

On behalf of the Defendant
Alison Munro
First
Exhibits DB
6 August 2012

CO/3477/2012, CO3467/2012,
CO/3635/2012, CO/3605/2012, & CO/3732/2012

IN THE HIGH COURT OF JUSTICE

QUEEN'S BENCH DIVISION

ADMINISTRATIVE COURT

IN THE MATTER OF AN APPLICATION TO PERMISSION TO APPLY FOR JUDICIAL
REVIEW

BETWEEN:

The QUEEN (on the application of
(1) BUCKINGHAMSHIRE COUNTY COUNCIL and others
(2) HS2 ACTION ALLIANCE LIMITED
(3) HEATHROW HUB PROPERTY LIMITED and another
(4) HS2 ACTION ALLIANCE LIMITED
(5) AYLESBURY PARK GOLF CLUB LIMITED and others)

Claimants

-and-

SECRETARY OF STATE FOR TRANSPORT

Defendant

and

HIGH SPEED TWO LIMITED

Interested Party

WITNESS STATEMENT OF ALISON MUNRO

I, ALISON MUNRO, Chief Executive and Board Member of High Speed Two (HS2) Ltd, Eland House, Bressenden Place, London, SW1E 5DU, will say as follows:

1. I am the Chief Executive of High Speed Two (HS2) Ltd ("HS2 Ltd"), and have held that position continuously since the formation of the company. HS2 Ltd was established by

incorporation under the Companies Act in January 2009. I was re-appointed as Chief Executive on 26 April 2012 following an open competition¹.

2. I am duly authorised to make this witness statement on behalf of HS2 Ltd in response to the application by the Claimants for permission for judicial review of the Secretary of State for Transport's decision to approve HS2.
3. Except where stated otherwise, the facts and matters set out in this witness statement are within my own knowledge and are true. Where I have indicated that the matters set out are not within my own knowledge but rather are matters of information or belief, I have indicated their source. I refer to a number of documents in this statement, which are attached in a bundle marked **[DB/vol/tab/page]**. Where any documents referred to in this statement are already in the Claimants' Joint Bundle and Claimant Councils' Bundle, I make reference to those documents according to the Claimants' pagination **[CJB/vol/tab/page]** and **[CCB/tab/page]** and also make reference to the First Witness Statement of Christopher James Fraser Stanwell using the Claimants' pagination **[CFS1/tab/page]**.
4. In this statement I address the following matters:
 - i) Overview of HS2 Ltd's work since January 2009;
 - ii) Passenger dispersal at Euston;
 - iii) Construction effects on existing passenger services at Euston station;
 - iv) HS2 Ltd's current and future work;
 - v) The proposed rail connection between HS2 and HS1; and
 - vi) The route revision work undertaken by HS2 Ltd since our initial advice to Government in 2009, including in the Aylesbury area.

Overview of HS2 Ltd's work since January 2009

5. HS2 Ltd was established in January 2009 by the Department for Transport ["DfT"] to develop proposals and provide advice for a new high speed railway line between London and the West Midlands and to consider the case for high speed rail services linking London, northern England and Scotland. The remit for HS2 Ltd was set out in *Britain's Transport Infrastructure: High Speed Two*² and in letters between the

¹ <http://hs2.org.uk/press-releases/Alison-Munro-re-appointed-as-Chief-Executive-of-HS2-Ltd-82541>

² **DB/1/20/310 & 329**

Secretary of State and the Chairman of HS2 Ltd in February and March 2009³ ⁴. Our advice to the Secretary of State was to be submitted by the end of 2009.

6. Following a similar model to that adopted for the development of Channel Tunnel Rail Link and Crossrail, HS2 Ltd was established as a separate company, at arm's length from DfT. HS2 Ltd was staffed in part by secondees from DfT and Network Rail, along with others from the public and private sectors. In developing our advice during the course of 2009, we commissioned specialist consultancy advice on a range of subject matter. This technical advice supported our advice to the Secretary of State. The consultancy advice included:

- Engineering Services – Arup Group Ltd;
- Economic Modelling and Appraisal – a consortium led by WS Atkins PLC and supported by Sinclair Knight Merz Pty Ltd and Arup Group Ltd;
- Sustainability and Appraisal – Booz & Company Inc and Temple Group Ltd;
- European Cost Benchmarking Analysis – BSL Management Consultants;
- Land and Property – CB Richard Ellis Ltd;
- Advice on the assessment of Wider Economic Impacts – Dr Dan Graham and Patricia Melo;
- Financial advisory services – Ernst & Young LLP;
- Legal advisory services – Eversheds LLP;
- Commercial advice – Oliver Wyman Group; and
- Advice on the spatial impacts of high speed rail – Reg Harman.

7. We also established a number of working groups, comprising representatives of relevant organisations (such as Transport for London (“TfL”) and Network Rail), to assist in the development and review of our station proposals⁵, as well as three external challenge groups and one reference group. The external challenge groups provided independent expert scrutiny on different elements of our work covering a Strategic Challenge Group (which focused on offering an overall view and sense check of the programme and on providing an independent perspective on our overall approach), a Technical Challenge Group (which focused largely on peer review and challenge of the engineering and environmental specifications and assumptions) and an Analytical Challenge Group (which focused on the appraisal and modelling of

³ DB/4/82/1-6

⁴ DB/4/83/7-8

⁵ CJB/1/2/44

options, scrutinising the evidence base, as well as providing technical advice).⁶ The Appraisal of Sustainability Reference Group comprised relevant Government Departments and other statutory consultees.⁷

8. We submitted our advice to the Government in December 2009 in *High Speed Rail – London to the West Midlands and Beyond* [“the 2009 Report”]⁸. The 2009 Report recommended a route between London and the West Midlands. It also identified the main high speed rail alternative routes. It assessed the business case for the project, its implementation, and the development of a longer term high speed rail strategy.
9. HS2 Ltd provided a number of reports and supporting documentation to the 2009 Report. These were published with the 2009 Report on the DfT website in March 2010, alongside the Command Paper *High Speed Rail* [Cmnd 7827]⁹ and included:
 - *HS2 Cost and Risk Model Report*¹⁰ - This report contained more details on the costs of the HS2 project, the work carried out in reaching the cost conclusions and the approach to risk in the cost model.
 - *Delivery and Financial Reports*¹¹ – These reports contained more detail on the approach by HS2 Ltd to delivery and funding. They were prepared by HS2 Ltd’s financial advisers, Ernst & Young. The reports included international case studies on delivery and funding, reporting on international high speed rail projects in, for example, France, Portugal, Spain and Taiwan; and advice on delivery and financing, which supported HS2 Ltd’s conclusions.
 - *Appraisal of Sustainability: A Report for HS2 Non Technical Summary*¹² – This report was prepared by Booz Temple and is mentioned in the witness statement of Peter Miller.
 - *HS2 Demand Model Analysis Report*¹³ – This report provided further detail on the approach to and forecasts of demand used. The report explained how demand forecasting and appraisal had been used to inform and support the design of the

⁶ CJB/1/2/42-43

⁷ CJB/1/2/44

⁸ DB/1/24/349-623

⁹ CJB/1/3/258-410

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<http://webarchive.nationalarchives.gov.uk/20110202225955/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/riskmodel/pdf/report.pdf>

¹¹

<http://webarchive.nationalarchives.gov.uk/20110202230256/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/deliveryandfunding/>

¹² DB/4/89/809-834

¹³ DB/4/90/835-1006

HS2 proposal. It provided detail on the expected demand and economic impact of a new high speed rail line.

