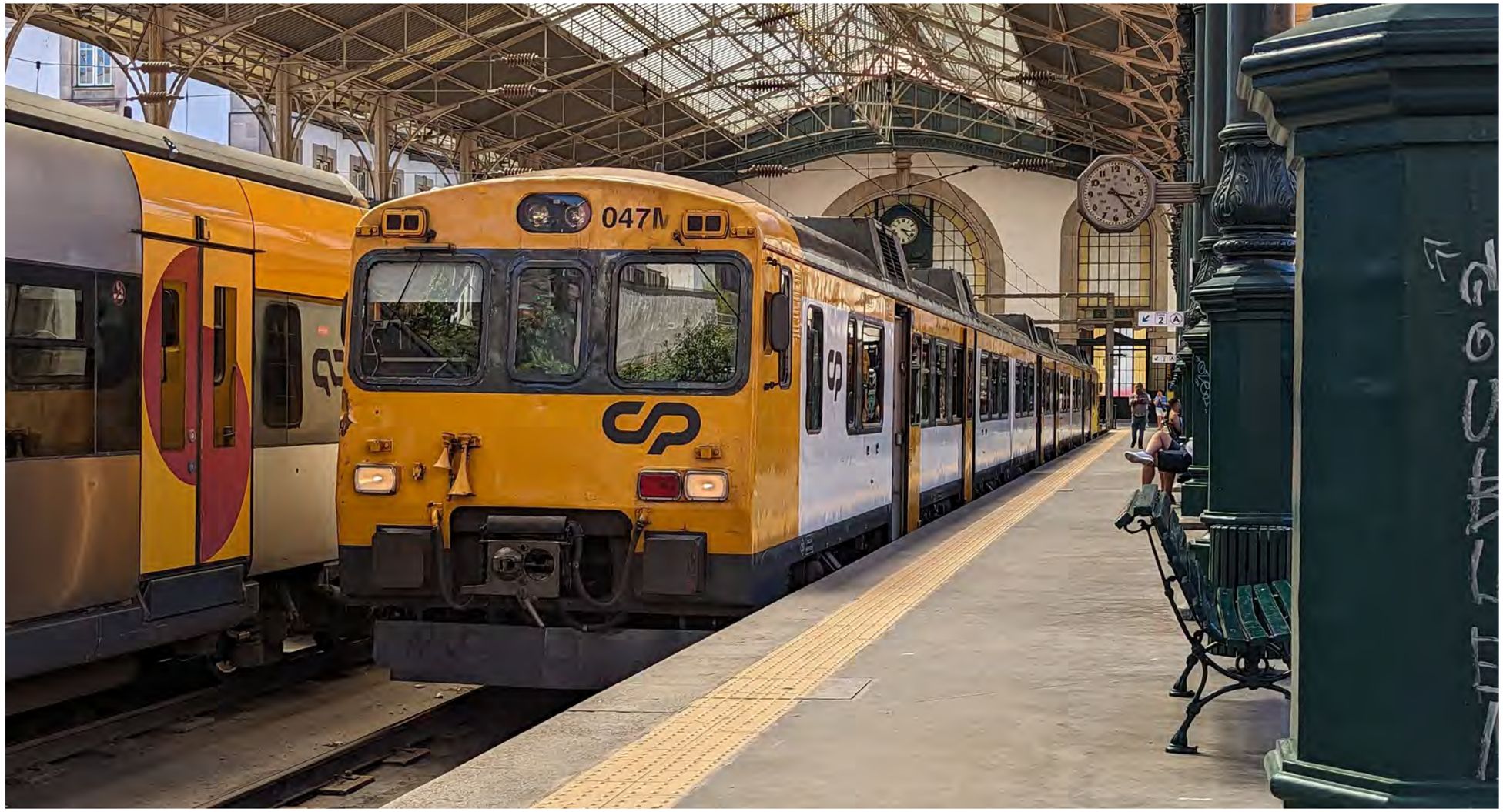


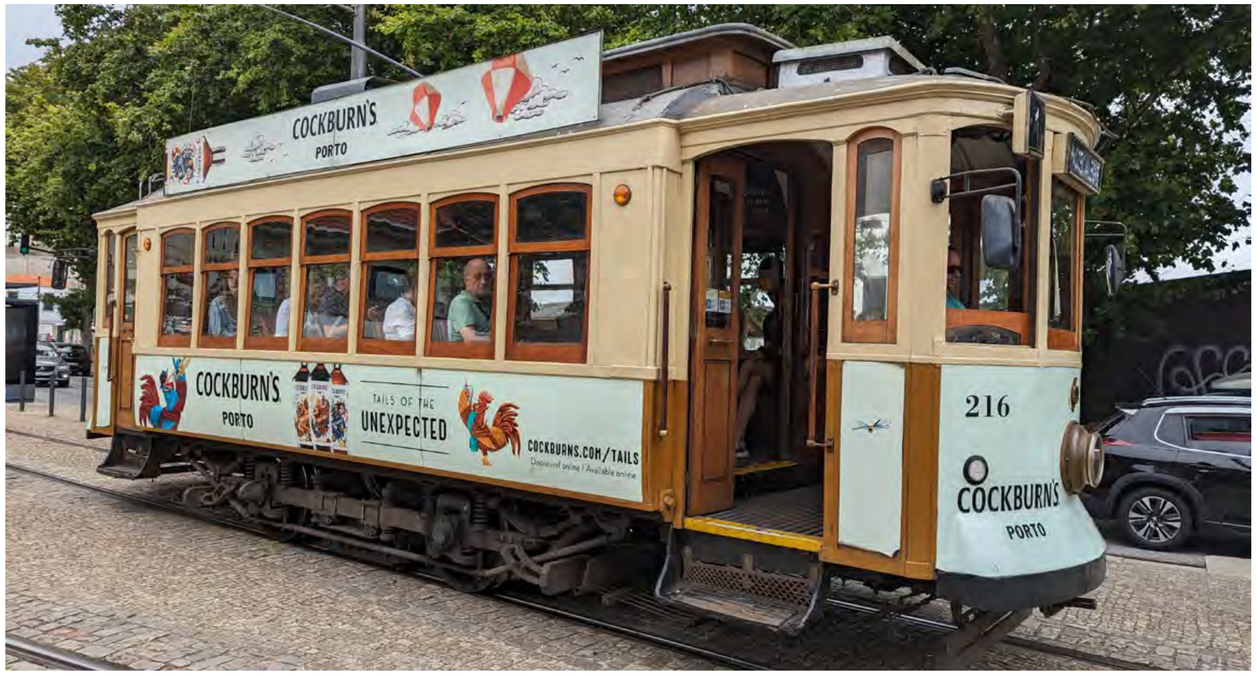
Portugal

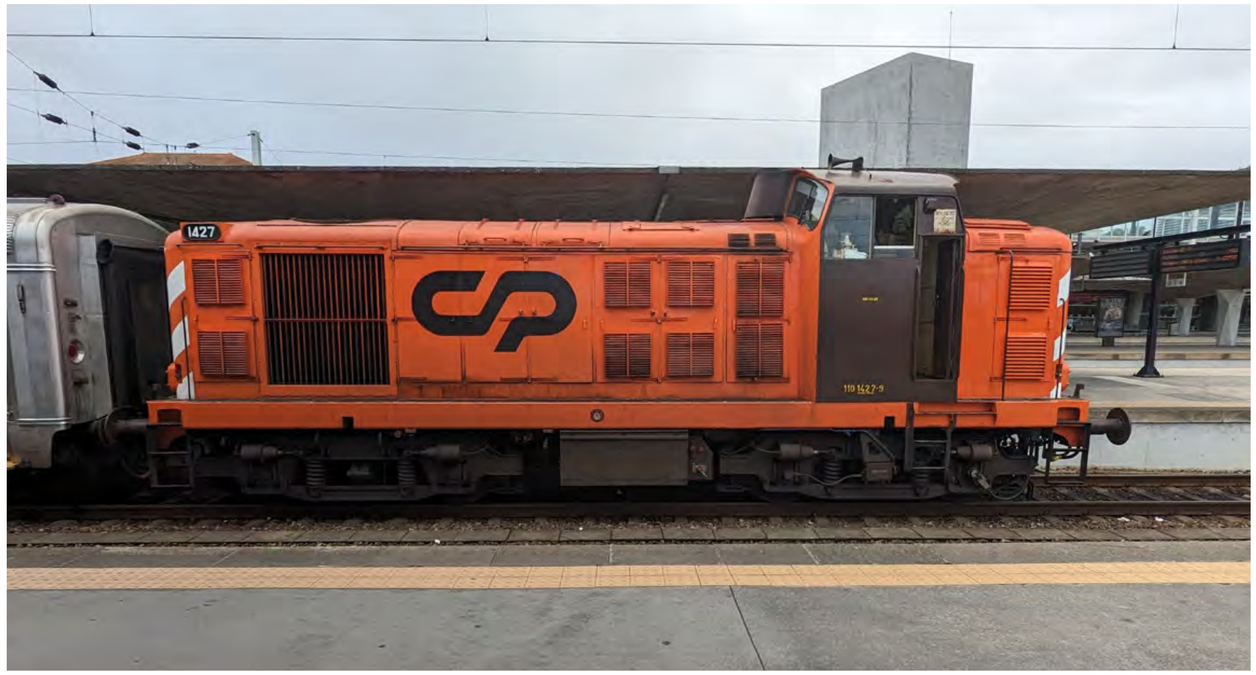
At Porto Sao Bento station on July 13th, CP 592 type DMU Nos. 047 and 048 are seen working the 15:20 Porto Sao Bento to Regua service. *Kevin McCormick*

CP Class 1400 No. 1427 with the 07:25 Porto Campanha to Pocinho service on July 15th is seen at Porto Campanha. *Kevin McCormick*

Porto Tram No. 216 on a line No. 1 service is seen heading back into the town on July 14th. *Kevin McCormick*







Portugal

CP EMU No. 3428 leads another class member working train No. R15424, seen at Porto São Bento on May 26th. *Thomas Niederl*

CP No. 1455 approaches Tua whilst working train No. IR869 13:20 Porto SB - Pocinho. *Laurence Sly*

On June 12th, No. 425572 (an ex SNCF loco) approaches Bucuresti Nord hauling a push-pull commuter service form Brasov.
Mark Torkington

No. 60.1680, in DB colours, stands with a freight service at the small station of Nicolae Balcescu on the line from Tulcea Oras to Medgidia on June 9th. *Mark Torkington*

On June 10th, Nos. 64.1295 and 64.0947 sit on the blocks at Bucuresti Nord with the VSOE Orient Express. *Mark Torkington*

Romania

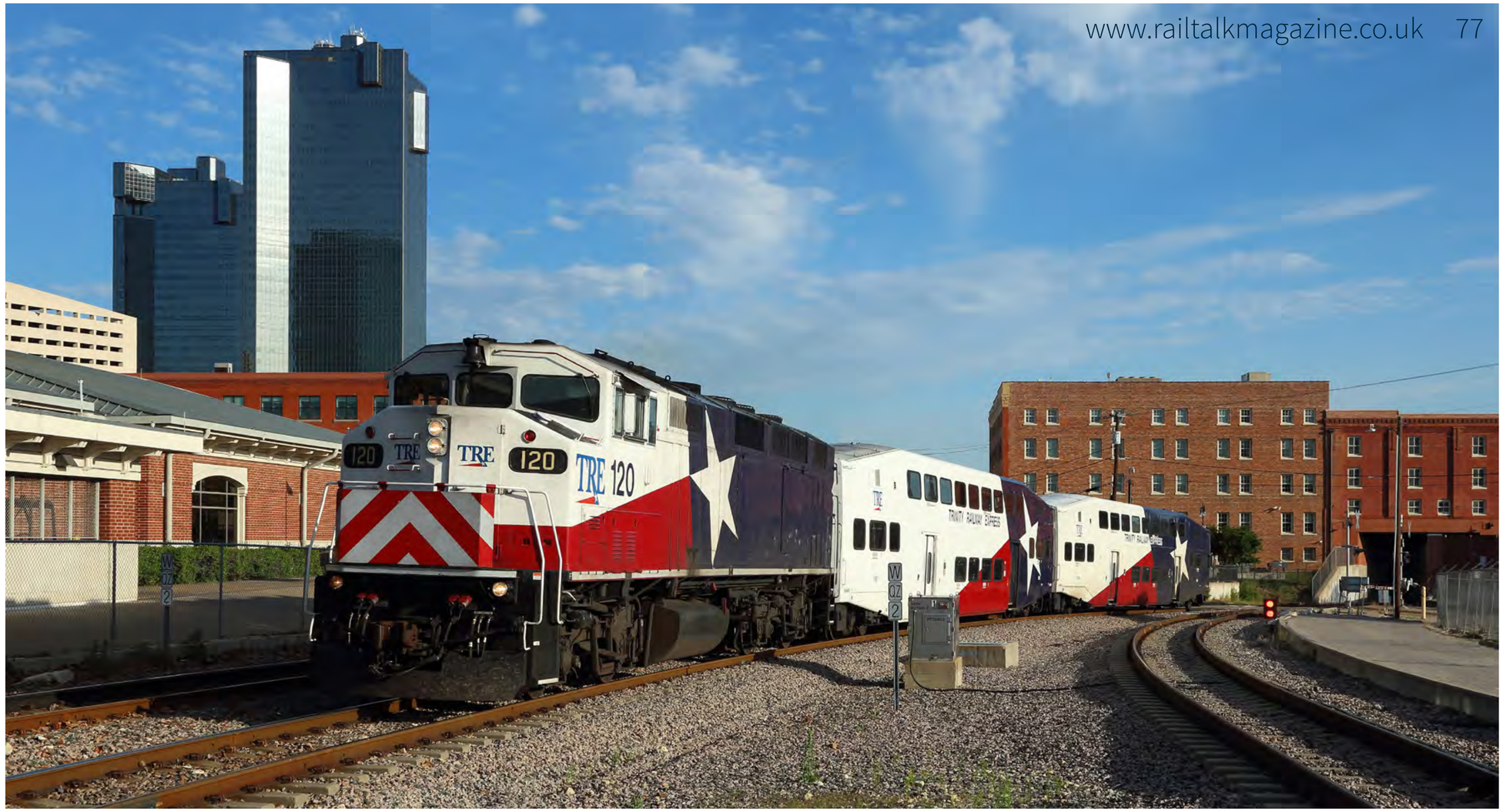
No. 60.1113 stands in the yard at Ploesti Sud with a p-way train on June 12th. *Mark Torkington*

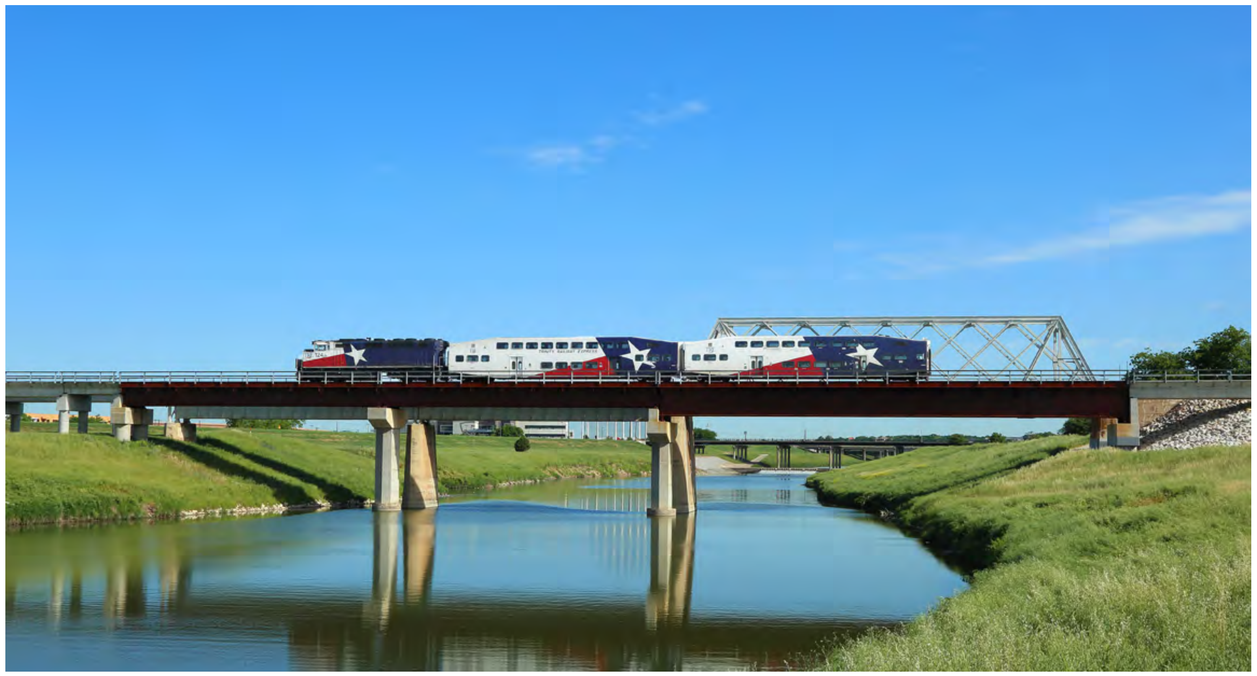
U.S.A.

