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21 March 2016

Dear John

### **East Coast Mainline Access Rights: Following Up to 4<sup>th</sup> March 2016 Industry Stakeholder Meeting**

Further to the Stakeholder meeting on 4<sup>th</sup> March I am writing to provide some further information on Competitive Response and to also comment on the proposed sensitivity testing on journey times. I will deal with each of these in turn:

#### **1. Competitive Response**

During the hearing on 4<sup>th</sup> March 2016 competitive price response following the introduction of lower fares offered by ECTL was discussed by all parties. A range of views were expressed including the counterintuitive view that there may not be a competitive price response. ORR invited submissions on the subject to enable applicants to articulate their views more fully and provide any further evidence.

We also wanted to take the opportunity to reiterate the comments we made in relation to the recent Leigh Fisher report on open access, given that a number of applicants referenced this work in respect of the discussion on competitive response.

- The Primary objective of the Leigh Fisher study was not to evaluate historical yield and fares data to determine whether there has been a competitive response. This is reflected in the limited and inconclusive data presented in the report on this point;
- When the report is read in full it is clear that Leigh Fisher were, within the limited scope of that aspect of the report, unable to find conclusive evidence of a competitive response, or conclusive evidence that there hasn't been a competitive response. This is summarised on page 18: *"This finding does not represent conclusive evidence that there has not been a competitive response, merely that we have not identified conclusive evidence of one."*;
- In the report "On Rail Competition Analysis, Dec 2009", which was commissioned by the ORR (and represents a more comprehensive review of historic data), case studies were developed to consider the relationship between competition, journeys growth and yield growth. The case studies for Hull Trains and Grand Central supported the proposition that competition resulted in stronger passenger growth and slower yield growth; and

- Leigh Fisher acknowledges in the executive summary the problems they have encountered with gaps and inconsistencies with the LENNON data used for the study. The main body of the report explains this further and highlights that one of the issues is on Open Access flows prior to the introduction of open access services. Leigh Fisher have used “subjective judgement <sup>1</sup>” to make manual adjustments to the data. It seems important to us that the underlying dataset should be verified before any judgments are made. This is probably one of the reasons why Leigh Fisher was unable to be conclusive on this point.

In the remainder of this section of the letter we explain and confirm our view that the rational and likely response of VTEC to the ECTL services would be to reduce fares on competing flows. This price competition will deliver an overall benefit to passengers and result in higher overall demand on the railway.

Our view is based on the following points:

1. **Rational economic theory** dictates that a monopoly (compared to a competitive market) leads to a loss of consumer welfare because prices will be higher and the quantity sold will be lower;
2. Analysis of **historic data following the introduction of Hull Trains and Grand Central** reveals that a competitive price response took place when previous Open Access operators were granted rights to run services on the East Coast Main Line;
3. The **opening of rail to competition in several European countries** has led to intense price competition between the OAOs and the incumbent;
4. **Case study evidence of rail-air market shares** demonstrates that in the presence of cross-modal competition, price competition leads to increased modal share for the rail sector, as price reductions attract customers who were previously using air transport; and
5. **Analysis of VTEC fares data** demonstrates how VTEC have increased prices since taking over the franchise. This provides evidence that there is currently no downward pressure on prices due to competition with the airlines. VTEC and SDG have both cited the presence of competition with airlines as a reason for there not being a competitive response to the introduction ECTL services.

Each of these points is discussed in more detail below:

### *1.1 Rational Economic Theory*

Rational economic theory dictates that a greater level of competition between operators will result in lower prices for consumers. The theory behind this was reported in Arup and Oxera’s recent study for ORR<sup>2</sup>, which considered the impact of the CMA’s Options for Increasing On-Rail Competition. The logic is summarised here in the context of the rail industry.

When a market is served by a monopoly, the firm maximises its profits by equating marginal revenue (the extra-revenue from selling one more unit) to the marginal cost (the extra-cost from producing one more unit). Compared with a competitive market, this leads to a loss of consumer welfare because prices will be higher and quantity

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<sup>1</sup> Leigh Fisher Report: Page 21 Paragraphs 5.3.3 and 5.3.4 and Page 50 Table 15 (commentary).