- *Demand and appraisal further material*¹⁴ – This comprised six reports providing further information about HS2 Ltd's approach to modelling and appraisal. These were:
 - Baseline Forecasting Report (Atkins Ltd).
 - Model Development Report (Atkins Ltd).
 - Model Framework Validation Report (Atkins Ltd)
 - Airport Demand Model Report (Sinclair Knight Merz)
 - International rail Travel Demand Model Report (Sinclair Knight Merz)
 - Advice on the Assessment of Wider Economic Impacts (Daniel Graham and Patricia Melo of Imperial College London).¹⁵

- *List of Reference Documents Report* – These were listing references used by HS2 Ltd in preparation of advice to Government.¹⁶
- *Route Engineering Study Final Report: A Report for HS2*¹⁷ – This report was prepared by Arup. It presented the findings of the route engineering and alignment study for the potential new high-speed rail line from London to the West Midlands.
- *Record of Stakeholder Engagement and Future Consultation Strategy*¹⁸ – This comprised of two documents: the first set out HS2 Ltd's approach to engaging with key stakeholders throughout 2009; the second set out HS2 Ltd's advice on a future consultation strategy.
- *Stakeholder submissions*¹⁹ – During the course of HS2 Ltd's work in 2009 a number of organisations submitted detailed reports which were considered by HS2 during preparation of the 2009 Report. These submissions included reports from:
 - Arup (about its proposals for a Heathrow hub);²⁰

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<http://webarchive.nationalarchives.gov.uk/20110202230424/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/appraisalmaterial/>

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<http://webarchive.nationalarchives.gov.uk/20110202230604/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/appraisalmaterial/>

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<http://webarchive.nationalarchives.gov.uk/20110202232330/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/referencedocuments/>

¹⁷ **DB/4/88/381-808**

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<http://webarchive.nationalarchives.gov.uk/20110202235730/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/engagement/>

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<http://webarchive.nationalarchives.gov.uk/20110203002007/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/stakeholdersubmissions/>

- Association of North East Councils;
 - BAA Heathrow (2 papers);
 - East Midlands Development Agency;
 - Glasgow Edinburgh Collaboration Initiative;
 - Leeds and Sheffield City Regions (2 papers);
 - London Borough of Hammersmith and Fulham;
 - London Borough of Newham;
 - The North West Business Leadership Team (2 papers);
 - Parsons Brinckerhoff - Old Oak Common Interchange;
 - Transport Scotland;
 - Metro, South Yorkshire Passenger Transport Executive and Nexus;
 - Sheffield City Region, South Yorkshire PTE and East Midlands Development Agency;
 - The Northern Way; and
 - Tyne and Wear Integrated Transport Authority.
- *HS2 Technical Appendix*²¹ – This report contained the over-arching HS2 Ltd technical specification, with additional detail on a number of topics, including train service assumptions, rolling stock strategy and sustainable design guidance.
 - *The High Speed Rail Revolution: History and Prospects*²² – This report was prepared by Terry Gourvish²³ for HS2 Ltd reviewing high speed rail networks across the world.

10. In the 2009 Report, HS2 Ltd submitted our proposed route for the development of a high speed rail line between London and the West Midlands. On 11 March 2010 the Secretary of State published the Command Paper *High Speed Rail*²⁴ and announced the Government's proposals for high speed rail, which included our proposed route. A

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<http://webarchive.nationalarchives.gov.uk/20110203002007/http://www.dft.gov.uk/pgr/rail/pi/highspe edrail/hs2ltd/stakeholdersubmissions/>

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<http://webarchive.nationalarchives.gov.uk/20110203000310/http://www.dft.gov.uk/pgr/rail/pi/highspe edrail/hs2ltd/technicalappendix/pdf/report.pdf>

²²

<http://webarchive.nationalarchives.gov.uk/20110203000447/http://www.dft.gov.uk/pgr/rail/pi/highspe edrail/hs2ltd/historyandprospects/pdf/report.pdf>

²³ Dr Terry Gourvish, London School of Economics,

<http://www2.lse.ac.uk/economicHistory/BHU/whosWho/gourvish.aspx>

²⁴ CJB/1/3/258-410

set of plan and profile drawings were published on the DfT website.²⁵ These drawings show the alignment of the proposed route, as well as the height of the line in relation to the existing ground and other information such as the design speed of the line.

11. On 17 March 2010 HS2 Ltd received a revised remit from the Secretary of State, following the Government's announcement on high speed rail. Amongst other requirements, the revised remit asked us to:

“refine aspects of HS2 Ltd's recommended route, reporting developments and any recommended changes to Government by the end of August. In particular:

Further refine the assessment of, and proposals for, mitigation of impacts of Route 3, especially in respect of noise and other environmental impacts.”²⁶

12. In June 2010, following the General Election, the Secretary of State widened our revised remit as follows:

“I will wish to review in more detail your recommended route (route 3) but in the meantime, given the strategic importance of linking Heathrow into the high speed network, I would like you to undertake some additional work on connections to Heathrow as follows, building on the work presented in the report that you published in March 2010.

Develop route options for a direct high speed rail link to Heathrow, to include options for a loop and a spur from your recommended alignment, and for a through route via Heathrow. This should include:

- a. a comparative assessment of the business case for each option – both as part of an initial London-Birmingham line, and as part of a wider network;
- b. a comparative assessment of the environmental and other impacts of each option;
- c. an assessment of the case for maintaining an interchange with Crossrail at Old Oak Common under each option; and

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<http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/route/>

²⁶ CJB/1/4/411-415

- d. an indicative service pattern for how the airport could be served under each option.

Carry out an assessment of the options for linking HS2 with HS1, including analysing the viability and cost of each option, and an assessment of the business case. This should cover consideration of the impact of the options for linking to Heathrow, and of the market for services between Heathrow and the Continent.”²⁷

13. In October 2010 a further revision to the remit was agreed by email, HS2 Ltd having received further detailed information on the Secretary of State’s requirements with regard to route changes.²⁸

14. Between September and December 2010, HS2 Ltd published the following reports, based upon a programme of work led by our engineering and environment teams:

(1) *High Speed Rail London to the West Midlands and Beyond – Supplementary Report, September 2010.*²⁹ This report included recommendations on connection to Heathrow and HS1, as well as reporting further work on the proposed location of an Infrastructure Maintenance Depot (a site to allow the track to be maintained) and locations for ventilation shafts above tunnelled sections.

(2) *High Level Assessment of the Wider Network Options – Reverse ‘S’ and ‘Y’ Network, October 2010.*³⁰ This report considered the relative merits of a network that served Manchester with an onward connection across the Pennines to Leeds (the Reverse ‘S’) against a network serving Manchester and Leeds through separate lines north of the West Midlands (the ‘Y’).

(3) *High Speed Rail London to the West Midlands and Beyond – Supplementary Report – An additional report to Government by High Speed Two Ltd Refining the Alignment of HS2’s Recommended Route, September 2010.*³¹ This report detailed HS2 Ltd’s work examining sections of the route near to Brackley, Chipping

²⁷ DB/2/30/1024-1026

²⁸ DB/2/37/1139-1140

²⁹ DB/2/32/1029-1089

³⁰ DB/2/34/1096-1117.

