



**51m**  
**Response to**  
**HS2 Phase 2 Consultation**  
**on the Route from the**  
**West Midlands to**  
**Manchester, Leeds and**  
**beyond**

## 51m RESPONSE TO CONSULTATION ON HS2

### Overview

1. 51 m is the cross party Alliance of nineteen local authorities who have come together to review and challenge the case for HS2.
2. Each of the councils has signed up to the following position statement:

“We are opposed to the current High Speed rail proposals as they are presently outlined and do not believe that they are in the best interests of the UK as a whole in terms of the benefits claimed in the business case.

We are not opposed to the need for higher speed rail per se and fully acknowledge the need for strategic improvement to the national rail infrastructure but cannot agree with the current proposals as the economic and environmental benefits are not at all credible.

We do not believe that all the other alternatives to achieve the transport capacity, regeneration and environmental benefits have been fully explored by the Government and with in excess of £30billion (now £50 billion) proposed to be invested, we owe it to the nation to ensure these are fully explored.”
3. 51m has previously responded to the Phase 1 consultation as well as making representations/submissions to the Transport Select Committee, the NAO, TfL and the Public Accounts Committee in relation to HS2.
4. 51m has sought Judicial Review on a number of aspects of the Government’s decisions in January 2012 to proceed with the HS2 project and also sought appeal on a number of aspects of the findings of the judicial review.
5. The consultation process on the Y reinforces 51m’s concerns raised during the original consultation for Phase 1 and raises a number of other issues:
6. The principle of the Y route is not part of this consultation and there has never been a fair consultation on the principle of the Y
7. The philosophy for the design of the Y is substantially different to that for Phase 1
  - Speed is not the driving factor for the Y – 75% of the Leeds

arm has a design speed of less than 400kph, whereas only 25% is less than 400kph for Phase 1 and this is nearly all in the tunnels out of London.

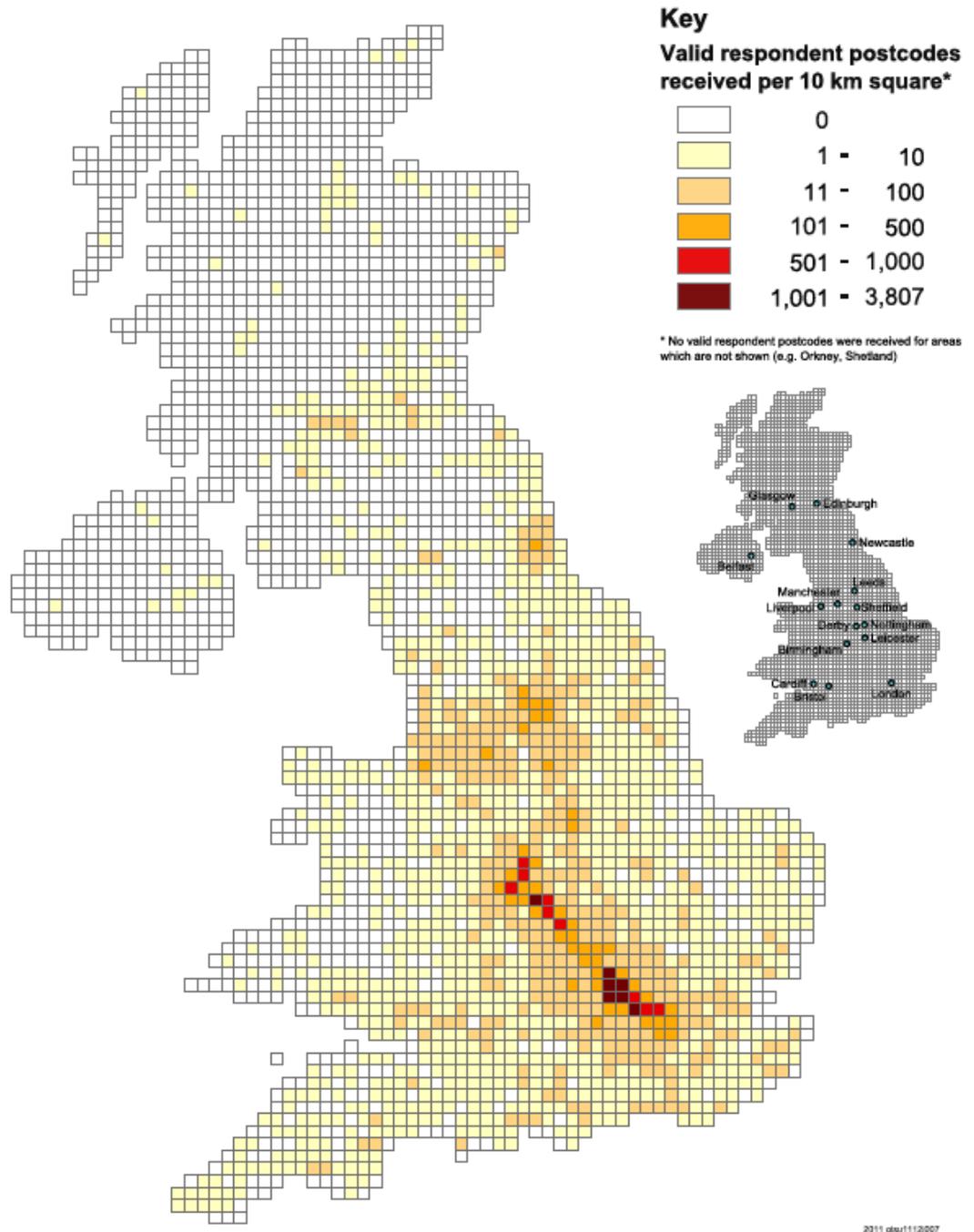
- The alignment has been designed to follow major transport corridors (motorways) where possible, whereas Phase 1 was designed to achieve a speed of 400kph for its whole length (except tunnels and approaches to stations)
  - The alignment has significant deviations in it to avoid sensitive environmental areas and population centres.
8. Route options for Phase 1 were rejected on the basis that design speeds would be lower, increasing journey times and the extent of tunnelling to get out of London would be too costly – these reasons are not valid given the design philosophy for the Y and the increase in tunnelling now included in Phase 1.
  9. Opinions are sought on the locations of intermediate stations and additional stations for the Y but this was not considered for Phase 1 consultation.
  10. The Government has changed its justification for HS2 from speed to capacity, claiming that the WCML is full, which it uses as the justification for the need of HS2. This argument is fundamentally flawed.
  11. HS2 as an engine for growth – case not proven.

