



National Audit Office



REPORT

HS2: update following cancellation of Phase 2

Department for Transport and
High Speed Two Limited

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HC 128

Key facts

October 2023	<p>the government announced decisions on the High Speed Two (HS2) programme to:</p> <ul style="list-style-type: none">● complete Phase 1 (London to Birmingham);● cancel the rest of the railway (Phase 2); and● revise how it will fund and deliver the London terminus station at Euston
Between 2029 and 2033	<p>when the Department for Transport (DfT) expects Phase 1 of the programme to start running between Birmingham and Old Oak Common, as the interim London terminus. DfT has not yet set a revised date for when it expects HS2 services to run from London Euston</p>
£30.1 billion (2019 prices)	<p>DfT's and High Speed Two Limited's (HS2 Ltd's) total spend on the programme as at the end of March 2024 (£27.8 billion on Phase 1)</p>
£44.6 billion (2019 prices)	<p>current funding envelope for Phase 1, which both HS2 Ltd and DfT estimate will not be sufficient</p>
£45 billion to £54 billion (2019 prices)	<p>DfT's range for the estimated total cost to complete Phase 1 (prior to the October 2023 decisions). HS2 Ltd's estimate is £49 billion to £57 billion (2019 prices)</p>
£592 million	<p>programme spend on land and property along the Phase 2 route as at the end of March 2024, that is no longer needed for HS2</p>
179	<p>parcels of agricultural land, across 63 farms, that HS2 Ltd will potentially dispose of in its first phase of disposals</p>
Up to £100 million (2024 prices)	<p>HS2 Ltd's estimate of the cost of remediation to close down sites where early works had already begun on Phase 2</p>

Summary

1 The High Speed Two (HS2) programme aimed to construct a high-speed, high-capacity railway between London and Manchester via Birmingham. The Department for Transport (DfT) is the programme's sponsor, responsible for funding and overseeing delivery. High Speed Two Limited (HS2 Ltd), an arm's-length body of DfT, is responsible for delivering an operational railway.

2 In October 2023, the government announced significant changes to the HS2 programme. At that point the phases into which DfT had split the programme were at different stages of progress. Phase 1 (London to the West Midlands) was the most advanced stage, with the railway and Old Oak Common station in west London under construction. The changes were as follows.

- The new railway will be completed between London and Birmingham, along with a connection to the West Coast Main Line (completing Phase 1 of the programme). DfT expects HS2 services to start running from Old Oak Common between 2029 and 2033. DfT does not yet have a date for when trains will run from London Euston, as the eventual London terminus.
- The rest of the new railway will be cancelled (all sections of Phase 2). The government intends to sell land and property no longer needed along these routes.
- The HS2 station planned for London Euston will be smaller, reflecting the lower number of train services planned, and funded by private investment. There will also be wider redevelopment of the area.

3 The government took these decisions due to increasing costs on Phase 1, repeated delays to the schedule and changing patterns of travel since the COVID-19 pandemic, which it considered to have weakened the case for HS2. Prior to the announcement, DfT expected Phase 1 to cost between £45 billion and £54 billion (in 2019 prices), against a funding envelope of £44.6 billion. The programme and budget for Phase 1 had been reset in 2020 due to increased costs and delays to the schedule.

4 Following the October 2023 announcement, DfT and HS2 Ltd began work to fully understand the implications for the programme. This included confirming the revised scope of Phase 1, identifying how HS2 Ltd would close down Phase 2, and determining how DfT would deliver and fund the HS2 station at Euston. DfT and HS2 Ltd also needed to incorporate these changes into work they had already started to respond to the rising costs on Phase 1. As at the end of March 2024, DfT and HS2 Ltd had spent £30.1 billion (in 2019 prices) in total on the programme, with most of the spend on Phase 1 (£27.8 billion).

5 We have reported regularly on HS2, including on progress at Euston in March 2023 and on the previous reset of the programme in January 2020.¹ Our previous reports have highlighted the need for DfT and HS2 Ltd to better understand the risks to, and costs and benefits of, the programme.

Scope of the report

6 This report examines whether DfT and HS2 Ltd are effectively managing their response to the changes in the HS2 programme to protect and maximise value for money. We assess DfT's and HS2 Ltd's progress in:

- responding to the changes and managing the risks; and
- resolving key issues that will allow them to reset and deliver the programme.

