



2026: off to an interesting start

Welcome to the first *Modern Railways* which has gone to press in 2026; already it's been quite the year, and I'm saying that in something I'm writing this on its 16th day!

You only need to read Railtalk and 'News Front' to see that the railway continues to provide talking points each and every day. Sir Andrew Haines, who stepped down as Network Rail Chief Executive last October, is about to take over as Chair of DfT. Then, as the railway was coming to terms with that announcement, Labour revealed its plans for Northern Powerhouse Rail. The devil is in the detail for that project... and there is little detail. That lack of detail is not helped by the fact that the trade press was, bizarrely, excluded from the launch event at Neville Hill attended by various mayors from the north of England and the Chancellor Rachel Reeves. I can only guess that the scrutiny (and, largely, criticism) the announcement received from commentators was part of the thinking. Nevertheless, we will continue to shine a light on the good and bad of the railway as *Modern Railways'* role continues to be the voice for the industry but also its critical friend.

This issue has had a longer than usual gestation period due to the festive period. That means I can compare and contrast a couple of trips I have undertaken which perhaps highlights the excellence of today's railway and also where it can improve.

Let me start by saying that I continue to believe that there is nothing better than travelling by rail

– it can be a real joy. Being able to sit back, look out of the window or work, listen to music (in your headphones, please, nobody wants to hear your call or bad taste in albums!) while you are whisked to your destination is superb. It's unrivalled. As people are aware, I like to travel to Europe (one trip during this period, to see an Italian football game) but I find flying so much more stressful when it comes to buying the right tickets, being there in good time, the worry of going to the right gate and the lack of legroom – all things you don't always have to contend with by rail. People will say I should travel by rail and that is certainly something I intend to explore soon!

Anyway, back to this period and a couple of journeys I'd like to highlight. The first was the *Modern Railways* annual Christmas Pullman trip with Great Western Railway. There was slight trepidation due to the reliability issue of the Intercity Express Trains (*Modern Railways*, January 2026), however, on the day, that worked ok. Our nine-car Class 800/3 took us to the West Country smoothly, arriving on time. Several of the team left the train at various locations including Taunton, Exeter St Davids and, finally for me, Newton Abbot where there was time to wait for a while before getting the next train back to London. Due to engineering works, the trains were diverted via Bristol Temple Meads, making the journey longer, but giving more time to sample the Pullman offering – and sample it you must! Anyway, after our train had left Newton Abbot, I received a call from the ever-helpful

GWR press office asking if one of the MR team had left a suitcase behind. "Yes" was the answer (it wasn't me, before anyone gets any ideas). After much mocking, it was agreed that the GWR team would call me and arrange collection. The suitcase was duly sent to London on the train behind us and was collected by said MR team member. On behalf of that person, I would like to once again thank GWR. It also, for me, highlighted the railway at its best. An unusual situation, perhaps, but I have never in all my years travelling on the Great Western, found the staff to be anything other than helpful and courteous – something echoed by my colleagues.

Another thing from that trip was the ability to divert away from the usual route - something I wished was possible on New Year's Day.

Now, something I have been on about for years, have quizzed senior leaders on it (and received promises things would change) and have made almost a personal hobby horse, is the closure of both routes between Norwich and London at the same time when hundreds, if not thousands, of additional people (football fans) are travelling to the capital. On 1 January, 2026, it happened again.

This time, the Great Eastern main line was open all the way to Stratford, but London Liverpool Street was closed. I can accept that the change is fairly simple to the Elizabeth Line - in theory. However, as I wrote last year, Stratford is not easy to navigate and when GA is using three platforms for its GEML operations, the last thing it needs is passengers unable to find

the 'tap in, tap out' equipment and having to scurry around looking for staff or where to tap their card.

Meanwhile, on the West Anglia main line, the railway was closed south of Cambridge North for more engineering work including resignalling in the Cambridge area.

