

INFORMED SOURCES e-Preview March 2018

Just two major items this month, and the editor has generously given me some extra space to do them justice.

VTEC highlights ECML upgrades confusion
Traffic Management – DfT takes a hand
Any old iron

While the politicians are still obsessing about the failure of the Virgin Trains East Coast franchise, analysed in detail in Informed Sources as far back as August last year, this month's column focuses on the lessons hidden below the froth and bubble. The first is that the 2013 Periodic Review (PR13) of Network Rail's access charges for the current Control Period 5 (2014-2019) was an orgy of collusion in delusion by government, the rail regulator and industry.

Both Network Rail's Initial Industry Business Plan in 2011 and the Department for Transport's High Level Output Specification (HLOS) a year later had proposed an ambitious programme of major enhancements. But by the time Office of Rail & Road (ORR) published its final determination at the end of 2013 some two thirds of these schemes were still between GRIP 0 (Output undefined) and GRIP 2 (Pre-feasibility).

One list of projects published in the Final Determination included 53 major schemes, each with a blank in the costs column. Yet the total cost was shown as a spuriously accurate £5.931 billion.

At this point ORR could have, and probably should have, said 'This isn't working, we need harder numbers'. Instead it introduced its Enhancements Cost Adjustment Mechanism (ECAM). Under ECAM, as schemes reached GRIP 3 (Option Selection) Network Rail gave the costings to ORR to check whether they represented efficient expenditure.

By June 2014 ORR was processing the first ECAM schemes. I was told at the time that any scheme which had not been signed off at GRIP 3 by the deadline of March 2015 was likely to struggle for completion in CP5.

Of course, it all became academic following the review of enhancements by Network Rail Chairman Sir Peter Hendy in 2015. This saw several schemes paused or deferred.

VTEC

Stagecoach and Virgin were bidding for the Intercity East Coast franchise in the spring of 2014 just as CP5 was starting. DfT had specified a timetable with more services and shorter journey times from 2020.

Five infrastructure enhancement schemes were needed to provide the capacity for the step-up in frequency. These were

Kings Cross station throat remodelling;

Grade separation at Werrington near Peterborough;

Restoration of the fourth track between Huntingdon and Woodwalton;

An additional platform at Doncaster station;

North East freight loops.

In January Lillian Greenwood, Chair of the House of Commons Transport Committee, wrote to Network Rail and VTEC seeking clarification on the infrastructure issues affecting the franchise.

For Network Rail, London North Eastern & East Midlands Route Managing Director Rob McIntosh pointed out that the ring-fenced £247m East Coast Connectivity Fund (ECCF), intended to pay for capacity enhancements during CP5, was at an early stage of development during bidding for the franchise.

David Horne, VTEC Managing Director, explained that DfT required bidders for the ICEC franchise to agree to operate a specified timetable with the new DfT-procured IEP train fleet. Under its Franchise Agreement VTEC had an obligation to deliver an enhanced train service, with faster journey times, from the timetable change date in May 2019, with a further step-up in 2020. David argued that ORR's CP5 Final Determination 'obliged NR to deliver most of the (upgrades) as part of the ECCF'.

And while Network Rail's revised Enhancement Delivery Plan following the Hendy Review was approved by the ORR, 'ORR's approval did not address the subsequent financial consequences of these changes'.

According to David Horne, VTEC warned DfT that Network Rail's failure to deliver the 'promised committed upgrades on the ECML would likely prevent VTEC from delivering several of its future obligations under the Franchise Agreement'. This would affect the finances of the franchise.

That, of course, is now a problem for whoever runs the franchise after the Parental Company Support for VTEC has run out. This is currently expected in mid-April.

Which brings us to the second lesson. Enhancements are not only running late, their costs are becoming unaffordable. In the column I detail two examples.

The first is the provision of three freight loops at Ouston, Bradbury and East Cowton in the two track section between Northallerton and Newcastle. Bearing in mind that these were originally due to be delivered during CP5, which ends on 31 March 2019, it is surprising that the scheme was not endorsed by the ECML Programme Board until April last year.

Remember that at current prices the ECCF is worth £260 million before the Hendy Review shunted £50 million back into CP6. A 2013 study put the Anticipated Final Cost of the three freight loops at £35 million. The current estimate is £127 million.