<sup>2</sup> Impact Assessment of the CMA’s Options for Increasing On-Rail Competition ([http://orr.gov.uk/\\_\\_data/assets/pdf\\_file/0015/20454/cma-on-rail-competition-impact-assessment-2015-12-31.pdf](http://orr.gov.uk/__data/assets/pdf_file/0015/20454/cma-on-rail-competition-impact-assessment-2015-12-31.pdf))

sold will be lower. In the rail environment, capacity is limited, and the marginal cost of providing additional capacity is high. Therefore a monopoly supplier will increase prices to a level where total revenue is maximised. Given the availability of walk-up tickets and variability in demand, the plan to maximise revenue may not be to attempt to fill all the seats.

A key constraint on increasing fares to the monopoly level is fares regulation. On most journeys on the East Coast, the key regulated fare is the standard class off-peak return. There is clear evidence that since privatisation, non-regulated fares have increased by substantially more than regulated fares. It is also evident that since the start of the new franchise VTEC have increased fares between London-Edinburgh and London-Newcastle. Section 1.5 summarises the data that demonstrates this trend.

A change from a monopoly supplier to a competitive market results in an increase in output and a reduction in price, which leads to a loss of firm profits, and a reduction in welfare loss. The franchising market can be characterised as competition for the market, as opposed to competition in the market. That means that the train operators cannot make a sustainable monopoly profit, as those profits accrue to the DfT through the competed franchise payments. The level of franchise payments bid and committed to be paid, are based upon the putative franchisee's view of the market based upon the parameters set out in the tender documentation. All bidders have the same starting information and have to decide on the risk profile in the particular market.

To the extent that competition in the market reduces the 'monopoly rent', the loser is the franchisee as it remains committed to deliver the premia to the state based on its earlier view of the likelihood of that 'monopoly rent' being available to it or not. In wider terms economic theory also explains that there are still net gains from the competition in the market: the increased consumer surplus exceeds the lost monopolist rent.

No loss beyond the immediate franchisee occurs unless the whole of the market was a "monopoly franchise asset" as a starting point. It was confirmed by DfT at the hearing on 12 June 2015 that the whole of the market (in terms of access rights on a specific route) is not a monopoly franchise asset<sup>3</sup>.

If firms enter a market that previously had only one provider, this can lead to the firms competing on price, resulting in a lower price and greater output than under a monopoly provider. In particular, price is more likely to be the main dimension of competition if there is limited scope to compete on frequency and/or quality of service. In the presence of cross-modal competition, price competition can lead to increased modal share for the rail sector, as price reductions may attract customers who were previously using road or air transport.

Competition in the market on East Coast was foreseeable at the time of the letting of the East Coast franchise. Both Hull Trains and Grand Central already operated on the East Coast, and Alliance had made applications for further rights. The ITT specification<sup>4</sup> required assumptions to be made by bidders about existing open access and also identified explicit requirements to specify the situation which would apply should further open access operators enter the market.

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<sup>3</sup> Hearing Transcript page 128 lines 5- 12, " ...we absolutely do not consider that we have unfettered rights . These belong with you. These belong with the ORR." responding to point made at Page 70 lines 13-16 "...in relation to [asserted] post-franchise impacts...This is predicated on a premise that the DfT has an unfettered right to sell and allocate all of the access that exists on the route to the exclusion of other operators."

