

## Volume 181 No 12



The Hokuriku Shinkansen has steadily expanded westwards from Tokyo over the past three decades, reaching Tsuruga in March 2024. Its extension to Osaka remains a priority project, but Japan's Ministry of Land, Infrastructure, Transport & Tourism has been reflecting on alternative ways of serving the country's declining and ageing population more cost effectively. This could see the adaptation of some conventional arterial routes for higher speeds (p34).

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## CONTACT

Railway Gazette International

1st Floor, Chancery House, St Nicholas Way, Sutton, SM1 1JB, Great Britain

Tel +44 20 8652 5200

editor@railwaygazette.com

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## IMAGE OF THE MONTH

- 4 DB and DSB launch Talgo fleets

## COMMENT

- 5 'Demography is destiny'

## INTELLIGENCE

- 6 European Commission sets out high speed network ambitions
- 8 India and Bhutan agree cross-border links
- 9 Railways Bill tabled in UK parliament
- 10 Virgin Group plans cross-Channel services
- 11 København Letbane launched
- 12 DART improves connectivity
- 13 DB reshapes management board
- 14 Market
- 16 Škoda Group eyes joint venture

## INNOVATIONS & RESEARCH

- 17 Automation on the Betuwe Route

## DATA & TELECOMS

- 18 **Migration challenges temper FRMCS optimism** With the launch of a landmark testing programme, momentum is building behind the realisation of the Future Railway Mobile Communications System. Yet as Nick Kingsley heard at UIC's recent conference in Paris, significant challenges remain
- 20 **Addressing GSM-R obsolescence 'more urgent than in Europe'** Australia's unique GSM-R specification and a sector-wide push to deploy ETCS across a diverse set of rail networks is spurring interest in rapid adoption of FRMCS
- 24 **Futurail aims to have autonomous passenger trains running in six years** Co-founders Alex Haag and Maximilian Schöffner tell Andrew Grantham how Franco-German start-up Futurail is aiming to bring automation technology from the road sector to rail, where they see a great opportunity to build a Europe-based global champion
- 27 **AI can help railways to 'do boring better'** 4AI Systems founder Derel Wust explains to Nick Kingsley how AI holds the key to determining train location, offering potential for a data-led approach to

minimising the risk of overspeed and signal passed at danger incidents

- 30 **Augmenting safety with advanced simulation** Indian start-up SimDaaS Autonomy is using advanced simulation tools to develop hazard perception and scenario planning tools that could further improve safety on the country's railways. Founder Dr Bharat Lohani explains its technology to Bharti Jain
- 32 **6G connectivity** Amid a push from the national government to launch a 6G telecoms network by 2028, Korea Railroad Research Institute is assessing how domestic railway operators could deploy the technology. Benjámín Zelki reports
- 33 **Optimising the OT cloud** OT clouds and data centres are becoming essential pillars of resilient, intelligent rail operations, from automation to AI-driven maintenance, argues Benoît Leridon of Nokia

## JAPAN

- 34 **The Shinkansen reaches a crossroads** Given its declining and less economically active population and the escalating costs of construction, Japan is investigating alternatives to continued expansion of its high speed network. Mike Bent considers the challenges and options
- 42 **Autonomous Operation offers flexible service provision with fewer staff** Trials on the RTRI test track near Tokyo have verified the performance of onboard detection and decision-making systems that could form the basis for autonomous train operations
- 45 **Targeting the international market** Having been selected to help operate London's Elizabeth Line, the part-privatised Tokyo Metro is looking to win more contracts to operate and maintain urban railways. Meanwhile, it is working to introduce what it calls GoA2.5 train control, as Naoshi Sakai explains to Benjámín Zelki

## IN FOCUS

- 47 **MF19 introduction marks Paris metro milestone** The first of up to 410 next-generation trainsets worth €3bn has entered service on Paris metro Line 10. Jérémie Anne reports

## SIDETRACK & CONTACT

- 50 Dieter; Double arrow of time

## IMAGE OF THE MONTH Europe



Deutsche Bahn and Talgo launched the operator's ICE L inter-city fleet at Berlin Ostbahnhof on October 17, ahead of the start of revenue service with the December timetable change. The unveiling was attended by new DB AG CEO Evelyn Palla, Federal Transport Minister Patrick Schnieder and Talgo's Executive Chairman Carlos de Palacio y Oriol.

Under a framework contract signed in February 2019, DB has ordered 79 Talgo 230 push-pull trainsets with a total value of €1.4bn. Each 17-car formation powered by a Class 105 electric locomotive will be 236 m long with seats for 562 passengers.

The first of 16 similar Talgo 230 trainsets ordered by DSB to operate long-distance and international routes entered service between København and Hamburg on November 3 (top). The Danish trains are hauled by Siemens Mobility Vectrons, initially working top-and-tail pending the delivery of the driving trailer cars.

