Miller P

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HS2 railway, UK – route development to hybrid bill: consultation

Peter Miller FIEMA

Environment Director, Technical Directorate, HS2 Ltd., Birmingham, UK (Peter.Miller@hs2.org.uk)

Since 2009 the promoter of the UK's High Speed Two (HS2) railway has listened to others' views on development of the first London-to-West Midlands phase. Initial scheme development required time to think and determine the best response to the remit, working in confidence with key stakeholders. Through the early part of 2011 a major national consultation was undertaken on the strategy for HS2, the approach to developing the scheme and the route itself. Analysis of all responses informed the route for phase one as the first stage of a new national railway network. Public participation continued through bill development with consultations on the environmental statement scope and methodology, a draft statement and route refinements consultation, alongside an intensive programme of more local community and stakeholder engagement. Through consultation and engagement, HS2 determined the 'blueprint' for high-speed rail in the UK, ensuring that mitigation is inherent in the scheme that will guide the construction and ongoing operation of HS2. This gave the government and parliament the confidence to approve HS2.

1. Introduction

The development of the UK's High Speed Two (HS2) high-speed railway presents significant change for people and places along the line of the route. While the new railway will transform how people will travel and bring people closer together to assist the next generation of growth, those receiving the new railway have helped influence what HS2 will look like and the measures to be taken that will protect them and the natural world.

Engagement has been at the heart of the project's development from the outset and the views of local people and a wide range of public and private organisations have helped shape the government plans for the new high-capacity, high-speed railway network. Consultation and engagement is inherent to parliamentary practice and has enabled people to participate in the hybrid bill process to further influence the plans that parliament has decided upon in the High Speed Rail (London-West Midlands) Act 2017.

2. HS2 the early stages – 2009 to 2010 – the path to consultation

This is a story about change which started in 2009 when the government created HS2 Ltd to consider the case for new high-speed rail services between London and Scotland. The remit that followed set out objectives for high-speed rail and accounted for appropriate environmental, social and economic assessments. By the end of that year the government planned to assess the options considered by HS2 Ltd for a route between London and the West Midlands and broad corridors beyond. A decision to proceed would involve public consultation on a proposed route or route options.

The government recognised that HS2 Ltd's work would cover a broad geographic area and could cause unnecessary blight in respect of options not taken forward. It planned to publish its response to HS2 Ltd's report to minimise the uncertainty for those potentially affected by a proposed line. A plan for full public consultation would follow the government's decision to pursue high-speed rail, with the aim of giving all interested parties an opportunity to comment before those proposals were finalised and a hybrid bill prepared to authorise the new railway. To minimise uncertainty for those potentially affected by a proposed route, the government set out and prioritised, for consultation, a non-statutory property hardship scheme. The scene was set for public engagement and the studies were progressed.

In March 2010 HS2 Ltd's report was published, together with further recommendations from government to carry out further works to refine and further reduce the effects of the railway and in particular noise before a final decision to pursue high-speed rail was made.

In July 2010 and with a new government in place the secretary of state confirmed the government's commitment to the establishment of a high-speed rail network. Mindful of the potential impact for those who would live on or close to a proposed route, the government set up an exceptional hardship scheme that followed consideration of around 4500 responses to the property consultation.

In response to that consultation the scheme was widened to include owner-occupiers of certain agricultural units and commercial properties. The government recognised it should cover properties recently inherited following bereavement and repossessed properties that the original owner urgently required lenders to sell to realise value. A number of respondents asked for the scheme to include properties above tunnels, but it was the government's view that blight above tunnels was limited. It did, however, make special provision in relation to properties

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close to the entrances and exits of tunnels and the scheme was extended to cover those areas.

The panel which was subsequently set up to consider exceptional hardship cases and make recommendations to government was made up of a majority of independent people. This property scheme enabled flexibility for people to move who had a pressing need to sell along the line of the route and who otherwise would experience exceptional hardship in advance of any statutory provisions being triggered by a decision to proceed with high-speed rail.

A considerable number of route options and stations were considered between London and the West Midlands and government required some further consideration of HS2 Ltd's preferred route before finalising its plans. By autumn 2010, following the secretary of state's route tour where he met many

local authorities, property owners and action groups, the London-to-West Midlands route was refined. Supplementary reports were in preparation to address potential effects in the vicinity of Old Amersham, a 'green tunnel' alongside South Heath, a route re-alignment away from Hartwell House near Aylesbury, possible reconfiguration of the Delta junction and the route alignment towards Lichfield, Northolt corridor and Euston. A plan for consulting on the strategy for high-speed rail and the government's preferred route between London and the West Midlands was established.

