

Van: Frank Menger

Onderwerp: Lessen van de HS2 in de UK. Voor de Lelylijn - Hamburg en Amsterdam - Berlin

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Geachte leden van de staten en leden van de gemeenteraden,

Op 17 mei 2020 stond dit artikel in de Guardian: <https://www.theguardian.com/uk-news/2020/may/17/hs2-costs-and-potential-delays-are-out-of-control-warn-mps>

Dit ging over de kostenraming voor de Highspeed 2 waarvan verwacht wordt dat ze flink uit de hand zullen lopen. Bent Flyvbjerg noemt zoiets vaak qua prijsstelling 'political pricing'. Totaal geen inzicht in de werkelijke realistische marktwaarde die voor dit soort projecten in de bouw wel noodzakelijk zijn. In dit perspectief is ook relatie met het project Zuidasdok. Want in de UK moeten de verschillende stations wel aan de nieuwe lijn gekoppeld worden. Aangezien in de bouw en constructie toch een paar vaste vuistregels gelden:

- Bouwen door een weiland het goedkoopte.
- Binnenstedelijk bouwen afhankelijk van de situatie een factor 3 tot 10 per kilometer duurder dan bouwen in een weiland. Dit heeft allemaal te maken met de inpassing van de infrastructuur in combinatie met de marktwaarde van het omliggende vastgoed.

Hier lijkt op de eerste blik dat vooral het binnenstedelijke complexe deel van de betreffende stations erg onderschat lijkt. Tenzij ze ook onze HSL-Zuid fout gemaakt hebben. Door ook daar een onrealistisch budget aan te hangen. Daarbij is de Franse maatstaf van 2 miljard Euro per 100 kilometer hogesnelheidslijn voor de technische bovenbouw de norm.

Aangezien Nederland sinds 2006 met het afserveren van de Zuiderzeelijn geen enkel hogesnelheidslijn project in gang heeft gezet. De kenners halen uit de ouder onderzoeken van de commissie grote projecten (Duijvesteijn) een conclusie. Niet realistisch budget was vanaf dag 1 de werkelijke oorzaak dat de kosten explodeerden bij zowel de HSL-Zuid als de Betuweroute.

Met vriendelijke groet,

Frank Menger
Groningen



House of Commons
Committee of Public Accounts

**High Speed 2: Spring
2020 update**

Third Report of Session 2019–21

*Report, together with formal minutes relating
to the report*

*Ordered by the House of Commons
to be printed 6 May 2020*

The Committee of Public Accounts

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Summary

The High Speed Two programme has gone badly off-course and is now estimated to cost up to £88 billion, significantly more than the original budget of £55.7 billion (both figures are 2015 prices). We are unconvinced that there will not be further cost increases, such as those we have seen in Crossrail and many other programmes, especially given that the route and forecast cost of the northern sections of the proposed railway is still very uncertain and will remain so for years to come. Passengers will not see the benefits from Phase One between London and the West Midlands until 2029 at the earliest, compared to the original plan of 2026, with passengers in the North having to wait much longer while the Government decides the future of the northern sections of the railway.

As well as cost increases and delays, public confidence in the programme has been undermined. At best, the Department for Transport's (the Department's) previous evidence to the Committee has been less than clear. The Department withheld information from us which would have given a clearer and more accurate picture of the budget and schedule pressures the project was facing. The Department and High Speed Two Ltd (HS2 Ltd) seemed to believe that a lack of transparency with Parliament and the public on the problems facing the programme would in some way protect it. With so many peoples' homes and livelihoods affected by the construction of the railway, there is no justification for the Department and HS2 Ltd having been so opaque about the delays and budget overruns. Now that the Government has given the programme the green light, things must change and there must be much greater transparency in future.

What we have seen about Government's management of this programme is all too familiar and we remain concerned that lessons from the delivery of other major projects are still not being learned. To protect taxpayers' money there should be far greater focus on fostering and embedding a culture that values learning from experience to do things even better and avoid repeating the same mistakes. We will regularly examine how this programme is progressing and what the Department and HS2 Ltd are doing to address our recommendations for improvement.

Introduction

The High Speed Two programme aims to construct a new high-speed, high-capacity railway between London, Leeds and Manchester, via the West Midlands. This will join with the existing rail network to enable journeys to Liverpool, Newcastle, Edinburgh and Glasgow. With an original budget of £55.7 billion set in 2015, it is the Government's largest infrastructure programme by value. The Department for Transport (the Department) is the programme sponsor and High Speed Two Limited (HS2 Ltd) is its dedicated arm's-length body responsible for delivering the programme. The Department and HS2 Ltd are planning for partial Phase One services from Old Oak Common to Birmingham Curzon Street to start between 2029 and 2033, with full services from Euston starting between 2031 and 2036. HS2 Ltd estimates the full network to Leeds and Manchester will open between 2036 and 2040.

