INFORMED SOURCES e-Preview June 2017

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Three topics this month, ranging from HS2's speed aspirations to the formal close of a regular source of merriment in previous columns, with, in between, confirmation of gathering gloom on the funding front

HS2's Conventional Compatible conundrum
HLOS Lite for CP6
SEFT - NAO writes official obituary

As you all know by now this column has been agnostic on HS2, not because it is not important, but because keeping up with the politics of the route, the alternative proposals, the choice of station locations, would have required too much time away from coverage of the here and now. However, while construction contracts have yet to be let, HS2 is starting to impinge on the national network, both technically and operationally. And with the current Periodic Review likely to take up less time and space, expect more coverage of the operational aspects of HS2 in the column.

It is now clear that HS2 will be very much part of the National network. DfT's bold decision to run HS2 and Intercity West Coast services as an integrated business under the West Coast Partnership leaves no doubt, although HS2 management may be struggling to come to terms with the new order.

Integration is reflected in the change in the composition of the initial train fleet. Originally, three quarters of the trains would be 'Conventional Compatible' sets able to run beyond HS2 onto the national main lines. With 70% of high speed services from Euston running beyond HS2 when Phases 1 and 2a (Euston-Crewe with links to the WCML at Handsacre Junction between Lichfield and Rugeley and Golborne Junction, south of Wigan North Western)) are open,
all of the fleet will now be Conventional Compatible Very High speed Trains (CCVHST). Which brings us to journey times beyond HS2, and specifically London-Glasgow.

Back in 2012, HS2 Limited said that the absence of tilt would cost 11 min between Crewe and Glasgow compared with present Pendolino timings. To reduce this disadvantage, HS2 had been working with Network Rail to identify a number of 'limited adjustments' to the WCML infrastructure. 'With appropriate speed signage' these would reduce the differential to 4 min.

There are certainly time savings to be made north of Crewe, but they will not come cheap. And, of course, if the conventional line speed is raised, in many places Class 390 would still be able to run faster. Or so you might think.

One of the feared Railway Lords, Tony Berkeley has been pursuing the Department for Transport on HS2 journey times through written questions. If carefully worded these can reduce fudge.

In February this year he asked for the expected journey time differences between London and Crewe and Glasgow from 2027, when Phases 1 and 2A are completed, compared with the present Pendolino services. As a supplementary he asked whether HS2 had estimated the time saving were the HS2 trains to incorporate a tilting mechanism.

This has produced some times and the odd eye-brow raising claim which readers may enjoy. Plus a table from which some interesting comparisons can be derived.

In the table DfT assumed that a tilting CCVHST would be limited to 300km/h versus the 360km/h planned for a non-tilting design. The table gives comparative journey times for Phase 1 and Phase 2a.

With Phase 1, the extra 60km/h of the non-tilting trains is worth 3min. Then, north of Crewe tilt pulls back 3 min, to give a 4hr journey time for both trains.

With the extra high speed mileage to Crewe for Phase 2a, the tilting train loses 6min and pulls back 3 min, giving Euston-Glasgow times of 3hr 48min (non-tilt) and 3hr 51min (tilt). So angels on head of a pin, really, although worth bearing in mind when we come to consider WCP running an integrated service

360km/h
DfT's table comes in handy when considering that tenet of the HS2 faith – 360km/h running. According to another response to Tony B's probing 'The government believes that HS2 should be designed to a maximum speed of 360km/h, with a route alignment enabling up to 400km/h in the future. While a lower operating speed – including 320 km/h - could result in marginally reduced rolling stock capital costs and some reduction to operating costs, these are more than offset by the significant loss in revenue and user benefits'. Note that 'significant'.

Now although a recently opened French Railways Ligne à Grande Vitesse has a design speed of 350km/h, trains will run at 320km/h. According to SNCF its customers would not wish to travel at the higher speed because 'it would raise fares sharply for a marginal gain in time, everything from maintenance to energy costs would have risen exponentially, which simply wasn't worth it'. Italy has also looked at 350km/h and decided to stick at 320km/h. the Chinese actually started running at 350km/h on some routes, but have now throttled back.

Tasked with the French decision, DfT says that HS2 Ltd intends to incorporate specific track components design which will improve the system performance while 'utilising an Infrastructure Management System that determines asset performance and condition at all times'. The combination of these factors and the use of innovative maintenance activities, 'that go beyond current best practice, should reduce the maintenance implications of running at these speeds'.

