



# TRANSPORT COMMITTEE DELIVERING MAJOR INFRASTRUCTURE LEARNING FROM HS2, HCI I39

Commentary on Oral evidence given on 9th July  
2025

## Abstract

This paper contains an analysis of the questions asked, Nos. 1 – 80, and the answers given by the witness and an executive summary

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## Executive Summary

### The Hearing and the evidence

#### Questions

The questions were basic and lacked substance because the Committee does appear to have been adequately briefed beforehand.

In the absence of a formal agenda, they lacked objectivity to address the growing and continuing problems with the project.

#### Answers

The answers, with few exceptions did not explain how the Department for Transport and HS2 Limited have dealt with these issues which have been clear since the completion of The Oakervee Review in February 2020.

The witnesses, in particular Lord Hendy and Alan Over, who were involved in The Oakervee Review and the details presented to it, have much more knowledge of the project than members of the Committee, and could have provided more detailed answers to the questions put to them.

Mark Wild, who has access to all historic data within the company, ought to have encouraged Mr. Over to be more forthcoming with his answers.

#### Outstanding issues

No indication of the estimated final cost of the project was offered nor the dates for delivery of the project into services.

The intransigence of HS2 Limited's supply chain to renegotiate the onerous contracts giving rise to excessive costs, was mentioned on several occasions.

The dates offered by Mark Wild for the publication of the reset figures and the renegotiation of the supply chain contract is the wrong order, December 2025 and Autumn 2026, they should be reversed and published as soon as possible to avoid further waste of public money.

#### Control of the project.

The project is out-of-control, with its management agenda being set by its supply chain and the professional consultants employed by HS2 Limited. In the early stages, prior to The Oakervee Review, there appears to have been an abuse of the processes used on the project for personal or corporate financial gain. Although efforts have been made by some advisors to address these issues, nothing has been done to correct them.

### Further hearings

In Question 80, Ruth Cadbury MP (Chair) suggests that the witnesses may be invited back to give evidence when the reset is complete. That is too little, too late, considering the superficiality of the evidence given at this hearing and the juxta timing of the reset and the completion of commercial negotiations.

With delay the Committee should be given comprehensive independent briefing on the issues arising and reconvene the hearing without delay.

### Administration

To remove and commercial intransigence and to introduce the missing commercial tension mention by Mark Wild in his answer to Question 31, putting HS2 Limited into Administration or threatening to do so, would create the missing commercial tension, immediately.



## Transport Committee

### Delivering major infrastructure: learning from HS2: HC 1139 - 9th July 2025

#### Introduction

This paper provides a commentary on the oral evidence given before the House of Common Transport Committee by Mark Wild, Chief Executive, HS2 Limited and Alan Over Director General for Major projects Group, Department for Transport.

The commentary also includes an analysis of the questions asked by the Committee and the comprehensiveness of their content.

#### Transport Committee members

Of the members of the Committee who questioned the witnesses, only its Chair, Ruth Cadbury MP, had been in Parliament for the duration of the HS2 project. The remaining members entered parliament much later and would not have had a detailed knowledge of the project's history.

Except for the Chair of the Committee, Ruth Cadbury MP, and its invited guest, Sir Geoffrey Clifton-Brown MP, none of its members were in Parliament as the project received Royal Assent and was scrutinised, nor were they party to The Oakervee Review.

Without adequate detailed briefing, the Committee, in its present form, would have been unlikely to understand the issues arising from this project to be able to ask incisive or probing questions of the witnesses.

Comprehensive briefing is crucial as the two witnesses have intimate knowledge of the project, Mr. Wild from 2020 and Mr. Over from its inception, with the knowledge and ability, if they so wish, to deflect the committee's questions or to omit the whole truth in each answer.

#### Prior briefing

The Transport Committee does not appear to have been briefed before this hearing. Earlier hearings, including those of the Public Accounts Committee have similarly been denied prior, informed briefings. The PAC, when chaired by Dame Meg Hillier MP, was denied access to forensic support and the funds to pay for independent forensic support considering the intransigence and obfuscation by officials from the Department for Transport and officers of HS2 Limited.<sup>1</sup>

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<sup>1</sup> Dame Meg Hillier MP, confirmed at a meeting in the House of Lords with Lord Berkeley and M H Byng on 21st October 2021.

## Witnesses prior knowledge.

Mark Wild, Chief Executive HS2 Limited, is currently carrying out a major reset of the company's activities and has access to all the information describing company's business and the event leading up to the Hearing.

Mr Over, as a senior civil servant within the DfT, had access to all information about the project, including its funding and attended The Oakervee Review between September 2019 and March 2020, and heard all the evidence given to it, including accounts of the construction problems the project faced, the shortcoming of HS2 Limited and concerns over the emerging costs of the project and the dates for completion.

Lord Hendy was a member of The Oakervee Review panel, between September 2019 and March 2020, and heard all the evidence given to it, including accounts of the construction problems the project faced, the shortcoming of HS2 Limited and concerns over the emerging costs of the project and the dates for completion.

## HS2 – Lessons to be learned

### History of the project

To ensure that the Committee adequately scrutinize the project, it must address the key points from its development through Parliamentary Approval to the current situation. To learn from the project, the key stages must be understood and progress challenged.

1. HS2 Phase I – Royal Assent, February 2017
  - a. Estimate of expenses £23.50 bn<sup>2</sup>
  - b. Date for completion - 2026
  - c. No approved tunnelled entry to London Euston from Old Oak Common.<sup>3</sup>
2. Project overspend and delivery overrun – 2018
  - a. Estimated cost of entire scheme - £55.7 bn<sup>4</sup>
  - b. Independent estimates £105.564 bn<sup>5</sup>
  - c. Suggested completion delays to 2029
3. Chairman's Stocktake Report – August 2019<sup>6</sup>
  - a. Estimated cost of entire scheme - £88 bn

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<sup>2</sup> For a summary of the Estimate of Expenses, refer to Appendix D to this commentary.

<sup>3</sup> The difficulties with the tunnels proposed under Park Village East, were exposed and discussed at the House of Lords Committee hearing of petition Hol 00691 on 11<sup>th</sup> October 2016, when HS2 Limited admitted the problems but claimed that they would "sort them out".

<sup>4</sup> Nus Ghani MP, Parliamentary Under Secretary of State for Aviation and Maritime, House of Commons debated 15<sup>th</sup> July 2019.

<sup>5</sup> Independent estimate prepared by M H Byng and presented to The Oakervee Review on 2<sup>nd</sup> October 2019.

<sup>6</sup> HS2 Chairman's Stocktake, published August 2019

- b. Date for completion now 2031<sup>7</sup>
- 4. The Oakervee Review – 2019<sup>8</sup>
  - a. HS2 Limited unwilling or unable to produce an estimate of cost
  - b. Chairman’s Stocktake report reconciled with independent cost estimate, total, for entire project, of £105.564 bn<sup>9</sup> verified the accuracy of the independent estimate.
  - c. HS2 Limited undertook to discard “Target Cost” or “Cost Plus” contracts and replace them with lump sum contracts with fair risk transfer to the supply chain.
- 5. HS2 Phase 2a – Royal Assent, February 2021
  - a. Estimate of expenses - £3.479 bn<sup>10</sup>
  - b. Date for Completion – between 20235 and 2040<sup>11</sup>
  - c. Estimate of expenses, after Oakervee, £7.79 bn.<sup>12</sup>
- 6. Business case and Benefit Cost Ratio (BCR) for the entire scheme.
  - a. No business case has ever been published for the project.
  - b. BCR at Royal Assent for Phase I,
  - c. BCR ascertained during The Oakervee Review, 0.60
- 7. Development delivery issues identified
  - a. Delivery issues identified
    - i. Acquisition of land
    - ii. Tunnelled access to London Euston Station
    - iii. Enabling oversite development at London Euston Station
    - iv. Old Oak Common Mainline interchange
    - v. Power supply for traction.
  - b. Funding issues identified
  - c. Cost of abnormal foundations for oversite development at London Euston Station
  - d. Cost of interchange station on Great Western Mainline at Old Oak Common.

In view of the composition of the committee and the length of time members had spent in Parliament, the history should have been explained to them with a detailed independent briefing on the issues involved.

<sup>7</sup> HS2 Chairman’s Stocktake Report, page 1

<sup>8</sup> The Oakervee Review, commissioned by the then Prime Minister, Rt Hon Boris Johnson MP, and chaired by Douglas Oakervee CBE Freng, published in December 2019.