Following cost increases and schedule delays, the Government announced an independent review of the programme ('Oakervee Review') in August 2019. In February 2020, the Government published the outcome of the review and announced that Phase One of the programme would go ahead, combined with Phase 2a which connects Birmingham and Crewe. The Government also announced that it would publish an Integrated Rail Plan for the North and Midlands by the end of 2020 that would identify the best way to sequence investments and how to integrate Phase 2b of High Speed Two, Northern Powerhouse Rail and other rail investments.

Conclusions and recommendations

1. **The Department and HS2 Ltd's lack of transparency has undermined public confidence in the programme.** The Department and HS2 Ltd were aware of the scale of the issues facing the programme as early as October 2018. In March 2019 HS2 Ltd formally notified the Department that it could not deliver Phase One to budget and schedule. Despite being aware of these issues, the Permanent Secretary withheld from us that the programme was in significant difficulty when she appeared before the previous Committee in October 2018 and May 2019, even in response to specific questions about the programme's delivery timeline and budget. HS2 Ltd's annual report and accounts for the year ending 31 March 2019 similarly failed to give an accurate account of the programme's problems. The Department and HS2 Ltd defended their actions, stating that there were commercial sensitivities, and that options were still being pursued to remedy the situation. While we recognise that ministers had not yet decided how to proceed, no adequate excuse was provided for not disclosing to this Committee and Parliament the risk and uncertainty the programme was facing. We are disappointed by the Permanent Secretary's response to our concerns about her failure to explicitly inform the Committee of the programme's delays and overspend when asked about the general health of the project. This was something that an accounting officer should share with the Committee. Failure of an Accounting Officer to provide accurate information to Parliament is potentially a breach of the Civil Service Code and a breach of Parliamentary Privilege. Lack of clarity and obfuscation about the budget issues with HS2 risks jeopardising the trust between Parliamentary committees and Government officials. The Government has now committed to six-monthly reporting to Parliament on the programme, but it has not yet set out what this will cover and how it will balance providing detailed but accessible information; frequency is not a substitute for quality when reporting on the status and risks of a programme.

Recommendation: *Within three months of this report, the Department must set out the form of its regular reporting to Parliament on High Speed Two. This must cover: how the Department will ensure a realistic appraisal of the programme's likelihood of delivering to budget and schedule is given at the reporting date; how it will keep Parliament informed of crucial milestones over the short to medium term to inform the timing of future scrutiny; and how it will report on the significant risks to successful delivery.*

2. **The Department failed to provide Parliament with clear warning that the programme was going off-course and value for money was at risk.** Accounting Officer assessments are a tool for providing assurance over public spending by considering whether a programme is justified against the four standards of feasibility, regularity, propriety, and value for money. HM Treasury requires that updated assessments should be produced when a programme departs from these standards or the plan agreed when the programme was first approved. A summary of each assessment should then be shared with Parliament. However, the Department did not fulfil this requirement, and failed to share with Parliament summaries of any of the four Accounting Officer assessments on Phase One of the programme made in 2019. Therefore, Parliament did not know the difficulties the programme was facing or the actions being taken in response. We are deeply concerned that the

Accounting Officer appeared not to know that summaries of these assessments should be shared with Parliament, despite publishing a summary on the East Coast Main Line Enhancements Programme in January 2019, and despite multiple calls from this Committee to do so in recent years.

Recommendation: *The Department must publish the summaries of its Accounting Officer assessments for all projects and programmes in line with HM Treasury guidance, including those already made and future assessments on High Speed Two. If the programme is going off-course, there must be no delay in informing Parliament.*

3. **Having raised concerns in the past, we are not yet convinced that the Department and HS2 Ltd have the skills and capability they need now or in the future.** In 2013 and 2016, previous Public Accounts Committees identified the challenges the Department has faced in securing the skills it needs for High Speed Two as well as its wider programme portfolio. A lack of capability continues to be an issue; HS2 Ltd recently assessed that while it had improved its capabilities in most areas, it still has gaps in key areas such as risk management and assurance, project management and project controls. Now that it is bearing more of the risk of cost increases, HS2 Ltd also needs to ensure that it has the right commercial skills to manage its revised contractual arrangements with its main construction contractors. While the Department tells us that it has retained staff knowledge through the continuity of senior officials on the programme, it will also need to ensure that it has the right skills to oversee and challenge HS2 Ltd's performance. Both organisations will need to ensure that they secure the right skills, at the right time, as the programme progresses; on Crossrail, for instance, the programme suffered from a lack of people with the necessary skills and experience of integrating different elements of a railway as it approached completion.