Why is this an annoyance? Well, Norwich City were away at Queens Park Rangers on 1 January and sold out the away end. That means more than 1,500 additional people were headed to the capital. Many could have used the railway but would have been put off by the need to use a bus in the west of the region or changing away from Liverpool Street. Certainly, the trains I used were quieter than you would expect so people must have found alternative ways of travel - which is a shame as the friend I travelled with made a point of stating how good the Class 745s he travelled on in each direction were.

And this leads me to my big hope for 2026. As the formation of Great British Railways gets ever closer, and the management team to lead the railway into the brave new world is put in place, it must be easier for passengers and freight customers to be able to use and access the railway. Engineering work is unavoidable but closing both routes between two cities at the same time needs examining. If the new railway is to be successful, it needs to be more attractive to those who want to use it more often. 

Richard Clinnick
Editor, *Modern Railways*

Glorious Devon: Great Western Railway No 802108 heads west from Dawlish on 10 August 2023. A recent *Modern Railways* Christmas Pullman trip along the sea wall highlighted how good rail travel and staff can be. Richard Clinnick



NEWS

- 8** **News Front**
Government reveals latest plans for Northern England, Siemens reveals next generation Desiro Verve, new chairs for NR and DfT
- 18** **Rail Freight**
DCRail successfully trials Plumstead freight; RFG reveals 2026 priorities
- 20** **Infrastructure News**
NR completes major Christmas engineering; HS2 completes vital Water Orton works
- 82** **Moving Wheels**
Northern new trains move closer, '350/2s' head for storage, and Chiltern prepares for Mk 3 farewell
- 84** **Europe View**
Keith Fender reveals the latest news from across the Continent

FEATURES

- 50** **A Greater Manchester vision**
Manchester Mayor Andy Burnham has ambitious plans for the City Region's rail network. Richard Clinnick looks at them in detail

- 56** **Coventry to Nottingham case moves forward**
Plans for improving a key Midlands link are developing rapidly
- 60** **Hydrogen demonstrates its potential**
Tony Streeeter reports from Tuxford as the railway examines the potential of hydrogen for traction and traffic
- 66** **Freight operator finances**
In an extract from *The Modern Railway*, Chris Cheek examines how freight operators' finances are holding up
- 68** **Cock-up or conspiracy?**
In an explosive analysis, John Morris argues decades of failed policy have failed the regions
- 76** **'Castles' farewell**
GWR withdrew its 'Castle' HSTs in December 2025. *Modern Railways* reports on the occasion

REGULARS

- 3** **Welcome**
Editor Richard Clinnick ponders what's in store for 2026
- 6** **Railtalk**
Northern England needs concrete plans, not vague ambitions for improvements



'69s' on the Seaford branch: with Bishopstone station in the distance, Nos 69013/022 top-and-tail a Tonbridge West Yard seasonal treatment train running via Gatwick Airport and Brighton on 6 January 2026. Chris Livings

24 **Informed Sources**
Roger Ford reveals the untold story of the Intercity Express Programme, 20 years after it started

40 **Pan Up**
Ian Walmsley assesses East Midlands Railway's new Class 810s and takes a ride on Avanti's Settle-Carlisle diversions

78 **Forum**
Readers' views and opinions

88 **The Human Factor**
Is mental health on the railway merely a token gesture? Tracey Barber examines the evidence

90 **Blood and Custard**
Our diary column

92 **Trackwatch**
The latest changes on the rail network

94 **People**
The latest arrivals and departures on Britain's railway network

95 **In Business**
Contracts and developments in the rail supply chain

96 **Alan Williams**
Accessibility on the railway is inconsistent and often poor, as Alan discovers