So HS2 is going to show SNCF how high speed infrastructure should be built and maintained. But notice, no rebuttal of the increase in energy costs.

Oh gosh, all this takes me back to early days of IEP specification and procurement. Could be fun times ahead.

HLOS Lite for CP6

First, some good news. Thanks to the reclassification of Network Rail as a government body, there's going to be a lot less for me to bore you with in the current Periodic Review for the next Control Period (CP6) starting on 1 April 2019. Now that Network Rail is part of the Department for Transport, rather than a quasi-independent company limited by guarantee, Government can by-pass much of the Regulatory process and tell Network Rail what it's going to do and how much money it's going to get to do it.

What will remain, because it is a legal requirement under the 2005 Railways Act, is the Governments' (Westminster and the Scottish Ministers) publication of their High Level Output Specifications and Statements of Funds Available (HLOS and SoFA). Meanwhile Network Rail has produced what is termed 'Initial Industry Advice' (IIA) to inform the HLOS. DfT is keeping this private.

At a recent Network Rail industry trade press briefing I asked Chief Executive Mark Carne why DfT had decided not to publish the IIA. Mark replied that it was important not to raise expectations based on industry aspirations at a time of considerable financial challenge. The IIA needs to be considered 'more carefully and strategically', he explained.

Mark continued, 'now, we have to develop schemes properly and only announce them when they are mature. Otherwise, all we do is raise expectations which we then dash in the public's eyes which then bring us into disrepute as being less than competent'.

As a result, DfT's HLOS and SoFA for CP6, which has to be published by July 20, will focus on Operations, Maintenance and Renewals (OMR). Those existing enhancement programmes being carried over into CP6 following Sir Peter Hendy's review, should have first call on any spare funding. New enhancement schemes will be introduced only as and when they have been developed fully, provided they represent value for money and then only if funding is available.

Even restricting the HLOS to OMR will involve some hard choices. Informed Sources are reporting that minimum renewals budgets for CP6 are approximating to the likely maximum budget available.

That's the relatively not-so-bad news. Now for the real damage.

On 27 April Network Rail published the minutes for its September 2016 Board meeting. And these revealed that the Treasury is 'requiring' that the proceeds from the current asset disposal programme should go towards reducing the national deficit.

Let's put some numbers on this. In 2015 Sir Peter Hendy's review of Network Rail's enhancement programme for the current Control Period identified cost overruns of around £2.5 billion. To cover the bulk of the shortfall, Network Rail said it would sell assets worth £1.8 billion. the Treasury increased Network Rail's government borrowing by £700 million to make up the difference. Asset sales have raised £24.2 million so far.

With masterly understatement the Board minutes noted that the Treasury's appropriation of the asset sales receipts implied 'a realistic prospect of a significant shortfall in funding', since the sales receipts would no longer be available to fund rail enhancement schemes.

I don't expect to see subsequent Board minutes published anytime soon, but it can't have been a coincidence that six weeks after that September Board meeting DfT announced the deferral of four sections of the Great Western Electrification Programme. More schemes are being deferred or cancelled, including enhancements on the East Coast Main Line.

Industry

All this, of course, impacts on the supply industry. When I asked Mark Carne about the effect on contractors of the lack of an enhancements programme in the CP6 HLOS, he replied that in the past 'we gave them (contractors) false certainty. The sense that there was this endless pipeline of work, was a bit of an illusion because it wasn't mature and the time frames were wrong'. In future Network Rail intends to have 'a more transparent funnel of projects we are looking at', but which are not commitments.

Of course, contractors have bought equipment and opened up colleges to train staff to handle the Government's much vaunted 'largest investment in our railways since Victorian times'. 'What about them', I asked Mark Carne? The reply was brutal in its honesty. 'We don't plan all of our projects in a way that manages the capacity of the industry'.

While Network Rail would want to ensure continuity of employment wherever possible, Mark added, 'I would far rather do that on the basis of firm clear commitments that I can stand behind and that I am confident we will deliver than a series of illusions which don't have substance behind them'.

He believes that ultimately the market will value this approach because contractors will have confidence that that a project is going to happen and is 'something we can commit to'. The phrase 'once bitten, twice shy' springs to mind.

South East Flexible Ticketing saga ends

In his 2011 Autumn Statement the Chancellor of the Exchequer allocated £45million to develop smartcard-based flexible ticketing in London & the South East. March 2012 saw the Department for Transport outline its plans for spending this windfall.