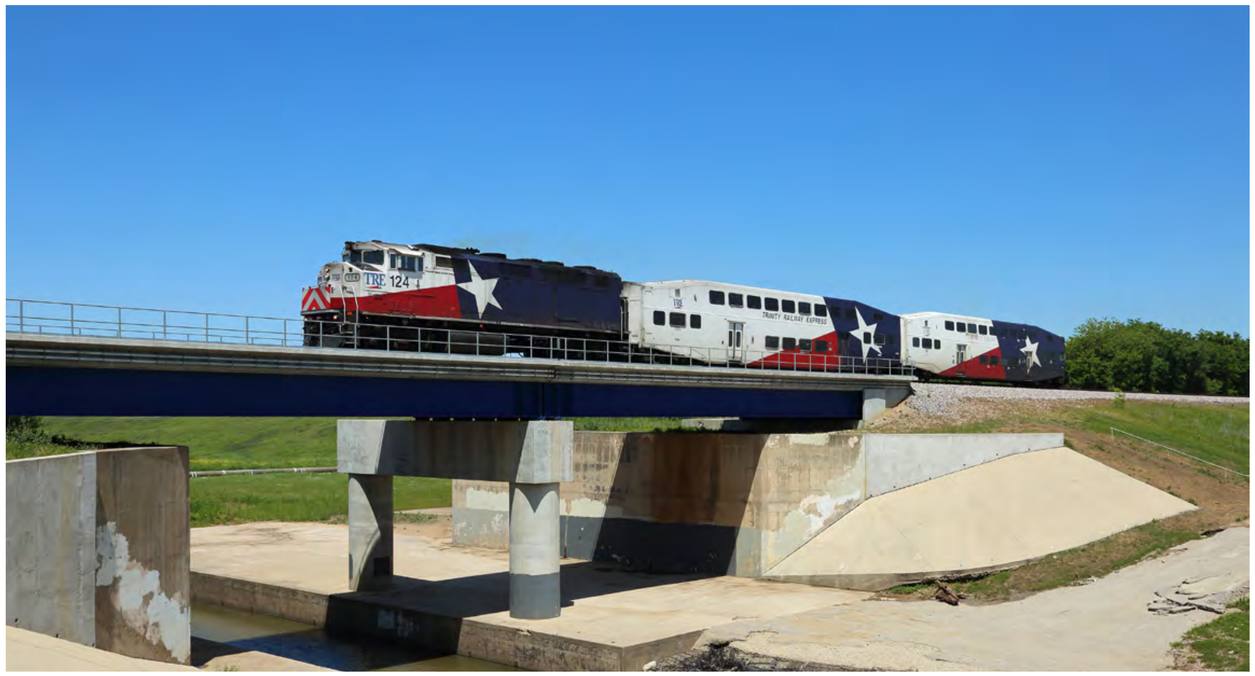
Trinity Rail Express No. 120 arrives at Fort Worth Central whilst hauling train No. TRE 2915 07:12 Dallas Union - Fort Worth T&P. *Laurence Sly*

TRE No. 124 crosses Bear Creek whilst hauling train No. TRE2935 14:12 Dallas Union - Fort Worth T&P. *Laurence Sly*

TRE No. 124 crosses the Trinity River whilst working train No. TRE2925 09:28 Dallas - Fort Worth. *Laurence Sly*





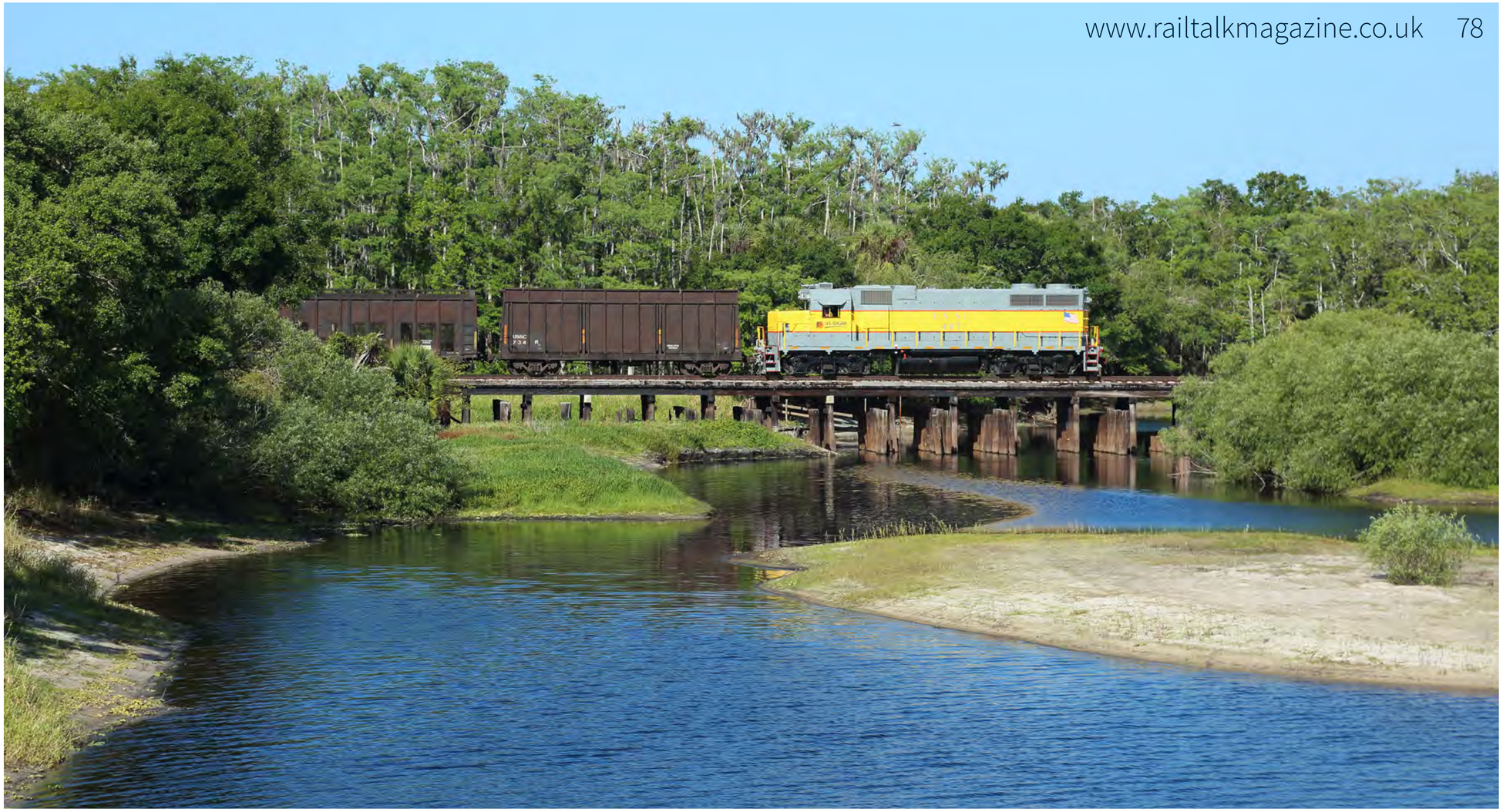


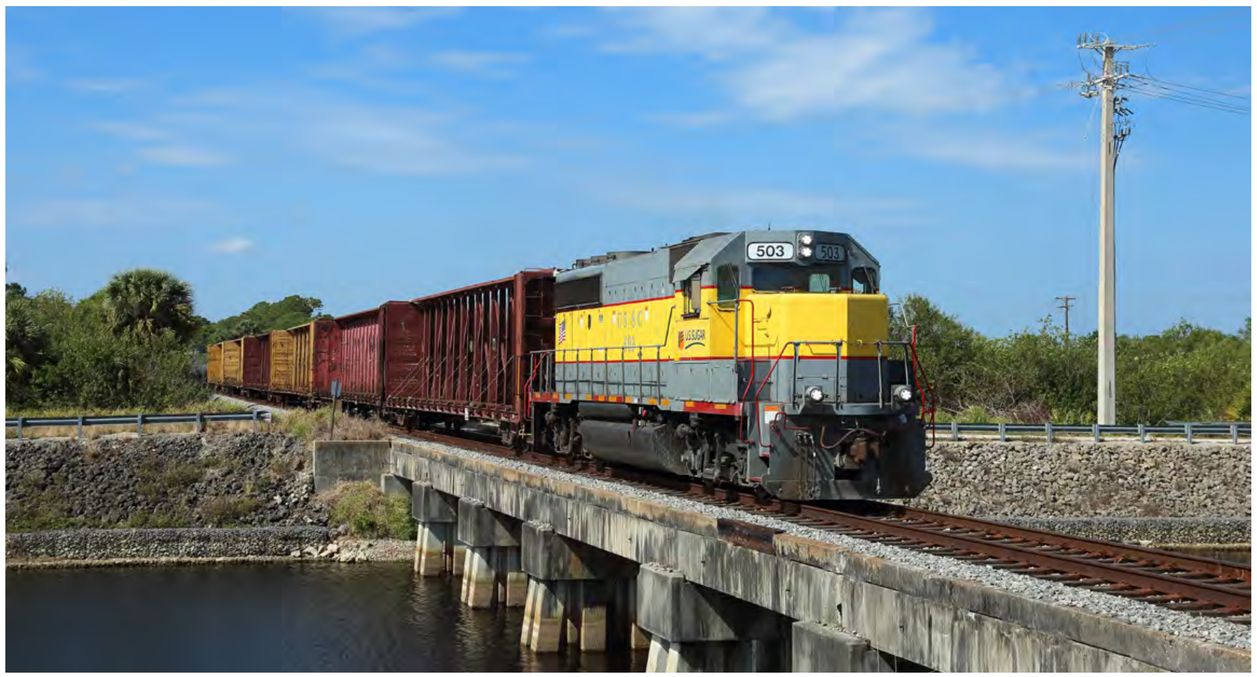
U.S.A.

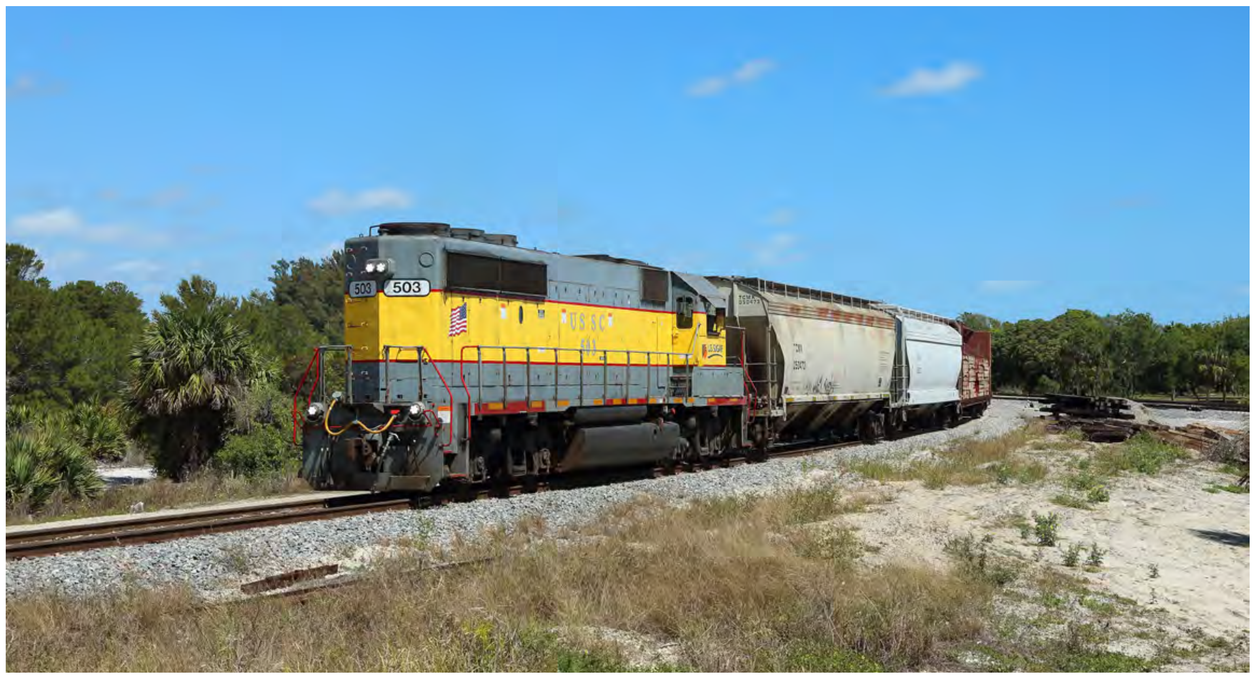
United States Sugar Corporation No. 407 passes Palmdale whilst hauling an empty sugar cane train. *Laurence Sly*

USSC No. 503 passes Savannah Road whilst returning from Fort Pierce to Clewiston. *Laurence Sly*

USSC No. 503 passes Port St Lucie whilst hauling the 'Fort Pierce Turn' from Clewiston. *Laurence Sly*