<sup>9</sup> The estimated cost of the original projects from London to Birmingham, Manchester and Leeds was agreed at £106.56bn at the prices ruling at 4<sup>th</sup> Quarter 2025 (4Q 2025).

<sup>10</sup> Estimate of expenses given at 1<sup>st</sup> Quarter 2015 prices; refer to Department for Transport website.

<sup>11</sup> HS2 Chairman’s Stocktake Report, page 2

<sup>12</sup> The Estimate of expenses was not updated after the Oakervee Review, nor was Parliament advised of the base date for it.

There is no evidence that an explanation was offered, or a detailed briefing given to the Committee before the hearing.

## Delivery and completion

### *Post Oakervee Review*

The Committee should be given the opportunity to ask the witnesses what has happened since the publication of the review. What has been learned from the review and what has been done on the project to address the issues identified.

### *Outcomes*

To understand the effect of the lessons learned, the Committee must obtain from the witness robust estimates of cost to complete and the dates for project delivery.

## Notional Briefing to the Committee

### Synopsys

The briefing should be given by informed independent professional advisors, who have knowledge of the procurement, delivering and completion of major projects as well as an intimate knowledge of this project.

The briefing should be comprehensive covering all the issues with the project since its inception.

Lessons from the project will only be learned if the Committee is able to question the witnesses thoroughly to identify what progress, if any, has been made, to address concerns raised in Parliament and by the public.

All questions and answers must be linked to and based on the approvals for time to complete and cost approved by Parliament. The details of the approvals are:-

1. HS2 Phase 1 – Royal Assent, February 2017
2. HS2 Phase 2a – Royal Assent, February 2021

Where relevant, questions and answers should be reconciled with “The Economic Case for HS2: Value for Money Statement”<sup>13</sup>, January 2012.

### Basis of costs cited

#### Construction costs and professional fees

Construction costs and professional fees are calculated, unless otherwise stated, using the Rail Measurement of Measurement (RMM Suite)<sup>14</sup> to produce an elemental estimate of cost

#### Land acquisition and associated costs

Land acquisition cost and associated fees are calculated as follows:

1. Valuations based on the “Red Book” published by the Royal Institution of Chartered Surveyors for land and property acquired by HS2 Limited using its Compulsory Purchase Powers

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<sup>13</sup> “The Economic Case for HS2: Value for Money Statement”, January 2012. published in January 2012 by the Department for Transport.

<sup>14</sup> The Rail Method of Measurement (RMM suite) published by Network Rail in 2014 and revised in 2018, was developed by an Industry Development Group on which HS2 Limited and most of its supply chain were represented and endorsed it.

2. The Land Compensation Manual published by the Valuation Office on behalf of HM Government, for land and property acquired by private treaty before the acquisition by HS2 Limited of Compulsory Purchase Powers

## Key areas for the Committee to question.

### Milestones achieved since The Oakervee Review

What has been achieved since the Review to be the project back on track. Has progress been made with:-

- i. Acquisition of land
- ii. Tunnelled access to London Euston Station
- iii. Enabling oversite development at London Euston Station
- iv. Old Oak Common Mainline interchange
- v. Power supply for traction.

### Time to complete

Has HS2 Limited been able to confirm dates for completion for

1. Phase I, London to West Midlands Railway
2. Phase 2a – West Midlands to Crewe Railway
3. Progress with the disposal of land acquired for sections of the project that have been abandoned.

### Form of construction contracts in use

### Estimate of project costs

HS2 Limited was unable to give accurate estimates of cost for Phases I and 2a at The Oakervee Review; can it now provide costs for:-

1. Phase I – Old Oak Common to West Midlands
  - a. Does the estimate include the costs of acquiring all land required for the project and the resources required to do so.
  - b. Does the estimate include the cost of providing a power supply from the National Grid for the entire project.
  - c. Is a discrete estimate available for the interchange station on the Great Western mainline at Old Oak Common
2. Phase 2a – Handsacre to Crewe
  - a. Does the estimate include the costs of acquiring all land required for the project and the resources required to do so.

- b. Does the estimate include the cost of the infrastructure maintenance depot at Stone.
- 3. Base date for estimates off cost
  - a. Provide the base date<sup>15</sup>
  - b. Provide the Office for National Statistics (ONS)<sup>16</sup> or other standard cost indices against which the costs are benchmarked.
- 4. Estimate of cost, basis of calculation.

### Moneys expended to date.

Is HS2 Limited able to:-

- 1. Provide an estimate of expenditure to date for Construction and professional fees,
  - a. Phase 1 from Old Oak Common to Handsacre
    - i. A separate estimate of expenditure for the interchange station on the Great Western Main Line at Old Oak Common.
  - b. Phase 2a Handsacre to Crewe
    - i. A separate estimate of expenditure for the Infrastructure Maintenance Depot at Stone.
- 2. Land acquisition and professional fees
  - a. Phase 1 from Old Oak Common to Handsacre
  - b. Phase 2a Handsacre to Crewe
  - c. Other phases, land no longer required

### Estimate of costs to complete

- 1. Construction and professional fees, provide an estimate of expenditure to date
  - a. Phase 1 from Old Oak Common to Handsacre
    - i. A separate estimate of expenditure for the interchange station on the Great Western Main Line at Old Oak Common.
  - b. Phase 2a Handsacre to Crewe
    - i. A separate estimate of expenditure for the Infrastructure Maintenance Depot at Stone.
- 2. Land acquisition and professional fees
  - a. Phase 1 from Old Oak Common to Handsacre
  - b. Phase 2a Handsacre to Crewe
  - c. Cost of land acquisitions outstanding, including
    - i. Cost of land acquired, for which payment has NOT been made.

<sup>15</sup> All estimates of construction costs, including professional fees and risk, included in this report are based on prices ruling at 4<sup>th</sup> Quarter 2015 and benchmarked against the ONS "All Construction Index" for that quarter, 100.I.

<sup>16</sup> For this report, the ONS "All Construction Indices" have been used.

- ii. Number of outstanding complaints for persons whose land has been acquired

Summary.

There is no evidence the Committee was offered a prior briefing, nor did it ask for one. The commentary on the questions asked and the evidence given, is made based on this notional briefing.



# Commentary of the Questions asked, and the evidence given

## Introduction

### Format

The commentary considers each of the questions asked by the Committee. The questions are numbered from Q1 to Q80, in each case, the Committee member asking the question is identified and all the responses are included, giving the name of the witnesses.

The commentary considers the adequacy of each question and reply, the content of the reply and identifies issues that could have been raised but were omitted.

Where the witness had greater knowledge of the question, than covered in his answer, the omission is identified.

There is a summary at the end of this commentary, which considers the evidence given and those matters that were not addressed at the Hearing.

## Witnesses

### HS2 Limited

Mark Wild (MW), Chief Executive, HS2 Limited, gave evidence on behalf of the company.

### Department for Transport

Alan Over (AO), Director General for Major Projects Group, DfT, gave evidence on behalf of the Department for Transport.

### HM Government

Lord Hendy (PH), Minister for Rail, Department for Transport, gave evidence on behalf of the Government

## The Questions

### Question 1 – Ruth Cadbury (RC) Chair.

A general introduction to the proceedings, which makes no mention of the Committee prior knowledge or briefing, nor does it draw attention to the extent of the witnesses' involvement and prior knowledge of the project.

### Responses

Each witness introduces himself, but none declares prior knowledge of the project.

## Question 2 – RC, Chair

A general question asking for the witnesses to explain the issues with the project, without defining the parameters for the responses.

### Responses

**MW:-** states that the project is 5 (five) years into major construction and cites the inflationary effects of the Ukraine War and the lockdown caused by COVID, as another adverse factor. He refers to imbalance of risk between the Government and the supply, without offering any reason why the situation has developed.

**Comment:-** Without direction from the Chair, he gives an answer which makes no reference to specific events, preceding the hearing, including reference to The Oakervee Review and the matters arising from it. He is correct in stating that HS2 Limited has not managed risk but offers no evidence to suggest that it is now addressing the issue.

*His assessment of project delays is open to challenge, Phase 1, which started in 2013 for land acquisition purposes and in 2017 for enabling works, was due to complete in 2026, with one year left, there is a great deal of civil engineering works to be completed, and the best independent estimates are that Phase 1 will not be completed before 2033 at the earliest.*

## Question 3 – RC, Chair

A question challenging the response made to Question 2 by MW.

