

**Transport Committee
14 July 2011**

Transcript of Agenda Item 6: High Speed Rail (HS2)

Caroline Pidgeon (Chair): Right, let us move to our main item today, which is about High Speed 2 (HS2). We are looking at the case for and against HS2 but also particularly the impact that HS2 is going to have on London's transport network and our infrastructure in London. Before I introduce our guests I appreciate there will be lots of different views and lots of very passionate views on this. Clearly, we want to hear both sides of the argument on this and what we need to do, if it does go ahead, to address transport in London. Obviously, we particularly would like our guests to focus on London as that is our area of responsibility.

We are going to be holding this session in two halves. The first is looking specifically at the strategic and business case for HS2. Our guests are Adam Raphael, who is Director of the Campaign for high speed rail, Richard Hebditch, who is Campaigns Director for Campaign for Better Transport, Chris Stokes, who is from 51M, campaigning against high speed rail, and Joe Rukin, who is Campaign Co-ordinator for Stop HS2. You are all very welcome, thank you very much indeed for coming along today.

Richard Tracey (AM): Chair, before we start, can I just record some serious dissatisfaction from my point of view that there is nobody from the Department for Transport (DfT) here, because I believe we had invited representatives. Surely if it is trying to make a case from the Government for HS2 and all that it entails the DfT should be here. I imagine colleagues will agree with me on that dissatisfaction.

Jenny Jones (AM): Very much so, yes.

Richard Tracey (AM): I think we should write to the Secretary of State and tell him that we are extremely dissatisfied.

Caroline Pidgeon (Chair): I am very happy to do that and that we have requested HS2 and DfT come along to make the case. DfT at 6.30pm last night told us its representatives were not going to attend after all. So I think, with the Committee's support, I will very happily write a letter.

Richard Barnes (AM): HS2 representatives, Madam Chair, are they not here because there is no one to hold their hand?

Caroline Pidgeon (Chair): HS2, I think, has said earlier on that it would not attend without the DfT.

Richard Barnes (AM): I was right then.

Caroline Pidgeon (Chair): I am happy to write to HS2 as well, if you would like that?

Jenny Jones (AM): Yes, please.

Valerie Shawcross (Deputy Chair): Chair, do we want to put on record what reasons they gave for dropping out at the last minute?

Ian O’Sullivan (Assistant Scrutiny Manager): It was because they did not want to send an officer in front of the Assembly; they were afraid to send somebody else and they did not have someone available for this morning.

Caroline Pidgeon (Chair): OK, thank you. Brian.

Brian Coleman (AM): Chair, as the current Government has broken the taboo of ministers appearing before the Assembly, Bob Neill MP [Parliamentary Under Secretary of State, Department of Communities and Local Government] appeared before the entire Assembly and the Police Minister [Nick Herbert MP, Minister of State for Police and Criminal Justice] appeared before the Budget and Performance Committee, I can see no reason why the Minister of State responsible for high speed rail, who I believe to be Theresa Villiers MP, should not be invited in person to appear before this Committee to deal with this subject, and indeed other subjects for which she is responsible and for which this Committee is interested in. I can see no reason, other than her diary, why, and I am sure you, Chair, would fit in a meeting at the Minister’s convenience.

Caroline Pidgeon (Chair): Absolutely. Maybe we will put that in our correspondence. Thank you, Brian.

Richard Barnes (AM): I note that this Committee does not have the power of summons. However, the Assembly in full session does have the power of summons.

Brian Coleman (AM): Not ministers we can’t.

Richard Barnes (AM): No, but we could summons HS2, or find out if we could summon HS2.

Brian Coleman (AM): You can’t.

Richard Barnes (AM): We can try, Brian, to get them before us, because I am very concerned that there is nobody here that can answer a question on the consultation process. It is a consultation process which is - tangential to my belief - fundamentally flawed. If the starting point is fundamentally flawed I do not know how we can take this forward.

Caroline Pidgeon (Chair): I think on that basis we can add some of those points into our letter and we will see if HS2 or a minister from the DfT will be willing to come before us, but we can make those points very clearly indeed.

We have got experts here from both sides of the debate who have got a lot of expertise in this area. I am going to kick off the questioning to all guests. We have had a lot of evidence and we have had hundreds of pages of evidence come in from both sides of this debate. What we should really understand is how robust do we think the figures are within the consultation? How robust is the case that has been made in terms of cost benefit ratio really, for HS2?

Adam Raphael (Director, Campaign for HSR): Right, let me say first of all that I am, by background, a journalist. I am not an expert on railways. I have been writing about railways for 30-40 years. I have travelled extensively in Japan and other parts of the world looking at high speed rail. At one point *The Economist*, which I was working for, was so keen to get rid of me they sent me around the world to look at high speed rail.

I have had a look at many systems in different parts of the world and I must say I came back from those journeys convinced, as these countries were convinced that high speed rail is essential to economic development. Now, there is something which I call 'the curse of British exceptionalism' which is that this country is different. Our geography is different, our economy is different. We are different in 1,000 ways. I have never felt that argument stood up and I always felt that our - basically - refusal to look at what other countries are doing and consider the lessons that have been learnt from these other countries has been very short sighted.

Japan began its high speed rail in 1964, and the story there is a remarkable one really. If you ask a Japanese person today - Japanese government, Japanese official or even Japanese member of the public - "Was this a mistake to go down this route?" they would just look at you as though you were mad. Equally, if you ask someone in France or in Spain or in Germany that this is not a route to have gone down, they again would look at you as though it was bizarre. It is absolutely understood that fast, efficient transport links are essential to economic growth and development.

The idea somehow that the geography of this country is so different from all these other countries that it makes actually high speed rail irrelevant is wrong. You ask a businessman in Glasgow or even Manchester or Birmingham who has an early morning appointment in London. In fact the distance between London and Edinburgh and Glasgow is almost identical to that between Paris and Bordeaux or Madrid and Barcelona. The only difference is that the businessmen in Bordeaux or Barcelona can reach the capital by train in roughly half the time it takes a Scottish businessman.

Certainly, the geography is no different and indeed I do not believe the economics are different. In fact, one of the curses of this country, in my view, has been the overdevelopment of the south-east of this country, to the extent that other parts of the country, which are lacking jobs, lacking development, have lost out. Somehow this country, if it is to have a great future, (which I believe it has) has to address those regional imbalances. In a sense, my view is a very general view. The argument about high speed rail comes down to one, at the end of the day, of what sort of future do we think this country has. If you are a pessimist and you think it has not got a great future - economic growth is going to be slow, we are just going to meander along on the byways of Europe while the rest of the world develops - then in fact it does not matter too much whether we have high speed rail or not. If you take my view that this country has a great future and it has a great capacity for economic development, growth and jobs - and we are already seeing the record rail numbers, which I believe will continue - then I think you have to say, "Hey, we really do need this development". It is coming far too late. It is not going to come in my lifetime. I am sure I am going to be well under the soil by the time it comes. We are 60 years behind Japan, 30 years behind France, 20 years behind Spain and about the same in Germany. Let us get on with it. Thank you.

Caroline Pidgeon (Chair): So you very much think the business case stacks up then from the points you have talked about? Regional imbalances, time savings and so on: you feel the business case adds up?

Adam Raphael (Director, Campaign for HSR): I do. The argument that the business case does not stack up would have to take a view that this country is totally different from the rest of the developed world. If you take that view then I think you could say, "Ha! The business case does not stack up". Frankly looking at these things in abstract, 20 years before a development, is extremely difficult. We all know that projections are just projections. Things can change. Who would have thought that today more people are using the railway at any time since 1928? There has been fantastic growth in the railway. My view is that this will continue. In fact, if any

government in the future has the courage to introduce road pricing nationally the mode shift will accelerate. So we really have to address this capacity issue. Quite apart from anything else, there is a huge capacity issue, which is going to have to be addressed. There are only three ways to do it: 1) you can just price people off the railways, just shove up the fares by 50%-100% and just get people off - you could do it that way - 2) you could tinker with the existing infrastructure or 3) you can build a new railway. The new railway could be an ultra slow railway going at 100mph. Frankly, in 20-30 years when the rest of Europe is going to be criss-crossed by high speed lines - already there is something like 5,000km under construction or in progress in the rest of Europe. We have 113km of HS1. We are far, far behind. I accept this is a very conservative country with a small 'c'. People do not like change. I understand the 'not in my back yard' (NIMBY) position only too well. If my house was in the middle of HS2 I would be opposed. I can understand their concerns, but for goodness' sake they are not speaking in the national interest. They are speaking, quite legitimately, in their own interest.

Caroline Pidgeon (Chair): OK, thank you for that. Chris [Stokes], do you want to give a different point of view on whether you feel the business case stacks up for HS2?

Chris Stokes (51M): Yes, certainly. Thank you. Like Adam [Raphael] I actually know Japan very well, so I know the Shinkansen very well. My son has lived in Japan for the past six years and I first visited in 1990. I do recognise the relevance to Japan of its high speed network, particularly the route between Tokyo and Osaka. That provides fast journey times against the classic route, so the journey times were more than halved. The position in this country is different. Today there is a train every 20 minutes from London to Birmingham, which takes 1 hour 24 minutes. Today there is a train every 20 minutes from London to Manchester which takes 2 hours 8 minutes. I personally find it very difficult to believe that reducing the Manchester journey time to say an hour and a quarter is suddenly going to transform the economy of the North West. I just do not think that passes the test of common sense. InterCity train services to London - but not in all parts of the country by any means - are already quite good and I do not believe this is going to drive either massive further rail growth or economic regeneration.

To give the example of Eurostar, London to Paris is a superb service. I think it is almost perverse to go from the centre of London to the centre of Paris by any other means. Rail has 80% of the market, so it has captured the market, it has captured the vast bulk of traffic from the airlines, but its level of volume is around 40% of that forecast when the Channel Tunnel Rail Link, HS1, was first contemplated. In his evidence to the Transport Select Committee, the Chief Executive of Eurostar admitted that basically that market was saturated. So the total transport market is not growing above a level. It is already the position, and it is a useful analogy that between London and Manchester and London and Birmingham, city centre to city centre journeys, rail has a very high mode share. I think the potential benefits that are claimed for HS2 are frankly illusory. Actually, the world is spotted with examples of high speed rail projects that are achieving nothing like their forecast. The high speed rail in Taiwan, for example, does not actually cover its direct operating costs through its revenues and a lot of people, particularly visiting friends and relatives, still use the slower conventional trains because it is cheaper.

Lastly the capacity issue: Adam referred to tinkering. It is a simple straightforward fact that by lengthening the existing trains to 12 cars and changing at least one, conservatively one, first class car to standard class, the number of standard class seats on the West Coast Main Line can be doubled pretty quickly at minimal cost and producing benefits years before the earliest possible opening date for HS2 of 2026.

Caroline Pidgeon (Chair): That is so helpful. Thank you.

Joe Rukin (Campaign Co-ordinator, Stop HS2): Yes. I think the problem we are facing with HS2 is that the whole premise started with the principle that high speed rail is the answer, now what is the question? It has been conducted in rather a bombastic way. Part of the argument is that we see that other countries have it. What we have seen with the international comparisons is Portugal, the suspension of the Lisbon to Madrid line is part of the conditions of the bailout there. In Spain they have just axed the Toledo to Alicante service. In France there has been a 100% fare rise over the last ten years and the president of Société Nationale des Chemins de fer français (SNCF) has said that the vision of this being a fast transport system for the people of France, opposed to just the business elite, is very much under threat. In Holland they are looking at potential bankruptcy and the cancellation of the Amsterdam to Germany line. Taiwan, as Chris mentioned, has had a government bailout. In China, where they have constructed thousands of miles of high speed rail that is responsible for a \$304 billion debt and currently they can just about afford to pay the interest on that. Finally, in the USA where President Obama has been touting subsidies for building high speed rail in Ohio, Florida and Wisconsin, they have all been turned down. They just do not want to touch it because, and it all goes back to the same reason, they predicted these massive, massive increases in passengers which simply have not materialised.

