INFORMED SOURCES e-Preview January 2018

INFORMED SOURCES e-Preview January 2018

It’s mostly franchising in this month’s column, plus some technical analysis of the Class 800s early operation with Great Western Railway. My annual fleet reliability analysis features in our traditional focus on traction and rolling stock in Modern Railways first issue of the new year. Features include an Electrostar retrospective by Ian Walmsley.

Franchise replacement - all change please
Intercity East Coast re-booted
IEP performance – fact replacing fiction

Various documents published by the Department for Transport in November created further havoc in an already struggling franchise replacement programme. I’ll start with the less controversial change.

In the consultation document on the next Great Western franchise DfT observes, with masterly understatement, that with the current franchise expiring on 31 March 2019, ‘this is not an ideal time to plan for a potential change of franchisee as it falls in the middle of a major programme of change, which is scheduled to be completed by December 2019’. Extension to April 2020 ‘would help to ensure that new trains and timetable changes are implemented as smoothly as possible’

But it doesn’t stop there. According to DfT, when they started preparing to let the replacement franchise from April 2020, ‘we identified a number of reasons why this would not be in the best long-term interests of passengers and communities served by the franchise’.

DfT then expands on the number of reasons why ‘maintaining continuity of franchise operator, for a further period of approximately two years, could enable a better long-term outcome for passengers’.

But the Consultation Document also includes a proposal to split the current GWR franchise. DfT concedes that this would involve substantial preparatory work, such as reorganising the franchise into standalone business units, with separate workforces, train fleets and contracts with suppliers. And guess what?

DfT also expects to have an option in the new Direct Award to extend for a further period ‘of up to two years’. This, explains DfT, ‘provides flexibility to cater for circumstances that cannot be foreseen at this stage, and to adapt the franchising schedule to maintain a steady flow of competitions’. That would take GWR to 2024, coinciding with the end of Control Period 6.

ICEC triggers political storm

Back in the August 2017 column I analysed the emerging problems at Intercity East Coast where Stagecoach (90%) and Virgin (10%) are having to pump money into the franchise to meet the over-ambitious premium profile. Readers will know that the situation is not as simple as the Branson-Bashers, Bring back British Rail proponents and left wing politicians like Lord Adonis would like to believe.

As Stagecoach pointed out when it broke the bad news to its shareholders, ‘the scope and timing’ of the delivery of the new rolling stock under the government’s Intercity Express Programme and Government-owned Network Rail’s “reprioritised” infrastructure upgrade programme for the East Coast Main Line were ‘not consistent with what was assumed in our franchise bid and then contracted’.

So even had things been going swimmingly, VTEC would have run into a brick wall in May 2019 when the upgraded ECML on which to run the more frequent and faster trains, including an hourly 4h London-Edinburgh service, was not available. Without the services to attract more traffic and generate more fares income to pay the rising premiums, the franchise would have had to have been renegotiated from April 2019 anyway.

Since DfT is responsible for both the IEP contract and nationalised Network Rail, Government was on the hook as much as, if not more than, Stagecoach.

So talk of a government bail-out letting VTEC off paying growing premiums in the last three years of the franchise is mere political cant. Far from ‘handing in the keys’, Stagecoach is playing a long game and staying in play at a cost of £84.1 million over the next two years (2017-18 and 2018-19), in addition to drawing down £57 million from the Parent Company support loan commitment in the franchise agreement.

This put the pressure on DfT to find a way to justify pressing ctrl-alt-del and rebooting a ‘clean’ Intercity East Coast franchise. And on 29 November Transport Secretary Chris Grayling revealed the cunning plan.

East Coast Main Line will become ‘the first of the new generation of long-term regional partnerships which will be introduced from 2020’. The East Coast Partnership, between the public sector and a private partner, will be operated by a single management, under a single brand and overseen by a single leader’.

You can tell that DfT is desperate because if you wanted to set up such a partnership the last place you would choose would be the ECML. Intercity is a minority operator running a small fraction of the trains using the route. Yet, DfT’s private partner ‘will have a leading role in defining future plans for route infrastructure’. That will go down well with Thameslink, Northern, TPE and ScotRail, let alone the freight haulers.

As for thee ‘from 2020’ timescale, this allows a ridiculously short time to create the framework of the entirely new Partnership, let alone put the concept out to tender, submit bids, evaluate bids and then mobilise. And who knows what state the ECML capacity upgrade programme will have reached by 2019 when the bidding would have to start?

