

1. Introduction

This document is submitted as supplementary evidence to the Transport Select Committee's inquiry on High Speed Rail by HS2 Action Alliance.

Its purpose is to clarify the basis on which the Government and some supporters of HS2 have been contending that:

- *WCML will be full within a decade*
- *WCML will be completely overcrowded by 2022, and*
- *The means of increasing capacity will be exhausted.*

These statements relate to contentions made by Network Rail, but this note explains that they are not consistent with the actual forecasts made by Network Rail.

2. Summary

Network Rail (NR) have made recent statements about when WCML will be full which are currently being taken out of context. These statements refer to

- *Within 6 to 10 years*, but this statement to the Transport Select Committee was simply based on the past increases of 10%/a continuing (which no one expects, least of all NR's own forecasts, or HS2 Ltd's); using NR's own forecast suggests more like in 38 years time
- *Effectively full by 2024*, but this statement was based on NR's Draft RUS and assumes no other improvements are made, not even those they identify eg running an extra off peak service, and seem to ignore their own evidence on actual levels of overcrowding (that indicates about 5% overcrowding weekdays by 2024)

The above does not provide robust evidence on which Philip Hammond can state the WCML will be 'completely overcrowded by 2022', or statements by Theresa Villiers that it will be full within a decade, or the position being quoted by Prof Begg (on his Yes to HSR website) that it will be full within 6 to 10 years.

Statements are being taken out of context, and are used to suggest there is no other option than HS2.

3. Evidence

3.1 Government statements

Philip Hammond, Theresa Villiers¹ and Alison Munro have all been stating that WCML will be full in around a decade. Most recently they rely on statements made by David Higgins (Network Rail's Chief Executive) to the Transport Select Committee. But his statement (that WCML would be full in 10 years, or even 6 to 10 years) involves a projection that no-one, including NR, would say is realistic. His words have been taken completely out of context.

Prior to that they rely on statements Higgins made when the HS2 consultation was announced.

3.2 Network Rail forecast

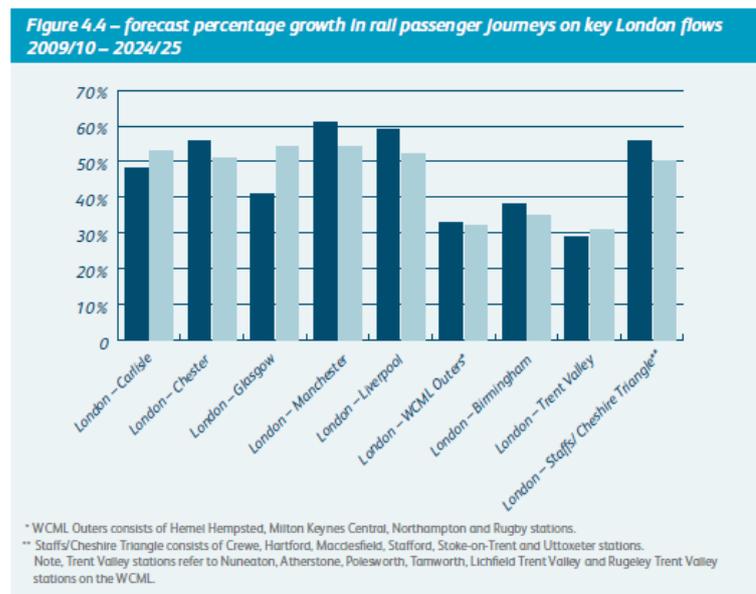
¹ Villiers in Westminster Hall debate on HS2 (March 2011); Hammond on Central ITV debate (19 May 2011); Hammond on statement to the house (20 December 2010); Alison Munro on radio (11 April 2011); Prof Begg on Yes to HSR website 4 April 2011).

What NR actually forecast in the December 2010 draft RUS for WCML is reasonably in line with the current forecasts for WCML made for HS2 Ltd.

Figure 1 shows the growth they forecast. If average growth is about 45% to 2024/5, this gives 2.5% per annum – so that demand doubles in 28 years (HS2 forecast has demand doubling in 35 years).

However, the Draft WCML RUS had the forecasts done prior to the fares revision of RPI+3% for 3 years, so forecasts that included this factor should be lower to some extent.

Figure 1: Network Rail: Draft WCML RUS, page 69



3.3 Network Rail statements

David Higgins was reported as follows in welcoming the HS2 consultation (28 February 2011, on NR’s web site):

‘David Higgins, Network Rail chief executive, said: "HS2 is a vital infrastructure project of national importance. It will be a hugely significant enhancement to the national rail network and will unlock tremendous capacity to tackle, what will be by 2024, critical overcrowding on the West Coast Main Line.