This is the problem with the HS2 business case, because it fails to learn from the mistakes of the past, such as HS1, which should be carrying 25 million passengers; at the moment it is carrying about 9.5 million. The business case is exceptionally sensitive to this passenger forecast. HS2 originally, back in last March, predicted a 267% increase in passengers as a result of HS2. Over 70% of the people who would use HS2 at that point would not travel at all until HS2 is built. That dropped, when the consultation started, to a 214% passenger increase, which is obviously significantly higher than both the Network Rail and the DfT's own predictions for passenger growth over a similar period. The net result of that drop in passenger growth is that the benefits that HS2 is meant to bring to the economy dropped from £67 billion to £44 billion; so they lost a third of the benefits simply by revising passenger forecasts down a little bit. Again, a great chunk of that economic benefit is based on the cash value of time.

Yesterday I gave a talk to a Year 3 group in a school (so, a bunch of eight-year-olds). I said, "Well part of the reason they said that it is going to make lots of money because they say everyone who goes on a train, all their time is wasted" and someone said, "Well that's silly, my daddy works on the train" and a substantial chunk of the cash value of the economic benefits for this country comes from that premise.

Then you look into HS2 in more detail and you find that there are several planks of the economic case which do not stand up. To go back to the school analogy, it is a bit like they have been doing their homework on the way to school on the bus, because there are serious omissions and errors in the project. This is highlighted by the fact that last week, over four months into the consultation, HS2 issued an erratum on the business case and a lot of figures have moved. They have not necessarily moved a great deal, but four months into a public consultation process they are still changing the figures. If you want to highlight how dodgy potentially the economic assumptions are I think that is probably as good a place to look as any.

Caroline Pidgeon (Chair): Absolutely, I feel that they do not stack up at all. I wonder, Richard, if you want to come in here, and particularly whether you could also pick up the point about the difficulty perhaps in projecting several decades into the future, the wider economic benefits of some of these figures, as we have heard from Joe and Chris that some of these schemes have predictions worldwide and they have not met the numbers that people expected?

Richard Hebditch (Campaigns Director, Campaign for Better Transport): Sure. I mean our point is we are open-minded about HS2, we think there could be a strategic case for it. I was reading the economic case last night and, when you read that, you become less convinced by the proposals. It shows up the problems with transport modelling and transport appraisal. We have done lots of work on this area and it does very much depend on how you value those small time savings over 60 years. It does not really take account of wider scenarios about actually what is likely to happen to the price of petrol; how is that likely to change behaviour; how are we going to meet our need to cut carbon over that time. Taking out some of those wider assumptions you start to see, actually, there is more of a case potentially for high speed rail. When you look at the detail of it, it is very dependent on 60 years of small time savings and valuing them quite highly, and you start to see the problems whereby if HS2 is not delivered on time - somehow the benefit cost ratio magically improves - because you have suppressed demand. It is almost making the case for delivering it late. It highlights the problems that you have got with that.

I think what we would have liked to have seen is a bit more from the DfT about what would be the case under different scenarios. What would be the case under higher oil prices, what could you do in terms of the liberated capacity that Philip Hammond MP [Secretary of State for Transport] talks about on the West Coast Main Line. Those kinds of issues, and fitting in much more within a wider strategy for transport. The National Transport Strategy seems to be high speed rail and ending the war on the motorist and electric vehicles. That is not necessarily a strategy that shows you how high speed rail will fit into future plans for our transport system.

Caroline Pidgeon (Chair): OK, that is very helpful. Can you just clarify, before I move on to Jenny [Jones] what your position then is as an organisation? Are you potentially in favour of high speed rail but not quite --

Richard Hebditch (Campaigns Director, Campaign for Better Transport): Potentially in favour but it is very much about how it fits within wider policy. One of the key things is about what happens to the rest of the rail network. We have had recently significant investment in our national rail system and that needs to carry on. If you are expecting in the future to have higher oil prices with peak oil, if you are also expecting to want to cut carbon that implies a growth in rail over time. We need to very clearly see that we have carried on investments across the rest of the network. I was reading something that Chris had produced, which identified many of the areas where you need investment. You are going to have problems of capacity on the line into Waterloo and you have the East Coast Main Line as well. All those capacity problems and actually how do we invest? If we are going to have high speed rail how do you also invest in the rest of the rail network to meet the capacity requirements that we need?

Caroline Pidgeon (Chair): Very helpful.

Richard Barnes (AM): A clarification from Mr Raphael, if I can. You are listed as Director, Campaign for high speed rail. That is not Campaign for HS2, the issue which is under current consideration, it is the concept, rather than the specific?

Adam Raphael (Director, Campaign for HSR): No.

Richard Barnes (AM): No what?

Adam Raphael (Director, Campaign for HSR): I think that is probably a misnomer, Director of High Speed Campaign, it is in favour of HS2.

Richard Barnes (AM): So it is in favour of --

Adam Raphael (Director, Campaign for HSR): Yes, it is.

Richard Barnes(AM): Great, thank you very much indeed.

Richard Tracey (AM): What sort of power would drive high speed rail? Are we talking about diesel or are we talking about electric, or are we actually going forward possibly to hydrogen dual cells and things like that? I think it is going to be very significant in the whole debate about climate change and our use of energy in this country.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): I think we are talking about electric and a lot of the assumptions about where that electricity generation come from. If you are making an argument in terms of cutting carbon then you need to also make an argument about reducing the CO₂ from electricity generation as well.

Richard Tracey (AM): Yes.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): There is a wider issue also about how much the rest of the network is electrified. So there have been some recent good announcements in terms of electrifying the line to Cardiff, but we still have systems where large parts of it are reliant on diesel trains and we have the absurdity where we are about to commission the new rolling stock that has to be bi-mode. It has to be both diesel and electric. If you wanted to have a transport system that meets our future needs then electrifying the rest of the rail network needs to be a key part of that.

Richard Tracey (AM): There are enormous problems, surely, about electricity. We know that in the winter there is the problem with the rails freezing over. In the summer recently we had the cables that could not keep in contact with the trains and then there is the whole problem of all the enormously low bridges and all the rest of it that we have in the rail system in this country. So there is an enormous amount of infrastructure work needed, is there not?

Chris Stokes (51M): I think, technically, the straight answer, as Richard has indicated, is it is inconceivable that a high speed rail line would operate under anything other than electric traction. Whilst I recognise many of the problems you are talking about - and when things go wrong it is quite dramatic - in the round, electrified railways are in fact more reliable than diesel operation.

Joe Rukin (Campaign Co-ordinator, Stop HS2): However, the power issue does highlight the complete lack of joined-up thinking in this because where the electricity is going to come from is not anything to do with the DfT. That is not necessarily something that is an issue for them.

Jenny Jones (AM): I want to come in on environmental stuff. Just before I do, Richard, your organisation is signed up to this charter, so you are in favour in principle of high speed rail?

Richard Hebditch (Campaigns Director, Campaign for Better Transport): That is right, yes. The White Lines Charter, which the Council for the Protection of Rural England developed with a range of organisations. It is more about if we are going to do high speed rail how do we do it well. I think there is a danger of focussing on just the economic case and arguments which are focussed on relatively small parts of the line, but actually who is going to go ahead; what are the strategic things that we need to do to make sure it is done well.

Jenny Jones (AM): It is quite interesting because these are, of course, all issues for this Committee and it slightly looks at the moment as if HS2 is failing on all of these. It would be interesting to see if your group of organisations comes out against HS2 if we can prove that they fail.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): I think so. I mean a lot of it still is knowing what the rest of the wider government policy is. So that national strategy, like I said. Things like the relative pricing of rail. We have at the moment rail fares which are going to increase 3% above the retail prices index (RPI) rate of inflation each year, so it is a 28% rise in rail fares over the next few years. That key issue is one of the things about making sure that HS2 could have a much better benefit/cost ratio if you made sure that it was affordable. If rail fares carry on rising anywhere near the rate they have been rising over recent years then the benefits are outweighed by the costs.

Jenny Jones (AM): I did want to move on to the environmental aspects. Perhaps I can ask Adam and Richard about these. We are attempting to head towards a lower carbon economy and the fact that HS2 is only aiming to be carbon neutral is very disappointing because of course in 20 years time when it is operating we are going to be in a completely different environment where it has to be generating electricity, not actually taking it. Could you comment on that, Adam?

Adam Raphael (Director, Campaign for HSR): I think you have to think of the alternatives. Assuming people wish to travel, and I am afraid as people get wealthier they wish to travel. There is a definite correlation between that. If people wish to travel, they are going to travel either by car or by plane or by train. Those are the only methods really. High speed rail will undoubtedly relieve pressure on the motorway networks and it will also make a big difference in terms of people's choices. The idea somehow that high speed rail is expensive high carbon usage, it does depend, as my colleagues here have been saying - and I agree with quite a lot of their comments - on how that electricity is generated. If it is generated in part by nuclear means then some of the concerns that you may have, and some may not as well, will be addressed.

Jenny Jones (AM): Yes, I am not very nuclear friendly, I am afraid.

Adam Raphael (Director, Campaign for HSR): I know you are not in favour of nuclear energy, but I would hope as a Green you might, to some extent, at least recognise that it is part of the energy mix. I think just a flat rejection of nuclear energy, particularly with its huge carbon advantages, is odd in the modern world. We probably would disagree on this issue.

Jenny Jones (AM): HS2 Limited, it is such a pity they are not here today, because they could answer this. They have yet to provide a full environmental impact study for Phase 1. I am not sure what that would include. Would that include the carbon emissions from construction as well and running costs in terms of carbon and also maintenance costs because these are all very carbon intensive? The construction is incredibly carbon intensive. That would be measured within the environmental impact study?

Richard Hebditch (Campaigns Director, Campaign for Better Transport): I think it will. I do not know the details but I think a lot of it is also looking at the environmental impacts of the route chosen as well, in terms of immediate local environmental impacts. I do think though, from a kind of environmental point of view, as I was saying, if you are moving to a more low carbon transport system that does imply a growth in usage of rail. I am not sure that it is the

case though that as you get wealthier they will always carry on travelling more and more. There is only so much travelling you can do in the days of the week. There is some evidence - what some academics call peak car - which is looking at the economic growth. Income is continued but in many places the use of transport, particularly by car, has levelled off.

Adam Raphael (Director, Campaign for HSR): Not by train.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): Not by train, no, but I think in terms of the part of the move towards a more low carbon system. I do agree that there is a capacity issue. I think that is the issue that has to be addressed.

There has been a problem in the way that the whole HS2 proposal has been developed. It is led by politicians, which is good, in terms of assuring democratic accountability. On the other hand, it was developed before the election where each party wanted to show that it was keeping up with the rest of the world. If you read the consultation paper from DfT that is the first thing that you read is, "All these other countries have high speed rail, we need to too". It is a bit like nuclear weapons, "France has it, why haven't we got it?" It is the classic Anglo-French rivalry. The issue really is not the high speed rail, it is about the capacity issues between here and Birmingham and further north and how that might change over time.

Jenny Jones (AM): My concern is I do not feel there is any solid environmental impact assessment (EIA) anywhere in anything that has been done. Construction, maintenance, all these things have a very high carbon cost. I just do not get the feeling that there is any attempt really to bring those costs out. Can anybody make a suggestion about how it could be more carbon friendly, more environmentally sound?

Joe Rukin (Campaign Co-ordinator, Stop HS2): If you want to make it more environmentally sound, you slow it down. This is one of the main problems that the proponents of high speed rail have continually moved arguments. In fact, originally they were saying it was going to be good for the environment, where with our current electricity production mix it will actually be worse in terms of CO₂ than driving a car. If you want to cut the CO₂ emissions you slow it down, quite simply. This is because energy consumption increases on an exponential gradient with speed, so the faster you go the even more energy it consumes, which is why it will consume about twice as much as a normal train. That would be the first thing.

