High Speed 2: The draft Environmental Statement

1. Introduction

1.1 This is the response of the London Assembly to the consultation on the draft Environmental Statement (ES) issued by High Speed 2 Ltd (HS2 Ltd). It has been prepared by the Assembly's Environment Committee.

There will need to be a fundamental review of the cost-benefit case for the proposed High Speed Two scheme. The body of this response identifies several areas, especially in central London, where more mitigation and/or compensation is required, which are likely to increase the financial cost of the scheme. It also identifies non-financial costs, such as the health impacts of air pollution and the loss of green space, which should be more effectively quantified and valued for use in the cost-benefit analysis. These (and other) improvements to cost evaluation would then need to be looked at alongside an updated estimate of the scheme's benefits. If the scheme is to go ahead, route and design options need to be considered, especially in London, to minimise the costs and environmental impacts.

1.2 Regarding the High Speed Two (HS2) draft ES specifically, the Committee raises issues in the following areas:

- Mitigation of environmental effects and remedy of or compensation for those that cannot be avoided, in collaboration with local stakeholders
- Planning for the onward travel of passengers from the London terminus
- Adequately assessing and publishing the air pollution impacts of constructing and operating HS2, and mitigating them as far as possible
- Likewise assessing and mitigating noise impacts
- Full and public consideration of different route and station options, particularly to mitigate impacts in central London and the Colne Valley
- Taking enough time to consult adequately with local stakeholders and develop mitigation proposals with them

Background

1.3 High Speed Two is a new high speed railway proposed by the Government. Its London terminus would be at Euston, and near Euston it would also connect to the High Speed 1 line, which runs from St Pancras to the Channel Tunnel. The line towards Birmingham would enter a tunnel north of Euston, and would go under central and west London to West Ruislip. The total route length in tunnel would be about 21 km (13.5 miles) and there would be one intermediate below-ground station at Old Oak Common, in the north of the borough of Hammersmith and Fulham. From West Ruislip it would go on the surface and over a viaduct for about 4.5km through less built-up areas of outer west London, including the Colne Valley.

1.4 From there the route is initially (in Phase 1, to which the present consultation applies) proposed to go to Birmingham. Phase 2 is planned to extend from there in two branches to Manchester, Sheffield and Leeds, with some trains continuing on existing track to destinations further north. There is also potential for a spur from the Colne Valley stretch to Heathrow.

2. Physical impacts of the scheme and its construction

Euston and Camden

2.1 The works in central London would include altering Euston station and extending it to the south and west, and altering the area around it, including Euston and Euston Square stations on the Underground. The rail corridor heading north out of Euston would also be widened, with structures such as road bridges and cutting banks rebuilt, and works would be required on and around the North London Line from Camden to the High Speed 1 line north of St Pancras.

2.2 The proposal would involve the permanent loss of at least 208 homes[1] , mainly on the Regent's Park estate, along with business, service and community buildings. Hampstead Road open space would be lost and St James's Gardens reduced in size by 75 per cent, with the loss of an unspecified number of mature trees. Thirteen roads would be permanently closed. At least part of the split-site Maria Fidelis school would have to be moved.

2.3 The construction phase would last for up to ten years, on many large and small sites in the Euston and Camden areas. This would require temporary (in some cases very protracted) closure of more roads (including busy 'red routes' on the strategic London road network) and further green or open spaces, including a play area. It would also cause significant disruption for businesses near the construction sites, particularly those to the west of Euston station that draw on Euston passengers for a large part of their customer base and would find themselves on the other side of the HS2 construction site. Camden Council reports that the scheme, and particularly the uncertainty over its details, is preventing the go-ahead of a number of its regeneration projects for the area.

