

# **Chapter 10**



## **Disruption to Existing Services During Construction**

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## 10 DISRUPTION TO EXISTING SERVICES DURING CONSTRUCTION

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- 10.1 This chapter relates to the following questions listed by the Committee:
- 3.1 – Business case robustness of assumptions - the failure to evaluate the financial and economic impacts of HS2 construction on the existing operation, particularly at Euston and Old Oak Common.
  - 4.1 – Station location - the implications for existing services of the choice of Euston as the London terminus for HS2.
  - 6.4 – The disruption to the “classic” network during construction, particularly during the rebuilding of Euston.

### Introduction

- 10.2 Ministers have throughout argued that the construction of HS2 will cause minimal disruption to existing train services, and also claimed that any upgrade to the existing route will cause major disruption over a long period, citing the impact caused by the West Coast Main Line (WCML) upgrade before its completion in 2008.
- 10.3 It is true that, for most of the length of the route, construction of HS2 will have minimal impact on the existing network. However, there will be massive impact over 7/8 years at Euston, which is of course the key station on the route; there will also be a significant impact on the Great Western Main Line and Crossrail as a result of construction of the proposed Old Oak Common station, with lesser impacts elsewhere.

### Euston Reconstruction

- 10.4 There will be major disruption at Euston over a 7/8 year period, as it is proposed to rebuild the tracks and the station completely. All the existing platforms will be realigned and rebuilt, with the level of the approach tracks dropped by approximately 1.5 metres north of Hampstead Road, increasing to 3 metres down the length of the station.<sup>1</sup> Construction of the HS2

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<sup>1</sup> High Speed 2 Route Engineering report Para 3.5  
<http://highspeedrail.dft.gov.uk/sites/highspeedrail.dft.gov.uk/files/hs2-route-engineering.pdf>

approach tracks to Euston is also likely to cause disruption to the route into the terminal during this period.

- 10.5 It is likely that train services into Euston will have to be reduced for considerable periods during this work, both as a result of reductions in the number of platforms available during construction and a reduced number of approach tracks, reducing the capacity of the route. This is likely to affect both Inter-City and commuter services. The High Speed 2 Route Engineering Report states that *“During construction, planning would ensure that there is minimum impact on existing classic services.”*<sup>2</sup> But there is no indication of how the work would be phased and for how much of the eight year construction programme services will have to be reduced. In addition, work of this scale will certainly require a number of complete closures, typically over holiday periods such as Easter and Christmas.
- 10.6 In addition to the direct impact on train services, passenger circulation will be seriously affected during the construction programme: Euston will become a building site for seven years.
- 10.7 Despite the scale of the planned work, Minister’s statements on this have been at best naive and at worst seriously misleading. Theresa Villiers MP stated in the Westminster Hall debate on 31<sup>st</sup> March that:
- “... the works required at Euston for RP2 would be considerably more disruptive than those required there for HS2, because they would have to be carried out within Euston’s current footprint, making it much more difficult to keep current services going”*
- 10.8 Given the scale of reconstruction set out in HS2’s own documentation, including lowering the tracks both on the approaches to Euston and in the station itself, it is inconceivable that the work for HS2 would cause less disruption than the addition of three platforms on the west side of the station proposed by DfT in its RP2 alternative, which our analysis (“Chapter 1 Optimised Alternative – the scope for growth on the exiting network”) shows is not required in any case.
- 10.9 The potential disruption is obliquely acknowledged in the consultation documents:
- “...the major redevelopment project necessary at Euston station, lasting between seven and eight years...”*<sup>3</sup>

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<sup>2</sup> High Speed 2 Route Engineering report Para 3.1

<sup>3</sup> High Speed Rail: Investing in Britain’s Future February 2011. page 54, para. 2.68

