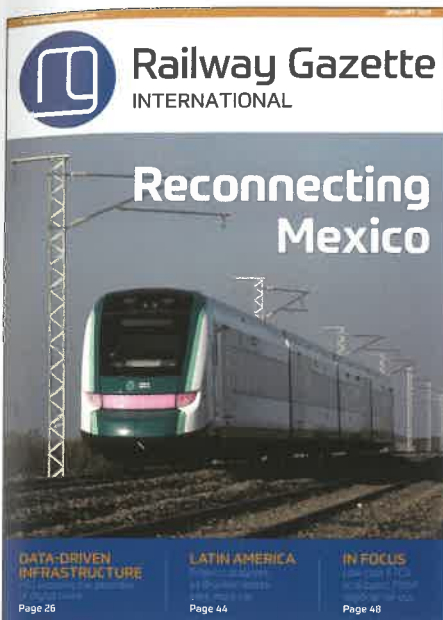


## Volume 181 No 1



The final section of Mexico's ambitious **Tren Maya** network is set to open in the coming months, supporting sustainable tourism and local economic development across the Yucatán Peninsula (p30), although work continues on the electrification of a core section of the main line. Meanwhile, new President Gloria Sheinbaum has approved an ambitious budget for passenger railway expansion totalling more than 3 000 route-km over her six year term (p8).

Photo: Gabriel Briceño

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Opening of Macau LRT's 2.2 km Hengqin Line on December 2 provides the special economic region with a cross-border connection to the Chinese mainland.

Running west from an interchange with the Taipa Line at Lótus, the line runs on an elevated alignment before descending into a 900 m tunnel below the Shizimen channel to an underground terminus with border crossing facilities on Hengqin Island. This provides a connection to the Zhuhai Airport Intercity Railway. Trains operate every 6 min with a journey time of 2 min.

Like the Taipa Line and the Seac Pai Van Line (pictured bottom left and right) opened on November 1 (RG 12.24 p10), the Hengqin Line uses light metro technology from Mitsubishi Heavy Industries. Work began in March 2021 at a cost of 3.46 bn patacas. The 7.7 km East Line now under construction is expected to open in 2029.

Speaking at the opening, recently appointed Secretary for Transport & Public Works Raymond Tam said the government would 'explore further extension of the LRT line to the heart of the Macau Peninsula to solve the core traffic congestion problem'.

# COMMENT

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## A glimpse over the horizon

This year marks a milestone in railway history. Although various forms of rail transport existed earlier, the opening of the Stockton & Darlington Railway on September 27 1825 is being celebrated in Great Britain in 2025 as the 200th anniversary of the modern railway. Rail transport as we know it today was unimaginable 200 years ago, and any attempt to look two centuries ahead would be over-ambitious. If we limit our horizon to 50 years, half a century being the time that your writer has spent on the editorial team of this august publication, we may discern some important trends.

While early railways qualified for the epithet of revolutionary, development in the intervening decades has been evolutionary, reflecting lessons learned as technology advanced. And rightly so, for the reputation of what is now the safest form of land transport had to be earned, and it is axiomatic for the future of the rail industry, in its widest sense, that its current role and standing in the transport marketplace is maintained and enhanced. We should remember that it was not always so, especially when rival modes with aggressive agendas had the ear of supine governments, which all too often view rail as an unacceptable drain on the public purse.

What then, we wonder, would the pioneers have made of the 400 km/h Fuxing CR450 trainset that was due to emerge from CRRC's Changchun and Qingdao factories by the end of 2024 for operation on China's high speed network? They would have to acknowledge that high speed rail is now a mature technology in 16 or more countries. The Vietnamese government announced a 350 km/h line over the 1540 km between Hanoi and Ho Chi Minh City on November 30, and other lines are under construction, planned or proposed in India, Morocco, Russia and elsewhere. Perhaps the only outstanding question is whether it is economic to run at 400 km/h rather than 300 or 350 km/h.