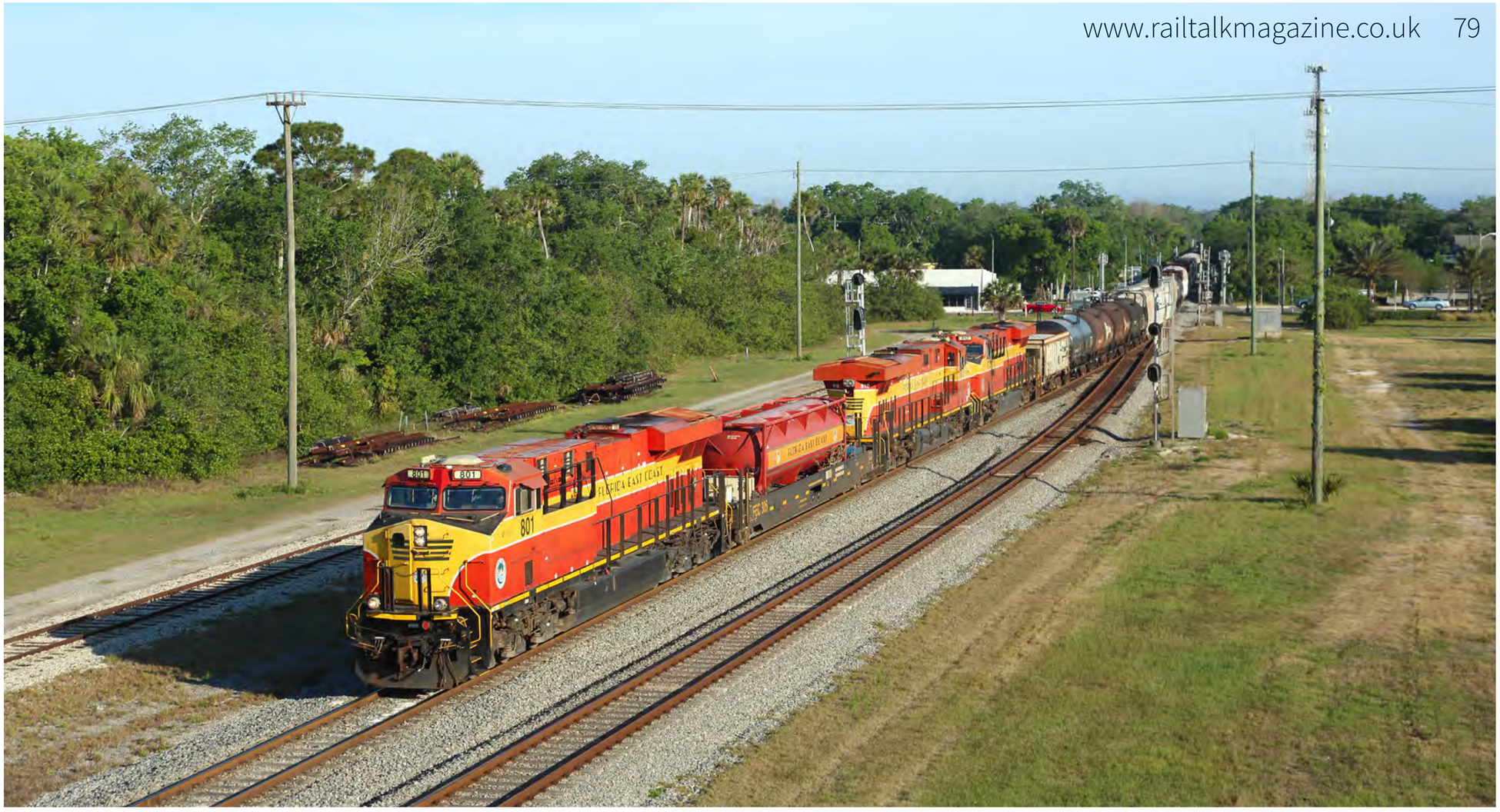


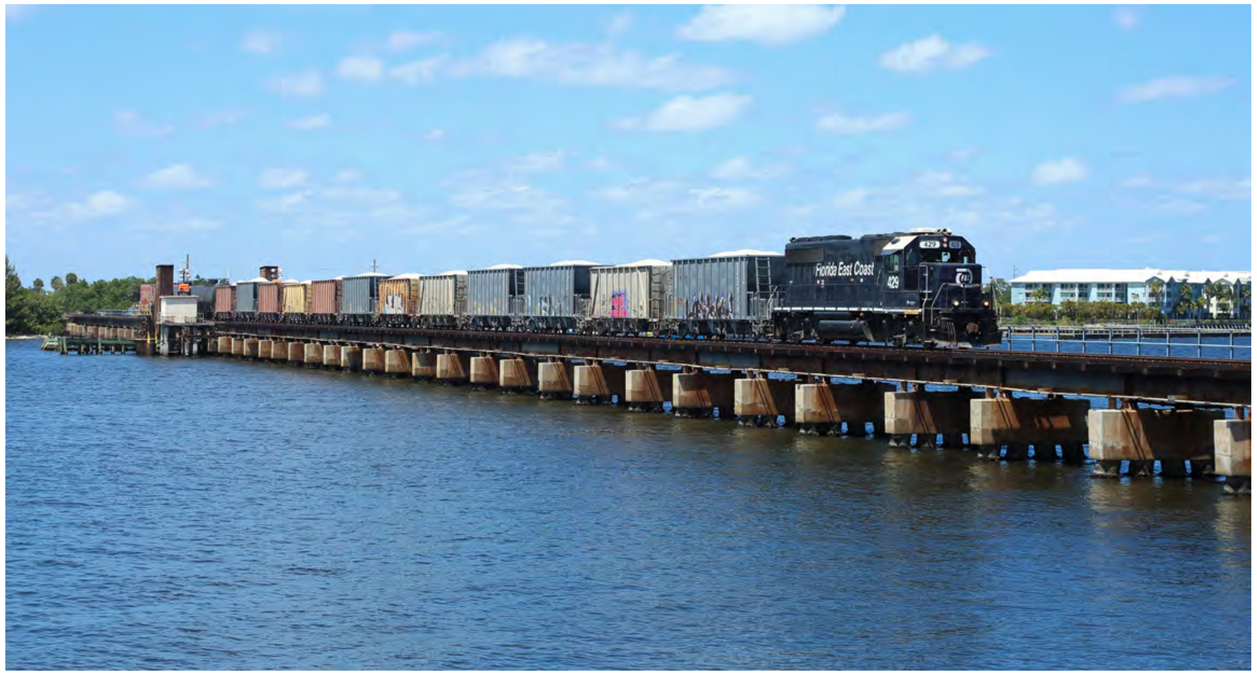
U.S.A.

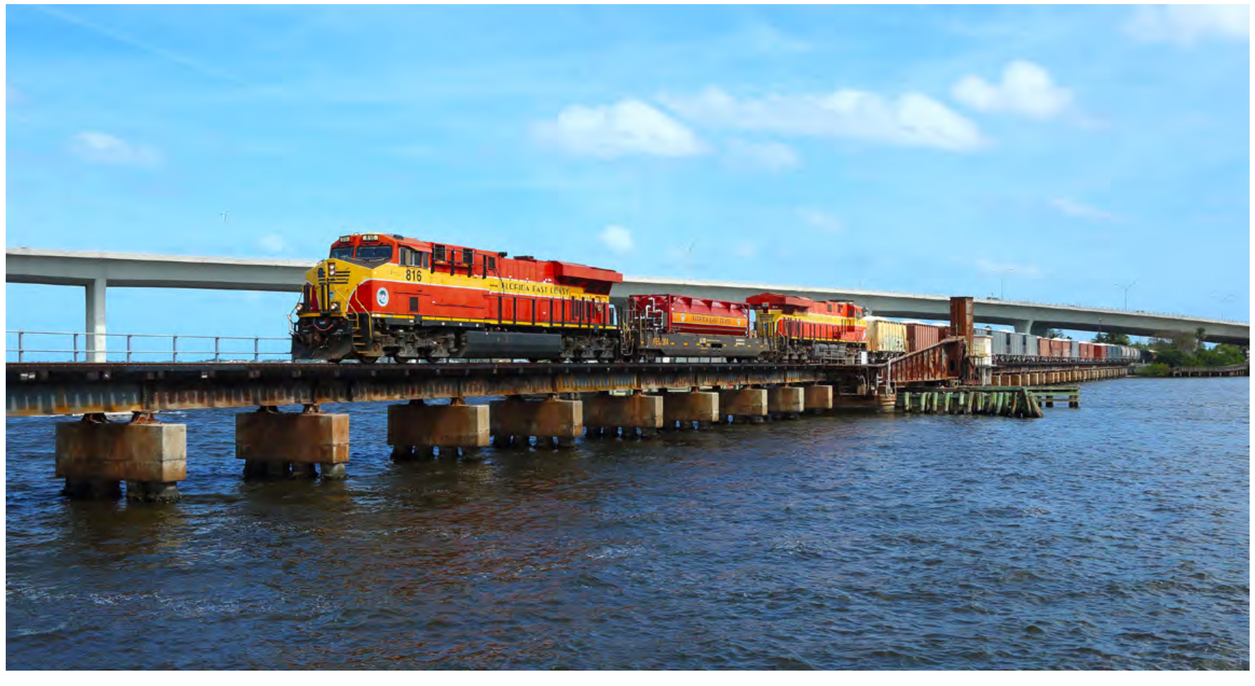
Florida East Coast Nos. 801, 810 and 812 approach New Smyrna Beach whilst hauling train No. 103 from Jacksonville to Fort Pierce. *Laurence Sly*

FEC Nos. 816 and 814 pass Stuart whilst hauling train No. 206 from Miami to Jacksonville. *Laurence Sly*

Florida East Coast No. 429 cross the St. Lucie River in Stuart whilst hauling local train No. 920 to Port Sewall. *Laurence Sly*





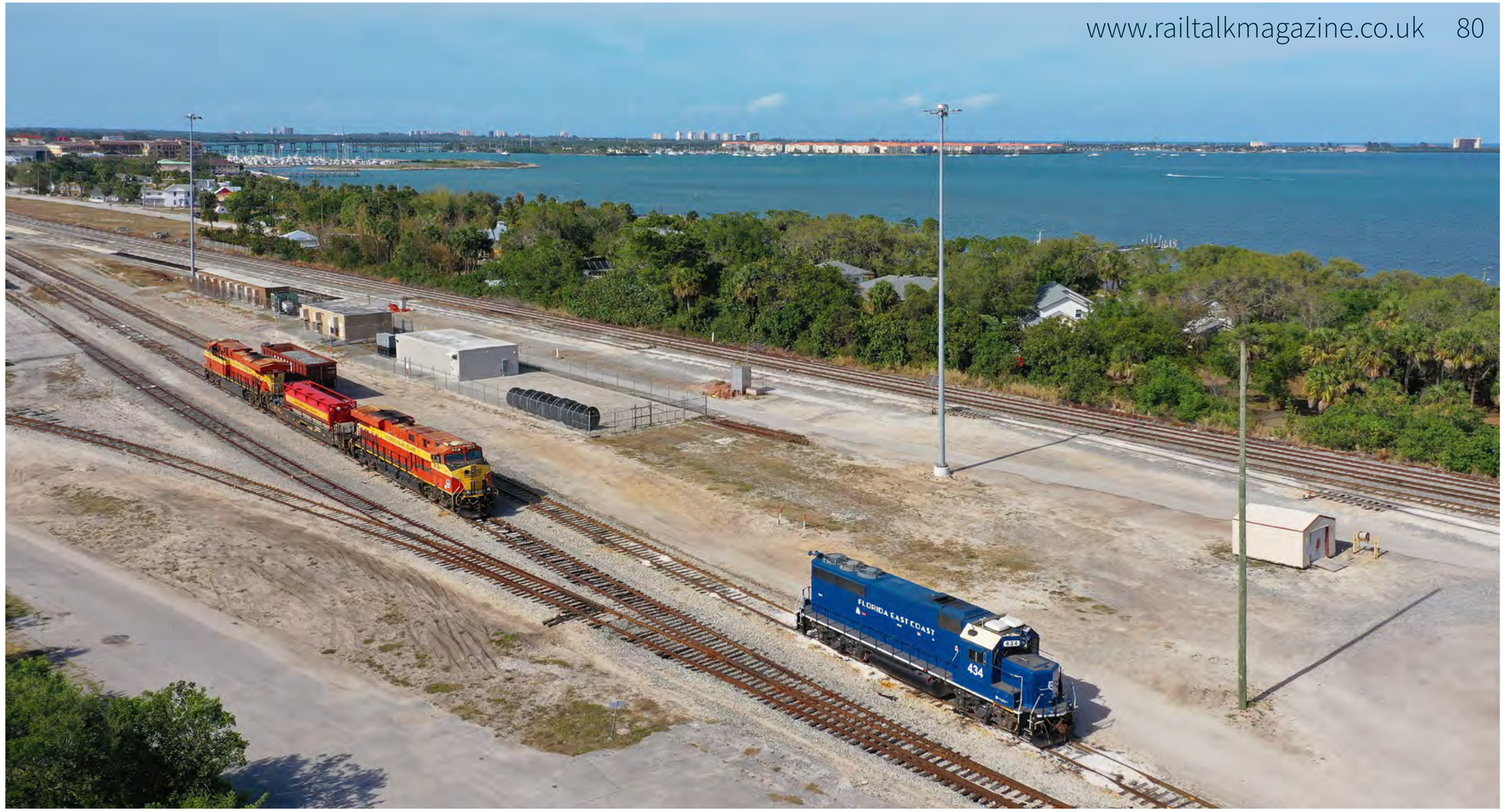


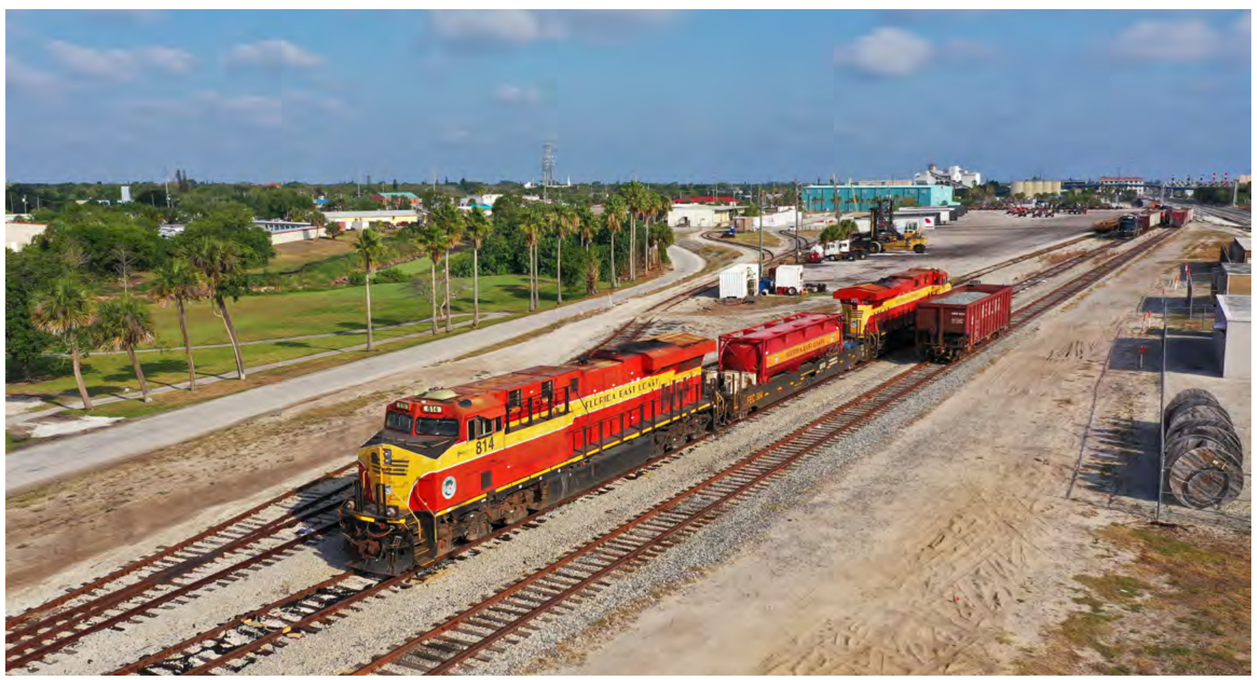
U.S.A.

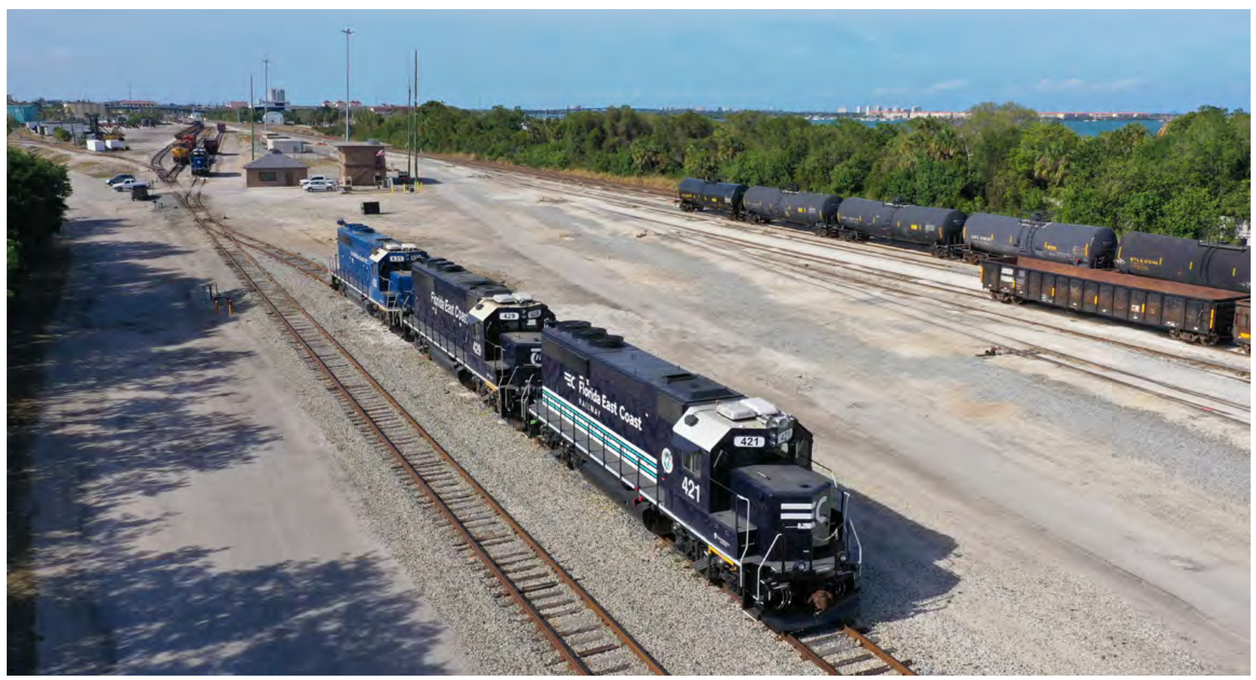
Florida East Coast Nos. 434, 819 and 813 are seen stabled in the yard at Fort Pierce.
Laurence Sly

Florida East Coast Nos. 421, 429 and 435 are seen stabled in the yard at Fort Pierce.
Laurence Sly

Florida East Coast Nos. FEC 819 and 813 are seen stabled in the yard at Fort Pierce.
Laurence Sly





