



Unite Evidence to the High Speed Rail All Party Parliamentary Group Inquiry into Rail Capacity

1 Introduction

- 1.1 This evidence is submitted by Unite the Union, the UK's largest trade union with 1.5 million members across the private and public sectors and the largest union in the transport industry. As well as transport, the union's members work in a range of industries including manufacturing, financial services, print, media, construction, local government, education, health and not for profit sectors. Unite's members in rail consist of rail construction, maintenance, manufacturing and supply chain engineers in the main with some drivers in the rail freight industry and those utilising Eurotunnel.
- 1.2 Unite's 8,000 strong membership in the rail industry is principally in the manufacture, maintenance and freight operations in companies such as Alstom, Bombardier, Hitachi, Mersey travel, National Express, Railcare, London Underground and DB Schenker, to name but a few. Unite has members who are drivers on Eurotunnel as well as engineers, electricians and construction workers. Unite represents around a quarter of a million members in transport with 71,500 of these in the road transport sector and over 63,000 in civil aviation.
- 1.3 Unite is strongly committed to supporting a properly integrated, environmentally sustainable, intermodal transport network to support a growing economy in the UK and further afield. Unite believes a key element to this is the growth of the high speed rail network.
- 1.4 Overcrowding on the UK's rail network is already reaching crisis point during the morning and evening rush to work on some routes, particularly when it comes to commuter trains in London & the South East. Whilst it is the responsibility of train operators to provide sufficient capacity, the ability of the network to cope with demand is becoming increasingly stretched requiring the need for additional infrastructure.

2 Equalities

- 2.1 Whilst there may be no prescribed limits on the number of passengers that are allowed to travel in a carriage, there are physical restrictions. These physical restrictions are increasingly becoming a barrier to less able bodied passengers and their ability to reach their place of work. Recommendations contained in the McNulty report suggest that staffing levels should decrease, resulting in the provision for these passengers progressively deteriorating as a consequence.

- 2.2 Overcrowded trains have the other unintentional result of making passengers feeling unsafe and prone to an increased level of injuries, should a train have to deal with an emergency or come to a sudden stop. Equally, overcrowding makes travelling uncomfortable and unpleasant.
- 2.3 Unite believes in equal treatment for all and the need to provide adequate adaptation where necessary and reasonable to allow every individual to contribute to society. Unless additional capacity is provided it is likely that these passengers will seek a far less carbon efficient mode of transport to complete their journey to work, or be excluded. Such exclusion will do nothing to help the UK economy.

3 Form of the additional capacity

- 3.1 At present there is sufficient off peak capacity to enable the utilisation of the rail network to accommodate freight traffic. The provision of this capacity enables the reduction of congestion on the road network by removing up to 50 long distance container lorries per train. The provision of rail freight as part of an intermodal freight network is a key factor to the reduction of freight emissions from the road.
- 3.2 Unite believes that if capacity is enhanced by upgrading the existing network rather than providing an alternative network for the provision of high speed rail, it would have a significant detrimental effect on this capacity. It is generally the quieter off peak evening and weekend periods when track enhancement work is carried out, to avoid disruption to normal scheduled passenger services. As it is also this off peak period when freight operations are encouraged, the disruption caused by enhancement work tends to become a major obstacle to freight as priority is given to passenger services.
- 3.3 The much quoted West Coast Route Modernisation cost £8.9bn and took almost a decade to complete, finishing late and several times over budget. The modernisation services on the route were disrupted throughout with some services cancelled. Whilst the provision of a new high speed line may cost more in the short-term, it will have long term benefits which could not be met by successive track enhancements.

4 The route

- 4.1 Unite believes, however, that the route chosen for the new high speed line is far from optimal. If the service on the new line is to attract the maximum amount of traffic, it needs to connect existing to transport hubs, not run from somewhere near one to somewhere near another like some Ryanair of the rails.
- 4.2 Starting in London, the location of the terminus for the HS2 proposal harks back to an era where rival train companies competed for traffic by building their own bespoke routes disconnected from any rivals network. The aim of the new line is to provide capacity not only from the West Midlands to London but also to enable the onward journey to both continental Europe via HS1, as well as points further afield than Birmingham, Leeds and Manchester. It therefore makes no sense to bring the line into Euston and suggest that passengers walk for 10 minutes to continue their journey. If rail is to compete with aviation on such journeys, it

requires passengers to enjoy either an uninterrupted journey or one where they only have to walk a short distance at the same station.