Where we find it very hard to understand exactly why the original figure of 250mph for the track and now 225mph for the trains - since they have realised that there is not actually a train that does 250mph - we do not really know why this figure has been pulled out of the air because it is not really high speed rail, it is ultra high speed rail. The Javelins in Kent - they travel at 186mph - it gives you far more for the environment, both in terms of reduction of omissions but also in the reduction of environmental impact because you can put bends in the thing. That is one of the reasons why, say, the Wildlife Trust, for example, are saying that it is going to impact on 160 wildlife sites just on the London/Birmingham/Litchfield stretch. The reason for that is because to go that fast you have a 7km turning circle, so it is very difficult to miss what is in front of you and to go around, say, a wood, a burial ground, anything like that, it severely impacts on the environment far more as a result of the speed. Also the land take is greater because there has to be a greater gap between the train and anything that is going to get anywhere near it.

Jenny Jones (AM): A lot of the environmental costs obviously are quite difficult to assess in monetary terms because of their loss of amenity. An appraisal of sustainability for the full network has not been done either. I do not know when these things are going to happen. Does

anybody here know when we are going to hear about a real assessment of the environmental impact?

Chris Stokes (51M): After the consultation has been completed and when the Secretary of State has made his decision, apparently.

Joe Rukin (Campaign Co-ordinator, Stop HS2): We are expecting the environmental impact assessment to be done next year, and the consultation potentially to begin by the end of next year. At the same time there will be a consultation on the route further north.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): I think the key thing is about the second phase as well, about learning from what have been the problems in terms of the HS2 to Birmingham, and some of the issues where his has been, "This is the line that it will take, take it or leave it". The second phase needs to address some of those issues, so perhaps we do not need to always be so obsessed with how fast the trains go. Perhaps we can have a route that avoids some of the more sensitive environmental sites, rather than with having such a high speed line where it has to go so straight, and it is not problem. I think it probably has added to the costs as well in terms of the Chilterns. If you think you are going to have a nice view of the Chilterns travelling on HS2 you will not, most of it is going to be in cuttings. You are going to be travelling very fast with no view whatsoever. I think that has added to some of the costs of building the thing.

Jenny Jones (AM): Right, thank you. Could I move on to the issue of consultation and information generally. What other information do you think could be useful for people who are going to experience HS2?

Chris Stokes (51M): I think one of the key concerns would actually be that the consultation is, in effect, asking the nation to buy a complete strategy for the 'why'. At the moment the supporters are lobbying hard to build support in the north, and it looks quite good in the north. If you live in South Manchester, "Hey, somebody is going to provide a high speed railway that will get me to London in an hour and 15 minutes". If you live in South Manchester, by the end of the year, after the consultation, you may discover that that high speed railway is going to go through your back yard. In a sense, most of the country is being sold the upside without understanding the downside. It is a real issue in Manchester, because we do not know where the route will be but there is supposed to be a parkway in the South Manchester areas. One of the key candidates is obviously at Manchester Airport. That means there has to be a route between Manchester Airport and the centre of the city. That is potentially at least as devastating, if you like, as the current proposal is to plough through Ealing and Hillingdon on the surface.

Jenny Jones (AM): Adam, do you feel that there has been enough information given on the disruption that is going to be caused by the construction and by the operation?

Adam Raphael (Director, Campaign for HSR): I think there has been a very robust debate. I think my colleagues here are doing an excellent job in bringing out a lot of the issues.

Jenny Jones (AM): That is not the same as the information being given freely and generously by the people who want to build the line, is it?

Adam Raphael (Director, Campaign for HSR): I am not critical of what has been done so far. I think we have had consultations by the London Government as well at times, have we not? In respect of road pricing, I always thought that was pretty bogus. I do not have a terribly

high opinion of consultation processes. I think in the end what you need is a vigorous debate, which you are getting. I think a lot of the facts are being brought out in there.

One fact, I think, that has not been brought out before this Committee today is the actual crucial issue of capacity. I talked to Mr Guillaume Pépy, not so very long ago, who is the Chairman of the French Railways, and asked him, looking back what were the mistakes that the French had made in developing their Trains à Grande Vitesse (TGV) system and the key answer he gave me was, "We underestimated the demand for high speed rail in France". He said, "If only we'd had better information we would have had built in increased capacity there". Not right in the beginning but you would have had the ability to increase capacity. Now he says, "We're faced by a very, very difficult situation of having to increase capacity on very, very busy lines and we have not allowed for that". I think these people who say, "There is no demand for this" I feel are living in a dream world. You have only got to look at the rail usage figures today to see the huge increases in rail. I am not surprised by it, given the congestion on the roads and given the experience that air travellers face. The idea somehow that that trend is going to suddenly cease; I do not believe it for one moment. This is a very small congested island. For certain things rail does very, very well, and one of the things it does well is InterCity travel.

Jenny Jones (AM): Many of us support rail travel tremendously and would support expansion of the network, but that does not mean that we support high speed expansion. There are --

Adam Raphael (Director, Campaign for HSR): Could I just address that one issue? I think this is one thing which perhaps people who are not railwaymen, and I am not a railwayman, do not sufficiently appreciate the difference between a dedicated high speed line and a mixed railway is absolutely huge. If you just look at the record of the Shinkansen, it carries 375,000 passengers a day at speeds of up to 200mph. It has been running since 1964, there has not been one fatality on that line through a rail accident or a collision or anything of that kind. The average delay, I think, in one year was less than 15 seconds. You cannot imagine. This is partly obviously due to the Japanese but partly due to the dedicated line. You cannot run a mixed railway in that fashion. I think Chris Stokes, who knows a great deal more than railways than I do, will support me in this. It is a different thing totally in kind. You could run this dedicated line at 50mph and meet all your environmental concerns, but it would make absolutely no sense to do so.

Jenny Jones (AM): I have travelled on that line and it is stupendous. My concern is that you are actually fixing a past problem with HS2 that you are trying to fix a problem that happened a few years ago, ie the desperate need to travel faster. What we need for the future is a more carbon aware rail network that is not so expensive environmentally.

Chris, do you have a comment on the information flow from the HS2 to the areas that it is going to go through and whether or not you feel that sufficient information has been given about the disruption and the problems?

Chris Stokes (51M): I think, to be honest, there has been a lot of spin. I will not say it has all been by HS2 and DfT. I will not say it has all been deliberate. Some of it has been accidental. For example, we have constantly been told that any future upgrade of the West Coast Main Line will be incredibly disruptive. Look what happened when it was upgraded. Capacity on the West Coast Main Line can be increased with a small number of specific investments at individual bottlenecks, which would also have the effect - south of Crewe, which is the busiest part of the route - of effectively giving complete separation of InterCity trains from local passenger trains and freight. It would also have the benefit of providing more freight capacity. Those are limited specific investments. By the way, north of Crewe to Glasgow you get onto a two-track

railway with a mix of InterCity passenger and freight and the capacity on that is very constrained but with relatively modest, compared with HS2 investment, on the south end of the route capacity can be freed up both for passenger and for freight.

Then the Government has tried to elide the impact of the total reconstruction of Euston Station over a period of seven to eight years. Occasionally, little bits of cats get out of the bag: for instance, HS2's own submission to the Transport Select Committee says, "During this period we're confident we can at least maintain the off-peak level of service". At least maintaining the off-peak level of service for that period means, potentially, a reduction in commuter peak capacity of up to 40% on that route.

Valerie Shawcross (AM): Just quickly, but quite a fundamental question for me, I know that none of you here were responsible for the consultation, but the thing that strikes me most strongly is how unusual it seems to me to be that in a big infrastructure project the consultation is only about one routing. I think it is more normal under a development of a major project of any kind - goodness me we did it with the Croydon Tramlink - to actually go through a consultation process where you would have a number of different broad concepts of the route and what might work. Do you know why there has been this fast forward to, "This is the one and only solution"? Because it does seem to me to be fuelling a lot of the debate and conflict and causing the polarisation, where we are, kind of, being forced into either you are a super futurist or you are a NIMBY and there is nothing reasonable and negotiated in between. Why is the consultation process like this? In a way it is very unhelpful, I think is what I am saying.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): One of the key things is about learning from the first high speed route and the issue of light. So at HS2 we are keen at all costs to avoid lighting large parts of the midlands. That was why it was a very secretive process with only one route the on offer at the end of it, which is reasonable but it also, as you said, it has polarised the debate and made it very difficult to think about alternative solutions in avoiding some of the more difficult sites.

Joe Rukin (Campaign Co-ordinator, Stop HS2): A more cynical view, I would believe that you give one option and it means that it can now be got done a lot quicker and within the Parliamentary timetable of this Parliament.

Murad Qureshi (AM): Just coming back to the direct effects of the construction and operation of HS2. I think some residents in London, around Paddington for example, are going to soon appreciate the impact of the Crossrail works in their locality. I just wanted to be clear what you suspect are going to be the major issues there, apart from the ones that have been raised already by colleagues? I just want to be sure you are picking up on what I have been picking up on going around meeting groups who are very keenly affected by the proposals as they go through London?

Joe Rukin (Campaign Co-ordinator, Stop HS2): Well London is the area that is going to suffer the most disruptions. As HS2 obviously there is the tunnelling, the refusal to tunnel in Hillingdon borough, basically for the Heathrow link. You have to look at the major disruption obviously that there is going to be at Euston Station. You have to look at Hanger Lane and all those sorts of areas. It is one of those things, going back to the carbon impact, that, for example there is going to be a lot of roadworks. That is not put into the appraisal of sustainability. Whether it will be put into the Environmental Impact Analysis we do not know. I suppose, what is happening in Regent's Park is quite symptomatic of the lack of detail in that HS2 Limited say that probably 350 houses will get demolished. There is more than that in Camden.

Murad Qureshi (AM): In the second part of the session we will go into that. I was not talking about specific localities, just generally across London. The two I picked though, I will be very clear, is ventilation shafts and security. Ventilation shafts are a critical issue because they pop up all the way along the line. I have come across groups in Queen's Park, Westminster and also in Camden (Rowley Way, where that is a big issue). These ventilation shafts are going to be huge. We have not seen anything like them. There is particular security around them, and I am just wondering the extent to which they are needed, given the Crossrail experience during consultation?

Chris Stokes (51M): I would not claim to be an expert on that but I think again the documentation is inadequate to alert people to the potential impacts. Just to make the point that if anyone thinks the people who live in the social housing in Euston wear bowler hats and have large lawns is laughable. [Refers to 'Their lawns or our jobs?' - pro-high speed rail link posters.]

Murad Qureshi (AM): Just to reinforce that point I do think, for example, in Queen's Park on the border of Brent and Westminster, residents have rightly raised this issue and have not had anything from HS2 to explain why this is needed at this point; if you compare it against ventilation shafts that you have on the Tube system. If there is a security issue let us hear it now during this consultation and deal with it. Residents, clearly, along the line are not hearing it. I am not sure whether we can learn from the experiences from other countries with their high speed rail networks as well.

Caroline Pidgeon (Chair): I think we will pick that up in our response about the lack of information in some of that detail which would have an impact on residents.

Brian Coleman (AM): I did want to come in on that specific point because whose idea was that ill-advised and rather stupid advertising campaign involving the bowler hats? It was demeaning, it was patronising, it was insulting to my constituents in the London Borough of Camden, in particular. Frankly, I think it was a huge own goal by the pro-high speed rail lobby. I wonder who was responsible for that. It was not the DfT, was it? Was it anybody at the table?

Caroline Pidgeon (Chair): I have no idea but I think it was a campaign group. All right, OK.

