

In this month's column, the Scottish Ministers show their Westminster counterparts how to write a High Level Output Specification; and with the Government's new enthusiasm for open access I explain what operators will have to pay. There's an analysis of signalling costs, plus a brief history of railway sandwiches. I also pay tribute to a great Chief Civil Engineer.

Scottish HLOS - integrated railway in waiting
Open Access faces new Rules of Engagement
ETCS juggernaut crushing resignalling options
British Rail - What drives Conservative paranoia?

When the Scottish Minister's High Level Output Specification (HLOS) for Control Period 7, which starts on 1 April 2024, was published, I wondered how it would compare with the pitiful England & Wales version. It turned out to be a breath of fresh air, showing that the Scottish Ministers, or rather their rail team in Transport Scotland, are informed customers for Network Rail.

They have very clear views of what Network Rail is to deliver in CP7 - plus catching up what they failed to deliver in the current CP6. Behind the text is the firm stamp of command.

For example, the HLOS says that during CP7 Transport Scotland will continue to work with Network Rail, at 'Regional and corporate/central level', as plans for the further empowerment of the Scotland Route evolve. The aim will be to provide 'a clear understanding of the priorities of the Scottish Ministers and how this translates into railway outcomes and outputs. At a central level, this applies equally to Freight and National Passenger Operations and Systems Operator functions.

Transport Scotland intends to maintain a tight grip on renewals, starting with a 'clear specification' of the original plan and cost, followed by updates on any changes from the original.

Remembering that one of the original recommendations of the Williams-Shapps Plan was that Great British Railways (GBR) would determine timetables centrally, the HLOS says that Network Rail and ScotRail Trains should create and operate a joint 'Scotland-based timetabling team'. This team will cover all timetable activity on the Scottish network.

While elsewhere on the UK network, journey time reduction has stalled, Network Rail is required to 'take full advantage of maintenance and renewal works and timetable development processes' to enable ScotRail Trains to cut journey times. Transport Scotland's longer term challenge is for Intercity journeys to have an end-to-end average speed of 60 mile/h by 2030.

Network Rail, in conjunction with ScotRail Trains, plus cross-border passenger and freight operators, is required to develop a 'whole industry financial view' for each route. Combining the cost of the operation and maintenance of the network assets with the revenues from the services on the route will provide the whole-industry profit & loss (P&L) account which was a fundamental feature of the Williams Review.

By far the strongest sign in the HLOS that Transport Scotland sees the railway as a national operation is the section on signalling. Having considered Network Rail's approach to signalling investment 'elsewhere in Great Britain', the HLOS concludes that it 'does not align' with Scotland's current strategic priorities. In particular there is no business case for the European Train Control System (ETCS) Level 2 in Scotland at this time.

One requirement I found particularly encouraging. Network Rail should continue to support the Interchange Programme which provides opportunities for staff in the constituent parties of Scotland's Railway to 'broaden knowledge and understanding and stimulate greater operational integration through, staff exchanges, shadowing and secondment opportunities'. An integrated railway will need managers and engineers with 'total railway' experience.

Of course, all this will be easier said than done. And Chris Gibb's decision not to continue as Chief Executive of Scottish Rail Holdings exposed tensions behind the scenes - particular around ministerial interference with operational decisions. Instinctual fortitude will be required by the railway management.

New Open Access operators to pay more

Perhaps the most striking aspect of the evisceration of the Williams-Shapps Plan by the Department for Transport's new ministerial team has been the screaming U-term on open access operators. For the last two decades Open Access has been anathema to the Department's civil servants.

DfT argued that their services abstracted revenue from its franchises, while being able to undercut them because the privateers did not pay their fair share of access charges. TOCs pay a fixed annual Track Access Charge (TAC) plus a Variable Usage Charge (VUC) per vehicle mile. Previously Open Access Operators paid only the VUC.

