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10th July 2015

Dear John,

### Access to the East Coast Main Line: industry hearing follow up

Further to your letter to the industry dated 22 June 2015, below are our comments on performance modelling. We have also included a list of questions / issues that need to be resolved prior to ORR making a decision - these have been appended to this letter.

Work by Transport Focus shows that *“punctuality remains the single most important driver of passenger satisfaction”* (Network Rail Monitor Q3-4, ORR June 2015). Indeed, recent Transport Focus commissioned research exploring the views and expectations about train performance has found that *“it is clear that a punctual service is the key success criteria for passengers. Punctuality is a vital prerequisite in building trust between passengers and a train company”* (Transport Focus, May 2015). VTEC shares this view and firmly believes that it would be unsafe for the ORR to make a decision on access rights without fully understanding the performance impact. As Mark Carne acknowledges, reliability has a real impact on the lives of passengers and is not currently at the level that passengers expect: *“The railway continues to see strong growth in passenger numbers, however, we know that there are too many passengers that do not get the level of reliability they have a right to expect and that this has a real impact on their daily lives.”* (Mark Carne, November 2014). Moreover, as Patrick Butcher stated (June 2015) *“The railways continue to grow in popularity and we continue to invest heavily to respond to that demand. While progress is being made in improving performance, safety, asset reliability and delivering more renewals and projects, our rate of acceleration in these areas isn’t yet where we want it to be. With more than a million more trains on the network than ten years ago, there are inevitable challenges.”*

However, before performance can be considered it is necessary to determine what capacity exists, both once the full CP5 Connectivity Fund package (and any other schemes regarded as necessary in the NR report of 17 December 2014) is delivered, and whether any extra capacity exists before full delivery. The industry recognises that *“a significant amount of PPM is lost, even on good days, due to the timetable failing to deliver robust performance”* (NTF Theme Better Timetables - update 09/01/15).

Network Rail’s CP5 Delivery Plan highlights how reliable services depend on timetable design: *“Apart from reliable assets, the other key component of a reliable service on the railway is the timetable.”* Whilst the industry is now doing much to fix timetables to improve performance, VTEC’s view is that it would be far better to avoid getting into these problems in the first place.

As you know, there are currently 6 LDHS services per hour on the ECML (5 VTEC, 1 open access). Our application provides an extra hourly service from May 2019 following the expected completion of some of the ECML Connectivity Fund schemes, and an additional two-hourly service from May 2020. (In each case, the detailed timings we have prepared incorporate paths for the existing 16 per day open access services in each direction). As the approach of Network Rail’s assessment was to determine which infrastructure schemes are required to achieve the 8 LDHS service level, it does not provide clarity as to when



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there will be sufficient capacity for each service increment. As delivery milestones for individual ECML Connectivity Fund schemes becomes clearer, an assessment should be made of how much extra LDHS capacity will be available prior to full delivery.

Network Rail's letter of 15 May 2015, states that PPM would reduce by between 1.8 and 2% with 8 tph LDHS and that it would be unrealistic for NR to commit to a PPM output in CP6 for VTEC in excess of 86% (which would be a worsening compared to the current MAA of 88%). This risk cannot be ignored. A reliable train service is a commercial imperative to VTEC and our passengers. Better performance is one of DfT's key objectives for the ICEC franchise and DfT has committed VTEC to achieve 90% PPM by the end of the Franchise.

The most recent step change in timetabling on the ECML has been that introduced by East Coast in May 2011. This saw the total number of weekday services operated by the East Coast business increase from 136 to 155 per day, a total of 19 services per day all of which were introduced south of Doncaster. As part of this, the core quantum of off-peak services operated by East Coast increased from 4TPH to 5TPH and for the first time in decades, the structure of the timetable was radically changed to become a standard 2 hourly repeated pattern - for the significant benefits of both customers and also fully recognising the operational and performance benefits this should deliver. However, our performance analysis has clearly demonstrated that when such a step change in quantum of services on the ECML occurred, it increased Delays Per Incident (DPI) by 12% in the Area Director South region the flowing year (2011/12). DPI increased further in 2012/13 and 2013/14.

