

Westminster Energy, Environment and Transport Forum Policy Conference

High Speed 2 – delivery practicalities and future
Government policy

Key issues arising from the Oakervee Review of HS2

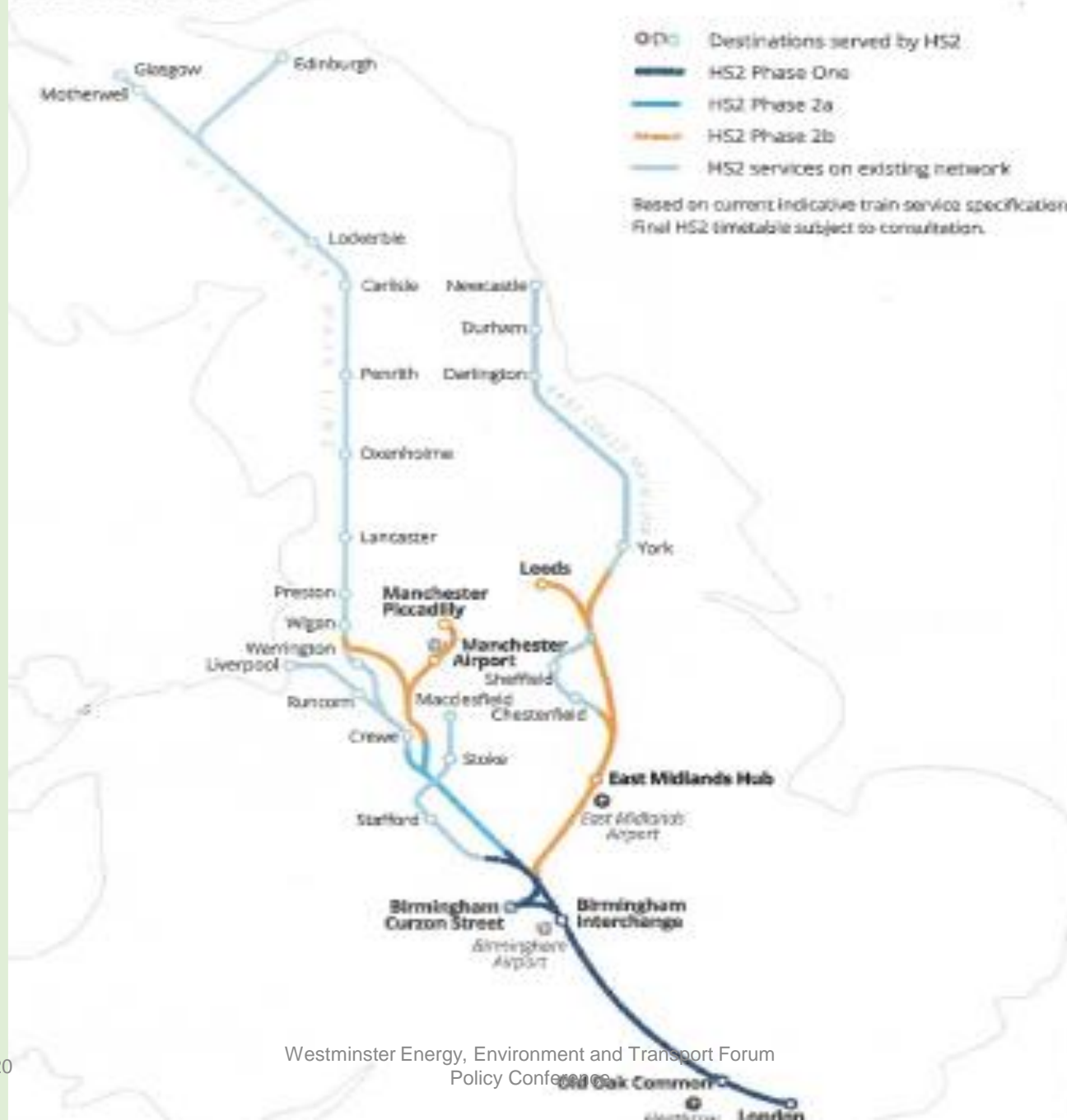
Tony Berkeley
Former Deputy Chairman of Oakervee Review

House of Lords, March 2020

Terms of Reference of Review

- *Review whether and how to proceed with HS2 ahead of Notice to Proceed for Phase 1*
- *For whole project, rigorously examine:*
 - *Full range of benefits and costs*
 - *Business case assumptions, passenger numbers, train frequency*
 - *Potential for cost reduction*
 - *Reprioritising, cancelling or descoping project*
 - *Prioritising in the North with Northern Powerhouse Rail (NPR)*
 - *How to better integrate HS2 with other rail projects in NPH and Midlands*
- *Time for Review Mid August to end October 2019 to allow Government decision by end of 2019.*
- *Review panel of experts*
- *Secretariat from DfT including HS2 section.*
- *The Review Team will be provided with any papers and persons they request.*
- *Written Report suitable for publication.*