The Office of Rail & Road, took DfT's complaint on board and from the start of the current Control Period in 2019 new Open Access Operators have been subject to a supplementary Infrastructure Cost Charge (ICC). For the first two years, while the new operation is settling-in, the ICC does not apply. Then it ramps-up to the full rate over the next three years.

Lumo will be the first operator to pay the ICC. The initial 25% charge will apply from October this year.

In the article, I compare the ICC with the TAC paid by TOCs and also calculate the scale of the ICC for a notional Open Access Operator.

I also use comparative fares data for LNER and Lumo to show the potential additional cost per seat mile for the Open Access Operator. Even with the full additional charge Lumo still has the edge.

Rail Minister Huw Merriman on BBC Radio 4's 'You and yours' on 13 February said 'We want to encourage more and more private operators to get involved in the operation of trains through open access and more competition along the line'. I link this aspiration to an ORR survey which asked Open Access Operators what they saw as the principal barriers to entry and expansion.

Open access operators generally abstract revenue from Government contracted operators. This has an impact on the need for subsidy, hence ORR's 'Not Primarily Abstractive' (NPA) test for proposed new services. I explain how this works and also how it will be affected by the introduction of the ICC.

Meanwhile ORR is currently consulting on proposals for how the ICC should be set in CP7. How all this would work in a future when GBR is responsible for both infrastructure and contracted operators is yet another of the unknowns in the Williams-Shapps Plan and the associated legislation.

Signalling 'affordability' challenge

My colleague Rhodri Clark's comprehensive article on the prospects for the Marches Line (Modern Railways February), has triggered the latest in my on-going analyses of signalling renewal costs. Rhodri's article included the claim by Network Rail that replacing the mechanical signal boxes with modern multiple aspect signalling would cost £116 million.

At this price, resignalling would not support a business case based on rationalising signaller operating costs. As a result, resignalling the route will have to wait for the installation of the European Train Control System (ETCS) in 2036. Yes, that is not a misprint, 2036.

Revisiting previous articles, plus my signalling costs data base, confirmed that the price quoted for the Marches Line resignalling equated to a unit cost three times that of the North Wales Coast resignalling, which was reported in the April 2018 Modern Railways.

According to the Office of Rail & Road (ORR), between Control Period 4 (2009-2014) and Control Period 5 (2014-19), Network Rail's unit costs for re-signalling work increased by 77%. Another ORR study reported that 'Network Rail has set itself a long-term target of spending £190,000, on average, per Signalling Equivalent Unit (SEU) for digital signalling. This compares with approximately £412,000 per SEU paid for conventional signalling products throughout Control Period 5 (2014-2019). An SEU is an item of signalling equipment, such as a multiple aspect signal head of a point end.

Signalling readers will have spotted an oxymoron here: signalling has been increasingly 'digital' since the introduction of SSI in 1985. Like many other lay-folk, for ORR, 'digital' is synonymous with ETCS. But it isn't. ETCS is just one form of digital signalling.

So how on earth did Network Rail not spot that three times what the North Wales Coast resignalling cost might be a tad over the top? I answer this rhetorical question with a review of project cost inflation since privatisation, which I first identified in 2003.

In the article I also quote some of the factors which may have contributed to the lack of a corporate awareness of what projects 'should cost'. As a failed traction engineer, I can't help pointing out that this cost explosion has not affected my former engineering discipline.

Meanwhile, the ETCS juggernaut rolls on. However, Siemens WestRace Modular digital-ready signalling, employed for the North Wales Coast scheme, is being used for the current Devon & Cornwall resignalling programme. Various other low cost signalling systems are being developed, including a cheaper approach to ETCS itself.

But is ETCS really that affordable? We won't know until the ECML (South) resignalling has progressed further. Currently, it is coming in at £220,000-280,000 per SEU, but that does not include cab fitment. I hope to address this in a future column.

Harper's BR-sandwich jibe

I was not alone in thinking that Transport Secretary Mark Harper's George Bradshaw Address (Modern Railways March page 10) was a bit thin. For me, the most interesting part was his comment, that 'nationalisation was about as dynamic and forward-looking as the British Rail sandwich - soggy, wrapped in a cling-film of backward thinking and unfit for consumption in the 21st century'.