**MW:-** Confirms that in the 5 years of civil engineering work, HS2 Limited has achieved 2½ to 3 years progress. He cites the reasons as a lack of design maturity and the lack of permissions to do the work. He thinks that the original estimate was optimistic.

**Comment:-** he appears to go back on his last answer and confirm the independent assessment of time to complete. His reference to the effects of exogenous events, is vague, as he does not state what they were. The reference to original estimate being “optimistic” is disingenuous, as The Oakervee Review established<sup>17</sup> that the original estimate should have been £106 bn at 4<sup>th</sup> Quarter 2015 prices.

*He makes no mention of the time spent dealing with the enabling works for Phase 1, of which there were 561 (five hundred and sixty-one) separate packages required to create the site for the rail corridor. This adds to the lack of credibility in the original estimates of time and cost.*

## Question 4 – Dr. Scott Arthur (SA)

A question about the application of Optimum Bias in the original estimate.

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<sup>17</sup> The Oakervee Review accepted the estimate of £106 bn for the original full “Y” scheme, rather than the £55.7 bn claimed by the Government in 2019; this estimate was reconciled with the Chairman’s stocktake report, published in August 2019, and was found to be within 3.18% variance of the accepted estimate.

**MW:-** provides an overlong answer about the use of “Optimum Bias”.

**Comment:-** *The original estimates, as presented to Parliament, do not appear to have been prepared using the industry standard process for calculating the costs of railway infrastructure works.<sup>18</sup> The RMM suite in Group Element 4.01, Risk Allowance, sets out clear rules for assessing risk in a measured estimate of cost, which reduces the need for additional adjustments for “Optimum Bias”.*

### Question 5 – Olly Glover (OG)

A simple question about design being incomplete and construction starting too early.

**MW:-** states the current position but makes no reference to the lessons learned from The Oakervee Review

**Comment:-** *He makes no reference to the issues identified by The Oakervee Review, published in February 2020, five years ago.*

### Question 6 – Olly Glover (OG)

A question about the role of politicians is pressing ahead with the scheme before the costs and programme were properly understood.

**MW:-** provides a very diplomatic answer, leaving the problem to the politicians and referring the question to PH.

**PH:-** accepts that the Politicians must ultimately be accountable.

**Comment:-** *PH fails to declare his own involvement in The Oakervee Review and his knowledge of the problems with the project since 2019.*

### Question 7 – Olly Glover (OG)

Referring to the Stewart review and the original need for a separate HS2 Minister in Government.

**PH:-** Points out that the post of HS2 Minister fell into disuse in the previous administration and that the project shall fall within the responsibility of a Rail Minister as it is part of the national network.

**Comment:-** *This is an important admission as one of the criticisms of design of the HS2 Project was that it stood separate from the Network Rail system with obvious interoperability problems. This was obvious at London Euston Station.*

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<sup>18</sup> The Rail Method of Measurement (RMM suite) published by Network Rail in 2014 and revised in 2018, was developed by an Industry Development Group on which HS2 Limited and most of its supply chain were represented and endorsed it.

### Question 8 – Olly Glover (OG)

A question about the lack of connection with the existing rail network.

**PH:-** Accepts the issues and agrees with the problem.

**Comment:-** This issue was raised at The Oakervee Review and in much of the external evidence given.

### Question 9 – Olly Glover (OG)

A supplementary question/statement confirming the failure of interfaces between high-speed rail and existing networks in other countries.

**PH:-** Agreed with the statement.

**Comment:-** This issue was raised at The Oakervee Review and in much of the external evidence given.

### Question 10 – RC, Chair

A question, in two parts, to Mr. Over about the application of “Optimum Bias” and its application in the UK over the past 50 years.

**AO:-** A general answer statement, which describes the problem the correct use of “Optimum Bias”.

**Comment:-** *He then describes Government adjustments to the “Optimum Bias”<sup>19</sup> process but admits its limitations, if the point cost, the base cost is not right in the first place. He places the responsibility for advising Ministers of these shortcomings on officials and experts in HS2 Limited.*

*There is no acknowledgement in his answer of the reconciliation of cost and scope of the project carried out in The Oakervee Review and the clearly apparent errors in the estimates of cost and time to complete for Phases 1 and 2a.*

### Question 11 – Laurence Turner (LT)

A question in two parts, the first about the Hybrid Bill process used to promote the project and their relationship with the 7,000 additional consents required, outside the Bills, to obtain approval to build. The questions are is there an estimate of cost of the additional change made by the Hybrid Bill Committee and the second, the need for 7,000 additional consents required after Royal Assent for each Phase.

**AO;-** describe the problems with the Hybrid Bill process for major projects and the effect on their progress of vexatious opposition, which is correct.

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<sup>19</sup> The relationship between “Optimum Bias” and risk in construction projects is dealt with in the building industry through the development of robust cost planning techniques and the creation of comprehensive structured cost databases of existing, completed projects.

**Comment:-** *These problems were fully explained to The Oakervee Review in 2019. The review understood their effect, but Government has done nothing in the past 6 (six) years to alleviate them through secondary legislation.*

## Question 12 – Laurence Turner (LT)

LT asks about additional costs.

**AO;-** says he will write to the Committee with an estimate.

**Comment:-** *This delay is like those used by DfT and HS2 Limited at the time of the third readings of the Hybrid Bills for Phases 1 and 2a and to the refusal or inability of HS2 Limited to provide an estimate to The Oakervee Review.*

*Mr. Over was a party to all these processes and has never provided detailed estimates to either Parliament or The Oakervee Review.*

## Question 13 – Laurence Turner (LT)

Asks about refinements to the process being considered by Government since 2016, a government task.

**AO:-** gives a bland reply as alterations are beyond his authority.

**Comment:-** The need for these amendments has been known since 2017 and certainly since The Oakervee Review in 2019, but nothing has been done about them.

## Question 14 – Baggy Shankar (BG)

A question about the strategic case for major projects and the need for them.

**PH:-** offers only general statements, citing developments in Birmingham, deriving from HS2.

**Comment:-** *He ignores the or omits to mention that there has never been a business case for HS2; the absence of the business case, from which a strategic case for the project should have been built was known to Oakervee and never acted upon.*

*Lord Hendy was a member of The Oakervee Review, which identified the problem.*

## Question 15 – Baggy Shankar (BG)

BG questions the need for speed and its effect on delivery of the project.

**PH:-** replies by questioning the need for high-speed in a small country whereas the need for increased capacity was the aim of the industry.

**Comment:-** *The answer does raise the question, not asked, about the original business case for the project.*

## Question 16 – RC Chair

Questions the original decision to build a high-speed line with its associated high costs.

**AO:-** claims that the decision predates his involvement in the project and suggests that we should look back at its origin. He repeats the political aim to join the high-speed rail revolution.

**Comment:-** *This is a very disingenuous answer to a simple question. Mr. Over has had access to all papers relating to project decision and was party to the Oakervee Review, which failed to locate or identify a business case for the project. At very least he should have shared that knowledge in his answer.*

## Question 17 RC Chair

Questions the impact of the lack of focus in the project and the effect on the delivery of the project.

**MW:-** claims that the design is cast in stone, i.e. fixed, but is the catalyst to developments on Birmingham and at Arden Cross (Solihull).

**Comment:-** *The statement is incorrect development has been taking place in Birmingham since 2009 and the development at Arden Cross was mooted at the same time, it would have happened had Birmingham Airport been allowed to have its second runway in 2013.<sup>20</sup>*

*The reference to the plans for the redevelopment Birmingham City Football Club's stadium , St. Andrews, are without foundation. The problems with the club's stadium were identified in December 2020, with damage discovered during a routine building inspection under the Kop and Tilton Road stands. The stadium needed major renovation long before the HS2 project claims to have influenced its future.*

*No mention was mention of the beneficial effect on the club's development plans in any evidence given to The Oakervee Review.*

## Question 18 – Scott Arthur (SA)

Points out, correctly, that much of the development in Birmingham would have happened without HS2 and suggested that the decision to proceed was a political one. He questions if the politicians were aware of the implications of uncertainty and cost.

**PH:-** concede that the costs were not considered at the time of the project's conception.

**Comment:-** *Lord Hendy was party to the proceeding of The Oakervee Review, which did review all these costs and delivery implication but does not explain why they were ignored and the project allowed to continue out of control for another 6 (six) years.*

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<sup>20</sup> The proposal was submitted to the Airport Commission in 2013 but excluded from the shortlist prepared by the Commission in its report published in July 2015; ISBN: 978-1-84864-158-7

### Question 19 – Scott Arthur (SA)

Asks if the contractors engaged on the project have a vested interest in the project being over-specified.