Recommendation: *In its response to this report, the Department must set out its:*

- *Plan for and progress in obtaining robust assurance that it and HS2 Ltd have the capability to manage the programme and its supply chain into construction and through to completion;*
 - *Assessment of areas where capability is below that needed to manage the programme and how this gap will be addressed, including on commercial skills; and,*
 - *Plan to refresh its skills strategy as the project progresses, balancing the need to retain key staff and knowledge, whilst ensuring that it has the skills and new ideas needed for future stages of the programme.*
4. **Several years into the programme, we are concerned by the huge uncertainty remaining with the design and delivery of Euston station.** Euston is a key element of the Government's plans for High Speed Two because it will be the London terminus, and will link to the existing railway, London Underground and the proposed Crossrail 2 programme. Alongside the extension of the station for High Speed Two, the Government has plans to redevelop the existing station and promote economic regeneration in the wider area. It is a risky element of the programme because the build site is in a tight urban environment and on an operational railway. We are told

that the station design had already been completed but that the Department, HS2 Ltd and Network Rail are currently working together to revise the plans at Euston, after the Oakervee Review recommended changes to the programme, including the frequency of planned train services. We are concerned by the lack of clarity over the station build at this stage of the programme. Euston is an important transport hub and business area, so ensuring minimal disruption and developing the site in a way that benefits all stakeholders will be crucial objectives.

Recommendation: *The Department must write to the Committee within six months of this report setting out its plan for Euston, including how it will be delivered and how it will ensure effective working between all stakeholders.*

5. **The Department and HS2 Ltd did not understand the consequences of changes made during scrutiny of Phase One legislation.** During the passage of the Phase One hybrid Bill through Parliament, commitments were made to petitioners about how and where the railway would be built and the effect it would have on the surrounding environment. HS2 Ltd tells us that the speed at which the Phase One hybrid Bill progressed through Parliament meant that more changes had to be made at the Committee stage to satisfy local communities, rather than being dealt with earlier in the process. However, the Commons Hybrid Bill Committee had more than 160 sittings over nearly 2 years. HS2 Ltd's implication that this was too rapid therefore seems incongruous, especially given that several individuals within the company had experience of Crossrail legislation. HS2 Ltd should therefore have been aware of the potential for changes to be made, and the implications this could have on the project's budget and timescales. HS2 Ltd recognises that the cost of commitments made were not accurately estimated; for example, the forecast costs of undertakings and assurances have risen from an allowance of £245 million in HS2 Ltd's early estimate to an indicative estimate of £1.2 billion at present. For Phase Two, HS2 Ltd says that it intends to apply the more granular costing information it has from Phase One to its estimates of any commitments made on Phase Two, and that it has undertaken a greater level of public consultation along the route for Phase 2a to ensure that fewer changes will be needed in Parliament. It is important that commitments made in the passing of the Phase Two hybrid Bill are fully understood by Parliament so that it can make informed decisions.

Recommendation: *The Department and HS2 Ltd must write to the Committee within three months of this report to set out how they are learning lessons from the experience of the Phase One hybrid Bill process for Phase Two. This should include how they will ensure that Parliament is provided with sufficient cost information and time to enable effective scrutiny and decision making on current and future high-speed railway related legislation.*

6. **We are concerned, given the scale of the programme and its future impact on the rail network, that if the Department does not give enough attention to managing the interdependencies within the programme and with other rail programmes, passengers will suffer.** The High Speed Two programme has many interdependent elements, such as stations, infrastructure and railway systems, that must work together to deliver passenger services. The programme, particularly Phase Two, also has links with the wider rail network to enable faster services to destinations on the conventional network, and with other rail improvement programmes such as

Northern Powerhouse Rail, to deliver the full benefits intended. The Government has given Phase One and Phase 2a the go-ahead, while pausing Phase 2b so that it can review how to better integrate it with Government's plans for rail in the North and Midlands. However, there is a risk that taking separate approaches to Phase 2b and to Euston, and adding in dependencies with Northern Powerhouse Rail and other projects, increases interdependencies and complexity across the programme.

Recommendation: *As part of its regular reporting on the programme, the Department and HS2 Ltd must set out how they are integrating the different elements of the High Speed Two programme with each other and the rest of the national rail network, and how they will work with other stakeholders to maximise the benefits of the programme as a whole.*

7. **The Department did not convince us that it was making sufficient and meaningful changes to its management of infrastructure programmes.** We have seen the Department face significant challenges across its major programmes portfolio, including on Crossrail, Thameslink and the Great Western modernisation programme. These complex programmes have been running concurrently and need lessons learned to be proactively shared in real time. Last year, the Department for Transport and Infrastructure and Projects Authority published the 'Lessons for the sponsorship of major projects' report that draws from the Department's experiences, and the Department says that it is embedding the 24 lessons across its portfolio. The Department also acknowledges that it needs to learn from its mistakes on High Speed Two, such as its failure to understand the scale and complexity of the programme and how reasonable it was to expect HS2 Ltd to handle the programme alone. Given the repeated emergence of issues across the Department's major programmes, we are not satisfied that the Department is yet embedding the lessons it has learned to date.