And how would those early entrepreneurs have reacted to the

200  
years

2025 is being  
celebrated  
as the 200th  
anniversary  
of the modern  
railway

spectacular advances in automation? These range from Rio Tinto's GoA4 Autohaul technology in the Australian Pilbara that manages 30 000 tonne ore trains to the plethora of automated metro lines. We estimate that there are now over 2 000 km of driverless metro, with recent openings in Qingdao, Thessaloniki and Riyadh, plus more to come in China, India and elsewhere. High-capacity metros will prove essential as cities expand, with around three-quarters of the global population forecast to be urban dwellers by 2050.

Automation and tomorrow's digital landscape offer huge opportunities for rail, be it in train control, infrastructure monitoring or condition-based maintenance. One pointer is the trial run of a remotely controlled retrofitted VT648 diesel trainset in north Germany last September using Alstom's Autonomous Regional Train Evolution technology linked to the train's ETCS equipment. Expect more similar technologies to emerge as railways grapple with a shortage of train drivers and their costs. Above all, automation offers an opportunity to make rail more affordable, which is arguably the overriding question for tomorrow's railway engineers and managers. Can digital advances and the internet of things resolve this challenge?

The issues facing the industry in the next half century will be both technical and managerial, to say nothing of climate change. To these we should add resilience, reliability, capacity, connectivity, journey information and train noise. Smart devices, big data, robots, nanotechnology

and as yet unforeseen technical advances may offer opportunities here, but it will require the best available expertise to turn them to rail's advantage.

Rapidly advancing battery and hydrogen power and related hybrid technologies look set to gain a niche in the traction field, with solid oxide fuel cells potentially a more distant prospect. And on the subject of technology, what of maglev? No fewer than 54 years have elapsed since the first passenger-carrying maglev vehicle was unveiled in May 1971. While the Shanghai shuttle has whisked passengers between Shanghai Airport and Pudong since October 2003 at up to 430 km/h, we await the debut of the Chuo Shinkansen superconducting maglev line between Tokyo and Nagoya, now expected in 2034, construction having started in 2014. Various projects in China will doubtless attract interest, but questions remain about maglev's economic and technical viability.

Among pointers to a positive future are the revival of passenger trains in Mexico, new lines in Tanzania, Uganda and elsewhere in Africa and the Middle East. The USA generally remains an outlier, but even there, subject of course to the whims of the government taking office this month, the Brightline project in Florida and its Brightline West sister, plus the Merced – Bakersfield line in California and Amtrak's investment programme, suggest a passenger train comeback.

One final thought. Mohamed Mezghani, UITP Secretary General, said at COP29 in November that 'by aligning transport policies with climate goals, governments can significantly accelerate the transition toward a low-emission transport system, ultimately enabling citizens to reduce their transport emissions by 50%'. Imagine, then, what could happen if air travel, one of the fastest-growing sources of greenhouse gas emissions, were to become less acceptable in a more climate-conscious world? Could rail step in for journeys of up to, say, 1 500 km or even 2 000 km? Read the answer in these pages in years to come. 



'While early railways qualified for the epithet of revolutionary, development in the intervening decades has been evolutionary'

## Briefing

A ceremony at Weststeiermark on November 28 marked the end of civil works on Austria's 130 km **Koralmbahn** project following 26 years of construction; the 250 km/h line between Graz and Klagenfurt is expected to open throughout in 2025. On the same day, the second bore of the 27 km **Semmering Base Tunnel** between Gloggnitz and Mürzzuschlag was holed through; this tunnel on the Wien – Graz corridor is due to be inaugurated in 2030.

Genesee & Wyoming launched its **Red Deer Railway** in western Canada on December 2, having acquired the former Canadian Pacific line from Jackson to Homeglen in Alberta as part of the transaction which saw CPKC and CSX acquire G&W's Meridian & Bigbee Railroad in Mississippi and Alabama (RG 12.24 p6).