**MW:-** denies the allegation but refers, correctly to the supply having to respond to the specification given to it by HS2 Limited. He claims that the supply chain could not price risk and its effect on Optimum Bias. He further claims that the supply chain influenced the design.

**Comment:-** *The answer makes no reference to the findings of The Oakervee Review, during which HS2 Limited promised that all the “Target Cost” and “Cost Reimbursable” contracts would be replaced by lump sum contracts, in which the contractor priced risk.*

*There are supplementary questions that could have been asked in response to the statement that “there is no evidence that the supply chain influenced the design”. Internationally this normal practice, which combine the responsibility or design and construction to one party. To adopt that process would have removed much of the risk and uncertainty.*

*The second supplementary question should have been, “why were the promises made by HS2 Limited to The Oakervee Review, not delivered.*

### Question 20 – RC Chair

The Chair repeats the question to Mr. Over.

**AO:-** His response is that politicians were advised that the project could be delivered affordably to a high specification, rather than being advised that the costs were uncertain.

**Comment:-** *His reply would have merit had The Oakervee Review, in which he participated, not identified all these problems in 2019. The review gave the basis of a thorough cost and programme delivery review. His answer is economical with the facts of which he was aware, to say the least.*

### Question 21 Scott Arthur (SA)

The question challenged Mr. Over’s knowledge of the decisions made on the project.

**AO:-** His answer is incorrect regarding the iteration of cost and scope in the past as is his comment about advice to his political masters. His comments about the action required if the costs are higher than the Government want to pay, is disingenuous. The costs and the problems were known from The Oakervee Review, in which he participated.

**Comment:-** *His answers are weak; he makes no reference to his knowledge of the project since he joined in in 2015 and the information which came out of The Oakervee Review. Mr Over should be recalled by the committee to answer supplementary question.*



## Question 22 Sir Geoffrey Clifton-Brown (GCB)

The question is about the correct application of Optimum Bias and its future use.

AO:- In his final comments Mr. Over accepts that the “we should have insured (sic) a higher level of confidence”, although he fails to mention that the problem was exposed at The Oakervee Review “HS2 Costs Round Table” meeting in October 2019<sup>21</sup>, when HS2 Limited failed to provide an estimate of cost.

**Comment:-** From The Oakervee Review, both GCB and AO would have been aware that an estimate was produced covering the entire original project. The estimate, which was reconciled by DfT with The Chairman’s Stocktake Report, published in August 2019, was £106.564 bn at 4<sup>th</sup> Quarter 2015 prices. The question and the answer are superficial.

## Question 23 Sir Geoffrey Clifton-Brown (GCB)

Question is about the origins of the design decisions for the project

PH:- In his answer confirms that the origins of the basic design decisions were unclear.

**Comment:-** There was neither a demand analysis, prepared prior to the approval of the project nor a business case found during The Oakervee Review, although searches went back to 2009. Without these analyses, it is difficult to see how objective decisions were made.

## Question 24 Sir Geoffrey Clifton-Brown (GCB)

Asks, if with the benefit of hindsight, the whole concept was misconceived.

**PH:-** admits that the relative options and choices, were not fully considered.

**Comment:-** There was neither a demand analysis, prepared prior to the approval of the project nor a business case found during The Oakervee Review, although searches went back to 2009. Without these analyses, it is difficult to see how objective decisions were made.

## Question 25 Sir Geoffrey Clifton-Brown (GCB)

Questions the effect of the planned high speed on costs.

**PH:-** admits that, had we known when the projects was conceived, what we know now, the design decision would have been different.

**Comment:-** There was neither a demand analysis, prepared prior to the approval of the project nor a business case found during The Oakervee Review, although searches went back to 2009. Without these analyses, it is difficult to see how objective decisions were made.

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<sup>21</sup> HS2 Costs Round Table meeting held at the Institution of Civil Engineers, 1, Great George Street, London SW1P 3AA on 2<sup>nd</sup> October 2019.



All the issues referred to in Questions 23, 24 and 25 were considered by The Oakervee Review and flagged as problems.

### Question 26 Sir Geoffrey Clifton-Brown (GCB)

Refers to writing by Bent Flyvbjerg, who advice is “think slow, act fast” to control costs.

**MW:-** agrees with GCB comment without revealing his knowledge of Professor Flyvbjerg’s advice to DfT and HS2 Limited, prior to Royal Assent for Phase 1.

**Comment:-** Bent Flyvbjerg and his colleague at Oxford University advised DfT and HS2 Limited in 2015 of the risks they were taking with the project. His advice was ignored.

### Question 27 RC Chair

Chair asked for advice on the reason for lower costs in France and Spain amongst other countries.

**MW:-** suggest that with HS2 we tried to design something new from scratch with considering the experience elsewhere with similar projects.

**Comment:-** MW may unaware of the advice given to HS2 Limited, prior to Royal Assent by Sir John Armitt about international comparators.<sup>22</sup>

### Question 28 Catherine Atkinson (CA)

Questions who made the decisions to proceed with the project.

**AO:-** disclaims any knowledge for the period between 2010 and 2015 and claims that over-optimistic advice was given to Ministers about the cost of delivering HS2. He claims that the costs were only reset in 2020, presumably after the report of The Oakervee Review. He claims that the original costs were set based on high level estimates in the mid-2010’s.

**Comment:-** The answer is incomplete; AO makes no reference to The Oakervee Review and its reconciliation of independent estimates with the Chairman’s Stocktake Report and the undertaking given by HS2 Limited to the review to cease using “Target Cost” or “Cost Reimbursable” contracts.

### Question 29 Catherine Atkinson (CA)

Asks the question about the relationship between optimism and too much specification in the early stages and the effect of changes in political control. The question continues to ask if specification challenge and transparency is required at each change.

**AO:-** replies in general terms, which answers neither question but confirms that , in the absence of a rational analysis, he cannot give answers to the questions.

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<sup>22</sup> Sir John Armitt and M H Byng discussed the comparisons with international costs at a meeting, Liverpool, organised by the Institution of Civil Engineers in February 2016; both offered advice to HS2 Limited, who appear to have ignored it.

**PH:-** replies with a view of the political position, which does not answer the questions. However, he does confirm that the decision to cancel HS2 north of Birmingham was taken without reference to Network Rail (Sir Andrew Haines<sup>23</sup>).

**Comment:-** *Neither answer consider the lessons learned over the past 10 years, since the inception of the project, the lessons from the Oakervee Review and neither makes any reference to the Business Case, if there was one, on which the project was based.*

*That the cancellation of part of the project was done without reference to Network Rail, questions the earlier assertions by PH, that the project is an integral part of the national rail network.*

### Question 30 Catherine Atkinson (CA)

Questions the level of accountability for decisions made with the project and asks about the level of vagueness about who took these decisions.

**PH:-** confirms the absence and thoroughness of the decision making when changes have been made to the project.

RC Chair, confirms that the witnesses will be back in Autumn with more detailed answers to the Committee's questions.

**Comment:-** None

### Question 31 Sir Geoffrey Clifton-Brown (GCB)

Asks about the contracts used for the civil engineering contracts and their effect on the overall cost overruns.

**MW:-** claims that the problem arises because the contractors were unable to price the risk, a claim made twice, and that there was not the commercial tension in the supply chain to mitigate the costs increases. He also confirms that the supply chain asked to be removed from the risk at the outset of the project. He claims to have a plan to address these problems to reset the project and rebalance the situation.

**Comment:-** *All these problems were known about at The Oakervee Review and HS2 Limited gave undertakings to address them in October 2019, 6 (six) years have passed without anything being done, whilst the costs went out of control. If MW was not aware of these undertakings, then AO certainly was, as he was at the meeting in which they were given.*

### Question 32 Sir Geoffrey Clifton-Brown (GCB)

Accepts that risk could not be priced but questions the ability of HS2 Limited to manage these contracts properly. He asks MW how HS2 Limited intends to renegotiate them.

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<sup>23</sup> Sir Andrew Haines, Chief Executive Officer, Network Rail.

**MW:-** states that the only way to mobilise the project was to remove the risk from the contractors, because even with the biggest contractors in Europe, the risk might have destroyed the companies. He claims that HS2 is part of a “bigger game” and that he is considering increasing the commercial resources on the project.

