

INFORMED SOURCES e-Preview April 2018

Not much good news in this month's column, I'm afraid, although we do get a clearer view of the immediate way forward for Digital Railway. However, I have a bit of fun with a Business Plan for CP Minus 2 and there are positive signs of new train reliability improving in New Train TIN-watch

Perfect storm hits May 2018 Timetable

Rise of the Zombie franchises

Digital Railway – Network Rail's Wunderwaffe

Record spending in Periodic Review 1985

Network Rail had completed the May 2018 Working Timetable (WTT) on 17 November last year. With infrastructure enhancements, including Thameslink and the Manchester-Bolton electrification, coinciding with the arrival of new train fleets, the timetable had required almost four million services to be rescheduled. This represented seven times the usual workload.

But then it was decided to phase the introduction of Thameslink services. The Manchester-Bolton electrification was delayed, requiring the timetable for the North of England to be re-written. Late delivery of ScotRail's new trains added yet another timetable re-write.

The end result of all these changes was that on 23 February the Rail Delivery Group (RDG), announced that Network Rail had been forced to suspend 'Informed Traveller', or T-12 for short. This finalises timetables, particularly weekend timetables that can change owing to project or engineering work, twelve weeks ahead of travel.

Thus, T-12 is the date when train operators open their retail systems for the booking and purchase of advanced tickets. It is also important for operators when preparing staff rosters and rolling stock allocation. As a result the process is a licence condition.

Following the Timetable change on 20 May, T-12 will now be replaced by T-6. In some cases it may be nearer T-4.

Network Rail has a recovery plan in place with the aim of restoring T-12 for the December 2018 timetable change. But this is by no means certain.

While T-6 is in force, train operators will continue to offer the usual range of discounted tickets. Should you want to buy an advance ticket for a service affected by the change to T-6, and only standard discounted rate tickets are available when you go on-line, the advice is to book your journey at the standard fare then, when cheaper advance tickets subsequently become available, buy another set of advanced tickets for the same journey. You can then request a fee-free refund on the original standard ticket.

This approach requires a leap of faith and a healthy credit limit on your plastic. For long distance travel, even a super off peak return ticket can be the wrong side of £100. Note that RDG advised that on some weekends Informed Traveller 'may not be available until four weeks before travel or fewer'. And what if the operator can't offer the full allocation of advanced fares?

As a result of the various delays and changes, early in February Network Rail did not have a stable May WTT for Scotland, London North Eastern, London North Western or the South East Routes. Having to divert an already understaffed Timetabling Department to rewriting the May 2018 WTT has threatened preparation of the December 2018 Timetable. According to Network Rail there is a risk that two teams would not be able to start work on the December timetable when train operators presented their Priority Date Notification Statement (PDNS) at T-40 in March.

Multiple franchises feeling the pinch

With Virgin Trains East Coast set to exhaust the £165 million of Parent Company Support someday soon, we should not forget that other Train Operating Companies are also suffering. By my calculation almost half of the franchised train operating companies are struggling to meet the revenue lines on which their franchise agreements were based.

In some cases we have hard numbers, in other cases, there are coded, or not so coded, warnings in financial statements. And, of course, there are Informed Sources. The column includes a table which highlights those suffering.

All the franchises let in the last three years appear to be affected by the weakening economy. Both ScotRail and Caledonian Sleeper have required parent company support.

Abellio is confident that Greater Anglia can work through its current pressures. The arrival of the all-new train fleet, starting later this year, is expected drive ridership and revenue growth.

At South Western Railway FirstGroup/MTR have a similar strategy. Overcrowding is assumed to have been suppressing latent demand. When the combination of the Waterloo scheme and the new train fleet provides more capacity these frustrated travellers are expected take to the rails.

Also in the FirstGroup portfolio is Trans-Pennine Express, where at the end of last year, when Lord Adonis suggested that the franchise was losing 'big money', a spokesman conceded that revenue growth was running slightly behind projections but that most growth would come from the new rolling stock being introduced.

Just to round-off the good news, DfT's memorandum to the Commons Transport Committee on its Supplementary Estimate for 2017-18 included an additional £248.7 million needed to cover a fall in the net revenue received from TOCs.

