

HS2 6-monthly report to Parliament: October 2021

I am proud to report significant progress on High Speed 2 (HS2) in my third update to Parliament on the project. We remain within budget and schedule, have hit major construction milestones, made substantial progress with key procurements, and are crucially supporting more jobs than ever before – all demonstrating just how HS2 is central to this government's mission to [Build Back Better](#) from the COVID-19 pandemic.

Key achievements in this reporting period (February to August 2021 inclusive) are:

- the recent announcement that the project now supports 20,000 jobs, just over a year since the Prime Minister marked the start of main construction. To date, over 2,200 businesses, 97% of which are UK-registered, have delivered work on HS2
- launching the first tunnel boring machines (TBMs) that are digging the 10-mile-long tunnels underneath the Chilterns hills. The 2 TBMs have driven a combined distance of approximately 1.5 miles and are progressing ahead of schedule. Construction on the new 'superhub' HS2 station at Old Oak Common (supporting 2,300 jobs and 250 apprenticeships) has also started
- at Euston, we've confirmed the move to a less complex, more efficient 10-platform design, which can be built in a single-stage, and can still support the full operation of the HS2 network
- releasing tenders for Phase One and 2a rail systems packages, with 14 rail systems packages available over the next 2 years (which include systems for track, power, signalling and communications)
- on Phase 2a, commencing early environmental works which marked the first stage in extending the railway from the West Midlands to Crewe and starting procurement for a design and delivery partner (DDP)
- announcing the government's [commitment to deliver a 'net gain' in biodiversity](#) for the next phase of HS2 (Crewe to Manchester)

The report uses data provided by HS2 Ltd to the HS2 Ministerial Task Force for Phases One and 2a and covers the period between February 2021 and August 2021 inclusive. Recommendations from the [Public Accounts Committee \(PAC\) report of 22 September 2021](#) have been considered and I will provide an update on the continued implementation of these recommendations in my next report.

Programme update

Schedule

In my last report, I confirmed that Phase One remained within its projected delivery into service (DiS) range of 2029 to 2033. I also committed to providing an update on the outcome of a schedule re-planning exercise to

mitigate the impact of delays that have arisen since the schedule was set at the start of last year (of which some are COVID-19 related).

This exercise was undertaken by HS2 Ltd and its suppliers and the exercise has now concluded. Construction activities have been successfully re-sequenced to deliver a schedule that reflects an increasingly mature understanding of the years of works ahead. The re-sequencing helps resolve a large number of previously reported schedule pressures, whilst still retaining the Phase One DiS range of 2029 to 2033. The cost of these mitigations has been assessed at £110 million and will be covered by contingency delegated to HS2 Ltd.

Whilst the forecast DiS range for Phase One remains 2029 to 2033, HS2 Ltd has identified some potential minor delays in the southern section of the line-of-route and tunnels leading into Old Oak Common from outer London. Our focus now is to identify efficiencies and control risk in these key areas. The most notable risks include:

- residual delays in completing enabling works and handover to main works in certain locations
- slower than planned design progress and securing planning consents by the main works civils contractors that are limiting productivity of the supply chain
- the consequential impacts of COVID-19, which has continued to cause disruption within this reporting period

Following Royal Assent of the Phase 2a High Speed Rail Bill, the Phase 2a DiS range has now been set to 2030 to 2034. New delivery arrangements have been approved, including a DDP that will act as a strategic partner for HS2 Ltd to provide support in managing design and construction.

Affordability

HS2 remains within budget. The overall budget for Phase One, including Euston, remains £44.6 billion. This is composed of the target cost of £40.3 billion and additional government-retained contingency of £4.3 billion. The target cost includes contingency delegated to HS2 Ltd of £5.6 billion for managing risk and uncertainties.

On Phase 2a, revised delivery arrangements were [approved in June 2021](#) based on an updated cost range of £5.2 billion to £7.2 billion, broadly similar to the National Audit Office's (NAO's) report of January 2020. Arrangements will be formalised in the Spending Review.

To date, out of the Phase One target cost of £40.3 billion, £12.9 billion has been spent, with an additional £1 billion for land and property provisions. £12.4 billion has additionally been contracted, with the remaining amount not yet under contract or drawn as contingency.

Since my last report, the first £15 million of the £4.3 billion of government-retained contingency for Phase One has been allocated, to increase the number of trains that Old Oak Common station can serve from 3 to 6 trains

per hour whilst it acts as the temporary London terminus. This will unlock substantial economic benefits until the completion of the new HS2 station at Euston.

To date, HS2 Ltd has drawn about £0.8 billion of its £5.6 billion delegated contingency. Contingency use to date reflects an increase of about £0.4 billion since my last report to Parliament. The rate of contingency draw is expected at this stage given the nature of current enabling and civil works and the scale and complexity of the programme.