#### **Principle of the Y – No Fair Consultation**

12. There are two fundamental principles of fair consultation:
  - It must be undertaken at a time when the proposals are still at a formative stage;
  - It must provide sufficient information for the consultees to give intelligent consideration and an intelligent response.
13. The Secretary of State's decision in January 2012 was to promote the full Y network, but in two phases. Therefore although only the details of the route were set out for Phase 1, the principle of the project proceeding to Leeds and Manchester was established in January 2012 and is not part of the current consultation. Indeed this consultation only focuses on the detail of the route from the West Midlands to Manchester, Leeds and beyond.

14. The obvious consequence of this approach is that all those local authorities, individuals, companies and environmental groups who now know they are to be affected by Phase 2 have not had a fair and reasonable opportunity to respond/challenge the principle of the project. This view is underpinned when you look at the level of responses to the original Phase 1 consultation carried out in 2011.
- Overall there were 54,909 responses and the Consultation summary report by Dialogue by Design provides a geographic breakdown, see figure below.

Figure 2.1 Geographical breakdown of respondents



It is clear that the geographical breakdown of respondents shows that the vast majority of responses were submitted by respondents in postcode areas near the proposed route from London to the West Midlands, including Birmingham and London. There are also

concentrations of respondents in postcode areas in the North West and Yorkshire and the Humber.

- Only about half of the County, Metropolitan and District Councils on the indicative Y route (north of Birmingham) responded in any form compared with virtually all along the route from London to West Midlands.
  - Only 2 parish council on the Y responded, compared with 69 along the London to West Midlands route.
15. Consultees did not make intelligent representations on the impacts of the proposal north of Birmingham because they did not know the route and did not have sufficient information to respond intelligently.
16. The Government has stated during the judicial review process that no actual decision has been made on either Phase 1 or Phase 2 of the project and that the consideration of the principle, alternatives, the detailed route and any decisions to proceed will be made by Parliament. Given the basis of the consultation on both Phase 1 and Phase 2, it is clear that local authorities, individuals, companies and environmental groups north of Birmingham have not been given a fair opportunity nor had sufficient information to give intelligent consideration and an intelligent response to the principle of HS2.

#### **Different Design Philosophy for the Y**

17. Phase 1: London to the West Midlands was designed to maximise speed and minimise journey times and the alignment has a design speed of 400kph for the whole route except when it is in tunnels at the London end. This design philosophy has resulted in a very straight alignment causing very significant environmental impacts. When the Phase 1 route was selected a number of other options were considered which used major transport corridors, in particular the M1, WCML and M40 but these were rejected for a combination of the following reasons<sup>1</sup>:
- Slower journey times 5-7 minutes

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<sup>1</sup> **Review of HS2 London to West Midlands Route Selection and Speed.** A report to Government by HS2 Ltd. January 2012

- Prohibitive tunnelling lengths and costs
  - Impacts on communities
18. The design philosophy for Phase 2 – the Y - is different from Phase 1 and speed is not considered the main driver, indeed the Government states that the drivers behind HS2 now are capacity and connectivity. This different design approach is very evident with the Leeds arm of the Y, where only 38% of the route has a design speed of 400kph compared with over 75% for Phase 1. In addition the only sections on Phase 1 that have a lower design speed are in the tunnels where you cannot run at 400kph for technical reasons and the Leeds arm of the Y has virtually no tunnels. This reduction in line design speed will have increased the journey times and although we are not able to assess this in detail it is likely to have increased the journey time to Leeds by between 5 - 10minutes compared with a 400kph alignment.
  19. In order to mitigate some of the impacts of Phase 1, HS2 have increased the lengths of tunnels to get out of London and past Amersham, such that there would be very little difference in the lengths of tunnels required for the HS2 alignment and the other alternatives along major transport corridors (M40, M1, and WCML).
  20. The impacts on communities, environmental damage and severance of using one of the major transport corridors for Phase 1 would be significantly less than the current alignment, since the route would be next to motorways which go around any major centres of population.
  21. The above examples demonstrate that design philosophy for HS2 has changed and there is no need for 400kph design speeds, indeed HS2 has said that to start with services will only operate at 350kph. The reasons for the rejection of alternatives route options for Phase 1 are no longer valid and the route selection process for Phase 1 should be started again.

## **The Need for HS2**

### ***The capacity arguments for HS2 are fundamentally flawed***

22. Government are constantly quoting Network Rail as saying that *“the West Coast Main Line will be full by the mid 2020’s”* but there has been no objective, independent review of this. Even on Network Rail’s own evidence<sup>2</sup>,

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<sup>2</sup> London and South East Route Utilisation Strategy July 2011 (page 55)

<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strateg>

the West Coast Main Line is, except for HS1, the least crowded main line into and out of London:

### Morning peak demand and capacity

[Network Rail London and South East Route Utilisation Strategy July 2011]

Service group (long distance services into London)	Load factor (3 hour morning peak - 2010)
Paddington (Main Line and other fast trains)	99%
Waterloo (South West Main Line)	91%
St.Pancras (Midland Main Line)	80%
Liverpool Street (Great Eastern Main Line)	78%
Victoria (fast trains via East Croydon)	72%
Kings Cross (ECML long distance)	65%
<b>Euston (long distance)</b>	<b>60%</b>
St.Pancras (HS1 domestic)	41%

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23. The data above shows that it is the other routes such as the main lines into Waterloo, Victoria and Liverpool Street and key commuter routes into cities such as Birmingham, Manchester and Leeds are full now – and in many cases the Government has no long term plans to provide extra capacity.
24. It is also important to understand that there are two aspects to determining whether the WCML is full and whether it can accommodate future growth. Firstly one must consider current & future demand v capacity and secondly the potential future growth in the market.
25. When you look at the number of people that use the WCML Virgin services compared with the seats available, there is plenty of capacity. Reinforcing this view is the data released to the High Court as part of the Judicial Review case into HS2 in December 2012 showed that evening peak Inter-City departures from Euston in 2011 carried on average just 229, a load factor of only 52.2%. Furthermore, the 2011 counts were carried out before the programme to lengthen 35 out of 56 Pendolinos from 9 to 11 cars was implemented which has provided a further 150 standard class seats in each lengthened set.

[ies/rus%20generation%202/london%20and%20south%20east/london%20and%20south%20east%20route%20utilisation%20strategy.pdf](#)

26. We accept that you cannot double the number of trains on the WCML but the number of trains you run is not the correct measure of route capacity, it is the number of seats that you provide. As an analogy: If an airline uses a 220 seat aircraft (say Boeing 767) on a route from London – Boston and the flights become full, its first response is to change to a bigger aircraft (say Boeing 777), not to put on a second flight.