Adam Raphael (Director, Campaign for HSR): I suppose I had better respond to that.

Caroline Pidgeon (Chair): Very briefly because I want to move on.

Adam Raphael (Director, Campaign for HSR): I certainly did not devise the campaign. It was crude, but it underlies a truth that the people who are going to benefit from this are far more numerous than the small number of people who are mostly - not all but mostly - quite well off.

Caroline Pidgeon (Chair): I think I have to say actually, Adam, I do not want to go down this route as we have an awful lot of questions to get through. I am not sure whether we are for or against it if we agree with that campaign.

Richard Tracey (AM): Just before I get onto the next area of questioning, one thing I have picked up somewhere is using electricity to power these trains in China, apparently, has caused a problem because of the high cost of electricity they have had to slow the trains down in order to save money. Is that right?

Chris Stokes (51M): Yes it is. The Chinese have slowed their trains down from 350km per hour to 300km per hour to save energy costs. There are also some possible safety issues and the Chinese Minister of Railways has been taken out of his job and - this being China - may shortly be shot. I make the point that it seems to me extraordinary that HS2, as Joe has alluded to, should be specified to be the fastest high speed railway in the world. This does seem odd given the distances involved, compared with China where it is 1,000km, or whatever, we are talking about London to Birmingham. It seems bizarre that this should be designed for 400km/h.

Joe Rukin (Campaign Co-ordinator, Stop HS2): We will very rarely get up to that speed because the journey is not simply long enough. You get the benefits of speed the longer distances you have.

Richard Tracey (AM): Clearly, for this whole project to make sense it has to look at Manchester and Leeds and further north, not simply going to Birmingham; that is just farcical. You have already talked to some extent about the West Coast Main Line. The question I want to ask is, in fact, is HS2 really the best way and the most economical way to solve the problem? It sounds from what you were saying earlier is it is not, and there are other ways of solving this.

Chris Stokes (51M): I believe in terms of capacity it certainly is not. Let us explain it in quite simple terms. Currently, the West Coast Main Line trains are nine cars, four first class, five standard class, and they have 294 standard class seats. Some of them, bizarrely not all of them, but 31 out of 52 are going to be lengthened to 11 cars. Lengthening the whole fleet was apparently not value for money but building a £30 billion high speed line is, which strikes me as strange. Except to Liverpool, where there are physical constraints at Liverpool Lime Street Station, all of them could be lengthened at relatively low cost to 12 cars and I am convinced that there would be no revenue lost by changing one of the first class cars into a standard class car. That would give nine standard, three first and 594 standard class seats. So simply by changing the configuration of the trains it is possible to double the capacity on the route at a fraction of the cost of HS2 and with virtually no risk.

Richard Tracey (AM): How fast do the existing trains or even some upgraded ones, on the current line, travel?

Chris Stokes (51M): They run at 125mph top speed. Interestingly, if you take London to West Midlands it is quite important. Obviously, the high speed of the high speed trains is a main reason, but one of the reasons that the journey times on HS2 will be faster is that those trains will only stop at Birmingham Interchange (which is a Park and Ride station really only accessible off motorways like the M6, which raises all sorts of issues) and Birmingham Curzon Street Station, which is pretty much in the city centre but less convenient than Birmingham New Street Station. The existing service actually services the core of the West Midlands very well. It stops at Coventry, which is one of the cities that will lose out. It stops at Birmingham International, Birmingham New Street, Sandwell and Dudley in the Black Country and Wolverhampton. For a lot of the journeys the experience and the journey time after HS2 is actually going to be worse. Indeed, that has happened in France. In Professor Tomanay's [Henry Daysh Professor of Regional Development, Newcastle University] evidence to the Transport Select Committee this week (which in terms of the economic regeneration arguments, I recommend people to read, because it was very clear and very objective, I think), he made clear the TGV, Paris to Lyon, has meant that for some sizeable towns in Northern France, like ours, the train service to Paris has actually got worse.

Richard Tracey (AM): So you two gentleman who are preaching the gospel of high speed, what do you say to that?

Adam Raphael (Director, Campaign for HSR): What I say to that is that you look at what has happened on the East Coast line and the sorry saga of development on that line, it was about four times over budget, years late. The trouble about trying to tinker with existing lines is that you run into all sorts of problems. I have no doubt about it there is huge disruption. May I say all the costs of it, of course, have not taken into account any of the costs of the disruption to existing travellers on the line. So, trying to tinker with that line, as I say, a mixed railway carrying freight and everything else at a time when the capacity is already under huge strain is, frankly, I think, madness. I listen with respect to Chris Stokes, who is obviously a distinguished railwayman, but I just think one has to see what has happened on that West Coast line and what the experience of that redevelopment has been.

Joe Rukin (Campaign Co-ordinator, Stop HS2): This is one of the things that does not make particular sense as there are particular, different ways of upgrading the existing network, such as longer trains, which does not really impact on the operation of the line. It is just a question of getting them to the yard, coupling up the new carriages and you are pretty much good to go. That on its own does not cause any disruption. It is when you get into, say, the wider aspects of options like Rail Package 2, which attacks a lot of the pinch points then you potentially have a knock on. However, with HS2 - let us be clear about this - Euston Station gets knocked down and completely rebuilt, the track sinks six foot and the buffers end up where the bus stops are now. That is going to take seven to eight years. That is going to have severe implications for everyone using not only Euston Station but it is going to knock-on on the rest of the London infrastructure. Of course, you have all the buildings where HS2 will cross roads. Working on the existing railway network you do not get that.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): I just wanted to say two things. If you are dealing with small capacity increases in terms of passenger numbers on the existing network with the same train parts there are two things that you would miss out. One of them is, actually, the increased freight capacity on the existing West Coast Main Line if you build HS2. So, actually, we can grow that and there is not any capacity to do that at the moment. I think also, if you are looking at it at the moment, it is a timetable that works very well if you want to travel between London, Birmingham and Manchester, but I think if you are travelling in the west and the north west there are areas that will miss out on the current timetable and actually you could use the West Coast Main Line to improve some services. You could also do additional investments to have additional rail links. I think it is the east-west rail link through to Milton Keynes which would give you some more capacity to do other things. I think Network Rail will probably tell you very much about the problems of upgrading an existing line.

Richard Tracey (AM): Right, but the demand forecast, this is something that is being questioned. Tell me what can we place credibility on the demand forecasts for the West Coast Main Line?

Adam Raphael (Director, Campaign for HSR): The only thing I can suggest, and this is a layman's answer to you, is look what has happened to rail travel over the last ten years.

Richard Tracey (AM): That is true.

Adam Raphael (Director, Campaign for HSR): There has been a huge increase and I do not think anyone believes that that increase is suddenly going to stop. There are very valid reasons

why that has happened. Look at the amount that petrol, car costs and other costs are going up, and congestion; the factors against car travel have moved very sharply against it. Rail fares, yes, have been increasing but at a much less rate - about a third of the rate - than car costs have been increasing. While those trends continue, unless you think somehow the oil is going to flow with abundance and that this Government is going to build new motorways and what have you, that would obviously change the whole complexion of it. My view is that is just not going to happen and that we are going to see more and more tough restrictions on road travel and in fact becoming more and more unpleasant. As far as air travel is concerned, which is the other alternative, frankly, personally I find that a fair nightmare already. So unless you think somehow these factors are going to change, which have driven this huge increase in rail travel, then somehow that capacity has got to be met. I just think you need to look at the immediate past, 10 or 15 years, rather than to try some airy fairy projections into the future where, frankly, even on the best models it is a guess work.

Richard Tracey (AM): Because obviously air travel as the alternative is one of the reasons why we are having this debate, is it not?

Richard Barnes (AM): Not to Birmingham.

Adam Raphael (Director, Campaign for HSR): No, not to Birmingham, I agree, but from Manchester and further north; but Chris, what do you have to say to this question of credibility in the forecasting?

Chris Stokes (51M): I show my age and I think it might be a useful insight; I actually remember the electrification of the West Coast Main Line in the 1960s when there was three, four or five years of very rapid growth and indeed, the Liverpool/London air link was abandoned. There was massive modal shift from the Manchester/London air link to rail and rail did very well but after that it plateaued for many years and then indeed declined somewhat as quality went down. Now, I think the recent upgrade of the West Coast route is actually replicating that and it would be amazing, given the step change in the quality of services that happened, a 20 minute frequency to Manchester taking two hours eight minutes, it would be amazing if there had not been rapid growth. Rail now has 80% of the Manchester/London air/rail market. For HS2, there are no flights, as has been said, from Birmingham to London obviously. There are no flights from Leeds to London now where has that market, so what is left directly affected by HS2 is Manchester to London where most of it frankly is interlining but the growth that has happened on the West Coast Main Line, I do not believe will continue into the indefinite future. In the same way, I remind you of the Eurostar growth, rail has captured the great bulk of the London/Paris market but that market is now saturated. Even in Japan, the Tokyo/Osaka/Shinkansen, that market is now effectively saturated and for city centre to city centre travel, I do not believe there is endless growth in prospect. Rail has most of that market now. I believe - and I think Richard would have a lot of sympathy with this - that to achieve modal shift, the focus ought to be on improving routes away from London because away from London, both InterCity and obviously commuter services, rail has a very small market share and there will be environmental benefits in improving its mode share elsewhere in the country.

Male Speaker (AM): So you would like to start from the two prongs rather than the Birmingham to London?

Chris Stokes (51M): It is difficult. Philip McNaughton, HS2's Chief Engineer, says rail only has 4% of the Birmingham/Manchester market. I do not know actually what the Birmingham/Manchester market is. I think the volume of people who travel from the centre of

Birmingham to the centre of Manchester is probably pretty low and it is the intermediate flows that one would want to look at.

Richard Tracey (AM): What about the state of the forecasting on HS1 because at least we have a model there to look at. How credible has the forecasting been on HS1?

Chris Stokes (51M): Sadly incredible. It is only running at 40% of the levels forecast for 2006. That is for the Eurostar services. The domestic services are a story in two parts. It is, I think, broadly meeting its forecast that was done quite well to Ashford where it does produce a step change but from North Kent and the Medway towns, it is pretty unpopular because it does not produce a major speed benefit and it takes many of the existing commuters to St Pancras Station which is not where they want to go, so they then have to take the Underground; they have to pay premium fares and they have to buy the Travelcard add-on to get there.

To get back to the City. The Medway towns' conventional railway takes people both to the West End, Victoria and to the City, Cannon Street, so provides very good distribution direct to where lots of people want to go. St Pancras does not, at the moment, fulfil that. There will be developments in the Kings Cross lands and it may generate its own market but for existing commuters, it is generally for North Kent and the Medway towns have been bad news.

Richard Tracey (AM): To an extent, you have already dealt with part of my next question but let us just go through it. Possible alternatives to building a new line; you have been talking about longer travel and those things but tell me, how do you think that the alternatives you suggest, you two that are protesting about this, how will the alternatives best serve London because we are the London Assembly and this is a London Committee? We are not really as much interested, obviously, in the rest of the country.

Chris Stokes (51M): In many ways, I think it comes to the opportunity cost. Forgive me, but I believe Government has started with this project and then built the business case to retrofit round it. Now, if you analyse the rail network in the round, I would argue that all of East Coast Main Line, Great Western Main Line, the Great Eastern Main Line into Liverpool Street, the South Western Main Line into Waterloo and the Brighton Main Line into Victoria and the City all have more urgent overcrowding problems in the round than the West Coast Main Line does. Some of these have been identified through Network Rail's own internal planning processes but if there is going to be £30 billion spent on the West Coast Main Line, I think it is naïve to believe that there is going to be significant expenditure on those routes. So commuters from Hampshire and Sussex and Essex are going to eat cake basically - they will have Hobson's choice - and I think that is a major opportunity cost and I think that matters to London. This is not actually the priority in my view.