The fieldwork for this report was completed between April and June 2024. Several areas that we examine have work in progress. We have not examined the decision to cancel Phase 2 or how funding allocated to Phase 2 has been reallocated to other projects as part of the government's October 2023 announcement. We have also not examined the progress that DfT and HS2 Ltd have made on Phase 1 or how they are managing the wider risks to the programme. We expect to report further on progress with the HS2 programme in the future.

Key findings

Responding to the October 2023 decisions

7 DfT and HS2 Ltd quickly identified which parts of their Phase 1 plans they needed to assess following the cancellation of Phase 2 to avoid costs that had become unnecessary. The government's decision to cancel Phase 2 created uncertainties in a range of complex areas, particularly as HS2 Ltd and other rail organisations had not been involved with the decision. These areas include what infrastructure and rolling stock are required for Phase 1 and how HS2 trains will connect to the existing West Coast Main Line. With Phase 1 construction underway, DfT needed to decide quickly what works would need to be stopped or changed to avoid unnecessary costs. After the announcement, DfT worked with HS2 Ltd and others to establish a critical path and identify options by the end of 2023 to allow for informed decision-making on different actions and trade-offs. DfT's general principle is to stop work where it is no longer needed for Phase 1 unless it would cost more to stop or change plans. As a result, some infrastructure work may be completed that is not needed for Phase 1. For example, DfT has decided that all platforms will still be built at Birmingham Curzon Street station, although they will not all be made operational as part of the HS2 programme, to avoid unnecessary costs. DfT still has decisions to make on some smaller areas of scope (paragraphs 2.2 to 2.7).

¹ Comptroller and Auditor General, *High Speed Two: A progress update*, Session 2019-20, HC 40, National Audit Office, January 2020; Comptroller and Auditor General, *High Speed Two: Euston*, Session 2022-23, HC 1201, National Audit Office, March 2023. More reports on HS2 can be found on our website www.nao.org.uk.

8 HS2 Ltd estimates that closing down Phase 2 will take three years to complete at a cost of up to £100 million. HS2 Ltd needs to efficiently and safely decommission and close down Phase 2 construction sites. Although no substantive construction work had begun on Phase 2 before it was cancelled, HS2 Ltd had begun early enabling works including investigative boreholes and moving utilities such as gas pipes. HS2 Ltd has an obligation to reinstate land to its original state or, for land where environmental works have been completed, to maintain the land until disposal. HS2 Ltd expects to complete remediation works for Phase 2 by summer 2027 at an estimated cost of up to £100 million (in 2024 prices). HS2 Ltd will recognise accounting losses relating to the cancellation of Phase 2 in its 2023-24 annual report and accounts (paragraphs 2.8 to 2.11).

9 Disposing of Phase 2 land and property will take several years and DfT is in the process of establishing a strategy to achieve value for money from the disposals. As at the end of March 2024, the HS2 programme had spent £592 million buying land and around 1,000 properties on the Phase 2 route that DfT will no longer need for HS2. DfT and HS2 Ltd are developing an approach for potentially disposing of an initial set of land and property, focused on 179 parcels of Phase 2 agricultural land across 63 farms. DfT is developing a value-for-money framework for these properties before establishing a full end-to-end disposals process with HS2 Ltd. This should allow DfT and HS2 Ltd to test and refine their approach ahead of a more comprehensive framework for different types and volumes of disposals. Other types of properties will provide different challenges, such as housing where the speed and timing of sales may impact local housing markets. The full programme to dispose of land and property no longer needed will take several years to complete. Our cross-government work on land and property has highlighted the need for realistic targets and timeframes, transparency on terms of disposal to provide greater assurance over value for money and consideration of how any gains in value could be shared (paragraphs 2.12 to 2.17 and Figure 4).

10 DfT's plans for resetting Euston station and surrounding wider development are at an early stage; it has not yet decided on its scope, funding, or governance. We reported in March 2023 that DfT and HS2 Ltd had failed to develop an affordable and viable station that integrated with other activity at Euston and needed to reset the project again, having previously reset it in 2020. While (as a result of the October 2023 announcement) the HS2 station will be smaller, the scope of the Euston programme is now larger, incorporating more commercial development and new housing beyond the boundary of the station site. DfT intends that the smaller HS2 station, private funding and a new delivery model will help address affordability and integration. DfT has progressed with developing minimum requirements for the station and options for a new delivery model ahead of ministerial approval. However, it is at an earlier stage in considering how cost and risk will be transferred and what the long-term governance arrangements at Euston will be. DfT expects it may be several years before it could put all these arrangements in place. Some works may need to proceed ahead of this to avoid delays and potentially higher long-term costs, and these may require public funding (paragraphs 3.1 to 3.10, Figures 5 and 6).