The HS2 route



The Review Process

Mid August to end October 2019

- Meetings with:
 - Regional leaders
 - Network Rail
 - HS2
 - DfT
 - HM Treasury
 - Some advisors and consultants
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- Submissions from many of the above generally on anything relevant
 - 300 to 400 documents in all.
 - Text of draft report edited by DfT officials

Problems

- Information from HS2 and DfT was abundant
- Review was encouraged to use DfT/HS2 info and not seek alternative views
- Need to sign Non Disclosure Agreements restricted any debate with external bodies
- Review members were not allowed to take text out of the office for fear of leaks
- No meetings of Review members to discuss final drafts
- Most important of all, DfT and HS2 were very reluctant to provide information to back up their forecasts of passenger numbers/revenue and capital costs.

Passenger numbers and revenue

- There was no opportunity to challenge the DfT/HS2 view on passenger numbers or fares, nor the effect of adding all these extra seats might have on the revenue from existing services.
- HS2 plans to operate 18 trains per hour, whereas in Japan and continental Europe there are no lines operating at more than 12 to 13 tph. Oakervee recommends 14tph but future proofing to 16 tph.
- Train speeds and route alignment planned by HS2 were for 360/400 kph, again higher than the standard of 320 kph on the continent. A reduction to 320 kph would reduce capital costs by around 30% by realigning tracks, changing specifications for track design and structures etc.
- However, the revised DfT appraisal methodology gives greater benefit to the highest speeds.
- A prudent analysis would reduce the benefits used by HS2 in the ratio 14/18 trains per hour.

Costs

Officials refused request to bring in independent consultants as Michael Byng to challenge Hs2's costs, so Oakervee relies on the latter.

For Phase 1, Oakervee uses a cost range of £36.1bn to £38.4bn for Phase 1 at 2015 prices (Q1), an increase of around £10bn on the funding envelope on which parliament gave approval in 2013.

Chairman's stocktake suggests total for HS2 £80.7bn to £87.7bn at 2019 prices. Oakervee adds 15 to 20% to this, taking this to over £100bn.

Byng suggests HS2 has omitted certain essential costs, total should be £106bn (at 4th Quarter 2015 prices)

Oakervee suggests that the private sector should fund the main stations, thereby reducing the overall capital costs of the scheme, but fails to provide any examples of where this has been successfully achieved.

None of the above figures include the cost of traction and rolling stock, estimated by DfT to cost £7.92 bn, at 4th Quarter 2015 prices

HS2 capital cost estimate up three times.

- 2011 estimate of costs (prices 2009) excl rolling stock £32bn
- 2013 revised upwards to £38.4bn
 - Long term funding envelope £50.1bn
 - 2015 'Current' Funding Envelope £55.7bn
 - 2019 same funding envelope confirmed in Parliament. £55.1 bn
 - 2019 Chairman's Stocktake at 2019 prices £80.7bn to £87.7bn
 - 2020 Oakervee adds 15 - 20%, taking this to over £100bn.**

Who in Government and HS2 knew what and when?

11 May 2016 Patrick McLaughlin (S of S) wrote to George Osborne (Chancellor) saying that they could not keep to the HS2 cost estimate, but needed to keep this confidential.

At the Public Accounts Committee hearing on 4 March 2020, (uncorrected proof), Bernadette Kelly, DfT Permanent Secretary explained the reasons:

- ‘£55.7bn budget originates from 2013 (November Estimate of Expense), ‘Uncertainty, **we couldn’t have known the budget was incorrect.** risk & complexity, Overoptimism’
- PAC Chair Meg Hillier MP to HS2 CEO Doug Thurston on the HS2 2018-19 Annual Report...
- ‘Can you explain to us why your annual report statement did not reflect the reality of the finances?’
- ‘We didn’t want to scare the horses’
- Hillier...”some of those horses were the taxpayer”.

They DID know that the budget was incorrect in 2016 but chose to keep it quiet. This means they misled parliament!

Benefit/cost ratios

- Oakervee page 102 give the BCR without wider economic benefits of 1.1 to 1.2. This uses the Chairman's stocktake cost figures and revenue from an unachievable 18 trains per hour.
- Oakervee considers many reasons for adding wider economic benefits, of which the largest is agglomeration, as well as benefits from journey time savings, reductions in waiting and crowding and reliability. How realistic are these?
- Taking a capital cost of £106bn as forecast by Oakervee and Byng, and reducing the revenue by 14/18 trains per hour, the **BCR reduces to 0.6**. Normally this would cause the Treasury to reject a scheme as being bad value for money.