Recommendation: *The Department must write to the Committee within six months of this report providing a plan for how it will embed lessons learned from programme delivery more effectively in current and future major projects and programmes, including the recent learnings from High Speed Two.*

1 Transparency and Oversight

1. On the basis of a Report by the Comptroller and Auditor General, we took evidence from the Department for Transport (the Department) and High Speed Two Limited (HS2 Ltd) on the current status of the High Speed Two programme.¹

2. The High Speed Two programme aims to construct a new high-speed, high-capacity railway between London, Leeds and Manchester via the West Midlands. Phase One of the programme will run between London and the West Midlands, Phase 2a will connect the West Midlands and Crewe and Phase 2b will complete the full network to Leeds and Manchester. The Department's objectives are to provide sufficient capacity to meet long-term rail demand, improve resilience and reliability on the rail network, improve connectivity and boost economic growth across the UK.²

3. In March 2019, HS2 Ltd formally advised the Department that it would not be able to deliver Phase One of the programme on time or within the available funding. The Department's emerging estimate in December 2019 gave a potential cost of between £65 billion and £88 billion (2015 prices), 17% and 58% respectively more than the available funding of £55.7 billion (2015 prices). The Department and HS2 Ltd expect partial Phase One services from Old Oak Common to Birmingham Curzon Street to start between 2029 and 2033, with full services from Euston starting between 2031 and 2036. It is not clear when services on the full High Speed Two network to Leeds and Manchester will commence; HS2 Ltd estimates these will open between 2036 and 2040. The original opening dates were 2026 for Phase One and 2033 for the full network.³

The Department for Transport's transparency with Parliament

4. The scale of the issues on the programme first became apparent to the Department and HS2 Ltd in October 2018, when contractors provided cost and schedule estimates for the main civil construction elements of Phase One. The cost estimates were 83% more than HS2 Ltd's target and the work was set to complete between 12 and 18 months later than planned.⁴ The Department and HS2 Ltd developed an action plan to attempt to address the cost and schedule issues with Phase One. The plan included examining ways to make the technical design of the programme more efficient, revising commercial arrangements with contractors and examining elements of scope which could be removed from the programme.⁵ In March 2019, when the plan was ultimately unsuccessful, HS2 Ltd formally told the Department it had breached the terms of the Development Agreement and would be unable to deliver the programme to cost and schedule.⁶

5. We questioned the Department on why it had not informed Parliament about the true status of the programme, despite the significant issues it was facing.⁷ In October 2018, the Permanent Secretary appeared before the Committee and stated that the delay to notice to

1 C&AG's Report, *High Speed Two: A progress update*, Session 2019–20, HC 40, 24 January 2020

2 C&AG's Report, paras 1–3

3 C&AG's Report, paras 5–7, 14, 25

4 Qq 37–38; C&AG's Report, paras 14, 1.13, 2.8, Figure 6

5 Qq 38–40; C&AG's Report, para 1.13, Figure 6

6 Qq 44–45; C&AG's Report, para 5, Figure 2

7 Qq 36, 46–52

proceed to construction would not affect the overall programme schedule.⁸ She appeared again in May 2019, after the breach notice had been served by HS2 Ltd, and alluded that scope options were being examined to manage the affordability of the programme.⁹ She did not clearly set out that the programme was facing serious difficulties.¹⁰ In our most recent session we asked the Department and HS2 Ltd why the HS2 Ltd annual report and accounts for 2018–19 did not set out a forthright account of the programme’s status.¹¹ There is no mention of delays or that costs had exceeded the budget. Instead, there were minor references to “cost and schedule pressures” leading to the revision of notice to proceed, which has allowed “better definition of the scope, cost and schedule.”¹²

6. The Department and HS2 Ltd defended their lack of transparency and careful wording. They told us that, as they were in the middle of a live negotiation with main civil construction contractors, there was a risk that reporting of cost increases might have prejudiced the result.¹³ In addition, the Department told us it did not make an announcement as Ministers had not yet decided how to proceed.¹⁴ The Permanent Secretary recognised that there had been an issue with the transparency of reporting on the programme more generally, and that Government had now made a commitment to six-monthly reporting on the programme.¹⁵

7. The Department reports to Parliament on Crossrail through an annual Written Ministerial Statement. Despite this reporting, significant cost and schedule increases were only identified and reported to Parliament at a very late stage. The Government has not yet set out the form or content of its expected reporting on High Speed Two. We would expect any reporting to include as a minimum:

- Current cost range (for each Phase);
- Current schedule range (for each Phase);
- Key milestones (achieved in period and coming in the next); and
- Key risks the programme is currently facing.