Joe Rukin (Campaign Co-ordinator, Stop HS2): The bottom line is that HS2 still ongoing will demand about a third of the DfT's capital infrastructure budget assuming it stays at the levels that has been predicted; both the budget and the budget for HS2. So, obviously, other transport projects are going to lose out as a result which is one of the very big contradictions with HS2 because pretty much everyone who is proposing it is saying it will only work with additional spend in various areas like Centro, for example, the West Midlands Passenger Authority, is saying, "Yes, we need HS2 into Curzon Street and Birmingham Interchange but we need all this as well", and the problem is that where on earth is the money going to come from for any other projects because if a third entire department's transport infrastructure is going one rail project, then I would think that where is the rest of it going?

Richard Tracey (AM): That is actually a view of the rail industry, isn't it, that the £30 billion, or whatever it is likely to be, would be better spent on improving the rest of the network. Last week, I was dealing with an ITV documentary where the rail industry was talking along those very lines.

Chris Stokes (51M): I think the rail industry, in a sense, is quite constrained because it cannot really bite the hand that feeds it and if Government is saying, "We are going ahead with HS2", it is very difficult for anyone in the rail industry to oppose it because the rail industry is so dependent on Government funding.

Adam Raphael (Director, Campaign for HSR): Rail came out quite clearly well in advance of the election saying there was a very strong business case for the railway, so I find I dispute the idea that somehow they are against it.

Valerie Shawcross (Deputy Chair): Can I just come back to you, Richard. You made the point, I think, quite powerfully a couple of times that this project, HS2, should be placed within a national transport strategy and you have talked about capacity issues but is there a national transport strategy? Is there a plan that shows where we need more connectivity, where we need more capacity, what economic triggers we need in some areas and how we are going to promote more modal shift? Is there a plan which lies behind this that justifies this project in any way or is it, as Chris says, a sort of retrospective justification process that is going on at the moment? Where is the background plan?

Richard Hebditch (Campaigns Director, Campaign for Better Transport): I think there is a danger that it is a kind of a replacement for a plan. It is by saying you are doing something about meeting the future transport needs of the country, so there is a danger that it is not really seen as part of a real strategy. There are statements from Philip Hammond and others about rail that it should be the default choice for all inter-city journeys but, however, it is what else do you do to make sure that happens. I think one of the key things for us is about the relevant pricing of different modes of transport. So it has been the case, although fuel costs have risen recently, it is still the case that the overall cost of motoring is no higher than it has been for the last ten years; I think it is slightly less. So it is how can we make sure that rail is affordable and attractive to people and also how do we assure the additional investments across the rest of the network to realise the full capacity of HS2 as well. So what is our strategy in terms of trying to encourage more freight on rail as well? So all of the things are pretty short-term and I think one of the worries is that the spending squeeze we will face for some years to come will mean that we just deal with immediate things; that the long-term planning, the next kind of high level output specification for rail, will that set out a clear course for rail spending to try and achieve the maximum benefits from HS2?

Valerie Shawcross (Deputy Chair): I think that was no, but there is a multi-modal transport development plan for the UK with environmental and economic components.

Richard Hebditch (Campaigns Director, Campaign for Better Transport): No. I think what we have seen from the Government recently is the very strong focus on high speed rail is what has absorbed Ministers' attentions. So documents that should be doing that like the National Networks' National Policy statement have been put off and I think it is consultants that are writing it rather than it being something that is very driven by Government itself.

Valerie Shawcross (Deputy Chair): OK. So if you looked at just a capacity plan for rail aside from road and other infrastructure developments, you talked about the High Level Output Specification plan, is there a full capacity development plan for railways in this country?

Richard Hebditch (Campaigns Director, Campaign for Better Transport): We do not think so and it is also how it fits with the rest of the transport system as well, so there is an overarching kind of strategy towards that.

Valerie Shawcross (Deputy Chair): Would you say, therefore, that is a weakness in the case for HS2 that it does not sit inside either a multi-modal or even a railway plan for future development in this country?

Richard Hebditch (Campaigns Director, Campaign for Better Transport): Yes, we would definitely agree with that.

Caroline Pidgeon (Chair): OK. That comes to the end of our first half of this session, so thank you all very much indeed. I know you submitted written evidence as well. We are very, very grateful for that and your contributions this morning, so thank you for your contributions.

We will now move to our next part of the session where we have Ed Wilson from Network Rail, Sanjay Jamuar from Network Rail, and Richard DiCani from Transport for London (TfL).

Joanne McCartney (AM): This part of the session is particularly about the effects on London of HS2 because London is obviously vital to the success of HS2. We have had various representations from different boroughs; some are very enthusiastic and see it bringing lots of economic benefits to their boroughs and other boroughs are not enthusiastic at all. I take, for example, the London boroughs of Camden and Hillingdon in particular who have issues with current proposals. I notice that TfL and London Councils have said that more needs to be done to mitigate the environmental and social effects of the line as it runs through London. Can I just ask some questions about general principles as opposed to going into details about use to the Old Oak Common because I know other people have questions on that shortly? Can I just ask, from a general point of view, do the current proposals offer the best deal for London and is enough being done to mitigate those costs, those environmental costs and other costs as well?

Richard DiCani (Director of Strategy and Policy, Transport for London): OK. I think one of the previous speakers summed this up very well that this is not the only part of a National Transport strategy that needs to be delivered. There are all sorts of transport pressures that London faces over the next 20 years many of which we believe are more important than HS2 and more pressing in terms of their problems. It is part of a mix of things and it is very focused on national connectivity and the Mayor's Transport Strategy supports improvements to national connectivity between London and the rest of the UK. So it ticks that box, but it is one of the things we think is important. As a principle, the concept of high speed rail is supported. This particular proposal that is put to us has a number of problems for London and what we have been looking is how we can make it work better for London. Those problems are partly transportation problems, which we will talk more about in terms of dispersal and capacity, but also environmental problems as well because obviously coming through West London and North London into Euston. That is the most built up part of the HS2 route, so whilst there is a lot of complaints from people in the Chilterns, which is clearly a rural area, the area where people are affected is London and we think more needs to be done in terms of mitigation and HS2 need to look more carefully at the impacts on London as well as the important issues in the Chilterns as well because there are people affected in London in a way and in the concentration that are not affected elsewhere on the route.

Ed Wilson (Head of Public Affairs, Network Rail): We come from a national perspective obviously as the owner and operator of the national infrastructure, so we do not have the

specific London focus that Richard [DiCani] and his team do. We support the project. We did about 18 months worth of analysis in 2008 and 2009 that concluded essentially that some form of step change intervention was required for national rail network capacity. In terms of the specific question, there are clearly some impacts of building a project of this scale in London, in the Chilterns and elsewhere. We are not here to defend HS2 specifically. We feel they have made some efforts towards mitigation but it is clear from the opinions that have been shared by TfL, by councils, by individuals frankly who have been affected that they might need to look at a bit more mitigation frankly.

Richard Barnes (AM): Can I have clarification? You support the project. Now, is the project high speed rail or is the project HS2 and this identified route?

Ed Wilson (Head of Public Affairs, Network Rail): We support this project.

Richard Barnes (AM): This route.

Ed Wilson (Head of Public Affairs, Network Rail): This route; we think they have a pretty good route, frankly. It is difficult to build a railway between London and Birmingham without causing some severe impacts frankly. We ourselves did our analysis and we concluded that you cannot follow the path of the West Coast Main Line; that does not work for a high speed railway of this kind. We support this project. We support high speed rail in general but fundamentally, that is on the grounds of capacity.

Richard Barnes (AM): I asked, Madam Chair, because there is an enormous difference between supporting high speed rail and supporting the identified route for HS2 which devastates part of London.

Joanne McCartney (AM): OK. I think the devastation that Richard refers to is partly because this is overground and there has been suggestion there should be more thought given to tunnelling particularly through those highly dense areas. Has that been considered adequately or is it merely a case that is going to be more expensive so it is not going to be looked at?

Ed Wilson (Head of Public Affairs, Network Rail): Clearly, it would be more expensive to tunnel. It is in a tunnel to Old Oak Common and then it uses an existing alignment until Northolt and South Ruislip and then it is elevated across the River Colne and its valley in Hillingdon and then in the tunnel thereafter.

Richard Barnes (AM): That sounds very easy.

Ed Wilson (Head of Public Affairs, Network Rail): It is not easy but they could go into tunnels but, in actual fact, these are deep tunnels and excavation is difficult although the technology clearly exists. There is a cost issue clearly but actually, broadly speaking, we think looked at dispassionately, it is not a bad route.

Joanne McCartney (AM): Can I ask on a project of this size, you would normally look at different options and different routes. I assume Network Rail will be one of the main stakeholders that were consulted about routes. Were alternatives looked at and discarded or not?

Ed Wilson (Head of Public Affairs, Network Rail): There are 18 interfaces between the current project that is on the table and the National Rail Network, so clearly we were consulted. My understanding, and I am not speaking for Network Rail here, but my understanding and

obviously DfT and HS2 are not here, was that they considered a number of routes and they plumped for this one, but the reason they did not put four out into the public domain was because of the potential for blight on the three that were ultimately not chosen.

Joanne McCartney (AM): So there has been no public consultation or knowledge of alternative routes at all as far as we are aware. Is that correct? You said there were three other --

Ed Wilson (Head of Public Affairs, Network Rail): My understanding is that they looked at a number of routes, specific alignments, but they did not want to put out multiple alignments for fear of causing blight on properties on four times as many properties for years to come.

Joanne McCartney (AM): So to date, there is been no democratic scrutiny of those alternative proposals.

Richard DiCani (Director of Strategy and Policy, Transport for London): When you look at some of the background material that HS2 has produced as part of the consultation, it does provide some detail about routes that it has considered and discounted; what it does not do is invite people to comment on those routes but it does set out other options that have been considered. So people who were minded to review all that documentation could see previous routes and maybe suggest alternatives that they felt were better but it has not actively sought people to comment on the alternatives, no. It is a single route.

Ed Wilson (Head of Public Affairs, Network Rail): There were a number of changes made by the Secretary of State to the alignments pre-consultation; about a dozen or so.

Joanne McCartney (AM): Can I ask where you consulted as well on those alternatives and did you feed into any consultation?

Ed Wilson (Head of Public Affairs, Network Rail): We have been in constant dialogue with HS2 Limited and DfT about this but not a formal consultation process.

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): I entirely support what Ed has said and what Richard said about the various alternatives that HS2 Limited had listed and applied a decision criterion; a multiple disciplinary criterion in order to select this particular route but the details of the alternatives which were considered has not been consulted.

Joanne McCartney (AM): Richard, you might be able to help me with this; I understand that your residents in particular have difficulties because they do not actually know the exact route to date. Is that correct?

Richard Barnes (AM): We have a black line on a map but the map page is very unclear. The detail of the information which is available to people is poor. The so-called spur loop, or whatever one wants to call it which we will come on to, to Heathrow, which has a major impact on West Ruislip and Northolt is not clear on the drawings, if indeed it exists on any drawings which is in the public domain. It is such a consultation that is so poor in its information that it is fundamentally flawed; but I recognise that HS2 are the founts of all knowledge.

Joanne McCartney (AM): Sanjay, I do not know if you could offer any clarity with that or any detailed mapping that would have the exact route on it.

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): It is not part of Network Rail's infrastructure. This is HS2 Ltd's proposal towards doing Heathrow and HS2 Ltd should comment upon it.

Ed Wilson (Head of Public Affairs, Network Rail): Ultimately, HS2 Ltd would have to comment on the consultation materials that have been released rather than ourselves, I am afraid.

Richard Barnes (AM): It underlines our first discussion, Madam Chair.

Caroline Pidgeon (Chair): Exactly. We are very grateful you are here but we were expecting DfT and HS2. It is extraordinary that they are not prepared to come along and sell and talk about their project. We want to hear both sides.