Detailed analyses must be undertaken so that the ORR and industry fully understands the most likely performance impacts of additional services. This point is well made in the recent Modern Railways interview with Phil Verster in which he highlights the issues with the recent TPE timetable change "*TPE added a fifth path in May 2014 which... has taught us quite a lot on timetable modelling. The expanded timetable proved vulnerable to perturbations. Associated issues such as out of position train crew, their changeover points and split and joining operations all exacerbated reactionary delays.*" (Modern Railways, July 2015). Any decision reached without such analysis would be unsafe and, indeed, contrary to your Section 4 duty to promote improvements in railway service performance.

#### **1. Performance Modelling (assuming completion of ECML Connectivity Fund schemes)**

Performance should be modelled by developing standard two hourly repeating timetables for 7, 7.5 and 8 tph. Ideally this would be done for all the possible combinations of applications. This, however, would take a long time and would be resource intensive. Instead we propose that the VTEC bid timetables could be used as example timetables against which to model the performance impacts of different levels of capacity utilisation.

Firstly, as a 7tph timetable the 'VTEC 2020 core' timetable should be used. This would need a little development from the one used by CH2MHill, but this would be relatively quick, and VTEC could provide an appropriate timetable if required.

Secondly, to test 7.5 tph, the full VTEC bid 2020 timetable could be used.



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And finally, to test 8tph, the full VTEC timetable with First Group's Edinburgh proposition could be used (with Scotrail Tweedbank local services removed in those hours, given the capacity constraints NR have identified east of Edinburgh).

Our timetables are the most thorough and detailed of any of the proposals and should be of the quality (including available electronically) that Network Rail can easily apply as a considerable base from which to start any such modelling.

While we strongly believe that our full proposal should be given track access rights, as it offers benefits to customers across the route and meets the Secretary of State's aspirations, this performance modelling need not prejudice that issue. It could be regarded as indicative of the performance impacts of differing levels of service, to allow such impacts to be included in the economic appraisal.

Clearly, for the GNER Edinburgh proposal, further detailed analysis and timetable planning would be required to speed up the journey time to the 3h43\* as proposed by GNER and the impact of the additional overtaking and/ or flighting that would be required would need to be taken into account. While these scenarios would not test 3tph to Edinburgh, it has been recognised and accepted that such LDHS service levels could only be achieved with compromises to Scotrail services.

\*ORR must be satisfied that 3h43 is both achievable and realistic. VTEC does not accept that such a journey time is achievable, and we believe that Alliance's assessment of the time savings delivered from tilt are overstated and the costs of the associated infrastructure investment are under-estimated. Given the Secretary of State's Statement to the House of Commons on Thursday 25 June, it is unclear whether any infrastructure works required for tilt could be delivered in CP5 or even in CP6. ORR needs to understand what journey time is required to pass the NPA test (i.e. to generate sufficient new revenue to the industry) and whether such a journey time has any realistic prospect of being achieved. This is the journey time that must be achieved from day one of operation. If such a journey time is achievable (and there must be credible independent evidence to support this) then the added performance impacts of 3h43 train must be tested (and disbenefits from overtaking, performance risks etc fully assessed and economic disbenefits fully taken into account in the decision).

## 2. Railsys Testing

These scenarios should then be tested using Railsys compared with a base of the current timetable to determine the impact of moving to 7tph, 7.5 tph and 8 tph. This will test the negative performance impact of moving to 8 tph and allow mitigations for such impacts to be considered or alternatively for such impact to be included in the economic appraisal.

Determining the available capacity as infrastructure schemes are delivered will inevitably take a significant amount of time, however, this is essential in order to avoid overselling paths. The analysis in sections 1 and 2 may take some time, but our proposed simplifications should speed this up somewhat. Again, it would be unsafe to sell the access rights without properly understanding the resultant impact on performance, so we view this as a critical step of the decision making process.



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### **3. Economic Appraisal Implications**

Any implications of additional Open Access LDHS services on VTEC stopping patterns or speeds elsewhere on the route should also be clearly identified and included in the economic appraisal. Or preferably, as we do not think a significant performance worsenment is acceptable, Network Rail should be encouraged to develop additional interventions to mitigate any performance impact, and the cost of these interventions should be included in the appraisal.

### **4. Assess Available Capacity prior to completion of ECML Connectivity Fund schemes**

This would address the performance and capacity issues once the Network Rail work programme is completed, which, based on latest estimates, we understand is scheduled for late 2020. You will also need to address whether any capacity exists before that work programme is completed. We note that Network Rail stated that the full programme is required to enable 8tph. Our analysis during the bid would support this conclusion. We propose that Network Rail is asked to consider which elements of its work programme would enable 7tph. A version of the 7tph timetable as described in Section 1 above should then be tested against this infrastructure to determine the performance implications.