- 10.10 And also in the consultation document for the next West Coast franchise:
- “...it is likely that major construction work will be needed at Euston station to enable the new high speed rail lines to be incorporated into the revamped station building. The phasing of any such works will only be decided after the consultation, but the new franchisee would need to be prepared for the possibility of some disruption to both services and the station concourse interchange during the next franchise”<sup>4</sup>*
- 10.11 The reality is that the disruption will be massive. This is a project which was described by a participant at a High Speed rail conference in February as *“open heart surgery on a conscious patient”<sup>5</sup>*
- 10.12 The High Speed 2 Route Engineering Report also makes clear that the capacity of the station and its approach tracks will be reduced for the existing WCML route after reconstruction. At present there are effectively three pair of tracks from Camden to Euston itself, which has eighteen platforms; this minimises potential conflicts between arriving and departing trains immediately outside the station, hence reduces delay. After reconstruction, there will only be twelve platforms for the existing WCML route (plus two “hybrid” platforms for use by HS2 or “classic” trains), and four associated approach tracks. This will constrain the total capacity of the route

### ***Great Western Main Line***

- 10.13 The major and complex work required to build Old Oak Common station may require reductions to commuter and Inter-City services to and from Paddington for a significant period, in addition to the impact on services during construction of the committed Crossrail project, including the construction of the Crossrail train maintenance depot at Old Oak Common.
- 10.14 The work at Old Oak Common involves major construction on an intensively used main line route, and there will inevitably be serious disruption to train services during the construction period. The scale of this disruption is totally unclear because of the lack of detail provided by DfT; for example, it is not clear whether access to the Crossrail depot can be maintained throughout the construction period.

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<sup>4</sup> InterCity West Coast Consultation Document January 2011. Page 39

<sup>5</sup> Modern Railways April 2011 page 55

## **Other Disruption**

### ***Chiltern Line***

- 10.15 Construction of HS2 parallel to the existing Chiltern line route between Northolt and West Ruislip may require significant disruption to Chiltern Line services.

### ***Other Locations***

- 10.16 There will be limited disruption at other locations, for example for the construction of the junction at Lichfield at the North end of the Phase 1 route, and at locations where the route of HS2 crosses sections of the existing network.

## **Disruption as a Result of Upgrading the Existing Route**

- 10.17 Detailed work carried out for the “51m” group shows that any foreseeable level of demand growth can be cost effectively met by a range of incremental measures, including some specific infrastructure investment if this proves to be necessary, without construction of HS2 (“Chapter 1 Optimised Alternative – the scope for growth on the exiting network”).
- 10.18 The hierarchy of actions to increase capacity is built up as follows:
- Rolling stock reconfiguration, particularly conversion of some first class vehicles to standard class
  - More effective demand management, including use when appropriate of obligatory reservations
  - Operation of longer trains, to the extent that this is possible without major infrastructure expenditure
  - Targeted infrastructure investment to clear selected bottlenecks to enable frequencies to be increased
- 10.19 It should be noted that the Department for Transport (DfT) and HS2 Ltd have given **no** consideration to rolling stock reconfiguration and improved demand management, and have not optimised their evaluation either of train lengthening, or of incremental infrastructure investment.

## ***Impact of Possible Upgrades to the Existing Route***

- 10.20 The upgrades proposed for the existing route are set out in the 51m “Optimised Alternatives” Chapter 1. These do not involve wholesale modernisation and upgrade of the existing route (as was the case with the

recently completed WCML route modernisation) but investment to increase capacity at a small number of specific “pinchpoints”:

- **Ledburn Junction** - The scope of the work involved in grade separating Ledburn Junction is broadly equivalent to that required for the HS2 junction at Lichfield.
- **Construction of a fourth line between Attleborough and Brinklow** - Some disruption would be necessary, probably with diversions at weekends via the West Midlands for a limited period
- **The “Stafford Bypass”** – The detailed HS2 documentation assumes that equivalent work has taken place for Phase 1 of HS2<sup>6</sup>, to enable frequency increases north of Lichfield. The impact on West Coast Main Line services is therefore identical for HS2 and any upgrade of the existing infrastructure.

### Conclusion

- 10.21 Construction of HS2 is certain to cause greater disruption to existing WCML InterCity services than targeted, incremental upgrades to the existing route, as a result of the planned complete reconstruction of Euston over an eight year period. HS2 will also significantly impact on Great Western Main Line services and, to a lesser extent, the Chiltern route. The disruption caused by HS2 to the existing network will be significantly greater than the Optimised Alternative.

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<sup>6</sup> Technical Appendices, Appendix 2, para 2.20  
<http://webarchive.nationalarchives.gov.uk/20110131042819/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/technicalappendix/pdf/report.pdf>