Jenny Jones (AM): Could I come in very briefly on this. It is a question to TfL and to Network Rail. The Mayor of London I think has expressed some problems with the current routes and so on and suggested tunnelling. Has he asked you to work up any figures on that? Has he asked you for an estimate of how much extra it would cost?

Richard DiCani (Director of Strategy and Policy, Transport for London): Not specifically, no because that is something that is quite a specific job. It is something for HS2 to look at but what we have said to HS2 is that bringing the route to surface at Old Oak Common because there appears to be an existing railway corridor that it might be convenient to use is not necessarily the right solution and they should consider tunnelling to the London boundary because that way we would avoid the main areas of population. It is slightly odd that they are looking at tunnelling and culverting in the Chilterns to protect the rural landscape but where there are people - they are looking at surface - so we are saying it needs to be switched around. Clearly, there is an issue about rural impact as well but you also need to look at the impact on people, so we are making a very clear case to HS2 that they should look at more tunnelling in London to take it to the London boundary.

Jenny Jones (AM): Whose job is it then to work up the figures on this and just how much extra it will cost?

Richard DiCani (Director of Strategy and Policy, Transport for London): My understanding of what happens next is that all the responses to the consultation will be digested and reported to the Secretary of State and then the Secretary of State will have to decide later in the year what he wants to do next. If he believes there is a need to --

Jenny Jones (AM): Or she.

Richard DiCani (Director of Strategy and Policy, Transport for London): Or she, but if they believe there is a need to do further design work on some areas of the route, then that is a decision for them to make in the autumn time.

Richard Barnes (AM): If I can help, tunnelling through the Hillingdon part of London would cost an additional £330 million and that is the figures that Hillingdon Council have given. That does not include any tunnelling which might be needed for the Heathrow loop.

Ed Wilson (Head of Public Affairs, Network Rail): Just in answer to the specific question, we have not been asked to look at it but we would not expect to be asked but Richard's

absolutely right that the consultation concludes at the end of this month and the Secretary of State is expected to pronounce towards the end of the year; December time, I think.

Murad Qureshi (AM): One of the main questions that has been hanging around clearly is why Euston Station? What are the main benefits of going into Euston for the HS2 rather than any other central London option? Clearly, Network Rail has been privy to other central London options and it would be useful to know from yourselves first why you have come out in support of this option when all the other central London options were considered.

Ed Wilson (Head of Public Affairs, Network Rail): The capacity pressures on the existing rail network are at their most acute on the West Coast Main Line. Now, the West Coast Main Line essentially serves London which is clearly our capital, our economic centre and also our railway hub for the national rail network, Birmingham, the second largest in the West Midlands, the second largest conurbation and Greater Manchester. So that alignment, broadly speaking, is there.

There is obviously a certain logic to having it in that, kind of, Euston Road corridor that runs pretty much from Euston down to Kings Cross stations. We initially looked at the idea of a brand new brownfield site terminal but that is not really feasible now given certain developments. So we think in conclusion that Euston Station is the sensible choice.

Murad Qureshi (AM): You have not mentioned any other centres in central London as options that you considered. Did you just go straight to this and not look into those at all?

Ed Wilson (Head of Public Affairs, Network Rail): As I say, Murad, we did an 18 month piece of analysis over 2008/09 and we looked at all sorts of options at that point but that piece of --

Murad Qureshi (AM): Could you name some of them?

Ed Wilson (Head of Public Affairs, Network Rail): As I said, we looked at Euston; we looked at a brownfield site.

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): We looked at 18 sites including Waterloo, South of London, North of London, West London, East London and we applied criteria which are to do with cost, constructability, feasibility, and Euston has scored very high.

Murad Qureshi (AM): I am just keen to have that emphasised because in the submissions made, we have had Newham Council, for example, putting in a case for Stratford and the new international station there. That seems to have been dropped at some point and it would be useful to know when and where that happened. Now, you have been privy to more information than any of us have, so it would be quite useful.

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): Specifically, I will not be able to tell you how Stratford has scored against Euston but I can assure you that Euston scored higher than Stratford for us to favour it as a London terminal.

Murad Qureshi (AM): Thank you. To what extent has Crossrail been involved in any consultation in, for example, consideration of brownfield sites like Old Oak Common?

Ed Wilson (Head of Public Affairs, Network Rail): I am assuming that Crossrail is in dialogue there but Richard is probably better placed to answer that.

Richard DiCani (Director of Strategy and Policy, Transport for London): Absolutely. The process that has happened over the last three years around station locations has been led by HS2 with input from Network Rail and TfL has been involved in some of that work where they have sought our views on different station locations. Now, we have made the case throughout that if you are having a high speed network to the North of London, it needs to serve central London, not the edge of London because that creates a huge problem for them moving people to that station because from HS2's own analysis, 80% of HS2 journeys will start or end in London; so London's kind of the big station so it has to be accessible. There is no site that has sufficient capacity or links to serve that level of demand. The one advantage of Euston Station is it is relatively central; it has the potential to be rebuilt in terms of its station infrastructure. There was already a proposal by Network Rail to rebuild it anyway but even in Euston Station, there is a critical need to provide more capacity to make it work. The other options that we were asked to comment on were options around the Olympic Park and we thought that had some potential, but again you have to move everybody from central London, west of London, south of London to get to the Olympic Park which itself creates capacity issues. We were asked to look at some of the other options, the kind of blue sky thinking around new stations, for example, under Hyde Park and things like that and what would that do? There has been quite a wide spread of options that have been considered by HS2 for stations and we have inputted to some of that process.

Murad Qureshi (AM): Could you just clarify what TfL considers to be the disbenefits of making Euston the hub of HS2 in central London?

Richard DiCani (Director of Strategy and Policy, Transport for London): The specific problems that we have with Euston, that we would have with any location, is the ability to connect people to and from it because it is going to be a generator of an awful lot of demand. So there is going to be a huge increase in people wanting to get to and from wherever this terminal is. The whole philosophy behind HS2 is a network that connects the whole of the north of England. The Birmingham bit is almost sort of irrelevant in terms of scale. What we are interested in is the implications of the whole network which is connecting Leeds, Newcastle, and Manchester all into one station. So at the moment, we have this demand to the north that is spread across three terminals: Kings Cross, St Pancras and Euston. In the future, most of it will come into Euston because that is the philosophy behind HS2 - to bring it into one place - and that means you need a very big station and there is an awful lot of people who have to be connected to and from it. So the big issue for us, wherever it is, is how you connect people to and from it.

Brian Coleman (AM): Of course, Euston Station is firmly in my constituency of Barnet and Camden. At the outside, I think the whole project is stark staring bonkers but anyway, that is another issue. Specifically on Euston Station, when High Speed 1 was put into St Pancras Station, if my memory serves me, it was deliberately put in because St Pancras Station was considered grossly underused and having immense spare capacity. There was the odd train to Bedford and wherever from St Pancras Station but not a lot else going on there. That is surely not the case, Mr Wilson, with Euston Station?

Ed Wilson (Head of Public Affairs, Network Rail): No. Euston is an extremely busy station, undoubtedly.

Brian Coleman (AM): Are there any other London termini that have spare capacity?

Ed Wilson (Head of Public Affairs, Network Rail): Not long-term, no.

Brian Coleman (AM): OK, but the sheer destruction that is proposed around Euston Station, this is quite destructive; it is quite bizarre and particularly around the Somers Town area which I have to hand it to Camden Council, they have done millions of pounds of work over the years and the scuppering of planned regeneration just somehow, have all these factors been brought into account?

Ed Wilson (Head of Public Affairs, Network Rail): Ultimately, that is a matter for the DfT and HS2 to consider.

Brian Coleman (AM): No it is a question for Network Rail. Did you consider the blocks of flats that have to be demolished?

Ed Wilson (Head of Public Affairs, Network Rail): In terms of supporting Euston as the terminal for HS2?

Brian Coleman (AM): Yes.

Ed Wilson (Head of Public Affairs, Network Rail): Yes, up to a point in the sense that we were conscious that there will be significant efforts for communities along the line and clearly in London, as Richard mentioned.

Brian Coleman (AM): Yes, but with all due respects to my many friends in the green and pleasant lands of the Chilterns there could be the old houses along the route and that is all very nasty and unpleasant. We are talking blocks of flats here. I am not sure how many blocks of flats there are in Amersham that have to be demolished but I am sure there are some poor folk who are going to lose their houses; but we are talking significant numbers of residents here in the way that we are not in the Chilterns, unpleasant though it is for the residents that are affected.

Ed Wilson (Head of Public Affairs, Network Rail): The size of the terminal that is required for the services on the existing infrastructure and HS2 means that the footprint is larger than the existing footprint for the station and that means that there is going to be some demolition particularly on the Melton Street alignment.

Brian Coleman (AM): Yes. We are even losing a former burial site, a public park, a hotel - when we are supposed to be building more hotels in London - and possibly even a convent school.

Ed Wilson (Head of Public Affairs, Network Rail): Indeed, one of Network Rail's offices.

Brian Coleman (AM): I am less worried about Network Rail's offices. Will Euston Station be closed for any of the seven-year build?

Ed Wilson (Head of Public Affairs, Network Rail): Clearly, Euston Station is still going to need to be operational throughout the construction period undoubtedly, but we do not know the details of this yet.

Brian Coleman (AM): I may have misunderstood what we were told earlier; something about Euston Station could only function at 40% capacity. Is that what we were told earlier, Chair, during the seven-year construction work?

Ed Wilson (Head of Public Affairs, Network Rail): I did not pick that up exactly I have to say.

Brian Coleman (AM): So what would 40% capacity availability of Euston Station do to your services?

Ed Wilson (Head of Public Affairs, Network Rail): We can look into that and see what that would be but, ultimately, we need to work with all the parties and that is TfL, that is HS2 Limited, that is DfT, to work out how we keep the station operational throughout the construction phase; but clearly, on a project of this scale, there is undoubtedly going to be some disruption. It would be misleading to claim anything else.

Brian Coleman (AM): What my argument is, even if I was in favour of HS2, which I am not, I would not be in favour of Euston Station as the terminal for putting it in because the arguments that apply are, in fact, the same arguments applied to the third runway at Heathrow. Now, Heathrow is too busy, so why would you put a third runway and a sixth terminal and everything else into Heathrow which is already too busy? Why would you put in another train line into Euston which is already packed to the gills not just at rush hour actually?

Ed Wilson (Head of Public Affairs, Network Rail): I think Richard's point about dispersal of people who are arriving is entirely valid. We have made some recommendations of our own.

Brian Coleman (AM): Sorry to interrupt you. It is entirely valid but Mr DiCani, the Tube station at Euston struggles now to cope. It is only on two lines. At Kings Cross and St Pancras stations, you have six or seven, whatever the number of Underground lines is. You only have those two lines. The good old Northern line packed to the gills, certainly at rush hour, and the Victoria line where I regularly have to wait for four or five trains to go through Euston before I can get on one.

Richard DiCani (Director of Strategy and Policy, Transport for London): I think it is very clear from the analysis that we have done is that you need a new Tube line to enable us to work at Euston Station.

Brian Coleman (AM): Could you tell us whose budget that is in then?

Richard DiCani (Director of Strategy and Policy, Transport for London): It would have to come through the funding we get from the DfT. We are looking at a world in 20 years' time. We are looking at growth that is already forecast to take place in London through the London Plan [the Mayor of London's spatial development strategy]. We are looking a major increase in demand on the National Rail Network for all the capacity that has been provided even before you get to HS2 and then you concentrate all this demand at Euston Station. So the existing network, it is obvious for anyone who uses Euston Station at the moment that you have to wait to get on the Victoria line and the Northern line. There is no point spending money to save journey time to come from Birmingham to London if you have to queue for 20 minutes to get on the Victoria line. So you need more Tube capacity and that is a very strong part of the case we are making to HS2. You can play with statistics to prove that the impact is not that great at certain times of the day but it is a commonsense argument we are making. The scale of growth is very, very significant and we need more capacity.