<sup>4</sup> As set out in our letter of 24 February

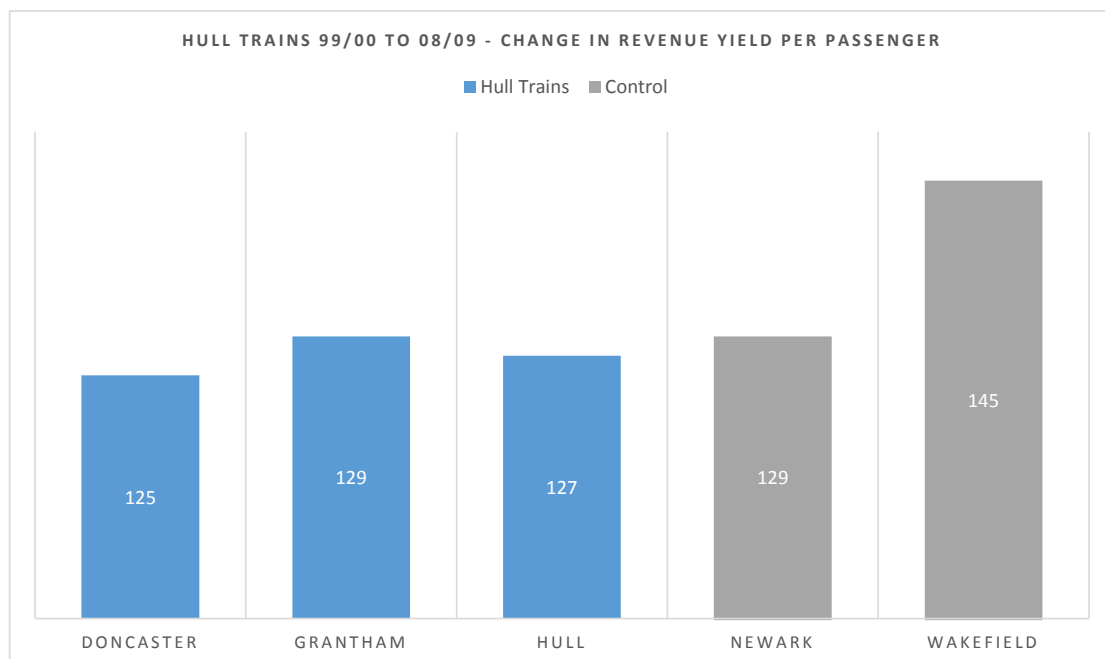
A reasonable analysis at the time of the East Coast franchise bid would have concluded that the Alliance proposal and/or other potential open access proposals were commercially sustainable, and that paths were available. The most likely approach was a fares strategy similar to that adopted by Grand Central and Hull Trains (i.e. lower than the franchised operator). The new market equilibrium position with the Alliance services in place would see substantially higher passenger volumes, at a lower average yield. The franchised operator would have to lower some fares as a competitor response, and include that within their bid plans.

*1.2 Historic data analysis following the introduction of Hull Trains and Grand Central*

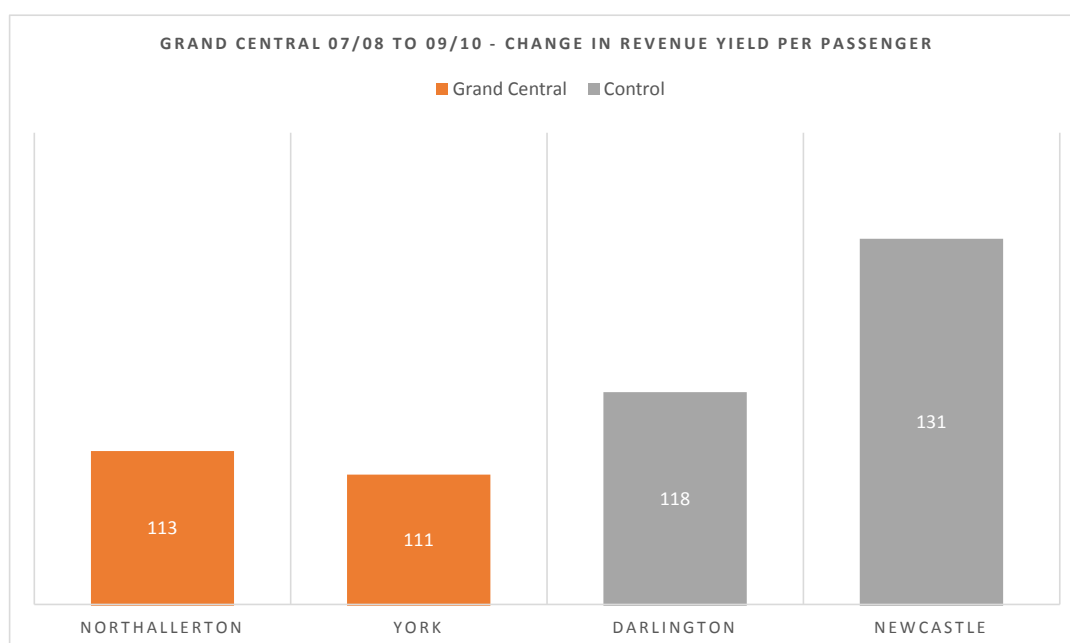
With respect to both Grand Central Rail and First Hull Trains there is evidence that demonstrates that franchise operators have responded to price competition on the flow in question. This response is evidenced by fares promotions and changes in average yield. For example, it is notable that the franchise operator responded to competition from First Hull Trains by offering its own carnet product, whilst GNER (the franchisee) increased the number of advance tickets available.

