

INFORMED SOURCES e-Preview May 2015

Signalling dominates this month's Informed Sources, and the news is pretty grim all round. However, for rolling stock aficionados I think I have determined how much IEP weighs and solved the mystery of the West of England bi-mode engine ratings.

Traffic Management System procurement aborted
West of England bi-mode performance conundrum
East Kent Resignalling delayed
LU Sub-Surface Signalling – twice the price and four years late.

Exactly a year ago, the lead item in the May Informed Sources was headed 'Descending into farce'. The subject was Network Rail's procurement of its much-vaunted Traffic Management System.

In the 'Signalling in Crisis' special report in the March 2015 Informed Sources, I gave a detailed breakdown of where TMS procurement had got to. Essentially, Hitachi, Signalling Solutions Ltd and Thales were bidding for the national roll-out of a severely cut-down version of TMS – essentially just the 'plan/re-plan' facility to revise timetables in real time.

To call it TMS-Lite would have been generous and this seems to have sunk in, because on 20 March, Network Rail told the three contractors that it had decided to not conclude the tendering for the deployment of accelerated Traffic Management.

After six years, and spending over £50 million, NR confessed 'We have learned a good deal in the last 9 months about the way we need to roll out ETCS and TM and the current process is not ideally suited to that'. Hence the decision 'to curtail a current course of activity which we now believe is not best suited to our business'.

ETCS struggling

ETCS is the other leg of Network Rail Chief Executive Mark Carne's Digital Railway. Someone has sold Mr Carne the idea that ETCS can 'liberate enormous amounts of capacity'. I don't know any experienced railwaymen who would support this claim.

Anyway, it has been clear for some time that NR's ETCS programme has been struggling. In the case of the Great Western Route Modernisation the contract for ETCS GRIP5-8 (effectively detailed design to completion) has yet to be awarded.

Similarly, as described in the March column, although bidding for East Coast Main Line ETCS Phase 1 is underway, as I was writing this column the date for bids to be submitted slipped back another eight weeks to July. As with TMS, don't expect a formal announcement, but deferral of the ECML ETCS programme by a year or two must be imminent.

West of England bi-mode performance conundrum

On the press visit to see the first Intercity Express Programme vehicles at Hitachi's Kasado Works in Japan, my colleague Keith Fender was told that the maximum axle load was 15 tonnes for a Class 800 bi-mode intermediate car. This included the eight tonne MTU underfloor diesel power pack. Axle loads for non-diesel powered vehicles were 13 tonnes or less.

A 60 tonne Diesel Electric Multiple Unit vehicle could not be right. But when Keith and I separately sought clarification, Hitachi declined to elucidate.

No matter, we could wait for the first vehicles to arrive. But in the meantime Informed Sources suggested that the Class 800s being considered as replacements for IC125 on West of England services could have a problem matching IC125 sectional running times on the Devon banks. If true, this could only be down to the power-to-weight ratio – either not enough puff or too much avoidupois.

That it was not an attack of the lard-butts was clear when the 800.001 vehicles, with shipping weights on display, arrived at Southampton. When I made allowance for the lack of seats and interior trim it was clear that Hitachi's designers have done a pretty good job weight-wise.

A 20 m long Class 395 Javelin intermediate Motor Second coach with 66 seats weighs 45.7 tonnes. Hitachi has produced a 66 seat 26m long vehicle with an 8 tonne 700kW (938hp) diesel power pack under the floor for a tad over 3 tonnes extra.

West of England

Then on 20 March, Hitachi announced that they had been selected by First Group as preferred supplier for a fleet of 29 bi-mode AT300 trains for West of England services. But note the designation of this first commercial order as ATR300 and not IEP or Super Express or Class 800.

Now comes the interesting bit. Explaining the significance of the ATR300 designation, Andy Barr, Chief Operating Officer, Hitachi Rail Europe said that, while closely related to the Class 800 bi-mode trains, the ATR 3000 'will utilise higher engine operating power to cope with the gradients in Devon and Cornwall'.

Naturally this got everyone confused and excited. Some assumed that the ATR300 engines would be more powerful than those in the IEP fleets.

Anyway, I had a welcome break from signalling woes, talking diesel engines and doing hp/tonne calculations. All is revealed in the column.

Suffice to say that it's all about operational reliability and redundancy. And if you want to hear MTU's little Vee-12 on full chat, Devon and Cornwall will be the place to go.

East Kent Resignalling commissioning

Over Easter it was planned to commission East Kent Resignalling Phase 2, covering the new signalling in the Sole Street-Sittingbourne corridor. With completion nearing, the reviews which form part of Network Rail's Delivering Work Within Possessions (DWWP) procedure began.