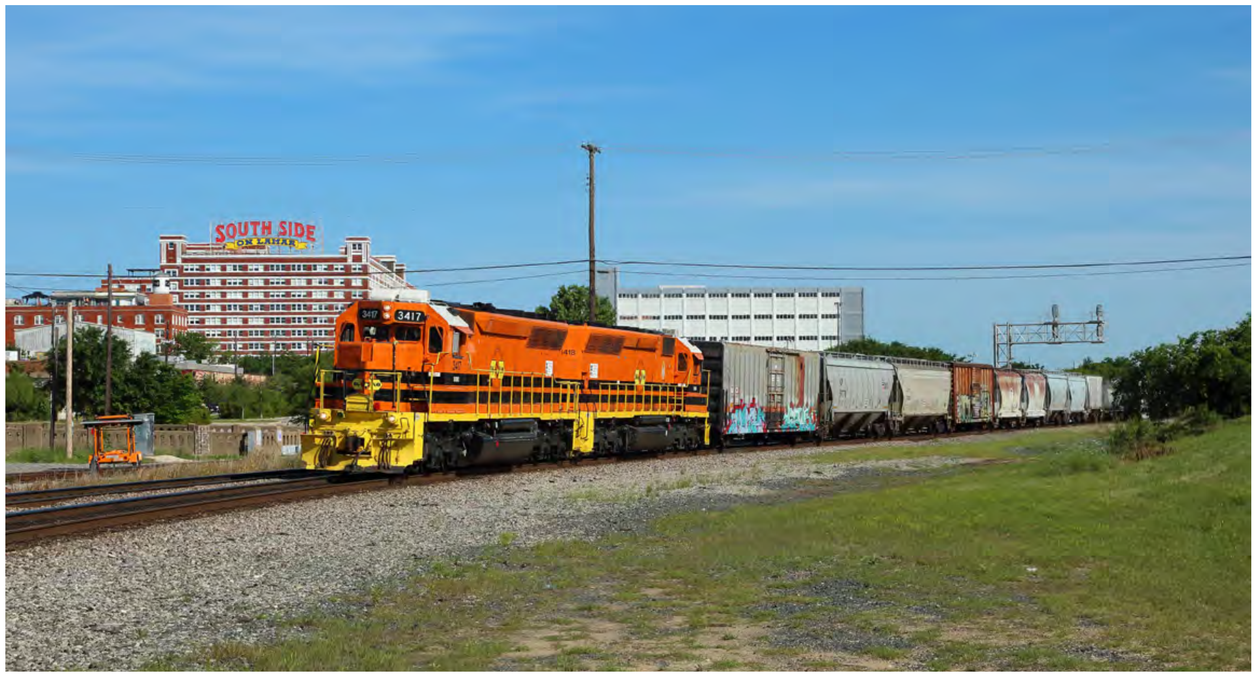


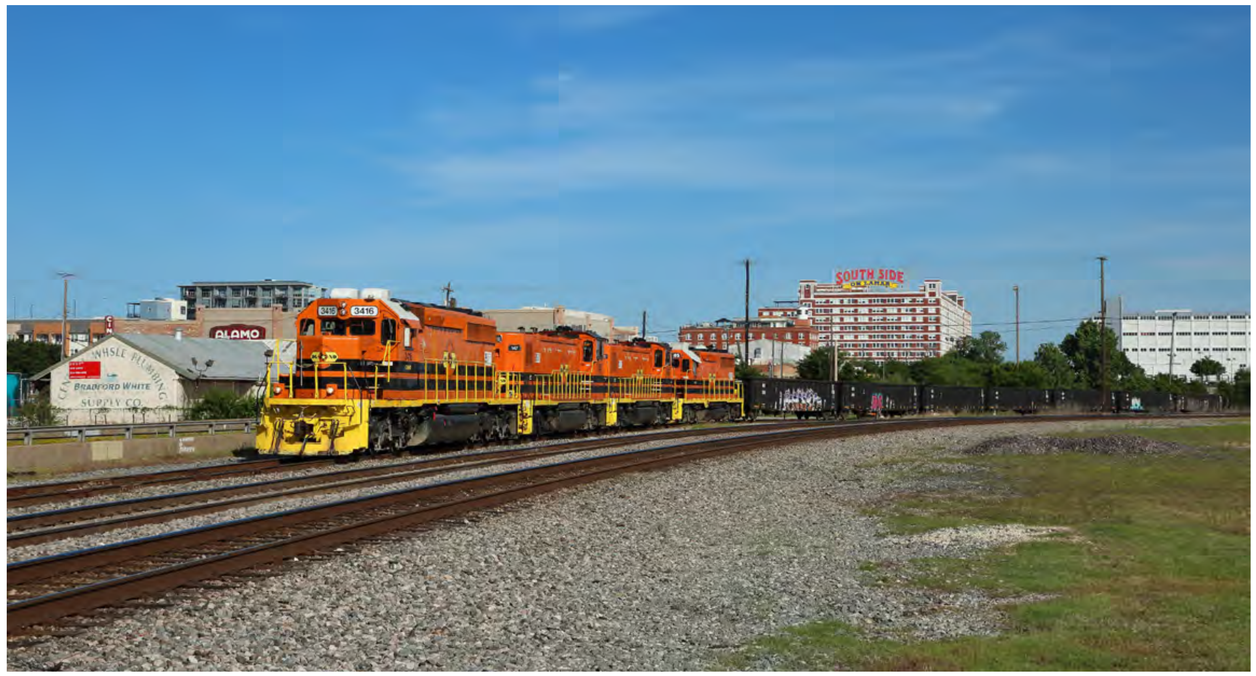
U.S.A.

Dallas Garland & Northeastern Nos. 144 and 2076 are seen stabled in Mockingbird Yard. The Dallas skyline is in the distance. *Laurence Sly*

Dallas Garland & Northeastern Nos. 3416, 146, 147 and 2505 switch cars in the small yard by Cadiz. This is the DGNO Garland Turn. *Laurence Sly*

Dallas Garland & Northeastern Nos. 3417 and 3418 approach Dallas whilst making their way back from the Union Pacific Miller Yard to the DGNO Mockingbird Yard. *Laurence Sly*



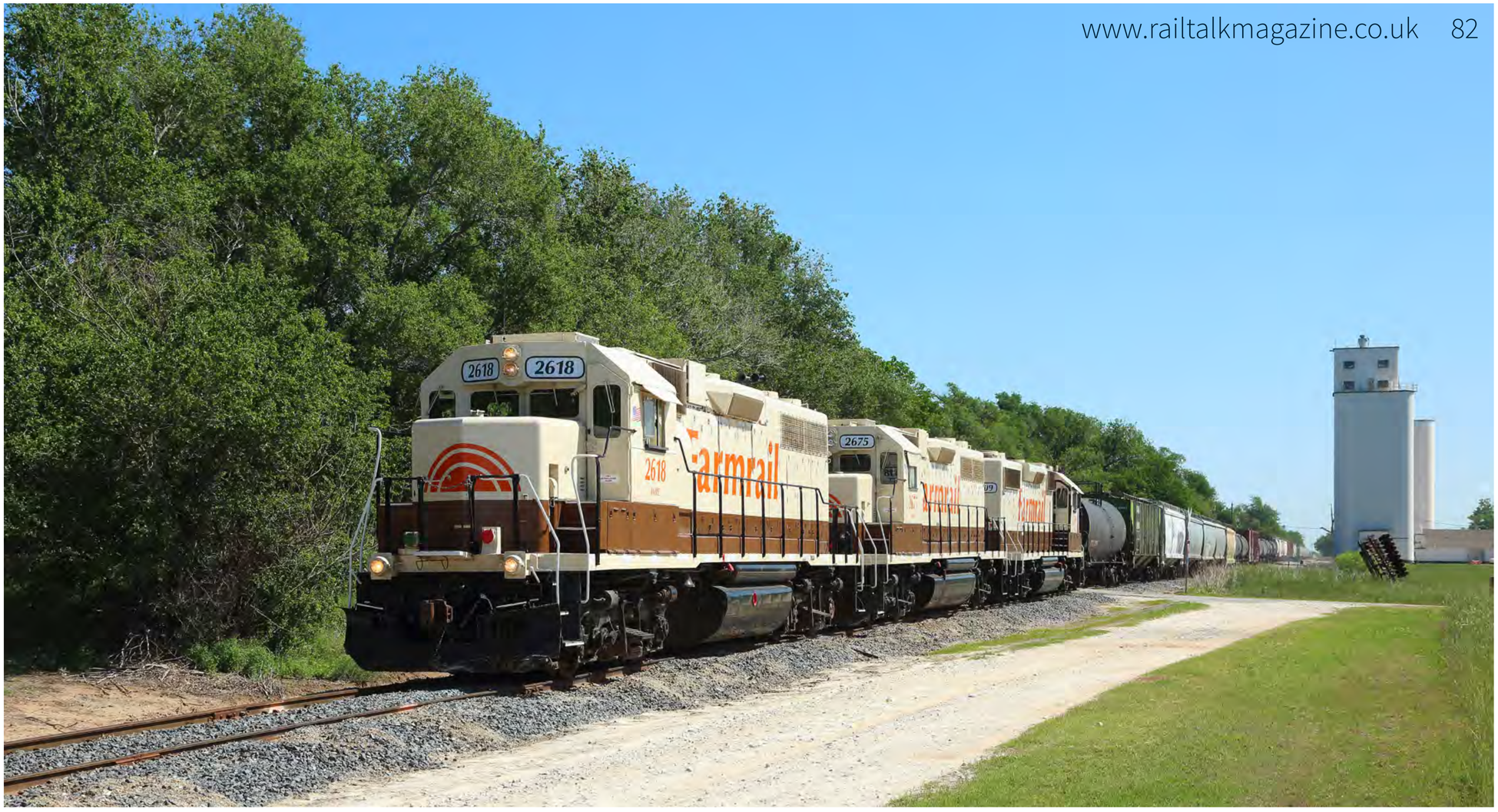


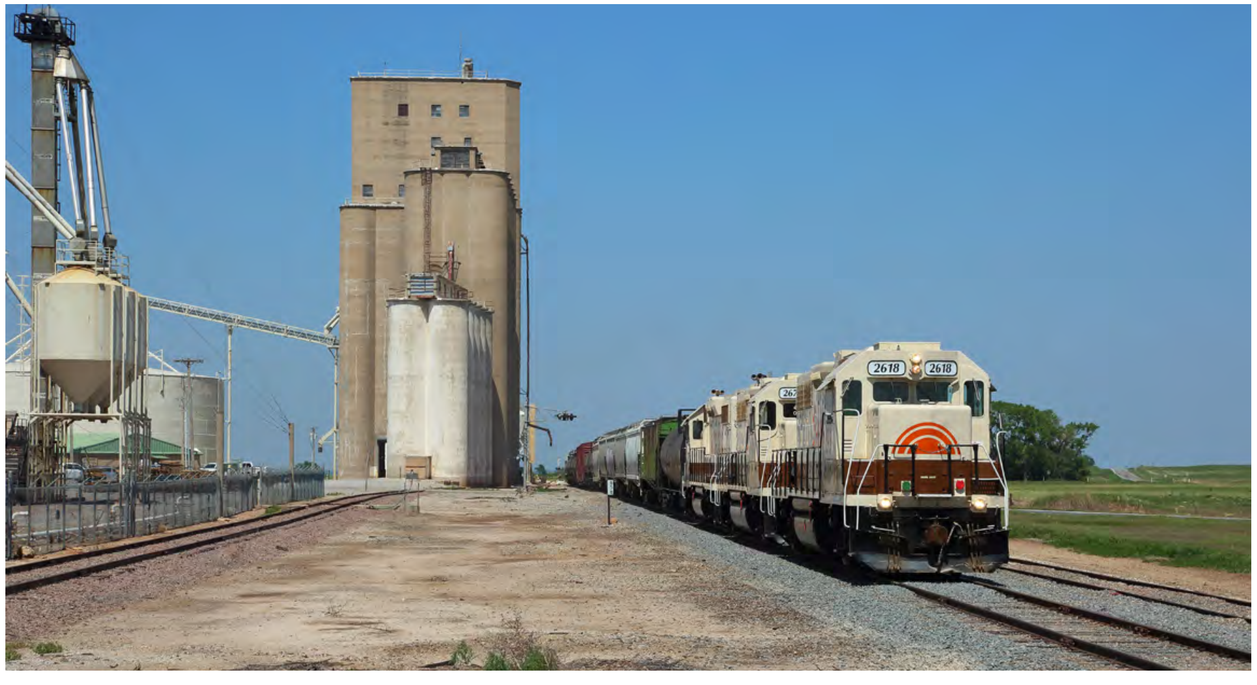
U.S.A.

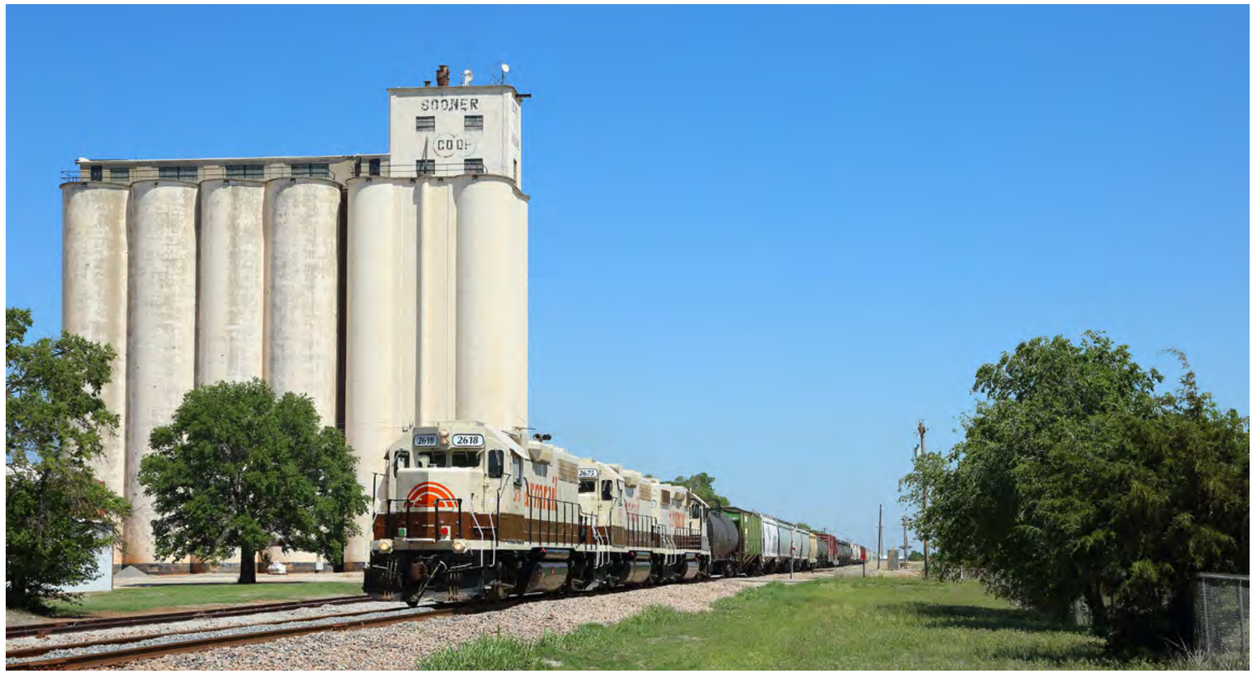
Farmrail Nos. 2618, 2675 and 2309 pass Armes whilst hauling the ‘North Train’ from Enid to Clinton. *Laurence Sly*

Farmrail Nos. 2618, 2675 and 2309 pass Okeene whilst making their way from Enid to Clinton. *Laurence Sly*

Farmrail Nos. 2618, 2675 and 2309 pass Thomas whilst hauling the ‘North Train’ from Enid to Clinton. *Laurence Sly*