Finland's state railway group **VR** has agreed to sell its road logistics business to München-based private equity company Mutares as part of its strategy to focus on its core business of passenger and freight transport by rail.

Trains have begun running again on a 38 km section of Portugal's **Beira Alta** line between Celorico da Beira and Guarda, following completion of the latest stage in a programme to modernise the 202 km Pampilhosa – Guarda route. Through services from the Porto – Lisboa main line to the Spanish border at Vilar Formos are expected to resume in early 2025.

A first train has travelled the full length of Russia's 531 km **Pacific Railway** from the Elga coking coal deposit to a port at Cape Manorsky on the Sea of Okhotsk. The single-track line owned by ELSI Group is expected to start regular operation in the first half of 2025, handling up to 50 million tonnes/year.

Read the latest news at [www.railwaygazette.com](http://www.railwaygazette.com)

# Tema – Mpakadan line commissioned

## GHANA

The 97.7 km Tema – Mpakadan standard gauge railway was formally commissioned by President Nana Akufo-Addo on November 22. Built by Afcons Infrastructure Ltd for US\$447m, the line connects Tema's port with a transfer quay on Lake Volta.

Speaking at the ceremony,



President Akufo-Addo described the line as 'a vital component of Ghana's first multimodal transport

system, to drive the economic growth of our nation.'

Afcons Managing Director S Paramasivan said he was 'proud to have executed the largest railway project in Ghana', which would 'play a pivotal role in re-vamping and modernising the country's railway infrastructure. The construction of a bridge over Volta River is a classic example of extreme engineering.' The project was financed through a credit from India Exim Bank.

Passenger services are to be operated by two Pesa DMUs delivered in April (RG 5.24 p7), and were expected to begin ahead of a general election on December 7.



Uganda's President Yoweri Museveni launched construction of that country's 272 km Eastern Line from the capital Kampala to Malaba on the Kenyan border with a ceremony in Tororo district on November 21. A €2.7bn contract to build the line had been awarded to Turkish contractor Yapı Merkezi on October 14 (RG 12.24 p9).

# HS2 railway systems contracts

## UK

HS2 Ltd announced the award of more than £3bn of track and railway systems contracts on November 27 for the High Speed 2 line linking London with the West Midlands.

The project promoter said the main contractors would be brought together under a Rail Systems Alliance structure designed to manage the interfaces and resolve any conflicts in the programme.

A joint venture of Ferrovial Construction and BAM Nuttall was awarded the Track Systems, Lots 1, 2 and 3, which cover the route from Old Oak Common to the terminus at Birmingham Curzon Street, the infrastructure maintenance depot at Calvert, the

connection with the West Coast Main Line at Handsacre Junction and an interface with the Washwood Heath rolling stock maintenance depot. Switches and crossings and pre-cast slab track will be delivered through existing contracts with Voestalpine and Porr UK, while rail will be supplied through Network Rail.

Colas Rail will be responsible for the design, installation and commissioning of the overhead catenary systems, which will be certified for speeds of up to 360 km/h.

Siemens Mobility will be responsible for the operational telecommunication systems and route-wide security systems, and will also supply the train control technology based on ETCS Level 2 and a traffic management

tool. The company has also been awarded the digital engineering management system contract covering an integrated SCADA platform with up to 25 years of technical support

A joint venture of Hitachi Rail GTS and Telent Technology Services will be responsible for third party telecoms, including mobile communications for customers and the emergency services, as well as the station data network.

Costain has been selected for the Tunnel & Lineside Mechanical & Electrical Systems contract, which covers M&E services within the tunnels including ventilation systems, as well as low voltage power distribution on the open sections of the line. This seven year contract is valued at a minimum of £400m.

# RENFE takes Arenaways stake

## EUROPE

RENFE Proyectos Internacionales and Spanish private equity firm Serena Industrial Partners have each acquired a 33% stake in Longitude Holdings, which was sole owner of Italian private operator Arenaways, with effect from November 27.