Case study 1 - Ladbroke and Southam

The original route alignment in Warwickshire passed close to the village of Ladbroke, passing over the floodplain of the River Itchen on a long, low viaduct. Concerns were raised by the local community about the railway per se, the prominence of the viaduct and the proximity of the route to the village.

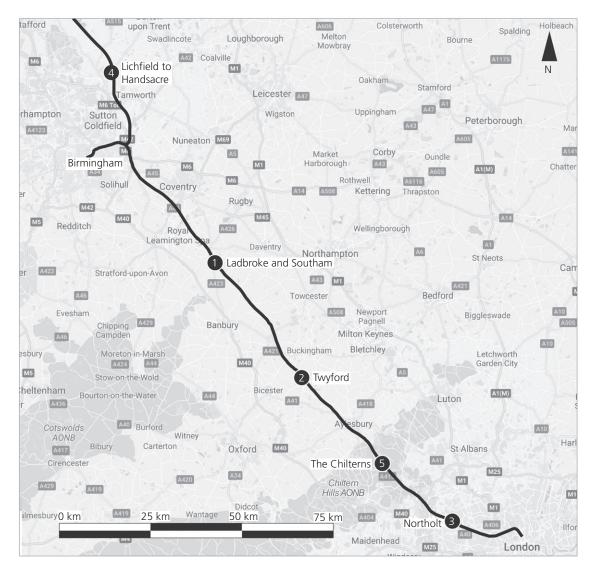


Figure 1. Case study locations

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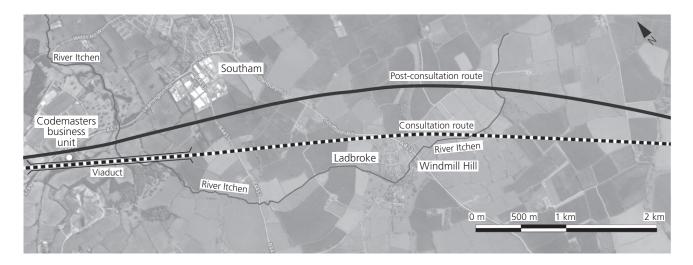


Figure 2. Ladbroke to Southam

The merits of their case were taken up by HS2 Ltd through the design. HS2 Ltd looked to remove the viaduct structure and move the rail alignment north-eastwards to a position equidistant between Ladbroke and the industrial estate fringe of Southam (Figures 1 and 2).

The final route passed through Windmill Hill to the south, screening the railway in a deep cutting before passing north-westwards over the Banbury Road onto an embankment then into a cutting near the polo grounds and a tunnel beneath the high ground of Long Itchington Wood. The revised alignment enabled a closer union with the ground by removing the long viaduct and afforded further opportunities to provide earthworks and planting to screen the new railway outside the floodplain. By keeping the route low in the landscape, the alignment change broadly achieved what Ladbroke were seeking for the permanent design in this location.

Further consideration was given to the route and road diversions in the vicinity of 'The Codemasters' business, south of Long Itchington Wood, access improvements were made which helped this important employer to remain on site.

3. 2011 – consultation – strategy and the London-to-West Midlands route

The government gave the green light to high-speed rail and the strategy and route consultation was set for February 2011. On 20 December 2010 the secretary of state published the route for consultation with around 50% of the route amended in some respect from the plans published in March. This included careful siting of vent shafts in the Primrose Hill area that helped move the route to a different location more closely aligned and beneath the West Coast main line, more of the route was covered in the Chilterns, the route re-alignment at Hartwell House was confirmed, together with an improved

alignment away from Lichfield. Further consideration would be given to address impacts on property values.

The High Speed Rail: Investing in Britain's Future (DfT, 2012) consultation was carried out online through provision of information and through direct engagement with local people at roadshows at 30 locations. Alongside the government's strategy for high-speed rail, the roadshows were accompanied by HS2 Ltd's reports, details of the preferred corridor, the business case, plans, an appraisal of sustainability and sound booths to experience high-speed rail at representative locations along the route. Specific local area material and information sheets were prepared to help people understand the plans and the approach adopted towards environmental, engineering, property and other matters.