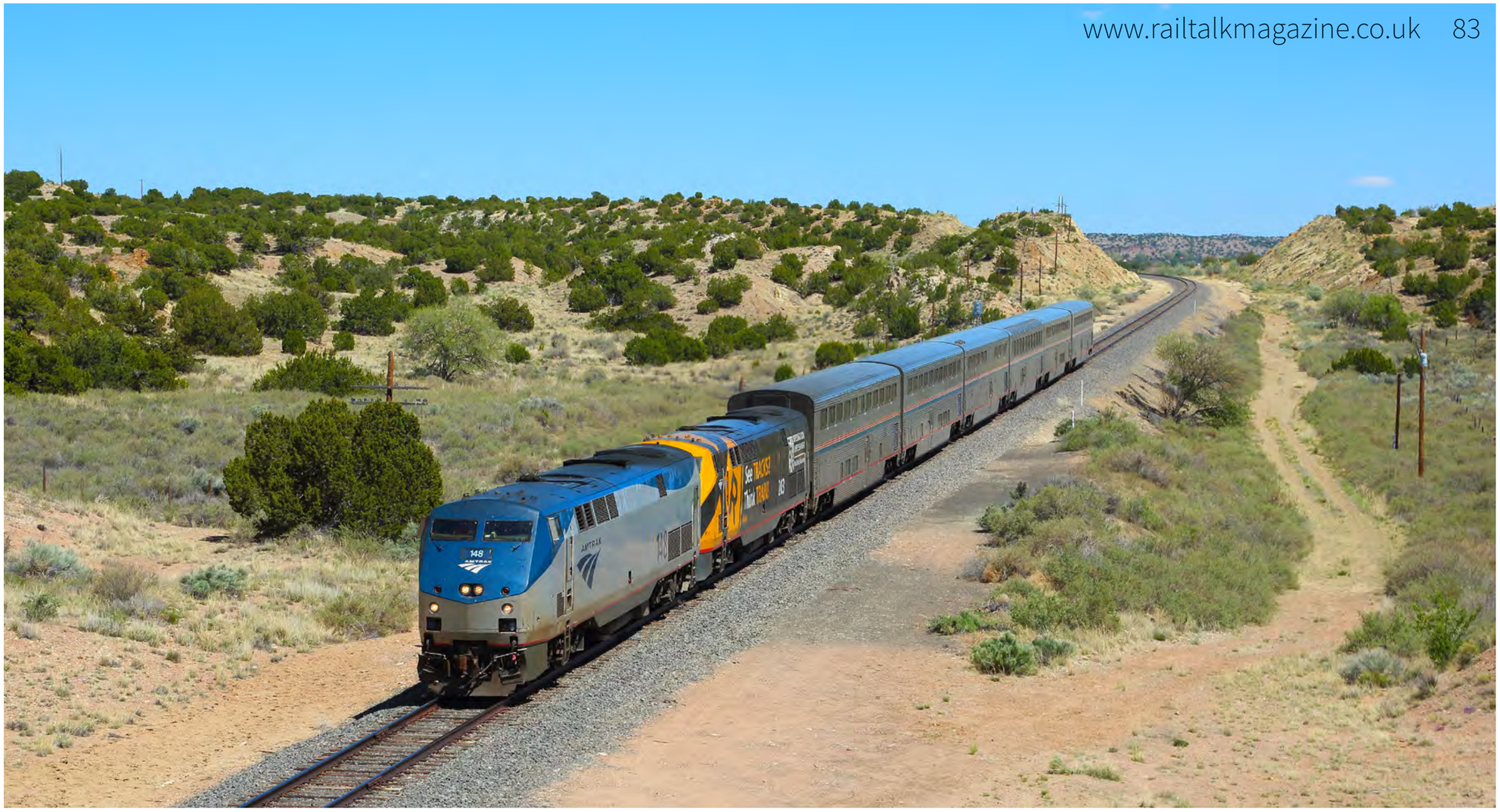


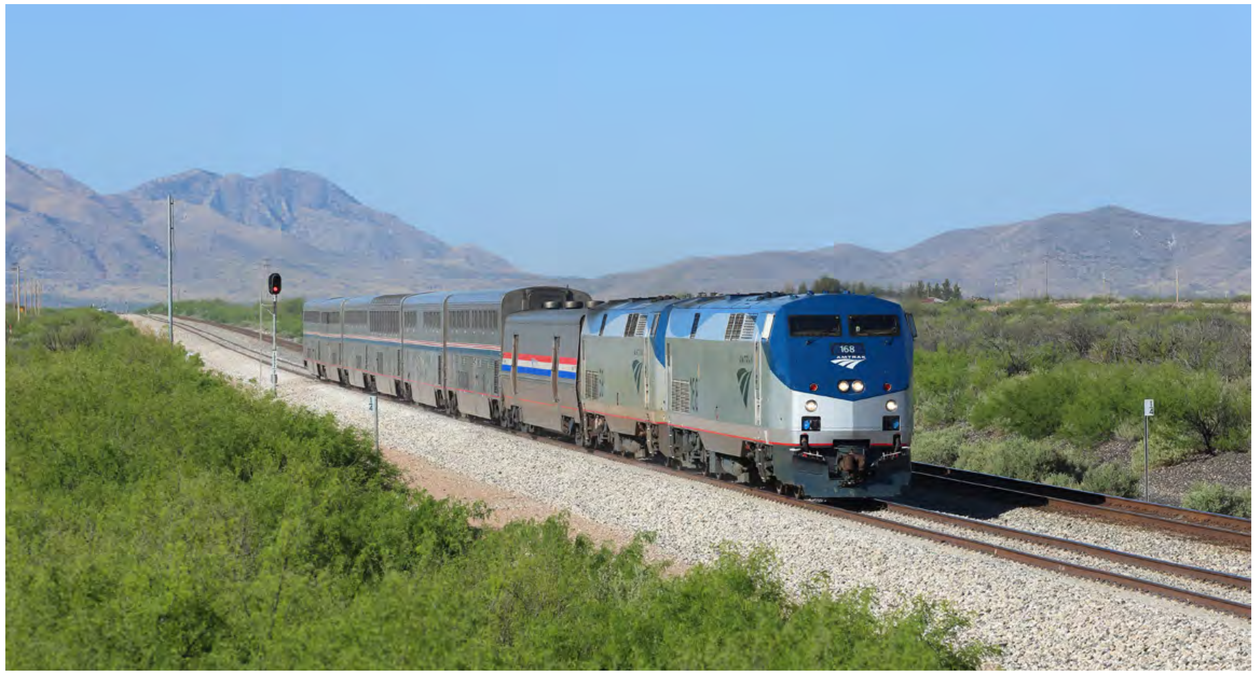
U.S.A.

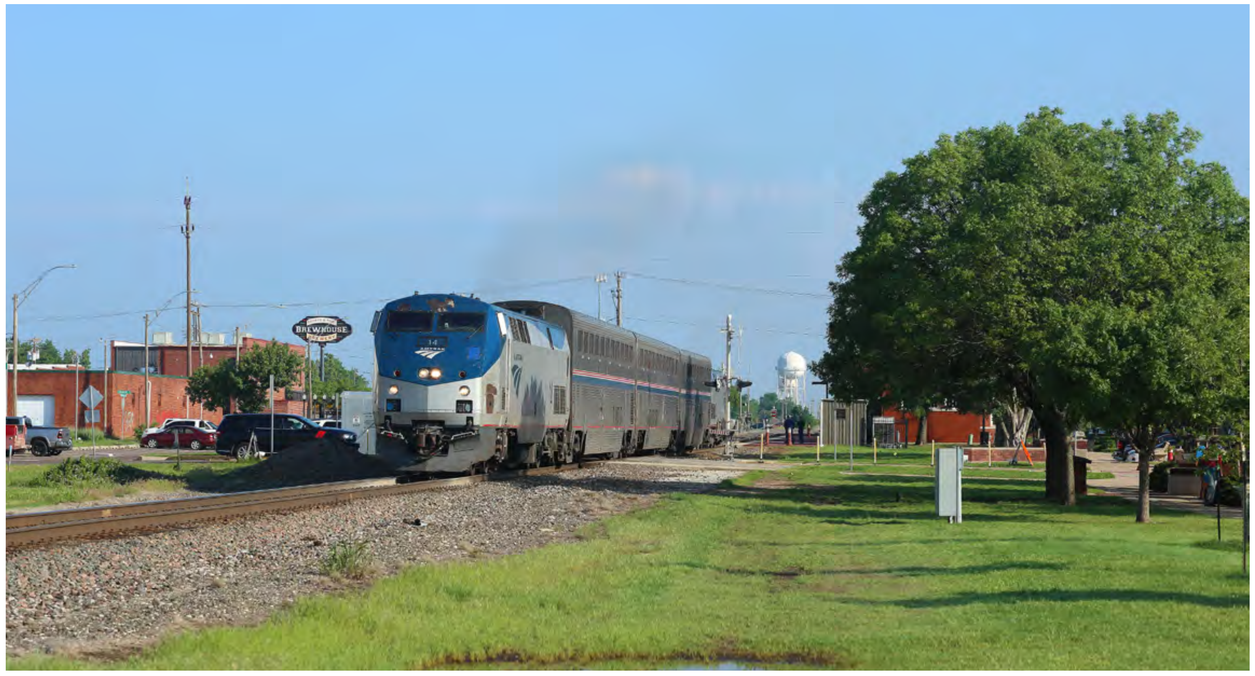
Amtrak Nos. 148 and 203 pass Los Cerrilos whilst hauling the Southwest Chief from Chicago to Los Angeles. *Laurence Sly*

Amtrak Nos. 14 and 30 depart Norman whilst hauling the 08:25 Oklahoma City - Fort Worth. *Laurence Sly*

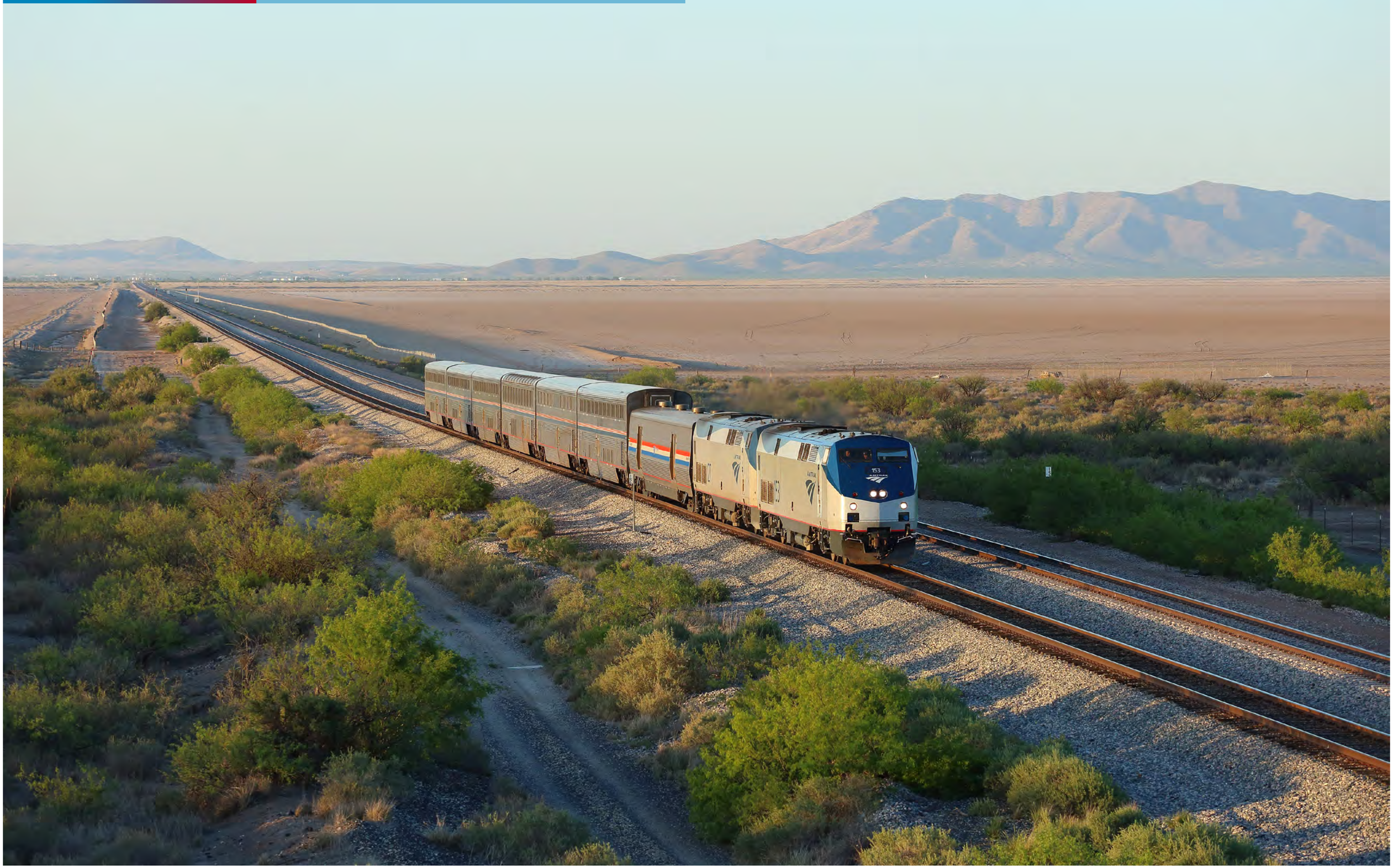
Amtrak Nos. 168 and 59 approach Cochise whilst hauling the Sunset Limited from Los Angeles to New Orleans. *Laurence Sly*







Amtrak Nos. 153 and 127 approach Cochise whilst hauling train No. 2, the Sunset Limited, from New Orleans to Los Angeles.
Laurence Sly

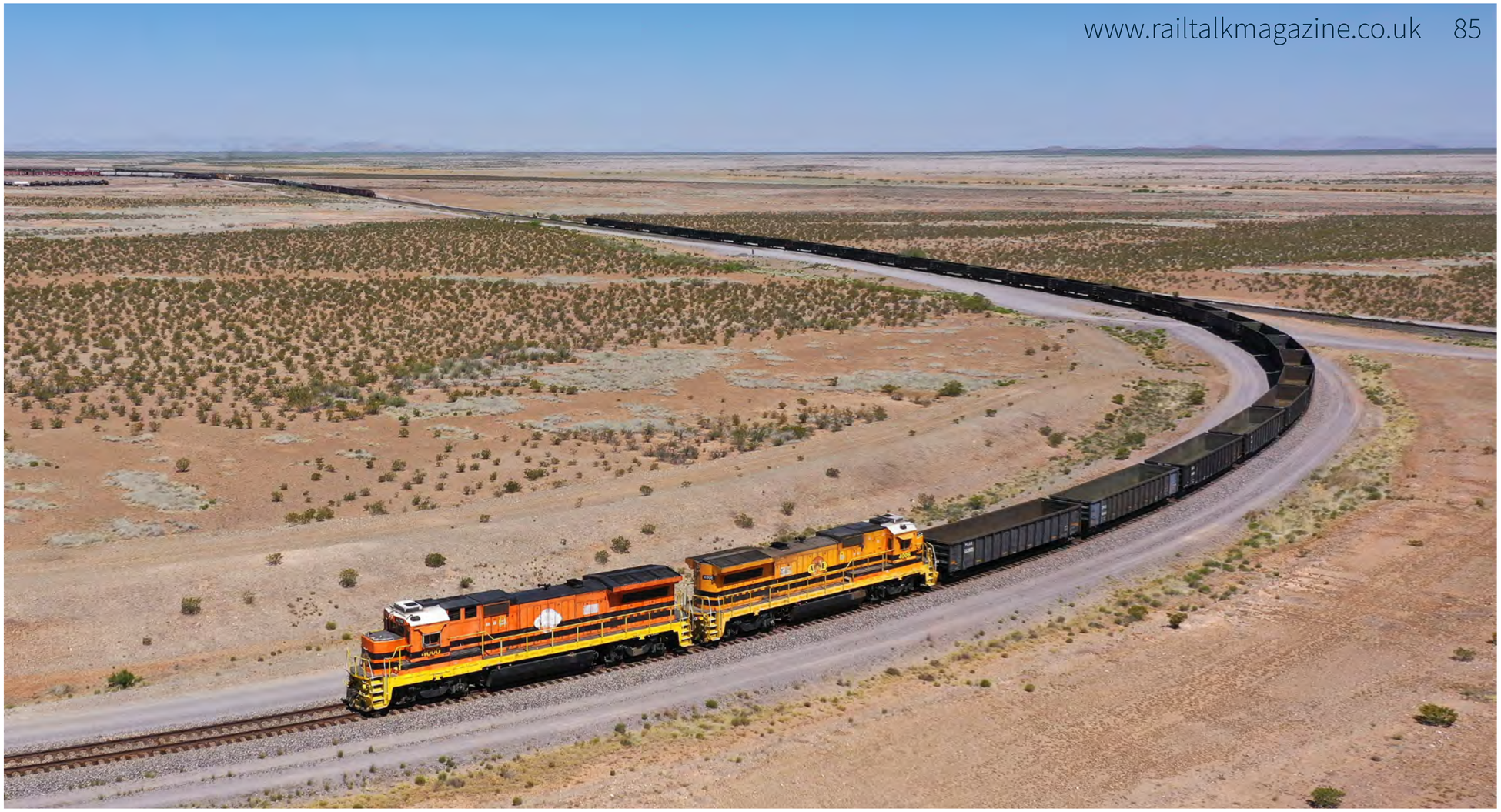


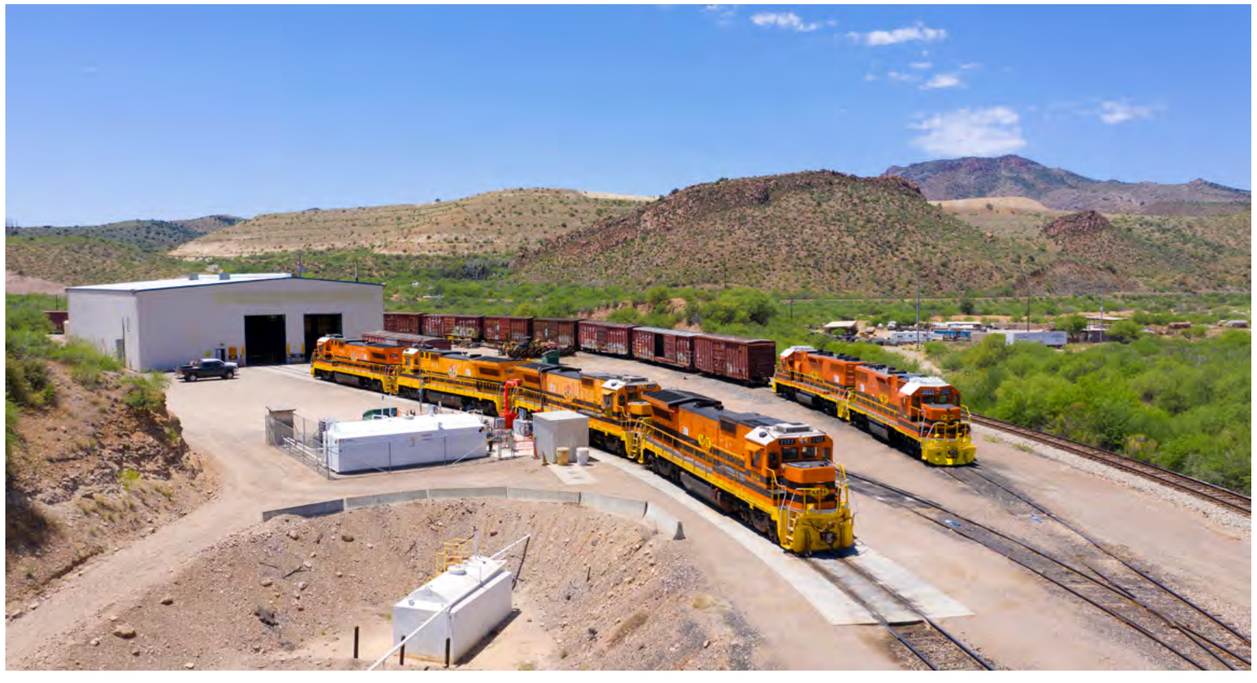
U.S.A.