**PH:-** confirms that the Government is involved in the process, which affects other large Government contracts.

**Comment:-** *Neither witness answered the question about renegotiating the contracts nor do they refer to the promises made by HS2 Limited to The Oakervee Review to discard these contracts and transfer risk to the contractors. As for the intention to increase the commercial resources within HS2 Limited, the company spent £11.9 m<sup>24</sup> in the 12 months ending 31<sup>st</sup> December 2018 on quantity surveying and cost engineering services but could not produce an estimate for the review.*

*Without discarding these contracts, it difficult to understand how MW intends to reset the project.*

### Question 33 Baggy Shankar (BG)

Ask how HS2 Limited will balance the costs caused by any delay in renegotiation the contracts against the savings achieved.

**MW:-** provides a general reply without answering the question.

**Comment:-** *The problems with the time for project delivery and cost overruns were identified during The Oakervee Review, in 2019, but nothing appears to have been done to address them, this is confirmed in the second paragraph of the transcript of his answer. I challenge if the best contractors in the World are employed on the project but even if they were, the form of contract and the over-involvement of consultants is holding the project back.*

### Question 34 RC Chair

Asks if HS2 Limited has a Plan B is the renegotiation fails.

**MW:-** offers no specific solution but says HS2 will carry on as it is if the renegotiation fails.

**PH:-** stated that that the Government is watching the situation and it expects the contractors to “lean into the discussions” if they want further work from the Government.

**Comment:-** *This situation has existed since 2019, and nothing has been done about it. During this period, expenditure on the projects has risen from £9 bn to £34 bn, with no end in sight to project completion. The situation, and the reasons for it, have been apparent to HS2 Limited and its professional advisors for the past 6 (six) years. They have done nothing to correct it so the contractors, who do not want to take any risk, have little incentive to renegotiate.*

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<sup>24</sup> Source: Excel spreadsheet available by download from DfT website, since redacted.

*The solution now is to place HS2 Limited into Administration, thus allowing the Administrator to disclaim these onerous contracts. If the contractors are anxious to maintain their order books with HM Government, then they will renegotiate.*

*Renegotiation applies equally to all the professional consultants, who have been extremely well remunerated as the problems have spiralled out of control.*

### Question 35 Steff Aquarone (SQA)

Ask for further details of the negotiation strategy used by HS2 Limited.

**MW:-** does not answer the question and offers procedural explanation of his relationship with AO. He claims that he has insufficient resources on the project.

**Comment:-** *The strategy appears to be dependent on the use of the existing forms of contract, which are bureaucratic and expensive. The solution is to place HS2c Limited into Administration and for these contracts to be disclaimed and replaced with less bureaucratic and expensive contracts like those used overseas.*

### Question 36 Steff Aquarone (SQA)

Questions the lack of incentivisation in these contracts and the responsibility to improve competitiveness and cut costs in the supply chain.

**MW:-** Agree that the original contracting model was flawed but declines to provide details of the measures HS2 Limited intends to put in place to incentivise the contractors.

**Comment:-** *These problems were known and discussed during The Oakervee Review.*

### Question 37 Steff Aquarone (SQA)

Suggest that the current arrangement with the supply chain is a “Blank cheque”.

**MW:-** denies the suggestion and claims that the decision to mobilise the project without risk created the situation. For the only time in his evidence he mentions the word “fraud”.

**Comment:-** *Once more, the role of HS2 Limited consultants is ignored or omitted by MW, they have made extraordinary charges, as acknowledged by HS2 Limited at The Oakervee Review, and have kept their businesses running on the proceeds of this project. These consultants must take the bulk of responsibility for the current situation.*

### Question 38 Steff Aquarone (SQA)

Asks if the original contracting strategy prioritised progress over price.

**MW:-** confirms that it was the strategy.

**Comment:-** *This is an admission that was NOT made during The Oakervee Review but must have been known by HS2 Limited. The company continued its uses as the costs have spiralled, and the progress been disappointing since 2019.*

### Question 39 RC Chair

Questions the liability for the specification and contracts comparing them with similar schemes in France and Spain.

**MW:-** refers to the Bill, which calls for extensive tunnelling, cuttings and viaducts, thus adding to the cost, which is correct.

**Comment:-** *In his answer MW fails to mention that the Estimate of expenses placed before parliament in January 2017 for Phase 1<sup>25</sup>, was heavily discounted to encourage Parliamentarians to approve it. No questions have been asked about the reason for what is alleged, as deception by the DfT, HS2 Limited and its consultants.*

*DfT was advised on 18<sup>th</sup> January 2017 that an independent estimate of the cost of Phase 1 was £53.6 bn, later reduced to £47.8 bn.<sup>26</sup>*

*These costs were confirmed by The Oakervee Review in October 2019, but HS2 Limited did nothing to contain them.*

### Question 40 Scott Arthur (SA)

Asks about the capabilities within HS2 Limited's staff and its ability to recruit them.

**MW;-** Confirms that he has a shortage of suitable staff and confirms its over-reliance on consultants.

**Comment:-** *The shortage of personnel with suitable competencies is not confined to HS2 Limited, it extends across the construction industry in the UK. It stems from the use of the form of contract used by HS2 Limited and the failure of the professional Institution, ICE and RICS, to publish relevant standards, monitor their use, regulate those who use them and to sanction them who misuse them.*

### Question 41 Scott Arthur (SA)

Asks about HS2 Limited's links with universities and the gap in the workforce.

**MW:-** confirms that it is 30% of what is required and that HS2 Limited is trying to close the gap.

**Comment:-** See Question 40 above.

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<sup>25</sup> The Estimate of expenses for Phase 1 in the Act which received Royal Assent on 23<sup>rd</sup> February 2017 was £23.5 bn, whereas "Whistleblowers" within HS2 Limited have indicated that the true estimate was £47.1 bn.

<sup>26</sup> The true estimate of costs produced by HS2 Limited at the time of Royal Assent and the independent estimate are at 4<sup>th</sup> Quarter 2015 prices.

### Question 42 Scott Arthur (SA)

Asks about Government delaying recruitment of key personnel.

**MW:-** confirms that the barriers were historical ones that have now been removed.

**AO:-** agree that these restrictions were limited to senior roles, which have now been lifted.

**Comment:-** *Restrictions such as these do not exist in the private sector; these application questions whether the project should have been delivered by private organisations rather than an “Arm’s Length Organisation” that is publicly owned.*

### Question 43 Scott Arthur (SA)

Questions the length of time taken to recruit key personnel.

**AO:-** confirms that DfT has acted to resolve it.

**PH:-** confirms Government consensus to support HS2 Limited’s efforts to recruit these staff members.

**Comment:-** *No comment.*

### Question 44 Scott Arthur (SA)

Ask if the media approach to the project hinders recruitment because people want to be part of a success.

**MW:-** confirms he came to the project.

**Comment:-** *The question and the answer ignore the commonly held view in the construction industry that HS2 should have been delivered by private entities and that the contracting strategy, employed, would never be used in the private sector.*

### Question 45 Scott Arthur (SA)

Acknowledge MW as an example

**MW:-** explains that there is a pool of good staff within HS2 Limited, which will be improved.

**Comment:-** *Again, the answer ignores the problems of using a publicly owned body to deliver the project.*

### Question 46 RC Chair

Compliments HS2 Limited on its progressive HR and EDI policies.

**MW:-** confirms the success of these policies.

**AO:-** confirm that the problem with the project lie at system levels and not with its staff.

**Comment:-** *No comment.*

### Question 47 Laurence Turner (LT)

Questions to the suitability of the framework agreement with the TUC.

**MW:-** confirms that HS2 Limited is working with the TUC to update the agreements.

**Comment:-** No comment.

### Question 48 Alex Mayer (AM)

Ask about plans and estimates of cost for the redevelopment of Euston Station.

**MW:-** refers the answer to AO.

**AO:-** outlines the process following to date and agrees that the original budget was set too low, with a design process that did not pay attention to designing to budget.

**Comment:-** *This answer is disingenuous and incomplete. It ignores the problems that existing been known at London Euston station since the petitioning stage of the Phase 1 Bill.*

1. *HS2 Limited proposals only included the station for high-speed trains it omitted the development of the station for classic trains.*
2. *The proposal did not include the foundation required for the oversite development nor the crash deck above the trains.*
3. *In addition, no allowance was made for the abnormal foundation required for the OSD, which were omitted from the station's rebuilding in 1959 and 1964.*
4. *The station, as proposed by HS2 Limited, is at a lower level than the classic station making interoperability impossible.*
5. *The layout is based on the tunnelled access from Old Oak Common at Park Village East, which has proved impossible to deliver.*

*The costs of the HS2 Limited Euston Station proposed were disclosed at the House of Lords hearing of petition HoL-00691 on 11<sup>th</sup> October 2016 and accepted by HS2 Limited.*

### Question 49 Alex Mayer (AM)

Ask what HS2 Limited is doing differently to correct the situation.

