

There's some heavy duty analysis in this month's column, starting with an up-date on the railway's current financial state as it seeks win back ridership. For the technically minded there are exclusive photos of Hitachi's proposed solutions to the 800 Series cracking crisis with more analysis. And I conclude with a brief history of railway plans, as background to the Great British Railways Transition Team's Whole Industry Strategic Plan (WSP)

Operators facing revenue-cost gap

Network Rail slims ahead of GBR

Chasing Will o' the WISP

800 Series - Hitachi's remedial mods break cover

While successive lockdowns have wrecked the railways' finances, with lost revenue approaching £15 billion, there had been worrying signs even before the pandemic. After years of the franchised operators paying a net premium to Government, from 2018-19 the situation reversed, with the subsidy required increasing in the following years. And remember, this was in addition to Network Rail's Direct Grant.

Since the pandemic began, the Treasury has been pouring billions into the passenger operators to keep the trains running despite the collapse in ridership. But in terms of official financial data, we are always running six months behind.

For example, the Office of Rail & Road's most recent industry finances report covers the second Quarter of 2021-22 (July-September 2021). This provide an indication of the recovery in ridership and revenue as restrictions eased last year following the first wave of the pandemic.

Taking Quarter 3 2019-20 (October-December 2019) as a baseline for pre-Covid ridership and revenue, traffic was back to 60% by the Autumn of last year. DfT's own passenger-journey-based ridership data for the same period suggested that by the end of 2021 traffic was around was up to 70% of pre-Covid.

However, this was academic, because the introduction of the Government's 'Plan B' restrictions, following the arrival of the Omicron variant in December, saw ridership plummet, taking us back to around 50% of the old 'normal'.

Clearly, the impact of the restrictions has varied between operators and their markets. In the column I analyse how this has affected revenue.

As a final piece of analysis, I have attempted a rough estimate of the recovery of fare revenue before the impact of the Omicron variant. I reckon that the equivalent annual fares income was up to £6 billion by Period 6 2020-21. On that basis, my 'guesstimate' is that annual revenue could be back at £8 billion by the end 2022.

In parallel I look at the scope for cost cutting, where the Government has demanded a 10% reduction across the board. This is not going to be easy for the TOCs, which have little control over their costs, apart from staff.

So everything hinges on the return of passenger traffic in the coming year. Thinned-out timetables are being reinstated. With staff sickness levels hopefully falling, the capacity should be available. Time for a spring (charm) offensive.

Network Rail reverses rising costs

Network Rail's Report & Accounts for 2020-21 shows that the wages bill rose by 5.8% year on year, reflecting a 6.9% increase in the numbers employed to 44,523.

In the column I have the results of the Voluntary Severance Scheme (VSS). The numbers mean that redundancies will now be necessary.

According to Network Rail Chief Executive Andrew Haines, Network Rail's head count has been increasing by 1,000 a year over the last 10 years. Some of this was necessary, following the austerity imposed as Network Rail took Railtrack out of administration. In response to current crisis, the aim now is to get management grade employment back to the 2017 headcount.

Even that is not going to meet the DfT target. Unlike the TOCs, Network Rail's status as a regulated utility means that its income is assured for the five years of each control Period. I have a chart showing how expenditure has increased over the last three years. In its Report & accounts for 2020-21, Network Rail noted 'operating costs increased from £5.8bn to £6.4bn largely due to planned increases in maintenance activity agreed as part of the five-year CP6 settlement'.

In contrast, enhancements and the associated borrowing is controlled by the DfT. And here we are, approaching the start of the fourth year of CP6, and still waiting for an update on the last, decidedly skimpy, Rail Network Enhancements Pipeline (RNEP) published back in in October 2019.

In the column, I tempt controversy by questioning whether renewals, instead of being accelerated, could contribute to the immediate cost savings. Back in the days of BR, when we had a vertically integrated railway, and the Government decreed an across-the-board cut, all departments were expected to share the pain.

While this article focuses on short-term savings in the face of the current crisis, in the long term, Great British Railways (GBR) is forecast to ramp up to efficiency savings of £1.5 billion a year over its first five years – starting from next year. Expected savings include costs avoided through better access management, how retail is managed and simpler interfaces.

These do not include the potential to increase revenue through such developments as simplified fares and ticketing, and improved service quality.

800 Series modifications in close-up

Hitachi's solution to the various fatigue and corrosion cracking problems in the bogie bolster area of the 800 series vehicles began test evaluation in January. We featured a photograph of the test train – 802007 – in our News section last month.

Now, an alert reader has spotted the test train and taken photographs of the modifications. Two vehicles have been fitted, a Driving Pantographs Trailer (DPT) and the adjacent Motor Composite. Different designs of replacement yaw damper brackets have been required for the leading and trailing ends of the DPT. So there is plenty to consider.

To put the 800 series modifications in context, the column also features photographs of other manufactures' designs for the interface between the yaw damper and the body-shell for 125 mile/h DMUs. My thanks to my colleague Tony Miles for providing the illustrations.

Compared with their peers' designs, Hitachi's revised solutions, particularly on the DPT, are decidedly chunky. However, it is important to bear in mind that these vehicles are part of the Intercity Express Programme (IEP) – a 27.5 year Train Service Provision (TSP) deal. So now is the time to make sure that the problems has been cured once and for all!