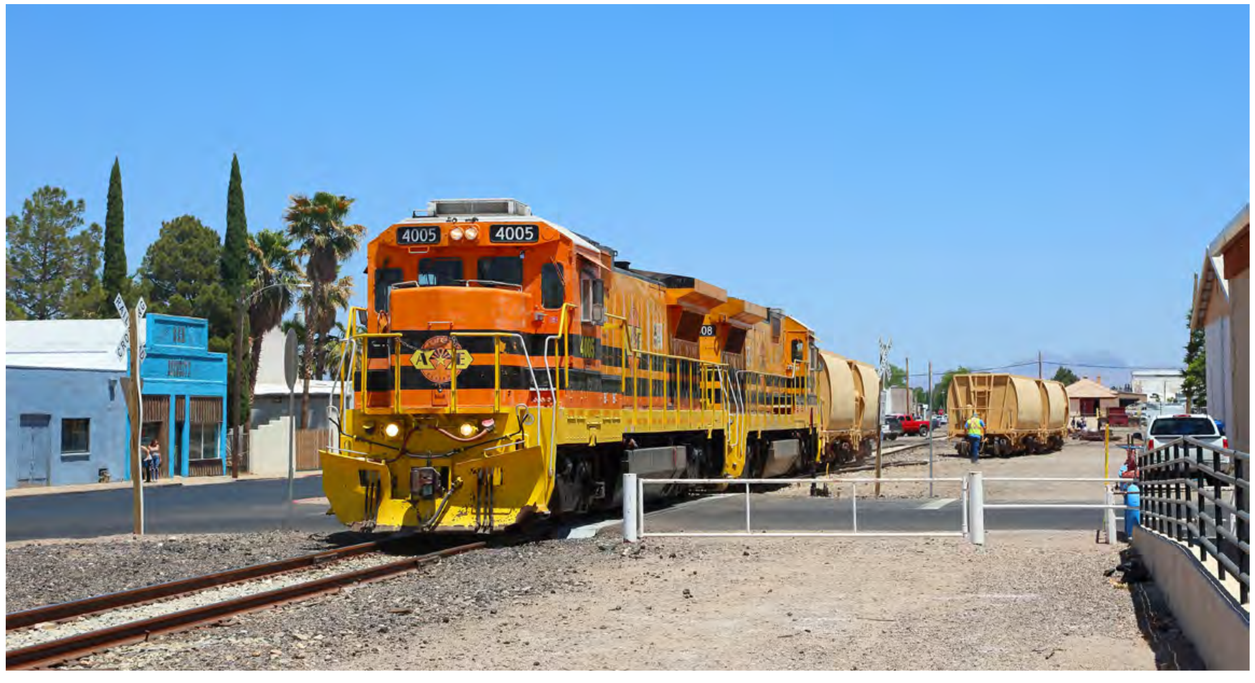
Arizona Eastern Railroad Nos. 4000 and 4006 are seen shunting wagons at Lordsburg. *Laurence Sly*

Arizona Eastern Railroad Nos. 4005 and 4008 shunt ballast wagons at Safford. *Laurence Sly*

Several Arizona Eastern Railroad locomotives are seen outside the depot in Globe. *Laurence Sly*

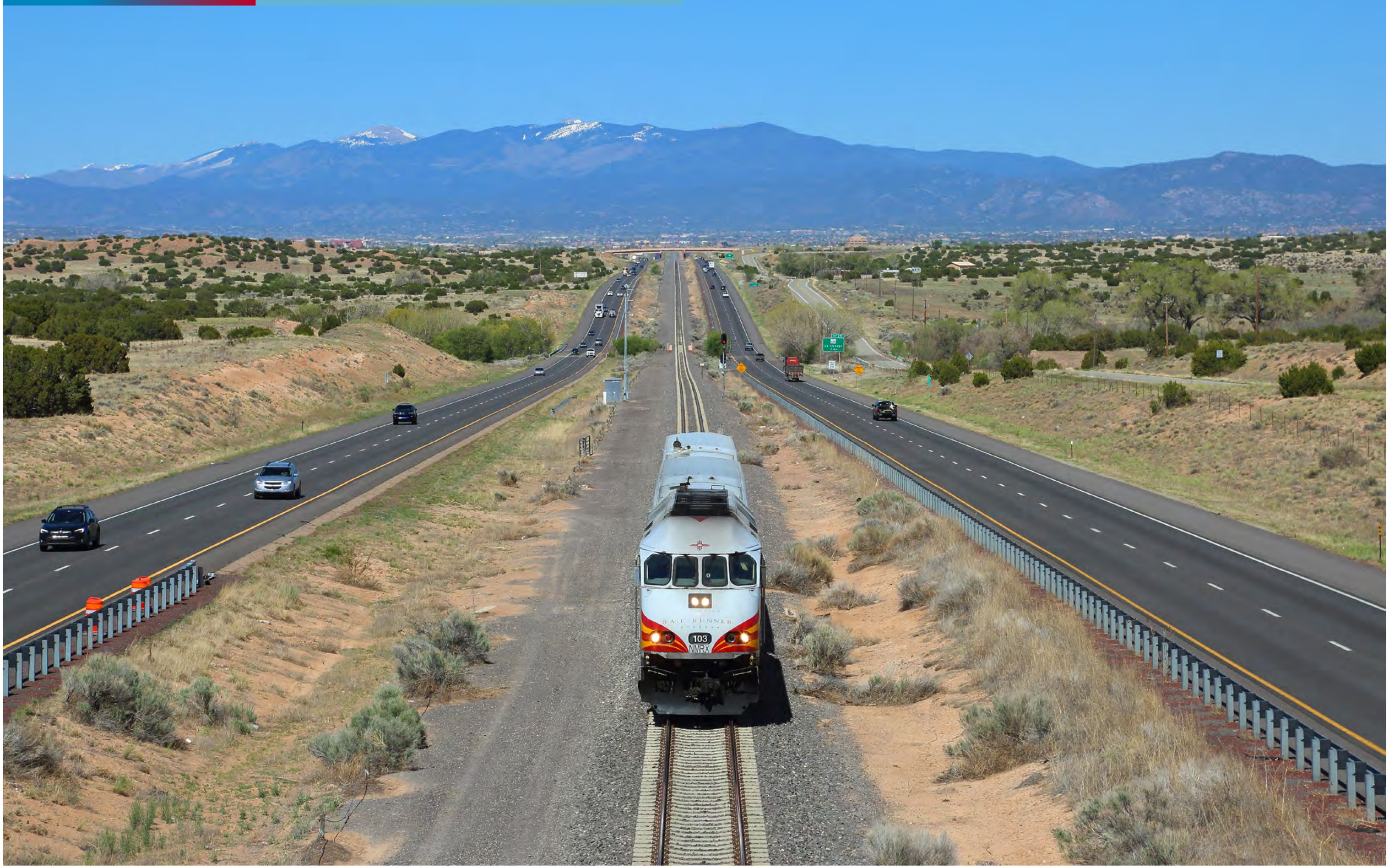






Arizona Eastern Railroad Nos. 4013, 4012, 4009 and 4007 depart Lordsburg with train No. 109 to Globe. *Laurence Sly*

Rail Runner No. 103 passes La Cienega whilst hauling train No. 513 14:43 Santa Fe - Belen. *Laurence Sly*



Rail Runner No. 105 passes La Cienega whilst hauling train No. 101 17:04 Santa Fe - Albuquerque. *Laurence Sly*

Morocco

Alstom boosts investment in the Moroccan rail industry

Alstom is driving the expansion of the rail industry in Morocco by investing 160 million dirhams to construct a second rail plant, which will make driving cabs for regional and underground railway trains.

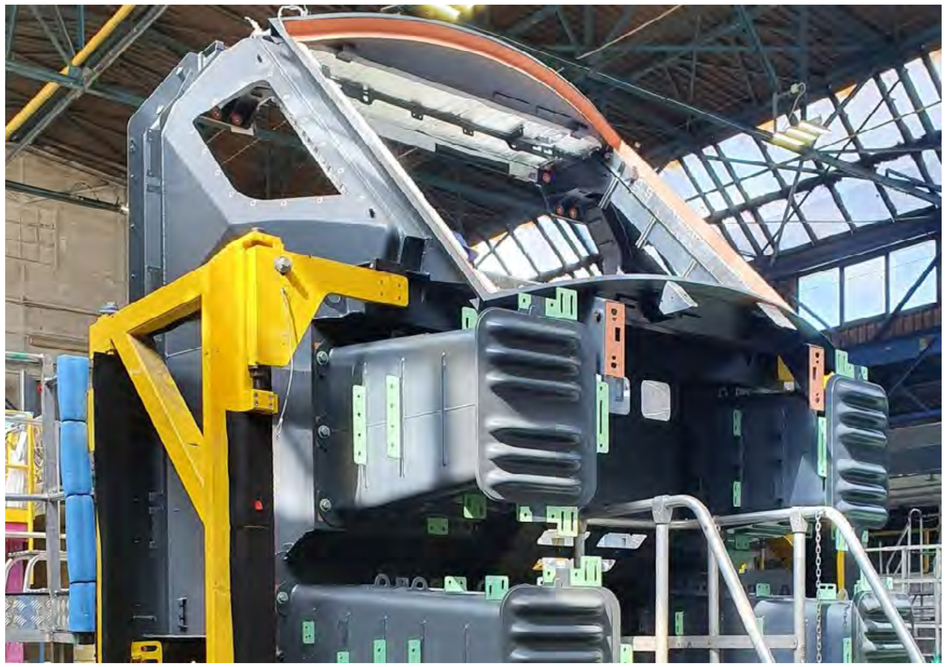
This latest investment will create 200 direct jobs between now and 2025.

In 2020, Alstom Morocco announced the expansion of its plant in Fez, and in 2021, the construction of a second production line. The Fez site produces electrical wiring and Mitrac transformers and employs 850 people, of whom 56% are women. This second plant will make driving cabs and is fully in keeping with the Group's commitment to develop the Moroccan rail ecosystem and build local rail expertise.

"We are extremely proud to be building a new industrial site. This is a prime example of our strategy to design and develop a local ecosystem. I would like to thank all the teams for the remarkable job they have done over the last few months to make these projects a reality," says Mehdi Sahel, managing director of Alstom Morocco. Alstom Maroc has invested 320 million dirhams since 2019 to grow its industrial operations, resulting in the delivery of 25 international projects; a total of 1,200 jobs will be created in the rail sector by 2025.

"We are once again demonstrating our commitment to building a rail industrial base in Morocco; the Alstom Group has now decided to take its investments in Morocco a step further by creating a second site in Fez, to manufacture cabs for regional and underground railway trains," says Mama Sougoufara, Managing Director of Alstom MENAT (Middle East, Northern Africa and Turkey). He adds: "Thanks to the transfer of unique technology from our international sites we will be able to create a Moroccan rail centre with world-class expertise. We are an established local player and we have confidence in the future of Morocco."

With some 950 employees in Morocco, Alstom has been responsible for several major projects in the country, including the installation of signalling and the delivery of 190 Citadis X02 trams to the cities of Rabat (66 trams) and Casablanca (124 trams), 12 Avelia Euroduplex trains for the high-speed rail link between Tangier and Casablanca, and 77 Prima locomotives providing optimised solutions for freight, passenger and combined transport services.



U.K.

Alstom supports contribution of near £1bn to UK and Ireland GDP, economic impact report finds

Alstom, global leader in smart and sustainable mobility, has revealed the scale of its economic impact on the UK and Ireland. Publication of its 2023 Economic Impact Report follows last month's 200th anniversary of the world's first purpose-built locomotive works in Newcastle, Robert Stephenson and Company, to which Alstom can trace its roots. Founded in UK in 1823, it was the first company in the world created specifically to build railway engines. Since 1989, the company belongs to Alstom. According to the economic impact report by EY, Alstom has supported a contribution of nearly £1bn to UK and Ireland GDP in the financial year 2022/23. The report also reveals that the train manufacturer works with 1,144 UK & Ireland suppliers and supports over 17,000 jobs. Alstom represents a central role in the UK's rail industry, delivering some of the biggest rail programmes in the country from its headquarters in Derby and its additional 36 locations around the UK and Ireland.

Alstom has been part of the fabric of UK rail for two centuries and this month celebrated the bicentenary of the Newcastle factory of Robert Stephenson & Co, which later became part of Alstom. As the UK continues to build back from the last few years, Alstom is once again at the forefront of the country's next rail revolution. Manufacturers of AVENTRA – the UK's largest train production programme for a generation – Alstom continues to support governments, train operators, rolling stock owners, infrastructure owners and maintainers to increase passenger numbers, raise revenue and improve railway reliability – while meeting decarbonisation targets.

Nick Crossfield, Managing Director of Alstom UK & Ireland commented, "This report highlights the value that Alstom provides to the UK and Irish economies. With a heritage of 200 years in the UK, we continue to support thousands of jobs across the country, with our 37 sites the home of some of the UK's biggest and best-known train manufacturing and refurbishment projects, including the Elizabeth line, HS2 and the iconic West Coast Pendolino fleet.

"And looking to the future – within this financial period we are due to finish delivering the AVENTRA orderbook, totalling over 2,600 cars, continue to deliver the two largest major signalling frameworks for Network Rail in Control Period 6, continue to support a large portion of the UK's installed train fleet and prepare for the manufacture of 54 HS2 trains which will roll out of our Derby factory. A true demonstration of Alstom's continued economic contribution to the UK and Ireland."

Mexico

Alstom delivers the first cars to the Tren Maya railway project

Alstom, global leader in smart and sustainable mobility, has completed the delivery of the first train of the Tren Maya project to the Federal Government and Fondo Nacional de Fomento al Turismo (FONATUR). The cars are a depiction of Mexico's art culture, reflecting the varied colours and textures of the region's art. These first 4 cars will form the first of the 31 Xiinbal type of trains that Alstom will deliver to the project in different configurations, featuring large panoramic windows to allow passengers to enjoy scenic views.

The first cars departed Alstom's manufacturing facility in Ciudad Sahagún, Hidalgo, on July 3rd. The four cars were wrapped and transported on special platforms, travelling 1,943 kilometres over five days until they reached the workshop and depot in Cancún. A team of experts has already started the meticulous unloading of the cars, after which they will assemble the cars to form the first train. Once assembled, the trains will undergo exhaustive testing to validate the functionality and safety of the different train components, prior to integration and testing with the rail infrastructure.

The Tren Maya project stands out not only for the latest mobility technologies included in the project but also for its representation of the history and culture of Mexico through the three different train designs. Each car is equipped with air conditioning, ergonomic and reclining seats, video surveillance systems and passenger information screens, with dedicated spaces for luggage storage. Since the floor is flat throughout, passengers with reduced mobility will have full liberty of movement. With these design features, combined with an ability to operate at a maximum speed of 160 km/h, the trains will deliver an efficient means of transport and excellent passenger experience.

These first cars also feature advanced digital technologies such as an automatic train control system (ERTMS) to provide optimal efficiency and high levels of safety and security, Further, Alstom will deploy HealthHub and TrainScanner, its digital solutions for condition-based and predictive maintenance, enabling continuous health and condition monitoring of different train components, signalling and infrastructure to guarantee the maximum reliability and availability of the trains, while optimising the lifecycle costs of each train.