**MW:-** refers the question to AO but confirms that HS2c Limited has failed to produce any reliable estimates. He refers to the work of Professor Bent Flyvbjerg and to “reference cost forecasting”, which has not been applied.

**Comment:-** *The answer ignores the outcome of the House of Lords Hearing on 11<sup>th</sup> October 2016 to hear petition HoL-00691, which pointed out the defects in the HS2 Limited's proposal scheme for Euston and the associated estimate of cost, which were confirmed during The Oakervee Review.*

*In the UK, there is a sophisticated system of construction cost analysis, the Standard Form of Cost Analysis (SFCA) developed by the Building Cost Information Service (BCIS) of the RICS. SFCA is used*



*extensively in the private sector and provides the detailed reference cost forecasting suggested by Flyvbjerg.*

*AO answer ignores the process being employed to develop Euston, separate schemes for the high-speed railway and the conventional railway and a separate development project for the oversite development.*

*The only way to develop Euston is as one contract covering all these requirements.*

### Question 50 Sir Geoffrey Clifton-Brown (GCB)

*Asks if Euston should be considered as a discrete single project covering all requirements, rail and oversite development.*

*GCB declares his interest as a member of the Royal Institution of Chartered Surveyors (RICS).<sup>27</sup>*

**PH:-** *agrees that it would be a better solution and explains why, in the opinion of the Government, the original scheme was unworkable and unaffordable. He also refers to the use of private finance for the Euston project.*

**Comment:-** *The answer omits several issues surrounding the development at Euston*

- 1. HS2 Limited acknowledgement on 11<sup>th</sup> October 2016 that its proposal for a tunnelled access to Euston from Old Oak Common were unbuildable and that its proposal for the station was for the high-speed side only.<sup>28</sup>*
- 2. The need for major foundations beneath the station to support the oversite development.<sup>29</sup>*
- 3. There was a development proposal in place, referred to as the Euston Estate, at the time of Royal Assent for Phase I.*
- 4. Private finance is available, with the associated competence to develop the station, and remains in place.*

*There have been no discussions, of which the public has been made aware, regarding private finance with interested parties outside the existing HS2 supply chain.*

### Question 51 RC Chair

*Ask how contractors are being incentivised achieve project milestones by certain times.*

**MW:-** *explains how the scheme works as part of the fee they receive on their existing contracts but accepts that it modest in the scale of the whole expenditure.*

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<sup>27</sup> Sir Geoffrey Clifton Brown is a member of Rural Practice Faculty of RICS.

<sup>28</sup> House of Lords hearing of petition HoL-00691 present by Sam Price, entitled “Euston Express”.

<sup>29</sup> British Railways were prevented from providing these foundations by successive Government in 1959, by the Conservative administration, and in 1964, by the incoming Labour Government; these foundations to support the OSD are estimated to cost £2.1 bn at 4<sup>th</sup> Quarter 2015 prices.



**Comment:-** *The answer is disappointing as it demonstrates, HS Limited's continued reliance on the discredited "Target Cost" or "Cost Reimbursable" contract which it promised The Oakervee Review, it would discard in 2019.*

### Question 52 Catherine Atkinson (CA)

Asks how HS2 Limited is taking on board the recommendations of the Stewart Review into the governance of the project.

**MW:-** explains what HS2 Limited is doing with Government support. He confirms the appointment of new fraud and ethics head in the company.

**Comment:-** *A bland answer but interesting as for the second time in his evidence, MW makes mention of fraud.*

### Question 53 Catherine Atkinson (CA)

Asks Lord Hendy what the Government is doing to organise future projects.

**PH:-** explains the criteria used by the Government for the new board but refers the question to AO for a detailed reply.

**AO:-** confirms that the Government accepts the recommendations of the Stewart Report and describes what the DfT is doing to improve governance. He mentions the possible sources of cost modelling information and how the Government is considering descoping options.

**Comment:-** *The cost modelling required for the project and other railway projects should come from use of the RMM suite of documents creating by Network Rail with the support of HS2; the information comes from the railway industry and is not created by civil servants.*

### Question 54 Laurence Turner (LT)

Questions the effective functioning of the HS2 board.

**MW:-** confirms that there is a lot of improvement needed.

**Comment:-** *No comment*

### Question 55 Scott Arthur (SA)

Asks why improvements in the board of HS2 Limited were not made earlier.

**AO:-** describes surrounding improvement and the need for strong control gates., saying that the project should not proceed until DfT is sur the cost position is as mature as it can get.

**Comment:-** *There were control gates in place in the earlier stages of the project which were either ignored or not put in place to ensure the project continued.*

*All these measures are worthless without an adequate, comprehensive base estimate on which the project was allowed to proceed. MW has admitted that no such estimate existing and that HS2 Limited was poor at preparing estimates.*

*HS2 Limited admitted during The Oakervee Review, that, despite having spent large sums of money on quantity surveying and cost engineering , it could not produce an estimate.*

*Six years has passed since that admission, during which time, expenditure has risen from £9 bn to £34 bn, with the project completion date constantly slipping back.*

### Question 56 Steff Aquarone (SQA)

Asks if DfT has any comments about the breakdown in trust between the Department and HS2 Limited and its proposals for improving the relationship.

**AO:-** denies that there was a breakdown of trust between the Department and the company, claiming that DfT had lost confidence in the information being shared by the company.

**PH:-** confirms the Government's agreement to AO's answer.

**Comment:-** *These answers confirm the problems caused by the absence of an adequate base estimate, on which project approval should have been granted, and which would, in normal professional practice, be used to monitor the progress of the project against its agreed budget.*

### Question 57 Steff Aquarone (SQA)

Asks if DfT, as the client, has sufficient commercial engineering expertise within its organisation to fulfil its role.

**AO:-** confirms that most of the expertise sits in HS2 Limited but accepts that he would like to invest more in the Department's cost estimation capability.

**Comment:-** *The question would be unnecessary, and the answer academic had there been an adequate base estimate, on which project approval should have been granted, which could be benchmarked against international comparators.*

### Question 58 Steff Aquarone (SQA)

Ask for further comments about the subject of capability.

**MW:-** confirms that HS2 Limited lost control of the programme and with it the control over cost leading to a lack of confidence.

**Comment:-** *HS2 Limited and the DfT had lost control of the project programme and the project cost, even before The Oakervee Review in 2019, so why has nothing been done to correct the position in the intervening years?*

### Question 59 Laurence Turner (LT)

Asks when the revised estimates of cost be published after the Stewart Review identified the disagreement between the DfT and HS2 Limited over the costs.

**MW:-** explains how the process will be carried out and refers the question to AO for comment. He confirms that the process will be consistent to remove the nominal confusion from 2019.

**Comment:-** No comment

### Question 60 Laurence Turner (LT)

He asks a supplementary question about the relationship between the revised estimates and the spending review.

**MW:-** confirms that the process will be consistent to remove the nominal confusion from 2019.

**Comment:-** *These questions stem from the absence of an adequate base estimate, on which project approval should have been granted, which could be benchmarked against international comparators.*

*His reference to the confusion in 2019, raises the question as to why the position has been allowed to deteriorate for the past 6 (six) years.*

### Question 61 Laurence Turner (LT)

Asks if the estimate will be in 2024/25 prices.

**MW:-** talks about ranges of estimates but not about basic costs and does not confirm an exact date for publication.

**PH:-** confirms the Government's position that HS2 Limited needs time to get it right and admits that HMG is purposely vague so as not to pressurise HS2 Limited, to ensure the exercise is done properly.

**Comment:-** *The answers, accept, tacitly, that there is a neither an adequate base estimate in place nor is there agreement on the way in which the estimate will be prepared. The problem was identified during The Oakervee Review, and 6 (six) years has passed without the situation being remedied. With costs running at £5 bn per annum, it is little wonder that the contractors are in no hurry to address the costs and management problems.*

*All that PH's answer does is push the problem further down the road, a situation that would not be tolerated by a private body delivering the project.*

### Question 62 Laurence Turner (LT)

Asks what other support HS2 Limited needs from DfT and Ministers to deliver HS2 Limited's objectives.