So impossible to deliver to that timescale, but presumably the Transport Secretary wouldn’t be told.

Meanwhile, back in the real world DfT is currently in discussions with Stagecoach-Virgin, ‘to ensure the needs of passengers and taxpayers are being in met in the short term while laying the foundations to bring forward the reforms in full under a long-term competitively procured contract’. According to Stagecoach Chief Executive Martin Griffiths, with the discussion making good progress ‘we are hopeful of reaching an agreement through to 2020 within the next few months’.

To get their pound of flesh, I would expect DfT to keep Stagecoach-Virgin on the hook until April 2019, running the risk that the Parent Company guarantee has enough cash left to keep funding VTEC. But that ‘from 2020’, aspiration depends on keeping the VTEC team on side.

Even assuming that that Martin’s ‘next few months’ means that VTEC 2.0 comes into effect on 1 April 2018, it is then going to take at least two, probably three, years to sort out/rescue the Intercity East Coast timetable , especially power supply and rolling stock issues. And then there’s Thameslink at the Southern end.

So how about a two year management contract from 2019 with an optional extension of at least another two years. That takes us up to 2023, by which time the start of Control Period 7 is only a year away. So why not make it a three year management contract with a two year optional extension?
If the bonkers Partnership idea has not been kicked in the head post Brexit, then bidding could start early in 2023 with the new management taking over on 1 April 2024. Or not.

Class 800 performance logs

Steve Jobs of Apple was credited with the ability to create a ‘reality distortion field’ when his team were developing the original Macintosh. A similar field surrounded the Department for Transport when the Intercity Express Programme specification was being developed.

One of the longest campaigns in Informed Sources history has seen me patiently explaining why DfT’s belief that distributed traction compensates for a shortage of installed power is delusional. But people have continued to cling to it like a security blanket.

However, the train is now in the metal, in the form of the Class 800 and, entering service with Great Western. And, as they say in motor racing ‘when the flag drops the b*llsh*t stops.
So I was delighted to receive the first analysis and modelling of Class 800 logs to date from the Railway Performance Society (RPS) And very interesting it has proved too.

For example when the delays to GWEP meant that the Class 800 bi-modes were going to be running under diesel power for over a year, DfT finally conceded that the 750hp (560kW) ‘reliability rating’ of the Class 800 MTU engines was not enough to match IC125 times.

So as part of the deal which saw the 9-car electrics for GWR delivered as bi-modes, Hitachi agreed to ‘unmuzzle’ the engines and run them at their 940hp (700kW) commercial rating. This added £300 million to the cost of the IEP contract.

Thus far the RPS members have failed to find any evidence of the uprating, analysis being consistent with the 750hp power output. Nor does analysis of performance with an engine out indicate that the automatic uprating of the other engines in the set to the commercial rating is happening.

These are, of course, early days for the Class 800 fleet, with the first sets being bedded in. I would not be surprised if the engine management software was locked at the Reliability rating. In addition, according to Informed Sources, GWR is under pressure from DfT not to ‘unmuzzle’ the engines.

As part of the £300 million deal the engine reliability regime within the contract is suspended for uprated power units. If an engine fails, Hitachi is held harmless for any performance regime penalties during the rest of the diagram and DfT compensates GWR.

One interesting feature to emerge from the analysis is the comparative performance from a standing start. Obviously the Class 800 zips away, but then the IC125 overhauls it. Way back in the IEP saga, my brother, the engineering professor, analysed just such a ‘drag race’ as part of my efforts to discredit the distributed traction fallacy. Using just published acceleration curves and excel he was within 20% of 2017 real world performance. Clever stuff, eh?

Welsh affairs

Talking of comparative performance, at the beginning of November I was invited to give evidence to the Parliamentary Welsh Affairs Committee on the cancellation of electrification between Cardiff & Swansea. My submission was a simple restatement of the advantages of electric traction and why bi-modes were a retrograde step.

Hitachi also put in a written submission and, quite reasonably, put the counter argument that bi-modes are the future. However some of the supporting claims made me pause.

According to the Hitachi submission ‘A hybrid Class 800 is lighter than existing intercity trains on the Great Western route’. Really?.

Now, this may have been a reference to weight per seat, in which case a nine car bi-mode is a bit better than a 40 year old train and a five car bi-mode a bit worse. So a draw.

