

INFORMED SOURCES e-Preview December 2016

Well that was a very busy month, with major developments bracketing my delivery day for the December Informed Sources. It started on Friday 4 November when DfT announced the integration of InterCity West Coast and HS2 services under a single franchise, not a surprise if you read the November column. The following Tuesday the deferment of 13% of the Great Western Electrification Programme was announced and on Wednesday (press day) the National Audit Office released a report on the Great Western Route Modernisation.

Electrification RIP

Electrical clearances – the plot thickens

Integrated ‘franchise’ for ICWC and HS2 services

Rail Minister Paul Maynard made a written statement to Parliament on 8 November giving an ‘Update on the programme of rail investment in the Great Western route’. I had assumed that the review of Network Rail’s delivery plan by Sir Peter Hendy had established a new programme and budget for Great Western Electrification Programme, but, apparently the review also initiated an ‘ongoing assessment of investment decisions so that passengers and taxpayers get maximum value’.

And this scrutiny has resulted in the deferment of four sections of GWEP: Oxford-Didcot Parkway; Bristol Parkway-Bristol Temple Meads; west of Thingley Junction-Bristol Temple Meads; and the Henley & Windsor branches.

Now remember that when I visited GWEP in February the aim of the cost reduction initiatives, was to complete the scheme within the £2.8 billion budget. But as the NAO put it bluntly in its report the next day, electrification of the four route sections had to be delayed because ‘the costs cannot be met within the current funding package’.

Happily, according to Paul Maynard, truncation is acceptable ‘because we can bring in the benefits expected by passengers - newer trains with more capacity – without requiring costly and disruptive electrification works’. More on numbers next month, but this diesel equivalence marked the start of the slippery slope as far as future electrification is concerned.

Following the GWEP ‘deferrals’ I expect electrification of the Midland Main Line north of Kettering and the North Trans-Pennine route to be ‘deferred’ beyond the already deferred dates announced when Network Rail Chairman Sir Peter Hendy ‘un-paused’ these schemes midway through his Review. The word ‘electrification’ appears only once in the prospectus for the East Midlands replacement franchise

As I pointed out last month, Department for Transport officials have always been institutionally Luddite when it came to electrification. Now, GWEP has justified all those reservations.

NAO’s Report rammed home this point, arguing that DfT’s recent decision to procure all the Great Western Intercity Express trains as bi-modes ‘also calls into question whether the full extent of electrification under the programme is still value for money, as all the new trains will now be able to run on non-electrified route sections’. A very steep as well as slippery, slope.

Meanwhile, on 7 November a House of Commons debate on Midland Main Line electrification had added to the woe. Paul Maynard told the House ‘We are committed to electrification on the Midland Main Line. We will deliver electrification from London to Kettering and Corby by 2019’. Development work is continuing on further electrification of the route to Sheffield and Nottingham ‘to ensure that the scheme delivers value for money for the taxpayer, and a better experience for the passenger’.

Asked when the rest of the MML would be wired Mr Maynard gave a text-book example of a Minister sticking to a difficult brief. ‘Let me make it clear that we are committed to continuing the ongoing development work, and my focus today is on how, in the shorter term, we can deliver faster journeys and better trains for his constituents’ he stonewalled.

Of course, MPs knew that was all they would get, but kept on challenging the government’s commitment to the 2023 date, perhaps for the fun of seeing a hapless minister in ‘dead parrot denial’ mode.

Meanwhile, who was it who forecast in November 1996 that diesels would rule the privatised railway?

More on electrical clearances

My heavily technical analysis of overhead line electrical clearances in last month’s column had informed observations whizzing into my e-mail in-box. The European Railway Agency send a surprisingly supportive letter. ORR also provided a policy statement and Network Rail sent me a chapter and verse – and paragraph and sub-paragraph - guide to the respective regulations.

Last month’s item focused on clearances to structures. This month it’s the turn of clearances ‘from parts of 25kV electrification systems to standing surfaces to which members of the public may foreseeably gain access’.

No room for detail here save to highlight BS EN 50122-1, the standard dealing with protective provisions against electric shock. Previously this took the UK loading gauge into account, with a UK specific case establishing an electrical clearance of 2.75m as a minimum. The revision in 2011 removed this special UK condition and today the use of any clearance under 3.5m must be justified by risk assessment.

ORR points out that ‘no other industry uses a dimension as low as 3.5m to achieve compliance with the Electricity at Work Regulations for 25kV systems, so its use already takes into account the constraints of UK rail infrastructure. ‘As such, the scope for further compromise of this already significantly reduced clearance distance without accompanying mitigations is extremely limited’.

In response to this policy statement I fired off an e-mail to ORR asking five questions, concerning risks and real world data, such as the number of passengers at stations electrocuted by 25kV overhead lines or rolling stock pantographs. ORR’s ever helpful press office arranged a phone conference with their relevant expert. After the ‘hello’s, I was told that they couldn’t answer the questions and an embarrassing, if informative discussion ensued. More dead parrot stuff.