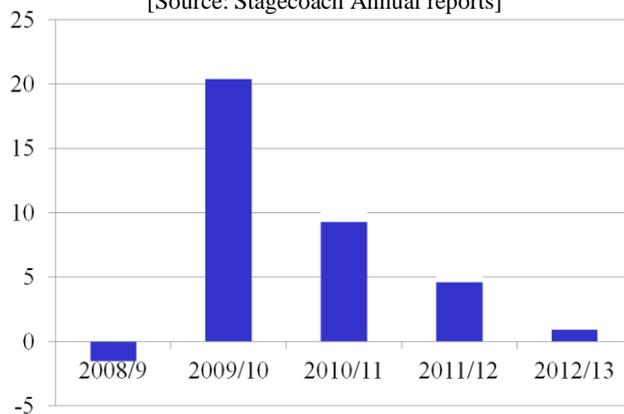
#### Future demand

27. Passenger numbers on the West Coast Main Line grew dramatically after the upgrade of the route was completed in 2008. This isn't surprising, as frequencies were improved and journey times were slashed. Taking London – Manchester as an example, for years there had been just one train an hour, taking 2 hours 40 minutes, but there is now a train every twenty minutes, taking 2 hours 8 minutes. So there has been a massive switch from air to rail, with almost everyone travelling to central London now going by train – the remaining air passengers are either inter-lining, or fly because the destination airport is more convenient for them than Euston.

But the results for Virgin Rail<sup>3</sup> show that rapid growth in demand is now over:

#### Passenger miles growth (%) for Virgin West Coast

[Source: Stagecoach Annual reports]



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28. The same pattern occurred when the West Coast main Line was electrified in the 1960s – initial rapid growth, then passenger numbers plateaued for

<sup>3</sup> Data from Stagecoach annual reports – Stagecoach own 50% of Virgin Rail

many years. Future growth on the West Coast Main Line is now only likely to come from growth in the total transport market, rather than transfer for road and air, which has already happened. But rail is already dominant for travel to central London, and the Department for Transport's own statistics show that business travel is declining, almost certainly because businesses are increasingly using IT as a smart, cost effective alternative.

### **HS2 Services**

29. The HS2 services patterns<sup>4</sup> proposed further demonstrates that HS2 is being developed from a purely theoretical basis with no consideration of the real need and demand. In addition it promises services which if delivered would have a significant impact on the core proposition and misleads major cities on the Y.
30. Currently Birmingham to Manchester is served by 2 through trains per hour with a total capacity of 524 seats and the services pick up passengers at a number of intermediate stations (Stafford, Stoke and Stockport). The HS2 proposition is for 2 trains per hour non-stop to Manchester Airport / Manchester Piccadilly with a minimum of 1100 seats. Currently there are 1300 trips each weekday from Birmingham to Manchester<sup>5</sup> and this is predicted to increase to 2100<sup>6</sup> each weekday by 2043. Even by their own estimations the trains will be only 20%<sup>7</sup> and in practice it will be even less, since HS2 will operate for some 18 hours a day, providing nearly 20,000 seats each day. It is unbelievable that HS2 is planning to provide 2 trains per hour between Birmingham and Manchester, which in 2043 will only be 10% - 20% full. The situation on the Leeds arm is little better with a maximum load factor on Birmingham to Leeds trains of only 37%<sup>8</sup>. These service will need to

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<sup>4</sup> HS2 Ltd Economic Case - figure 28

<sup>5</sup> MVA Options for Phase 2 of the High Speed Rail Network – demand and appraisal report July 2013, Table 3.1

<sup>6</sup> MVA Options for Phase 2 of the High Speed Rail Network – demand and appraisal report July 2013, Table 3.2

<sup>7</sup> MVA Options for Phase 2 of the High Speed Rail Network – demand and appraisal report July 2013, Figure 10.2

<sup>8</sup> MVA Options for Phase 2 of the High Speed Rail Network – demand and appraisal report July 2013, Figure 10.3

have huge subsidies to operate and cannot be justified under any normal appraisal. **HS2 is capacity for capacity sake.**

31. HS2 is designing the HS2 – HS1 link for up to 3 trains per hour in each direction<sup>9</sup> to enable direct rail services to key European destinations such as Paris, Brussels and Amsterdam, from stations that will be served by the UK's new high speed trains. If HS2 trains from Birmingham, Manchester and Leeds were to directly serve continental Europe, it would reduce the number of services on the core HS2 route to London Euston. In practice, unless some destinations were not to be served this would mean a reduction in services to the Birmingham, Manchester and Leeds. Alternatively HS2 trains could start at Old Oak Common and then connect to HS1 and the continent, but then there would be no direct connectivity to the continent as passenger would have to change at OOC and wait for a train to the continent. In practice it would be easier to take HS2 to Euston and then change onto the more frequent Eurostar services from St Pancras.
32. Under either scenario, HS2 is misleading the cities of the north of England in terms of what levels of services and connectivity they will receive with HS2.

### **Scope to upgrade capacity on the West Coast Main Line**

#### ***InterCity capacity***

33. The Department for Transport (DfT) forecast 102% “background growth” in long distance demand over the 2008 base in its 2011 consultation documentation. From recent trends, this looks highly unlikely but even if rail growth does continue, there are much cheaper and quicker ways on increasing long distance capacity on the West Coast Main Line. The alternative developed by 51m<sup>10</sup>, the group of local authorities opposed to HS2, achieves a major increase in capacity by:
  - Changing one first class vehicle to standard (this would still leave three first class coaches in each train).
  - Lengthening trains from the present 9/11 cars to 12 cars (except for Liverpool trains which would stay at 11 cars because of physical constraints at Liverpool Lime Street).

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<sup>9</sup> HS2 Ltd Serving Continental Europe Technical factsheet

<sup>10</sup> Optimised Alternative to HS2: the scope for growth on the existing network”  
<http://51m.co.uk/sites/default/files/uploads/App%201%20-%20Optimised%20Alternative%20to%20HS2.pdf>

**This approach gives 693 seats on most trains – more than three times the average evening peak loading in 2011**

34. Eliminating three “pinchpoints” between Euston and Crewe would allow an extra 15 Inter-City trains in each direction daily, as well as increasing freight capacity by separating InterCity and freight trains throughout.
35. Buried within the documentation, issued by the Government in January 2012, are reports commissioned by DfT from both Network Rail<sup>11</sup> and WS Atkins<sup>12</sup>. While the Network Rail report was clearly intended to “rubbish” the 51m Alternative, it implicitly acknowledges that capacity calculations set out in the alternative are practical and deliverable; the WS Atkins report shows that the alternative has a Benefit Cost Ratio (BCR) of 5.1, compared with 1.4 for HS2 – and the capital cost of the 51m Alternative is £2bn, a fraction of the cost of HS2.