- 4.3 One has to remember that aviation passengers are able to check-in their luggage at one airport and, hopefully, collect it at the destination without the hassle and inconvenience of manhandling it on and off trains and finding space to store it. Consequently, adding the additional complication of having to journey between stations is far from ideal.
- 4.4 The same can be said at the other end of the journey in Birmingham. It cannot make any sense for a passenger to depart Birmingham New Street station and walk for 12 minutes to arrive at Curzon Street only to catch a high speed train that will stop at Birmingham International Airport, when there is an existing line which can complete the journey in 12 minutes. It is surely better and more cost efficient to enhance the line from New Street to Birmingham International with additional capacity.
- 4.5 Throughout Europe the rail operators have realised the benefits of connecting their lines to the major transport hubs. Heathrow is one such hub, not just with respect to aviation but also in terms of bus and coach connectivity. Heathrow is the second largest depot of this nature outside of London Victoria providing connectivity well beyond the local area. With the connectivity to Crossrail, the Heathrow express and Piccadilly line it has significant additional rail connections. If the Arup for a hub on the Great Western Line is utilised, then there is the additional benefit of a direct connection to the West Country and Wales. Although such a diversion would add a couple of minutes to the total journey time, Unite believes that this would not make that much difference in journey enjoyment, whilst providing access to a wider audience for its services.
- 4.6 Although Old Oak Common, has existing train maintenance facility for Eurostar trains, it is not a transport hub. Consequently this will remove the connectivity catchment area benefits of a line linking via Heathrow. Additionally creating a separate line from the high speed route to Heathrow will increase the hassle factor, discouraging passengers from using this service. As a result it is more likely that passengers will continue to rely on their own vehicle to access the airport rather than the train.
- 4.7 Moving the line via Heathrow would also reduce the impact on the Chilterns as it would move the ideal path from one which traverses the widest point of this area to one passing through a far narrower point. This could therefore reduce the cost by eliminating the high level of tunnelling that would be needed to avoid disturbing the visual impact of the region.
- 4.8 A reduction in tunnelling will also make the journey experience of the passenger far more compelling and allow greater opportunity for passengers to work and play on-line whilst on-board. If tunnelling can be avoided it should be, as the additional costs associated not just during construction, but also in terms of maintenance, are significantly increased.
- 4.9 Finally, Unite would suggest that providing multiple close proximity stops on the onward route to Leeds would remove the benefits of an express service. Such an

all stopping train would best be served by conventional services due to the additional power requirements of high speed services.

- 4.10 The old class 43 high speed train of the early 1970s had a power output of some 2,250 hp (1,678 kW) enabling it to reach up to 148 mph (238 km/h). A modern day class 90 can produce up to 7,680hp (5,860kW) enabling it to haul longer trains up to a maximum of 110mph (177km/h)¹. A Eurostar produces a massive 16,300 hp (12,200 kW) under 25kV AC supply enabling it to reach 186 mph (300km/h). The reason why it needs this much extra power is to overcome the forces of friction with both the air and track at these speeds. A Eurostar 18 car train set has twelve 1370 hp (1020 kW) traction motors. Eight of them are in the power units (frame mounted, as in TGV practice); the remaining four are in trailers R1 and R18 and equip the trucks immediately adjacent to the power units. The reason for this is the great length (and hence weight) of the train set with more powered axles are needed to provide acceptable acceleration.
- 4.11 As energy requirements, to overcome friction and air resistance, square with speed, reducing the operational speed of trains will reduce the energy demand significantly and reduce wear on the network and train but doing so comes at the expense of additional travel time. A planned speed reduction would therefore improve the operational green credentials of a high speed service.

5 Ever increasing demand

- 5.1 The UK population is projected to increase by 4.3 million by 2018. This increase is equivalent to an average annual rate of growth of 0.7 per cent. If past trends continue, the population will continue to grow, reaching 71.6 million by 2033². All these people will require food, furniture, heating and consumer goods. They will also want to travel to work, visit friends and family and shop. Their employers will require the ability to import and export goods. Shops will want to increase the number of customers through their doors, from a wider area than just the local population. For all of these reasons and more, people and goods will need to travel. As things stand, it is highly unlikely that such capacity will be possible on the current network without a revolution in the way we utilise the network.
- 5.2 To manage this ever increasing demand, capacity is needed not only on the rails but throughout the transport industry, to get people and goods from A to B in a sustainable fashion. Movement of freight by rail significantly reduces congestion on the roads and reduces the level of accidents releasing capacity for other users. It also increases the security of loads and reduces the number of drivers attacked whilst taking rest breaks during long distance journeys on the road. Due to the lack of proper road side facilities for hauliers, many drivers who are approaching their maximum driving hours have no option but to spend the night in the back of their cab on the side of the road. During this time they are held responsible for the security of their loads.
- 5.3 With gauge enhancements from the major ports, particularly from Southampton and Felixstowe, more containerised freight is taking to the rails. The Government aims to continue to promote rail freight growth as clearly illustrated by comments

¹ Restricted to 100 mph on UK track.

² Source:- Office of National Statistics.

on the 2012 Rail Command paper, which states “*Government will provide a clear planning policy framework to support further private sector investment in rail freight terminals and rail-connected distribution parks, including Strategic Rail Freight Interchanges (SRFIs), to support growth*”³. The capacity on the existing network is not sufficient, however, to meet the needs of both future passenger numbers and rail freight growth.

6 Conclusions

- 6.1 Unite sees the development of a high speed rail network as a key part of an integrated, sustainable, intermodal transport system. Proposals in both the McNulty report and the Rail Command Paper to discourage passengers from travelling at peak times will not work unless there is a sea change in the way companies and offices operate, to accommodate more flexible working practices. Consequently Unite believes that only realistic option is to build an alternative rail network to increased capacity on the most crowded routes, whilst providing the masses with a way of moving long distances on a dedicated high speed network.
- 6.2 The start of this process is to build a line between London St Pancras and Birmingham International, via Heathrow. The services on this new line will need to attract the passenger numbers to make the improvement possible rather than leaving the new network the preserve of the rich.

³ Para 44.6