Brian Coleman (AM): The rough cost of such a Tube line? I know you are going to say it depends where it goes but it would have to be an additional cost to HS2.

Richard DiCani (Director of Strategy and Policy, Transport for London): It would be somewhere between £6 billion and £9 billion. Just to make that point very clear. The need for the Tube line is not driven purely by HS2; it is a combination of that plus the growth that is happening anyway.

Ed Wilson (Head of Public Affairs, Network Rail): In terms of the number of people arriving at Euston Station, we believe that Old Oak Common will take some of the people coming off HS2 who can join at Crossrail at that point. We ourselves have made a recommendation that consideration should be given to linking the West Coast Main Line to the Great Western Main Line where they get very close to each other in North West London and in addition, the Crossrail aspiration, the Hackney to Putney line, we support TfL.

Caroline Pidgeon (Chair): I just wanted to pick up one point we particularly raised when we did our site visit. It is such a huge footprint you are looking at for Euston Station and all those buildings at the side that will be knocked down, let alone the tower block further down. What could be done? Could you look at stacking the trains? Are there different ways you could reduce the footprint; a different design of the station?

Ed Wilson (Head of Public Affairs, Network Rail): HS2 looked at the double-decker station and discounted it but you would need to ask them particularly what their analysis was on that.

Caroline Pidgeon (Chair): That is a possibility? You could double-deck the station to make it a smaller footprint, but HS2 rejected it?

Ed Wilson (Head of Public Affairs, Network Rail): They did look at this is my understanding but they have concluded that it is not the appropriate option but you would need to ask them as to what drew them to that conclusion.

Caroline Pidgeon (Chair): Richard and Sanjay, technically is it possible to reduce the footprint?

Richard DiCani (Director of Strategy and Policy, Transport for London): Absolutely. You see it elsewhere in Europe and around the world. I think it is worth pointing out; there are not any specific designs or proposals for Euston yet because what has been presented by HS2 is a sort of blocks and massing showing an area. We actually have not seen a station design to see how this can work effectively. One of the things that we are suggesting that should go in the Mayor's response is seeking greater involvement and definition around Euston as soon as possible because there is absolutely a number of ways you could design this to mitigate the impact both externally but also to make it work better internally.

Caroline Pidgeon (Chair): That is what we are thinking.

Jenny Jones (AM): One of things we heard on our site visit was that the reason that it comes so far forward and covers the current forecourt area is because the trains have to come in the station straight and they cannot come in on a curve. Is that correct?

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): One of the reasons why they are as far south as indicated on the map is because of the requirement for a 400 metre platform in compliance with the regulations; the particular standards for High Speed. Also it is good practice not to have stations on a curvature but to have them on straight lines.

Jenny Jones (AM): OK, but could you not just push it all back a bit?

Sanjay Januar (Senior Sponsor for HS2, Network Rail): There is the dual requirement of longer platforms and to maintain a certain track configuration on the country end and that limits where you can locate the station; but, like Ed said before, the specific questions with respect to a station design will have to be addressed by HS2 Limited and not by Network Rail.

Brian Coleman (AM): Just a quick question, Mr DiCani. You say TfL is suggesting to the Mayor that he might even be stronger than that and reject Euston Station as the terminal of HS2.

Richard DiCani (Director of Strategy and Policy, Transport for London): The Mayor's Transport Strategy supports the central London terminal for HS2 because of the issues we talked about before in terms of dispersal. It identifies Euston Station, out of those options that have been presented to us, as the preferred option.

Brian Coleman (AM): Sorry to interrupt but the Mayor's thinking is moving, isn't it, on HS2, as shown in a letter that he wrote the other day? His thinking has moved considerably. Although he remains, as I understand it, committed to the principle of it, he has now this long list, does he not, of objections to HS2? So the Mayor's Transport Strategy is now a year or two old. Could I suggest the Mayor's thinking may have moved or TfL may wish to advise him to move his thinking?

Richard DiCani (Director of Strategy and Policy, Transport for London): It is not for me to say what the Mayor's view is specifically but the advice that we are giving in terms of the transport impacts are setting out what the big issues are around HS2 that I am sure the Mayor will take into consideration in his response.

Caroline Pidgeon (Chair): The ask that is needed in London if it is to go ahead basically.

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes, what could make it work; what you need to make it work.

Richard Barnes (AM): Just a very quick question before we move on to the next area. We have identified £69 billion additional for the Tube network to do some work. The figures in the public domain at the moment are around about £34 billion to build the link from London to Birmingham. Does that include the cost for the full rebuild of Euston Station that you are talking about now or is that going to be in addition as well or are they, like most Irish builders, saying it is going to be roughly that? Are we working on estimates?

Richard DiCani (Director of Strategy and Policy, Transport for London): None of the HS2 figures for costs include the cost of building or the mitigation we are saying is necessary in London; that is all additional to what they are currently assuming is the cost. What we have looked at is not just the Phase 1 impact but the whole impact of Phase 2 because Euston Station will only get rebuilt once. It will get rebuilt in Phase 1 to do the job it needs to do for the whole network, so we are making the case that you need to make sure it is built with enough capacity on day one to deal with the whole of the HS2 network and that means that you need to forward front some costs to make that work in mitigation, considerable costs to do things like the new Tube line and all the other things we will need for London's transport connections.

Richard Barnes (AM): Clearly, you have not just dealt with the philosophical concept. Have you put the numbers to what would be needed?

Richard DiCani (Director of Strategy and Policy, Transport for London): What we have already and the Secretary of State has already safeguarded the route of a new Tube line across London, that has been safeguarded for a number of years, it was called the Chelsea/Hackney Line, Crossrail 2, and that was identified to deal with London's growth over the next 20 years but also to disperse people from London's terminals. This problem of dispersing people is not a new one. It is a problem we have today; we have had it for many years and it is getting worse every year. What we are saying is that that route that is already safeguarded by Government needs to come forward and be delivered to make HS2 work, so it is a priority for TfL in terms of our funding from Government as an enabler of HS2 if you like.

Richard Barnes (AM): We are looking at the business case and we have the arguments. What are the numbers for the mitigation works that you believe need to be done?

Richard DiCani (Director of Strategy and Policy, Transport for London): As I said, the costs of a new Tube line, again it has not been designed, but we are looking at between £6 billion and £9 billion. There is the mitigation you would need at Euston Station in terms of the bus network and the bus and taxi facilities and making the whole thing work from a public realm perspective and then there is the issues at Old Oak Common in terms of transport connections as well which we may be coming on to with some separate questions. In addition to that, there is the environmental mitigation we are saying is necessary to the route through west London which is not included in those costs at the moment either.

Richard Barnes (AM): Have you put a price on them?

Richard DiCani (Director of Strategy and Policy, Transport for London): To the whole package?

Richard Barnes (AM): Yes.

Richard DiCani (Director of Strategy and Policy, Transport for London): No, we have not.

Richard Barnes (AM): Rough estimate?

Richard DiCani (Director of Strategy and Policy, Transport for London): It is difficult to be drawn on a rough estimate because --

Caroline Pidgeon (Chair): Put something in writing to us maybe because we are working on it for the next week or so.

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes, we can follow that up with some specifics if that would be helpful. Yes, we can follow that up.

Caroline Pidgeon (Chair): It would be helpful for our response, so great.

Victoria Borwick (AM): If we could go back to Old Oak Common and Heathrow and the access and the connectivity there, why Old Oak Common particularly in view of the fact about the 400 metres platform and the curves and everything and why not direct to Heathrow? Just give us a bit of a flavour to as how this was chosen and how it is going to be taken forward.

Richard DiCani (Director of Strategy and Policy, Transport for London): I can kick off that first from our involvement around Old Oak Common. HS2 is responding to a remit that has been set for them by the Secretary of State, so that is the remit for HS2 and that is publicly available on our website and that sets out the objectives for HS2. That includes having a connection to Heathrow, so from HS2's perspective, Old Oak Common is doing two things. It is providing the ability for a connection to Heathrow in the first phase.

Victoria Borwick (AM): It could not just go directly to Heathrow?

Richard DiCani (Director of Strategy and Policy, Transport for London): There is that alternative but what they are saying for Old Oak Common, in the first phase, Old Oak Common can provide that connection by linking in with Crossrail. It also provides a way of dispersing passengers across London. If you extend Crossrail to Old Oak Common, the estimates are around about a third of people will interchange at Old Oak Common to go east to the West End, the City, Canary Wharf.

Victoria Borwick (AM): As opposed to?

Richard DiCani (Director of Strategy and Policy, Transport for London): Going to London, Euston and then changing on to the Victoria and the Northern lines or whatever. So I think from a transport planning perspective, Old Oak Common is extremely sensible because it does do that dispersal. We would endorse those figures of around a third of people changing at Old Oak Common on to Crossrail.

Victoria Borwick (AM): Therefore, less would interchange at Euston; just going back, following on from what we have just been talking about.

Richard DiCani (Director of Strategy and Policy, Transport for London): Absolutely. All those things you need to do at Euston Station take that into consideration. The problems we have with Old Oak Common are that the current proposals are completely landlocked. It is being looked at purely as a rail to rail interchange. Clearly, having something of that significance in terms of transport access ability is a major benefit for the whole of the London economy particularly west London, south London and north-west London and what we are suggesting is that the station there should be connected to the wider transport network. People who live in west, south, north London can access it to avoid going into central London but also they can access that new rail hub to change on to services to Heathrow, to central London, to north London, so we start to have the kind of strategic interchange in west London that you have in places like Stratford where you can move orbitally, radially and connect to all these different lines together. So we understand HS2's starting point on Old Oak Common to deal with their problems but from a London perspective, it is just not enough. It can do so much more if you plug it in.

Victoria Borwick (AM): Just like we talked about, the whole reconstruction around Euston Station, are you saying we could not have a similarly massive reconstruction around Old Oak Common?

Richard DiCani (Director of Strategy and Policy, Transport for London): The construction at the station of Old Oak Common is significant in itself. It is a very different context. It is railway land; it is not without challenges but it is a very different environment. I think the broader issue there for the local boroughs to look at is the potential catalyst that is going to create in terms of development potential and what that means for the future of that

area. Again, when you look at Stratford and you look at what has happened around Stratford, it will change the whole perception of that part of London. So connecting it into the transport network is really important to do that.

Victoria Borwick (AM): Just to park that for a minute, what about just going straight to Heathrow because you touched on that earlier?

Richard DiCani (Director of Strategy and Policy, Transport for London): Just to be clear on what HS2 is proposing, the first phase is to connect it via Old Oak Common. The second phase, which includes the Birmingham and the Leeds connections, will have a direct loop or a spur to Heathrow and those details are not clear yet. It is sort of lines on maps; that is what we do not know. When you look at the demand for having a direct connection to Heathrow, there is actually quite low levels of demand for people wanting to access Heathrow by high speed rail and the connection via Old Oak Common using Crossrail, Heathrow Express. If it is designed properly it will give you a much better connection to Heathrow than you have at the moment, so we think from a transport perspective, the Old Oak Common link could work very effectively for Heathrow.

Victoria Borwick (AM): Then you would also have to change around both the Underground and road network to facilitate the interchange?

Richard DiCani (Director of Strategy and Policy, Transport for London): At Old Oak Common?

Victoria Borwick (AM): Yes.

Richard DiCani (Director of Strategy and Policy, Transport for London): Absolutely, because at the moment the area is completely landlocked in terms of railway land. You would need road connections, you would need the rail connections I talked about, bus connections, walking connections; you would have to open up that part of London to the rest. It is hinterland which it just does not relate to that at the moment.