British Rail's 'de-quadrified' of the four-track section between Huntingdon and Woodwalton in the 1980s is to blame for the second example. This took the up-slow line out of use. Today, re-quadrification is required to provide the capacity needed for the 2020 timetable, with the reinstated track electrified.

Ideally, the reinstated fourth track would run into the existing Connington Loop. This full-house solution was costed at £85 million at GRIP2. Now that the scheme has been taken to GRIP3 the cost has become an unaffordable £190 million.

As a result various cut-down options are being considered. Anticipated Final Cost now ranges from £125-180 million.

But there is some positive news. At his hearing before the Transport Committee on 22 January 22, Transport Secretary Chris Grayling revealed that, following his intervention 'some months ago', he expects that the power supply upgrade necessary for IEP to operate north of Doncaster, will be available. 'We now have plans in place that will enable that to happen. There is no risk to the introduction of the Intercity Express trains', he declared. So that's alright then.

Continuity

Network Rail is working to have the capacity enhancements in place for the May 2021 timetable. Which brings us back to the VTEC crisis. If the schemes analysed above, plus other essentials like grade separation at Werrington, are to be completed by May 2021, the ECML is going to be a series of building sites for the next three years.

At the same time Hitachi will be replacing the existing ICEC fleet with Class 800/801 electric and bi-mode trains, including taking over maintenance. Meanwhile the operator will be trying to maximise the use of the new trains within the capacity available for the May 2019 and May 2020 timetables.

Not the ideal situation in which to introduce Mr Grayling's barely thought out Regional Partnership between an operator and Network Rail 'by 2020'. Nor for the bunch of consultants who have taken over from Directly Operated Railways as DfT's operator of last resort, to take over ICEC in the short term.

Continuity will be essential. But has the Government got the courage to do the sensible thing for the railway and negotiate a management contract for David Horne and his existing team to keep on running the railway?

Traffic Management - DfT goes freelance

There are some areas of railway technology where I seem to be the only writer providing a running commentary on developments. Years ago I was the world's leading writer on vacuum toilets for trains - in a field of one.

Network Rail's procurement of Traffic Management has been tracked in this column since 2009 and this month I provide an update on progress with the various schemes. Or, rather, non-progress, because both of the contractors from the original procurement programme have yet to get a TM system operational.

There's a handy time-line in the column tracing the procurement process which has cost the thick end of £100 million. Under the 1st Deployment programme, Isolated TM, alternatively known as Operations Decision Support Tools (ODST), was finally installed at the South Wales Control Centre in December. This was two years late and didn't immediately have all its functions.

Further software upgrades should provide the Train Running Controller's workstation for the South Wales Main Line with ODST, the most basic form of TM, from March. It will be capable of supporting Very Short Term Planning and provide train graphs to re-plan the current service.

Provision of further TM functions, such as handling rolling stock diagrams and crew rosters, should be available towards the end of 2018. But this is subject to a further contract being agreed.

Presumably, Thales' other 1st Deployment Scheme at Romford Route Operating Centre, also due for commissioning in December 17, is now in a queue behind Cardiff.

Hitachi's TM system for Thameslink is intended to provide Interfaced TM for the central core and ODST for the fringing boxes at King's Cross and West Hampstead. When ordered in July 2015 commissioning was scheduled for August 2017.

According to Informed Sources it is now running a year late. Fortunately, the phased introduction of the Thameslink timetable means that TM is not considered essential until the 22 train/h service is introduced in May 2019. So fingers crossed.

Early success

Network Rail's hopes for an early Digital Railway success now rest on Resonate's addition of its Luminare Integrated TM platform to its IECC Scalable at the Thames Valley Signalling Centre.

Integrated is the full-house TM and, according to Resonate's Chief Executive Anna Ince, design, installation and integration testing is largely complete and staff training has started. It is reported to still be on course to go live in June this year.

Bearing in mind that Network Rail has spent £100 million with two mighty multinationals with not even an operational ODST in service, and that the plucky Brit from Derby is aiming to go straight to Integrated TM in 12 months, I have to rank this as an heroic aspiration. But the 30th Anniversary of the delivery of the first Class 91 locomotive on Valentine's day 1988, two years to the day after the contract was signed, is a reminder that with the right people, seemingly heroic aspirations can be met.