HS2 Ltd is currently reporting future potential cost pressures of around £1.3 billion (compared with my previous update of £0.8 billion). If these cost pressures materialise, they will be drawn from contingency held by HS2 Ltd, of which £4.8 billion remains. Of the £1.3 billion potential contingency drawdown, the key cost pressures currently being reported which may require a call on contingency delegated to HS2 Ltd if not mitigated are:

- an estimate of £0.6 billion for the slower than expected mobilisation of main works civils contractors for Phase One, associated with delays to enabling works handovers, design approvals and securing of planning consents. This estimate is, in part, informed by the schedule re-planning exercise
- a £0.4 billion pressure on Euston cost estimates (which remains unchanged from my last update to Parliament). However, now that the move to a smaller, less complex 10-platform single-stage delivery strategy at Euston has been confirmed (which will still support the full operation of the HS2 network), the Department for Transport (DfT) anticipates that cost pressures at Euston will be reduced as the updated station design is developed over the coming months
- a further £0.15 billion pressure has been reported for delivering on-network works on the existing Euston network that are required to facilitate the new HS2 station

HS2 Ltd has identified over £0.3 billion in savings and continues to focus on realising further efficiencies and opportunities to reduce the cost of Phase One.

On COVID-19 costs (which will be managed from within government-retained contingency), HS2 Ltd is making good progress with its suppliers to quantify the impacts on individual contracts ahead of submitting claims to request drawdown of government-retained contingency. Since my last report, HS2 Ltd has updated its assessment of the likely financial impact of the pandemic on delivering Phase One and estimates the full costs within the range of £0.4 billion to £0.7 billion (this has been authorised by DfT). The assessment was based on the extended duration of restricted working practices anticipated to run to a revised end-point assumption of December 2021.

DfT and HS2 Ltd have agreed in principle a set of initial claims that include direct and measurable costs of restrictions that relate to the initial phases of COVID-19 in 2020. These will now be subject to government scrutiny and will require formal approval before funds from government-retained contingency can be allocated.

Delivery

On Phase One, work is well underway at our 340 sites between London and the West Midlands and construction of the line-of-route continues to gather pace. Health and safety remains a top priority for the project as work continues to ramp up. With over 4 million hours worked across the programme per month, there has been an increase in the number of safety-related incidents. HS2 Ltd is focused on continual improvement with its supply chain including through embedding lessons learned and cross-functional learning between integrated project teams comprising of HS2 Ltd staff and its contractors.

The launch of the first 2 TBMs (Florence and Cecilia) marked a significant moment for the project. The TBMs are the largest ever used on a UK rail project and will excavate tunnels underneath the Chilterns for the next 3 years. Further TBM launches are planned in the coming months, including excavation under Long Itchington Wood.

Elsewhere, good progress has been made on the 4 new HS2 stations along Phase One. In June 2021, the Transport Secretary visited Old Oak Common to mark the start of permanent construction. This 'super-hub' station truly shows the government's [Plan for jobs](#) in action – kickstarting major regeneration, supporting 2,300 jobs and 250 apprenticeships in construction.

In the West Midlands, a design and build contract for Birmingham Curzon Street station was awarded to HS2 Ltd's new construction partner on time. HS2 Ltd has also recently announced the shortlist of bidders for the contract to build the award-winning Interchange Station in Solihull, and contract award is planned for summer 2022.

In response to a recommendation from the Oakervee Review about looking into the efficiency of the Euston station, the move to a smaller, simpler 10-platform station design at Euston has now been confirmed, which can be built in a single-stage (instead of an 11-platform, 2-stage build). This will provide a more efficient design and delivery strategy and play a significant role in mitigating the affordability pressures recently identified. Moving to this revised HS2 Euston station design maintains the station infrastructure capacity to run 17 trains per hour, as set out in the [Phase One full business case](#). We are continuing to explore opportunities for greater integration between the HS2 and Network Rail stations through The Euston Partnership and to optimise the oversite development above the Euston terminus. Further details will be provided in my next update.

We have reached a major milestone on the procurement of rail systems. HS2 Ltd has started to release tenders for Phase One and 2a rail systems packages for systems such as track, catenary, power, control and communications. This will continue over the next 2 years.

There have been various legal challenges to the rolling stock process, but we expect the contract award to be in the autumn subject to there being no further challenges. It is not expected that this delay will affect the planned opening of Phase One services.

Following Royal Assent of the Phase 2a High Speed Rail Bill, we have continued to deliver the enabling works contracts, consisting of ground investigations, utility diversions and environmental works. Early environmental works mobilisation commenced in April 2021 and the second enabling civil works package in July 2021. The procurement of the DDP and advanced civil works contract (ACW) started in June 2021, the tenders for ACW have now been released and the publication of the DDP tenders is due to happen shortly.

