



## ***HS2 REVIEW***

### **Brief Commentary on the HS2 Review from the Chartered Institute of Logistics and Transport September 2019**

#### **Introduction to CILT**

The Chartered Institute of Logistics and Transport ("CILT") is a professional institution embracing all transport modes whose members are engaged in the provision of transport services for both passengers and freight, the management of logistics and the supply chain, transport planning, government and administration. CILT's principal concern is that transport policies and procedures should be effective and efficient, based on objective analysis of the issues and practical experience, and that good practice should be widely disseminated and adopted. The Institute has a number of specialist policy groups, a nationwide structure of locally based groups and a Public Policies Committee which considers the broad canvass of transport policy. This submission draws primarily on contributions from CILT's Strategic Rail Policy Group.

#### **CILT's views on the HS2 Review**

CILT welcomes the Department for Transport's commissioning of a Review of the HS2 project which is designed to assess the way forward for this major infrastructure project. The creation of new railway infrastructure, mainly away from the existing transport networks means that its construction phase will have limited impact on the existing rail services including rail freight. The proposed reduction in journey times will provide economic as well as physical benefits and stronger links will be created, notably between the East and West Midlands and the North East and North West of England and eventually into Scotland.

We are of the view that HS2 is an important and major infrastructure project which has the ability to unlock a significant amount of additional capacity for both freight and passenger travel between the north and the south of England and into Scotland. Most of the capacity is produced through the transfer of the existing fast passenger services onto HS2, thereby creating additional capacity on the classic rail network for shorter distance and regional passenger services and, most importantly, additional freight services, which can help to encourage more modal shift from road to rail. Adding new stations for HS2 services in cities such as Birmingham and Manchester will release capacity at the existing major stations which will benefit local services in those areas.

Where additional capacity is released by HS2 there will be the opportunity to provide electric traction or other low carbon energy options for these new services, which will help with the UK Government's agenda of reducing carbon and emissions from transport in the UK. We note that although the project is called "High Speed 2" its main benefits come from the provision of additional capacity and the economic savings that this can provide. It is expected that such economic savings will flow both to those who will use the rail system and those who use the parallel road network as logistics

organisations create new traffic flows on HS2 and the remaining classic road and motorway users see a reduction in congestion on their routes. They can transfer services to make the best use of the capacity released by HS2, including moving services from the road network, and make use of the greener power available to power these services. **CILT therefore believes that HS2 should continue to be supported by the UK Government provided that it meets value for money criteria once the costs are firmed up.**

## **1. Anticipated Benefits of HS2**

- 1.1 CILT believes that the services which are to operate on HS2 will need to be of similar speeds in order to get the benefits of high speed operations. It makes sense to use this route for the fastest services if these are effectively transferred from the existing classic network and thereby create additional capacity on the classic network on the routes from London to the Midlands, Manchester and Leeds. While there are time and operating cost saving benefits from having very high speed services, they need to be considered against the higher costs of construction of a railway line which can operate at these high speeds and the available funding for the construction of the infrastructure.
- 1.2 CILT acknowledges the calls from various communities along the route of HS2 to have a number of railway stations which serve those communities, but we believe that there needs to be a limited number of stops so that there is sufficient distance between stops for trains to reach their top speed and travel a reasonable distance at those speeds. The braking for and accelerating from intermediate stops removes an amount of the capacity of the system, particularly where stopping patterns for services are different. A steady high speed with limited common stops provides more capacity than very high speed with a number of intermediate stops. Each track requires two platforms at each intermediate station to provide capacity resilience in case one train is delayed, thereby further increasing costs for the line's construction.
- 1.3 We do not oppose the operation of freight services on HS2 provided that the speed of the freight services is commensurate with the speed of the passenger services being operated. Thus a TGV-type high speed parcels service would be good use of some of the capacity. The bigger benefits for freight would be from the shift of the fastest passenger services from the classic network to HS2 leaving more space on the existing network for freight. It is important that the faster longer distance passenger services are moved to HS2 to work alongside those additional passenger services created by HS2 and for an amount of the released capacity specifically allocated for freight. If there are more freight services operating on classic routes at similar speeds, then better use of the existing capacity can be made, particularly when using ETCS (which should be in place by the time that HS2 goes live) to allow freight trains to run closer together.
- 1.4 **Creating capacity is more important than high speed. Limited stops provide the greatest capacity for the line but services do not have to operate at very high speeds. A key factor is the release of additional freight capacity on the classic network which in turn should help modal shift of freight to rail and a reduction in the consumption of carbon and NO<sub>x</sub> and PM<sub>2.5</sub> emissions.**