2.4 The loss of green open space in this densely urban setting is valued at £54,000 per hectare, taking no account of the number of people using the site or the availability of remaining green space in the area. HS2 Ltd acknowledges that this valuation of green space lacks robustness – it is therefore excluded from the main business case, and covered only in value for money advice provided by the Department for Transport (DfT). **An adequate valuation of green space should be made, and included in the main cost-benefit analysis for the scheme.**

2.5 Discussions are ongoing about how to compensate for these losses. The government has committed that social renting tenants will be found new homes, but it is not yet clear where, and it is not guaranteed that they will be in the same area. Home owners and leaseholders are to be compensated, but the Euston Community Forum set up by HS2 Ltd to engage with locals says that the compensation is insufficient, especially for those in 'affordable housing', who seem unlikely to find equally affordable housing in the area. Private tenants, including those in the same buildings, are to receive neither compensation nor re-housing. Also, in central London a much smaller or non-existent area around the scheme is to be eligible

[1] 208 is the number given in the draft ES. Some stakeholders give higher numbers, counting for example homes just outside the enlarged station footprint that may be so severely impacted that demolition becomes a better option.

for the voluntary purchase scheme or as a safeguarded area. Whereas in the Chilterns, properties up to 120 metres from the track have their value protected by HS2 Ltd, in central London many properties immediately adjacent to the track or works are left to the market and are set to receive no compensation. The compensation scheme is statutory and HS2 Ltd (having been found against in court) is again consulting on going beyond that scheme. The Secretary of State is then to take proposals to Parliament.

2.6 A site is being sought for Maria Fidelis school. Discussions are also still underway about replacing lost open spaces and possible mitigation or replacement measures for the loss of trees and other potential habitats for rare urban birds and bats.

2.7 Camden Council are key partners in all of these discussions about replacement and mitigation, and HS2 Ltd says it is working with the council, but the council told the Committee that HS2 had not in the past responded well to its requests for information and offers of solutions. There have been recent improvements in progress but there is still a great deal to do. The Euston Community Forum has pointed out that Drummond Street is only expected to take 5% of the construction traffic, and asked that it be taken out of the 'safeguarding zone', to protect the local businesses from loss of custom. This has not been taken up and the reasons have not been explained. HS2 said it is for the Secretary of State to make the safeguarding direction. **HS2 must set out more detail about displacement effects and steps to mitigate environmental damage and loss.**

Old Oak Common

2.8 It is proposed for there to be a new below-ground station on HS2 at Old Oak Common, and a new surface station there which would serve Crossrail and the Great Western Main Line. These would connect with each other to provide interchange. There would also be three nearby ventilation shafts for the tunnels.

2.9 The Old Oak Common site would be a major construction site for the duration of the work, and would be physically transformed by its completion. As the site is currently mainly occupied by rail depots, fewer local residents and businesses would be affected than at Euston, but there would be a number of buildings demolished. A large proportion of the tunnelling work would be based here, with most of the boring machines starting in this area and therefore generating spoil at the sites.

2.10 About 120 homes at Wells House Road would be surrounded by construction activity for about 10 years and would have reduced access, including to schools, childcare facilities and shops. HS2 is still considering mitigation for these effects.

2.11 Bat roosts in buildings and/or trees would be lost. The draft ES says that provision of alternative habitat is being considered, but gives no details or commitments.

2.12 In the longer term, the London Borough of Hammersmith and Fulham envisages a major regeneration development associated with the HS2 interchange and other local transport links. The full implementation of this vision would depend on many factors, including further transport investment to free up more of the site, the agreement of other boroughs responsible for parts of the site, and private investment.

The tunnels, West Ruislip and Ickenham

2.13 HS2 does not expect the tunnels themselves to have significant environmental impact on the areas they pass underneath. However, there would be a number of features at the surface associated with the tunnel, including ventilation shafts, and other installations such as electrical infrastructure.

2.14 The ventilation shafts (six in addition to those near Old Oak Common) would each come to the surface in a building up to 10m high housing ventilation fans and emergency access. To make way for these at least 24 buildings would be demolished and a road diverted. During construction, local nature reserve and recreation space including potential bat and great crested newt habitats would be lost, and there is a lack of local alternative habitats.

2.15 The tunnel mouth at West Ruislip would require the demolition of some existing buildings and some permanent road and right of way diversions. During construction there would be temporary loss of farmland and land used by a rifle club and golf course, affecting the ability of these facilities to operate. There also could be significant effects on groundwater quality.

Colne Valley

2.16 The HS2 line is proposed not to be tunnelled between West Ruislip and about the M25, passing through London's outer suburbs on the surface and then on a viaduct across the river Colne (and adjacent canal and lakes). At two points along this stretch would be the connectors for the potential Heathrow spur line. The junctions would be put in during Phase 1 construction to minimise disruption should this spur go ahead later.