Note the use of the British Rail sandwich as a metaphor for nationalisation. Time for a brief history of the railway sandwich.

In 1986, when Mr Harper was 16, as part of its Modular Catering programme Intercity followed Marks & Spencer and Boots

and began selling packaged sandwiches. Sealed in their packaging they retained their quality for 36 hours and eliminated stocking buffet cars with raw materials.

True they cost more than sandwiches made on the train, but the extra cost was more than offset by extra sales. The new sandwiches were so popular that sales went from two million to six million a year, topping out at nine million before privatisation.

After the presentation, my old chum Christian Wolmar went up to Mr Harper and gave him a copy of his latest book 'British Rail: a new history'. Christian also queried the infamous sandwich reference. Mr Harper replied that he and his team had debated whether to take the cling-film wrapped soggy sandwich reference out but eventually decided to leave it in.

Now the fun starts. Advance copies of ministerial speeches, like the one sent out before the Bradshaw Address, carry the warning 'check against delivery'. So next day I downloaded DfT's official transcript of the speech. And the whole nationalisation is like a soggy sandwich section had gone.

Some social media ribaldry followed this discovery.

And the next time I logged on, the transcript had changed again. Occupying the space where the offending text had been was the message 'political content removed'. Who knew that I was making a political statement when I enjoyed a freshly made cheese and tomato sandwich in a BR buffet car all those years ago?

All good fun. But what I think this light hearted episode shows is that Conservatives have always felt threatened by the Nationalised Railway. I give examples from a speech in 1995 and Rail Minister Huw Merriman this year: the wording could be interchangeable.

There are some who welcome each new Transport Secretary or Rail Minister as the new broom. I have long regarded them as just another politician with the same ingrained prejudices and false recovered memories as all those that have come and gone before. And that is party neutral.

An engineer remembered

The column seems to have concluded with an obituary all too often recently. This month I celebrate a great civil engineer and an old friend, Philip Rees, who has died at the grand old age of 104.

We first met in 1976 when he was Western Region Chief Civil Engineer and I had just joined Modern Railways. With great patience he took me through the detail of the track up-grade programme to provide 125 mile/h running. This was for our feature on the introduction of InterCity 125

As I was leaving after the interview, Mr Rees paused beside a cabinet. On it was his 'symbol of office', I K Brunel's walking stick, which unfolded to provide a 7 ft ¼ inch gauge measure.

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He must have thought I was worth encouraging because throughout his long retirement blue envelopes would arrive addressed in his neat handwriting. He was a regular reader of Modern Railways and his letters, which I always opened with some trepidation, might comment on an article in the magazine, correct something I had written or point out an omission, or occasionally, contain a compliment.

Roger's Blog

Last month I was looking forward to an on-line presentation featuring revisions to the standards for AC electrification and traction. Regular readers will remember articles in the column highlighting the lack of pragmatism - also known as common sense - in the application of these standards which contributed to the electrification costs crisis.

In part, this was industry's fault for not challenging standards until it was too late. These revisions take on board various criticisms and I hope to report on the changes in the next column.

After last month's e-Preview was posted, I received an invitation to the first of a new series of round-tables for the railway press organised by the Great British Railways Transition Team (GBRTT). Network Rail Chief Executive Andrew Haines has been holding similar sessions with the railway press for some time and the new event follows the same format.

Unlike press conferences, which can be confrontational, these events generate more light than heat. Other organisations in the industry could follow suit with advantage - although I suspect that one reason for their success is Andrew's openness.

Meanwhile uncertainty over future industrial action is keeping me at the desk, but there is always plenty to be getting on with. Currently, there are 11 potential topics for the May Informed Sources, with space for only three or four. The priority can change at any time - or an entirely new topic can emerge as happened this week. It is this variety that makes the column, now in its 40th year, so rewarding to write.

That's all for this month.

Roger