The plans gained momentum and people, local authorities and non-governmental organisations came forward to attend the roadshows, answer the consultation questions and express their concerns. HS2 Action Alliance and Stop HS2 were action groups that were formed by local people who challenged the project's economic and environmental case. Eighteen local authorities along the line of the London-to-West Midlands route formed a group known as '51m' and came together to oppose the proposals for high-speed rail. So while there was broad support across parliament and the regions that would benefit from high-speed rail, regional opposition along the line of the route and individuals emerged, and was made known through the consultation process.

By July 2011, the consultation was complete and through the summer around 55 000 consultation responses were analysed. Speed, environmental impact and the route-selection process were matters of concern, and through autumn 2011 further work was commissioned by the government to test its strategy,

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Figure 3. HS2 design vision

strategic alternatives, the technical specification for high-speed rail in the UK, property issues and possible route refinements.

By autumn 2011 non-governmental organisations developed their objectives and approach to high-speed rail in the UK – *The Right Lines Charter* (CPRE, 2011) – was published and led to a specific engagement between the Council for the Protection of Rural England (CPRE), the wildlife trusts, Greenpeace, the Ramblers Association, the Woodland Trust, National Trust, the Campaign for Better Transport and others. Specific consultation was set up with those organisations through a regular ministerial environmental round-table meeting. Among a range of matters that were discussed, the round table highlighted the need to address the quality of design – ultimately taken up by the secretary of state and HS2 Ltd through the formation of the design panel and the design vision (HS2, 2017a, 2017b) (Figure 3).

That engagement also considered ways and means to further support businesses and communities that led to the development of the £40 million HS2 community and environment fund and the business and local economy fund (HS2, 2017c), launched to coincide with the Act. These funds are now available for local communities and businesses and are administered by Groundwork.

4. 2012–2013 decisions and next steps – the route to parliament

In January 2012 the government, through the publication of High Speed Rail Investing in Britain – Decisions and Next

Steps (DfT, 2012), confirmed its strategy for high-speed rail that would address rail capacity, which was forecast to escalate, promote national economic growth and support the midlands and the north to fulfil their economic potential. The government also recognised a range of criticism that merited further careful investigation; this included options related to the upgrade of the existing rail network instead of constructing HS2, alterations that amended the route, further consultation on property and blight proposals. At that point, the government also confirmed that preparations would commence on a hybrid bill to seek parliamentary powers for the construction of the London-to-West Midlands line.

Changes included refinements over the Trent and Mersey canal at Lichfield; a horizontal shift of the tracks away from Middleton; a lower viaduct slightly further from Balsall Common; a shallower cutting and longer tunnel at Burton Green; a lower alignment through the National Agricultural Centre; a longer bored tunnel at Long Itchington Wood; a longer green tunnel past Chipping Warden and Aston le Walls, with a revised position of the tracks near Edgcote; a lower alignment and green tunnel at Greatworth; a revised route alignment away from Twyford; a lower route past Aylesbury and Stoke Mandeville; a longer green tunnel at Wendover and a green tunnel at South Heath; a longer continuous tunnel through the Chilterns designated area of outstanding natural beauty (AONB) - from Little Missenden to the M25; and a 2.75 km increase to the bored tunnel in the vicinity of Ruislip.

Case study 2 - Twyford

In 2011 the route alignment took up the former railway formation once used by the Great Central Railway between Calvert and Chetwode. The introduction of an adapted version of Arup's Soundlab brought forward an auralisation in this location that showed clearly the impact of operational noise on the village of Twyford, a location of relatively low ambient noise.

The case was a significant concern to local people who asked for the railway to be screened or moved away from the village entirely. HS2 worked on the relative merits of moving the route and recognised that, although a route change might mitigate effects at Twyford, other communities like Preston Bissett and Barton Hartshorn would be newly affected. The route was moved away from the main centre of the village by about 100 m to provide space for earthworks, noise fencing and screen planting that reduced the noise effects to acceptable levels for most people living in Twyford.