8. HM Treasury guidance states that, in addition to producing an Accounting Officer assessment for projects or programmes within the Government’s Major Projects Portfolio alongside an approval of the Outline Business Case, it is good practice to prepare an assessment for “each novel and contentious transaction or proposal”. An assessment should also be prepared if a project departs from the four standards of regularity, propriety, value for money and feasibility, or the agreed plan in terms of cost, benefits, timescales, or level of risk.¹⁶ HM Treasury guidance says that Parliament should be provided with a summary of the key points of an Accounting Officer assessment, which is then shared on the Government website, deposited in the Library of the House of Commons, and sent

8 Q 49; Committee of Public Accounts, *Oral evidence: Department for Transport: Implementation of Brexit*, HC 1657, October 2018, Q 14

9 Qq 36, 46, 50; Committee of Public Accounts, *Oral evidence: Crossrail*, HC 2127, May 2019, Q 14

10 Q 50

11 Qq 41, 144–147

12 HS2 Ltd, *Annual Report & Accounts, 2018 – 2019*, HC 2500, July 2019

13 Qq 36, 144

14 Qq 42, 50, 52

15 Q 42, 49

16 HM Treasury, *Accounting officer assessments: guidance*, September 2017, Purpose and when to produce one, paras 1.2–1.3, 1.8

to the C&AG and HM Treasury Officer of Accounts. If the content is too sensitive for publication, the Accounting Officer should instead inform the Chair of the Committee of Public Accounts.¹⁷ The Department and HS2 Ltd can only authorise the start of main civil construction when certain criteria have been met, including assurance that the programme is affordable and value for money.¹⁸

9. We asked the Department whether, considering the cost overruns, it had sought a Ministerial direction or recommended cancelling investment in the programme. We heard that the Department completed four Accounting Officer assessments in 2019 to help inform this process and decision making.¹⁹ The Department told us that these formal assessments considered whether it was appropriate to continue with the project given affordability challenges, if Government policy still supported the programme, the value for money assessment and if there was prospect of a “credible” plan to bring the project within budget. The assessments also considered the risk of nugatory spend if the project were to be cancelled.²⁰

10. The Department explained that it would have been premature to seek a direction on the programme before it consulted Ministers on the potential for a programme review. The Department also informed us that it concluded it should continue with spending on the programme throughout 2019, but only on “essential items” necessary to maintain the programme; spending on items that could wait until a decision on the programme had been made, were postponed.²¹

11. The Department did not share summaries of any of the four Accounting Officer assessments on Phase One with Parliament. Considering the need for greater transparency from the Department on the status of the programme, and as recommended in our past report, we questioned whether Accounting Officer assessment summaries for High Speed Two could be shared with Parliament and placed on the Government website.²² The Accounting Officer did not appear to know that summaries should be shared, and suggested that while this was not a “matter of routine”, she would consider providing this information pending checks on sensitive information.²³ Later in the session, the Accounting Officer provided an update to state she would share the summaries of the assessments.²⁴

Skills and capacity in the Department for Transport and HS2 Ltd

12. In 2013, the previous Committee concluded that the Department faced a challenge in making sure it had the right mix of skills, particularly commercial and major projects expertise.²⁵ In 2016, the previous Committee raised the issue of skills again, highlighting that the Department may find it difficult to secure the skills required for all its major

17 HM Treasury, *Accounting officer assessments: guidance*, September 2017, The commitment to publish, paras 4.1, 4.11–4.12, 4.14–4.15

18 C&AG’s Report, para 3.2

19 Q 53

20 Q 54

21 Q 54; C&AG’s Report, paras 1.18, 2.28

22 Qq 55, 134; Committee of Public Accounts, *Accountability to Parliament for taxpayers’ money*, Thirty-ninth Report of Session 2015–16, HC 732, May 2016, Conclusions and recommendations, para 3

23 Q 55

24 Qq 134–135

25 Committee of Public Accounts, *High Speed 2: a review of early programme preparation*, Twenty-second Report of Session 2013–14, HC 478, September 2013, Conclusions and recommendations, para 6

transport infrastructure plans, including HS2.²⁶ Reports from the NAO have raised capability as a challenge²⁷ and the recently published Oakervee Review provided numerous conclusions and recommendations on building capability in HS2 Ltd.²⁸

13. We heard from HS2 Ltd that it had recently concluded a two-year programme that considered 24 capabilities, including leadership, governance, safety, assurance and technical skills. HS2 Ltd's assessment of its organisational capability at the time of the NAO's most recent report found improvements in most areas, but gaps remained in key areas such as risk management and assurance, project management and project controls.²⁹ HS2 Ltd told us that the maturity and capability of the organisation will continue to grow and change over time, and that it had spent time choosing staff based on behavioural and technical competences.³⁰ The Department also informed us that it is assessing HS2 Ltd's capability as part of the notice to proceed to construction assurance process, expected by the end of March 2020. The Department explained that it had been focusing on obtaining assurance and evidence on the current level of capability, progress made and future improvements, particularly in the core areas of project controls and assurance, and commercial management. It is also looking to strengthen the capabilities of the HS2 Ltd Board.³¹