ON THE COVER

EXCLUSIVE: SIEMENS' NEXT GENERATION DESIRO VERVE

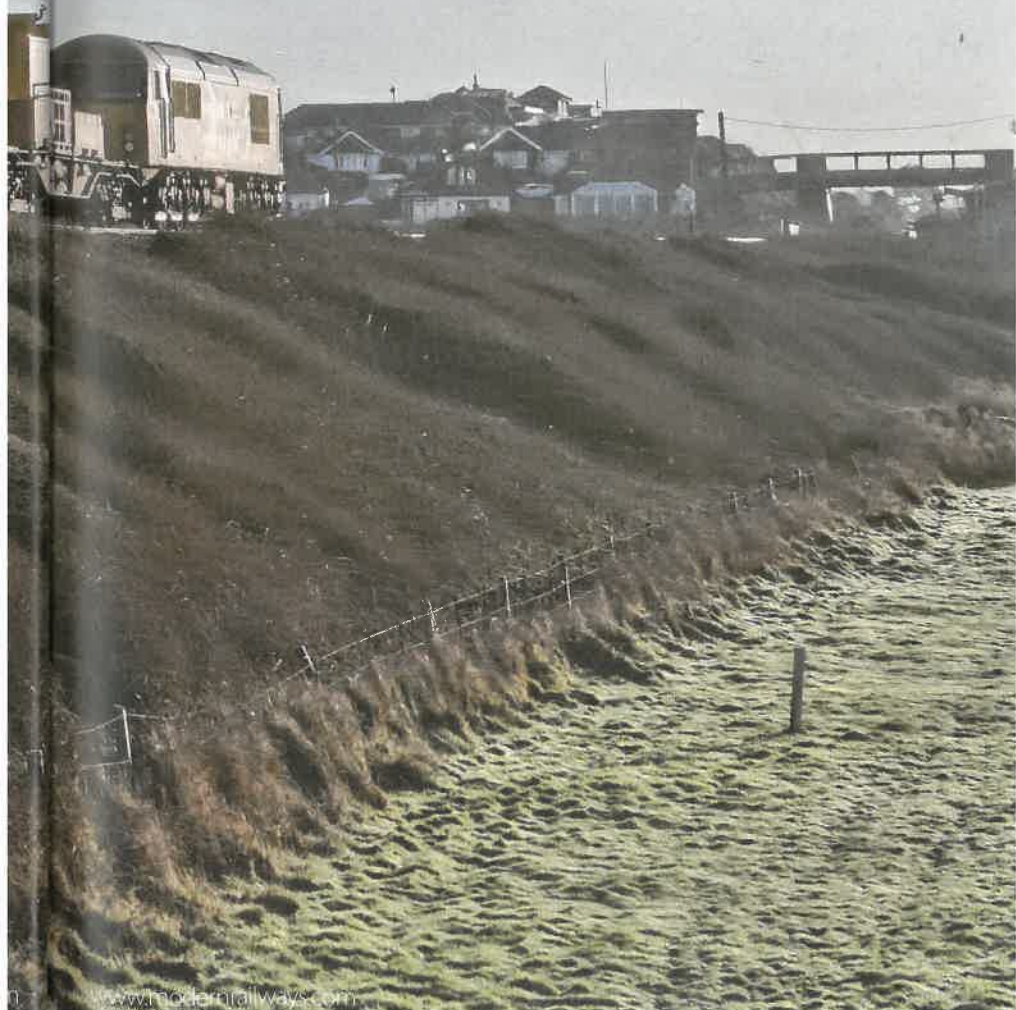


CLASS 810s - THE MR VERDICT - GBRf STORES CLASS 60s

On 23 May 2025, Northern No 331109 approaches Euxton Balshaw Lane with the 16.05 Blackpool North-Liverpool Lime Street. Tom McAtee
Insets: Tony Miles/Jamie Squibbs

- 10** Desiro Verve
- 68** Sabotaged!
- 8** Northern plans
- 24** The IET story
- 12** Class 455s
- 40** Class 810 verdict
- 11** GBRf stores '60s'

A SUBSCRIPTION TO **MODERN RAILWAYS** OFFERS GREAT SAVINGS ON THE COVER PRICE. SEE PAGE 22 & 23 FOR DETAILS



Perspiration, not aspiration, is needed for Northern upgrades

Just before this edition of *Modern Railways* went to press, the Government announced 'plans' to upgrade the rail network in northern England. 'Improved connections' were promised, plus a new Liverpool-Manchester railway, and at the end of this programme, completion of a new railway – but definitely not High Speed 2 – between the Midlands and the north.