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[http://webarchive.nationalarchives.gov.uk/20110130205316/http://www.dft.gov.uk/pgr/rail/pi/highspe
edrail/hs2ltd/recommended-route/pdf/route.pdf](http://webarchive.nationalarchives.gov.uk/20110130205316/http://www.dft.gov.uk/pgr/rail/pi/highspe
edrail/hs2ltd/recommended-route/pdf/route.pdf).

Warden, Ladbrooke, Southam, Stoneleigh, Burton Green, and Hints. Maps of these revisions were also published.³²

- (4) *High Speed Rail London to the West Midlands and Beyond – Line of Route Supplementary Report*, 4 November 2010.³³ This report detailed HS2 Ltd's work examining sections of the route between Old Amersham and Little Missenden, South Heath to Wendover, Wendover itself, and Edgcote House.
- (5) *High Speed Rail London to the West Midlands and Beyond – Line of Route Supplementary Report*, 19 November 2010.³⁴ This report detailed our work examining sections of the route at Hartwell House in Aylesbury, the Delta Junction near Birmingham, the Northolt corridor in London, ventilation shafts for the HS1 connection, and further work on construction at Euston.
- (6) *High Speed Rail London to the West Midlands and Beyond – Confirming the Line of Route Supplementary Report*, 3 December 2010.³⁵ This report detailed HS2 Ltd's further work examining sections of the route along the Northolt corridor in London, at Edgcote House and the Delta Junction at Birmingham building on our previous advice as detailed above, alongside work on the provision as part of the first phase of work for a connection to Heathrow, international stations as part of the HS1 link, and the Rolling Stock Depot (to provide maintenance facilities) in Birmingham.
- (7) *High Speed 2 options for connecting to the Heathrow Airport area final report*, 20 December 2010.³⁶ This technical report was prepared by Arup.
- (8) *High Speed 2 automated people mover (APM) Euston Station to St Pancras International further investigation final report*, 20 December 2010.³⁷ This technical report was prepared by Arup. It presented the findings of investigations into

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<http://webarchive.nationalarchives.gov.uk/20110130205316/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/hs2ltd/route/mitigatednorthernroutesection/>.

³³ **DB/2/35/1118-1125**

³⁴ **DB/2/36/1126-1138**

³⁵ **DB/2/38/1141-1145**

³⁶ <http://assets.dft.gov.uk/hs2-heathrow.pdf>

³⁷

<http://webarchive.nationalarchives.gov.uk/20110131042819/http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/proposedroute/apm/pdf/apm.pdf>

options for a people mover between Euston and St Pancras as an alternative to a rail connection from HS2 to HS1.

(9) *High Speed 2 review of HS1 to HS2 connection final report*, 20 December 2010.³⁸

This technical report was prepared by Arup. It presented additional design development work on the rail options for connecting HS2 to HS1.

(10) *High Speed 2 tunnels shafts options – London tunnels report*, 20 December

2010.³⁹ This technical report was prepared by Arup. It described the results of additional studies carried out to investigate tunnelling and shaft options in more detail for the London route section.

(11) *High Speed 2 Infrastructure Maintenance Depot*, March 2011.⁴⁰ This

technical report was prepared by Arup. It provided operational and engineering proposals to assist HS2 Ltd identify the best location and the master layout of the Infrastructure Maintenance Depot for the London to West Midlands route.

15. On 4 October 2010 the Secretary of State by further remit letter confirmed his support for the development of proposals for a Y shaped network serving Manchester and Leeds. He asked HS2 Ltd to develop proposals for routes between the West Midlands and Manchester and Leeds.⁴¹

16. On 20 December 2010, the Secretary of State made a statement to the House of Commons announcing his proposed route for and details of his forthcoming public consultation on high speed rail in early 2011.⁴² In December 2010 a revised set of plan and profile maps were published on the DfT website. These revised plans incorporated changes to the proposed route from London to the West Midlands

³⁸ <http://webarchive.nationalarchives.gov.uk/20110131042819/http://s3-eu-west-1.amazonaws.com/assets.dft.gov.uk/hs2-hs1connection.pdf>

³⁹ see <http://webarchive.nationalarchives.gov.uk/20110131042819/http://s3-eu-west-1.amazonaws.com/assets.dft.gov.uk/hs2-londontunnels.pdf>

⁴⁰ <http://webarchive.nationalarchives.gov.uk/20110131042819/http://www.dft.gov.uk/pgr/rail/pi/highspe edrail/proposedroute/londontunnels/>

⁴¹ DB/5/94/1173

⁴² DB/2/40/1148-1155

resulting from HS2 Ltd's supplementary reports, to which I have referred in paragraph 14 above⁴³ and HS2 Ltd issued a press release regarding the same⁴⁴.

17. The Secretary of State's public consultation on high speed rail ran from 28 February to 29 July 2011. HS2 Ltd provided the following supporting documents for publication with the main consultation document:

(1) *Economic case for HS2: The Y Network and London - West Midlands*. This report described the proposed high speed rail network and presented a strategic level economic assessment of a Y shaped network from London to the West Midlands, Manchester and Leeds, alongside a more detailed assessment of an initial high speed line from London to the West Midlands.⁴⁵

(2) *HS2 London to the West Midlands Appraisal of Sustainability*. This report was commissioned by HS2 Ltd from Booz Temple. It comprised a non-technical summary, 2 main volumes and 6 appendices.⁴⁶

(3) *HS2 Route Engineering Report*. This report was commissioned by HS2 Ltd from Arup. It described the proposed route for a high speed rail line between London and the West Midlands. It included proposals for Euston Station and a link to HS1.⁴⁷

18. HS2 Ltd participated directly in the planning and delivery of the 2011 public consultation. HS2 Ltd staff and consultants were present at the public roadshow events to answer questions and explain the consultation proposals. I attended several of these events, along with others from the HS2 Ltd Executive team. Our public enquiries team responded to questions and provided copies of consultation materials requested by the public. Nearly 30,000 people attended consultation events, and over 55,000 responses were received.

19. HS2 Ltd provided further advice to the Secretary of State on issues raised in responses to the 2011 public consultation. This work was informed by our own internal analysis of responses in addition to that undertaken by the independent response analysis company, Dialogue by Design. HS2 Ltd's advice focused on Part 2 of the

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[http://webarchive.nationalarchives.gov.uk/20110131041552/http://www.dft.gov.uk/pgr/rail/pi/highspe
edrail/proposedroute/maps/](http://webarchive.nationalarchives.gov.uk/20110131041552/http://www.dft.gov.uk/pgr/rail/pi/highspe
edrail/proposedroute/maps/)

⁴⁴ <http://www.hs2.org.uk/assets/x/77425>

⁴⁵ CJB/3/14/912-975

⁴⁶ CJB/2/12/650-883 & DB/5/95-101/1174-11711

⁴⁷ DB/4/88/381-808

Consultation Document – ‘Developing a New High Speed Line’,⁴⁸ and ‘the Government’s Proposed Route for HS2 (London - West Midlands)’. It included:

- (1) *Review of Possible Refinements to the Proposed HS2 London to West Midlands Route*. This report considered and made recommendations on amendments to the route to reduce its impact on people and the environment.⁴⁹
- (2) *Summary of effects of HS2 London to West Midlands Route Refinements*. This report summarised the engineering, environmental, and cost changes made to the route.⁵⁰
- (3) *Review of HS2 London to West Midlands Route Selection and Speed*. This report re-examined the route selection process adopted during 2009, including consideration of whether lower speed routes or routes following existing transport corridors such as motorways would allow for a route with lower environmental impacts.⁵¹
- (4) *Review of HS2 London to West Midlands Appraisal of Sustainability*. This report reviewed the February 2011 Appraisal of Sustainability in the light of consultation responses.⁵²
- (5) *Economic case for HS2: Updated Appraisal of Transport User Benefits and Wider Economic Benefits*. This report updated the economic case, including revised economic forecasts and reflecting further work on the Y network.⁵³
- (6) *Review of the Technical Specification for High Speed Rail in the UK*. This report reviewed the technical specification for HS2.⁵⁴

20. Following publication of the Secretary of State’s decisions on high speed rail in January 2012, HS2 Ltd’s remit was revised on 11 January 2012.⁵⁵ The Secretary of State asked HS2 Ltd to continue work on route options for extending the Y network to Manchester, Leeds and Heathrow. The Secretary of State also asked HS2 Ltd to promote the first phase of the project, undertaking the necessary further work to enable a hybrid Bill to be laid before Parliament seeking powers for the construction and operation of Phase 1 by the end of 2013. In line with the timetable detailed in the

⁴⁸ CJB/2/10/572

⁴⁹ CJB/4/20/1551-1591

⁵⁰ DB/3/66/2063-2069

⁵¹ DB/6/105/1978-2046

⁵² CFS/1/BB/1153-1187

⁵³ DB/3/63/1926-1992

⁵⁴ DB/3/65/2036-2062

⁵⁵ DB/3A/68/2114-2115

Decisions Document,⁵⁶ HS2 Ltd is working to develop route plans to the required level of engineering detail and to prepare a draft Environmental Statement for public consultation in the spring of 2013. To assist with the delivery of this work and to ensure that we have access to the necessary expert advice, HS2 Ltd has appointed CH2M Hill as Development Partner⁵⁷ to provide project management and technical advice. A number of other Professional Service Contracts have been awarded, to cover engineering, environmental and land referencing.

Euston

21. Chapter 3 of the 2009 Report is entitled “Determining the Preferred Scheme”.⁵⁸ Chapter 3.1 “Option generation and sifting” describes the process by which we arrived at preferred options for the design of HS2 and explains the conclusion we reached at each stage of that process.⁵⁹ We stated that more detailed information on the design and impacts of our chosen options could be found in three supporting documents – the *Route Engineering Study*⁶⁰, the *Appraisal of Sustainability Study*⁶¹ and the *Demand and Appraisal Report*.⁶² In paragraph 3.1.2 of the 2009 Report we said that, for London stations, we had carried out a 3-stage process to identify our recommended ‘preferred options’, which would in turn fit together with ‘preferred options’ for Heathrow/Crossrail interchanges (including approaches to London), lines of route and West Midlands stations and routes to make up a ‘preferred scheme’.⁶³

22. Chapter 3.2 of the 2009 Report explains the 3-stage option development process we followed in order to identify viable station options in London. We begin with a long list of inner and outer London station options at stage 1 of the process. At stage 2, from that long list, we select a short list of London station options that includes (amongst other options) both Euston and Old Oak Common. At that stage we explain that the bulk of the demand for HS2 would come from the centre, north and south of London and would be best served by a central London station. At stage 3, we identify our preferred and alternative options for that purpose, using the following criteria: construction and operational impacts; sustainability priorities; costs and economic

⁵⁶ CJB/4/18/1384-1503

⁵⁷ <http://hs2.org.uk/press-releases/HS2-Ltd%e2%80%99s-appointment-of-CH2M-Hill-creates-new-job-opportunities-80080>

⁵⁸ CJB/1/2/58-156

⁵⁹ CJB/1/2/59-61

⁶⁰ DB/4/88/381-808

⁶¹ CJB/2/12/650-883 & DB/5/95-101/1174-171711

⁶² DB/3A/77/2316-2383

⁶³ CJB/1/2/59

analysis. Paragraphs 3.2.10 to 3.2.23 set out our assessment of our preferred option – Euston with all platforms (including HS2 services) on one level.⁶⁴

Passenger dispersal

23. Paragraphs 3.2.16 to 3.2.18 of the 2009 Report set out our assessment of passenger benefits and dispersal for that preferred option. (The figures provided were up to date at the time of publication, but have since been updated in light of model updates and changes to forecasts, such as GDP figures. My statement below details the updates that have taken place.)⁶⁵

3.2.16 Euston has good links with most London destinations via the Underground, with the Victoria line and both branches of the Northern line currently integrated within the station complex, and the Metropolitan, Hammersmith & City and Circle lines at nearby Euston Square station, with the potential for a new connection from the eastern end of Euston Square station platforms to the south west corner of the Euston station site. A short Advanced People Mover could connect Euston to St Pancras along a route to the north of the British Library. This would provide immediate access to First Capital Connect (Thameslink and Great Northern services), East Midlands Trains, South Eastern (domestic high speed services), Eurostar and East Coast core services. These connections would require further work and have not been included in our costs.

3.2.17 Around half the passengers arriving or departing from Euston currently go on to use the London Underground. Even with TfL's investment programme for the Underground, parts of the tube network are likely to be heavily loaded by the time HS2 opens. We forecast that the impact of HS2 would be to add as much as 50,000 long distance and 15,000 - 20,000 short distance passengers per day to and from Euston (i.e. 25,000 in each direction). Assuming that half of these passengers go on to use the Underground, that could mean around 32,000 additional passengers at Euston and Euston Square Underground station per day. With an outer London interchange station, the number of additional passengers on the Underground reduces to 17,000 per day. There are several potential ways to relieve some of the crowding problems on the Underground. An HS2 interchange with Crossrail in West London would be one such option, as discussed in section 3.3.

⁶⁴ CJB/1/2/62-77

⁶⁵ CJB/1/2/72

3.2.18 Suggesting improvements to the Underground network itself was not part of this study but we note a number of potential ways that could help with crowding around Euston which we have discussed with TfL. For the purposes of this study, we have not included their costs or benefits. Further work would be required to understand the impacts of these proposals alongside a new HS2 scheme.

24. On page 64 of the 2009 Report⁶⁶ (following on from paragraph 3.2.18 above), we set out brief details of schemes that were included by Transport for London [“TfL”] in the consultation on the Mayor’s Transport Strategy published in October 2009, all of which had the potential to help passenger dispersal generally at Euston, as part of the Mayor’s emerging strategy to meet wider transport planning objectives for London.⁶⁷
25. Paragraphs 3.2.32 to 3.2.34 of the 2009 Report set out our summary and key recommendations for a London station serving HS2. We recommended that the single level Euston option should be taken forward and suggested that the next stage of design should include (amongst other matters), additional work to understand opportunities which would help with dispersal of passengers from Euston.⁶⁸
26. Paragraph 3.2.17 of the 2009 Report stated that an HS2 interchange with Crossrail in West London was one potential option for assisting with the relief of crowding on the Underground and passenger dispersal at Euston.⁶⁹ That option was considered further in section 3.3 of the 2009 Report.⁷⁰ The role of such an interchange station in the dispersal of passengers from HS2 to central London is discussed in paragraphs 3.3.5 to 3.3.6.⁷¹ The preferred option is Old Oak Common, for the reasons given in paragraphs 3.3.36 to 3.3.44.⁷² Paragraph 3.3.41 identifies the potential offered by Old Oak Common to provide interchanging passengers with access to London via Crossrail, thereby easing congestion at Euston, as a key advantage of that location for an interchange station.⁷³