14. The Crossrail programme suffered with skills and capability issues during the completion stage. In 2019, the previous Committee reported that the Department and Crossrail Ltd recognised there were insufficient people involved in the programme with the necessary skills and experience of integrating different elements of a railway, which is a latter stage of the project.³² The previous Committee also reported that both the Department and Crossrail Ltd recognised that if they had acted sooner to enhance capability in Crossrail Ltd, some of the issues on the programme could have been picked up sooner.³³

15. We heard from HS2 Ltd that it is using a revised commercial model with its main civil contractors, which means it bears more of the risk of cost increases.³⁴ HS2 Ltd informed us that it has much better visibility into emerging risks through its more collaborative, less transactional relationship with its contractors and the use of integrated teams, and that the contractors are incentivised to beat cost and schedule targets to generate profit. It also told us that there is a clear definition on what risks the contractors and HS2 Ltd are each responsible for.³⁵

26 Committee of Public Accounts, *Progress with preparations for High Speed 2*, Fourteenth Report of Session 2016–17, HC 486, September 2016, Conclusions and recommendations, para 4

27 C&AG's report, paras 24, 3.7–3.10; C&AG's Report, *Progress with preparations for High Speed 2*, Session 2016–17, HC 235, June 2016, paras 9, 3.1, box 3

28 Department for Transport and High Speed Two (HS2) Limited, *Oakervee Review of HS2*, February 2020

29 Q 115; C&AG's report, para 3.8

30 Qq 115, 118

31 Q 116–117, 136–141

32 Committee of Public Accounts, *Crossrail: progress review*, Ninety-Second Report of Sessions 2017–19, HC 2004, April 2019, para 22; Committee of Public Accounts, *Oral evidence: Crossrail: progress review*, HC 925, March 2019, Q 15

33 Committee of Public Accounts, *Crossrail: progress review*, Ninety-Second Report of Sessions 2017–19, HC 2004, April 2019, para 22

34 Q 111; C&AG Report, para 3.7

35 Qq 111–114

2 Learning Lessons

Euston Station

16. Euston is an important and complex part of the High Speed Two programme and involves building new platforms, extending bridges, tunnelling and building connections to the underground system in a tight urban environment.³⁶ The Department told us that Euston is currently estimated to cost £2.2 billion, including £239 million allocated as contingency. HS2 Ltd told us that it is “looking to find a more cost-effective solution based on the number of trains and the number of platforms”.³⁷ The Department told us there are essentially three projects at the Euston site: building the HS2 station; planning for potential changes to the existing Network Rail station; and, planning for an oversite development around the station.³⁸

17. Euston station was originally intended to open with the rest of Phase One in 2026, however significant cost and schedule pressures have pushed back the opening date to between 2031 and 2036.³⁹ HS2 Ltd informed us that Euston had been scrutinised under the Oakervee Review, with discussions on whether the railway should terminate at Old Oak Common. The Department assured us that it still plans to terminate the railway at Euston, not Old Oak Common.⁴⁰

18. HS2 Ltd stated it had spent around £30 million designing Euston station based on the Phase One hybrid Bill, and the design is ready for planning consent.⁴¹ However, the Department and HS2 Ltd told us that there are now choices to be made about aspects of the station, some of which are included in the Oakervee Review. These aspects include the number of platforms, the number of services an hour and whether the station should be designed and built in one or two stages. We were told by HS2 Ltd that these choices have quite big cost and schedule implications.⁴² The Department, HS2 Ltd and Network Rail are working together to revise their plans, to best optimise the design and delivery of the station as a whole.⁴³

19. HS2 Ltd also informed us that there are links between High Speed Two and the underground network at Euston, including integration with Euston and Euston Square, and potentially Crossrail 2, although the Department informed us that the scheme does not depend on Crossrail 2 to disperse passengers.⁴⁴ A decision on Crossrail 2 has not yet been made but HS2 Ltd assured us that it would not expect a big impact on London Underground services if it did not go ahead. If changes are made to Euston, HS2 Ltd estimates that it will need to undertake a further year of design work before resubmitting for planning consent.⁴⁵

36 Q 66; C&AG’s Report, para 3.5

37 Qq 69,71–72; Letter from Permanent Secretary, Department for Transport to Chair of Committee of Public Accounts dated 13 March 2020, The cost of the HS2 station at London Euston

38 Q 66; C&AG’s Report, para 3.5

39 Letter from Permanent Secretary, Department for Transport to Chair of the Committee of Public Accounts dated 2 March 2020, HS2 section and appendix D; C&AG’s Report, para 1.11, Figure 5