2.17 The viaduct would be 10 to 15 metres high, and cross expanses of water, making it prominently visible from some distance away. There would be building demolitions and a public right of way and a short stretch of the River Colne would be permanently diverted. Agricultural land would be lost and there would be partial destruction of a Site of Special Scientific Interest (SSSI), ancient woodland, sites of national importance for bird conservation, and sites of borough importance for wildlife.

2.18 During construction there would be temporary diversions of roads and rights of way, and loss of high quality farmland. Trees and other habitats would be lost, and breeding and wintering birds disturbed by noise. Vegetation would be removed from about 12 hectares of a Site of Metropolitan Importance for Nature Conservation, and there would be temporary diversions of watercourses, potentially amounting to de-watering the Colne Valley. These changes would obviously have effects on the ecosystems that could persist for some time afterwards.

2.19 The draft ES anticipates no significant impact on cultural heritage because of the existing effects on the landscape from gravel extraction, the M25 and power lines, but local stakeholders take different views.

2.20 HS2 Ltd told the Committee that it would work closely with relevant bodies (such as the Environment Agency, Natural England and water companies) to manage the local impacts, and

in some cases was doing so already. It will do what it can to avoid, or repair, effects on the SSSI.

2.21 During the years of construction, the Hillingdon Outdoor Activities Centre (HOAC – a charity bringing outdoor and environmental education to over 22,000 users, especially disabled and disadvantaged young people) would be severely impacted. HS2 Ltd describe the impact as temporary, but the centre anticipates it would have to close and would face significant obstacles to re-opening in a similar form. Hillingdon Council and others are seeking alternatives but are not at this stage optimistic. **HS2 must set out in more detail these likely displacement effects and steps to mitigate environmental damage and loss.**

Committee conclusion

2.22 The physical effects of the scheme will be severe for several London localities, including the Euston and Camden areas, Wells House Road and other areas around Old Oak Common, West Ruislip and the Colne Valley. Homes, businesses, community services and habitats are to be destroyed and damaged across some large areas. The mitigation and compensation measures proposed to date are far from adequate. High Speed 2 Ltd and the Government should give urgent attention to resourcing these measures fully. They should also engage more effectively with local authorities and other local stakeholders to develop and resource satisfactory mitigation and compensation, and should allow as much time as this requires *before* the Parliamentary stage.

3. Long term transport impacts

3.1 Acting as the London terminus, it is expected that Euston would handle the majority of all HS2's passengers. Departing passengers would be able to reach Euston, and arriving passengers travel onward, by foot, cycle, bus, taxi, mainline rail and London Underground.

3.2 Euston is already a very busy transport interchange, with crowded roads, buses and tube lines. However, the additional passenger numbers expected with HS2 would be very large even compared to the existing flow. TfL told the Committee that currently Euston receives 23,000 passengers in the morning peak (7-10am), which (with HS2 Phase 2 operational) would be expected to rise to 55-60,000.

3.3 Transport for London told the Committee about its plans to increase walking and cycling to and from Euston, saying that cycling could increase from 2 per cent of onward journeys to 7 per cent, and walking from 20 per cent of onward journeys to 30 per cent. Given the passenger numbers quoted, this would represent an increase from fewer than 5000 pedestrians to about 17,000, and from fewer than 500 cyclists to about 4000. However, with the overall increase in passenger numbers, the morning peak demand for onward journeys by public transport (or private vehicles) would still double, from about 18,000 to over 36,000 (see table below).

	Total	Walking		Cycling		Motor transport	
		Percentage	Number	Percentage	Number	Percentage	Number
Current	23300	20%	4660	2%	466	78%	18174
2041 Forecast	58200	30%	17460	7%	4074	63%	36666

3.4 This would present an extreme challenge to the transport infrastructure at Euston. Including Euston and Euston Square stations, which would be connected by a pedestrian subway, there would be connections to six London Underground lines. There is also a bus station at Euston, which would be moved and remodelled as part of the station works. However the tube lines are already crowded and set to get more so in the coming years independently of HS2. Bus services are also crowded at peak times. Although flows from the rail station to onward transport would be improved as part of the station works, the HS2 proposal does not offer significant capacity increases on either bus or tube routes themselves. Both Transport for London and, more strongly, Camden Council told the Committee that the proposals to handle onward passengers could be improved. **There is a need for further work by HS2 Ltd to demonstrate how the connections to the public transport network are to be fully addressed.**