⁶⁶ **CJB/1/2/73**

⁶⁷ **See also DB/5/90a/1007-1083**

⁶⁸ **CJB/1/2/68**

⁶⁹ **CJB/1/2/72**

⁷⁰ **CJB/1/2/78-97**

⁷¹ **CJB/1/2/79**

⁷² **CJB/1/2/90-93**

⁷³ **CJB/1/2/91**

27. In March 2010, the Secretary of State accepted our recommendations as the basis for further development of the proposed route for public consultation: paragraphs 6.2 to 6.28 of the Command Paper *High Speed Rail*.⁷⁴ In paragraphs 6.7 and 6.27 the Secretary of State acknowledged the important relationship, for passenger dispersal and connectivity across London, between a remodelled Euston Station as the central London terminus for HS2 and an interchange station at Old Oak Common. The Secretary of State stated that HS2 Ltd proposed to work with TfL and Network Rail on options for managing the interface with London Underground and other local transport at Euston Station.
28. Our continuing assessment of passenger dispersal at Euston Station has been informed by our demand modelling work. This has enabled us to understand the demand that passengers travelling to and from central London on HS2 are likely to add to the Underground network.
29. In 2009 we developed the PLANET Modelling Framework. The core element of this framework, PLANET Long Distance, is used to forecast long distance rail demand on both the national rail network and HS2, while a regional model known as PLANET South, is used to forecast demand on local rail and Underground lines in London and the South East. Although the primary objective is to assess the strategic business case for HS2 with the focus on long distance trips, the modelling framework enables us also to forecast likely demand for relevant short distance rail trips. The PLANET South model provides a useful assessment of likely demand on local rail and Underground services in London and the South East.
30. The results are presented in Chapter 4 of the *HS2 Demand Model Analysis* report published in March 2010⁷⁵. The analysis shows a substantial increase in the number of passengers arriving at or departing from Euston station without HS2. It also shows the likely need for further significant investment in order to manage future crowding on the Underground network, over and above current levels of major investment in that network. The PLANET Modelling indicates that the number of passengers arriving or departing the station – even without HS2 – is forecast to grow by 60% by 2021 and 143% by 2033 whereas HS2 would increase passenger numbers by only around 3% on services through Euston Underground station.⁷⁶

⁷⁴ **CJB/1/3/355-366**

⁷⁵ **DB/4/90/874-879**

⁷⁶ **DB/4/90/879**

31. The same version of the model was used to undertake further analysis of the case for an interchange station at any or none of Old Oak Common, Heathrow, or Iver on the Great Western Main Line. This interim work was published in July 2011 (see *Analyses of London Interchange Options and Markets – A Report for HS2 Ltd*, prepared by Atkins ⁷⁷ together with analysis in the *HS2 Demand and Appraisal Report*,⁷⁸ which corrected certain modelling issues and updated our modelling to include more recent assumptions on demand growth for the purpose of the February 2011 public consultation).
32. Chapter 4 of the *HS2 Demand and Appraisal Report*⁷⁹ (February 2011) provided further detail on the impacts of passenger demand at Euston in the light of these updates. It shows the HS2 London-West Midlands line would result in around 32,000 additional passengers arriving or departing Euston across the day and 5,500 additional Underground passengers in the peak three hours. The impact of HS2 London to West Midlands on the total number of passengers travelling through Euston overall on the London Underground network remained relatively small – about a 2% increase in passenger numbers (this figure is calculated in 2043 and includes the London to West Midlands section only).
33. This demand modelling and analysis was further refined and updated in order to inform the Government’s response to the 2011 public consultation. See Chapter 4 of the updated *HS2 Demand and Appraisal Report* (April 2012).⁸⁰ This updated report also includes an estimate of the potential impact of the full Y network, suggesting a more significant increase in demand overall at Euston, with an additional 17,400 passengers using Euston Underground Station in the peak 3 hours compared to the case without HS2. It concludes that the impact of the full Y network in 2033 on the total number of passengers travelling through Euston overall on the London Underground network is likely to remain relatively small - of the order of 3% (this figure is calculated in 2037, and incorporates the entire Y network).
34. In developing our advice for Government we set up a working group on London terminus locations, which included senior and experienced representatives from TfL (including the Head of Rail Planning) and London Underground Limited. The working group’s remit included identifying a long list of possible London locations, reviewing

⁷⁷ DB/6/102/1771-1924

⁷⁸ DB/2/51/13881456

⁷⁹ DB/2/51/1414-1420

⁸⁰ DB/3A/77/2316-2383

London Underground crowding data and identifying key dispersal issues, and involvement in the option sifting process (referred to above) including recommending shortlist options to HS2 Ltd's Executive Team. (I note in passing that Euston was suggested as an option for the London Terminus by TfL from a list circulated to the working group in March 2009). Further, HS2 analysts have had regular meetings with their counterparts at TfL to discuss technical issues and share results. This has helped both organisations better to understand each other's analysis. In particular it has allowed TfL to use the long distance outputs from the PLANET modelling framework as an input to the TfL model, and for PLANET to use some of the TfL model's outputs on station accessibility.

35. This engagement with TfL has enabled a shared understanding of the dispersal issues around Euston to be developed. Both HS2 and TfL have been aware, throughout this process, of the future demand pressures at Euston (with or without HS2), but are in agreement that Euston is the appropriate London terminus for HS2. TfL's position is clearly stated in the Mayor of London's Transport Strategy published in May 2010 which stated:

"The Mayor and TfL support the development of a national high-speed rail network and will work with the DfT, Network Rail, High Speed Two and other transport stakeholders to ensure that the main London terminal for any new high-speed line is centrally located, well-connected to the existing public transport network, and widely accessible to maximise access to jobs and London's population. It is currently considered that Euston best meets these criteria. Further evaluation will be made of this and other potential termini, in particular, in relation to links to Heathrow."⁸¹

36. Passenger dispersal at Euston was considered in the February 2011 public consultation document which stated at section 5.4:

HS2 Ltd has examined the implications that an initial London – West Midlands HS2 line could have on passenger dispersal at Euston, in particular on the Underground. By 2043, as a result of the proposed line, the number of passengers per day using Euston Mainline Station is estimated to increase by 31,700. Surveys of current passengers suggest around 50 per cent of passengers would arrive or depart by

⁸¹ DB/5/90A/1011

London Underground which, in the three hour morning peak, would mean 5,500 additional passengers using Euston Underground Station. Both the Northern and Victoria lines which stop at Euston are likely to be heavily crowded even without HS2. Although the introduction of HS2 would add to this pressure, the number of passengers added by HS2 is likely to be relatively small (around 2 per cent) compared to the number of passengers already forecast to be on London Underground services passing through Euston. HS2 Ltd would work closely with TfL as part of its wider ongoing strategy for modernising and improving Underground services.⁸²

37. A number of consultation responses related to the ability of Euston station to cope with the increase in passenger throughput from HS2. HS2 Ltd provided advice to the Secretary of State in response to the main points raised by consultees in sections 5.1 and 5.2 of the *Review of HS2 London to West Midlands Route Selection and Speed* report. In particular, we considered the issue of passenger dispersal at paragraph 5.2.8.⁸³ In paragraphs 5.29 to 5.33 of the Decisions Document the Secretary of State confirmed Euston as her preferred central London terminus station.⁸⁴

38. Since the Secretary of State announced her decisions on 10 January 2012, HS2 Ltd's engagement with TfL has increased substantially. Officials from TfL are now located in HS2 Ltd's offices in Eland House. We have regular meetings with TfL on demand forecasts for HS2 and the transport assessment for the Environmental Statement. TfL and Network Rail are now part of the Euston design working group in order to ensure they become part of the design development process and both organisations are involved with the sifting of options and the criteria used.