Resetting the programme

11 HS2 Ltd has recently made organisational changes that aim to refocus it on delivery of the Phase 1 railway. Over the first half of 2024, HS2 Ltd has been implementing a new operating model and executive structure to improve coordination and decision-making within the organisation. HS2 Ltd began work to revise its organisational structure in September 2023 but subsequently revised this to take into account the October 2023 decisions as well as measures to improve cost management. While HS2 Ltd's focus in recent years has been on civil engineering, it is now shifting its focus to the delivery of railway systems and managing its integration risks. These risks include those arising from how it will bring the railway into operation and how the railway will integrate with the wider railway network. HS2 Ltd is seeking to learn from the Crossrail programme, which underestimated the complexity of and time required to complete systems integration. HS2 Ltd has established a new role of Chief Railway Officer, with responsibility for integration and focusing programme decisions on how to best deliver the whole Phase 1 railway, rather than individual component projects. HS2 Ltd also needed to reestablish its senior leadership following the departure of its Chief Executive in September 2023 and the interim appointment of an Executive Chair. It recently completed its recruitment process and appointed a new Chief Executive, the former Chief Executive Officer of Crossrail Ltd, who will take up the post during 2024-25 (paragraphs 4.3 to 4.5).

12 DfT and HS2 Ltd have different views on how much it will cost to complete the programme. Prior to the October 2023 decisions, HS2 Ltd estimated that the total costs of Phase 1 would be £49 billion to £57 billion, while DfT estimated a cost to complete of £45 billion to £54 billion. Both estimates are above the current funding envelope of £44.6 billion (all 2019 prices), and HS2 Ltd has since identified cost pressures which will increase their estimated range further. The estimates differ because HS2 Ltd and DfT disagree over aspects of estimation methodology, including how to calculate the financial value of the programme's risks. Total costs will also be impacted by the timing of funding. In March 2023, DfT instructed HS2 Ltd to slow work on Phase 2a, Euston and parts of Phase 1, to address affordability pressures. Continuing to manage the schedule of work to meet spending limits would reduce short-term funding needs but extend the schedule of work and increase overall costs. DfT and HS2 Ltd should agree on the final cost of Phase 1 before they agree with HM Treasury a revised funding envelope for the HS2 programme, as well as establish revised financial controls, including an approach to annual funding beyond 2024-25 and the programme's overall contingency. These elements must be in place to provide the longer-term certainty needed to plan activity and manage the supply chain (paragraphs 4.6 to 4.9).

13 DfT and HS2 Ltd are developing plans to address the issues that have led to significant cost increases. HS2 Ltd has identified several factors that have led to the cost increases on Phase 1, including the budget and schedule being set too early and delays to obtaining planning consents. In September 2023, HS2 Ltd estimated that the forecast cost of main civil construction work alone had increased by £6 billion (2019 prices) since 2020. Although these works are on schedule, HS2 Ltd has not driven the cost performance it expected through its contracts, and contractual incentives to control costs and improve productivity have not worked as intended. The works have also been affected by the impact of external events on the supply chain, such as COVID-19. DfT and HS2 Ltd are finalising a plan which identifies actions that aim to provide greater certainty over, avoid, and reduce costs. An important element of this plan is for HS2 Ltd to renegotiate its four main construction contracts to better incentivise cost control and achieve greater certainty on costs. However, DfT and HS2 Ltd acknowledge that successfully renegotiating major contracts that are already in progress will not be straightforward. HS2 Ltd's plan also includes delivering stations and railway systems elements more efficiently, improving the productivity of the main civil construction works and engaging with third parties to speed up planning consents. As well as known cost increases, areas of risk and uncertainty remain within the Phase 1 cost estimate where costs may increase further (paragraphs 4.6, 4.10 to 4.14, Figures 7, 8 and 9).