Meanwhile the consultants who make up DfT's 'Operator of last resort' are all over VTEC getting up to speed in case they are needed. In parallel Stadaecoach is discussing terms for what DfT calls 'a very strictly designed short-term arrangement'. The Department will choose

parallel suggestion to discussing terms for infrastructure, clearly, designed short-term arrangements. The Department will choose the option that offers 'best value for money for taxpayers and protects the interests of passengers'.

Next question: define 'short term'.

Digital Railway – more on strategy

One of Network Rail's 22 Business Plans for Control Period 6 (2019-2024) covered the 'Digital Railway Programme' According to Network Rail's overview, Digital Railway is the solution to the three major challenges facing the rail network.

These are:

- *The lack of spare capacity following a doubling of passenger numbers over the past two decades;
- *What is termed 'a failure to embrace digital technology';
- *And the continued rise in the costs of renewing out-dated conventional signalling 'which have become unsustainable'.

Not only is the cost of conventional equipment claimed to be rising, the renewals profile will require replacement of 'almost two-thirds' of the network's signalling system over the next 15 years. Shades of Railtrack's 'Project Destiny' in the 1990s when signalling renewals were also considered unaffordable.

Anyway all these problems will be resolved by the Digital Railway Programme (DRP) which, it is claimed, will transform the rail network. The Digital Railway Business Plan confirms that in CP6, the focus will be on Traffic Management systems including Connected Driver Advisory Systems and Crew & Stock Systems to improve performance.

The DRP Plan includes an update on the candidate schemes proposed for the £450 million ring-fenced funding for the Digital Railway from the Government's National Productivity & Investment Fund. Two of the schemes have been approved. However, for the other three the funding allocated covers only the development phase.

As for the European Train Control System (ETCS), the rail industry is working with Government to align signalling renewals with both train fitment and the timetable for letting replacement franchises. Trains currently being acquired by replacement franchises are required to be ETCS ready, avoiding an expensive and disruptive retrospective cab fitment programmed

According to the Business Plan, during CP6 (2019-24) and CP7 (2024-2029), this alignment of ETCS rolling stock fitment, signalling renewals and enhancements will come together on the East Coast Main Line, the Trans-Pennine Upgrade, the West Coast Main Line, including the HS2 interface, plus the Wessex and Anglia Routes. Initial business cases have been prepared for ETCS on routes covering over 70% of all passenger journeys.

Today's funding structure for yesterday's railway

Down at the word-face, hewing my way through Network Rail's 22 Business Plans for Control Period 6, it occurred to me that it might be instructive to recreate a similar Strategic Business Plan for a 'Control Period' from the pre-privatisation era. To avoid charges of cherry picking, the current five yearly sequence would have to apply retrospectively and the chosen Control Period would have to be reasonably representative of its time.

This ruled out Control Period Minus 1 (1991-1996) which started in the depths of a recession, saw BR dismantle itself completely and ended with the flotation of Railtrack. However, CP-2 (1986-1991) looked promising.

BR was reorganising into Bob Reid's business led railway, the economy was growing and there was a supportive government. So it was into the archives, plus Volume 2 of Terry Gourvish's invaluable history of BR, in search of numbers to populate a spread sheet.

In the column there's a table of my version of British Rail's 1985 'business plan' for CP-2. To make it comparable, I have tried to strip out traction and rolling stock operations, leaving just infrastructure as we have today.

Government support was the easy bit. But reproducing the equivalent of today's simple expenditure categories of Operations Maintenance & Renewals (OMR) and Enhancements was the tricky part. BR categorised infrastructure spending into Revenue and Capital.

From my archives I've found BR's proposed expenditure on signalling & track rationalisation and electrification for CP-2. The column reproduces a table listing the individual schemes with the estimated cost for each.

Signalling renewals mainly counted as revenue expenditure and were supported by the PSO. On the other hand, electrification counted as capital expenditure and equates to today's 'enhancement'.

Despite the passage of over three decades, the table includes a topical issue. Bedford-Kettering-Corby electrification had yet to be authorised, but commissioning was scheduled for the final year of CP-2.

What my imaginary 1985 Business Plan shows is that while passenger usage has doubled, costs, and passenger revenue, have increased by a factor of three. And where BR was paying down borrowings from Government, since 1996 debt has soared.

While the costs of the renewals and enhancement projects, even adjusted for inflation, seem ludicrously small by today's 'unaffordable' resignalling and electrification prices, we should not be surprised. It was more than a decade ago that Informed Sources reported the plague of boiling frogs erupting across the network. Yet for all the Office of Rail & Road's talk of 'efficiencies', boiling frogs are with us still.