Construction Effects on Existing Passenger Services at Euston

39. Euston station currently has 18 platforms and is served by a mixture of long distance intercity trains, medium and short distance commuter services and overnight sleeper trains. It is the southern terminus for the West Coast Main Line, and serves a number of cities such as Birmingham, Manchester and Glasgow.

⁸² CJB/2/11/583

⁸³ CB/6/105/2032-2034

⁸⁴ CJB/4/18/1473-1474

40. It was most recently rebuilt during the 1960s to accommodate increasing passenger numbers, a trend that continues to this day, with 34.1 million passengers entering or exiting the station in 2010/11 compared to 26.3 million in 2004/05.⁸⁵ Network Rail proposed in 2007 to demolish and rebuild the station so as to increase capacity and reduce congestion for passengers.⁸⁶
41. The HS2 proposal would see an enlarged and rebuilt Euston station, extending the station to the west to accommodate new, longer platforms required for high speed trains, and also southwards to the edge of the gardens at the front of the current station⁸⁷. In total 24 platforms would be required – 10 high speed rail platforms, and 14 platforms for conventional services (of which 2 would also be able to serve high speed trains). Fewer platforms for conventional services would be required than the present 18, as a number of the existing longer distance services would be replaced with local or medium-distance trains which have shorter turnaround times.⁸⁸
42. Both high speed and conventional platforms would be on the same level, around 2 metres below the current track level. This change would allow high speed trains to achieve a sufficient depth to pass under the Hampstead Road Bridge. The current station acts as an impermeable barrier for people on foot for a large part of the area, as it is not possible to walk through the station without a ticket, impeding east – west pedestrian movement of the general public in the area. A redesigned and lower station would enable people on foot to more easily walk through the station and around the Euston area.
43. The London Underground element of Euston station would be enlarged. The new ticket hall would be about 4 times larger than the current ticket hall. An underground walkway connection between Euston and Euston Square is proposed, to improve passenger dispersal and access to underground services. This is not reflected in traffic modelling to date.
44. The London Underground platforms at Euston station and Euston Square underground station are 300 metres apart. Current facilities mean that passengers who wish to

⁸⁵ <http://www.rail-reg.gov.uk/server/show/nav.1529>

⁸⁶

<http://www.networkrailmediacentre.co.uk/content/detail.aspx?releaseid=2928&newsareaid=2&searchcategoryid=2>

⁸⁷ **DB/7/115/2460A**

⁸⁸ For more details see section 3 of the February 2011 Arup Route Engineering Report provided in support of the February 2011 Consultation. **CJB/3/15/976-1116**

travel between the 2 stations to make use of the additional underground lines they offer, have to exit Euston station and walk along the Euston Road, before entering Euston Square station. HS2 Ltd proposes the construction of an underground walkway between Euston and Euston Square stations. The proposed walkway would give improved accessibility to passengers wishing to travel to or from Euston, who would be able to use the Circle, Hammersmith and City and Metropolitan lines that serve Euston Square, in addition to using the Victoria and Northern lines that serve Euston.

45. The existing taxi and bus stations at Euston would be replaced with new facilities. The taxi rank at Euston station is currently located in an underground facility below the station complex, whilst buses use a bus station at the front of the train station. Both facilities would be relocated within the redeveloped Euston station.

46. The construction phase for the full redevelopment of Euston station would take between 7 and 8 years, with a likely start date of 2017. Construction would be undertaken in stages. Our engineering advice from 2009 suggested a 4 phase construction period.⁸⁹ The western side of the new station would be built first with a likely duration of 3 years and then brought into service, before the remaining stages are completed. The exact details of the construction phase at Euston are currently being developed, and will form part of the draft Environmental Statement which will be consulted on in spring 2013.

47. HS2 Ltd explained the effects of construction at Euston on existing passenger services during the construction phase in our written evidence to the Transport Select Committee's inquiry into high speed rail, dated 30 August 2011.⁹⁰ We said, and it remains our view, that:

“through the period of Euston development we concluded that the existing train service could be maintained. Passengers would experience some level of inconvenience through building works changing pedestrian, public transport and road access during the multiple stages of the works, similar to other major rebuilding projects of which the most recent and relevant was St Pancras.”⁹¹

⁸⁹ DB/4/88/434

⁹⁰ DB/6/104/1957-1977

⁹¹ DB/6/104/1964

48. HS2 Ltd will continue to work closely with Network Rail, TfL, train operators and the London Borough of Camden as we develop our plans for the construction of the proposed new station at Euston, with the aim of minimising disruption to existing services and passengers. There would be a need to close the station for short periods in order to facilitate the proposed staging of construction. This would allow for track to be disconnected from one set of platforms and reconnected to another. Such work would take several days, and would need to be timed to coincide with periods of lower demand, such as Bank Holidays or during the summer.

49. The redevelopment of Euston station would require the demolition of four blocks of flats on the Regents Park Estate, totalling some 190 dwellings. A further 25 dwellings in surrounding streets would also need to be demolished. As well as residential buildings, a number of listed buildings would need to be moved or, in some cases, demolished. A section, around two-thirds, of the green open space at St James Gardens would also be lost. These requirements were set out in the Appraisal of Sustainability published for consultation in February 2011.⁹² On behalf of the Secretary of State, HS2 Ltd is working with the London Borough of Camden to reduce and mitigate these impacts. In particular, the Secretary of State's objective is to ensure that high quality social housing will be provided to replace that which needs to be demolished for HS2.

50. HS2 Ltd will work in consultation with the Mayor, the London Borough of Camden and the local community, in order to minimise the environmental and socio-economic impacts of the works to redevelop Euston Station. We are developing a Code of Construction Practice that will define the principles of approach and conduct, and the detailed measures that contractors would be required to comply with during construction. The draft Code will be subject to a consultation as part of the draft Environmental Statement consultation in spring 2013.

HS2 Ltd's Current and Future work

51. Following the Secretary of State's decisions in January 2012, the next stage of development work for the HS2 project has commenced. We have increased HS2 Ltd's staff resource and appointed engineering (Arup) and environmental consultants

⁹² See for example Chapter 3.1.9 in the Non-Technical Summary of the 2010 Appraisal of Sustainability at **DB/5/101a/1770g**

(ERM/Temple/Mott MacDonald) who focus on Euston, along with route wide railway consultants (Parsons Brinkerhoff).

52. The route between London and the West Midlands has been divided into 5 sections, to allow teams to specialise on individual sections. The 5 sections are shown on a map prepared in-house by HS2 Ltd, dated May 2012⁹³ and are:

- Euston (including the station itself and the track leading out if it, known as the throat);
- London Metropolitan (including the link to HS1, Old Oak Common Station, and the rest of the route within London);
- Country South;
- Country North;
- and Birmingham.