***Euston commuter capacity***

36. There is a major crowding problem today on the fast commuter trains to Milton Keynes and Northampton. Indeed, DfT have stated that one of the ten most overcrowded trains in the country last year was on this route. However, this could be solved immediately and at no cost by allowing Milton Keynes commuters to use the eight Virgin trains which stop at Milton Keynes in the evening peak period, but only to pick up. These trains have an average load factor of just 43%, with 1992 empty seats. In the medium/longer term, the 51m alternative would double the fast peak commuter capacity on the route by building a new flyover south of Milton Keynes and introducing faster rolling stock, and this could be done in five years. HS2 would provide no additional capacity until 2026 at the earliest.
37. Major increases to capacity on the shorter distance commuter services on the route (egg to Watford and Hemel Hempstead) can be achieved by increasing all trains to 12 cars, and operation of additional commuter trains by changing stopping patterns and transferring a small number of freight

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<sup>11</sup> Network Rail review of strategic alternatives November 2011  
<http://assets.dft.gov.uk/publications/hs2-review-of-strategic-alternatives/hs2-review-of-strategic-alternatives.pdf>

<sup>12</sup> Atkins strategic alternatives update January 2012  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/3664/hs2-strategic-alternatives-study-update.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3664/hs2-strategic-alternatives-study-update.pdf) (page 28)

trains to run outside peak periods. But HS2 doesn't help shorter distance commuters, as these trains would still have to operate on the "slow lines" as DfT's plans for the route show that the "fast lines" would still be very busy with fast (125/110 mph) after HS2 is built.

### ***Commuter capacity in Birmingham, Manchester and Leeds***

38. Key commuter routes into cities such as Birmingham, Manchester and Leeds are full **now**. The Government is arguing that HS2 is essential to enable rail to meet growing commuter demand in Birmingham, Manchester and Leeds. In reality, HS2 will only have a marginal benefit in each case. Taking the morning peak as an example, only two trains from London arrive at each of Manchester and Leeds before 9am today, so HS2 would only release capacity for just two more trains, on just one route into each city and then not until 2033. HS2 would only release paths for three or four additional peak trains on only one route into Birmingham, and not until 2026. Four tracking Birmingham to Coventry would provide much greater commuter capacity much more cheaply and quickly.
39. HS2 does not provide the solution to commuter overcrowding in Manchester, Birmingham and Leeds despite its £50bn price tag.
40. If commuter capacity is the problem, then spending £50bn on HS2 to Birmingham, Manchester and Leeds cannot be the right solution.

### ***Freight capacity***

41. The "fast lines" on the key four track section of the route between London and Rugby will still be very busy with fast (125/100 mph) passenger trains serving stations such as Milton Keynes, Rugby, Coventry, Tamworth, Lichfield, Stoke-on-Trent, and Macclesfield, none of which will directly benefit from HS2. In addition, there will still be services to Chester and North Wales, as well as hourly trains on the existing route to Birmingham, Liverpool, Manchester, and Glasgow. So there is no realistic possibility of 60-75 mph freight trains transferring to the "fast lines" – this would be the equivalent of heavy lorries using the fast lane on the M1.
42. North of Lichfield, freight trains already have to share tracks with fast Inter-City passenger trains on the majority of the route all the way to Scotland. HS2 will make this worse, again because of the differences in speed between freight and high speed trains. Far from providing extra capacity for freight, the additional fast trains on the route, including two trains an hour

to Edinburgh carrying passengers transferred from the East Coast Main Line, are likely to result in little or no capacity to run any day-time freight trains between Preston and Glasgow.

43. In contrast, the 51m alternative eliminates the remaining bottlenecks on the route south of Nuneaton and in the Stafford area where freight and InterCity trains have to use the same tracks. These small scale enhancements would separate freight and InterCity trains all the way from London to Crewe, providing genuine additional freight capacity and speeding up transit times.
44. HS2 will not provide useful additional capacity for freight trains.

### ***Disruption***

45. Supporters of HS2 have constantly argued that the 51m Alternative will cause major disruption because of the infrastructure work required. This simply isn't true – work is only required at three locations (Ledburn Junction south of Milton Keynes, Brinklow – Nuneaton, and Colwich junction south of Stafford), and this is comparable to the work being carried out on the route at present, for example the recently completed flyover at Nuneaton, Bletchley remodelling, and the new flyover at Norton Bridge. The scale of work proposed is not in any way comparable to the previous West Coast upgrade, which involved comprehensive renewal of the route.
46. 51m Alternative does not require any works at Euston. In contrast, HS2 construction work will be very disruptive at Euston, with a permanent reduction in the number of approach tracks (from 6 to 4) and platforms (from 18 to 13/14) at an early stage of the construction programme, almost inevitably resulting in a permanent reduction in peak services. A further example of the rail industries biased approach to assessing alternatives, Network Rail have said that alternatives would require 2700<sup>13</sup> weekend closures for construction, this is clearly ridiculous considering the 51M alternative requires work at 3 locations, the magnitude of which is similar that recently carries out by Network Rail at Nuneaton and Norton Bridge.
47. This will also impact on the Scottish sleeper services, which will no longer be able to stand at Euston after arrival in the morning, enabling passengers to remain on the train until 0800, even for the 0647 arrival; it is quite likely that these trains will have to be permanently transferred to another terminal.

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<sup>13</sup> Answer to written question in Hof C

48. Even away from London, HS2 will require works that will cause as much disruption to existing services as the 51m Alternative, with construction of new grade separated junctions near Lichfield, south of Crewe and south of Wigan.
49. HS2 will require some 389<sup>14</sup> weekend closures of the WCML for its construction, which is the equivalent of every weekend for 7.4 years.
50. It is totally wrong to suggest that providing sufficient future capacity using the existing WCML requires a major upgrade and disruption similar to the WCML upgrade between 2004 and 2008.
51. HS2 will much cause huge disruption to WCML services for 8 years with 389 weekend closures.

#### **Capacity on other routes**

52. HS2 delivers no benefits for the East Coast Main Line or the Midland Main Line until Stage 2 is completed in 2033 at the earliest – at least twenty years away - and the cost of HS2 will inevitably squeeze investment on all other parts of the rail network. Sensible incremental improvements in capacity and reductions in journey times could be delivered within five to ten years across the network delivering national benefits, at much less cost.

#### **Improving journey times to/from London**

53. Even before any potential improvements to journey times on the existing main lines, times between London and major cities in England are already fast by international standards, reflecting both the investment over time in improving principal Inter-City routes to and from London and the shorter distances involved compared with other countries such as France and Spain. For example Manchester to London takes 2 hours 8 minutes today, which compares with 2 hours 11 minutes from Paris to Lyon and 2 hours 45 minutes from Madrid to Barcelona. Before construction of the high speed line, Madrid – Barcelona took 6 hours 30 minutes, so high speed rail delivered a massive step change and caused a huge modal shift from air to rail – but HS2 will not give the same step change for London – Manchester: rail is already fast, and the time saving achieved is relatively much lower, particularly for end to end journey times, taking into account the time taken at each end to get to and from the station.

