

High Speed Lines

ATOC's view

ATOC firmly backs the principle of the provision of a new high speed link to the Midlands and beyond to provide more capacity to allow more people and freight to use rail. In ATOC's recent evidence on high speed to the Transport Select Committee¹ we set out our support for and endorsement of the Government's proposals in respect of high speed rail.

The development of high speed rail and in particular High Speed 2 (HS2), with the Y-shaped network that the Government proposes, sets a clear, long-term plan that will help bring significant journey time gains to and from many regions of the country, including the North West, Yorkshire, the North East and Scotland. It will also release capacity on all three of the existing North – South main line corridors (the West Coast, Midland and East Coast Main Lines).

Beyond these immediate impacts, a high speed rail network of this kind would provide substantial, broader benefits in development and environmental terms. In particular, it would:

- improve the economic development of the regions served, increase their competitiveness and reduce their peripherality;
- contribute to the country's longer-term environmental goals by attracting passengers from air and car, whilst also taking the pressure off runway capacity in London and the South East; and
- through the release of rail capacity, unlock the development of improved commuter and regional services on today's North-South main lines, particularly the West Coast, whilst permitting improvement in both the capacity and transit times of freight services. The latter would make a significant contribution to the development of the strategic freight network that the rail industry has been developing since 2007.

ATOC welcomes the Government's confirmation² that they support the development of a high speed network. Earlier, in 2010, ATOC had indicated its agreement with the principles of the HS2 Command paper produced by Sir David Rowland's HS2 team but believed that closer scrutiny and revision was required to ensure the project delivered value for money and served the major areas of demand. ATOC is pleased to see that many of the issues identified were addressed in this ministerial announcement.

ATOC believes that the Secretary of State's more recent commitment to a network that will serve Manchester and Leeds, as set out in the launch of the consultation on HS2³, will help provide capacity to address the growth in demand for travel not only for long distance journeys but also for the important regional market. This, coupled with a proposed link to HS1, will allow Great Britain to play its part in the development of a more sustainable transport infrastructure; moving towards meeting the objectives set out in the EU Commission's recent White Paper on a single European transport area⁴, especially regarding the expansion of EU transport network and the development of a high-speed pan-European rail system.

- ATOC endorses the Government's conclusion that the line should be planned as a Y-shape serving not only Birmingham but also Manchester, the East Midlands,

¹ Submission to the House of Commons Transport Select Committee inquiry into the strategic case for High Speed Rail by ATOC – 16 May 2011

² Ministerial Announcement December 2010

³ Ministerial Statement 28 February 2011

⁴ Roadmap to a single European Transport Area – Towards a competitive and resource efficient transport system, EU Commission, March 2011

Sheffield and Leeds. ATOC also advocates the need to look at further options for HS2 to serve Scotland and thus welcomes the Government's commitment to explore further options with the Scottish Government for reducing journey times to Scotland.