The impact of price competition, and behaviour of the incumbent franchisee, can be considered by looking at what happened following the introduction of Grand Central and Hull trains on the ECML. In the report “On Rail Competition Analysis, Dec 2009”, which was commissioned by the ORR, case studies were developed to consider the relationship between competition, journeys growth and yield growth. The case studies for Hull Trains and Grand Central supported the proposition that competition resulted in stronger passenger growth and slower yield growth. Figure 1 and Figure 2 are taken from the “On Rail Competition Analysis” report and demonstrate how the change in revenue yield per passenger (in pence) has grown more slowly on flows where competition is present (i.e. shown in the comparison between locations served by the Open Access Operators (OAO) compared to those locations only served by the franchisee, the “control” results).

**Figure 1: Hull Trains 99/00 to 08/09 - Change in revenue Yield per Passenger**



**Figure 2: Hull Trains 99/00 to 08/09 - Change in revenue Yield per Passenger**



### 1.3 Rail competition in European countries

The opening of rail to competition in several European countries has led to intense price competition between the OAOs and the incumbent. Table 1 below is taken from Arup and Oxera's recent study for ORR<sup>5</sup>, which considered the impact of the CMA's Options for Increasing On-Rail Competition.

Price-related reactions include: undercutting the competitor's fare, offering special prices or discounts, waiving reservations fees and legal action. While the structure of access charges varies across countries, the experience of the on-rail competition in Europe examples are relevant for assessing how greater on-rail competition in Britain could affect prices, as they illustrate the impact of entry by OAOs.

**Table 1 - European on-rail competition impact on prices**

Country	Reaction
Austria	Intense price competition between OAO and incumbent: the OAO undercut the incumbent's fare by offering discounted fares for regular travellers and the incumbent introduced special offers
Czech Republic	After market liberalisation, the first OAO entering offered fares that were 25% lower than the incumbent's for a slightly slower service. The incumbent retaliated by lowering its price by 30%, waiving its reservation fees and offering special discounts on the line Prague-Ostrava. The first entrant filed a complaint to the Czech competition office for predatory pricing by the incumbent. When the second OAO entered, competition on the line Prague-Ostrava became even more intense
Italy	OAO downward pressure resulted in fares for High-Speed services falling to similar levels as non-High-Speed services
Sweden	The incumbent started selling discounted tickets because of expected OAO entry
Germany	The no-frills operator HKX offered lower fares on route between Cologne, Dusseldorf and Hamburg, leading DB to freeze fares and introduce better rolling stock