Despite the government's commitment and parliament's requirements for the preparation of the environmental statement (ES), and the process of consultation on it, the secretary of state was challenged in judicial review proceedings by the 51m group of local authorities, HS2 Action Alliance and a

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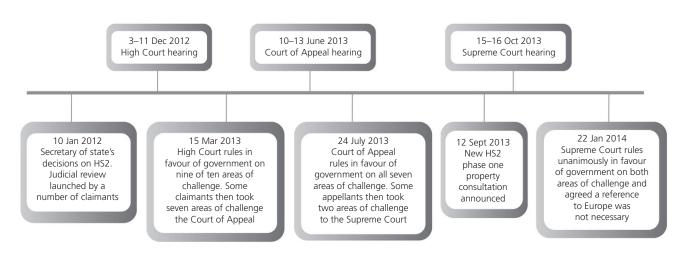


Figure 4. HS2 judicial review – a timeline of events (DfT, 2014)

number of other interest groups, individuals and commercial interests. This action sought to restrain government from introducing the bill into parliament until alleged defects in the ES and the consultation process had been rectified. That challenge was unsuccessful, but in view of its constitutional importance, the proceedings went on appeal to the Court of Appeal and then to the Supreme Court (DfT, 2014) (Figure 4).

A planning forum was set up to bring local authorities together to understand their role in the development of a nationally important infrastructure and the approach to the detailed approval of plans following approval by parliament. In addition, a national environment forum was established to engage relevant government departments, Natural England, the Environment Agency, Historic England and HS2 Ltd. The overall aim was to agree terms with relevant authorities recognising that detailed design would follow the Act and draft environmental minimum requirements (EMRs) were established that set out the government's commitment to protect people and the environment. The published EMRs (HS2, 2017a) set out the general principles of that commitment, a code of construction practice, the planning memorandum, the environmental memorandum and heritage memorandum that will need to be met through the construction and operation of the railway.

Case study 3 - Northolt corridor

The original route took up a tunnel alignment beneath the densely populated area between Euston in the London borough of Camden and Old Oak Common on the border of the London boroughs of Ealing and Hammersmith and Fulham. It then took up space in the Central/Chiltern line railway corridor and passed on the surface alongside those lines to the Colne Valley. With significant challenges for the rebuilding and disruption of the Hanger Lane gyratory, a major traffic distributor in west London, and to satisfy the

local authorities, further tunnelling was progressed to a portal in railway land to the south of South Ruislip station.

Local concerns about the elevation of the route through Ruislip, Northolt and Ickenham were taken up together with further work on major engineering work adjacent to the liverunning Chiltern and Central line railways. This resulted in a further tunnel extension and the final location of the London tunnel's northern-most portal at West Ruislip.

5. 2012–2013 – preparing for parliament

The House of Lords select committee report highlighted that in the first great age of railway building almost no consideration was given to environmental matters, unless they involved an obvious and serious danger to public health. Over time the attitudes of parliament, and of the general public, have since changed fundamentally and environmental impact assessments of major projects are mandatory and enable public participation in the process.

Through 2012 and 2013 HS2 Ltd prepared draft legislation, the ES and referenced land to understand ownership. The ES was structured around community forum areas and engagement with the local communities followed suit. A large number of meetings took place with local communities to explain the plans as they emerged, answer questions wherever practicable and consider local ideas for adjustments and mitigation of the route.

Parliament's procedures for dealing with ESs also have to comply with the objectives of the European Union (EU) directive on environmental impact assessments, which include a requirement that the public are consulted on the formal ES, and on 26 June 2013 the House agreed a new standing order (House of Commons, 2014) to ensure compliance. Rules governing parliamentary practice, the parliamentary standing

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orders, were refined and included provision for parliament to undertake its own consultation of the final ES and fulfil the necessary public participation of the high-speed rail plans laid before parliament.

In April 2012, HS2 Ltd consulted on a draft of the scope and methodology (SMR) (HS2, 2013) it proposed for the environmental impact assessment to enable consultees, primarily local authorities, to comment on the approach proposed. Following consultation, the SMR was revised, taking into account the comments received where appropriate.

In summer 2013, an early draft of the ES was published to help people understand how the design was being developed and to obtain views on it to help develop plans to mitigate the main effects of the railway. During the 8 week consultation period over 20 000 responses were received in relation to the draft ES and draft code of construction practice. A great deal of consideration has been given to the comments received and to how these could be addressed, whether through the ES, the draft code of construction practice or through design development.

HS2 Ltd anticipated the need for public participation in the development of its plans and geared its environmental impact assessment to be focused on the communities it would directly or especially affect. The ES and the engagement held with local people and organisations leading up to the deposit of the hybrid bill in parliament was structured around 26 community forum areas, the aim of which was to enable local discussion about the plans.