53. Detailed plans for the proposed works to Euston station are in preparation that will provide the basis for Environmental Impact Assessment. This design process will address construction timings and methods, architectural designs for the redeveloped station and layout. The results will be presented in the draft Environmental Statement, which is to be published for consultation in spring 2013. The Environmental Statement will be presented with the hybrid Bill to be submitted to Parliament by the end of 2013.

Engagement with affected individuals, businesses and other organisations

54. The February 2011 public consultation included public events and meetings in the Euston area. We held 3 days of public events, including 2 within the grounds of the station itself, and a third at a local community centre. A follow-up drop in surgery event, specifically focusing on property issues for people living in the Regent's Park Estate was also held, following a request from the London Borough of Camden.

55. Since January 2012 we have been working to establish procedures in order to engage effectively with the local community around Euston as we continue to take forward the Secretary of State's proposals for the redevelopment of Euston station to serve HS2.

⁹³ DB/7/115/2460

56. Local community forums are our primary way of engaging with local residents. 26 forums were originally established along the London to West Midlands route. The local community forums first met in March and April 2012. Each local community forum comprises between 10 and 25 representatives of local communities, businesses, organisations and local authorities. Local community forums enable HS2 Ltd to present, explain and receive feedback on our work as it progresses, discuss local issues, improve our understanding of local priorities and increase local awareness of our work and future consultations, such as the draft Environmental Statement in spring 2013.

57. HS2 Ltd intended to establish a stand-alone forum for the Euston area and a number of other forums to cover the rest of Camden. At the request of local residents and the London Borough of Camden, our original plans for local community forums in Camden were placed on hold whilst the local community considered their position. I attended a public meeting on 12 June 2012, along with members and officials from the London Borough of Camden and the local Member of Parliament. Following that meeting we published information relating to a number of questions that were raised.⁹⁴

58. However, following the decision at the Camden-led public meeting on 19 July 2012 for the community not to engage in the community forum process, a strategy to engage via bilateral meeting and other mechanisms is being pursued. The London Borough of Camden will continue to engage with HS2 in its capacity as a local authority at the Camden mitigation steering group (detailed in paragraph 60) and through the Opportunity Area Planning Framework (“OAPF”). The OAPF is discussed in the Third Witness Statement of Philip Graham.

59. It is intended that HS2 Ltd will have built up relationships sufficiently so that by the planned September forums along the route, the Euston stakeholder engagement team will be able to deliver the same information to the local community via alternative engagement mechanisms.

60. A working group between HS2 Ltd and the London Borough of Camden has been established to consider the issues and opportunities arising from the development of HS2 within the Borough, covering the following areas:

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<http://highspeedrail.dft.gov.uk/sites/highspeedrail.dft.gov.uk/files/HS2%20Ltd%20response%20to%20questions%20raised%20at%20Camden%20public%20meeting%2012%20June%202012.pdf>

- Residential;
- Educational;
- Business and Commercial;
- and Public Realm / Open Space.

61. HS2 Ltd has also established planning forums⁹⁵. Membership of these forums includes HS2 Ltd area teams and officers from highway and planning authorities (i.e. Boroughs, Counties and Districts) on the London to West Midlands route, along with Transport for London and Centro, the organisation responsible for bus, rail and Midland Metro Tram transport in the West Midlands. On an invitation basis, the forums also involve Network Rail, the Highways Agency and local officers of statutory environmental consultees. We have established 6 planning forums, including a London-wide forum. Planning forums meet every 2 months. They facilitate senior officer level discussion in respect of continuing detailed planning and design work and method for HS2 and the progress and findings of Environmental Impact Assessment in the relevant geographical areas.

62. HS2 Ltd continues and will continue to engage directly with local residents, businesses and community organisations. In the Euston area, we are engaging with the Maria Fidelis School and the Royal College of General Practitioners. Our work with the Maria Fidelis School is presently examining whether we can help with the School's aspiration to merge its 2 sites into a single site. Our work with the Royal College of General Practitioners is presently examining whether it is possible to retain the College's Grade 2* listed building.

The proposed rail connection between HS2 and HS1

63. In preparing the 2009 report HS2 Ltd was asked by the Secretary of State to review options for linking HS2 to HS1 (the high speed rail link from St Pancras to the Channel Tunnel). Section 3.8 of the 2009 Report⁹⁶ sets out our advice and recommendations to the Secretary of State. We recommended that if a direct rail link were to be provided between HS2 and HS1, it should be a dual track railway run at conventional speed between Old Oak Common and HS1 at the Camden Road East Junction: paragraph 3.8.17 of the 2009 Report.⁹⁷ We recommended that a decision about a rail connection

⁹⁵ <http://highspeedrail.dft.gov.uk/forums/planning-forums>

⁹⁶ CJB/1/2/143-148

⁹⁷ CJB/1/2/148

between HS1 and HS2 and whether Old Oak Common should be built as an international station needed to be taken early in the process so that, if needed, the tunnel and station could be built from Day One to avoid significant disruption in the future: paragraph 3.8.18 of the 2009 Report. In paragraph 3.8.19 of the 2009 Report⁹⁸, we recommended that further consideration be given to the costs and benefits of a people mover between Euston and St Pancras/King's Cross.

64. The Secretary of State responded to HS2 Ltd's advice and recommendations in paragraphs 7.19 to 7.28 of the Command Paper "High Speed Rail" in March 2010.⁹⁹ In paragraph 7.28, the Secretary of State instructed HS2 Ltd to carry out further work to develop options for both a direct rail link to HS1 via the existing North London network and an improved passenger connection between Euston and St Pancras, to include detailed assessments of their respective business cases. In June 2010¹⁰⁰, the Secretary of State extended that instruction to:

"Carry out an assessment of the options for linking HS1 with HS2, including analysing the viability and cost of each option, and an assessment of the business case. This should cover considerations of the impact of the options for linking to Heathrow, and of the market for services between Heathrow and the continent."¹⁰¹

65. In September 2010 we reported on our further consideration of these matters in *High Speed Rail London to the West Midlands and Beyond – Supplementary Report*.¹⁰² This included consideration of a single track, classic speed connection, and a people mover between the two stations. The business case for such a link was also reviewed.¹⁰³

66. On that basis, page 86 of the February 2011 public consultation document presented a revised option for a direct, single track rail connection between HS2 and HS1.¹⁰⁴ The link would start from Old Oak Common station, heading east in tunnel alongside the tunnel into Euston, before diverting off to connect to the North London Line at surface level. This proposal required one track on the North London Line to be upgraded in order to accommodate the wider high speed trains. The proposed capacity for HS2 services was 3 trains per hour in each direction.

⁹⁸ CJB/1/2/148

⁹⁹ CJB/1/3/382-384

¹⁰⁰ DB/2/30/1024-1026

¹⁰¹ DB/2/30/1025

¹⁰² DB/2/32/1029-1089

¹⁰³ DB/2/32/1068-1081

¹⁰⁴ CJB/2/11/585

67. We recognised the need to continue work with Network Rail and TfL to ensure that this level of service could be provided without affecting the existing operation of the North London Line. Nevertheless, consultation responses expressed concern about the impact of the proposed connection to HS1 on the operation of the North London Line. On the basis of work with Network Rail and TfL, a number of potential options were identified to ensure existing services on the North London Line would not be impacted. This was factored into our cost assumptions for the HS1 link. In section 5.4 of *Review of Possible Refinements to the Proposed HS2 London to West Midlands Route*,¹⁰⁵ HS2 Ltd recommended to the Secretary of State that, if the decision was made to proceed with the proposed link between HS1 and HS2, we should continue to develop these options and recommend a solution to be included in the hybrid Bill.