# COMMENT

Nick Kingsley, Executive Editor, Railway Gazette International

nicholas.kingsley@railwaygazette.com



## 'Demography is destiny'

Under the slogan 'demography is destiny', Democratic Party strategists in the USA believed for years that there was an inevitability about younger, more diverse and supposedly more progressive voters becoming enfranchised, so the Dems would gain an insurmountable caucus of support in national elections.

The current political landscape suggests those strategists may have been a little too optimistic. But wider demographic changes are exercising policymakers in many parts of the world, especially in the many developed countries where birth rates are flatlining and population numbers are set to fall in the years ahead. This raises a slew of questions about how living standards can be maintained and retirements funded as populations age. Clearly, there are also implications for infrastructure spending, and within that the provision of rail services.

It is well understood, if rarely vocalised, that railways are a high-volume business. Rail advocates often maintain a staunch and laudable commitment to retaining rural passenger services or less-than-trainload freight operations. Yet at the same time, we see frequent reports emphasising just how challenging the economics of these services can be, despite the impassioned reactions from all and sundry when the spectre of cuts is raised.

Japan has for years been in the dubious position of battling a depopulation crisis. As we report this month (p34), the crunch is even starting to affect the famous 'bullet trains', with growing doubts over the viability of completing long-planned Shinkansen extensions. While rural depopulation and a shrinking labour force are not the sole factors, they are among the reasons that the government's vision of achieving a 7000 km high speed network might not reach fruition. As just one example, plans to extend the Hokkaido Shinkansen to the northern outpost of Asahikawa have been put on hold, and alternatives are now being explored.

4.5  
€bn

Enhancement  
funding  
settlement  
for which  
Jean Castex,  
the next SNCF  
President,  
has promised  
to lobby

The population crisis in Hokkaido serves as a stark illustration of the challenge: a lack of bus drivers could even undermine attempts to replace some conventional rail services after the Shinkansen opens to Sapporo. The demographic crisis that was already threatening the fortunes of Japan's rural railways (RG 5.22 p50) is only getting more acute.

Japan is not alone in facing the fraught reality of secondary railway economics. France stands out among its major European counterparts for having an especially stark contrast between its trunk network and a partially moribund web of largely rural routes, many of which see little or no traffic.

As part of studies underpinning the structural reform of the French rail sector, the government found in 2019 that rural lines accounted for 9000 km of the 28000 route-km national network. No less than 78% were single track and 85% were not electrified. But classifying these as bucolic branch lines fails to give a full picture — rail advocates remain alarmed by the decay of once-thriving cross-country main lines linking major cities like Lyon and Bordeaux via Limoges. But as aborted start-up Railcoop found, trying to revive such connections is much more difficult in practice than it might have seemed on paper (RG 5.24 p7).

The 'territorial integrity' and quality of the French rail network was on the mind of former Prime Minister Jean Castex when he appeared at the Assemblée Nationale on October 29 as part of his

confirmation as the next SNCF President (p13). While he reiterated well-trodden arguments about the impact of market liberalisation, Castex saved his strongest comments for the state of the country's rail infrastructure.

Referring to the permanent way as 'the foundations of the house', he said he faced 'the mother of all battles' to bring the network back to an acceptable state of good repair. 'Without a high quality network, we cannot do anything', he insisted. He promised to lobby for the enhancement funding settlement to be raised from the current €3bn per annum to €4.5bn, with the SNCF group itself funding €500m of that increase. But he repeated the suggestions made by his predecessor Jean-Pierre Farandou over the past year that 'innovative financing mechanisms' would be needed to find the remaining €1bn.

Yet the fundamental problem remains: France is a relatively low-density country with large distances between its urban centres. This inevitably has an impact on railway economics, and if passenger services in particular are not merely to endure but to thrive, a rethink of their operating model may be needed. As we report on p24, Franco-German start-up Futurail sees autonomous operation as the key to driving down asset and staff costs. Its full automation system is incorporated into the Draisy lightweight two-axle battery railcar, which Lohr plans to test on regional branch lines in the Moselle region next year.

Returning to Japan, RTRI is also researching what it terms 'autonomous operation' with an overt goal of reducing staff numbers (p42). While such an abrupt approach to human resources might be too blunt for railways in other countries, there is little doubting that macro-societal demographics — not to mention the industry's own angst about the attractiveness of rail careers — mean that digitalisation and automation will surely emerge as an attractive option for railway operators in many parts of the world. Especially if the alternative is seeing rail services disappear altogether. @

“Digitalisation and automation will surely emerge as an attractive option for railway operators in many parts of the world”

## Briefing

Région Sud has selected **SNCF Voyageurs** to operate the Lot 3 package of Zouli-branded regional passenger services on routes including Marseille – Toulon – Hyères/ Les Arcs, Marseille – Aix – Pertuis/Veynes – Briançon and Romans – Valence – Briançon services. The 10-year contract starting from December 2029 is valued at €1.8bn. The région is also spending €328m to acquire 25 CAF Régiolis trainsets, and €46m to build a maintenance facility at Briançon.