Does HS2 deliver what is needed?

ToR: Prioritising in the North with Northern Powerhouse Rail (NPR)
- How to better integrate HS2 with other rail projects in NPH and Midlands

- HS2 gets people between major cities more quickly; good for intercity travellers.
- Comments from many in the N and Midlands that local and regional service and infrastructure improvements are more important to deliver better service to daily commuters, bringing economic benefit and more job opportunities.
- These are not achieved by HS2 except in parts of the NPR area.

Does HS2 deliver these benefits when they are needed?

- HS2 claims to be ‘shovel ready’ even though there are many contractual matters to be sorted out before Phase 1 can start ,as well as designs for Euston and Old Oak Common.
- More importantly the benefits to passengers from HS2 will not be delivered until 2030 to 2040.
- Improvements to local and regional services are also really ‘shovel ready’ in many cases just awaiting DfT approval and finance.
 - Examples include wider electrification to allow 300 new electric trains currently stored to be used.
 - 4 tracking at through platforms at Manchester Piccadilly
 - Many more can be ready for use in a few years

So in addition to HS2, these regions need...

- The National Infrastructure Commission has estimated that essential connections for HS2 are needed - cost £44.36 bn.
- 'Connecting Britain by Rail' give summary of what is needed in these regions to improve local and regional services of:
 - NPR area £38.89bn
 - Midlands Connect area £20.20bn
- Total 'extras' to give these regions what they need:
 - £103.45bn

Total estimated capital costs HS2 + local and regional upgrades

- MB estimate HS2 Phases 1, 2a, 2b E & W £107.92bn
- DfT traction and rolling stock £7.92bn
 - +Inflation 2015-2019 3Q gives total HS2 £128.34bn
 - NIC estimate connecting services current prices £44.36bn
 - NPR Rail programme current prices £38.89bn
 - Midlands Connect Rail programme 3Q 2019 £20.20bn

**HS2 entire project, connectivity, NPR and MC
current prices £231.79bn**

References and more detail in letter to Chancellor 25 February 2020

Alternative works to the classic rail network compared to HS2

• Chiltern Line upgrade and electrification	£19.43bn
• Midland Main Line Upgrade and electrification	£13.85
• Cross Country Upgrade and Electrification	£14.55bn
• Midlands Connect Upgrade and Electrification	£6.43bn
• Total	£54.24bn

This compares with £128.34bn for HS2 at 3rd Quarter 2019 prices

Saving £74.10bn

- Upgrades contained in the document 'Connecting Britain by Rail' contained in letter to the Chancellor of the Exchequer

If the North and Midlands are to get the local and regional rail improvements needed to bring these areas up to the standard that the South East enjoys, Government has at least two options:

1. Make a firm commitment not only to HS2 but to the local and regional expenditure totalling £231.79 bn over 20 years
2. Cancel most of HS2 (except in NPH area) and commit to the local and regional expenditure and the alternatives to HS2 in Connecting Britain by Rail, committing £157.69bn. A saving to the taxpayer of £74.10bn.

Option 2 delivers:

- earlier improvements to the network,
 - reduced construction risk due to smaller contracts
 - Greater environmental benefits
 - Similar capacity improvements on main lines
- Option 1 gets you to and from London more quickly!

Conclusion

- HS2 costs have trebled over ten years – before any permanent works have started.
- Ministers kept this secret from Parliament.
- The final Oakervee Report was written by DfT officials and lacks independence.
- HS2 does not deliver the rail improvements needed in the North and Midlands which are seen by most users there as more important than getting to London more quickly.
- In terms of delivering improvements to passengers, HS2 is less 'shovel ready' than many smaller and less costly enhancements in the North and Midlands.
- Will Government commit to 20 years expenditure of £106bn on this one rail line without committing to the other less exciting but more needed regional improvements that commuters and the economy need to bring those networks up to the standard of the South East?

Lessons to be learned

- HS2 project is too large for the construction industry, for the management, for government departments and ministers.
- The progress of costs and programme may have been monitored, but only by those whose interests are in keeping going whatever the cost. Little of independence in the Oakervee Review.
- HS2's costs could not be challenged independently as the company did not use the industry standard – Rail Method of Measurement.
- The project started as being needed for speed, but this was changed to capacity, but nobody changed the specification to reflect this change, adding 30% to the capital cost.
- Sadly, nobody will be to blame, and anyone at risk will be moved to a different role in government.

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- References:
- Oakervee Review
- Dissenting Report by Lord Berkeley
- Lord Berkeley letter to Chancellor of the Exchequer with Report 'Connecting Britain by Rail' dated 25 February 2020.