Industry in consultation mode

Consultations appear to be all the rage at the moment. The Great British Railways Transition Team (GBRTT) has just concluded consulting on proposals for a 30 Year Plan for the railway. Meanwhile, Transport Secretary Grant Shapps has launched a 'public competition' to 'help guide' the decision on the location for GBR's new headquarters.

Why have I highlighted these two consultations? Because, in their own way, they are equally irrelevant to what is needed here and now. Locating the new headquarters is a lot less important than getting on with creating GBR, where there seems a distinct lack of urgency.

Back in 1992, just six months after the Privatisation White Paper was published, the necessary Railways Act was ready to go before Parliament. It is now nine months since the Williams-Shapps Plan was published and there is still no news of when we might see the required legislation.

But surely a long term plan is a good thing? According to DfT the Whole Industry Strategic Plan (WISP) – will be 'a landmark resource, enabling the government to set a clear and unified direction for the railway in support of long-term priorities, assisting with problem solving, and aligning the rail sector behind a common vision and with joined-up decision making'.

True, as the cliché goes, 'fail to plan, plan to fail'. But experience tells us that in the railways, even a 10 year strategic plan is unlikely to survive first contact with the unknowable future.

In the column I look at the history of railway plans. And since writing it, I have discovered that British Rail published its first five year Corporate Plan in 1971.

What this review confirms is that long term plans are ephemeral. For example in 1991, British Rail published 'Future rail – the next decade'. This was described as BR's 'Agenda for the next 10 years to improve existing services and build vital new lines'. Just 15 months later the Privatisation White Paper was published and, within five years, let alone 10, BR no longer existed.

However, my real problem with the WISP call for evidence is the massive distraction it represented for hard pressed management and the associated diversion of human resources in collating and presenting data. I quote two questions from the consultation in the column. Taken seriously, each of these is almost a PhD thesis in the making and there are six in all.

I conclude with this extract from the consultation document. 'Responses that identify opportunities for prioritisation, efficiency, and cost reduction in order to drive value for money for the taxpayer and rail user, will be particularly welcome. Any responses that focus solely on requests for new investments or enhancements will not be considered, and any proposals for new funding will need to evidence the cost reductions or efficiencies such proposals would realise. The purpose of the Strategic Plan will not be to present an investment pipeline, and as question 3 sets out below, the unprecedented taxpayer support given to the railway during the pandemic combined with the long-term cost challenge of providing rail service means that it will be crucial for the Strategic Plan to recognise the restraints on public finances'.

Which takes us back to my opening item.

New train TIN-Watch

As expected, another Hitachi fleet, LNER's Class 800 bi-modes, has been promoted from the Table and has been replaced by – another Hitachi fleet. Lumo's Class 803 electric units are already above the 20,000 MTIN MAA required for promotion, but I will keep them in the table for a couple of months to make sure this initial performance isn't a flash in the pan.

Incidentally, in last month's e-Preview, on the subject of my review of the new trains' trials and tribulations, I asked what I thought was a rhetorical question: 'how soon before the Treasury notices'? Next thing was the arrival of an email from an HM Treasury address. It read 'I guess this email answers your question! Your column is always helpful. Thank you'.

HS2 trains

It's all very embarrassing. And all because I, for once, forgot that Informed Sources' 1st Law trumps all others.

As you can read in an interview in the magazine, of course the Hitachi-Alstom Joint Venture isn't producing a UK version of the ETR1000 Frecciarossa. Where would be the challenge in that?

Memo to self: stop being so naïve.

Roger's blog

Last month ended with an on-line seminar on discontinuous electrification which I joined, together with some fellow members of our informal electrification 'ginger group', just to keep an eye on things. My colleague Ian Walmsley covers this in his 'Pan up' column, pointing out that the seminar treated the subject in isolation, ignoring the associated infrastructure and rolling stock issues.

Much more interesting was the latest six-monthly one-to-one for the specialist press with Network Rail Chief Executive Andrew Haines. As ever this was both an open exchange of views and highly informative. With luck, the next one might be in person, rather than a Teams session, where it was my turn to ask a question while muted!

This coming Friday the Modern Railways Golden Whistles awards return as a live event. Where the Golden Spanners celebrate rolling stock reliability, the Whistles highlight operational excellence.

For some years now, we have been running morning conferences alongside the after-lunch awards ceremonies. At the Spanners I'm tied up in the morning preparing for the actual awards, but I'm looking forward to some highly topical presentations at the Whistles conference.

March starts with a long awaited visit to Liverpool Street for an up-date on how they are exploiting the Luminate Traffic Management System. It's almost exactly eight years since I visited Resonate's Derby offices for an introduction to Luminate. One of the pleasures of this job is following innovations through from concept to successful application.

Meanwhile, I've been researching the second of my reviews of Modern Railways' Six Decades. The 1970s are particularly interesting because for the first five years I was working in other industries and not following the railway.

I've been going through the back numbers of the magazine to get up to speed. What strikes me are the similarities between the challenges facing the railways then and the current situation.

Roger