There are three minor problems with this 'plan' (we use the inverted commas deliberately). First, while the intention to improve the north's rail network is laudable, there's no specification of what should be built, what it should achieve and what the benefits

are. Without those, it's impossible to decide what actually to do.

Secondly, while a funding ceiling of £45 billion has been announced, nobody has any real idea what this will actually fund. Could it build that new railway – including an underground station at Manchester Piccadilly if the city region's mayor Andy Burnham has his way – AND improve connections across the Pennines AND build the definitely-not-HS2-Phase 2a route? Nobody knows.

Thirdly, with no specification or funding, there's no timescale for these non-existent projects to be completed. It seems a safe bet that a child born in, say, Stockport today, will be well into adulthood

if and when the programme is completed. Driving instructors can rest easy for the next 15 or so years that their services will still be needed in many towns and cities.

PHASING

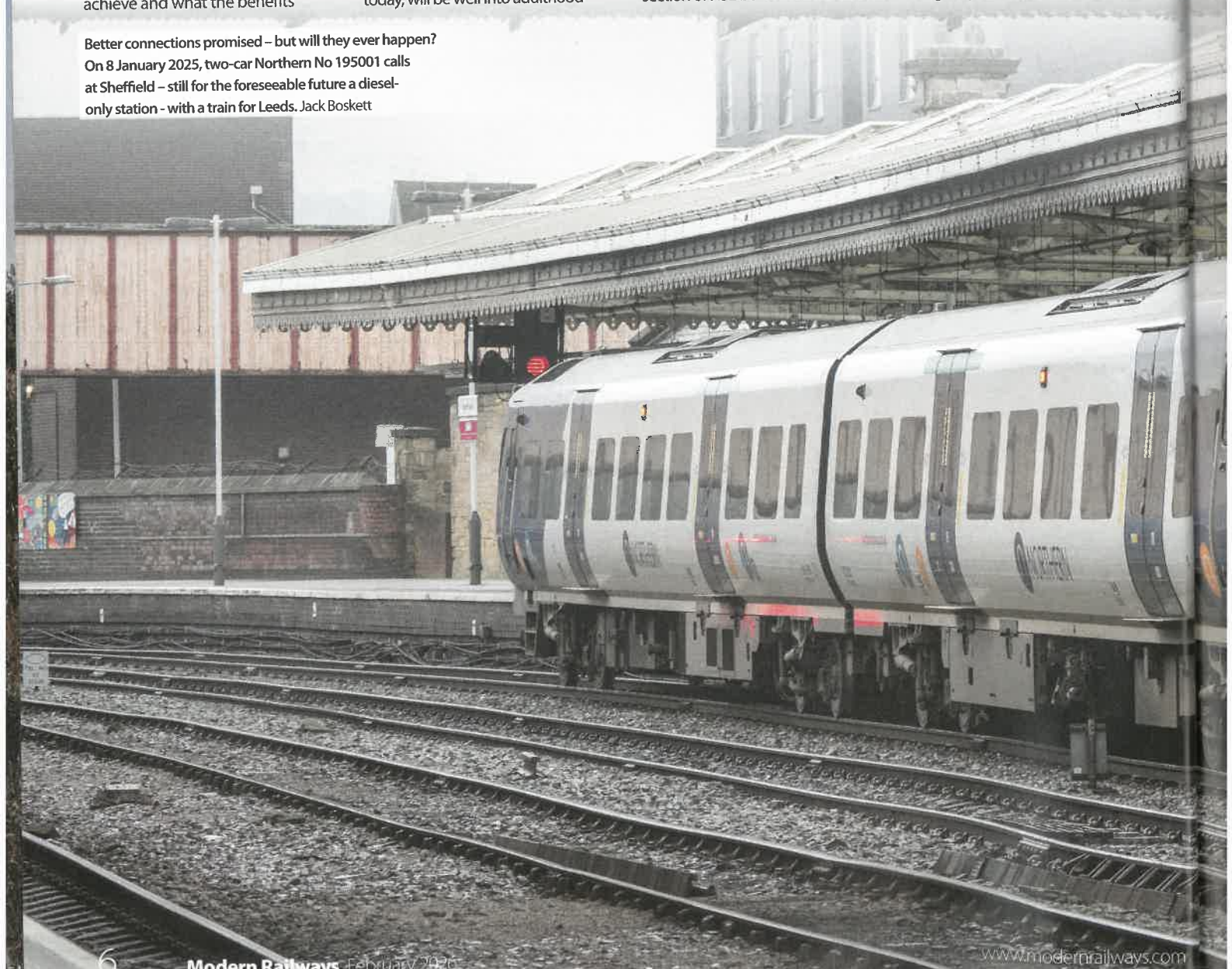
We have reported extensively on capacity issues affecting our north-south main lines, with those of the West Coast main line particularly acute. Particularly troublesome is the two- and three-track section south of Stafford – originally proposed to be solved by a Stafford bypass line, which was ditched when it seemed HS2 would ride to the rescue. The need for that relatively cheap and relatively straightforward-to-build section of HS2 between the Midlands