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<sup>14</sup> House of Commons: Written Answer to Questions – Transport 15<sup>th</sup> January 2014

54. Furthermore, there is real scope to reduce journey times on all three main lines from London to the Midlands, the North of England and Scotland. Electrification of the Midland Main Line will reduce journey times by up to 15 minutes, and DfT has promised that the introduction of the new “IEP” trains on the East Coast Main Line will reduce journey times – by 17 minutes to Newcastle. Arriva UK Trains Alliance Rail Holdings has recently announced its plans to introduce new high speed express train services on the East Coast Mainline between London Kings Cross, Newcastle and Edinburgh in December 2016. The trains will initially slash the journey times to 3hours 43minutes between London and Edinburgh and 2hours 29minutes between London and Newcastle.

### **Business Case**

55. The business case for the Y was updated in October 2013, indicating a benefit cost ratio of 2.3 including Wider Economic Impacts (WEI) which reduces to 1.8 without WEI. Whilst the supporting documents suggest that errors in the forecasting and appraisal methodology, highlighted by 51m and a number of other organisations (value of time, working on trains, PDFH etc.) – all of which should reduce the BCR - have now been addressed, it is remarkable how the BCR has only very slightly reduced. It is even more surprising given that: the capital costs have gone up by some £4bn, the revenues down by nearly £2bn and the WEI down by £1bn, relative to the appraisal in August 2012.
56. Government now recognise that they previously overstated the earnings of rail business travellers (and have cut them by a third) but bizarrely they have re-valued the cost of crowding to them at a 5 times higher rate than before, to compensate for the reduction in benefits.
57. It is also surprising that after numerous iterations suddenly the number of business passengers increases dramatically from 28% to 38%, which conveniently further compensates for errors in their previous forecasting methodology and assumptions.
58. Government has accepted that you should not apply optimism bias to savings attributed to cuts in services on the conventional network. However, they have compensated for this by increasing the savings from £5.5bn to £8.3bn between the August 2012 and October 2013 business cases. This further saving is not explained or justified but implies that even greater cuts

are proposed on the conventional network, further reducing connectivity for rail users.

59. The benefits of replacement services on the classic network are included but the costs are ignored. These services will need subsidy as the premium business passengers will be on HS2, but the HS2 case ignores this cost. In practice the services will not be provided as they will increase the cost of the railways.
60. The major change is in transport benefits which have miraculously increased by some £10bn and some 65% is attributed to time savings. If one considers that passengers from London to Newcastle, Derby, Nottingham and Sheffield will get no journey time benefits from HS2 (see paras 81, 89, 93 below), it is all the more surprising that the transport benefits have increased by 18%.
61. The assumptions in the business case change each time it is revised but miraculously bring the BCR back to over 2.0 with WEI. There can be no confidence that the business case reflects the real costs and benefits of HS2.
62. There is no commercial case for HS2 as it now requires some £31.5bn of subsidy, up by nearly £6bn since August 2012.

#### **HS2 an engine for growth – case not proven**

63. The Government is forecasting 100,000 new jobs – but mostly in the South East, and at a cost of £500,000 each! The “normal” cost per job as a result of regeneration projects is £33,000 – and these can be delivered much more quickly.
64. Only c3% of journeys nationally are made by rail and only 2% of all rail journeys are made on InterCity trains on the West Coast Main Line – so the Government is planning to spend £50bn to benefit 0.06% of the journeys in the country<sup>15</sup>.
65. The academic experts say that there is no valid evidence for the claimed transformational benefits of HS2 i.e. that it can redress the north south divide. If you connect two cities then the theory and evidence suggest the dominant one gains. So London will do better than Manchester and Leeds, and towns and cities not served by HS2 such as Bradford, Stoke-on-Trent and Leicester will suffer.

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<sup>15</sup> Data derived from DfT's 2011 National Travel Survey

66. Professor Vickerman of the University of Kent told the Transport Select Committee in 2011 “Obviously, if you feel that something is going to do good for you, you big it up. We saw that with HS1 in Kent as well, as to all the effects it was going to have. I have to say, they are not visible to the naked eye”.
67. Academic studies of Europe’s experience<sup>16</sup> of the impact of high speed rail (HSR) find ‘compelling reasons to doubt whether HSR will contribute to rebalancing the economy’<sup>17</sup> egg: despite business creation there is no evidence the TGV led to decentralisation from Paris
- The TGV to Lyon caused some business headquarters to relocate to Paris and the net impacts were negative for Lyon
  - On the Paris Rhone Alps route passenger growth in trips to Paris was three times greater than from Paris and for intra-organisational trips it was eight times greater
  - Unemployment in Lille rose against the French national average, with the arrival of the TGV
  - HSR in Spain is associated with a strengthening of Madrid at the cost of regional centres.
68. Supporters of HS2 rely on studies on the potential effects of HSR done using an unsound and discredited methodology<sup>18</sup> that is insufficiently robust to provide valid results. 34 leading planners and transport economists (including advisors on HS2) wrote to the Sec. of State in Jan 2013 (Transport Strategy – where are we heading) expressing concern that the evidence base for the link between major infrastructure projects and economic growth can no longer be relied upon.
69. A report by KPMG for the Department of Transport to assess the economic impacts of HS2, stated that the benefits of HS2 may be upto £15bn/year, but most leading economists challenge the findings of the report.
70. At the Treasury Select Committee hearing last year Professor Overmann, formerly on the HS2 advisory panel, was withering in his assessment of the project and the way it had been handled by the Government and the work

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<sup>16</sup> Professor John Tomaney’s (Director, CURDs) written and oral evidence to Transport Select Committee (2011)

<sup>17</sup> Para 6.3 of Prof Tomaney’s report on Local & Regional Impacts of HSR in the UK, A Review of the Evidence

<sup>18</sup> Dr Lairs & Prof Mackie reviewed the approach used by KPMG for The Northern Way.

done by KPMG, the consultants brought in by the Department for Transport, to assess HS2's economic benefit.

*"They applied this procedure which is essentially made up"* and said he believed the figure emerged after KPMG were sent back to look at what he described as the "wider, wider" benefits of HS2. He also questioned the argument that the line – linking London to Leeds and Manchester via Birmingham – would "rebalance" the economy.

*"I think its likely impact on the north south divide has been overstated. There are reasons to think it might widen the north-south divide."*

71. Professor Dan Graham, Professor of Statistical Modelling and Research Director of the Railway and Transport Strategy Centre, Imperial College, told the same committee that he believed the KPMG work was flawed.