14 DfT is not yet clear how it will maximise the benefits of the new scope and how it will achieve them. The programme's intended benefits include passenger benefits (such as more seats along the route) and environmental benefits (such as decarbonisation), as well as wider economic benefits from regeneration and business investment around the new railway. However, the October 2023 decisions reduced the scale of benefits that can be realised by the programme. DfT's focus since then has been on what it can deliver through a revised train service specification for the Phase 1 route and the infrastructure needed to support this. Maximising the wider economic benefits from this revised scope will require DfT to work with other government departments, local authorities and businesses to develop a shared vision for what the programme intends to achieve. This is particularly important where benefits are outside of DfT's direct control and may require further investment to be realised. DfT told us that it is planning to update its planned benefits and how it will achieve these, as it updates its business case during 2024 (paragraphs 4.15 to 4.18).

15 DfT will not be able to address capacity issues on the West Coast Main Line north of Birmingham through its revised programme scope. The HS2 programme was originally intended to improve capacity on the West Coast Main Line. However, the HS2 services that will run north of Birmingham will not resolve capacity issues on that section, and DfT estimates that the line could reach capacity by the mid-2030s. DfT plans for HS2 trains to run from the Phase 1 track onto the West Coast Main Line in place of conventional trains, but the trains will have fewer seats than existing services unless changes are made to existing infrastructure and stations to accommodate longer trains. Options for addressing capacity issues involve, at a high level, managing demand for rail services or investing in infrastructure such as additional tracks and longer platforms. DfT will need to balance trade-offs in developing options while considering the impact on and operation of the national railway as a whole (paragraphs 4.19 to 4.21).

Conclusion

16 As soon as the government announced plans to cancel Phase 2, DfT and HS2 Ltd started work to understand and respond to immediate risks to value for money. They established what decisions were needed on the scope of Phase 1 to minimise unnecessary costs and established plans to decommission Phase 2 sites. DfT's work to dispose of land and property is at an early stage, but its plans for a small number of potential sales provide the opportunity for DfT to learn from this in developing its wider disposals strategy.

17 While HS2 is now a smaller programme, it remains by any measure an extremely large and complex endeavour, and DfT and HS2 Ltd need to reset the programme successfully to avoid repeating past failures and maximise its value. To do this, they will need to be clear on what benefits they now want the programme to achieve and how they plan to achieve them, agree a realistic budget to deliver them, and re-establish control so that risks and costs can be managed effectively and benefits delivered for both passengers and taxpayers. DfT and HS2 Ltd must now take the time needed to properly reset, and set themselves up to deliver value for money from the programme.

Recommendations

a DfT, HS2 Ltd and HM Treasury should do the following as part of resetting the programme.

DfT should:

- fully confirm the revised scope for the programme;
- update its benefits realisation plans in light of the new scope and develop a shared vision with its wider stakeholders on what the programme will achieve; and
- agree with HS2 Ltd a revised methodology for estimating the cost of the programme and use that estimate to set a revised funding envelope.

HS2 Ltd should:

- finish developing its lowest cost action plan, ensuring that a programme of work is established to implement it; and
- complete its organisational changes and monitor how well the changes are effectively supporting it to manage the revised programme.

HM Treasury should:

- as part of future spending reviews, agree revised financial controls with DfT and HS2 Ltd, including multi-year funding settlements for the programme to provide them with the longer-term certainty needed to plan activity, manage the supply chain and avoid higher costs; and
 - consider how to apply the recommendations we made in our 2023 report on how best to manage the budget for the HS2 programme to best protect value for money. These recommendations included consideration of: resetting HS2 budgets and costs in current prices; how inflation risk would be managed in the future; and revisiting financial controls that allow for flexibility in spend between years, and whether these need to be increased.
- b** At Euston, DfT should:
- develop a programme business case to help it and other stakeholders with decision-making across all projects within the larger Euston programme; and
 - while the long-term delivery and funding arrangements are being developed, make the time-critical decisions on progressing necessary works at Euston where not making them would create risks to value for money.
- c** In disposing of the land and property it no longer needs for the programme, DfT should be transparent about its value-for-money framework and how it has been implemented. DfT should also, as part of developing its framework, identify appropriate opportunities where government could share in any future gains in values on the land and property it sells.
- d** Outside of the programme, DfT should continue to assess HS2's role in supporting the wider rail network to realise benefits and consider other options for improving capacity on the West Coast Main Line.