

INFORMED SOURCES e-Preview February 2017

Modern Railways' publication schedule means that the January issue is the last of the old year and the February issue the first of the New Year – so a belated Happy New Year to all subscribers. Reflecting this I have also introduced a new feature in the column – a preview of the year ahead - which I hope you will find useful.

A crucial year ahead

Exporters need political support in the home market
IEP – Date set for GWR service debut.

The first two pages of this month's column have a different look, featuring seven areas to watch in 2017. These are: Publication by the Department for Transport of the High Level Output Specification and Statement of Funds Available for Control Period 6 (2019-2024); Network Rail's devolution of power to the Routes; Progress with what I call Digital Railway Version 2.0; Deliveries of new train fleets; Developments in franchising; Freight; Industrial relations.

For each area there's a thumbnail sketch of what to expect and the key issues to watch for. As I say, this is a new departure, reflecting the fact that 2017 will be a crucial year in many respects. I'd welcome readers' views on its value – or otherwise (roger@alycidon.com)

Exporting at the sharp end

My latest critique of the Rail Supply Group's (RSG) unworldly export aspirations (Informed Sources October 2016), brought me an invitation to visit a company which already exports 80% of its rail output. William Cook is a family owned business, built around steel casting. Its rail foundry at Leeds has a turnover of around £15 million a year.

Group Chairman, and owner, Sir Andrew Cook, (a long-term Modern Railways reader, by the way) exudes the confidence in his Group you expect from German and Japanese company heads. 'I am proud of William Cook. I built it up almost from scratch. I believe we are 'world class', and we can prove it to our customers' he says.

My tour of the Leeds plant showed that this confidence has been backed with hard cash, over £10 million in recent years. This includes extensive investment in computer- controlled machining centres, with space already allocated for more as the company accelerates the move from a supplier of raw castings to machined and welded finished products. With rail there is also the opportunity to add considerable value to the basic product. For example through supplying complete bogie frames, cast, machined and fabricated in-house.

Current export contracts I saw on the shop floor included cast secondary suspension pots being supplied to Alstom for the Coradia Polyvalent regional trains in service with French Railways.

As part of the pursuit of added value, the Leeds workshop facility is being expanded to handle more overhaul work as well as manufacture. Current contracts include refurbishing Wedglock couplers for London Underground and Tightlock couplers for Bombardier Electrostars.

UK market

So why did a flourishing UK company, and a successful exporter, feel the need to respond to my RSG critique? Because, as Sir Andrew explained, the Company's order books do not reflect the sheer volume of new trains on order in the UK. For example, the company is not supplying the Intercity Express Programme (IEP) where bogies, together with other high value-added systems and components, are imported from Japan.

Even more galling for the forthright Chairman is the fact that despite £1 billion being spent on new trains for the 'Northern Powerhouse', almost none of this investment will be generating work for his factory at the heart of the Region. These trains are being imported from companies who have their own established national supply chains from which William Cook is effectively excluded. This results in 'the odd situation of William Cook having to export to the trains' countries of manufacture in order to serve the UK domestic market', 'swimming against the current' in Sir Andrew's words.

Mandated

As argued in my articles on the RSG, the only way to get more high value-added rolling stock components and systems into new trains being ordered by franchises, London Underground and HS2 is to require a minimum local content by value. This view, is now on the Government's radar I understand.

There is also an important caveat when it comes to local content. While a European component supplier can have a UK plant, it may also be a 'Potemkin Factory', importing complete or part-finished equipment from the parent company, but counting as British when supplied to the train assembler.

However, the critical consideration in assessing content is value versus parts count. As one Whitehall source has put it, value rather than percentage of contracts going to UK firms has to be the criterion, 'so that we aren't fobbed off with carpets, seats, interior panelling, lights and other lower value components, pleasing though it is to secure these anyway'.

Quite reasonably, all train builders want to keep as much value in their own countries. Which means that the only way to increase the high value content made in the UK is either through the train manufacturer setting up a manufacturing plant in this country, or ordering high value equipment from UK companies who actually make high value things, as opposed to sticking a Union Jack on an imported module as it passes from the goods inward to the delivery bay of a shed. In the column I quote an example of mandating local content in Australia

On my recent visit to Hitachi's Newton Avcliffe plant the company was claiming that 70% of the parts in IEP are sourced from UK suppliers.

But since the traction packages, air conditioning, Universal Access Toilets and diesel power packs are imported, most of those 'parts' must represent relatively low added value – valuable though the business for the UK suppliers involved.

What the RSG should be doing now is working on a breakdown of where the cost goes in a train. These numbers should then be used to establish a credible minimum UK content by value for future state-backed orders. Of course such a policy would generate howls of protest about supporting uncompetitive UK suppliers, or restricting competition. Which is why I showcased a successful exporter in the column before getting on to the politics of procurement.

Do I think a UK Government would have the intestinal fortitude to adopt such a policy? I have always assumed not. But with Brexit on the horizon we are going to need all the work we can get to put into UK factories and then some. But to make it happen the RSG needs to start lobbying now for an early commitment.