Upgrading London's transport network

3.5 The Victoria and Northern lines are being upgraded, but the biggest prospect for increasing the capacity of the transport system to handle more passengers from Euston is Crossrail 2, a new underground line from north-east London to south-west. If HS2 goes ahead, Crossrail 2 is proposed to serve Euston, but it is at an early stage of development and there could be a gap of up to 10 years between High Speed 2 and Crossrail 2. The Mayor's position is that Crossrail 2 must be brought forward in time to be in place when HS2 Phase 2 begins operation. This would imply either slow progress with HS2 Phase 2, or very rapid progress with Crossrail 2, and for the duration of any gap between the two, the Tube lines serving Euston would be threatened with very severe overcrowding.

3.6 Even if Crossrail 2 comes with HS2 Phase 2, the Committee is concerned that there could be severe overcrowding at Euston in the initial years of HS2 Phase 1 operation – the forecast number of rail passengers arriving at Euston in the morning peak in 2026 is 33,600, 44 per cent more than currently. This would be to the detriment of existing London transport users, and would undermine the attractiveness of HS2 to its own market. The Government should better co-ordinate strategic transport infrastructure investments so that demand and supply remain in balance across the network, and pinch points are eased, to a much greater extent than seems likely given current plans.

Surrounding roads

3.7 The extension of Euston station and the alterations to the surrounding area look set to create problems on the surrounding roads. Several streets would close, and concerns have been expressed that the siting of the bus station and taxi rank will mean that these vehicles drive additional distance around the station. This would all increase congestion. Also, with the extended station development as proposed reportedly not allowing pedestrians to pass through it on a journey across the area, walking and cycling would be discouraged in the Euston area, to the detriment of local businesses and residents, and to efforts to encourage people to walk and cycle into central London from the north. HS2 Ltd does not appear to have modelled these impacts fully: although the draft ES does list increased congestion as an effect around Euston, HS2 Ltd said it heard further concerns at the Community Forum during the consultation period, and would work on the issues for the formal ES.

Committee conclusion

3.8 Modelling traffic flows and congestion effects of the proposed scheme combined with the increased travel demand is essential to full consideration of the merits of the scheme, and HS2 Ltd should work with TfL to bring this out in more detail in further iterations of their environment impact assessment.

3.9 The Committee is very concerned that the cost of the onward passenger impact has not been included in the cost-benefit analysis underlying the HS2 business case. The costs of dispersing passengers from HS2 should be included in the cost-benefit analysis.

4. Air quality and construction traffic impacts

Impacts in central London

4.1 HS2 would worsen air quality in the Euston area, already one of the most polluted parts of London. There would be a permanent effect from the additional traffic and congestion discussed above, and there could also be a particularly severe effect during the construction period, from the work itself and the vehicle movements necessary to take equipment and materials to and from the site.

4.2 As this Committee has repeatedly demonstrated air pollution is one of the most serious public health issues facing London and the UK, estimated to be responsible for thousands of additional deaths per year in London alone. Central London is the most problematic UK area for the EU Air Quality Directive and so significant negative impacts on air quality here could exacerbate the UK's breach of the directive and increase the risk of large EU fines. The works span the critical period from 2015, the EU's latest date for compliance, to 2025, the date by which the Government has said London will reach the air quality targets.

4.3 There is considerable uncertainty over the scale of air pollution generators. A figure of a 40 per cent increase in local traffic during construction was cited to the Committee, but it seems that this is a worst-case scenario based on not agreeing to move construction materials by rail or canal. HS2 Ltd intend to use rail where possible in any case, but have not yet agreed access to the track. **There is a need for further work by HS2 Ltd to demonstrate how transporting materials by rail or canal can make difference to the environmental impacts of construction.**

4.4 The draft ES states that air pollution from construction would largely be controlled through HS2 Ltd's Code of Construction Practice (COCP), which sets out in three pages the general principles for controlling air pollution, especially dust, from construction work. However, the COCP lacks quantitative baselines or standards, and leaves specifics about all sites to the environmental management plans, which are to be produced only after the scheme receives Parliamentary assent. It has very little about monitoring air pollution, with no reference to pollutant measurements, and it does not contain standards to reduce the emissions from vehicles beyond the normal levels for construction vehicles making as many trips as are deemed necessary for the work.