Stupidity

With the future of Traffic Management at a tipping point, enter the Department for Transport. The Invitation to Tender for the replacement Southeastern franchise requires the successful bidder to procure and implement an 'Interfaced Traffic Management System on the Ashford IECC control area and an Isolated Traffic Management System elsewhere together with a supplementary Connected Driver Advisory System and a TMS compatible Stock & Crew system'.

So, after Network Rail has struggled to produce a working ODST, system DfT expects the three shortlisted franchise bidders – Abellio, with East Japan Railway and Mitsui, Govia and Stagecoach, to buy an Interfaced system from scratch. And have it operational in the third year of the franchise.

Adding to the unreality the ITT notes that 'technical and operational outcomes and requirements specific to the TMS geography are not yet available and will need to be developed collaboratively between Network Rail, the Franchisee and industry partners as part of the design development process'.

Confusingly the ITT says that once procured the TM system should be handed over to Network Rail 'at nil cost'. But the Digital Railway Strategic Business Plan, published on 13 February, shows £75 million Approved Funding for the Southeastern franchise scheme. Informed Sources First Law applies.

Even more hootworthy, the ITT had the 'funding available to fund the capital cost of the Digital Rail Proposal' redacted only for Network Rail to fill the blank space.

Note that the franchisee is to provide TM at Ashford which has two IECC with five IECC Classic workstations. As mentioned earlier, TVSC, where Resonate is piloting Integrated TM on IECC Scalable, was originally equipped with Classic workstations which were upgraded to Scalable as part of the Great Western Route Modernisation.

How much would it cost to upgrade Ashford IECC to Scalable? Around £5 million. How long would it take? Nine months max. Then, if the GWML TM works as advertised, you could sit Luminare on the Scalable platform and have Integrated TM up and running.

So, here is the rational way forward for South Eastern TM.

- 1) Wait until the GWML Luminare trial has produced results.
- 2) June 2019 – if there are worthwhile benefits from the Integrated TM, upgrade Ashford IECC to Scalable. Ashford is due to be renewed anyway
- 3) January 2020 – install Luminare on Scalable – ideally persuading Resonate to enter another payments by results contract.
- 4) 2021 -Think about TM for North Kent and East Kent.

Unfortunately, this approach falls foul of various Informed Sources Laws and industry tropes, not least the ingrained belief that if you don't get competitive bids the private sector will rip you off. So expect the contract to go to a foreign firm with no experience of UK signalling.

Electrification scrapped – literally

Back in December Network Rail issued a notice inviting tenders for approximately 1000 tons of steel masts, booms and struts plus other materials. Photographs of the steelwork in store revealed the 'scrap' to be Series 1 Overhead Line Equipment – as being installed, gradually, under the Great Western Electrification Programme.

So I asked Network Rail what was going on. Apparently the masts and other components being sold for scrap are spares. They represent 4% of the steel procured to complete the London-Cardiff electrification. Scrap steel currently fetches around £100 per tonne.

Roger's Blog

Well, the Golden Whistles was as enjoyable as ever with a great atmosphere. Of course, where the Golden Spanners are just for mainline operators, the Whistles also feature London Underground and also incorporate the Irish Rail awards. But with Dick Fearn as a jovial master of ceremonies, the awards ran to time. And having thought I would be able to sit back and relax for once, I was called up to hand out the trophies in one of the categories.

Last week I had a session at Broadcasting House with Radio 4, being interviewed for a special report on the Today programme looking at proposals for renationalising the rail and water industries. Before returning home I also had an updating session with the Railway Industry Association.

Next week it the Guardian's annual George Bradshaw Address. This has been a bit anodyne in recent years. But this year's guest speaker is Network Rail Chairman Sir Peter Hendy who always has something interesting to say.

So I shall be sitting at the front and may even dare to ask a question. I've got one prepared.

On 13 March the All Party Parliamentary Rail Group has a meeting which was to have been addressed by Rail Minister Paul Maynard. Presumably the invitation will now be extended to his successor Jo Johnson. I hope so as he needs to be put straight on banning diesels, alternative sources of traction power and his perception that our industry can't innovate.

Meanwhile as I write this, Network Rail has just published not one Strategic Business Plan, as was the case with the last Periodic review in 2013, but a separate one for each Route plus Digital Railway. Lucky the diary is relatively quiet.

Roger