According to a DfT presentation, the intention was to introduce 'smart flexible season tickets' with the aim of giving National Rail passengers more choice about 'when and how they travel'. Under the South East Flexible Ticketing (SEFT) scheme, the new ticket facilities would be rolled out by April 2014.

A year after the launch the April 2014 roll-out had slipped to 'summer or autumn' (Informed Sources 3rd Law applies). The sub-heading of a contemporary Informed Sources item ran 'Is SEFT DfT's new IEP?'

And so SEFT fumbled on, until in December 2015 a Parliamentary written question on whether DfT still planned to progress SEFT, got the reply: 'the SEFT programme is proceeding with contractual obligations for five train operators who run commuter services into London. Together, these five train operators cover 73% of the annual season ticket market'.

But, significantly, the answer continued, 'We are discussing with the Rail Delivery Group and the remaining train operators the best and quickest way to deliver smart and more flexible ticketing for commuters in the south east'. Reading between the lines, SEFT would end with the roll-out of the ITSO compliant smartcard schemes being developed by the five main London commuter operators.

And that was that, until on 20 April this year the National Audit Office, the Government's coroner responsible for declaring duff public schemes dead, published the report of its investigation into DfT's management of SEFT.

NAO's official verdict? DfT has not delivered the original ambition of the Programme which was to improve the experience for passengers and reduce the cost of selling tickets.

Compared with the original aim to have flexible ticketing, including discounted part-time season tickets, in place on 11 London commuter franchises by 2014, by April this year five TOCs were offering season tickets on smartcards and only one was currently offering flexible, part-time season tickets.

SEFT has cost £54 million compared with the original budget of £45 million and of this £26 million was spent on the management of the programme. The remainder paid for the one useful result from SEFT – hardware in the form of a central back office, plus infrastructure such as ticket validators, ticket barriers and ticket vending machines. Add in the Oyster upgrade to take ITSO compliant cards and the total is 'at least £120 million'.

Any train operating company can access the new back office, which processes the transactions from the gates and validators, to handle their own smart ticketing schemes. According to the Rail Delivery Group, the central back office is currently using around 5% of its capacity. However, the 'in house' capability is being promoted to train operating companies across the network and two franchises outside the south-east of England are using the facility.

Roger's blog
Since the last e-Preview we've had Railtex where I noticed a significant difference this year. At past shows my standard procedure has been to sign in at the Modern Railways stand, go to one corner of the hall and walk and down the aisles, stopping off when something of interest caught my eye. Eventually I would arrive at the opposite corned with pages of notes, lots of photos, several kilos of leaflets and sore feet

This year I arrived early and spent some time going through the catalogue adding 'must see' stands to the invitations already received in the run up to the show. These visits kept me busy for most of the morning because there was a lot to discuss on most stands. Then when I started the methodical coverage, several discoveries resulted in further long chats.

As a result, come closing time a couple of aisles remained unvisited. So if I missed your stand, please accept my apologies.

What was noticeable this year was the presence of most of the major rolling stock suppliers. This no doubt reflected the current bonanza plus the start of procurement by HS2.

Various models of very high speed trains for the UK market were featured, including a chance to mix-and match a bewildering array of options on the Alstom stand. Interestingly overhead line electrification equipment was on show, which you would normally expect to find at Infrarail.

Another reason for my slow progress could be that I seemed to spend a lot of time trying out seats, from the conventional to the experimental. A common factor was a lack of lumbar support compared with, say, my office chair or car. One suggestion is that thinner foam makes fire safety compliance easier.

Incidentally, in this month's Modern Railways I have claimed the 'Welcome' page. When my turn comes around I like to write about travelling on the everyday railway and this month's piece covers six contrasting journeys to and from the West Midlands plus an example of a contingency plan saving the day.

Looking ahead, June is very quiet except for the Stagecoach summer reception at the end of the month. Much to talk about on the franchising front, even before we get onto the railway in general.

In part, the current quiet spell reflects the absence of railway announcements during the period of Government 'Purdah' leading up to the general election. No doubt the usual madness will erupt on 9 June.

Anyway, more time in the office will also allow me to get on with research and analysis for the July column which is going to be a 'special' devoted to various aspects of a single subject. And, having, hopefully, whetted your appetite, time to get started.

Roger