Back in April ORR had written to Network Rail following a meeting to discuss how its legal duties in relation to public safety from new overhead line equipment at stations can be met. According to the letter all Network Rail has to do is produce high-quality site-specific risk

assessments, demonstrating that all that is reasonably practicable to protect the public and staff is being done.

Site specific note. Think of the engineering hours this will take up. No wonder in Scotland Phil Verster gave up the fight for common sense and told his team just do what they want or we'll never get the wires up. According to ORR, addressing and recording the specific conditions at each location will provide greater transparency than a 'mechanistic, number-based risk assessment process'. It's only time and money.

Network Rail took me through the regulations in detail. The elimination of the Reduced Minimum (200mm) and Special Reduced (150mm) structure clearances from the standard, leaving only the Normal structural clearance of 270mm, is seen as a good thing. Since there is no longer a minimum clearance specified, the relevant clause actually relaxes the previous Group Standard. I suppose the theory is that each bridge can have a customised clearance, say 131.5mm if you can get it past ORR.

On platform clearances, Network Rail supplied some wonderful examples of the regulation writer's art. In the Committee responsible Network Rail obtained a relaxation to the relevant requirement to reflect the restricted GB gauge.

This allowed RSSB to publish a GB specific requirement for platform clearances in our old friend GL/RT1210.

When all this was reviewed by the relevant British Standards committee it was agreed that, while the previous 2.75m clearance was not justifiable as a minimum limit in a standard, it might be justifiable subject to a risk assessment. So, according to Network Rail, electrical clearances below 3.5m are possible - with risk assessment.

What's really infuriating about this safety-by-diktat, is that the engineers concerned know that it is irrational and yet they go along with it. To paraphrase Edmund Burke, 'the only thing necessary for the triumph of bureaucracy over common sense is that good engineers should do nothing.'

WCP for ICWC and HS2 services

In last month's column I outlined why integrating the Intercity West Coast (ICWC) franchise and the HS2 services would be the rational way forward. And blow me down, on 4 November DfT 'confirmed' the creation of a new franchise which will combine the current ICWC services with the 'development and introduction of High Speed 2 services'.

Called the West Coast Partnership (WCP), note 'partnership', the new franchise will take over ICWC services in April 2019, a year later than currently planned. WCP will also collaborate with HS2 Ltd to design, launch and then operate the initial HS2 services for three to five years. In parallel it will deliver the transition to the new West Coast Main Line timetable as HS2 frees up capacity.

DfT sees the WCP as providing a 'strong private sector partner' who must combine experience of delivering both conventional and high speed railway operations and transforming customer service through the use of 'cutting-edge technology'. The franchise will work 'collaboratively' with HS2 'to develop the best solution for passengers now and in the future', building on the existing West Coast franchise. Bringing HS2 into the world of the working rail network is not going to be a job for faint hearts.

Bidders for the franchise will need to draw on a wider range of participants and skills than would usually be the case, says DfT. They are encouraged to form 'bid vehicles' to deliver as strongly as possible 'all the constituent elements of the WCP franchise'.

I could see established train operators forming bidding consortia with a large consultancy, an infrastructure specialist and a ROSCO for rolling stock procurement, funding and maintenance. But HS2 still reckons that it will have ordered the trains before WCP can meddle.

In fact, the various announcements were studiously vague on rolling stock. There is a reference to WCP being responsible for testing and acceptance of rolling stock. Also mentioned is engaging with the HS2 design and build programme to ensure the franchise operator's and passengers' requirements are fully considered in 'developing implementation plans for HS2 rolling stock and infrastructure'.

Roger's Blog

First of all, something I forgot to mention in last month's blog was that before the Virgin Media Dinner we were shown the new driving simulator suite at King's Cross. Careful positioning, plus some sharp elbows, meant that when our hosts asked 'would any one like a go', I was in the driver's seat before anyone could stop me.

This was the Class 91 cab and the fidelity was very impressive. But what made it more than a jolly, was the experience of driving under ETCS Level 2. I've been building up material for an examination of the human factors aspects of cab signalling and this first-hand experience was invaluable. So thanks Virgin.

October ended with the Railway Industry Association's Annual General Meeting. Lots of chums to meet and some excellent presentations after the AGM proper. The following week it was the judging for the Rail Future Awards with a larger than usual panel. Web-sites generated an interesting discussion on the use of social media to support campaigns.

Last week it was the first seminar dedicated to rolling stock from conference organisers Waterfront. 'Rolling stock procurement forum 2016' combined speakers at the sharp end of rolling stock policy (if that's not an oxymoron), funding and legal issues, with a range of delegates which had me on the last page of my current notebook when I left. The big question of the day was whether, after all the recent rolling stock contracts, we have reached 'peak train'?

That evening there was a party for Jeremy Candfield who had retired as Director General of RIA at the AGM. A convivial occasion with the industry's great and good assembled for Jeremy's farewell.

This week I'm off to Leeds to meet William Cook Rail with a look round their factory, then on Friday it's the Golden Spanners awards. The sums are done, the spanners are being sprayed after writing this and I'm looking forward to two awards in particular. All will become clear next month

Roger