Hungarian operator **CER Cargo Group** has agreed to acquire **Wiener Lokalbahnen Cargo**, which was founded in 2007 and now provides intermodal and wagonload services internationally. Wiener Stadwerke launched an open bidding process in May to find a strategic partner for WLB's freight business, and the transaction is expected to be completed by the end of 2025.

The UK government has announced £120m of funding towards the restoration of passenger services on the freight-only branch serving BMW's Cowley car factory in **Oxford**, including the construction of two stations at Cowley and Littlemore. Local partners will be asked to contribute £35m, and the scheme is expected to be delivered by 2029-30.

**RFI** has commissioned an additional pair of tracks between Voltri and Sampierdarena as part of the Genova Node capacity expansion programme.

Hungarian state railway **MÁV** has closed its regional line between Debrecen and Nagykereki to facilitate the expansion of a battery plant operated by Chinese company CATL. Part of the alignment is expected to be reused for a future 160 km/h main line linking Debrecen to Oradea in Romania.



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# Commission sets out high speed network ambitions

## EUROPE

The European Commission has unveiled proposals to accelerate the development of high speed rail across the European Union. It said on November 5 that the creation of a 'well-functioning and faster' rail network by 2040 would support the twin goals of becoming carbon-neutral by 2050 and strengthening Europe's global competitiveness.

Building on the Trans-European Transport Network, the plan has been developed through stakeholder dialogue, and is structured around four pillars:

- accelerating investment and creating a truly interoperable high speed rail network;
- a 'High Speed Rail Deal', providing a multilateral commitment

to mobilise the necessary investment to ensure completion of the TEN-T network by 2040;

- binding timelines to remove cross-border bottlenecks to be set by 2027;
- a dedicated EU financing strategy, supported by a strategic dialogue with member states, industry and financial players.

The Commission said finalising the TEN-T high speed network by 2040 would cost around €345bn, while a more ambitious network operating at speeds well above 250 km/h could cost €546bn by 2050. Public funding alone would not be enough, and the plan would require private investment, along with loans and guarantees from financial institutions such as EIB.

The Commission also plans to co-operate with financial

stakeholders to expand or create innovative financing tools for new entrants to acquire or lease rolling stock.

'High speed rail is not just about cutting travel times,' emphasised Commissioner for Sustainable Transport & Tourism Apostolos Tzitzikostas. 'It is about uniting Europeans, strengthening our economy and leading the global race for sustainable transport.'

★ On October 30 Tzitzikostas outlined a 'delivery plan' to complete a 1 435 mm gauge mixed-traffic railway between Madrid and Lisboa, targeting a journey time of 5 h by 2030 and 3 h by 2034. The two Iberian capitals are around 505 km apart, but there is currently no passenger service between them. The rail corridor would be around 600 km long. 📍

## Southern Coast corridor completed

### SOUTH KOREA

The Southern Coast railway corridor linking Mokpo and Busan has been completed with the opening for revenue service of an 82.5 km link between Mokpo and Boseong in the southwest.

Built for 200 km/h operation, the largely single-track electrified railway has been built at a cost of 1.65tr won. It has six intermediate stations at Sinboseong, Jangdong, Jeonnam Jangheung, Gangjin, Haenam and Yeongam.

Developed in stages, the corridor is initially being served by diesel trains, with a daily *Saemaeul* train and a pair of *Mugunghwa* services each way offering a fastest journey time of 4 h 40 min between Mokpo and Busan. KTX-leum high speed trains are due to be deployed from 2030, when electrification of the Gwangju Songjeong – Boseong – Suncheon route has been completed. 📍



## Bank backs rail revival

### COLOMBIA

Latin America and Caribbean development bank CAF has approved a loan of up to US\$300m to support the Railway Reactivation, Sustainable Mobility & Logistics Efficiency programme, which aims to transform Colombia's transport infrastructure.

The programme includes reactivation of the rail network, the electrification of public transport and the reduction of logistics costs, with the aim of strengthening the country's

competitiveness and 'significantly' reducing carbon emissions.

There is also support for modernisation of the regulatory and institutional framework of the rail sector, including the establishment of a National Railway Agency and the prioritising of strategic projects. This will be accompanied by action to strengthen urban and regional public transport by incorporating clean technologies and improving financial sustainability. The National Planning Department will act as technical co-ordinator.

'We are backing a comprehensive vision that will reactivate rail transport as the backbone of intermodality, promote the electrification of public transport, and reduce the logistics costs that today limit the country's competitiveness,' explained CAF Executive President Sergio Díaz-Granados on October 10. 'It is a commitment to territorial connectivity, social equity and environmental sustainability that will transform the way Colombia moves and connects with the world.' 📍