## **2. Anticipated additional transport requirements if HS2 is cancelled**

- 2.1 One of the main drivers behind HS2 is the creation of additional capacity on the classic north-south rail routes, which can assist in the rebalancing of the economy and the movement of freight to/from the southern ports. The existing road and rail network for these routes is already overcrowded and congested. In the event that HS2 is cancelled, this demand for capacity will not reduce. Instead alternative infrastructure investment will be required, either through the widening of existing motorways or by adding additional tracks along existing rail corridors. In many places there are geographical factors which make these alternatives particularly expensive. In urban areas houses and businesses are situated close to railways and roads making widening practically impossible without unacceptable disruption to the areas and users.
- 2.2 Adding additional lanes to motorways or an additional railway track on existing routes may stretch civil engineering skills to their limits (and possibly beyond) and overall have few costs savings when compared to the cost of constructing HS2. There is also the disruption caused to existing traffic while the works are undertaken on an existing travel route. While studies of alternatives to HS2 found cheaper alternatives, they provided less economic benefit and caused significantly more disruption to users. The current construction of smart motorways, with speed restrictions and traffic delays cause many millions of pounds of additional costs for road hauliers and other travellers which are not always captured in the economic analysis for the works themselves.
- 2.3 If HS2 were cancelled, a number of the anticipated environmental benefits of HS2 would be lost. Instead of the carbon and emission reduction from the use of electric traction, both on HS2 and on the freed-up capacity on the classic network, freight customers and logistics companies would continue to use road transport. Despite the progress being made on electric cars there has been limited progress to date on electric lorries due to their power requirements and diesel power (even if in a low-emission form) is likely to be required for a number of years until a truly viable alternative becomes available.
- 2.4 **There are alternatives to HS2 if the project is cancelled, but these are unlikely to be as cost effective. Any alternative will also have its own cost implications. They are expected to cause disruption and additional costs to existing passenger and freight services.**

### **3. Re-prioritising of HS2 phases**

- 3.1 CILT is keen to support all aspects of HS2 and is aware of questions being raised regarding the current phasing of the works. It is expected that the biggest economic benefits will be through the construction of the Phase 1 route between London and Birmingham and the continued route to Crewe. This would allow for the release of capacity on the southern part of the West Coast Main Line (the most heavily congested part) which would benefit freight services from the southern ports and help encourage a switch to freight on rail from roads.
- 3.2 Given the number of logistics centres in the East Midlands as well as the West Midlands, bringing forward the extension of HS2 to Toton to free up additional freight capacity on the Midland Main Line would be beneficial. This would also assist with other projects to improve services to the Midlands, particularly in conjunction with local transport offerings such as the existing tram networks and allow better services for East Midlands airport.

- 3.3 The use of Old Oak Common as the London terminus of HS2, even on a short term basis, rather than Euston would dramatically reduce the connectivity of the London terminus and the benefits to passengers. Euston is relatively well situated for access to and from many parts of London and has a number of London Underground lines running through. There are also a number of bus routes and taxis to take travellers quickly to many parts of London. Old Oak Common will only effectively have a single link into London through Crossrail 1 and will require additional interchanges for passengers once they have travelled into central London. Taxi and bus services will not be so well established or easy and the distance is far greater.
- 3.4 A terminus at Old Oak Common would place additional strain on Crossrail 1 and it is likely that the capacity projections for Crossrail 1 were not made on the basis that most travellers arriving at the London terminus of HS2 would be expected to travel on that line and connect into London's transport network from the various Crossrail 1 stations. Additional costs would come from redesigning Old Oak Common as a terminal station, perhaps even requiring its footprint to be enlarged, or even requiring additional tunnelling to create another station level, although these would be offset by the initial savings from not constructing the route into Euston. If the main driver for HS2 in any re-phasing is the provision of capacity between London and the Midlands, particularly for freight services, the location of the London terminus and the effect on passenger journey times becomes less of an issue.
- 3.5 **Reprioritising the phases of HS2 is possible. Phase 1 creates the greatest capacity benefits as the routes between London and the West Midlands are the most congested. Terminating at Old Oak Common would place additional strain on Crossrail 1 and reduce benefits for passengers, but have a limited effect on the capacity being released for freight services.**

#### **4. *Managing the Costs of HS2***

- 4.1 An issue that CILT has observed in a number of transport-related infrastructure projects has been the cost escalation, particularly when the outline design evolves into the full design and contractors are appointed. In some cases it is because the requirements for the project have changed and both time and money are spent in redesigning parts of the project. In others it is due to the risk allocation pushing a greater portion of the construction risk onto the contractors in the search for price certainty rather than retaining a higher proportion of risk in the public sector, using a more mature, risk accepting approach.
- 4.2 Where risk is placed on the contractor there is the temptation for the contractor to over-engineer the project to ensure that it will more than meet the requirements. The price of additional materials will push up costs and the time taken to construct the more highly engineered project will push out the expected completion date. It is important for HS2 to be able act as a well-informed client that can judge risk in a sensible manner and consider whether the current risk allocation with the contractors could be improved, with more public sector-appropriate risk being taken in-house.
- 4.3 It may also be possible to consider ways of offsetting the costs of HS2 through the impact on land use and the effects on land value in those cities which will host HS2 stations. Improved intercity connectivity can lead to the concentration of economic activity in large cities and agglomeration

benefits, which in turn lead to specialisation and economies of scale and increased private investment. Capturing this uplift in land value has been an aim in a number of transport projects and efforts should be made to work with the main city regions to examine ways to recover this uplift and provide a contribution to cost of the project.

- 4.4 Costs may be reduced through a reallocation of risk, with more risks being retained by the public sector. Ways should be considered to capture the uplift in land value created by HS2 which can then be contributed to the project.**

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