The acquisition paves the way for the Spanish national operator's international arm to enter the Italian passenger market, augmenting the cross-border trains it runs between France and Spain. RENFE also holds shares in Leo Express,

which operates in the Czech Republic, Slovakia and Poland.

Arenaways Managing Director Matteo Arena explained that 'the experience, international know-how and solidity of the companies behind Arenaways will allow us to achieve all our objectives whilst constantly improving the quality of our offer. We have been defined as "the third national operator" but we don't live competition in a sense of opposition: competition means great benefits for users and the whole community, because it immediately results in more choice, better services and

plurality. We want to strongly reiterate what has always been our belief: the train will play a key role in the mobility of the future.'

Arena is expected to continue in his role. He remains a shareholder in Longitude Holdings, along with infrastructure contractor Generale Costruzioni Ferroviarie, and Caronte & Tourist, which operates ferries in southern Italy.

RPI and Serena had been linked with Grand Union Trains' proposed open access service to South Wales (p9), while Serena had been in negotiations with French start-up Railcoop prior to its collapse. 

# Railpool expands

## FRANCE

Having established a French subsidiary in 2023 to tap into the domestic rail freight market and the demand for greater European interoperability, München-based leasing company Railpool has signed a long-term agreement with Regiorail.

The fifth largest rail freight operator in France by market share, Regiorail is part of Euro-rail, in which Railroad Development Corp owns a majority stake. It leases 40 locomotives and operates 150 trains a week for various customers.

The full-service agreement with Railpool announced on November 26 covers the supply of three Alstom Traxx Universal locomotives with last mile engines, and includes an option for a further four.

'As we are aiming to expand our services in Europe, the full-service rental of interoperable electric locomotives with last mile engines is just in line with our strategy', explained Eurorail CEO Brice Devinoy. 'The bi-mode capability is also worthwhile for domestic Regiorail traffic, offering energy efficiency and CO<sub>2</sub> emission savings.' 

# Alstom to operate Metrolink network

## USA

Southern California Regional Rail Authority has awarded Alstom a combined contract to operate and maintain Metrolink passenger services for five years from July 1 2025, replacing Amtrak as operator when the current agreements expire. The \$515m contract includes an optional three-year extension which would take the total value to \$860m.

Alstom (formerly Bombardier Transportation) has maintained the Metrolink fleet since 1998. It will now become responsible for train crews, customer services and facilities maintenance, with

an option for materials management. Alstom expects to retain 180 employees and hire more than 200 people to support the new agreement.

The 880 km Metrolink network serves 67 stations across Los Angeles, Orange, Riverside, San Bernardino, Ventura and San Diego counties. It is operated with a fleet of 60 locomotives and 258 double-deck push-pull coaches supplied by Bombardier Transportation and Hyundai Rotem.

Alstom will also provide operating crews and management for the 14 km Arrow service linking San Bernardino and Redlands. This is worked by three Stadler Flirt

DMUs, and a hydrogen trainset is due to enter service in 2025.

'We are excited to continue our transition from a traditional commuter railroad to becoming a true regional passenger rail operator', said Metrolink CEO Darren Kettle. 'We are grateful for the efforts and dedication of the Amtrak crews who have been operating our Metrolink trains since 2010 and the TransitAmerica Services Inc team members who have been operating Arrow since that service began in 2022. We know Alstom will work collaboratively over the next several months to ensure a seamless transition and a continued outstanding customer experience.' 

# Flirt Evo arrives


## SWITZERLAND

Swiss Federal Railways and its local subsidiaries Thurbo and RegionAlps have formally unveiled the first of the Stadler Flirt Evo EMUs being supplied under a framework order aimed at standardising their regional train

fleets, with an event at the Turbo depot in Weinfelden.