I couldn't resist including this extract from the CP-2 Business Plan as it might have appeared in the 1985 overview.

Digital Railway

The successful commissioning this year of the pilot installation at Leamington Spa of the new Digital Electronic Interlocking (DEI), developed by British Rail Research with Westinghouse and GEC-General Signal, marks the start of the digitalisation of the railway. DEI will become the standard for future resignalling schemes. Currently under developing at BR Research is the new Digital Integrated Control Centre (DICC) with the first example due to be commissioned by the end of the Control Period. DICC will greatly extend the area

which can be controlled from a single work station with Automatic Route Setting running the timetable, providing what might be termed 'traffic management'.

As you know, my view is that what matters today is not ownership but structure. While a bit of fun, CP-2 is not about given succour to the 'Back to BR' brigade or winding up the doctrinaire privateers. If it has a serious purpose it is meant to raise the question, which no one seems willing to face up to, namely why does the railway cost so much?

New train TIN-watch

Now for the good news. While rolling stock reliability can occasionally swing wildly between operating Periods, and it will be interesting to see how the new trains coped with the recent heavy snow, in Period 11 the three new EMU fleets sustained the the Miles per Technical Incident (MTIN) performance reached in Period 10.

This was despite Siemens commissioning another 11 Class 700s. Even after mileage accumulation, box-fresh trains can suffer from infant mortality faults. The last 700 has left the factory and the first Class 717, which will replace my local Class 313s, is on test.

However the most encouraging performance was with the Great Western Class 800 Hitachi bi-modes where the number of TINs was almost halved, despite a 40% increase in fleet mileage. Fingers crossed, but the bathtub curve may have begun.

Roger's blog

Well, as I had hoped, after some recent worthy but dull George Bradshaw Addresses, Network Rail Chairman Sir Peter Hendy livened things up a bit, covering a range of topical issues. With a number of transport-related vintage Ladybird books on my office shelf, I approved of Sir Peter's choice of illustrations from his 'favourite book', as visual aids for the concluding section of his presentation.

This is the 1972 book in the Ladybird series on 'People at work' and covers the jobs on the railway. The last painting is reminder of what we have lost. An artist's impression of APT-E at speed illustrates the work of the 'Advanced Projects Laboratory' at the Derby Railway Technical Centre 'where 2000 people, half of them scientists, engineers and technicians are working on 'many other ideas for the future'.

Being truly sad I have several editions of some of the locomotive, cars and aircraft Ladybird books. The 1958 'British Railway locomotives', my standard reference for steam locomotives, has only 6 pages out of 50 devoted to modern traction, mainly early Modernisation Plan diesels, in among the kettles.

Contrast this with my undated later edition. It has a Deltic on the front cover and refers to London-Manchester being fully electrified by 1966. Steam now occupies only the first 20 of 50 pages – a reminder of the rapid pace of change in those times.

March began with my first visit to Network Rail's HQ at Milton Keynes. It is a splendid place for visitors. I arrived early so I was directed to the light and airy waiting area with chairs and tables and tea and coffee facilities. I set up my netbook and continued drafting an editorial until the time for my appointment.

I was meeting an old chum Jon Shaw who is coming to the end of his second year as Network Rail's Chief Engineer. And I have to say what a welcome change from the usual corporate job titles such as Director of this or that.

Jon and I last met at Derby where he was leading Bombardier's development of what we now call the Aventra. We had a brief chat about the way in which Derby went from the threat of closure after losing the Thameslink contract to today's busy factory which will be turning out Aventras, which have dominated recent EMU orders, for some time.

In the interview proper, we covered several of the changes he has introduced since arriving at MK, including a review of standards. More on which in future issues.

Currently April is fairly quiet, which is not a bad thing as I have a couple of articles to research and write. Not least one stemming from a reader who suggested it was time for a comprehensive guide to the technology behind Digital Railway.

Covering technical developments in real time, as I do, it is all too easy to explain the technology as it develops and hope non-technical readers will put it together for themselves. But with Digital Railway central to the next Control Period a round-up explaining how the technologies work and integrate is overdue.

Looking further ahead than usual, Infrarail starts on 1 May and I am planning to be there for the opening day. I thought I should mention this so that the refreshment supplies can be stocked up!

Roger