But the more interesting, confusing and eventually enlightening claim read: ‘The wear per mile caused by a new train is 56% less than a HST (Class 800 £0.177 per mile compared to £0.4 for a HST). This was clearly short of a parameter.

So I checked with Hitachi and, as I suspected, they were quoting Network Rail’s Variable Track Access Charges, more properly Variable Usage Charges (VUC), per seat mile. VUC reflect the cost of track wear.

Now I went through the issue of comparative VUC in excruciating detail in several columns back in 2011 when only provisional figures for what was to become the Class 800 were available . So I thought it would be useful to repeat the comparison at current VUC prices. But when I downloaded the latest (November 2017) price list the Class 800 was not there.

And it turns out that the Class 800/801 VUC are still being determined by Network Rail. As I explain in the column this is not so simple as it sounds, due to design changes to the Driving Cars and, for the nine car units, the trailer cars.

This is likely to require replacing the current calculation of ‘average’ VUC rates for motor and trailer cars with separate rates for the driving and trailer vehicles. While this sounds obvious it would establish a precedent for setting charges, which ORR has to confirm. Resolving this change has delayed publication of the Class 800 VUC..

But when the VTAC price list is next updated I will recalculate the cost comparisons of the Class 800 with IC125. For a bit of fun, I might even include a spanner winning Greater Anglia loco hauled set.

Roger’s blog

Well, the session in front of the Welsh Affairs Committee on the cancellation of the Cardiff-Swansea electrification was fun. A surprising number of readers watched the hearing on the Commons TV and thanks for the positive feed-back.

There was an amusing moments when I was asked how long electrification would take. ‘Er, three years’ I hazarded. Fortunately my old chum and electrification guru Peter Dearman was sitting behind me in the public section. I looked round, Peter flashed me a surreptitious Vee-sign. ‘Two years, Mr Chairman’.

This year’s Golden Spanners awards had a record attendance, the usual great atmosphere and we handed out a record 19 spanners. This increase reflected the separation of post-privatisation trains into 1st and 2nd generation equipment.

The following week I had a fascinating session with an American manufacturer of composite train doors and floors. More to come in a future column, but the video of a test on an end door simulating a breeze block dropped off a bridge, was pretty convincing.

Last week it was the Rail Freight Group Christmas lunch where I found I was due to sit next to the guest speaker Transport Minister Paul Maynard. Unfortunately it was the day of the Brexit vote and Paul had to pull out.

Labour Shadow Transport Secretary Andy MacDonald stood in at 30 minutes notice and gave an encouraging speech for the freight operators, while panning DfT’s handling of VTEC. We had good chat, but I could not interest him in the fact that the VTEC franchise was shot from May 2019 because of the non-availability of the infrastructure upgrades needed. As with Andrew Adonis, for politicians issues have to be black and white, or rather red and blue, and nuance only weakens the message to the faithful.

I went to London early and had my first ride in a Crossrail Class 345 before the lunch. I didn’t want to frighten the paying passengers, but the odd thump from the fist of quality was favourable. However, long before we got to Stratford, where I got off to catch the Tube back into London, my pelvic bones were complaining at the hard seat. The fold down seats appeared to have a bit more padding. But then it is a short distance mass transit train.

Book review

If you’re looking for a Christmas present for a railway acquaintance can I recommend ‘An unexpected end to the journey: an introduction to international accidents on and around railways’? This is written by my long standing chum Peter van der Mark and is best described as an international ‘Red for danger’ updated to the 21st Century.

The 60 accidents examined range from a derailment in France in 1842 to a rail grinding train running through the stop blocks at a terminating station in the Netherlands in 2010. What makes the book particularly interesting is that Peter is a retired driver and is able to bring a wealth of practical insight to his analysis of the incidents. For example, when discussing Cowden, he recalls a starting signal at Woldingham that would not come off it is was raining. And he was driving a following IC125 on the day of Ladbroke Grove and was stopped at Reading West.

My only criticism of this fascinating book is that it would have been improved by some editing. The accident reports form one long 500 page chapter. Grouping together related accidents, SPADs for example, in separate chapters would have been more enlightening.

Publisher is Shrewdale Publishing it costs £15.00 and is available from Amazon.

Too soon to think about the New Year, so my thanks to informed sources everywhere for your support and encouragement during the past year, without which the column would have to be renamed. Feedback to e-Preview continues to increase and is greatly valued. I hope you enjoy a happy and peaceful Christmas and come back refreshed and ready for what promises to be a turbulent new year

Roger