**MW:-** replies that he needs time to get the reset right.

**Comment:-** *The problems have been known about since The Oakervee Review in 2019, so why is the process not further ahead? With costs running at £5 bn per annum, it is little wonder that the contractors are in no hurry to address the costs and management problems.*

### Question 63 Sir Geoffrey Clifton-Brown (GCB)

Asks that the range between the DfT estimate of cost and HS2 limited estimate of cost (EAC) will not be as large as it is now, £45 bn/£66/bn

**AO:-** refers to the levels of confidence in the work to produce the estimates and the application of optimum bias.

**PH:-** repeats the statement made by AO and adds that more confidence exists with the costs of railway systems.

**Comment:-** *The levels of confidence between the two estimates should only be the individual views of pricing the quantities; the methodology should be based on the structure of the RMM suite, thus removing any difference in quantifying the specification*

*Railway construction including civil engineering works associated with it, is a collection of repeat work items, so there should not be any lack of confidence in the cost of these items.*

### Question 64 Sir Geoffrey Clifton-Brown (GCB)

Asks if the timeline for renegotiating the civils and the EAC is late Autumn. He also refers to a disagreement between DfT. and HS2 Limited to develop a new baseline.

**MW:-** confirm that it will be complete by late Autumn.

**Comment:-** *There is no reference in MW answer about the disagreement between DfT. and HS2 Limited to develop a new baseline, which suggests that neither party is using the RMM suite, thus removing any difference between them caused by interpretation of the costs.*

### Question 65 Sir Geoffrey Clifton-Brown (GCB)

Asks when the estimate of cost and EAC be complete.

**MW:-** describes the processes followed at Crossrail and learning from the mistakes made on Crossrail. He states that the commercial negotiation is aimed to be complete by April 2026 and complete by Autumn 2026.

**Comment:-** *Given the problems faced by the project have been known since The Oakervee Review in 2019, the rate of progress to renegotiate suggested by MW appalling. During The Oakervee Review, the then Chief Financial Officer of HS2 Limited, Michael Bradly, told the review, in the presence of AO, that although he could not produce an estimate, the company had compiled a library of over 32,000 rates for construction work.*

*It begs the questions what has HS2 Limited been doing for the past 6 (six) years, considering the amounts of fees paid to quantity surveying and cost engineering consultants.*

### Question 66 Sir Geoffrey Clifton-Brown (GCB)

Asks about a resolution of the EAC<sup>30</sup> and for the best estimate for the provision of a final cost.

**MW:-** says that it will be given to the DfT later this year but makes no comment about the disagreement over the EAC.

**Comment:-** *It is difficult to reconcile this statement with the dates given by MW for the completion of commercial negotiations with the contractors. Does he really mean that the EAC will be given to the Department 9 (nine) months before completion of the renegotiations.*

### Question 67 Catherine Atkinson (CA)

Asks how, in the light of the Stewart review, the assessment of Benefit Cost arising from major projects should be assessed.

**AO:-** provides a general answer, in some length, that does not answer the question.

**Comment:-** *Another disappointing answer which reflects the findings of The Oakervee Review, which was unable to identify any positive Benefit Cost Ratio for the project.*

*It is as if no one has learned from the review that a comprehensive BCR calculation must be made that reflects, the true cost of the project, not yet established, the planned life cycle of it and the wider economic benefits, including, in the case of HS2, the development value of land released from green belt.*

*The other issue that came out of The Oakervee Review, was the bias towards projects in London and the Southeast, inherent in the Government assessment process.*

### Question 68 Catherine Atkinson (CA)

Asks have we learned from the lessons provided by the Elisabeth Lone.

**AO:-** offers no positive answer, describing how the benefits materialize.

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<sup>30</sup> EAC – there is no definition for this acronym; the nearest term to it is AFC, Anticipated Final Cost, RMM page 32, which is based on two key components, the Base Cost Estimate and Risk Allowance; the Base Course Estimate is the sum of the works cost (direct construction works cost, indirect construction costs), design costs, project management costs and other project costs, which include land and acquisition costs; RMM page 32.

**PH:-** offered a similar inconclusive answer.

**Comment:-** *The lessons learned from the Elisabeth Lone and the Jubilee line before it should be made public and evaluated and compared with those stated from HS2 in Department for Transport – “The Economic Case for HS2: Value for Money Statement” published January 2012; refer to Appendix B of this commentary.*

*It is probable that neither witness wanted to offer any opinion until MW has completed his renegotiation of the commercial contracts in Autumn 2026.*

### Question 69 Catherine Atkinson (CA)

Asks if transport projects are hugely underestimated. In terms of their benefits.

**PH:-** offers a general answer, suggesting the questions to be asked of project promoters but pointing out that the compelling fact for value is when third parties offer to invest money in a project.

**Comment:-** *Unfortunately, the work during the Oakervee Review by Oxera, amongst other to create a framework for assessing the benefits arising from a transport project has not been continued by either DfT or HS2 Limited.*

### Question 70 Alex Mayer (AM)

Referring to the Stewart Report, asks whether railway projects in the UK are “gold-plated” and is it recognised.

**PH:-** does recognise it and offers a reason for it. He states that the process has now been revised to create a “minimum viable product”. He is asking MW to define what HS2 is doing considering the MVP process.

PH also cites the over design at Euston where the platforms were air-conditioned as an example of “gold-plating”.

MW:- confirms that HS2 Limited is reviewing design decision, which includes items that are “first-of-its-kind”.

**Comment:-** *Criticism cannot be levelled at the witnesses who have accepted the problem and are addressing it. However, if the project had been created based on a comprehensive business case with an agreed life cycle, then many of these expensive decisions would have been avoided.*

### Question 71 Catherine Atkinson (CA)

The Office for Value for Money report on mega projects showed that all but one had been late and over budget and asks why we are poor at learning and when will we get it right.

**MW:-** provides a sound answer starting with the effects of getting the estimate wrong at the beginning and the need for a pipeline of work. He cites China as an example of a country with a long pipeline of work.

**AO:-** supports MW's answer and suggest that we have a better pipeline than the current 10-year infrastructure plan.

**Comment:-** *There are examples in the UK railway industry, albeit from a long time ago, which illustrates the benefits of the experience gained from a long-term programme of repetitive work, the electrification of the railways south of the Thames by the London & South Western Railway and its successor, the Southern Railway between 1912 and 1937. Scheme were progressively delivered more quickly and more economically as the teams gained experience.*

*Having advised China Railway Engineering Group, it might deliver projects more reliably but its estimating competence is poor to say the least.*

### Question 72 Catherine Atkinson (CA)

Asks when the supply chain will have that confidence.

**PH:-** the Government is developing a long-term plan.

**Comment:-** *The supply chain includes the professional advisors who have a great deal from the HS2 project without contributing much to the knowledge of project appraisal and whole-life cycle cost planning.*

*These same consultants need to develop procurement strategies that are compatible with the digital age we live in instead of selling analogue methods to their clients.*

### Question 73 Catherine Atkinson (CA)

Asks how much of the supply chain will be around when the plan is in place.

**PH:-** the Government is working as fast as it can developing the plan.

**Comment:-** *The supply chain, like every other industry, must develop its products and services to be more attractive and affordable to its customers. That includes consultants who rely on the common-law system of contracting in the UK to perpetuate long out-dated practices that are not used elsewhere in the World.*

### Question 74 Alex Mayer (AM)

When compared to Olympics 2012, Is HS2 hampered by not having a hard deadline?

**PH:-** No.

He adds that we have yet to consider the problems of getting railway to operate and to integrate with the national network.



**MW:-** Does not believe that a fixed end date is helpful.

**Comment:-** *Elsewhere in the World, end dates are imposed but only after the detailed planning or project before it commences on site.*

*The lack of such planning for HS2 appears to drive this aversion to fixed end date because it cannot be achieved.*

### Question 75 Alex Mayer (AM)

Asks how HS2 Limited will manage the transition from civil engineering works to railway systems, learning the lessons from Crossrail.

**MW:-** explains that there will be a clean handover from the civil engineering to the systems with adequate time being allowed for testing the high-speed trains.

**Comment:-** *This is good answer which gives confidence that lessons have been learned from Crossrail.*

### Question 76 RC Chair

Referring to The Oakervee Review, which said HS2 required just that Phase I, asks why we should persist with the project.

**PH:-** claims that there are serious capacity problems at the south end of the West Coast Main Line, which Phase I will solve and that the project has created economic growth in Birmingham including the new stadium for Birmingham City Football Club.