The SFr2bn contract awarded in May 2022 covers 286 single-deck multiple-units with options for a further 224. This year, SBB has ordered 10 trainsets to work Hochrhein-Bodensee services from December 2027 and 33 sets for cross-border services to France.

There are two variants: a four-car unit to

carry up to 370 passengers, including 146 seated, and a three-car version for 256 with 134 seats. All will have spacious multifunctional zones for bicycles, pushchairs and luggage, and there are two spaces for wheelchair users per unit. The units are expected to enter service between 2026 and 2033 and will be approved for operation in Switzerland, Germany, Austria and France. 



# IR eyes higher speeds

## INDIA

Indian Railways has begun the development of indigenous trains suitable for operation on existing routes at higher speeds, ordering two prototype 250 km/h trainsets from Bharat Earth Movers Ltd. Following a competitive tender managed by IR's Integral Coach Factory, BEMIL has been contracted to build the eight-car air-conditioned trains at its Bengaluru plant for delivery by the end of 2026. The deal is valued at Rs8-67bn, giving an average price per coach of Rs278-6m, but this

includes non-recurring design and development costs.

IR officials confirmed that the 1435 mm gauge trains would be tested on the 50 km Surat – Bili-mora section of the 300 km/h Mumbai – Ahmedabad high speed line, which is being built with Japanese funding. Under the terms of the loan agreement, trains and signalling must be procured from Japanese suppliers. Railway Minister Ashwini Vaishnaw made a three-day visit to Japan in September to discuss progress, accompanied by the Managing Director of the

National High Speed Rail Corp Ltd Vivek Kumar Gupta and IR Board Member for Infrastructure Anil Kumar Khandelwal.

IR has long been discussing the development of 200 to 250 km/h trains able to offer end-to-end average speeds of at least 125 km/h. This is seen as a cost-effective alternative to dedicated high speed lines, particularly where the construction of the Dedicated Freight Corridors has freed up capacity on existing trunk lines. Such 'semi-high speed' trains could replace premium inter-city services like the *Rajdhani* and *Shatabdi*

expresses on the busiest arterial routes such as Delhi – Kolkata and Delhi – Mumbai, where the best end-to-end journey times are around 14 or 15 h.

However, extensive infrastructure upgrading would be required, as most inter-city routes are limited to 130 km/h. This would include the roll-out of the Kavach automatic train protection system (RG 10.24 p36). Potential candidates for the operation of faster daytime services include the Delhi – Chandigarh – Amritsar, Delhi – Lucknow – Varanasi, Chennai – Bengaluru – Mysore, Hyderabad – Chennai/Bengaluru, Delhi – Agra – Bhopal, Delhi – Jaipur, Kolkata – Jamshedpur and Kolkata – Patna corridors. 📍

## Inland Rail progress

### AUSTRALIA

The national government has given final approval for the construction of a 39 km rail link in New South Wales to take the Inland Rail corridor from Illabo to Stockinbingal, bypassing Cootamundra and Bethungra, where ARTC's existing Main South Line follows a winding and steeply graded alignment.

The single-track line will include a passing loop and eight river crossings. John Holland is due to start construction in the second half of 2025 for opening in 2027.

Inland Rail has received environmental approval from the New South Wales government to rebuild a 185 km section of the Main South Line from Illabo via Wagga Wagga to Albury on the Victoria border by 2027. This will provide clearance for the operation of 1800 m long, 6.5 m high double-stack container trains. However, the project promoter must undertake further studies and consult with key stakeholders before starting construction. 📍

## Bridge replaced

### CZECH REPUBLIC

Infrastructure manager SŽ has opened a 316 m long reinforced concrete bridge over the Vltava river near Červená nad Vltavou.

The Schwarzenberský bridge, inaugurated on November 28, replaces a steel structure dating from 1889, which had limited the maximum speed and weight of trains on the 60 km Tábor – Písek line. The new bridge built by

Metrostav at a cost of KC685m has a main span of 156 m and a height of 34.7 m.