and Crewe is pressing – so why is the Government pushing it to the back of the queue? The danger is that improved east-west links across the North will fail to reach their full potential due to lacunae in the north-south network.

Relief of the WCML fast lines would enable more freight and improve punctuality and reliability – and crucially, enable benefits to be shared with the putative Liverpool-Manchester line. Descope it if needed with lower operating speeds (and associated lower specification electrification and track), lay conventional ballasted track rather than slab, as per High Speed 1. But get the thing built urgently because the benefits will

Better connections promised – but will they ever happen?

On 8 January 2025, two-car Northern No 195001 calls at Sheffield – still for the foreseeable future a diesel-only station – with a train for Leeds. Jack Boskett



ripple out across the north. A small positive is that land acquired for HS2 Phase 2a from the Midlands to Crewe is to be retained, at least in the 'meantime', whatever that means.

Another key point is that it is essential that congestion on the approaches to Manchester, which HS2 Phase 2b would have addressed, is dealt with in the new plan. How will the business case for Liverpool-Manchester look as a standalone proposition? From a revenue perspective, it is surely better to take a share of relatively high value tickets from the Midlands and London to northern cities on it than relying – as seems likely – purely on those pan-North West journeys. This new railway could have to bear all of its costs with little traffic from outside the north easing the burden. That could hobble it from the start.

HOBBLLED

Cynics might suggest it's hobbled anyway given the 'pause' to Midland main line electrification. For a vastly lower cost than the new railway,

Sheffield and (with extensions to the wires) other areas could reap the performance and reliability benefits of electric trains, with the lower emissions in urban areas a useful bonus. As a statement of intent to upgrade the north's transport networks, and with work able to start well before the next general election, reinstating this scheme, as embarrassing as another U-turn might be, would at least have demonstrated sincerity. If, as a nation, we can't afford a simple electrification scheme, is it really credible to suggest a new railway linking northern cities is likely to happen?

There are clear shades of the Integrated Rail Plan here – promising action at some point in the future but, in reality, kicking the upgrade ball clear out of the stadium and onto the moon from where even if it is feasible to retrieve it from there, the practical and financial realities may well rule it out. What too of the implications for DfT's infrastructure and rolling stock strategies promised for later this year?

The fact that the press release announcing the 'plans' came from the Treasury may help to explain the air of unreality about it all. We're told organisations across the railway were taken completely by surprise and given no opportunity to prepare. That just about sums up the sense of all of this.