*"I don't think this statistical work is reliable,"* he said. *"Undoubtedly the work could be done better."*

72. The KPMG authors of the report also conceded to the committee that the report did not have a *"firm statistical foundation."*

73. HS2's example of how Zaragoza has benefited from High Speed Rail is totally misleading and not relevant to HS2 in the UK. Madrid to Zaragoza is 270km, almost exactly the same distance as London to Manchester, but before it was served by high speed rail the conventional rail journey time was some 4 hours, which was a very unattractive journey time compared with air and evidence suggests that up to 75% of the demand on the Madrid – Zaragoza – Barcelona (LAV) high speed rail route has come from air. In comparison the current London – Manchester journey time is 2 hours and rail already has a 95% share of the London – Manchester market. The starting points for the LAV and HS2 are very different - A very poor conventional railway v a highly developed and fast rail network - any economic effects attributed to LAV cannot be used as a model for justifying the impacts of HS2. It is comparing apples with pears!

74. It is clear that the methodology being used by the Government to calculate the economic benefits and the title "HS2 Engine for Growth" are at the best dubious and should not be the basis for justifying a £50bn investment. No other transport project would get approval from the Treasury based on this

type evidence and it is certainly not part of HM Treasury Green Book Guidance.

**(i) Do you agree or disagree with the Governments proposed route between the West Midlands and Manchester?**

75. Major deviations of the alignment have been made to reduce impacts on the Manchester arm, particularly at the northern end, where the line goes round the north of Knutsford to access Manchester airport and city centre and this has increased the journey time for services to Manchester. If the same design philosophy had been used as for Phase 1 the route would have gone in a straight line from Northwich to Manchester airport.
76. A further demonstration of the change in philosophy is the deviation the route proposed to serve Crewe. Whilst we are not arguing that Crewe should not be served, the logical route (using the Phase 1 – speed is critical - route approach) would be a route adjacent to the M6 corridor from west of Newcastle under Lyme to M6 junction 19 where the HS2 alignment crosses the M6, this would be some 20km shorter than the proposed and was one of the options considered but rejected.
77. If the Phase 1 options assessment had not falsely rejected motorway alignments then intermediate cities such as Oxford, Milton Keynes, Coventry could have been connected to HS2, greatly increasing the network connectivity - now one of the key justifications and drivers for high speed rail in the UK.

**(ii) Do you agree or disagree with the Governments proposals for:**

***(k) A Manchester station at Manchester Piccadilly?***

78. Commuters in Manchester already experience overcrowding with some 4000 passengers standing the morning peak<sup>19</sup>.
79. HS2 will deliver minimal benefit for Manchester commuters. Taking the morning peak as an example, only two trains from London arrive before 9am today, so HS2 would release capacity for just two more trains, on just one route into the city and it will not happen until 2033.

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<sup>19</sup> High Speed Rail: Investing in Britain's Future. Consultation on the route from the West Midlands to Manchester, Leeds and beyond: page 14

80. The proposed new HS2 Manchester Piccadilly station will only serve HS2 trains and will cost £100m's and will be used by a maximum of 5 services per hour (2 Birmingham and 3 London), this station asset will be hugely underutilised and it is implausible that it is a cost effective solution.

***(I) An additional station near Manchester Airport?***

81. No comment.

**(iii) Do you think there should be any additional stations on the western leg between the West Midlands and Manchester?**

82. No comment.

**(iv) Do you agree or disagree with the Governments proposed route between the West Midlands and Leeds as well as how the high speed line connects to the East Coast Mainline?**

83. The development of the Leeds arm has adopted an entirely different design philosophy from that used for Phase 1 and as identified in the overview. This will result in journey times considerably longer (upto 10 minutes) than those that would be achieved with 400kph operations, as was the philosophy for Phase 1. This reinforces the position that speed is not the driver and thus alternative options originally considered for Phase 1 and rejected as they were slower should now be revisited.

84. The connection to the ECML is provided to enable HS2 trains to serve the north east (York, Darlington, Durham and Newcastle) with classic compatible 200m trains with a capacity of 550 passengers.

85. Significant improvements can be delivered much sooner and at much less cost on the existing East Coast Main Line.

86. Journey times on the East Coast Main Line between London and the North East will be significantly improved by the introduction of the new "InterCity Express" trains recently ordered for the route and will increase capacity by some 28%<sup>20</sup>.

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<sup>20</sup> <https://www.gov.uk/government/news/government-gives-green-light-for-more-state-of-the-art-intercity-trains>

87. The Department for Transport's press release of 18th July<sup>21</sup> showed a 17 minute reduction on the typical journey time between Newcastle and London Kings Cross, from 172 minutes to 155 minutes, only 17 minutes longer than the 138 minute journey time promised with HS2. Other towns and cities on the route would see equivalent benefits, giving a better service for everyone on the route, sooner and at a fraction of the cost of HS2, which is currently only planned to serve Leeds, York, Darlington and Newcastle and not until 2033.
88. Further journey time reductions are possible, in the medium term. 140 mph operation, the design speed for the InterCity Express trains, would potentially deliver further journey time savings of 5 – 10 minutes between the North East and London, reducing the journey time difference between the existing East Coast route and HS2 to as little as 7 minutes. In addition, a small number of targeted infrastructure schemes would both increase the capacity and improve the reliability of the route.
89. Reinforcing the position that HS2 does nothing for the North east, Arriva UK Trains Alliance Rail Holdings<sup>22</sup> has recently announced its plans to introduce new high speed express train services on the East Coast Mainline between London Kings Cross, Newcastle and Edinburgh in December 2016. The trains will initially slash the journey times to 3 hours 43 minutes between London and Edinburgh and 2 hours 29 minutes between London and Newcastle. These shorter journey times will be achieved using updated versions of the "Pendolino" tilting trains with around 500 seats. The journey times could be reduced further to under 3 hours 30 minutes with 140mph operation, once Network Rail has modernised the signalling, which is planned for completion at the end of 2018.
90. HS2 journey time to Edinburgh will be 3hours 39minutes and this will not be available until 2033 at the earliest. The North East and Edinburgh can have equivalent journey times and additional capacity within the next five years as opposed to waiting for 20 years for HS2.
91. HS2 does nothing for the North East and Edinburgh.