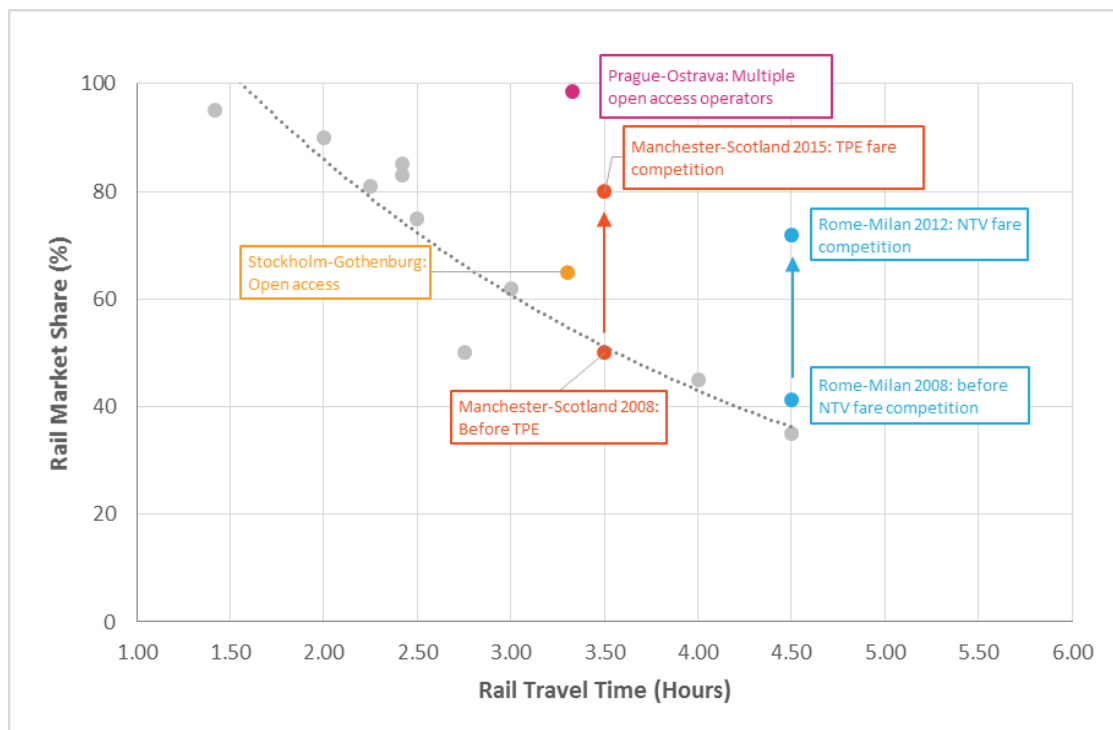
<sup>5</sup> Impact Assessment of the CMA's Options for Increasing On-Rail Competition  
[http://orr.gov.uk/\\_\\_data/assets/pdf\\_file/0015/20454/cma-on-rail-competition-impact-assessment-2015-12-31.pdf](http://orr.gov.uk/__data/assets/pdf_file/0015/20454/cma-on-rail-competition-impact-assessment-2015-12-31.pdf)

#### 1.4 Case study evidence from Air-Rail market shares

Figure 3 replicates the traditional relationship between rail travel time and rail market share in grey, to match charts shown in previous studies<sup>6</sup>. We have added in colour further case studies of routes which display strong price competition between rail operators (as well as against airlines). These case studies all lie above the line of best fit, demonstrating that simply reading off the curve would significantly underestimate the true rail market share for these routes. Moreover, the ‘before and after’ data available for Manchester-Scotland and Rome-Milan illustrate the extent to which rail market share can grow by introducing price competition even without material journey time savings.

These examples demonstrates that in the presence of cross-modal competition, price competition leads to increased modal share for the rail sector, as price reductions attract customers who were previously using air transport.

**Figure 3: Relationship between rail travel time and rail market share**



#### **Prague-Ostrava, Czech Republic**

On this route, connecting two of the Czech Republic’s largest urban areas, there is competition between the state-owned incumbent Czech Rail (České dráhy) and two open access operators, Regiojet (since 2011) and Leo Express (since 2013). The introduction of competition sparked a price war, to the extent that the incumbent has been accused of predatory pricing. An independent audit found that Czech Rail’s prices fell by around 50% when Regiojet entered the market and decreased further when Leo Express started operations.

Rail passenger numbers have grown strongly, while air traffic has declined. CSA Czech Airlines’ flight to Ostrava is the only domestic route from Prague Airport and passenger numbers in 2014 were less than a third of the 2010 figures.

<sup>6</sup> This is based on data from Table 2 of the 2009 OECD report “Competitive Interaction Between Airports, Airlines and High Speed Rail Round Table 145”

### ***Stockholm-Gothenburg, Sweden***

The introduction of open access services by Blå tåget to challenge the incumbent state-owned SJ has created strong competition between rail and air. Rail now accounts for more than half the market. In March 2015, MTR started operating services on the route but data to assess the impact of this is not yet available and is not reflected in the chart.