October debut for GWR IEP

Among the new trains due to start entering service this year is Great Western Railway's Intercity Express Programme fleet. But when the railway technical press sat down with Hitachi management hard information on what comes next was in short supply. To an extent this was understandable. Apart from the different Japanese business culture, many reputations are riding on the IEP, from the Department of Transport, which specified and bought it, to the multiple banks funding the trains.

But in the UK, we of the technical press are accustomed to asking straightforward, if awkward questions. And if these are ducked, we just explore other channels.

For example, in the press release for the visit, GWR Managing Director Mark Hopwood was quoted as saying that passengers could expect to see IEP trains 'operating on our network next summer and in regular timetable service in autumn'. But pressed for more detail on the programme Hitachi would only repeat 'autumn'. Informed Sources Third Law refers.

However, I understand that the current plan is to introduce six daily diagrams from mid October. According to the Great Western Train Availability & Reliability Agreement with the IEP train service provider, 20 five car Class 800 Bi-mode sets should be available for service from 19 October.

Acceptance

But then, how many sets will actually be available? Another issue with no clear answer was the possible delay to electrical testing and thus acceptance.

Route Section 3 (RS3) is the Great Western Main Line's IEP electrified test track between Reading and Didcot. Running started in July 2016 and promptly stopped when interference issues with the Overhead Line traction power supply emerged. A second run at the end of September, with the IEP in its final electric power configuration, was also unsuccessful and since then there has been no further electrical acceptance running on RS3.

At the press briefing Hitachi said that type testing was still progressing while the company was working through the electrical interference issues with Network Rail. Yet when I asked how far back the delay to electric test running has pushed the programme, I was told 'with the potential solutions we are looking at we don't expect that [delayed electrical acceptance running] to have any programme impact'.

Contractually the Type Acceptance date for the five car bi-mode is 2 February 2017 – in other words, next week. And a Great Western Informed Source subsequently reported that Hitachi had claimed a 104 day delay to acceptance because of the unavailability of RS3 for electrical testing.

Performance

Another question raised at the railway press briefing concerned long-standing query over the ability of the bi-modes to keep to IC125 timings when running under diesel power. The design maximum speed as a diesel is 100mile/h, although testing has shown the bi-mode can run faster. Hitachi is working with GWR on end-to-end journey times to assess the impact of the bi-mode's superior acceleration at low speeds, plus the benefit on station dwell times of the pocketed sliding power doors.

When asked if the Class 800 engines would be restored to their full commercial output, as in the AT300 versions being supplied to GWR and TransPennine Express, Hitachi explained that with the electrified mileage expected to be available 'there is no requirement to change the rating of the engines'.

However, the immediate challenge is October this year. Airport Junction to Maidenhead is due to be energised by June as part of the Crossrail programme: Reading-Didcot follows in December. Assuming electric operation to Didcot, diesel running would be limited to the remaining 63 miles to Bristol Temple Meads via Bristol Parkway.

Of course, the easy way out in October would be to allocate the IEP diagrams to the Oxford service, where they could replace the Class 180 DMUs. Since January these have been sub-leased by GWR from Grand Central for four months.

So many unanswered questions, such as why has no one bothered to establish the balancing speed of a five car bi-mode on level track? And what sort of IEP timetable is planned for October? Frustrating, but I will keep on beavering away.

Roger's Blog

As forecast last month it has been a quiet start to the year, but business returns to normal with the Modern Railways 'Golden Whistles' Awards this coming Friday. These are to operators' what the Golden Spanners are to engineers. The awards are organised by my Colleague Tony Miles and I am slightly jealous because, while I go to our local motor factors to order the spanners, Tony visits the Acme factory in Birmingham to collect the presentation Thunderers. As it's his show I will be able to enjoy the event and network instead of zipping around trying to organise things.

February starts off with the Rail Delivery Group Annual Conference in Birmingham. There are some topical issues on the Agenda plus some heavyweight contributors, so it should be a productive day. I used to turn up my nose at conference 'Workshop' sessions, but have found that if you choose carefully they can be both fun and informative. RDG's theme this year is 'Shaping Government strategy on rail', which

definitely sounds promising.

Last year I had my first experience of the Chiltern service lined up for a technical visit in Birmingham that was then cancelled. I'm hoping to remedy my recent lack of Chiltern mileage travelling to the RDG event;

For the rest of the month there are various interviews I need to line up on a range of topics. There's an up-date on the ECML electrification up-grade to finish off and since I started writing this blog procurement of the HS2 train fleet has started, and the Prospectus for the West Coast Partnership Franchise has been issued.

Several train manufacturers have out statements on their credentials to build the HS2 fleet. I have replied with this question: 'Will your bid for the new trains for HS2 include commitments to increase the proportion of UK manufacture of those high value systems and components which are currently imported with trains your company is supplying to the UK market?' Answers in the March column.

Roger