### **5. Non-Mainline destinations**

Whilst the above sections deal with performance and capacity on the core ECML, you will also need to ask Network Rail to consider capacity implications for off mainline destinations in particular the Alliance proposals between Hambleton Junction and Leeds/Bradford, and between Doncaster and Cleethorpes. You also may consider it appropriate to address the concerns raised by Freightliner on freight requirements and train weights.

While this may seem like a large work programme, we believe that it is necessary before making a decision of this magnitude from which it would be very difficult to reverse if the performance implications were severe.

### **6. Impact on ESG Process**

The ESG process should be used to oversee the development of detailed timetables once it is clear who has been granted access rights. This is a necessary process, but not one which can replace the above analysis, as ORR needs to be certain that it will be possible to produce robust timetables with acceptable performance for the track access rights granted.

### **7. Other issues**

Finally, I would like to address the process point you raise in paragraph 10 of your letter. We reiterate the points about the need for a decision to be based on firm foundations and welcome your steps to address the fundamental flaws identified with the CH2M Hill report and the need for more evidence on capacity and performance. This is a landmark decision and one which needs to be grounded in appropriate rigour and analysis. To that effect we strongly recommend that you allow us early access to CH2M Hill to discuss our concerns so that they can consider them in determining their further work programme.



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With regard to the sharing of timetables, we were not very happy at the time to be forced to share our timetable with competitors. There are obvious scenarios in which this could provide one or more competitors with an unfair advantage, and whatever benefits there may be from sharing such information needed to be weighed against competition law factors. For future track access decisions, we believe that the ORR needs to consider the general principles arising from competitors sharing such commercially sensitive plans with each other.

The Appendix overleaf details some key questions / issues that we believe need to be resolved prior to a decision by the ORR.

If you require any clarification in relation to the above, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink that reads "A Sparkes".

Andy Sparkes  
Commercial Director

## Appendix

Below are some key questions / issues that must be addressed prior to any decision:

### Question 1:

- a) Network Rail to provide a comprehensive update on the status of all CP5 Connectivity Fund schemes, including completion dates and funding status.
- b) Network Rail to confirm what schemes are required for 7 tph, 7.5tph and 8tph and when this capacity will be available from.
- c) Network Rail to confirm what power supply constraints exist between Newcastle and Edinburgh and how many Class 801 and Class 390 can operate per hour in each direction on this section.
- d) If constraints exist (as per Question 1c) Network Rail to confirm timescales for power supply upgrades between Newcastle and Edinburgh to the extent it will no longer be a constraint on the number of electric powered services that can be operated.
- e) Network Rail to update the industry on the impact of the Secretary of State's Statement to the House of Commons on 25 June to delivering 8 tph by the end of CP5.

### Question 2

- a) Network Rail / Alliance to provide comprehensive details on every second of journey time improvement capable by tilt - including but not limited to location of journey time improvement, full details of all infrastructure works required, detailed costs of works and delivery dates for works.
- b) Network Rail to ultimately confirm that 3h43 is an achievable journey time for Edinburgh <> London using Class 390 in tilt operation (but without any other line speed improvements other than those achieved by tilt).
- c) CH2M to confirm the journey time required to generate sufficient new revenue to rail to pass the NPA test
- d) DfT to confirm the impact on the funds available to the Secretary of State of a 3h43 journey time (or whatever is best achievable by the GNER proposal).

### Question 3

- a) Network Rail to provide a detailed assessment on what capacity exists in respect of the applications that seek additional services to operate off the core ECML i.e. Middlesbrough, Sunderland (via Newcastle), Lincoln, Huddersfield, Harrogate (via Leeds), Cleethorpes via Doncaster, Leeds / Bradford (via Wakefield and via Micklefield). NR to include any capacity constraints and enhancements required to meet all aspirations.
- b) Network Rail to comment on the timescales regarding W10 gauge clearance north of Newcastle and any potential additional capacity issues this may present that have not already been considered in Network Rail's Capacity Analysis.
- c) Network Rail to assess the impact of any freight services which are unable to operate via the Hertford loop due to weight restrictions.
- d) Network Rail to complete platforming analysis at Edinburgh, Leeds and King's Cross.