DWWP was introduced following the Liverpool Street and Rugby overruns in 2007. It is mandatory for all projects requiring disruptive access

at mid-week and weekends. For more detail see https://www.thepwi.org/about_us/blog/a_quick_guide_to_the_dwwp began.

Under DWWP, all worksites in a scheme must be assessed to identify any risks of a possession overrun. With EKR2, the T-4 weeks review – where the Go/No-go decision is supposed to be made – showed commissioning at risk. Given its importance, not to say scope for high profile embarrassment, NR tried to see if the commissioning could be rescued.

But after a ‘lot of effort’ over the succeeding fortnight, the T-2 review came to the same conclusion – the works were insufficiently advanced, or robust. Commissioning was removed (‘descoped’ in NR speak) from the programme.

Obviously there was still other work which could go ahead as planned. But then we come to the embarrassing bits.

A new Rochester station is being built, nearer the town centre. This is scheduled to open ‘in late 2015’. Easter commissioning would have transferred control from Rochester signal box to East Kent Signalling Centre, allowing the old box to be demolished. This was important because the box, obstructs the revised track layout serving the new station.

Constructions of Rochester station is now being re-planned ‘in order to achieve the public opening date’. Likewise commissioning of EKR2, so that it can be brought into use at the earliest opportunity.

Rochester’s new station wasn’t the only collateral damage. EKR2 would also have allowed the use of the new Platform 0 at Rainham station, plus line speed improvements between Meopham and Stroud viaduct.

So while Network Rail was able to report that all the big schemes over Easter were completed on time, in part this was because some work which might have over-run was ‘descoped’. And given the 12 month timescale of DWWP, finding testers for an early commissioning of EKR2 can only be at the expense of another scheme.

LU Sub-Surface Signalling – the saga continues

I have a soft spot for London Underground’s multiple attempts to re-signal the District, Circle, Metropolitan and Hammersmith & City lines. It’s like one of those family sagas, where successive generations turn out to be ne’er-do-wells and each book ends with much angst and recrimination for the new generation to resolve in the next volume.

It’s meat and drink for a writer like me who takes the long view and likes to slap down attempts to airbrush out the embarrassing past. As you can imagine I was in my element when, on 24 March, London Underground and the Mayor of London issued a press release headed ‘Plans to improve next four Tube lines confirmed’.

Clearly aimed at the forthcoming election, as an exercise in cynical opportunism it would not have been out of place in Orwell’s 1984. The best bit was how it boosted the still-to-be-signed contract to resignal the Sub-Surface Lines following the cancellation of the previous Bombardier contract on New Year’s Eve 2013.

According to the release ‘the next major phase of the Underground’s modernisation will see a new modern train control system introduced’ using an ‘even further improved version of the system built by Thales, now successfully operating on the Jubilee and Northern lines’. LU says that it is in ‘the final stages of negotiating a position with Thales’ Informed Sources suggest June for the new contract signing.

Total cost of the SSL modernisation is now £5.54 billion which includes the fleet of 191 S-Stock trains. This is 30% more than the original budget authority, the increase covering ‘a more realistic price for the new signalling contract, a longer overall programme, and additional infrastructure works and costs.

As everyone in the industry, well outside LU, knew when Bombardier presented their revised schedule in 2012, the 2018 completion date was unattainable. LU now expects completion in 2022.

Of course the extra cost of the resignalling has to be funded and it looks as though LU will keep within its budget by deferring the start of Deep Tube modernisation work until the SSL modernisation is completed.

Roger’s Blog

All the stories this month broke quite suddenly and required a lot of background research and analysis, which meant the run up to Easter was quite busy even without Easter Monday falling in the week when I have to deliver Informed Sources to the Editor. That was followed by the first issue of Rail Business Intelligence after its pre-Easter break.

Add in my contribution to our Editorial giving whoever is the new Transport Secretary on 8 May the benefit of Modern Railways long experience and I was ready for some R&R at the end of last week. And when I say ‘long’, the new man or woman will be the 31st Minister of Transport or Transport Secretary in Modern Railways’ history. Anyone care to name the first?

This week it’s the Fourth Friday Club meeting and we are all decamping to the National Railway Museum at York where the guest speaker will be Northern Rail Managing Director Alex Hynes.

May, of course, is show-time for the industry and this year it is Railtex at Birmingham. I’m not sure which day I will be pounding the aisles, but if you see me do stop me for a chat. I said that before Infrarail last year, adding that the frown is just my default concentrating face so don’t be put off, and it was good to meet so many readers and share industry gossip.

I mentioned last month that I was hoping to wangle a visit to the upgraded Marylebone Signalling Control Centre which I remember visiting when it opened in 1991. Well, no wangling was needed. Network Rail are keen for me to see their new state-of-the-art digital control system and I am waiting on a date in mid-May.

But after that I must try to get some traction action. I have a depot visit in mind.

Roger