- Whilst ATOC supported HS2's earlier decision to base the London terminal of the high speed line at Euston, and continues to do so, particularly now it has been confirmed by Government, it believes that a review of a more detailed nature needs to be conducted to take account of wider issues, including onward dispersal and the need to alleviate the increased demand which would be placed on the heavily overcrowded tube lines there. ATOC argues that serious consideration should be given to diverting London Midland services at Willesden to join the new Crossrail system. This would relieve pressure on London Euston, allow for a smaller station 'footprint' and could facilitate less disruption during the rebuilding. Network Rail has, in its recently published London RUS⁵, also recommended that this option should be subject to a detailed evaluation as it could deliver a number of additional benefits.
- ATOC is pleased to see that phase 2 of the programme will now include a spur to Heathrow. ATOC believes that this option is the most attractive as it could eventually allow extensions of the high speed network to the South and South West if the business case is proven. Furthermore, the decision to carry out preparatory works for the link to HS1 will eventually allow the development of journey opportunities into the wider European high speed network particularly from the Midlands and the North and also in the longer term from Heathrow and possibly further to the west if the network develops.
- Whilst ATOC understands the possible interim case for a Crossrail Interchange station at Old Oak Common to serve Heathrow it is doubtful of the longer-term business case for all HS trains to call especially as this will undermine the journey time benefits of HS2. Once the Heathrow spur is built many of the advantages of Old Oak Common as an HS2 station would disappear. Furthermore, there would be pressure to stop long distance Great Western services extending journey times between the south west and London. Alternatively, if this was part of a regional interchange between Crossrail and local services from the West Coast Main Line its advantages would be greater.
- The proposed station at Birmingham, Curzon Street still appears to be the most suitable location for the city but ATOC still emphasises that due attention must be given to delivering the appropriate connectivity into the city centre and with existing rail stations (New Street and Moor Street).
- ATOC also recommends that further work needs to be carried out on service patterns for HS2. The services to call at the proposed station east of Birmingham Airport/International have yet to be defined and there is a balance to be struck between the wider accessibility to the station by road that such a station will provide for most of Warwickshire, the wider journey opportunities available to the north from such a station, and the accessibility and journey time improvements gained by terminating services in Birmingham city centre.
- Furthermore, more analysis will need to be carried out on the impact on the existing Birmingham – London Euston services. At present these have the benefit of serving not only Birmingham but also a number of stations with high levels of demand (Birmingham International; Coventry) which supports high frequency services.

⁵ Network Rail, London and South East Route Utilisation Strategy (July 2011)

- There is need for capacity as well as speed. New infrastructure should be capable of delivering greater capacity, improved journey times and support high speed services. The HS2 paper recognises this.
- Pressure on capacity in the short term (up to 2020) makes it essential that investment in the existing main line network is not deferred or suspended as a result of the proposed investment in high speed lines. In this context ATOC welcomes the conclusions set out in Greengauge 21's paper 'Capturing the benefits of HS2 on existing lines'⁶. This demonstrates the wide range of benefits that can be delivered on existing lines with vastly improved service patterns on the West Coast Main Line and on local and regional services to the south east of the West Midlands. However, there must be a full commitment to delivering the revised regional service patterns as part of the HS2 package if the full benefits of the investment are to be realised and to maintain public confidence.
- HS2's cost estimates are higher than those assumed by NR and Greengauge 21's studies. Whilst the business case, even based on the HS2 costs, is good (a benefit/cost ratio of 2:1) ATOC believes that the opportunity should be taken to review these costs and to assess the benefits of wider private sector involvement in development and construction.
- ATOC believes it is essential that the UK train operators are directly involved in the development of the project. They will be able bring their wide experience of rail operation to the project and will also be able to identify the areas where private sector involvement can contribute to improving the economic basis of the project.

Background and key issues

- The Government Command Paper on high speed lines developed by HS2 was published in March 2010. It was based on their report sent to then-Transport Secretary Lord Adonis in December 2009, outlining HS2's vision for a new high speed route.
- Since May 2010 the new coalition Government expressed a commitment to the development of high speed rail. They undertook a review of the HS2 findings and in December 2010 endorsed the conclusion to build a first phase to Birmingham but, most importantly, committed to a further phase of development to the north of a Y-shaped network serving Manchester and Leeds whilst in the south confirmed that Heathrow Airport would be served by a spur alignment with preparatory work on a link to HS1 being part of the first phase. ATOC fully supports the coalition Government's proposals.
- The Government White Paper of 2007 on rail focused on medium term enhancements to the existing network but, based on the conclusions of the Eddington report, did not accept some of the benefits attributed to high speed lines. Subsequently Lord Adonis endorsed the case for further consideration.
- Whilst the earlier Eddington Report (2006) was conservative in its view of some of the benefits of high speed rail it did also highlight the importance of meeting the transport needs of growing city catchments, key inter-urban corridors and key international gateways – all of which are directly relevant to the potential of high speed rail.