These 'plans' are nothing of the sort. They're an undefined, unspecified, unfunded wish list.

OPEN GOALS


The most infuriating aspect of all of this is that had the Government taken the time to ask stakeholders including the railway, city regions and other bodies what is actually happening in the north, and what quick wins there might be, it could have emerged with rather more credibility than it has.

How about confirming funding for the next stages of the Transpennine Route Upgrade, or (with a touch of acceleration) confirming the first tranche of Northern's new fleet? What about TransPennine Express' long-running new trains order?

With a little imagination, the Government could have done something with its in-house operators to show the north matters. Something on ticketing, perhaps a Northern Railcard – anything that can actually be delivered reasonably quickly and offer benefits to customers.

What transport networks across the country need – notably the East Midlands, which can justifiably feel aggrieved about the lack of investment there – is fewer aspiration-led wish lists of possibilities and more perspiration in getting contracts signed and spades in the ground. That's what people notice.

People in the north aren't daft. They'll see these latest announcements for what they are – kicking improvements down the line that may never happen. Meanwhile, can we expect more of the same incoherent bloviation in the infrastructure and rolling stock strategies DfT is promising for later this year?

The sooner the railway takes back control of its future, the better. 





Orders awaited: an artist's impression of Siemens' next generation Verve unit. Courtesy Siemens

Siemens prepares for next generation with Desiro Verve

SIEMENS' NEXT generation Desiro Verve trains will come in EMU and battery EMU forms, with the train builder promising wide route availability and high levels of accessibility for passengers with restricted mobility.

Northern, TransPennine Express and Southeastern are seeking new trains, with longer term orders expected for Great Western Railway, Chiltern Railways and South Western Railway to replace their ageing ex-BR DMU fleets.

Desiro Verve vehicles will be 23-metres-long and formed in three-to-five car sets (longer versions can be built if required), and Siemens says the trains will be able to run on all routes cleared for Class 158/159 DMUs and Mk 3 coaches. Initial versions will be offered as 25kV AC trains with battery options, but the manufacturer is considering a dual-voltage version capable of operating on 750V DC third-rail routes.

Maximum speed operating in straight electric mode is up to

110mph, and up to 100mph on battery. Siemens says experience gained with its Mireo Plus B battery units in Europe means it can guarantee a minimum range of 50 miles under all conditions for end-of-life batteries (lifespans are expected to be 20 years), with longer intervals likely for newer batteries. Just one change of battery is expected during the train's predicted 35-year life. The batteries are based on those used on the Mireo Plus Bs, with the same Lithium titanate oxide chemistry which offers a longer cycle life and wider range of operating temperatures than lithium-ion batteries typically used in electric cars. Siemens can also offer discontinuous electrification using its Rail Charging Converter to convert power from domestic rather than high voltage supplies if desired.

CONFIGURATIONS

Traction power is said to be flexible depending on customer requirements, and unlike previous

generation Desiros, power bogies can be located on intermediate vehicles historically running as trailers in older trains. Power bogies are based on those on the company's Mireo fleets, while trailer bogies are those used on the Class 700/707/717 fleets operated by Govia Thameslink Railway and Southeastern. Unlike European Mireos, Desiro Verve will not be articulated.

While interior configurations are flexible, on vehicles with no PRM-compliant toilet, upwards of 70 seats per car are expected: doors will be in a 1/3 and 2/3 configuration.

Extendable electric footsteps at doorways to improve unassisted boarding are claimed to offer 'industry-leading compliance' with accessibility standards.

Drivers' cabs are based on those used on the Mireo fleets, adapted for the UK loading gauge, with extensive commonality between the two designs.

Siemens plans to assemble Desiro Verve at its Goole plant, which is

building the 2024 Stock trains for London Underground's Piccadilly Line. Delivery of the first trains post-order for testing is expected within around 2.5 years. Significant pre-service testing will take place at Siemens' Wildenrath facility.