On Phase 2b, preparations are underway for a hybrid Bill for the Western Leg (between Crewe and Manchester) to be deposited in Parliament in early 2022.

We will soon publish the integrated rail plan (IRP) for the North and Midlands which will set out how we will deliver and sequence HS2 Phase 2b, Northern Powerhouse Rail and other major rail schemes, such as Midlands Rail Hub, to ensure transformational rail improvements and benefits are delivered to passengers, businesses and communities more quickly.

Local community impact and engagement

As HS2 Minister, I expect affected communities to be at the heart of our plans for this project. That is why I previously committed to follow up on the conclusions of the Land and Property Review published in November 2020.

The Land and Property Review generated a number of proposals intended to transform how people and businesses affected by HS2 are treated. I am delighted that DfT and HS2 Ltd have implemented over half of these proposals, double the number implemented at the time of my last report. This spring, I went a step further and launched a [6-week public consultation](#) to seek views on proposals that required further engagement (for example, how to improve community engagement on the land and property buying programmes and how to protect the interests of those affected). Findings from the consultation, which will be published this autumn, will inform policy changes.

A priority since my last report has been to ensure that the Transport Secretary secures all the land needed to build the first phase of HS2 before compulsory purchase powers expire in February 2022. HS2 Ltd remains on target to complete the process of serving compulsory purchase notices on landowners where property is to be permanently acquired before the end of compulsory purchase powers. Affected property owners are being notified.

We recognise that compulsory purchase has an impact on property owners, some of whom will see land that was previously taken into temporary possession now permanently acquired and HS2 Ltd is talking to landowners to explain why this is necessary.

Over £10 million of funding has now been distributed by the HS2 Business, Community and Environment Funds. This milestone means over a quarter of the Phase One funds have now been allocated, delivering community benefits across 172 projects located near the line of route. Since April this year, a further £5 million has been made available to extend the funds to communities and businesses living on the Phase 2a route. These funds play a crucial role in

ensuring a positive legacy for communities most affected by HS2 construction and I look forward to many more projects up and down the line being supported.

In terms of community impacts, DfT's independent team of construction inspectors now act on my behalf to objectively assess community concerns. The inspectors have now visited many sites along the Phase One route, identifying a range of good practice and innovation, as well as some risks – notably difficulties with acquiring planning consents and delays caused by illegal protestors. A refreshed HS2 community engagement strategy will also be launched soon.

With regard to protester activity, which HS2 Ltd estimates has cost the project up to £80 million, the government is making sure that HS2 Ltd, its supply chain, emergency services and wider government have a coordinated response to illegal protest. Regrettably, some protesters have turned to violent and aggressive behaviour, particularly against HS2 Ltd's supply chain. The government is taking steps to ensure that illegal protestor activity is properly dealt with and that safety risks are minimised.

Environment

As we look to the 2021 United Nations Climate Change Conference (COP26), I wanted to reiterate the government's ambition of building the most sustainable high-speed railway in the world, so we play our part in helping the UK to tackle climate change and reach net zero carbon emissions by 2050.

I am delighted to confirm that HS2 Ltd will shortly publish its first environmental sustainability report, which will provide a clear and up-to-date account of HS2's environmental impacts and the important work that is being deployed to mitigate any adverse effects.

Further to this government's previous commitment to deliver 'no net loss' to biodiversity across all phases, I am pleased the government confirmed in June 2021 its further commitment to aim to deliver a 'net gain' to biodiversity for the next phase of HS2, the Crewe to Manchester scheme. This commitment will build on the significant environmental legacy of earlier phases, such as the new nature reserve on the Colne Valley Western Slopes, which recently received local planning approval.

I also recently launched the new £2 million Biodiversity Investment Fund (BIF) on Phase 2a to identify opportunities to work with local stakeholders to produce biodiversity gains through the creation and restoration of ecological habitats along the Phase 2a route.

Good progress is also being made on delivering our decarbonisation agenda. The government published its [Transport decarbonisation plan](#), which outlines the policies required to enable the sector to meet its net zero emissions target by 2050. HS2 will be an integral part in delivering the UK's future net zero rail network.

Benefits

Since my appointment as HS2 Minister, I have been totally committed to ensuring the benefits of HS2 are realised as widely as possible. In August 2021, I welcomed the announcement that, at its peak, HS2 will support 34,000 jobs, 4,000 more than forecast in my last update.

The jobs boost comes at a crucial time as the UK strives to 'Build Back Better' from the pandemic. HS2 is already playing a crucial role in the UK's post-pandemic economic recovery, with over 20,000 jobs currently supported. In addition, over 2,200 businesses have delivered work on HS2, with 97% UK registered.