**Comment:-** *This lack of capacity is challenged by professional rail operators and the growth in Birmingham would have happened without HS2. As for the new stadium for Birmingham City Football Club, the existing stadium has required major structural repairs for the last 10 years, it is convenient the project may provide funding support to the club's American owners.*

### Question 77 RC Chair

Ask when we will have an indication of work north of Handsacre. The renegotiation of Phase I will be complete toward the end of 2026; will we have to wait until that is complete.

**PH:-** suggests that news will be available earlier than the end of 2026, based on the lessons learned from Phase I.

**Comment:-** *No comment*

### Question 78 RC Chair

Asks if it is Government policy to create a new line north of Handsacre towards Manchester and Leeds.



**PH:-** says the Government is aware of the capacity problem and is looking at solutions, although they may be delivered in sections in view of the problems with grandiose railway schemes.

**AO:-** makes the point that before we consider new railways, we need to make best use of existing capacity.

**Comment:-** *Both answers are sound,AO comment is sensible. However, there is a scheme proposed by Network North for a Manchester, Bradford and Leeds direct railway<sup>31</sup>.*

### Question 79 RC Chair

Presses for an answer to the capacity problem, given the perceived time before the West Coast Main Line and the motorway network reach their absolute capacity.

**PH:-** points out that the existing railway must address these issues with new infrastructure being the last resort to solve the problem.

**Comment:-** *Both answers are sound,AO comment is sensible. We must learn the lessons from HS2 before we contemplate new infrastructure.*

### Question 80 RC Chair

Accepts that there are opportunities for additional capacity but presses for new infrastructure.

**PH:-** Notes her comments.

### Concluding remarks RC Chair

Thanks, the witnesses for attending and for their answers. She states that the answers have been thorough and informative and suggest that the Committee may well invite the witnesses back when the reset is complete.

**Comment:-** *Unfortunately, the closing statement is completely flawed. Given Lord Hendy and Alan Over's participation and knowledge of The Oakervee Review, they have been very guarded in their answers and have concealed information from the Committee.*

*The witnesses failed to:-*

- 1. Highlight and concentrate on the issues found by Oakervee*
- 2. Explain the issues arising from Oakervee.*
- 3. Explain why in the six years after the review, nothing appears to have been done to mitigate the problems.*

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<sup>31</sup> The Manchester, Bradford and Leeds Direct Railway as proposed by Network North, Colin Eliff and Quentin MacDonald, 2022

4. *Explain why HS2 Limited has continued with these “Target Cost” or “Cost Reimbursable” contracts after the review, when they had undertaken to withdraw them*
5. *Provide an estimate for final cost, reconciled with the funds allocated to the project by Parliament.*
6. *Provide an estimate of the costs to complete with a reconciliation of funds available and approved by Parliament.*
7. *Provide a comparison with the current Benefit Cost Analysis with that included in previous Government publications, reference to Appendix B to this Commentary.*
8. *Explain how the issues concerning land purchase and acquisition, whether by open treaty purchase or by Compulsory Purchase Powers, have been resolved.*

*Had there been published a formal agenda for questioning and the Committee properly briefed, then the proceedings may have been more informative and useful.*

*Without those criteria, the Committee was left to address a very complicated problem without adequate knowledge beforehand*

## Appendix A Transport Committee 2025 - Members

### Member of The Transport Committee, 2025

Meeting on 9<sup>th</sup> July 2025; attendees, absentees and guests

No.	Name	Political Party	Constituency	Entered Parliament	Notes
Members of the Committee					
1	Ruth Cadbury	Labour	Brentford & Isleworth	2015	Chair
2	Steff Aquarone	Liberal Democrat	North Norfolk	2024	None
3	Dr. Scott Arthur	Labour	Edinburgh South West	2024	Supporter of new Light Rail projects in Edinburgh
4	Catherine Atkinson	Labour	Derby North	2024	Formerly a Councillor in the Royal Borough of Kensington & Chelsea; represents a constituency that is heavily dependent on the rail industry
5	Olly Glover	Liberal Democrat	Didcot & Wantage	2024	Former employee of Network Rail
6	Alex Mayer	Labour	Dunstable & Leighton Buzzard	2024	None
7	Baggy Shankar	Labour	Derby North	2024	Represents a constituency that is heavily dependent on the rail industry
8	Laurence Turner	Labour	Birmingham Northfield	2024	Parliamentary Research for Lilian Greenwood MP, 2012 - 2015; Ms. Greenwood, is an Under-Secretary of State in the DfT and a former member of this Committee, she is a strong advocate of the HS2 project.
Absentees					
9	Elsie Blundell	Labour	Heywood & Middleton North	2024	None
10	Katie Lam	Conservative	Weald of Kent	2024	Previously worked for Goldman Sachs and was a Special Advisor to Boris Johnson
11	Rebecca Smith	Conservative	Southwest Devon	2024	None
Guest					
12	Sir Geoffrey Clifton-Brown	Conservative	North Cotswolds	1992	Chairman of the Public Accounts Committee; FRICS, Member of RICS, a Rural Practice Surveyor

## Appendix B Benefit Cost Analysis for HS2

### Department for Transport- The Economic Case for HS2 – Value for Money Statement<sup>32</sup> 2012

#### Paragraph 4.4, page 8, Value for Money Categories

The table, below, sets out the Value for Money categories used to assess major projects, such as HS2.

Value for Money Category	Benefit Cost Ratio
Poor	Less than 1.0
Low	Between 1.0 and 1.5
Medium	Between 1.5 and 2.0
High	Between 2.0 and 4.0
Very High	Greater than 4.0

Poor	Less than 1.0
Low	Between 1.0 and 1.5
Medium	Between 1.5 and 2.0
High	Between 2.0 and 4.0
Very High	Greater than 4.0

#### Paragraph 8.1, Tables 1 and 2

	PHASE ONE	FULL NETWORK
BCR without WEIs (ratio)	1.6	1.8
BCR with WEIs (ratio)	2.0	2.5

<sup>32</sup> Department for Transport – “The Economic Case for HS2: Value for Money Statement” published January 2012

## House of Lords Economics Select Committee 2015

Table 21: Benefit-cost ratio (BCR) of HS2 with/without wider economic impacts

	PHASE ONE	FULL NETWORK
BCR without WEIs (ratio)	1.4	1.8
BCR with WEIs (ratio)	1.7	2.3

Source: *Economic Case, Table 15.*

## The Oakervee Review 2019

The results below are derived from the many iterations of the BCR based on the merging extra cost identified during the review.

	PHASE ONE	FULL NETWORK <sup>33</sup>
BCR without WEIs (ratio)	0.6	1.2
BCR with WEIs (ratio)	0.9	1.5

In both tables, the full network is the scheme linking London and Birmingham with Manchester and Leeds served by separate legs diverging from the delta junction in the West Midlands.

<sup>33</sup> The Oakervee Review paragraph 11.22, Table 11.3.

## Appendix C – Independent cost reconciliation

### Introduction

The table below provides an independent assessment of the total cost of Phases I and 2a, the costs to complete and the saving in cost by adopting an alternative procurement strategy to complete them.

### Costs to date and Cost to complete

Summary of Costs - 2Q 2025	Current Strategy			Revised Strategy			Estimated savings
	£/bn	Total cost	Cost to complete	£/bn	Total cost	Cost complete to	£/bn
<b>HS2 Phase 1 - London to West Midlands Railway</b>							
Estimated Total Cost 2Q 2025 prices; 2033 completion	110.40	110.40		89.39	89.39		
Expenditure to date 2Q 2025	34.00			34.00			
<b>Estimated Cost to Complete</b>	<b>76.40</b>		76.40	<b>55.39</b>		55.39	21.01
<b>HS2 Phase 2 West Midlands to Crewe Railway</b>							
Estimated Total Cost 2Q 2025 prices; 2035 completion	19.62	19.62		13.84	13.84		
Expenditure to date 2Q 2025	2.10			2.10			
<b>Estimated Cost to Complete</b>	<b>17.52</b>		17.52	<b>11.74</b>		11.74	5.78
<b>Totals</b>		<b>130.02</b>	<b>93.92</b>		<b>103.23</b>	<b>67.13</b>	<b>26.79</b>

The costs are calculated using the methodology used for the independent estimate of cost presented to The Oakervee Review at the c"HS2 Costs Round Table" on 2<sup>nd</sup> October 2019.





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