"This first delivery of the rolling jaguar, or Xiinbal train, represents our commitment to contribute to the development of Mexico and our pride in delivering a public benefit with the latest smart and sustainable technologies. This first train, and the 41 other trains we will deliver, would not have been possible without the hard work and dedication by the different teams supporting this project. We sincerely thank everyone for helping deliver this first train made in Mexico, for Mexico," commented Maite Ramos, General Director of Alstom Mexico.
Alstom is expected to complete the full deliver of all 42 X'trapolis trains (219 cars) in the last quarter of 2024.

The Alstom-led consortium signed the contract for the Tren Maya project in June 2021. For Alstom, the construction of the Tren Maya project means an unprecedented opportunity for the industrial and economic development of Mexico, thanks to the generation of more than 7,000 direct and indirect jobs in the local and national railway sector, as well as the contribution to the local economy of 15 different states of Mexico.

Today, Alstom employs more than 1,700 employees in 15 sites across Mexico. Last year, Alstom celebrated 70 years in Mexico, highlighting the company's contribution to the socioeconomic development of the country, and its unrivalled experience in supporting the development of Mexico's mobility needs, both public transit and freight, through projects such as the construction of the country's first metro line in 1968 – Line 1 in Mexico City – to maintenance projects for the main national freight operators. Since its establishment in Mexico, Alstom has been committed to protecting employees, customers, and society, while preserving the environment, and has therefore developed a comprehensive and proactive sustainability and CSR policy, supporting 17 local community-related projects to date. In 2023, Alstom was certified Top Employer in Mexico for the third year in a row by the Top Employer Institute.

Canada

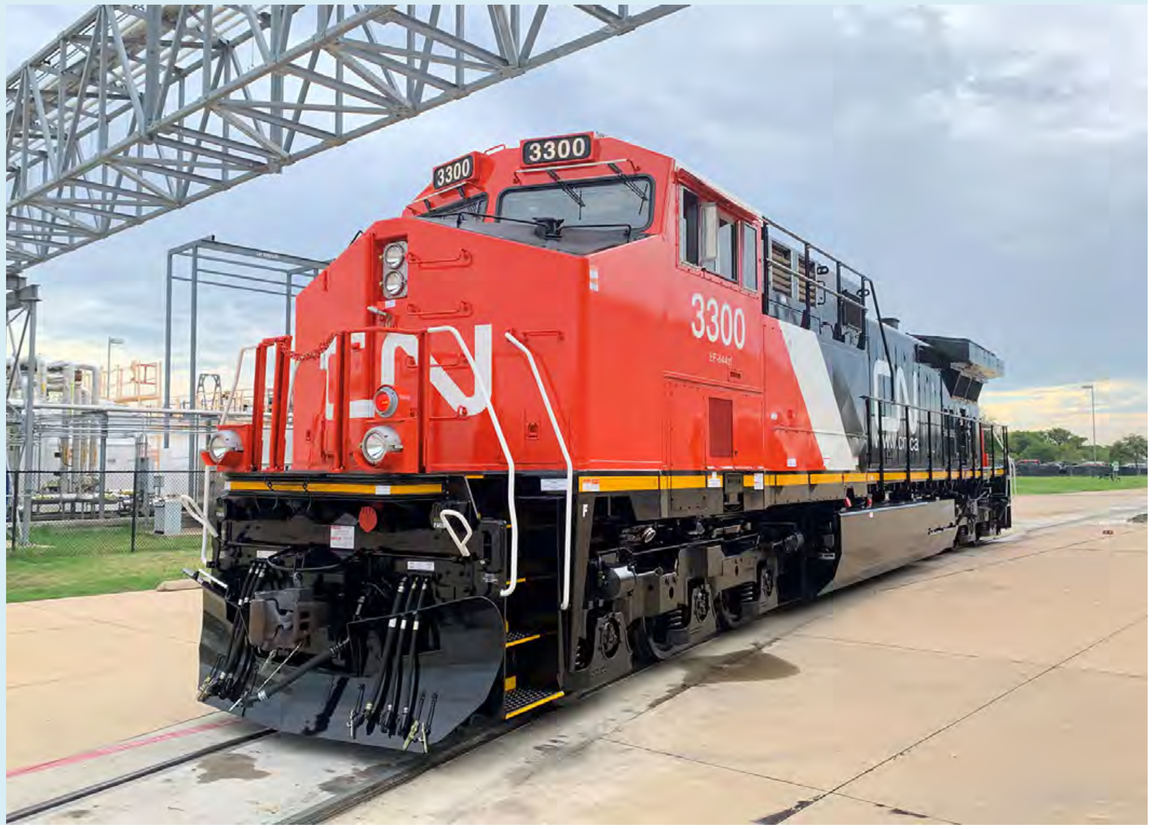
CN to Modernize 60 Additional Locomotives with Wabtec

CN and Wabtec Corporation have announced an order to enhance an additional 60 locomotives in CN's existing fleet through Wabtec's modernization program. The investment supports CN's commitment to drive growth in a sustainable manner and build success for customers, employees and communities.

"Modernizing these locomotives cost-effectively improves the reliability of our existing fleet and contributes to reducing our rail carbon footprint," said Mark Grubbs, Vice-President Mechanical at CN. "In addition to reducing the environmental impact of our own operations, it helps us to reduce the greenhouse gas emissions of our customers."

The modernizations will help to improve locomotive fuel efficiency, where CN remains a leader in the North American rail industry, consuming approximately 15% less locomotive fuel per gross ton mile than the industry average. The program supports CN's science-based target to reduce its Scope 1 and 2 emissions by 43% per gross ton mile by 2030 from a 2019 base year, and with CN's commitment to setting a net-zero 2050 carbon emission target aligned to a 1.5-degree scenario. Wabtec's Services team will modernize CN's 60 certified pre-owned Dash-9 locomotives to bring the total modernized fleet to 110 locomotives. The company will transform the locomotives from DC to AC powered traction and will feature enhancements such as the FDL Advantage engine upgrade and a suite of digital solutions including Trip Optimizer, and LOCOTROL Distributed Power. These upgrades are expected to extend the life of the locomotives and provide benefits, including targeted fuel efficiency improvements of up to 18% through a combination of engine and digital technology enhancements, a more than 40% increase in reliability, and up to a 55% increase in pulling power. The total program is expected to enable CN to realize up to 50,000 metric tons in annual greenhouse gas emission reductions, the equivalent of removing nearly 10,700 non-electric passenger cars. Additionally, the modernization order will reuse or recycle approximately 11,000 metric tons of steel.

"Our modernization solutions allow CN to enhance its existing fleet by upgrading to Wabtec's state-of-the-art technology to enhance the locomotives' performance to current standards," said Alicia Hammersmith, President of Wabtec Freight Services. "Our modernization program supports the circular economy and is a key component of Wabtec's sustainability approach through processes that reduce waste, extend life, and improve fuel efficiency, thereby driving emissions reductions and helping customers save money."



Spain

CAF MIIRA AND EUSKOTREN COLLABORATE ON A PROJECT TO REDUCE TRAIN NOISE

CAF MiiRA, a global leader in comprehensive wheelset solutions for the railway industry, announces a strategic collaboration with Euskotren, the leading transportation operator in Euskadi, to test innovative wheel soundproofing systems on their train fleet. This alliance focuses on implementing a solution that aims to significantly reduce the noise generated by train wheels, thereby improving the quality of life for people living near the tracks. CAF MiiRA, a renowned manufacturer of wheels, axles, and complete axle systems, offers comprehensive solutions in the design, manufacturing, and maintenance of rolling stock. Their experience and leadership in the railway sector support their ability to develop innovative solutions that enhance transportation efficiency and sustainability.

"At CAF MiiRA, we take pride in our commitment to excellence and continuous innovation inthe railway industry," said Julio Galipienzo, R&D Manager at CAF MiiRA. "This strategic collaboration with Euskotren provides us with an opportunity to combine our capabilities and knowledge to develop advanced solutions that improve the passenger travel experience andreduce environmental impact."

CAF MiiRA, as part of the CAF Group, is distinguished by its strong commitment to research and development, as well as its dedication to sustainability and environmental responsibility. These core values guide their actions and drive them to seek solutions that enhance railwayefficiency and sustainability.

Luis Lasa, Special Processes Manager at CAF MiiRA, highlighted the company's leadership in the industry: "CAF MiiRA is recognized as the leading manufacturer of wheel solutions, axles,and complete axle systems. Our commitment to excellence enables us to offer innovative solutions that optimize the performance and safety of the railway system."

Meanwhile, Euskotren has established its position as the reference transportation operator in Euskadi, offering a public service based on quality, sustainability, efficiency, and safety. Their commitment to innovation and continuous improvement of railway transportation in the Basque Country has led to this strategic collaboration with CAF MiiRA.

"This alliance with CAF MiiRA is an important step in our pursuit of solutions that improve railway transportation in Euskadi," said Pilar Rosado, Rolling Stock Manager at Euskotren. "We will work hand in hand to develop and implement innovative systems that reduce acoustic impact and enhance the overall performance of our trains, benefiting passengers and the environment."

The collaboration between CAF MiiRA and Euskotren is not limited to this specific initiative but is established as a long-term alliance. Both entities share a vision to improve railway transportation, promoting sustainability, efficiency, and innovation. The implementation of this wheel soundproofing system in Euskotren's train fleet is a significant milestone in the joint commitment of both companies to innovation, sustainability, and the well-being of the community.

Brazil

Vale Partners with Wabtec on Alternative Fuels Study and Orders Three FLXdrive Battery-Electric Locomotives

Vale announced a partnership with Wabtec Corporation to advance the decarbonization of the company's rail operations. The deal includes an order for three of Wabtec's FLXdrive battery locomotives and a collaboration to test ammonia as a potential clean, alternative fuel to replace diesel. The three 100% battery powered FLXdrive locomotives will be used on the Carajás Railroad (EFC), which runs the world's largest iron ore train consisting of 330 railcars transporting 45,000 tons. Today, three to four diesel locomotives pull the train. Once delivered, the FLXdrives will join the diesel locomotives to form Brazil's first hybrid consist pulling the train uphill for 140 kilometers in Açailândia, in the state of Maranhão, where fuel consumption is the highest. The FLXdrives will replace the two diesel locomotives, known as "dynamic helpers," that are used to pull the train uphill today.
Wabtec will build the FLXdrive locomotives at its plant in Contagem (state of Minas Gerais). The locomotives' delivery is forecast for 2026.

"Initially, we are maximizing energy efficiency, replacing the diesel locomotives in the dynamic helper with battery ones, but the idea is that, in the future, the other locomotives on the train can be fueled by ammonia. This way, we would have a clean operation at EFC," explains Vale's Director of Energy, Ludmila Nascimento. "This agreement is the first of many that we are seeking in order to accelerate the decarbonization of our railway operation," she adds.

Vale and Wabtec will work together on a study to use ammonia as a clean alternative fuel, which does not emit CO2. The study will initially be carried out as lab tests to validate performance, emission reductions, and feasibility. Among the advantages of ammonia is the fact that it allows the locomotive a longer range than other carbon-free fuels. In addition, ammonia has a high-octane rating and an established large-scale distribution infrastructure. The two companies will carry out the study in a laboratory over the next two years.

Regenerative Energy
The FLXdrive locomotive's energy management system recharges the batteries along the route as the train brakes. "It's what we call regenerative energy produced by dynamic braking. Today, that energy is lost when a traditional locomotive brakes. In the downhill sections, we will be able to recharge the batteries, without having to stop the train's operation," explains Alexandre Silva, Manager of Vale's Powershift Program. Vale introduced the Powershift Program to study alternative technologies to replace fossil fuels with clean sources in the company's operations. The FLXdrive locomotives are estimated to save 25 million litres of diesel per year, considering the consumption of all the railway's trains that use the dynamic helper. This savings would reduce carbon emissions by approximately 63,000 tons, the equivalent emissions of around 14,000 passenger cars per year.
"Technological advances in battery power and alternative fuels are accelerating the decarbonization journey for railroads," says Danilo Miyasato, President and General Manager of Wabtec for Latin America. "Vale's innovative approach to adopting alternative fuels for its locomotives will benefit its customers, shareholders, and communities. The FLXdrive provides Vale productivity, safety, fuel economy, and emission reductions for its rail network."

Net Zero
In 2020, Vale announced an investment of between US $4 and $6 billion to reduce its direct and indirect emissions (scopes 1 and 2) by 33% by 2030. Today, Vale's rail network represents 10% of the company's carbon emissions. The initiative is one more step towards achieving the goal of zero emissions net carbon emissions by 2050, in line with the ambition of the Paris Agreement to limit global warming to below 2°C by the end of the century.
The company also committed to reducing its net emissions from its value chain (scope 3) by 15% by 2035.

Belgium

MSC expands rail fleet with 15 Vectron locomotives from Siemens Mobility

Siemens Mobility has received an order from MSC subsidiary MEDWAY Belgium NV for 15 Vectron MS locomotives. MEDWAY plans to use the locomotives for cross-border freight transport in Europe and also for supplementing container transport by ship in serving the eastern hinterland of Antwerp.

"We're especially pleased that we've been able to win MEDWAY Belgium as a new customer with this order. With their record for reliability and flexibility, our Vectron locomotives enable sustainable cross-border freight transport throughout Europe," said Albrecht Neumann, CEO Rolling Stock, Siemens Mobility.

Salvatore Prudente, Executive Director of MEDWAY, commented: "MSC continues to invest on the European level via its MEDWAY arm to strengthen its intermodal offering, improving its capacity to serve clients not only with its core deep-sea solutions, but also inland. Improving these areas provides our customers with a portfolio of services and solutions designed to simplify and support their supply chain. Our teams of experts are

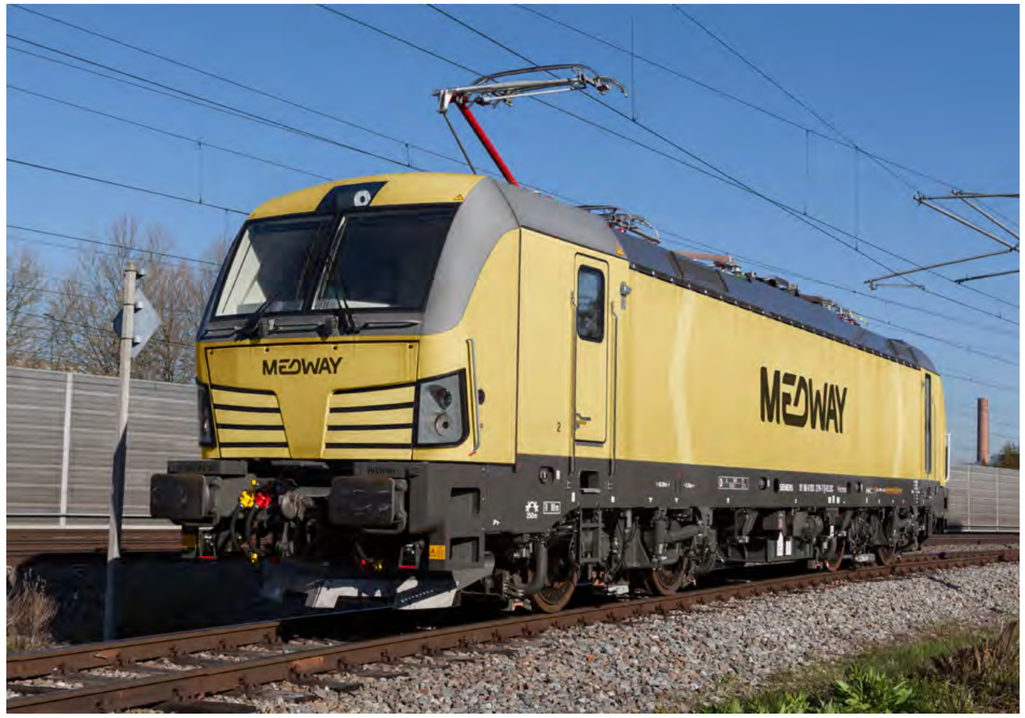
constantly monitoring both customer needs and market trends and we see a great deal of sense in investing in our intermodal capabilities, as customers are increasingly encouraged to move overland cargo by rail."

To further expand its engagement in rail-based hinterland transport and contribute to its continued growth in markets across the Northwest Continent, the shipping and logistics company MSC founded its Belgian subsidiary MEDWAY Belgium NV in 2022. The new locomotives will be deployed within an East-West geographical scope, improving connections and capacity between Belgium, Germany, the Netherlands, Austria and Poland, and landlocked central and eastern countries such as Hungary, the Czech Republic and Slovakia.

The locomotives, manufactured at Siemens Mobility's plant in Munich-Allach, have a maximum power at wheel of 6,400 KW and a top speed of 160 km/h. In addition to the required national train control systems, all locomotives will also be equipped with the European Train Control System ETCS.

Siemens Mobility has already sold more than 1,800 Vectron locomotives to 65 customers in 16 countries.