4.5 Unsurprisingly, therefore, HS2 Ltd acknowledges that there would be an air pollution impact of construction in central London despite mitigation efforts. The draft ES refers to, but

does not show, an analysis of projected air pollution effects by location, which says that 13 locations (unspecified in the draft ES) would see an increase in NO2 and 4 locations a decrease. The draft ES does not give figures for expected emissions or concentrations.

Committee conclusion

4.6 HS2 should immediately publish its analysis of the projected air pollution impact, in construction and operation, so that local stakeholders can respond, air pollution experts can assess the methodology, and authorities responsible for reducing air pollution can work with HS2 Ltd to reduce the harm caused by these emissions. The health impacts of air pollution can be quantified and valued, and should be included in the cost-benefit analysis for the scheme.

Suburban and outer London

4.7 Construction in outer London would likewise generate additional traffic to and from those sites. If it were necessary to remove tunnelling spoil by road, very large numbers (up to hundreds or even over 1000 per site) of daily HGV movements could be required from the sites at Old Oak Common and West Ruislip. The additional movements would combine with baseline traffic levels to increase congestion, which would also be exacerbated by road closures and diversions around the construction sites. HS2 Ltd say that the three Old Oak Common sites would not reach their peak of over 1000 HGV movements per day at the same time. **If HS2 Ltd has a profile of these movements over time it should be published, for all sites.**

4.8 Even much more limited construction traffic could have serious local impacts. The Ickenham Residents Association told the Committee that the routes from the construction sites to the main road are already saturated at peak hours, with further traffic-generating developments expected in the next few years. It has also identified a number of the relevant routes and junctions as unsuitable for large vehicles – an analysis that HS2 Ltd do not appear to have conducted.

4.9 Despite these traffic impacts, the draft ES says that all potential air pollution effects from the outer London sites would be effectively managed through the measures in their construction code of practice. However, it does not support this finding with any published analysis of expected emissions, current pollution levels or analysis of traffic flows and congestion effects. Therefore expected pollutant concentrations have not been modelled. HS2 points out that air pollution is lower in outer London. However main routes such as the A40 corridor, which would be affected, do experience elevated pollution levels. Also, the health effects of air pollution are estimated to be proportional to pollutant concentrations whether above or below legal limits, and so local residents will be harmed by increased pollution regardless of the initial level.

Committee conclusion

4.10 HS2 Ltd said that it will look at how to minimise the local traffic and air pollution effects of construction and will publish further modelling in the final ES following work with TfL and possibly other experts. The air pollution modelling work must be completed to a high standard and should be published without delay.

5. Noise impacts

5.1 Both the construction process and the high speed railway in operation will produce significant noise. There are to be noise mitigation measures, including potentially noise barriers installed along the rail corridor, and noise insulation for properties most affected.

Construction noise

5.2 There are particular concerns for noise in the construction period in central London, because work will have to go on around the main line rail services, which will mean frequent night time working. The current proposals involve retaining homes immediately adjacent to the construction sites – these are likely to experience the greatest noise impacts. Also construction work will not be contained within the railway cutting as the trains in operation will.

5.3 Construction noise is also likely to be an issue around the tunnelling sites at West Ruislip and Old Oak Common. If spoil is moved by rail then that is likely to require that trains be loaded and run at night when the tracks are used less by regular traffic, and if not then there will be heavy vehicle traffic along roads in the area.

5.4 The draft ES does not contain details of mitigation measures and again the COCP sets out general principles but leaves specifics to the future environmental management plans. The draft ES also does not set out baselines of existing noise levels or other technical specifications that were expected by Camden Council. There is a noise mitigation group in which HS2 Ltd are working with local stakeholders to discuss mitigation measures. **HS2 Ltd should ensure that it brings to this group the support and the flexibility in proposals necessary to make the noise impacts tolerable to local residents.**

Operational noise

5.5 Operational noise will be an issue where the track is not in a tunnel, including around Euston, where additional properties will experience rail noise as the station and railway are extended, around Ickenham where the residents association estimates about 1800 dwellings and a school will be affected, and especially in the Colne Valley where trains will travel at high speed (up to 320 kph or 225 mph) along an elevated viaduct, and Hillingdon Council anticipates noise across the valley floor and up the slopes around it.