### ***Manchester-Edinburgh/Glasgow, UK***

Services operated by FirstGroup's First TransPennine Express franchise between Manchester and Scotland take approximately 3 hours and 30 minutes (on average). The rail share of the air: rail market on this route has increased from circa 50% in 2008 to over 80% today. This is considerably higher than the s-curve estimate.

The increase in rail's share of the market reflects timetable improvements and competitive pricing, including the availability of low fares such that the current average standard class one-way fare is £25. We have deployed sophisticated yield management techniques to attract and manage demand which together with marketing activity has been a key driver of the observed mode switch from air to rail. This case study provides a very good benchmark for our ECTL proposal.

### ***Rome-Milan, Italy***

Open Access operator NTV connects several city pairs (e.g. Rome – Naples) competing with both air and road travel. Total high speed rail demand increased by 39% between 2011 and 2013 following the introduction of NTV's Open Access services. 28% of the new demand was generated travel, with 31% transferring from air travel and 13% from road travel, and the remainder transferring from other rail services. NTV's success has come not through abstraction from Trenitalia, but from incremental growth to the railways from air and road. This growth has been attributed to improved journey time, reduced fares, high frequency and the passenger capacity NTV offers. On the Rome-Milan route, the total rail share of the air: rail market (combining Trenitalia and NTV) increased to 72% by 2012. This is much higher than the s-curve would suggest.

### ***Vienna-Salzburg, Austria***

The open access operator Westbahn has been providing rail services between Vienna and Salzburg since December 2011, in competition with the incumbent ÖBB. Westbahn entered the market with fares set at 50% of ÖBB's full fare; ÖBB responded by heavily discounting its own fares. Although data on rail passenger numbers and market share is not available, airport statistics show that air passenger volumes between the two cities declined by around 7.5% between 2011 and 2013.

### ***Paris-Marseille, France***

OuiGo is a low-cost high speed rail service between Marne-la-Vallée (19km west of Paris) and the south east of France. The service very deliberately targets the low cost air market. The service is an independently operated subsidiary of SNCF which was launched 2013. The new service did not offer a significant improvement in journey time but has instead targeted a 40% fare reduction in comparison to the national High Speed network with a service based on simplicity of a good quality no frills operation. This has resulted in the OuiGo service attracting an estimated 800,000 journeys from non-rail modes of transport. OuiGo has been notable for targeting and attracting segments that were previously priced out of the high speed rail market. OuiGo represents another example of modal shift that has been driven by a targeted price reduction.

Data for overall rail demand and mode share on the route was not available so this example is not shown on the above chart.

## 1.5 Analysis of VTEC fares and pricing

It is important to consider the latest trends in pricing, which reveal actual pricing behaviour since VTEC took over the franchise. These trends demonstrate that there is no downward pressure on prices from the airlines and VTEC's behaviour is that of a monopoly provider.

QL2, an independent provider, has collected data for FirstGroup from the VTEC website and the website of its predecessor (East Coast). This data was shared, confidentially, with Arup for further analysis. Data were collected based on the cheapest available fare for each departure at the time of the price check. VTEC/East Coast fares between London and Edinburgh (in both directions) and between London and Newcastle (in both directions) for departures between the dates 01/06/14 and 01/10/14 (inclusive) and 01/06/15 and 01/10/15 (inclusive) were analysed. The 2015 dates cover the period after franchise change, starting in June to allow for VTEC to enact changes in pricing strategy. The 2014 dates cover the same period the previous year (before franchise change) for comparability.

Price checks took place on a daily basis throughout the conventional 12 week booking horizon, up until and including the day before departure. The day of departure is not included because VTEC Advance Purchase fares are only available for sale up to the day before departure, and therefore there is no scope for VTEC to make dynamic price changes. The average fare for each route in each of these two periods was calculated, with the 2014 data being re-weighted to reflect the same booking horizon sampling frequency as the 2015 data to ensure comparability. The analysis is based on around 792,000 data records.

