

## **CONFIDENTIAL BRIEFING NOTE FOR MEMBERS**

### **Re: Board meeting 18.03.14, Item 8, High Speed 2 and the implications for London transport users**

#### **Summary of potential passenger impacts**

High Speed 2 (HS2) is a proposed high speed rail line from London, with a north west trajectory towards the West Midlands and, in a second phase, two lines, one to North West England and the other to East Midlands and Yorkshire, with connections on to Scotland and North East England. The name HS2 is to distinguish it from the UK's first high speed railway, which was built as the Channel Tunnel Rail Link, but later renamed High Speed 1 or HS1 and links the Channel Tunnel to St.Pancras International via Ashford, Ebbsfleet and Stratford, and is used by a mixture of domestic (Southeastern High Speed) and international traffic (Eurostar and a small number of freight trains). HS1 is now a private company that contracts Network Rail for the maintenance of its assets, and has a separate charging mechanism regulated by the ORR. It envisaged that HS2 would follow a similar governance structure to HS1, and replicate some of the perceived benefits of HS1.

The rationale for HS2 line can be summarised as:

- The projected growth of traffic on the West Coast Main Line cannot be accommodated without additional capacity being provided.
- The reduced journey time to London will provide an economic boost to the West Midlands, north of England, North West Wales and Scotland and rebalance the UK economy geographically.
- That diversion of long distance passenger traffic from existing main line railways (West Coast, Midland and East Coast), and roads, would free up capacity on these other routes to enable more freight and local passenger services to operate.
- With a spur to Heathrow Airport the number of internal flights within the UK could be reduced.
- With a connection to HS1 via the North London Line through services could operate between HS2 and Europe via the Channel Tunnel in competition with air.

Within the London area HS2 has a core route starting at Euston, where a new station would be needed, then by tunnelled route to near Ruislip with an open 'station box' at Old Oak Common (similar to that at Stratford International on HS1) and a connecting link to the North London Line near Camden. There would be extensive redevelopment of the areas around Euston and Old Oak Common stations.

#### **Interchanges within London**

Euston has connectivity through the Northern, Victoria, Metropolitan, Circle and Hammersmith & City lines, and through its proximity to central London and the Kings Cross St Pancras complex. However, the diversion of passengers from other routes

and the expected growth associated with HS2 could mean that these existing services are overwhelmed. TfL has therefore proposed that the route of Crossrail 2 (South West to North East London) should be amended to include Euston so as to provide sufficient onward connectivity.

Old Oak Common would be a new station, comprising of a HS2 station and other platforms that would be served by Crossrail (1), Great Western main line, London Overground (West London Line) services. These services would give different connectivity to that of Euston within London, and would also support the extensive property and commercial development proposed for adjacent sites.

### **Connections to Heathrow Airport and to the HS1 route to the Channel Tunnel route.**

The proposed spurs to Heathrow Airport and to HS1 are problematic for commercial viability and operational robustness. In the case of Heathrow this is because without separate trains to the airport a 'dog leg' to the airport would reduce the journey time savings of a HS2 train, and hence the commercial attractiveness of HS2 over existing rail routes. Trains to Heathrow from HS2 would likely need to be commercially self sustaining on their own rather than being part of the London HS2 service.

There is also some doubt as to the extent to which domestic air travel would divert to HS2 as a significant proportion of passengers from Heathrow are using it as an interchange from air routes from other parts of the world.

The proposed spur to HS1 assumes that there is a commercial case for providing direct train services from the Midlands and the North to Europe. Members will recall that when the channel tunnel was planned there was a proposal (and for which trains and depots were built and Hampstead Heath Tunnel reconstructed) to provide direct services from North West and North East England to Europe. However, these direct services never operated as subsequent assessment of the market found that they would not be commercially viable, particularly as the air market had become deregulated and saw the emergence of 'low-cost' airlines. Whether the market has changed sufficiently to justify through services again remains to be seen. There would also be issues relating to border security and the need to establish inland border posts at stations served by these trains.

The HS1 spur also requires the use of the North London Line of London Overground between Camden and just north of St.Pancras International. Capacity on this route is at a premium and could potentially limit London Overground services on this route. This would weaken the passenger benefit from this link. TfL's position is that if the link to HS1 is to be provided it should not involve the partial use of the North London Line, and should be a stand alone route,( either as a spur or by making a new HS2 at Euston a through station similar to Old Oak Common).

### **Are there any alternatives to HS2?**

A substantial number of options have been looked at as part of the planning process for HS2 including that of upgrading existing routes. The recent experience of the upgrade of the West Coast Main Line showed that while an upgrade is feasible the cost and length of time of disruptions to passengers was such that it has been calculated that it would be easier and quicker to build HS2.