HS2 Ltd has a clear benefits management and evaluation strategy that drives how the programme's benefits for each phase flow through to the HS2 supply chain. DfT continues to work closely with HS2 Ltd, local government and central government departments to maximise the benefits of HS2 for people, communities and businesses. DfT and the Department for Levelling Up, Housing and Communities are continuing to engage with HS2 station places, to understand their local growth and regeneration ambitions and how we can work with them to realise those ambitions.

The publication of HS2 Ltd's [Building skills to deliver](#) report demonstrates the potential opportunities HS2 has to offer as we level up our country. The report highlights the critical role that HS2 is playing in supporting young people and unemployed people back into work after the pandemic. It notes that the total workforce for Phase One and 2a is expected to peak at around 26,500 people over the next 2 years and that there will be a constant labour demand of 23,600 to 26,500 people from now until 2025 to 2026.

The report also reaffirms that the HS2 programme will create 2,000 apprenticeships, with over 650 having been started since 2017. HS2 Ltd is also committed to promoting opportunities to local people as well as those from underrepresented and disadvantaged groups.

Forward Look

On Phase One, focus remains on overseeing the massive construction programme and I expect progress on closure of remaining early works, with handover of sites by summer 2022. I expect to see HS2 Ltd award the contract for rolling stock, and for HS2 Ltd to complete the process of serving compulsory purchase notices on landowners where properties are to be permanently acquired.

On Phase 2a, focus remains on selecting a DDP and launching procurement for the main civil works framework which is expected to commence in early 2022.

On Phase 2b, work on legislation for the Crewe-Manchester scheme continues, with the view to depositing a hybrid Bill early in 2022.

On wider programme governance, I would like to thank Allan Cook CBE who left HS2 Ltd in July 2021 after 2.5 years as Chairman. A search is underway to find a new Chair and I will provide an update on this in my next report. I am

also currently working to complete an updated HS2 framework document and development agreement to ensure continued effective governance between DfT and HS2 Ltd.

I will continue to engage closely with Parliament and will provide my next report in spring 2022.

Annex A: 6-monthly financial report^[1]

^[1] All figures in this report are presented in 2019 prices unless stated otherwise.

Forecasts costs by phase

Phase Target cost Total estimated costs range^[2]

One	£40.3bn	£35bn to £45bn
2a	Not set yet	£5bn to £7bn ^[3]
2b	Not set yet	To be determined ^[4]

^[2] Rounded to nearest billion.

^[3] Arrangements will be formalised at the next Spending Review.

^[4] In the last 6-monthly report, the government explained that the cost range of £32bn to 46bn would be subject to update. The government expects to set out more fully the costs of Phase 2b in the IRP and when it brings forward a hybrid Bill for the Western Leg of Phase 2b.

Historic and forecast expenditure

Phase	Spend to date^[5]	2021 to 2022 budget^[6]	2021 to 2022 forecast^[6]	2021 to 2022 forecast
One	£13.9bn	£4.7bn	£4.8bn	£0.1bn
2a	£0.5bn	£0.3bn	£0.3bn	£0.0bn
2b	£1.1bn	£0.3bn	£0.3bn	£0.0bn
Total	£15.5bn	£5.3bn	£5.4bn	£0.1bn^[7]

^[5] Total spend to date in actual prices is £15.3 billion. To note that in my first update to Parliament in October 2020, spend to date for the whole programme was reported at £11 billion. This figure represents actual prices. In 2019, prices spend to date at the time was £11.3 billion. Spend to date stated above for Phase One includes a £1 billion liability (provision), representing the DfT's obligation to purchase land and property.

^[6] Figures provided include land and property expenditure.

^[7] The total variance of £0.1 billion is due primarily to estimated in-year additional COVID-19 related costs.

Evolution of Phase One HS2 Ltd contingency drawdown over last 3 Parliamentary reports

	October 2020 parliamentary report	March 2021 parliamentary report	October 2021 parliamentary report
Total HS2 Ltd contingency drawdown and % used	£0.2bn (4%)	£0.4bn (7%)	£0.8bn (14%)
Total HS2 Ltd contingency remaining	£5.4bn (96%)	£5.2bn (93%)	£4.8bn (86%)

Evolution of Phase One government-retained contingency drawdown over last 3 Parliamentary reports

	October 2020 parliamentary report	March 2021 parliamentary report	October 2021 parliamentary report
Total government-retained contingency drawdown and % used	£0bn (0%)	£0bn (0%)	£0bn (0%) ^[8]
Total government-retained contingency remaining	£4.3bn (100%)	£4.3bn (100%)	£4.3bn (100%)

^[8] £0.015 billion has been allocated to enable Old Oak Common to increase the number of trains it runs from 3 to 6 trains per hour but has not yet been drawdown from government-retained contingency.