"The West Coast Main Line is Britain’s busiest and most economically vital rail artery. It will be completely full by 2024 with no more space to accommodate the continued predicted growth in both passenger and freight traffic. A new high-speed line to Birmingham and the North West is essential both to release much needed capacity on the existing line for more freight and commuter services, but also in creating the vital transport links we need to help Britain’s economy thrive." ‘

This announcement is supported by reference to the Draft WCML RUS, with up to 61% growth (3.5% per annum) in passenger numbers between Manchester and London for 2024. This is the highest growth for London and other city pairs (see figure above), and the highest growth scenario. This leads to the modest levels of crowding shown in Figure 4.6 (from the Draft RUS).

NR forecast that 12%² of the long distance high speed trains will have some standing in some point of their journey by 2024 (although how this aligns with Figure 4.6 is unclear). But NR see running an additional off-peak service (making use of spare capacity in the time table) as addressing this issue. This can be achieved with the then existing rolling stock, and so has little cost. Interestingly they do not see a business case for lengthening the rest of the Pendolino fleet to 11 car, or for the Voyager fleet for services to North Wales.

However, it should be noted that the business cases developed by NR are on the DfT basis that time savings are very valuable (assuming every minutes of time saving is a minute of additional productive time) and relieving crowding has little value as time is unproductive in any event. The business case for reducing crowding should be much stronger when DfT's approach is corrected and crowding is taken to have a much higher productivity related cost.

Curiously NR in the Draft RUS entirely dismiss the option of extending trains, claiming that after the re-timetabling:

*'.....thereafter the WCML, particularly at the southern end of the route is effectively full and subsequent additional capacity could only be provided by exceptionally expensive infrastructure solutions.'*³

This is odd, as lengthening trains is normally the cheapest means of creating more capacity, and is identified by Network Rail as the next course of action to adopt after exhausting timetable changes⁴. With only the Pendolino partly lengthened to 11-car, there are options of lengthening the rest of the Pendolinos, lengthening the Voyagers and selectively lengthening some Pendolinos to 12-car.

NR also do not actually consider means of increasing capacity through infrastructure solutions either, simply claiming that:

*' Further, more expensive, incremental capacity improvements have not been considered in detail as Network Rail, High Speed Two Limited and the DfT have already examined this, concluding that a new line is the preferred strategy.'*⁵

The Draft RUS provides the government with some quotes clearly stating that WCML will be full by 2024, however, this is reliant on a 'do nothing' view of future interventions. NR actually identify how crowding can be addressed through running an extra train off peak. They dismiss the options of train lengthening (possible for both Pendolinos and Voyagers) as lacking business cases. Their consideration of options is clearly constrained by the perceived imminence of HS2 and is not evidence that options to increase capacity on WCML do not exist..

2.4 Transport Select Committee evidence

David Higgins' statement to the Transport Select Committee (1 March 2011) is frequently quoted by the government, and also by Professor Begg on the Yes to HSR website. The following is an extract of the oral evidence that David Higgins gave to the Transport Select Committee.⁶

'With West Coast, it has been a tremendous success. £10 billion upgrading West Coast means that now that franchise is having customer growth of over 10% per annum. At Christmas it was up by 20% year on year. That West Coast line, within 10 years at the absolute maximum, and probably six years, will be at capacity, and that is with additional carriages included in the area. We can look at other tactical interventions in that line to put more capacity in there, but in the

² Draft RUS WCML, Network Rail, December 2010, page 7

³ Network Rail *op cit*, Section 6.5 page 118

⁴ Network Rail *op cit*, section 6.2 page 113

⁵ Network Rail *op cit*, page 89

⁶ Transport Select Committee 1 March 2011: David Higgins, NR Chief Executive

When will WCML be full?

end it comes down to capacity: we will, across a number of key parts of our network, run out of capacity.

Q25 Mr Leech: How many years do you predict that it would be-

David Higgins: *Six to 10 years.*

Q26 Chair: Is that six to 10 years from when it runs out of capacity?

David Higgins: *From today. If it keeps growing at the rate it is going today, and if petrol prices keep going in the way they are going, then in 10 years' time West Coast will be at capacity.'*

The statement was not therefore based on NR's forecast but simply the recent past (that reflects the effect of the much improved services from the Route Modernisation being completed) continuing.