Table 2 provides a summary of average fares pre and post VTEC operating the franchise. This shows an average price increase of 7.5% for London to Edinburgh and 9.2% on London to Newcastle. Inflation over the period (based on RPI) was approximately 1%.

This pricing behaviour is consistent with the behaviour of a monopoly provider and provides clear evidence that there is currently no downward pressure on prices from airlines. VTEC and SDG (on behalf of DfT) have both cited the presence of competition with airlines as a reason for there not being a competitive price response to the introduction ECTL services.

**Table 2: Average fare comparison pre and post VTEC**

Destination / Time Period	Average Fare	Change
Edinburgh Pre-VTEC (Jun-14 to Oct-14)	51.77	
Edinburgh Post-VTEC (Jun-15 to Oct-15)	55.67	+7.5%
Newcastle Pre-VTEC (Jun-14 to Oct-14)	49.06	
Newcastle Post-VTEC (Jun-15 to Oct-15)	53.57	+ 9.2%

## 2. Journey Time Sensitivities

The ECTL business case and customer proposition is not based on headline journey times hence why no additional protection was sought in our application for access rights. Further specific tests on journey times are unlikely to be representative of all the possible timetable options that exist and have the potential to overstate the sensitivity of results.

As discussed at the Stakeholder meeting on 4<sup>th</sup> March, FirstGroup is content that carrying out the sensitivity test undertaken by CH2M Hill to remove the overtaking of



our Edinburgh service (i.e. Option 15) was a reasonable additional variant within the evaluation. Whilst FirstGroup is comfortable with this approach, we do not expect to be able to achieve further improved journey times. It is also worth reiterating that the original reason for our service being overtaken was because of the structure of the VTEC timetable against which we demonstrated that capacity existed for our proposed five trains per day.

We note the comments made at the meeting by VTEC in respect of the Decision Criteria and also the paper authored by Mr Tony Crabtree that has been supplied by VTEC. However, as we have previously explained, the original timetable was to demonstrate that our services could be pathed and that there was sufficient capacity for them first and foremost, rather than trying to achieve specific journey times.

Given the discussion on journey times and associated sensitivities we feel it would be helpful to provide more detail as to whether there would be alternative pathing solutions should our service be granted access rights alongside the VTEC proposals. A fundamental part of our approach is to fit alongside the proposed May 2020 VTEC timetable, which we believe can only be achieved if the two fast Edinburgh trains are flighted together to optimise use of capacity. We considered alternative options to increase the spacing of the two fast Edinburgh trains, and the impact to services can be summarised as follows:

- In the down direction we examined paths from King's Cross at xx:16, xx:30 and xx:46, before selecting the path at xx:03. In all cases it caused an increased journey time to the fast Edinburgh services, and in some scenarios it also affected the Leeds service. The only path that was not possible was the xx:16 because of platforming constraints at York and Newcastle. The xx:30 path had the most impact on other services, and freight could not be accommodated between York and Newcastle. In terms of deliverability the most feasible of all the paths was at xx:46 (only works in the hours the Lincoln operates), however consideration would need to be given as to whether it is looped at Darlington or precedes the xx:00 VTEC service increasing its journey time by 5-8 minutes. There would seem no logical reason to progress with the second option (i.e. preceding VTEC) because it either affects the VTEC service, or if it is looped at Darlington then it would drop into its original xx:03 path; and
- In the up direction the ECTL service could run on the opposite half hour (in the hours Hull Trains do not operate) with a 3 minute longer journey time. However it should be noted that it would not be possible to accommodate any freight services between Newcastle and Northallerton in these hours.

In summary what ECTL originally proposed delivers a reasonable and effective result in terms of impact on other services, journey times and capacity use. It should be noted that VTEC has more flexibility to change their stopping patterns, which could have a greater impact on how Edinburgh services are spaced and on journey times for both VTEC and ECTL.