Siemens Mobility UKI's Head of Business Development – Rolling Stock Graeme Clark told *Modern Railways* he is confident Desiro Verve will win orders: "It's an excellent product, with service-proven technology throughout," he said.

CDAS OPTIONS

Siemens' Connected Driver Advisory System (CDAS) is being offered on Desiro Verve, and trials conducted on ScotRail Class 380 EMUs suggest its use can offer energy consumption savings of around 15% or more. While its main use is to help drivers regulate their trains to avoid stopping at red signals, on battery versions of the train, it can also be used to optimise the state of charge, suggesting coasting downhill to save energy, for example.

Siemens Mobility UKI's Head of Sales – Rail Infrastructure, Rob Thomas, says the ongoing integration of passenger operators within DfTO offers scope for commercial models not considered viable with conventional franchising, such as offering CDAS as part of the trains' long-term contract, with energy consumption savings over the lives of the train exceeding the cost of installation and operation. CDAS can also be retrofitted on to any other train in the UK using the already installed GSM-R radio, and longer term potential is said to include real-time response to weather conditions, something Mr Thomas says is more feasible under an integrated railway. "The sort of whole system thinking we're seeing on the railway now presents so many opportunities waiting to be unlocked: we are genuinely excited about the potential of CDAS to improve efficiency and safety across the network."

Porterbrook acquires Corelink Aventras and '196s'

PORTERBROOK IS acquiring the 324 five-car Alstom Class 730 Aventura EMU vehicles and 80 CAF Class 196 DMU cars owned by Corelink and operated by West Midlands Trains, for an undisclosed sum.

The 12x2-car '196/0s' and 14x4-car '196/1s' were built by CAF in its Spanish and Newport facilities between 2019 and 2021. WMT

uses them in the West Midlands area, although 6x2-car DMUs have been sub-leased to Chiltern Railways for East West Rail duties.

The 48x3-car Class 730/0 EMUs, built by Alstom between 2020-2023 at Derby Litchurch Lane, began entering traffic in 2023 and are for WMR operations around the west Midlands. The 36x5-car Class 730/2s began entering

service with London Northwestern Railway from June 2024, several years later than planned. Not all the sets are yet in traffic.

Corelink is a joint venture between Infracapital and Pan-European Infrastructure II, a fund managed and advised by DWS Group and GmbH Co KGaA.

Announcing the deal, Porterbrook Chief Executive

Mary Grant said: "West Midlands Trains has been one of our largest customers for over 15 years and this latest transaction solidifies that partnership for the future. It also completes a programme of more than £1 billion of capital deployed during the last five years in new trains, fleet upgrades, traction innovation and rail infrastructure."

Hendy highlights train design opportunities

THERE IS a real opportunity, over time, to make the railway more consistent for the benefit of passengers through train design following the introduction of Great British Railways, says Rail Minister Lord Hendy.

Lord Hendy was speaking at the final evidence session for the Transport Select Committee on 7 January in its examination of Government plans to reform the rail sector through the establishment of GBR. He gave evidence alongside Network Rail

Chief Executive Jeremy Westlake, Director General for Rail Reform and Strategy at the Department for Transport Richard Goodman and Lucy Ryan, DfT Director for Rail Transformation Programme.

Quizzed about accessibility, Lord Hendy said: "The fact that we are unable to explain how the design of trains will cope with various sorts of wheelchairs, because there are about 200 designs of trains, all the spaces are different, you cannot get on them very well, and in some of them the toilets

are in different places, is the sort of thing I would expect GBR to sort out much better in the future than anybody has done on the railway for the last 30 years."

Challenged on this later, he said: "The Government has already set out on a journey to have a long-term rolling stock and infrastructure strategy, which is precisely to stop the vast numbers of different trains bought as a consequence of the franchise process, which are not necessarily compatible, and which do cause passengers concern

on a daily basis. Of course that cannot be done overnight, but there is a real opportunity here."