The recent past of WCML reflects the upgrade that has resulted in massive reductions in generalised journey times from faster journeys, more frequent services and higher reliability. No one expects the uplift from these changes to continue to drive demand increases that are out of line with 'background growth'.

The information can however be used to calculate the point at which NR believe it will be full – on the basis of 6yrs (minimum) and 10 years (maximum) at 10%/a this represents between 77% and 159% growth.

Table 1: using forecasts to calculate maximum and minimum period until WCML is full

NR maximum period to reaching capacity		increase	'at capacity'
NR statement	10%/a for 10 years	159%	2021
NR RUS forecast	2.5%/a for 38 years	156%	2049
HS2 Ltd forecast	2.02%/a for 47 years	156%	2058
NR minimum period to reaching capacity			
NR statement	10%/a for 6 years	77%	2017
NR RUS forecast	2.5%/a for 23 years	76%	2034
HS2 Ltd forecast	2.02%/a for 28 years	75%	2039

Table 1 shows the results

- *Max period:* It would take 38 years for WCML to be full using the average forecast growth from NR's Draft WCML RUS and 47 years on HS2 Ltd's WCML forecast growth rate
- *Min period:* It would take 23 years for WCML to be full using the average forecast growth from NR's Draft WCML RUS and 28 years on HS2 Ltd's WCML forecast growth rate

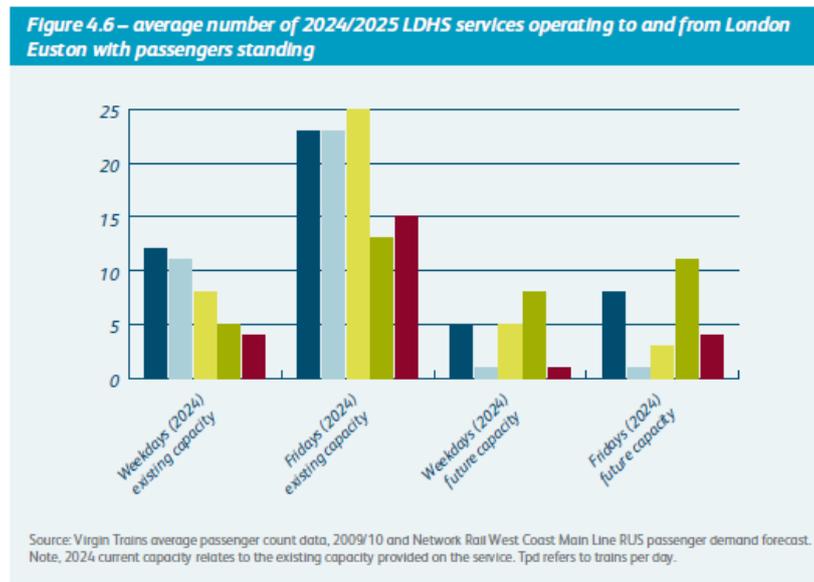
The answer probably lies somewhere between the two results. Based on HS2 Ltd's forecast this would be between 28 and 47 years

2.5 Crowding evidence

Figure 2 is from the Draft RUS and the section on crowding. The right hand side (future capacity) gives the levels of crowding expected with the new rolling stock to be introduced in 2012. The level of trains with some standing are modest (about 5%) – no doubt largely reflecting the first trains eligible for regulated saver fares in the evening (as now). It is not clear how this figure fits with the 12% of services to and from Euston having some standing at some stage.

The higher levels of crowding on the Wales services (green bars, 2nd from the right) have the highest crowding. These services are run by the Voyagers, for which no new rolling stock is being acquired, although more Voyagers could be obtained allowing more trains to be made up of two 5-car units (for example).

Figure 2: Network Rail: Draft WCML RUS (page 71)



Philip Hammond, on this evidence, has some difficulty in saying that services will be ‘completely overcrowded by 2022’, as he did on the recent Central ITV debate (19 May 2011).

Conclusion

It is convenient for Government and Professor Begg that Higgins made his statement about how long WCML might take to reach capacity, but the unqualified way it is being used or quoted is misleading – as what he said is a ‘what if’ type of statement, rather than NR’s own proper forecast.

Similar statements in the Draft WCML RUS appear to apply to 2024 but actually using Network Rail’s forecasts, but these relate to the situation if nothing is done. NR actually identify a low cost solution.

That 5% (or 12%?) of long distance trains will have some standing in 2024 without any further increases in capacity beyond that committed for 2012 is poor evidence that WCML will be ‘completely overcrowded by 2022’ as stated by Philip Hammond.

Bruce Weston
3 June 2011