Victoria Borwick (AM): Again, rather like the question you were asked previously, have you any idea of what the sort of implications of the costs of that would be?

Richard DiCani (Director of Strategy and Policy, Transport for London): No, but there is a lot of things that we are saying are necessary that are not currently part of the HS2 proposals.

Victoria Borwick (AM): No, so it is important those are registered.

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes.

Victoria Borwick (AM): Does anybody else want to come in on any of those questions? If anybody has any other ideas, please come in.

Ed Wilson (Head of Public Affairs, Network Rail): I would support everything Richard has said pretty much. The only think I would add about Heathrow is going via Heathrow adds journey time and bearing in mind the appraisal methodology that is used by the Department for these schemes, that is a negative and given the lower levels of predicted demand for people who want that direct link to Heathrow, that undermines it and we did not feel that there was a business case in our analysis to go via Heathrow but we can understand that there is a transport case to do that and we understand why the Government is proposing what it is proposing.

Victoria Borwick (AM): So what costs are included in the £34 billion of the Old Oak Common interchange that you were talking about? Are these all extra costs?

Richard Barnes (AM): The £34 billion is projected build costs London into Birmingham.

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes.

Richard Barnes (AM): The development that was necessary at Old Oak Common, and I know it, that is not part of those figures, is it?

Richard DiCani (Director of Strategy and Policy, Transport for London): No. Very little of the work we are suggesting is necessary at Old Oak is included in that base cost.

Victoria Borwick (AM): You had said that.

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes.

Victoria Borwick (AM): Fine, OK. Any other things, Sanjay, that you want to add on either about maximising the transport or any of the other things you want to talk about and feed into this discussion about Old Oak Common, Heathrow or anything else?

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): Nothing beyond what has been said already. One of our ongoing Route Utilisation Strategies for London and south-east London has recommended for consideration a direct link between West Coast Main Line and Crossrail through Old Oak Common which will alleviate some of the crowding and some of the dispersal problems at Euston Station in the future.

Victoria Borwick (AM): Does it have to be there or what about Waterloo or Euston Station? Are there any other alternatives? We just want to explore those.

Ed Wilson (Head of Public Affairs, Network Rail): Old Oak Common will provide the link to Crossrail; that is the key thing whereas, as we have discussed, HS2 will still go into Euston Station. Old Oak Common will help with the dispersal of people; I think Richard mentioned a figure of about a third is the analysis that is showing. Waterloo Station would not provide that link and in terms of an actual link to Crossrail, I think realistically Old Oak Common would be the only one, yes.

Caroline Pidgeon (Chair): I just wanted to get absolutely on record because we had heard from people who thought it could go to Euston and then go somehow under London to Waterloo. We also had evidence come in about whether it goes to Heathrow and then through the Airtrack route. I know the Airtrack project is dead but to go around then into Waterloo Station from Heathrow. Is either of those options viable at all?

Ed Wilson (Head of Public Affairs, Network Rail): I would not want to comment on the second without doing some analysis. Just in terms of a broad comment on the first, on the idea of going under, there is an issue in that the rolling stock that would be used on HS2 will presumably have doors at either end of the carriage and will have a certain dwell time when it is stopping whereas for Underground lines through from Euston via Tottenham Court Road maybe down to Waterloo stations, you would probably need a slightly different type of rolling stock, I would suggest, for that kind of line. It would be an informal view. We would need to look at in detail.

Caroline Pidgeon (Chair): Is it technically possible because I think when we came and did the site visit, we had heard it just couldn't happen because of the steepness that would be needed and the sort of speed the trains would be going?

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): To tell you the truth, we have not done the technical feasibility in order to have confidence in either way. We have not tested the hypothesis, basically.

Ed Wilson (Head of Public Affairs, Network Rail): It is complex under there though with the Northern line and everything.

Caroline Pidgeon (Chair): Richard, have you looked at that at all?

Richard DiCani (Director of Strategy and Policy, Transport for London): If the proposal is to take high speed south of Euston Station, through Tottenham Court Road Station and then rise up at Waterloo Station to use the old Eurostar platforms, then you have to go under the Thames and you have to clear the Bakerloo and the Northern line. So you are starting from a low point and then the old Eurostar platforms at Waterloo Station are elevated. So to come from that point to that point, you have quite a gradient and you're going through the Southbank area. It is difficult to see how that could happen.

Caroline Pidgeon (Chair): So let us be really straight, it is not your preferred option.

Richard DiCani (Director of Strategy and Policy, Transport for London): I have not looked at it. I am just commenting on the suggestion.

Richard Tracey (AM): I think on that point that Richard has just raised, from discussions that I have had with the DfT and so on about the under-capacity of the Windsor line that runs into Waterloo, there are all sorts of arguments and Val knows too, for using those platforms to take the pressure off.

Caroline Pidgeon (Chair): I know. Because there are all these options out there, I just wanted to be clear is it possible and you are not really sure if it is possible.

Richard DiCani (Director of Strategy and Policy, Transport for London): I have not seen any engineering work to prove that it is and it would just be extremely difficult and complex.

Caroline Pidgeon (Chair): No, it would be very complex.

Victoria Borwick (AM): It is probably even more complex than the work you would ideally need at Old Oak Common.

Richard DiCani (Director of Strategy and Policy, Transport for London): It would need more billions required.

Richard Barnes (AM): Mr Jamuar, I know your title is Senior Sponsor for HS2. What does that mean?

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): It means that we are basically looking at all the interfaces that the future high speed line will have with the national network and we are working towards managing those interfaces with HS2 and DfT.

Richard Barnes (AM): Yes, OK. You have looked at the London end of those interfaces.

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): Yes, starting with Euston Station.

Richard Barnes (AM): How content are you with those interfaces?

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): Like Richard and Ed said, right now we do not have sufficient information, a sufficient level of information required, to do a detailed analysis.

Richard Barnes (AM): Is that what you are telling the DfT and HS2?

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): Yes, and we are engaged with HS2 and the department so that we have better visibility of the design so that we can define all the risks arising out of construction and operation at Euston and we can mitigate those risks.

Richard Barnes (AM): Yes but at the moment, you are telling them you do not have enough information to reach a decision.

Sanjay Jamuar (Senior Sponsor for HS2, Network Rail): That is correct.

Richard Barnes (AM): Yet the consultation ends at the end of July, so do you know how they are trying to con the rest of the world into making a decision before that period?

Ed Wilson (Head of Public Affairs, Network Rail): In terms of the detail, it will get increasingly detailed as we move towards the hybrid bill process and we will be --

Richard Barnes (AM): After consultation?

Ed Wilson (Head of Public Affairs, Network Rail): Yes. In clear terms, we have stated publicly and privately to DfT and HS2 Limited that we support the project in broad terms certainly and we will work with them to mitigate on the impacts on the national rail network.

Richard Barnes (AM): How can you do that with positive information?

Ed Wilson (Head of Public Affairs, Network Rail): We can make an assessment. I think we have 18 separate interfaces with the National Rail Network. Some of them are just where it presumably goes under or over; it is relatively simple. Others are much more complex like Old Oak Common which is an incredibly complex site or Euston which is going to be an incredibly complex project. We understand those but in terms of actually really getting into the detail of what that mitigation means, and that is not just in terms of the build but it is in terms of what we do to minimise disruption during the construction of those interfaces; we are not in that detail yet.

Richard Barnes (AM): That will never come into the public domain before people's views are sought and a tick or a vote in favour or against on the consultation process.

Ed Wilson (Head of Public Affairs, Network Rail): It is part of the project delivery and development stage.

Richard Barnes (AM): It makes consultation a bit of a farce, doesn't it?

Caroline Pidgeon (Chair): I think you have made that point, Richard.

Valerie Shawcross (Deputy Chair): I was just going to finish up by referring to access to the continent. We have to worry about linkages to High Speed 1. There does seem to be some debate about how important it is to have the linkage between HS2 and 1 and there is certainly a real problem about the current proposed linkage route. Could we just air that a little bit? How important is it that there is a linkage over to High Speed 1?

Richard DiCani (Director of Strategy and Policy, Transport for London): The remit that HS2 is responding to from the Secretary of State is that they have to provide a connection, so they have been tasked with making a connection between the two lines. When you look at the data that HS2 have presented, there is a very low level of demand for people wanting to go through from the Midland and North West through to the continent and reverse; it is not all one-way traffic. So it is not a heavy flow of people. The business case for it is relatively poor, therefore, the justification for spending a lot of money on providing the link is weak. So the current proposal is to bring the high speed trains to surface and then run them on the existing North London lines through Camden before connecting them on to High Speed 1 to go onwards towards the continent. Our big reservation with that is that means that those trains would be mixing with London over ground trains that already have to mix with freight trains. That is a piece of the network that is being invested in very heavily by Network Rail and TfL. The passenger usage is growing considerably. There will be far more people travelling on our trains than there will ever be on a train from Birmingham to Paris and, therefore, why should we necessarily suffer when the high speed train is coming through.

The second point is if you really want to make that link work from a Birmingham or Manchester perspective, if it is slow in the middle, that is not going to help make the business case. So we are saying the current proposal, which is a sort of cheap and cheerful proposal, just does not work and they need to think again and come up with something that does not impact on London rail services or impact on the local environment. So it is a sort of go back to the start for that from our perspective.

Valerie Shawcross (Deputy Chair): You earlier mentioned Stratford and I know you were really keen to get the link through there. How viable is that?

Richard DiCani (Director of Strategy and Policy, Transport for London): I think if you did have trains running from Manchester to Paris and you did find a way of connecting them in the middle just outside Kings Cross that worked for everybody, then those trains clearly should stop at Stratford Station. So Stratford and Old Oak Common potentially will be the London stops; so it would be a Manchester/Paris train that stilled called at London but not central London and that would be connected into Crossrail.

Valerie Shawcross (Deputy Chair): How would Stratford and Old Oak Common compare given that Stratford already has quite a lot of good linkages around it; it is a good hub already?

Richard DiCani (Director of Strategy and Policy, Transport for London): Ideally, from our perspective, it would stop at west London and east London. If you have through trains coming through that do not stop in the middle of London, they could stop in the West and that has benefits, and they could stop in the East and that has benefits and that would be a very good model but, at the moment, the bit in the middle just does not work.

Valerie Shawcross (Deputy Chair): From TfL's point of view, do you think you are likely to be objecting quite strongly to the impact on the Overground and the Northern line?

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes. We have not seen anything at the moment to suggest it can work.

Valerie Shawcross (Deputy Chair): This is a very big problem for you.

Richard DiCani (Director of Strategy and Policy, Transport for London): Yes.

Valerie Shawcross (Deputy Chair): Yes, OK, I think that is probably it.

Richard Barnes (AM): Chair, can I ask a final question? Mr Wilson, you are Head of Public Affairs. How big has your post bag from people in the West Midlands that want a ticket to Old Oak Common?

Ed Wilson (Head of Public Affairs, Network Rail): From people wanting a ticket to Old Oak Common?

Richard Barnes (AM): Yes; what demand.

Ed Wilson (Head of Public Affairs, Network Rail): We have about 12,000 contacts from members of the public in every four week period but I have no doubt that the proportion of people that are asking that is virtually zero but I am not sure that people would necessarily ask that. Generally, most of our inquiries are about cutting down trees or letting trees grow too much.

Richard Tracey (AM): I just wanted to clarify; did I hear one of you say that all this would be subject to private bill procedure?

Richard DiCani (Director of Strategy and Policy, Transport for London): It is a hybrid bill. The process is starting in 2013.

Richard Tracey (AM): That could go on for years.

Richard DiCani (Director of Strategy and Policy, Transport for London): This is just the beginning.

Caroline Pidgeon (Chair): Thank you very much indeed. It has been a really useful discussion, so thank you for your input today and for your input at the site visit and I am sure we will be working with you again soon.