He explained how different types of rolling stock are needed and how they must be different depending on the sector they are serving. "There is a real opportunity here, over time, to make the railway more consistent for the benefit of passengers, and we have to start somewhere. It will not change overnight. Railway rolling stock lasts for 30 or 35 years, but over time, we can make that as an improvement."

Iarnród Éireann orders 20 new EMUs

ALSTOM IS to build a further 20x5-car X'trapolis EMUs for Iarnród Éireann (Irish Rail) in a €160 million deal.

The new trains will replace the fleet in use on the Dublin Area Rapid Transit (DART) system and follows two previous orders for new IE 90000 Class trains, bringing the total investment in new EMU and battery-electric trains to approximately €670 million.

The new order will supersede the original 8100 Class rolling stock – used on the largely coastal line from Greystones to Malahide and Howth – increasing the number of Alstom cars ordered for DART+ to 285, made up of 57x5-car X'trapolis trains.

Alstom says the first order for 95 vehicles will enter service mainly on the Dublin to Drogheda line from the first half of 2027 while the second order of 90 vehicles is due to enter service from 2028.

All three orders form part of a framework agreement which provides for up to 750 EMU and

BEMU vehicles for Ireland over 10 years. Furthermore, 155 out of the 185 carriages from the first two orders will work on BEMU services, with recharging facilities, also being provided by Alstom, available at Drogheda.

The new order has been placed by Iarnród Éireann through the National Transport Authority (NTA) and funded by the Department of Transport.

"This order of new DART carriages is the latest demonstration of the Government's commitment to public transport and to rail in particular," said Minister for Transport Darragh O'Brien. "It forms part of our NDP Sectoral Investment Plan for transport, which will see more than €10 billion of investment in public transport infrastructure, in addition to €2 billion allocated to commence construction of MetroLink from the Infrastructure Climate and Nature Fund, over the period 2026 to 2030," he added.

The full DART+ Programme, encompassing new fleet and infrastructure works under DART+ West, South West, Coastal North and Coastal South, will eventually double the capacity of rail services in the Greater Dublin Area.

Being manufactured at Alstom's Chorzów facility, near Katowice in Poland, the new fleet will consist of five-car X'trapolis trains. A ten-car X'trapolis train will have capacity for at least 1,100 passengers.

GBRf stores Class 60s

TEN CLASS 60s operated by GB Railfreight (GBRf) have been stored by the operator due to the introduction of the Class 99s.

GBRf used the '60s' on duties including biomass trains in the North East, however it has begun re-gearing Class 66s which are being used on duties previously employing '60s'.

A GBRf spokesperson told *Modern Railways* on 7 January: "With our new bi-mode Class 99s entering service imminently, we are undertaking an analysis of our locomotive fleet. For the time being, we have

placed our Class 60 locomotives into warm storage pending review of their future requirements."

Speculation suggests GBRf may also remove some '66s' from traffic but this has previously been denied by the operator.

As this issue of *Modern Railways* went to press there remained no introduction date for the Stadler Class 99s.

GBRf's decision leaves DCRail as the only regular user of Class 60s with the operator planning to double its fleet from four to eight locos (see 'Moving Wheels').



Decision awaited: the future of 10 GBRf Class 60s depends upon future requirements, the operator has told *Modern Railways*. GBRf No 60021 powers the 12.27 Rylstone-Hunslet through Scale House, in the Yorkshire Fells, on 10 December 2025. Chris Gee

Eurotunnel gears up for ERTMS

EUROTUNNEL IS preparing to introduce a dual European Rail Traffic Management System (ERTMS)/TVM-430 signalling system on its network as part of a modernisation strategy.

Compagnie des Signaux (CSEE) – part of the MERMEC Group – is to supply the signalling system

and will fit onboard equipment to Eurotunnel's 57 Brush Shuttle locomotives which currently run on the Channel Tunnel's TVM-430 system.

Following onboard equipment installation, CSEE will install lineside equipment to allow transition between TVM-430 and ERTMS.