5.6 In full operation, HS2 is anticipated to operate up to 36 trains per hour (combining both directions) and for up to 19 hours per day. Noise effects are still being assessed, and only part of the assessment conducted so far has yet been published. Consultees were dissatisfied that noise maps were marked with LAeq levels (noise spread or averaged through the day) rather than with the peak noise experienced when a train goes past.

Committee conclusion

5.7 HS2 acknowledged the need to bring forward peak noise information, and should do so without delay. HS2 also plans to use a noise barrier along the viaduct and perhaps alongside the track at Euston, and anticipates that rolling stock used on the line will be quieter than that currently being built – HS2 Ltd should make clear how design and procurement will be used to deliver these intentions and what it will mean for noise impacts.

6. Strategic considerations and route choice

6.1 These issues are not strictly within the scope of the consultation, but it is clear from the Committee's work that key local stakeholders remain dissatisfied with high-level elements of the scheme design, and that situations have changed and new information come to light, since the selection of the current overall route, that should be considered before the scheme is presented to Parliament.

Route terminus

6.2 Euston and Camden is the most costly and high-impact area in which the scheme is to be constructed. Camden Council and many other local stakeholders are firmly opposed to the scheme as currently put forward, because of the environmental impacts and the lack of compensation to those affected by them.

6.3 The local environmental impacts could be lessened if there were not such a central terminus station. The Old Oak Common site has been proposed as an alternative. On current proposals, onward connections would be an issue as Crossrail and the West Coast Main Line, while able to cope with an anticipated one-third of HS2's London passengers, would not be able to handle all of them. Also there is not enough space available at the site, between the Crossrail and main line tracks. However, the Committee has heard that an amended proposal for the station, with Crossrail's depot elsewhere, could also connect to the Central and Bakerloo lines of London Underground, and the Stratford-Richmond, Willesden Junction-Clapham, and Watford-Euston services of London Overground. Lord Adonis also recently told the Assembly's Planning Committee that the length and the quality of the interchanges at Euston would be 'significantly inferior' to those at Old Oak Common, making the latter more attractive to passengers, particularly if the Overground connection were made. HS2 Ltd report that there is strong demand among potential passengers as well as political backers for a city-centre terminus, but the Pan-Camden HS2 Alliance has produced figures to argue that travel time from Old Oak Common would be quicker than from Euston to most parts of London. Perceptions of where the business centre of London extends to can be flexible as new developments occur, as Docklands is demonstrating.

6.4 There have also been proposals for Old Oak Common to act as the terminus on a temporary basis, until the necessary infrastructure to handle onward passengers has been put in place at Euston.

6.5 If the terminus is ultimately to be at Euston, there are proposals for smaller-footprint designs for the station, including a 'double-deck' station with HS2 platforms beneath the main line platforms – a proposal of this sort was supported by the Assembly's Transport Committee in 2011 and would be favoured by Camden Council if found to be feasible. Conversely, the previous Government proposal for a more complete redevelopment of the station would have provided business and residential property to compensate the local area for the negative impacts of extending the station.

6.6 **The options for a London terminus must be considered fully and carefully, including the full costs and disbenefits of the current proposal, with adequate mitigation and compensation for its impacts.**

6.7 The Transport Committee has previously given the Assembly's view that there should not be a connection with HS1 over the North London Line, because of the impact on services that currently use that line. Revised proposals reduce the impact on North London Line services, but would increase the environmental effects by widening the rail corridor and requiring the rebuilding of bridges. The Transport Committee is now recommending that other ways of making the connection should be considered, including potentially extending the tunnel under Camden Town, and making greater use of Stratford International for services from the Midlands and North.

Outer London and the Green Belt

6.8 The environmental impact of the route is much greater on the surface than in a tunnel, and there are therefore already proposed tunnels under built-up London and under the Chiltern Hills Area of Outstanding Natural Beauty. There are therefore calls also to tunnel the intervening stretch, of about 4.5km through Ickenham and the Colne Valley. There would be engineering challenges and financial implications of a tunnel, but a report by Mott MacDonald for HS2 Ltd indicated that it would be feasible. Journey times would not be affected. **The Committee therefore considers that tunnelling the route under all of its outer London length should be considered again.**

6.9 The Committee heard that provision for a potential future Heathrow spur on this stretch of track may be deterring tunnelling. This would be unfortunate. Tunnels are among the route options under consideration for the spur.