Photo: ©Medway



Luxembourg

Alpha Trains and Siemens Mobility sign service contract for Vectron locomotives

Alpha Trains, the leading locomotive and trains lessor in Europe, has awarded Siemens Mobility a long-term service and maintenance contract. The contract covers the complete maintenance of Vectron locomotives over a period of 15 years, including revisions at the Siemens Rail Service Center in Munich-Allach. Maintenance of the locomotives will be tailored to their operation and carried out as needed in thirteen different countries at the Siemens Mobility Service facilities located along the major trans-European rail corridors.

“With this order, Alpha Trains will benefit from our Europe-wide depot and service network as well as our comprehensive domain know-how in the maintenance of Vectron locomotives. In addition, the cloud-based Railigent X applications, which are part of the open, digital Siemens Xcelerator business platform, will enable us to maintain the locomotives efficiently and ensure their maximum service availability,” said Johannes Emmelheinz, CEO Customer Services at Siemens Mobility.

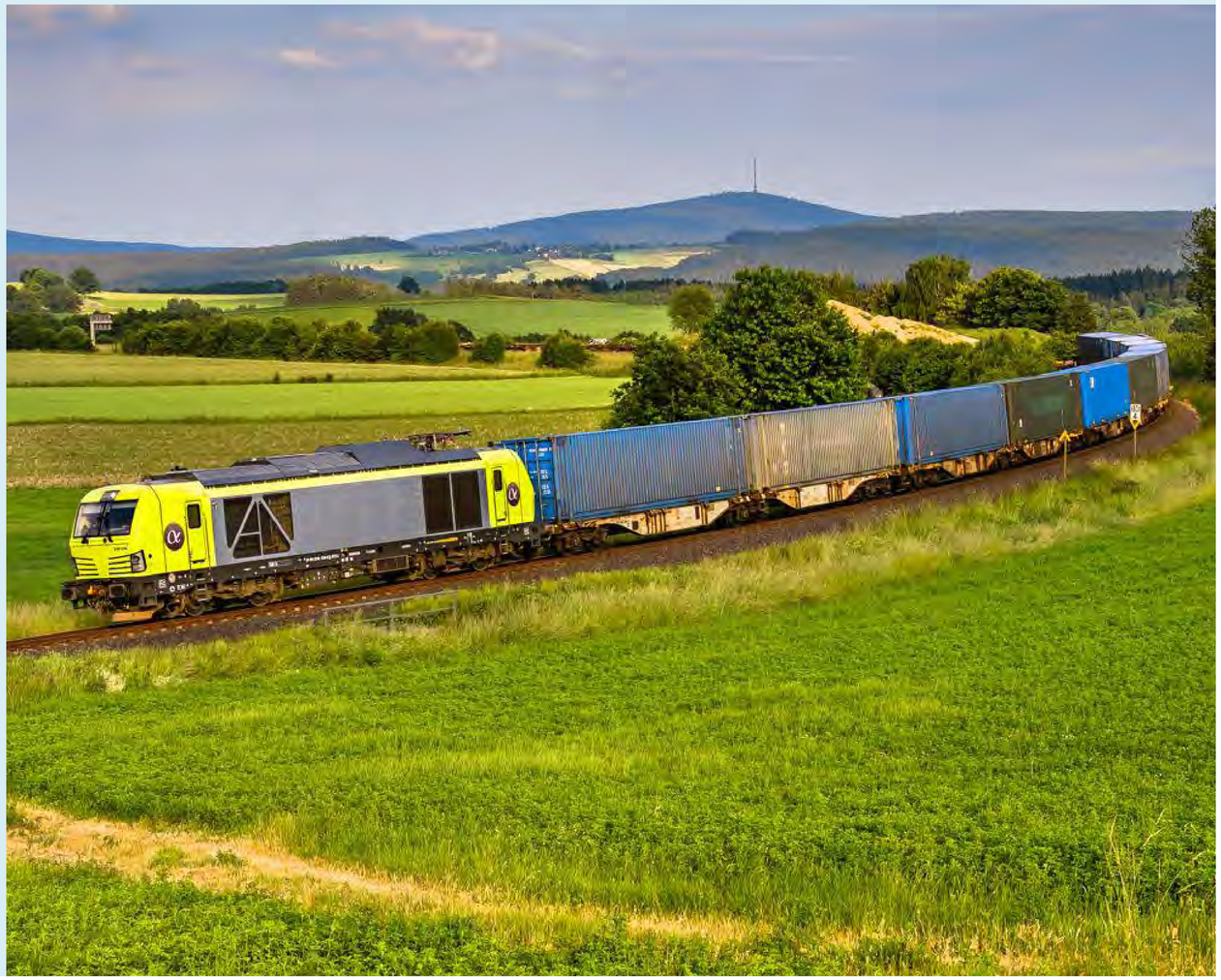
“Based on our partnership with Siemens Mobility, we were able to conclude a long-term service contract that ensures the optimal maintenance of our Vectron fleet. We will draw on Siemens’ extensive know-how and experience to offer our customers maximum availability and service quality. Backed by this lean and smart solution, we’ll be able to respond quickly to customer needs and provide efficient, flexible, and reliable leasing solutions,” stated Fernando Pérez, CEO of the Alpha Trains Group.

All Vectron locomotives are equipped with a remote data access system that works with Railigent X to ensure condition-based maintenance. Ongoing data analysis improves operational processes, optimizes maintenance, increases cost efficiency, and enables maximum availability of the locomotives. All data provided by the locomotives can also be displayed in the customer’s system via API interfaces.

The partnership between Alpha Trains and Siemens Mobility underscores their shared commitment to sustainable and efficient transport solutions in Europe. The high quality of maintenance for the Vectron locomotives and the resulting improvements in reliability and performance will support transport companies in shifting transport from road to rail and thus help reduce greenhouse gas emissions.

Siemens Mobility and Alpha Trains have been partnering for many years. The leasing company already has around 185 locomotives and multiple-unit trains from Siemens in its portfolio, including over 80 Vectron locomotives and more than 90 Mireo, Mireo Plus B, and Desiro trains. The latest order is the largest service contract yet signed by the two companies.

Photo: ©Alpha Trains / Photographer: Florian Fraaß



Spain

EUSKOTREN AWARDS CAF THE SUPPLY OF FIVE NEW TRAINS

Euskotren, a public company coming under the Basque Government Ministry of Urban Planning, Housing and Transport, has entered into a contract with CAF for the supply of 5 new electric units from its 980 series, to run on the new Metro Bilbao line 5. The scope of this closed agreement includes the supply of CAF’s onboard level 1 ERTMS system for the new units as well as for Euskotren’s 28 electric units from the 950 series that are already in service. These units will therefore be equipped with a state-of-the-art system that is in line with current European railway safety standards.

The entire contract is worth approximately €60 million. The new units, which must be delivered to Euskotren between 2026 and 2027, will allow the operator to broaden its service offering, given that these units will be added to the 58 trains from the 900 and 950 series already supplied by CAF and which are operating on the Basque railway, as well as 4 trains from the 940 series which will have been received this year 2023 and which are already equipped with CAF’s onboard level 1 ERTMS system.

Each of the new units will comprise four cars and is an improved version of the aforementioned 940 series. All the cars in the units will be interconnected by unobstructed gangways, designed to make the trains more spacious and offer enhanced passenger comfort. The units will also be equipped with cutting-edge technologies to facilitate the accessibility and safety of all users.

This agreement falls within the framework of Euskotren’s process to modernise its rolling stock, which commenced in 2011 with the commissioning of the first electric units from the 900 series and has progressively been completed over the last few years with the acquisition of units from later series and the upgrading of the initial units in order to create a more consistent image across the fleet, with regard to interior and exterior design alike. In this way, as well as the aforementioned service quality and safety, these latest-generation units make it possible to guarantee improvements with regard to a reduction in maintenance costs of the fleet of trains.

Poland

Alstom delivers four new Traxx multisystem locomotives to PCC Intermodal in Poland

Alstom, global leader in smart and sustainable mobility, delivered by the end of June four new Traxx MS3 multisystem locomotives to the leading intermodal operator - PCC Intermodal SA. The contract that includes the delivery of four electric locomotives, together with the certification, the training of PCC Intermodal staff and the provision of full maintenance service, was executed within the "Operational Programme Infrastructure and Environment" activity aiming at promoting and introducing low-emission transport solutions.

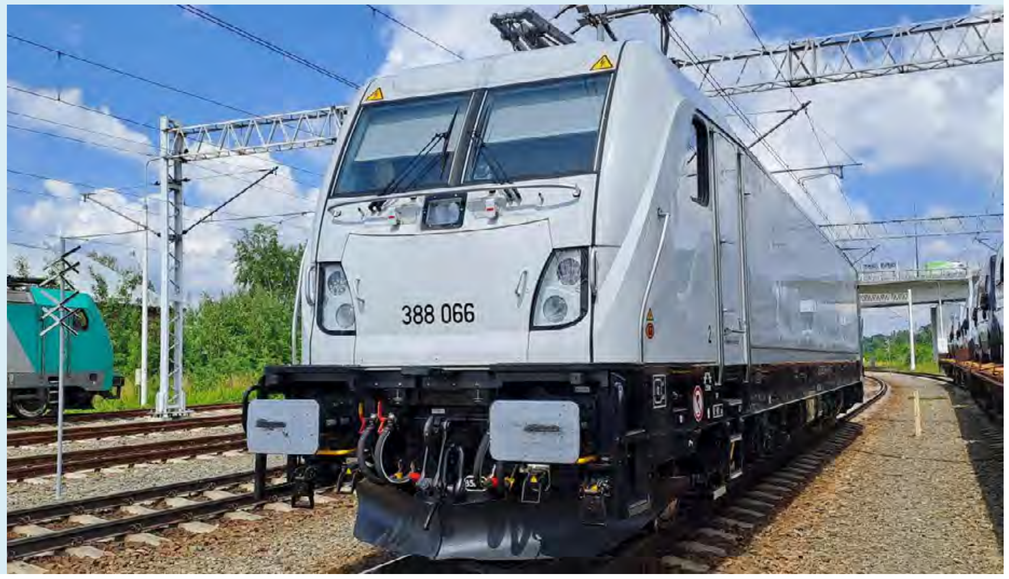
Intermodal transport, in and through Poland, has been developing for the second decade. Thanks to manufacturers consciously choosing modern logistics solutions, determination, patience and foresight of intermodal operators, the industry has gained a stable position on the market and is an important element in shaping the transport policy in the country and abroad. There are currently modern transhipment terminals operating in Poland, the most important economic regions of Poland are connected by a networks of daily intermodal services with economically important regions of our neighbours and the railway has been given a chance to experience its second youth in the form of container deliveries.

"To develop further and open new corridors for intermodal transport, in addition to investments in fully functional transhipment terminals, we need appropriate technical facilities: locomotives, reloading equipment, wagons, chassis and trucks. By adding to company's fleet next Traxx locomotives, PCC Intermodal, operating in total 15 electric locomotives, under its own licences will be able to, expand and increase flexibility of its offer of daily intermodal connections in international corridors." - said Adam Adamek, Vice-President of the Management Board of PCC Intermodal SA.

"We are very pleased that Traxx 3 MS locomotives became part of PCC Intermodal SA feel. These vehicles are based on the newest, most modern, and innovative locomotive platform, characterised by its energy efficiency, its proven ability to pull higher loads than comparable locomotives, its simplified interface with the European Train Control System and improved maintainability. We are convinced that the Traxx 3 MS locomotive will strengthen PCC's Intermodal market position and will contribute to further development of sustainable and low-emission European Transport Network" – commented Sławomir Cyza, Managing Director Poland, Ukraine, and Baltic States at Alstom.

The Traxx platform has been steadily developed since the 90s. Its strong, modular platform approach results in various advantages for single as well as multi-country applications. The third generation Traxx locomotive delivers increased operational performance and reliability and comes with a higher energy efficiency and its maintenance intervals have been extended by 33% to improve availability and reduce maintenance effort, compared to earlier versions. More than 2500 units have been sold over the last 20 years. They have been approved in 20 countries and cover a total annual distance of more than 300 million km.

Over 5,700 Alstom locomotives have been put into operation since 2000 and are used in railway transport in many European countries as well as in Asia, North America, and Africa.



Poland

Alstom and Koleje Mazowieckie sign a contract for the overhaul of Twindexx double-deck coaches in Poland

Alstom, global leader in smart and sustainable mobility, has signed a contract with Koleje Mazowieckie, regional rail operator in the Mazovian Voivodeship in Poland, to carry out P5 maintenance of 37 Twindexx double-deck coaches. The project will be undertaken between 2023 and 2025 in accordance with the quality, reliability and technical safety requirements of the IRIS standard (ISO/TS 22163).

Alstom will overhaul 26 trailing double-deck coaches "Bpz" and 11 control double-deck coaches "ABpbdzf". The gross value of the contract accounts to over seventy million eight hundred and twenty thousand Polish zlotys. This type of repair must be done after 16 years of operation. The basic scope of the work in the fifth maintenance level (P5) includes all activities described in the documentation of the maintenance system as well as technical and operational documentation. "Bpz" mid-series bi-level coaches and 11 "ABpbdzf" control series bi-level coaches will be inspected in detail for the condition of components and assemblies, along with their partial disassembly from the coach, replacement and repair. The contract also includes additional work, the supply of mono-block wheels and their replacement.

"The double-deck coaches were the first railroad vehicles of this type purchased by the Regional Government of the Masovian Voivodeship for Masovian Railways. As a result, push-pull trains were launched as the first in Poland. These trains successfully serve designated routes in Mazovia, as well as "Słoneczny" or "Słoneczny – BIS" trains running from Warsaw to the seaside in the summer season. Repairs to all 37 control and trailing coaches will be carried out in accordance with the Maintenance System Documentation, and will also undergo the necessary modernization resulting from current regulations," – said Czesław Sulima, Head of Management Board, Operations Director of the Masovian Railways.

The contract also includes the repair of air system valves and pressure sensors, replacement of air conditioning fan motors, and renewal of the exterior varnish coating. Changes related to repair in the fifth maintenance level (P5) will also be noticed by travellers. Replacement of damaged windows, carpets and partial restoration of the most damaged passenger seats is planned.

"Modern, low emission rolling stock is key to the development of regional and suburban railway. Double-deck coaches play an important role and are characterised by high capacity, ideal for lines serving high passenger traffic. We are pleased that Twindexx trains have become an important element of the landscape across Mazovia and in Warsaw. Comprehensive overhaul services will allow for the further safe operation of these coaches in Koleje Mazowieckie's fleet in the years to come," points out Slawomir Cyza, CEO and Managing Director of Alstom in Poland, Ukraine and Baltic States. Twindexx is a series of modern push-pull passenger double-deck coaches.

Since 2008, there have been 37 Twindexx Vario coaches in the fleet of Koleje Mazowieckie, including 11 control coaches and 26 trailing coaches. In addition to Poland, Twindexx coaches are also operated in Germany, Switzerland, Denmark, Belgium, Luxembourg, Israel and the United States, among others.

From the Archives

Austria

OBB centre cab Bo-Bo diesel No. 2045.07 is seen with a freight at Klaus on March 26th 1975. *John Sloane*

From the Archives

Czech Republic

Ceske Drahy AC voltage Class 242.238 runs light engine through Brno on July 6th 2008. *John Sloane*

From the Archives

France

SNCF BB No. 12139 is seen on Bobigny depot on November 2nd 1991.
John Sloane

From the Archives

Germany

A Czech Class 371 heads a Dresden bound Eurocity service near Bad Schandau on April 23rd 2008.
Mark Enderby

From the Archives

Germany

HSB dampflok No. 99-6001 heads along the line at Harzgerode on April 27th 2010. *Mark Enderby*

From the Archives

Germany

DB Class 218.321 and 218.339 pass at Lubeck on April 26th 2006.
Mark Enderby

From the Archives

India

Indian Railways ZDM3 No. 182 stands at Shimla on November 22nd 2005.
Mark Enderby

From the Archives

India

Skoda built 2-6-2T ST No. 37373 waits to depart Mayuram Junction with a branch line train on August 15th 1980.
John Sloane

From the Archives

Italy

FS Class E402.014 runs from beneath the two impressive overhead signal boxes at the approach to Milan Central station with an arriving express on August 18th 2002. *John Sloane*

From the Archives

Kenya

EAR Barclay 0-8-0 diesel shunter No. 4616 is seen with cattle trucks at Nairobi on July 24th 1978.
John Sloane

From the Archives

South Africa

SAR Class S2 No. 3773 is seen shunting at Port Elizabeth docks on October 24th 1973. *John Sloane*

From the Archives

Tunsia

CFT diesel No. 040.DD.108 stands at Hammamet with the branch line train to Bir Bou Rekba on August 30th 1979.
John Sloane

From the Archives

Ukraine

A line of brand new 2TE10u type diesels stand at Lughansk Works on May 3rd 1993. These works were previously known as Voroshilovgrad and now lie in the area of Ukraine annexed by Russia. *John Sloane*