68. Since January 2012, work has continued to advance the design of a direct rail connection between HS1 and HS2, including further examination of options for avoiding conflict with existing services on the North London Line.

Route revision work undertaken by HS2 Ltd since our initial advice to Government in 2009, including in the Aylesbury area

69. HS2 Ltd reported and recommended its preferred route for a high speed line between London and the West Midlands in the 2009 Report. In paragraphs 6.66 and 6.67 of the Command Paper “High Speed Rail”¹⁰⁶ published in March 2010, the Secretary of State accepted HS2 Ltd’s recommendation as the basis for public consultation on a proposed route for HS2. Following that announcement, HS2 Ltd was asked by the Secretary of State to review and refine the proposed route between London and the West Midlands. HS2 Ltd reported its further work and recommendations in the series of reports that I identify in paragraph 14 above. That further work informed the Secretary of State’s announcement on 20 December 2010 of his proposed route for public consultation in early 2011: paragraph 16 above.

70. The preferred route in the 2009 Report passed to the west of the town of Aylesbury, between Aylesbury golf course to the east and Hartwell House to the west.¹⁰⁷

¹⁰⁵ CJB/4/20/1589

¹⁰⁶ CJB/1/3/377

¹⁰⁷ DB/7/121/2525

71. During 2010 we met with the owners of the Ernest Cooke Trust (the owners of Hartwell House), Historic House Hotels (the leaseholder of Hartwell House) and the National Trust (who have been gifted the lease of Hartwell House), whose principal concern was that the proposed route should be as distant from Hartwell House as possible, in recognition of the Grade 1 listing for the House and the Grade II* registration of its Park and Garden. Our site visit to Hartwell House enabled our engineering and environmental teams to gain a more detailed understanding of the route in that area.
72. In *High Speed Rail London to the West Midlands and Beyond – Line of Route Supplementary Report – 19 November 2010*¹⁰⁸ (paragraph 14(5) above), we concluded that the proposed route should be moved between 75 and 100 metres away from Hartwell House. Such a change meant the route would be placed in higher ground, and so would be in a deeper cutting, helping to screen the railway from Hartwell House and its Park and Gardens. We recognised that this change would take the route through the edge of the Aylesbury golf course.
73. This change was accepted by the Secretary of State in his announcement on 20 December 2010¹⁰⁹ of the proposed route for public consultation and published in a revised set of plan and profile drawings in December 2010¹¹⁰. It formed part of the proposed route that was consulted on publicly in February 2011.

Post consultation consideration

74. In the light of responses to the February 2011 public consultation, HS2 Ltd carried out a review to identify sections of the proposed route that merited further investigation. This review was led by HS2 Ltd engineers, supported by our engineering and environmental consultants Arup and Booz Temple respectively, and reported to the HS2 Executive for consideration. The review was informed by detailed study of relevant consultation responses, review of a location specific issues report from Dialogue by Design,¹¹¹ the independent company that analysed the consultation responses, and the experience of HS2 Ltd staff gained from the public consultation events. All proposed route amendments were recorded in a dedicated spreadsheet, created by HS2 Ltd's engineering team. It was reviewed by HS2 Ltd's Executive team and used to formulate the work programme that considered possible route alterations

¹⁰⁸ DB/2/36/1126-1138

¹⁰⁹ DB/2/40/1148-1155

¹¹⁰ DB/7/122/2526

¹¹¹ CJB/3/17/1153-1383

in more detail, so that decisions could be taken as to whether or not they should be recommended to the Secretary of State. The review process, our work following on from it, and our recommended revisions, were reported to the Secretary of State in *Review of Possible Refinements to the proposed HS2 London to West Midlands Route* (January 2012).¹¹²

75. In that report we recommended 13 amendments to the proposed route from London to the West Midlands as published for the February 2011 public consultation. In paragraph 6.12 to 6.14 of the Decisions Document¹¹³ the Secretary of State accepted our recommendation: see also *Summary of Effects of HS2 London to West Midlands route refinements* – January 2012.¹¹⁴ The changes include:

- A further 8 miles of the route now in tunnel or green tunnel (a shallow tunnel which is dug out of the ground and then covered with a roof, which can be turfed over).
- A reduction in the extent of the route on viaduct or embankment from 50 miles to 40 miles.
- The number of properties that may experience a noticeable increase in noise has reduced from 4,700 to 3,100.
- 4 fewer demolitions will now be required and the number of properties at risk of land take has reduced from 342 to 172.
- The cost of constructing the route has reduced by around £500 million.

76. Following the closure of the 2011 public consultation, as part of the review process I have described in paragraph 69 above HS2 Ltd considered the Golf Club's proposed route revision around Aylesbury golf course. The Golf Club's proposal is recorded on line 340 of HS2 Ltd's spreadsheet¹¹⁵ referred to above, an extract from which I attach showing the relevant entry.

77. For the purpose of preparing my witness statement, I have spoken with our Senior Route Engineer, John Castle, who considered the Golf Club's proposal and the other route amendment suggestions as part of the above-mentioned process. He has confirmed to me that the route suggestion made by Aylesbury Golf Club and Mr Chris Eaglen was considered by him and his team. It was not considered to merit further

¹¹² CJB/4/20/1551-1591

¹¹³ CJB/4/1477-1482

¹¹⁴ DB/3/66/2063-2069

¹¹⁵ CJB/7/116/2461

investigation. It would have resulted in significant changes along a long section of the route, adversely affecting a number of other communities.

78. HS2 Ltd did investigate options to mitigate the impacts of the current route close to Aylesbury as reported in section 4.2 of *Review of Possible Refinements to the proposed HS2 London to West Midlands Route*.¹¹⁶ We recommended that the route be lowered, so that trains would pass Aylesbury in a cutting up to 6.5m deep, reducing noise impacts and allowing the route to be better screened within the existing landscape. The Secretary of State accepted this recommendation.
79. Representatives from the Aylesbury Golf Club now attend the Stoke Mandeville and Aylesbury Community Forum, which meets approximately every two months. Through this forum the Golf Club have requested a bilateral meeting with HS2 Ltd, so that they can gain an understanding of the HS2 proposals and the programme of work that will continue in advance of the hybrid Bill. We are in the process of arranging this meeting, which will involve members of our design, engagement and property teams, and are committed to working with the Golf Club to minimise any potential impacts on their course as a result of the construction and operation of HS2.
80. I refer now to the witness statement of Michael May.¹¹⁷ The *Review of Possible Refinements to the proposed HS2 London to West Midlands Route* provided to the Secretary of State following the February 2011 consultation sets out HS2 Ltd's advice on possible amendments to the proposed route in the light of its consideration of consultation responses and further assessment in the light of them. As Mr. May acknowledges at paragraph 18 of his Witness Statement, the process of refining the proposed route from London to the West Midlands in the light of consultation responses has resulted in a number of benefits. It is also true to say that the proposed amendments may have some negative impacts. Mr. May's detailed comments as to those effects will be taken into account by HS2 Ltd as it continues to develop the detailed design and mitigation of the route, in preparing the Environmental Statement and its preparation towards the hybrid Bill.

¹¹⁶ CJB/4/20/1580

¹¹⁷ CCB/2/127-148

Statement of truth

I believe that the facts stated in this witness statement are true.

Signed..... ..

ALISON MUNRO

Dated: 6 August 2012