ČD can now deploy its Class 847 Pesa RegioFox DMUs on Tábor – Písek – Strakonice services, while the new bridge will also facilitate the reintroduction of freight trains on the route.

The old bridge was to have been removed, but plans were dropped after it was designated as a national cultural monument in 2021. 📍



## Expansion budget approved

### MEXICO

The Mexican government has announced plans to invest 157bn pesos in 2025 for the construction of new passenger and freight railways across the country.

President Claudia Sheinbaum Pardo envisages that around 70% of the funding will be channelled through the Ministry of Infrastructure, Communications & Transport (SICT), whereas her predecessor Andrés Manuel López Obrador entrusted most work to the Ministry of National Defence (SEDENA). That ministry will remain responsible for the construction and operation of Tren Maya and will provide support for the construction of other lines.

The last segment of Tren Maya between Escárcega and Chetumal is expected to open for passenger services during this year, and work is to start in 2025 on converting the 1500 km network into a mixed traffic railway (p33). The plans envisage five intermodal freight terminals, four operating yards and a fuel loading spur, distributed across the main cities served by the network. Work is to begin with the construction of freight terminals at Palenque, Poxilá (Mérida), Progreso and Cancún.

The government's aim is to build more than 3000 route-km of passenger railway in its current

six-year term, with the work being divided into four phases.

Phase 1 (786 km): AIFA airport – Pachuca (54 km); Mexico City – Querétaro (242 km); Saltillo – Nuevo Laredo (306 km); and Querétaro – Irapuato (184 km).

Phase 2 (910 km): Querétaro – San Luis Potosí (263 km); Mazatlán – Los Mochis (441 km); and Irapuato – Guadalajara (206 km).

Phase 3 (1145 km): Guaymas – Hermosillo (135 km); Guadalajara – Tepic (204 km); San Luis Potosí – Saltillo (444 km); and Los Mochis – Guaymas (362 km).

Phase 4 (552 km): Tepic – Mazatlán (275 km) and Hermosillo – Nogales (277 km).

The first phase of the programme is expected to create 70000 direct jobs and support a further 140000 indirect positions. SEDENA will participate in the engineering development for all four phases, but will only build the first two lines. Construction of the AIFA – Pachuca line is scheduled to start in March or April and to be completed within 18 months. Work on the Mexico City – Querétaro line is also expected to begin in the first half of 2025.

Meanwhile, SICT will tender the works on the Querétaro – Irapuato and Saltillo – Nuevo Laredo sections. Tenders will also be called for the supply of passenger rolling stock to operate the first lines. 📍

# Dome cars in VIA fleet renewal

## CANADA

VIA Rail Canada has issued a request for qualification for the supply 313 coaches of nine types to replace its Long-Distance, Regional & Remote train fleet, along with more than 40 locomotives. A technical support and spares

agreement would run for an initial 20 years with two optional 10-year additions and there would be provision to order more vehicles.

The national passenger operator is seeking to provide a 'modern, comfortable, accessible, and sustainable travel experience', and ensure that it can 'maintain




coast-to-coast services, continue to connect communities, and inspire more Canadians to choose passenger rail', President & CEO Mario Pélouquin explained on December 9.

The 2024 federal budget has allocated funding for VIA Rail to replace all the locomotives and coaches used on routes outside the Québec City – Montréal – Toronto – Windsor corridor. Many of its current vehicles are 70 years old and life-expired. Siemens Mobility is already supplying new push-pull trains for the Corridor services, and this second procurement will complete the replacement of the VIA Rail fleet.

The replacement stock would include bespoke sleeper, accessible sleeper, couchette, dining, panoramic and dome cars, which must withstand Canada's cold winters, hot summers and vast distances, such as the 4466 km route of *The Canadian* between Toronto and Vancouver.