FirstGroup has also had chance to review the report authored by Mr Crabtree that VTEC has supplied. We agree with the general points that Mr Crabtree has made with regard to the Decision Criteria and that it is applied during the timetabling process. The following points are observations that we have on the details contained within the paper provided by VTEC:

- The indicative timetable had trains booked to stand at Darlington for 13 minutes to avoid compromising on the journey time of the VTEC Edinburgh to London services. In terms of its impact on network capacity and performance, we considered Darlington had minimal impact because there are two available loops

which both have very little planned use by other operators. Furthermore in the event of an incident affecting other services, the ECTL train could run without being looped to minimise the overall level of delay. This compares favourably to the VTEC timetable which had overtaking moves at Grantham and York. With regards to improving connections we do not see how the ECTL proposal at Darlington has any material impact;

- If the ECTL train was to leave Edinburgh at xx:50, the journey time would be longer as a result of being pathed to follow the Newcastle to London stopping service which departs approximately 5 minutes behind the fast VTEC service. This was a key feature of the VTEC timetable, and described as a requirement in the TransPennine Express franchise specification. It is not clear how Mr Crabtree has concluded it would get a clean path without overtaking the stopping service. In order to make this change to the timetable it is probable that it would impact on more trains and as such it is likely the outcome would favour the indicative timetable with the lay-over at Darlington;
- The fact that the situation is different on a Saturday demonstrates ECTL has endeavoured to avoid overtaking where it is possible. The difference on a Saturday is as a result of the VTEC fast service running earlier to call at Darlington in lieu of the Newcastle to London stopping service, which is only every 2 hours;
- Assuming that VTEC only has one fast service then this should ideally be planned with the VTEC train departing at xx:38 and the ECTL train departing behind at xx:42, ensuring the trains are flighted according to their stopping pattern i.e. the second train calls first (at Morpeth). As such is perfectly reasonable that the weekday timetable is modelled with no overtaking, as per Option 15. We would be happy to supply a timetable if this would help with the modelling; and
- The Decision Criteria are flexible and D4.6.3 makes it clear that the structure and parameters are in place to achieve the best overall system outcome. No single Decision Criterion is dominant. If it is being implicitly argued that the journey time criterion (D4.6.2(d)) in some way carries more weight than the eleven other Decision Criteria within D4.6.2 individually or together, then clearly that argument is incorrect and unsustainable. The Decision Criteria involve a balancing exercise.

The ability for VTEC to flex its services is an important consideration in any further sensitivity tests on journey time beyond that considered for Option 15. Should a scenario be tested with even faster journey times for ECTL then further sensitivity tests should also be carried out on the two VTEC paths per hour to Edinburgh. VTEC currently has one fast and one slower Edinburgh service in its plans. However, given the overall number of services that VTEC is operating it would be feasible for it to redistribute calls amongst its services to create two fast trains per hour to Edinburgh. It is also the case that similar journey times between a fast VTEC London to Edinburgh (assuming there is only one per hour) and the ECTL service are unlikely due to the different calling patterns and the points at which each train calls on its journey (which are not the same). Therefore any test of similar journey times is not necessarily a realistic scenario, and it is likely to be as reasonable to consider the situation where VTEC improves the journey times of both its proposed Edinburgh services per hour.

Whilst paths for ECTL services without overtaking were not proposed, we are not seeking that our services must be overtaken. In addition we are not seeking fast

journey times, rather a reasonable approach given the available capacity. ECTL acknowledges and agrees that through the timetabling process paths without overtaking manoeuvres may well be found for all operators (i.e. including removing the need for Hull Trains and Grand Central to be overtaken by VTEC services). This would improve our journey time and this has already been tested (Option 15).

The timetabling process is also likely to result in a number of choices and compromises for all operators who are successful in obtaining rights through this process as well as those that are already operating services along the route. The implications of each of these, which are not yet known, cannot and in fact need not be tested at this stage. The sensitivity tests that have already been conducted by CH2M Hill and contained in its latest report, as discussed at the meeting on 4<sup>th</sup> March, are reasonable in the context of the process.

I trust that the information contained within this letter is useful, if you need anything further please do not hesitate to contact me. I look forward to the outcome of the discussions of the ORR Board in April.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Russell Evans', with a long horizontal flourish extending to the right.

Russell Evans  
Policy & Planning Director, FirstGroup Rail Division