6.10 Also, the Heathrow spur has not been given the go-ahead and may not be, if the current review of aviation capacity for the UK does not designate Heathrow as the main hub airport. This raises the question of whether decisions on the HS2 route should be deferred until there is more clarity on the future of aviation capacity – expected following the report of the Davies Commission in 2015. Without the need for a Heathrow spur, a west London route option might not be preferred at all – the case has been made for a route north out of Euston, passing through less of London and potentially be able to follow existing transport corridors to the Midlands. On the other hand, a pre-2015 decision to route HS2 to the west could unnecessarily influence the airport capacity debate towards Heathrow. **The Assembly is on record as opposing the expansion of Heathrow**, most recently in the Transport Committee's April 2013 report on airport capacity in London.

Committee conclusion

6.11 The options around the route in London, the terminus, and how much of the route to tunnel should be fully considered and their costs and benefits analysed publicly, including the costs of adequately mitigating the effects of the current proposals and compensating those affected.

6.12 Specifically, the Committee considers that close attention should be given to proposals that reduce or compensate for the impacts around Euston and Camden, and supports proposals to tunnel the route from West Ruislip to the M25 if a west London route goes ahead.

7. Consultation process

7.1 The Committee recognises HS2 Ltd's argument that the current consultation on a draft ES is a step beyond what was undertaken for some previous strategic projects, and endorses the principle of consulting openly with affected communities and other interested organisations on the environmental impacts of proposed schemes.

7.2 However, the Committee heard a clear message from representatives of Londoners, including local authorities and community groups, that the present consultation process has not met the expectations that they have for a consultation on environmental impacts. Stakeholders reported:

- not enough time allowed for consultees to digest, discuss and respond in detail to the newly-published material in the draft ES
- poor advertising and accessibility of public meetings and copies of the consultation documents
- limited funding authorised by the government to enable local authorities to examine and respond to the draft ES
- environmental impacts not described in sufficient detail and without quantification
- baseline situations for environmental issues not fully established
- important processes leading to environmental impacts, such as traffic congestion, had not been modelled or analysed
- draft ES containing only partial information – further information was being supplied half-way through the consultation period, while other information had been asked for and was not forthcoming or would come out only at the full ES
- draft ES containing little detail on mitigation proposals, and not addressing mitigation proposals previously put forward by stakeholders

7.3 The Committee remains concerned that there is a good deal of detail on the environmental impacts that is not yet clear; our response is based on the information that is available.

7.4 The Committee recognises that there will be a further statutory consultation on the Hybrid Bill to be submitted to Parliament later in the year to enable the High Speed 2 (HS2) scheme to go ahead. A full Environmental Statement will form part of that process and consultation.

7.5 HS2 Ltd argues that the draft ES represents a work in progress, and that this provides greater scope for the plans to develop in response to the feedback received. However, this committee is greatly concerned that many of the contentious issues raised by both community forums and local authorities during the (up to) three years of dialogue between these groups and HS2 Ltd have not been addressed in the draft ES. This is clearly inadequate and suggests a mishandling of the consultation process between HS2 Ltd and its key stakeholders who, ultimately, are among those that are supposed to benefit from this project. The test of this case must now be in how far the full environmental statement reflects the feedback received in this process, and then in how flexible the Hybrid Bill proposals are: more feedback can be expected to follow the first public sight of the more detailed assessment of environmental impacts.

7.6 The Parliamentary stage is late in the process to be making considered amendments to the proposals on the basis of local environmental impacts. There must be a risk that the scheme will be pushed through in a form that could have been improved on with more thorough pre-Parliamentary scrutiny, or even that the Hybrid Bill could be defeated in Parliament because of local issues that might have been resolved.

Committee conclusion

7.7 The Government and HS2 should devote the necessary time and resources, and provide the necessary information to fully understand the effects of the proposal and to develop mitigation and, where necessary, compensation proposals in collaboration with the relevant stakeholders and as far as possible to their satisfaction.