The dining cars will have a full kitchen so chefs can prepare meals using fresh local ingredients, while the panorama cars and a new version of the famous dome cars would allow passengers to admire the scenery, flora and fauna.

The diesel locos will be required to exceed EPA Tier 4 emissions standards, and to be designed with a view to transitioning to zero-emission technologies in the future. 

# Diesel trains to replace hydrogen

## GERMANY

This month is due to see the re-introduction of DMUs on route RB15 between Bad Homburg and Brandobendorf, where the iLint hydrogen fuel cell powered multiple-units have been suffering from ongoing technical problems. The Taunus network has been operated for Rhein-Main Verkehrsverbund by DB subsidiary Regionalverkehrs Start Deutschland since December 2022.


The first of RMV's 27 iLints entered service with the new operating contract, with the rest following by June 2023. They were allocated to four routes: RB11 Frankfurt-Höchst – Bad Soden, RB12 Frankfurt – Königstein, RB15 Frankfurt – Brandobendorf and RB16 Bad Homburg – Friedberg.

RMV Chief Executive Prof Knut Ringat reported that 'we finally achieved the reliability that our passengers demanded in the summer', but that did not last, because the trains 'were again the victims of technical problems from late summer onwards'. He said Alstom had undertaken to bear additional costs relating to the repairs and the cost of the replacement fleet.

RMV has agreed to lease 14 Type VT648.4 and two VT648.3 Lint41 DMUs until the end of 2025, although the hydrogen trains will continue to operate on Route RB12. The operator explained that Alstom would overhaul the relevant components so that the iLints could operate reliably on the Taunus network 'beyond 2025'.

Alstom confirmed to *Railway Gazette International* that it had reached an agreement with RMV

and Start to stabilise operations on route RB15 by using diesel trains for a limited period. The iLint units would undergo a modernisation programme and be equipped with a new generation of fuel cell, before being phased back into service.

'Despite extensive testing in advance, we must recognise that the use of this technology in daily passenger operations is pioneering for everyone involved and we are facing up to the challenges that need to be overcome when pioneering a new technology', the supplier explained. 'Alstom is and remains the only railway manufacturer with a fully homologated hydrogen fuel cell train in passenger transport, and the cumulative learning will benefit the entire industry in the long run.' 



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## Briefing

The European Commission has concluded that Germany's provision of €1.9bn to support **DB Cargo** is in line with EU state aid rules. An in-depth investigation launched in 2022 found that an open-ended profit and loss transfer agreement under which DB had been covering the freight operator's losses since 2012 would no longer be in place from January 1 2025.

FirstGroup has acquired **Grand Union Trains** GWML Holdings Ltd, which holds track access rights to run open access passenger services between London Paddington and Carmarthen until 2037. The service is now expected to launch in December 2027, and FirstGroup has also applied for paths to operate between London and Paignton via Bristol.

China's **Sanle Tourism Railway** has started operating services between Sanya to Yazhou, using the first part of the 108.8 km Sanya – Jianfeng Bei railway, which was inaugurated on November 16, connecting to the Hainan Western Ring high speed line opened in 2015. The operator has a fleet of 15 four-car Type CRH6A-A EMUs based on CRRC Sifang's Cinova 2.0 platform.

**PKP Intercity** has put into service on its Kraków – Jelenia Góra route an SD85 DMU formerly used by NS in the Netherlands. The unit is leased from Polish short line operator SKPL, which bought 32 of the former DM 90 DMUs from NS in 2020. The trains were built by Talbot and Düwag in 1996-98.

Cambodian concessionaire **Royal Railway** has taken delivery of two YDM-4 metre-gauge diesel locos from India to expand and update its fleet, having put into service in November the first of five two-car KiHa 183 DMUs acquired from JR Hokkaido to operate between Phnom Penh, Sihanoukville, Kampot and Kep. The first 60 of 221 flat wagons ordered from China to carry containers and heavy machinery were delivered at the start of December.