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<sup>21</sup> <https://www.gov.uk/government/news/government-gives-green-light-for-more-state-of-the-art-intercity-trains>

<sup>22</sup> Alliance Rail Holdings: ECML Track Access Rights Briefing Document – December 2013

**(v) Do you agree or disagree with the Governments proposals for:**

***(m) A Leeds station at Leeds New Street?***

92. Commuters in Yorkshire already experience overcrowding with 3,100 passengers standing during the morning peak periods<sup>23</sup>. The West Yorkshire Rail Plan 7<sup>24</sup> identified that in order to achieve the Region's growth aspirations there is a need for rail capacity to Leeds to double by 2026.
93. HS2 will deliver minimal benefit for Leeds commuters. Taking the morning peak as an example, only two trains from London arrive before 9am today, so HS2 would release capacity for just two more trains, on just one route into the city from Wakefield and no benefit on any of the other commuter routes into Leeds. Any increase in commuter capacity the HS2 does bring will be in 2033 at the earliest, meaning there is a huge dis-benefit to commuters in Leeds for the next 20 years as their trains get more and more crowded.
94. The proposed new Leeds New Lane station will only serve HS2 trains and will require passengers who want to connect into the extensive existing Leeds rail network to walk between the New Lane station and the existing Leeds City station, negating some of the benefit of faster HS2 journey times. The New Lane station will have five 400m platforms and will cost £100m's and will be used by a maximum of 5 services per hour (2 Birmingham and 3 London), this station asset will be hugely underutilised and it is implausible that it is a cost effective solution.

***(n) A South Yorkshire station to be located at Sheffield Meadowhall?***

95. The Sheffield HS2 station is to be at Meadowhall on the outskirts of Sheffield and will thus not serve the city centre directly. Passengers will have to transfer on to train or Supertram to reach the city centre and this will negate most if not all of any benefits of HS2. Using HS2's own figures<sup>25</sup> the journey time from London to Sheffield Midland Station will be 79 minutes, only 10 minutes longer than the journey time to Meadowhall. This is highly optimistic as there is no allowance for interchange, which would realistically add another 10 minutes as a minimum – indeed in HS2 own model they apply

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<sup>23</sup> HS2 Ltd Consultation on the route from the West Midlands to Manchester, Leeds and beyond – Para 1.29

<sup>24</sup> West Yorkshire Local Transport Plan 2011-2026 – Rail Plan 7

<sup>25</sup> HS2Ltd – Facts, Figures and Journey Times

a 30 minute interchange penalty when interchanging between trains<sup>26</sup> - , thus the real HS2 journey time to the centre of Sheffield would more than 1 hour 30 minutes. The Midland Main Line electrification project currently being undertaken by Network Rail, at a cost of only £800m, will reduce journey times to Sheffield Midland by 15 minutes to 1 hour 44 minutes, meaning that HS2, costing £43bn, will save a maximum of c15 minutes on the journey from the centre of Sheffield to London and will the inconvenience of having to interchange at Meadowhall. The Midland Main Line journey time to London could be reduced even further with electrification of the Erewash line and line speed improvements. This would enable some London – Sheffield service to be routed directly from Leicester to Sheffield via Chesterfield without having to go via Derby and would reduce the journey time from London to Chesterfield and Sheffield by as much as a further 10 minutes.

96. The business sectors most likely to be influenced by the introduction of HS2 connectivity in Sheffield will be higher value service sector activities focused on the city centre. 12 times more service sector jobs are within 1km of the city centre compared to Meadowhall, and the greatest concentration of users will come from the South West of Sheffield<sup>27</sup>. The existing transport network is focused on the city centre providing very good access Sheffield Midland station and access to HS2 at Meadowhall will require two interchanges.
97. HS2 will result in a reduction of services on the Midland Main Line to London. HS2's own plans show a reduction from two to one train an hour between Sheffield and London, making 6 intermediate stops, compared with only 3/5 today. HS2 will bring little or no benefits to the city and indeed the requirement to make one or two interchanges to access HS2 will be very unattractive for potential passengers. HS2 does nothing to provide addition commuter capacity in the Sheffield City Region.
98. HS2 brings little or no benefit to the Sheffield City Region.

***(o) An East Midlands station to be located at Toton?***

99. The East Midlands HS2 station is planned to be at Toton, between Derby and Nottingham and will thus not serve either city centre directly. Passengers will have to transfer onto other public transport to reach the cities and this

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<sup>26</sup> HS2 Ltd - Summary of key changes to the Economic Case since August 2012 para 4.1.3

<sup>27</sup> Genecon: Sheffield City Council and South Yorkshire Passenger Transport Executive - Maximising the economic impact of HS2 investment in Sheffield

will negate most of any benefit from HS2. HS2 claim<sup>28</sup> the journey time to Nottingham Midland station and Derby Midland station will be 68 minutes (including 12 minutes journey time from Toton) and 71 minutes (including a 15 minute journey time from Toton) respectively, but these times make little allowance for interchange and waiting times at Toton and according to HS2 own model a 30 minutes penalty should be applied when interchanging between trains<sup>29</sup>. The Midland Main Line electrification project currently being undertaken by Network Rail will reduce journey times to Nottingham Midland and Derby Midland stations to 97 minutes and 82 minutes respectively. In practice it will be more convenient and almost as fast to use the electrified Midland Main Line direct to the centres of Nottingham and Derby. Even David Begg, Director of Yes to High Speed Rail, said in 2012 that “[HS2] is not relegating the Midland Mainline to the scrap heap. Indeed, using a faster electrified Midland main Line to get to St Pancras may remain the best option for people who live close to Nottingham city centre”.

100. The city centres are also the focal points for the all major transport links for both Nottingham and Derby, in contrast to Toton which at best will have only limited public transport links.

101. HS2 will not deliver significant journey time benefits between the East Midlands and London and indeed the level of service on the existing Midland Main Line is shown to be reduced, with only one train an hour from Nottingham and significantly slower trains from Derby because of additional stops.<sup>30</sup> HS2 does nothing for commuters in the East Midlands region and indeed the reduction of services on the Midland Mainline will reduce accessibility and connectivity for the region.

102. The East Midlands station at Toton will neither serve Derby or Nottingham effectively and it will be more convenient to use the upgraded Midland mainline to access the city centres, the destination of the greatest proportion of passengers.

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<sup>28</sup> HS2 Ltd - High Speed Rail: Investing in Britain’s Future. Consultation on the route from the West Midlands to Manchester, Leeds and beyond page 69

<sup>29</sup> HS2 Ltd - Summary of key changes to the Economic Case since August 2012 para 4.1.3

<sup>30</sup> January 2013 updated service patterns (page 9)  
<https://www.gov.uk/government/publications/updated-economic-case-for-hs2-august-2012-explanation-of-the-service-patterns>

103. The Leeds arm of HS2 will cost in the order £10bn and will not bring any real benefit to the North East, Sheffield or the East Midlands. Investments already identified or planned will reduce journey times from these cities to London by 2020 at the latest, whereas HS2 will not be delivered until 2033 at the earliest. The levels of economic benefit generated by time savings of a few minutes, particularly taking into account that people work on trains, cannot in any way justify the expenditure of £10bn on the Leeds arm.