40 Qq 76, 77

41 Qq 67, 76

42 Qq 66, 68

43 Q66

44 Q 73; Letter from Permanent Secretary, Department for Transport to Chair of Committee of Public Accounts dated 13 March 2020, Dispersal of passengers arriving on HS2 at Euston station

45 Qq 67, 73–74

Interdependencies

20. The High Speed Two programme is complex and involves many interrelated elements, including land and property, high-speed rail infrastructure systems, designing and building stations and constructing the railway itself. HS2 Ltd is expected to manage these concurrently over decades.⁴⁶ For Phase One, HS2 Ltd is at different stages of contracting for the different elements of the project and told us that it is yet to agree prices for Euston and Old Oak Common, and yet to contract the northern stations, railway systems and trains. HS2 Ltd said that it has contracted about 50% in total for Phase One but has estimated around 78% of the Phase One costs are supported by input from the supply chain.⁴⁷

21. Phase Two of the HS2 programme provides connections to the existing railway to enable journeys to Liverpool, Newcastle, Edinburgh and Glasgow, with Phase 2b specifically connecting high-speed trains to the existing Midland Main Line railway. At the time of the NAO's latest report on HS2, the hybrid Bill for Phase 2a had been deposited and was being scrutinised in preparation for Royal Assent in early 2020, and the Department had been planning to begin the hybrid Bill process for Phase 2b in June 2020.⁴⁸ When we questioned the Department on timescale and interactions between Phases 2a and 2b, it told us that the hybrid Bill for Phase 2a had now been revived in Parliament and work on an Integrated Rail Plan for Phase 2b had been announced, due to be finalised this year.⁴⁹ The Department explained that the plan will look at the potential for Phase 2b savings and whether Phase 2b can be effectively delivered alongside planned or potential investments in the Midlands and the North of England, such as Northern Powerhouse Rail. The plan will be informed by an assessment of the rail needs of the Midlands and the North by the National Infrastructure Commission and will also include the Infrastructure and Projects Authority (IPA) review on Phase One learnings.⁵⁰

22. We were interested to hear from the Department whether its criteria for environmental project assurance had changed since the plans for Heathrow Airport's third runway were ruled illegal by the Court of Appeal as the plans did not take account of the Paris climate Agreement, non-CO2 emissions and emissions post-2050.⁵¹ The Department responded that it is still assessing the consequences of the judgement on project delivery. We asked whether HS2 Ltd and the Department had undertaken an assessment on the programme's alignment with the Government's climate change policies.⁵² The Department told us that the programme's business case had long considered carbon benefits and carbon impact assessments have been published as part of the Phase One and Phase 2a Environmental Statements. It informed us that the programme will support the transition to a net-zero carbon economy through reducing carbon emissions from passenger and freight journeys. For example, the Department told us that High Speed Two will offer seven times less carbon emissions per kilometre travelled by a passenger than an equivalent journey in a car, and 17 times less than a domestic air flight. It also stated that rail freight produces 76%

46 Q 58; C&AG's Report, paras 1.4–1.5

47 Qq 109–111

48 Q 34; C&AG's Report, paras 1, 1.9, Figure 1

49 Qq 78, 81, 83

50 Qq 81, 83; Letter from Permanent Secretary, Department for Transport to Chair of the Committee of Public Accounts dated 2 March 2020, Appendix C

51 Q 119; Written statement to Parliament from Department for Transport and the Rt Hon Grant Shapps MP delivered on 27 February 2020, Aviation update: 27 February 2020

52 Qq 119, 120

less carbon dioxide per tonne of cargo than its equivalent on the road.⁵³ The IPA's review on lessons as part of the Integrated Rail Plan is set to report on the effects of environmental mitigation on costs of delivery.⁵⁴ In light of the Government's net-zero 2050 target, the Oakervee Review said that in the short to medium term, construction of High Speed Two is forecast to add carbon emissions, but HS2 Ltd estimates the programme could save around 11 to 12 million tonnes of CO₂-equivalent over the first 60 years of operation. The review concluded that the ability to reduce carbon emissions in Phase One construction may be limited, so focus should be placed on Phase Two.⁵⁵

Learnings for Phase Two

23. HS2 Ltd and the Department needed to deposit a hybrid Bill in Parliament to give them the legal powers to build Phase One. As part of the scrutiny process, extra requirements for the programme were introduced. These included commitments to change the design of the railway, such as lowering it beneath ground level, increasing the length of tunnelling and erecting noise barriers. While it is difficult to isolate the impact of these commitments from other design choices and legal requirements, indicative analysis by HS2 Ltd suggests that the costs of commitments known as 'undertakings and assurances' may be around £1.2 billion, compared with the allowance of £245 million included in its April 2017 estimate.⁵⁶ This is a cost the Department sees as a "significant additional element".⁵⁷