The response to local alternatives considered by the project was set out in each community forum area report – volume 2 of the ES. Designs included positions of noise barriers, landscaped earthworks, planting and new areas for woodland compensation and new habitats for affected species. The EMRs were refined together with a draft code of construction practice which would define the control over construction work to protect people and businesses along the route while it was being built.

A hybrid bill has characteristics of both a public bill and a private bill; that is, although it is of general application, the content of such a bill would significantly affect the interests of certain individuals or organisations.

6. 2013–2016 – parliament scrutinises the plans and the Act is made

The merits of certain alternatives were taken up through the committee proceedings and several amendments were made to the original plans set out in the bill. These additional provisions included relatively minor amendments to utilities, access arrangements and other features. Some were more substantial in scope, including a major change to the route

alignment between Lichfield and Handsacre described above and more continuous tunnelling in the Chilterns described below. In each case, further environmental assessment was carried out to accompany those revised plans and amendments and they were consulted upon in the same way to meet parliament's requirements.

The policies and practices were also refined and, for example, through discussions with the National Farmers' Union, Country Landowners' Association and the Central Association of Agricultural Valuers, HS2 has published its *Guide for Farmers and Growers* (HS2, 2016) to assist the farming community as the design and construction progresses.

Through its deliberations the Commons select committee helped realise changes to the route to benefit local people and the environment. The principal route changes were made through additional provisions to the bill and through a variety of undertakings and assurances given by the government outlined in their *High Speed Rail (London-West Midlands) Bill Second Special Report of Session 2015–16* (House of Commons, 2016).

The engagement with local people, communities, businesses, action groups, local authorities and non-governmental organisations has delivered beneficial changes that have affected and refined around three-quarters of the phase 1 route of HS2 between London and the West Midlands. The test of parliament has been met and the Act now paves the way for HS2 to become reality.

Case study 4 - Lichfield to Handsacre

The original route from Middleton to Lichfield followed an alignment close to Lichfield, meeting the west coast mainline at Lichfield Trent Valley. Early on there was considerable opposition from Lichfield due to the proximity of the route, despite following as closely as possible the existing road corridor. The route was subsequently moved closer to Whittington Heath on a new alignment across the countryside to the eastern edge of Streethay. The route consisted of a very high embankment to pass over the A38.

Through the Commons the route was challenged throughout Staffordshire, resulting in a further lowering of the line that passed Lichfield going underneath the A38. North-westwards the route then followed a revised horizontal alignment away from the Fradley Park industrial estate and avoided crossing the Trent and Mersey canal (near Fradley junction) on a more southerly alignment before meeting its connections with the West Coast main line south of Handsacre.

Case study 5 – the Chilterns

Passing a new railway across the Chilterns AONB has been one of the most hotly contested issues considered by HS2 Ltd.

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The original route passed from the Chiltern line railway corridor to take up an alignment through the Misbourne Valley. Passing beneath the M25 and the higher ground occupied by the villages of Chalfont St Giles and Chalfont St Peter in a deep bored tunnel before it broke ground in a deep cutting to the north-west of Old Amersham. Beyond, the route took a more surface route principally in a deep cutting but with embankments and structures to pass over the Wendover Dean dry valley and the A413 London road, respectively, with a surface alignment and short tunnel alongside the Wendover bypass.

Local people called for a fully bored tunnel across the whole of the AONB and shorter tunnel variants. Prior to consultation in 2011 the route in the vicinity of Old Amersham was shifted westwards and bored tunnels were extended to Mantles Wood. Through the consultation further consideration was given to tunnelling and a 'green' cut-and-cover tunnel was introduced at South Heath and a similar tunnel extension provided alongside Wendover to further protect people living in or adjacent to the AONB.

Through the Commons select committee proceedings, long-tunnel and short-tunnel variants continued to be tested. It was important to settle on the merits or otherwise for each option considered in order to determine common ground between the local people and the HS2 team and agree on the points of departure to enable the committee to consider the relative merits of the proposals. By summer 2015, the Commons determined there was no real case for a long tunnel throughout, but did want to hear more about short bored variants. The committee's view alighted on a bored tunnel from the M25 to the tunnel portal just north of South Heath. That preserved

Mantles Wood and simplified the construction arrangements to protect people in the vicinity of village.

Further consideration was given to tunnelling at Wendover. That was less straightforward on the proposed alignment because of the introduction of above-ground artificial tunnel structures. Nevertheless, the benefits of such structures were considered appropriate to protect Wendover House school and St Mary's church.

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