**(vi) Do you think there should be any additional stations on the eastern leg between the West Midlands and Leeds?**

104. Leicester is not connected to HS2 and suggestions that a dedicated rail service from Toton to Leicester would be attractive/economic are implausible. Journeys to London will be quicker on the Midland mainline. Leicester is some 40km south of Toton and even with a dedicated service it will take some 20 minutes to reach Toton by rail. HS2 services north from Toton only serve Sheffield and Leeds with a regular service (more than 1 train per hour) and there is potentially 1 train per hour to the North East. To get from Leicester to Sheffield City centre you would have to interchange twice (Toton and Sheffield Meadowhall) to get to Sheffield City Centre and the journey time would be in excess of 1 hour allowing for the interchanges. The existing Midland Mainline service has a journey time of 1 hour and 3 minutes with stops at Derby and Chesterfield, thus HS2 would give no journey time benefit, poorer connectivity and a much less attractive service as there would be 2 interchanges.

105. The current HS2 proposal is that Leicester would be significantly worse off, losing one of its Midland Mainline nonstop services per hour to London and would get virtually no benefits from a service connecting to HS2 at Toton. HS2 does nothing for Leicester's connectivity or capacity.

**(vii) Comments on the Appraisal of Sustainability?**

106. The Appraisal of Sustainability (AoS) should be a key component of the selection of the routes for Phase 2 and the documentation produced for the consultation should provide sufficient information for the consultees to give intelligent consideration and an intelligent response. In particular it should enable consultees to understand the reasons for the selection of the preferred route.

107. To enable this, the AoS should provide details of the comparison of the

shortlisted options under the appraisal criteria. It is not acceptable to just say that “many options were rejected due to, amongst other things, their potential sustainability impacts”<sup>31</sup> without providing details of these impacts.

108. The consultees, be they Local Authorities, householders or businesses know the issues that are important in their areas and it is implausible that the sifting process and preferred route selection described in the AoS can have taken these into account without their input. This should be part of the option selection process.
109. Consultees are just being asked for their comments on a single preferred option, a *fait accompli*, when they should be provided with a detailed comparison between, at least the shortlisted options, to enable them to provide an intelligent response.
110. As a particular example, the preferred option for the Manchester arm (via Crewe) is some 20km longer than the most direct route shown in Appraisal of Sustainability<sup>32</sup> and there is no information as to why this has been rejected.
111. In the Phase 1 route selection, alternative routes (particularly along motorway corridors) were rejected on the basis that they were longer as this would cost more and have longer journey times. Although part of the same project it is evident that a completely different approach has been used for Phase 1 and Phase 2.
112. There is no transparency as to how the option selection process for Phase 2 can justify using a longer route when for Phase 1 options of this nature were rejected.
113. The implications for communities along the route are severe, running adjacent to many hamlets and villages and in some cases, like Whateley in North Warwickshire, it will annex one side of the village. Designing HS2 to run within 100m of villages (e.g. Kingsbury, Whateley and Birchmoor in North Warwickshire) cannot be correct. Given that the Y now uses a different design philosophy, where speed is not the driver, it must be designed to absolutely minimise the impacts on towns, villages and hamlets in the corridor.

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<sup>31</sup> High Speed Rail: Appraisal of Sustainability – Non-technical summary, clause 5

<sup>32</sup> High Speed Rail: Appraisal of Sustainability – Volume 1 Figure 3.6

114. The AOS gives no information on mitigation and thus consultees have no way of understanding the actual impacts of HS2. To say that mitigation proposals will be developed once the preferred route has been agreed, means that consultees are not being given a fair opportunity to influence changes in the route or understand how the options perform in sustainability terms.

115. The option sifting process is not transparent and thus consultees are not being given a fair and reasonable opportunity to understand how the preferred route option has been determined and whether other options would have less impact.

**(viii) Comments on how the capacity that would be freed up on the existing rail network could be used?**

116. The Government has a strategy for reducing the cost of our railways by £3.5bn by 2019<sup>33</sup> and train fares have increased year on year 20% above inflation in last 10 years.

117. Network Rail has carries out 2 studies related to the release of classic network capacity as a result of HS2.

- Future priorities for the West Coast Mainline: Released capacity from a potential high speed line which focuses on Phase 1
- Network Rail Better Connections: Options for the integration of High Speed 2 which focuses on Phase 2

118. As a starting point it must be recognised that HS2 does not release capacity on the classic network north of Birmingham until 2033 and indeed even then there will be no capacity release north of Manchester, Leeds or Crewe as HS2 services will run on the classic lines.

119. In all of the Network Rail approaches it is assumed that the fares on HS2 are the same as on the classic network, which is highly unlikely, as demonstrated by HS1 Domestic services which have fares 20% higher than classic network services.

120. One of the major concerns with the work done by Network Rail is that it is completely theoretical, purely focused on how many trains it might be possible to run on the network – a similar approach to how it has concluded that the WCML is full – to replace reduced connectivity of town and cities in

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<sup>33</sup> Reforming our Railways: Putting the Customer First, DfT March 2012

the HS2 corridors which are not served by HS2, without any consideration of the cost of such provision.

121. The addition services opportunities will almost certainly not be commercial and will need subsidising, adding to the cost of our railway and more importantly adding to the cost of HS2 which will further undermine the already poor business case. These costs cannot just be ignored.
122. The reality of such an approach will be that the services will never be provided, as no commitment is being made for them now and that those County Councils, Borough Councils, District Councils and City Councils located directly along the Midland Main Line (MML), West Coast Main Line (WCML) and East Coast Main Line (ECML) routes as far as Leeds and Manchester will never get the types of services identified.
123. The outcome will be that a significant number of cities and towns in the HS2 corridor will be worse off with HS2 than they are now.

**(ix) Comments on the introduction of other utilities along the proposed line of route?**

124. The potential use of the corridor for utilities, whilst in principle it could be considered a good idea, will in practice be little or no use as it will not be available for 20 years.
125. The Government plan is for 9 out of 10 businesses and households to have access to superfast broadband (24Mbps) and everyone else to have access to at least 2Mbps by 2017, the Government has provided £500m upto 2015 and has promised a further £300m post 2015, with upto £2.5bn being invested by BT.
126. A recent report for the EU “the socio economic impact of broadband”<sup>34</sup> identifies major economic benefits from the implementation of ultra-high speed broadband across the UK with benefits exceeding cost by more than 2.5 times. However if we are to capitalise on this major growth stimulus and significant economic benefit, it is needed in the next 10 years.
127. A number of areas in the vicinity of route still do not have mains gas, surely in this day and age this should be a higher priority than HS2. Significant investment is necessary within the next few years, rather than having to wait 20 years for something that at the moment is no more than an idea, which

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<sup>34</sup> EU Commission: The socio and economic impact of broadband – Analysis Mason and Tech4i2

would have to be funded by the private sector as the utilities are a regulated industry.