24. In light of this, we asked HS2 Ltd how it could assure us that Phase 2a cost estimates for the hybrid Bill will be more accurate than Phase One. HS2 Ltd informed us that the Phase 2a bill process has already been different to Phase One; there was a greater level of public consultation before the Bill entered Parliament and the process is being delivered at a slower pace than for Phase One, which HS2 Ltd anticipate will lead to fewer commitments being needed in Parliament. HS2 Ltd stressed that lessons and insights from Phase One are being applied to Phase 2a. For example, HS2 Ltd is able to use its database of 12,000 cost rates, developed as part of Phase One, to more accurately estimate the true cost of a commitment, leading to a more robust cost estimate.⁵⁸

Wider programme learnings

25. In response to being questioned on how it is learning lessons from major programmes, the Department explained that, in 2019, it published a joint report with the IPA, on lessons for the sponsorship of major projects. The report sets out 24 best practice lessons for delivering major projects, drawing on challenges from projects such as Crossrail, Thameslink and Great Western Railway.⁵⁹ Previous Committee reports have also highlighted opportunities for learnings from these programmes.⁶⁰ The Department told

53 Qq 120–121; EV xx Letter from Permanent Secretary, Department for Transport to Chair of Committee of Public Accounts dated 13 March 2020, HS2's effect on the UK's climate change targets

54 Letter from Permanent Secretary, Department for Transport to Chair of the Committee of Public Accounts dated 2 March 2020, Appendix C

55 Oakervee Review of HS2 published 11 February 2020, Conclusion 5, paras 5.30–5.31, 5.33–5.34

56 C&AG's Report, paras 2.17–2.18

57 Q 35

58 Q 130

59 Q 82

60 Committee of Public Accounts, *Completing Crossrail*, One Hundred and Ninth Report of Session 2017–19, HC 2127, July 2019, Learning lessons; Committee of Public Accounts, *Modernising the Great Western Railway*, Forty-fourth Report of Session 2016–17, HC 776, March 2017, para 5; Committee of Public Accounts, *Update on the Thameslink Programme*, Twentieth Report of Session 2017–19, HC 466, February 2018, para 5.

us that it is embedding the lessons from its report into the delivery of High Speed Two. It pointed to lessons such as using realistic ranges for costing and schedules rather than fixed points, taking action to reset the programme rather than continuing and hoping it is brought back under control, using benchmarking to test and assure cost estimates and strengthening HS2 Ltd's Board.⁶¹

26. The Department told us that there are important lessons to learn from High Speed Two which are relevant for all major project delivery teams. Lessons include understanding the scale and complexity of the programme, the capability requirements and expectations placed on HS2 Ltd to deliver, as well as lessons around over-optimism.⁶² In addition, the Department informed us that it had asked the IPA to undertake a detailed examination into Phase One to look for opportunities to deliver Phase 2b more efficiently.⁶³

27. In addition to implementing the Department/IPA report lessons, the Department explained that it has tasked Ian King, its lead non-executive Director, to ensure best practice is embodied across the whole transport portfolio. The Department provided more detail, informing us that it is strengthening its portfolio management and risk assessment processes, has made changes to its investment committee to improve effectiveness and is recruiting more senior capability, all in a bid to learn from its programmes.⁶⁴

28. We also asked about what lessons the Department had learned on its approach to skills and retention. We heard it is working to ensure best practice is embedded across the portfolio. The Accounting Officer for the Department also told us that there should be greater continuity of tenure in key departmental roles. In the case of High Speed Two, however, there has not been a high level of churn within her senior team.⁶⁵

61 Qq 82–83

62 Qq 58, 80

63 Qq 81, 83

64 Q 83

65 Qq 82–85

Formal minutes

Wednesday 6 May 2020

Virtual meeting

Members present:

Meg Hillier, in the Chair

Mr Gareth Bacon	Sir Bernard Jenkin
Olivia Blake	Shabana Mahmood
Sir Geoffrey Clifton Brown	Gagan Mohindra
Dame Cheryl Gillan	Sarah Olney
Peter Grant	Nick Smith
Mr Richard Holden	James Wild

Draft Report (*High Speed 2: Spring 2020 Update*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 28 read and agreed to.

Summary agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

Resolved, That the Report be the Third of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[Adjourned till Monday 11 May at 1:45pm]

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Wednesday 4 March 2020

Bernadette Kelly, Permanent Secretary, Department for Transport; **Clive Maxwell**, Director General, High Speed and Major Rail Projects, DfT; **Mark Thurston**, Chief Executive Officer, HS2; and **Michael Bradley**, Chief Finance Officer, HS2.

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List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website. The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2019–21

First Report	Support for children with special educational needs and disabilities	HC 85
Second Report	Defence Nuclear Infrastructure	HC 86