⁶ High Speed Rail – Capturing the benefits of HS2 on existing lines. Greengauge 21 February 2011

- The top speed by train in Britain today is 186 mph (300 kph), which is the speed limit on HS1 between London and the Channel Tunnel. Maximum speed for principal long distance services in Britain is 125 mph (200 kph).
- New high speed domestic services from Kent started operating on HS1 in December 2009.
- The success of HS1 from London to the Channel Tunnel, has led to renewed discussion of the case for dedicated high speed lines in Britain, and Network Rail reported its view in August 2009⁷.
- The principal benefits of new lines in Britain will be the creation of additional capacity to meet the growing needs of passengers and freight customers. The pressure points are identified in Network Rail's Route Utilisation Strategies (RUS) for each route but in particular the West Coast Main Line. This RUS⁸ specifically identifies that HS2 would provide significant additional capacity on the corridor; this is essential as it estimated that demand will outstrip capacity by 2024. HS2, as well as helping to address the capacity constraints identified in the RUS, will improve connectivity on the existing network, support national economic competitiveness and reduce carbon emissions by encouraging more people to shift from roads and air to rail. Furthermore, the recent report by Greengauge 21 on capturing the benefits of HS2 clearly demonstrates that, with possibly one minor exception, the building of HS2 will also allow the delivery of a wide range of improvements and improved capacity on traditional lines to the North West of London, in the West Midlands and beyond.
- The principal benefits of new high speed lines would be in terms of the economic development of the regions served (agglomeration benefits), increasing their competitiveness and reducing peripheralities, as well as significant journey time savings for passengers.
- Other benefits would be in terms of a reducing the carbon footprint of passengers attracted from air and car, contributing to potentially reduced demand for runway capacity in South East England, and encouraging a significant shift from car, with a reduction in congestion. More work is required to understand and quantify such benefits.
- High speed lines based on advanced rail technology have the advantage of being compatible with the conventional rail network, so that trains can use existing city centre stations, or run through to destinations where a new high speed line could not be justified.
- Whilst energy consumption increases as speed rises, this can be offset through effective system and rolling stock design, and the higher capacity of trains mean that emissions per passenger kilometre remain low compared with other modes. Eurostar, for example, offers passengers a carbon neutral journey.
- The lead time for development and construction of HS1 was 20 years, and this is why it is right to plan now for lines that will be required beyond 2020. It is also why it is essential that Government continues to invest in upgrading capacity and

⁷ <http://www.networkrail.co.uk/asp/5892.aspx>

⁸ West Coast RUS - see:

<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/west%20coast%20main%20line/westcoastmainlinerus.pdf>

capability of existing routes to meet the growth in demand between now and 2020.

Relevant ATOC activity

- ATOC is a participant in the Greengauge 21 Stakeholder group to share in the analysis being undertaken of the demand factors and external benefits that might drive the need for greater capacity and better connectivity. It is also a key contributor to the Route Utilisation Studies and has given input to the Network Rail HSL studies.

Key documents/links

- HS2 command paper:
<http://www.dft.gov.uk/pgr/rail/pi/highspeedrail/>
- Eddington Report:
<http://www.dft.gov.uk/about/strategy/transportstrategy/eddingtonstudy/>
- Rail White Paper 2007:
<http://www.dft.gov.uk/about/strategy/whitepapers/whitepapercm7176/>
- Network Rail HS report:
<http://www.networkrail.co.uk/asp/5892.aspx>
- Greengauge 21 proposition:
http://www.greengauge21.net/assets/FastForward_Greengauge21.pdf
- Capturing the benefits of HS2 on existing lines
<http://www.greengauge21.net/wp-content/uploads/Capturing-the-benefits-update.pdf>
- West Coast RUS (July 2011):
http://www.networkrail.co.uk/browse_documents/rus_documents/route_utilisation_strategies/west_coast_main_line/westcoastmainlinerus.pdf
- DfT HS2 consultation 2011:
<http://highspeedrail.dft.gov.uk/>

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