



House of Commons  
Committee of Public Accounts

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**Crossrail: progress  
review**

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**Ninety-Second Report of  
Session 2017–19**

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

*Ordered by the House of Commons  
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## The Committee of Public Accounts

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## Summary

The Crossrail programme aims to deliver a new east-west railway through central London, providing passengers with new train services to improve connections on the existing transport network, reduce journey times and ease congestion. It was supposed to set the standard for delivery of transport programmes, where the skills and knowledge gained from the programme could be exported around the world. Instead, yet again, costs have escalated and delivery dates have turned out to be over-optimistic. New train services were due to start in December 2018 but have been badly delayed. Until a revised opening schedule has been agreed, we are not convinced that new services will start to run in 2020 as now hoped, nor that the additional £2.8 billion of funding provided will be enough.

The Department and Crossrail Limited are unable to fully explain how the programme has been allowed to unravel. Crossrail Limited failed to properly report the position of the programme and risks. Key warning signs were missed or ignored, and Parliament and potential new passengers still do not know the root causes of the delays and significant cost overruns. As the programme progressed, the Department, as a joint sponsor of the programme with Transport for London, failed to ensure that the governance arrangements it had put in place were robust. We are becoming increasingly alarmed at the continual shortcomings our work has highlighted in the Department's project management and oversight of the railways and we will continue to look closely at progress with this programme. We are also concerned about the clarity of message we have received from the Department throughout the programme. We have, previously, questioned the Department on the additional funding announced in July 2018 to cope with cost increases, only for further cost escalation and more funding to be agreed at a later date. This is symptomatic of how the costs of this project have been allowed to spiral out of control whilst question marks remain around its completion and when new train services will start to run.

## Introduction

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Crossrail is a major programme to run new rail services between Reading and Heathrow Airport, through a new underground section beneath central London, to Shenfield in Essex and Abbey Wood in south-east London. The new line, to be called the Elizabeth line, aims to reduce congestion and journey times, increase capacity in London's transport network and support economic growth. This is a much-needed programme for commuters who currently experience over-crowded trains and rail lines which are stretched to capacity. When complete, the new railway will be around 73 miles (118km) long, with around 26 miles (42km) of new tunnels. Ten new stations are being built and a further 31 are being improved.

The Department for Transport (the Department) and Transport for London (TfL) are jointly sponsoring the programme. Crossrail Limited is an arm's-length body specifically created to deliver the programme and is wholly-owned by TfL. In Spending Review 2010 the programme sponsors set a total funding package of £14.8 billion for the programme, including contingency but excluding the trains and main depot. Services were scheduled to start running through the central section in December 2018 and a full east-west service from December 2019. Some services are already running on the western and eastern ends of the line, but services have not yet begun through the central section. Now, services are not due to run until 2020, yet there is no guarantee that they will run by this date. Given the major delays and management issues that have so far blighted this programme, we are sceptical that this target date will be met.

It is disappointing to us to see a programme that at first seemed so promising unravel so quickly and fall victim to the same project management issues that we see so frequently across Whitehall.

## Conclusions and recommendations

1. **The Department for Transport, Transport for London and Crossrail Limited's fixation on a delivery deadline of December 2018 led to warning signs that the programme was in trouble being missed or ignored.** A key, politically important, milestone for the programme was train services starting through the central section of the line in December 2018. The pressure on, and determination within, those delivering the programme to meet this deadline led to an overriding culture of over-optimism when the programme began to slip in 2016 and failings identified then were not addressed as they should have been. The Department told us that "risks were not adequately identified, assessed, mitigated and reported on by and within Crossrail Ltd". Had these risks been addressed earlier then it is likely that the programme would not have veered so drastically off course. The Pudding Mill Lane explosion in late 2017 contributed to delays, but many elements of the programme, including the stations and signalling systems, were already a long way behind schedule. Even if the explosion had not happened, the programme would still have failed to deliver on time. The Department and Crossrail Limited failed to fully understand the cumulative effect of the risks that the programme was carrying. In May 2018, the Department's representative embedded within Crossrail Limited was reporting significant risks that the programme would not be delivered on time, but this information was not sufficiently acted upon by the Department who remained convinced by assurances from Crossrail Limited that the programme was still on track. Given that the stations and signalling systems are still some way from being completed, and that at least a further year of work now appears to be required, we find it difficult to believe that it was not evident before the public announcement in August 2018 that the central section of the railway would not open on time.

***Recommendation: The Department should write to the Committee within six months of this report to explain the steps it is taking to encourage a culture of openness and transparency internally and across its delivery bodies. This should include how it will ensure that project and programme teams reconsider and revisit completion dates for major programmes at key points through the programme lifecycle and engage early with the Department on challenges meeting agreed dates.***

***The Department should also commit to updating the Committee at regular intervals and ensure that we are kept up-to-date with all key developments.***

2. **It is unacceptable that the Department and Crossrail Limited are unable to identify the root causes of the programme unravelling so quickly and so disastrously.** A member of the Committee visited a Crossrail site in June 2018 and was told that the programme was on track. It was not until August 2018, four months before the central section was due to open, that there was any public recognition of the seriousness of the problems with the programme. Since then, it has become clear that the programme will be delayed by at least a year and forecast costs have potentially grown by nearly a fifth. There is an incongruity between how the programme can be described as performing so well and such significant issues emerging so quickly. The Department and Crossrail Limited's explanation for this focuses on a failure to assess the cumulative risks that were emerging as the programme schedule

was becoming more and more compressed due to delays. Crossrail Limited also accepted that at the time its management team did not have a good enough grip or understanding of the work that was still to be completed. However, the Department and Crossrail were unable to provide a convincing explanation of the root causes of the delays.

**Recommendation:** *The Department should consider the root causes of cost increases and delays and should write to the Committee by June 2019 setting out how it has taken lessons learned into consideration and what impact this has had on its approach to the project.*

3. **We are disappointed at the Department's and Crossrail Limited's unacceptably laissez-faire attitude to costs potentially rising by nearly £3 billion.** In response to escalating costs, in July 2018 the government announced an additional £0.59 billion of funding for the programme. After further cost increases and delays, in December 2018 the government announced £2.15 billion of additional funding, bringing the total budget to £17.6 billion (approximately a £2.8 billion, or 19%, increase on the £14.8 billion funding agreed in 2010). We are not satisfied by the Department's vague response to our questioning on how it protected taxpayers' money when overseeing delivery of the programme. The Department failed to identify what it had done proactively on this programme. Instead, the Department asserted that it aimed to consistently learn lessons from issues when they arise and apply those to new projects. The Department and Crossrail Limited still do not have a revised estimate of the programme's cost.

**Recommendation:** *In response to this report, the Department should set out how it considered the value for money for the taxpayer when agreeing to increased funding for the programme in 2018.*

4. **We are concerned that the value for money of the programme is at risk from further cost increases and delays.** While originally due to open in December 2018, the central section of the railway has been delayed and a revised opening date has not yet been set. Since December 2018, Crossrail Limited has been re-sequencing the remaining works required for the central section of the railway, untangling a schedule that had become more and more compressed over time because of delays. It has not yet completed this work. Crossrail Limited is looking at completing the railway systems needed to run the trains on the line (such as the signalling systems and operational systems to control parts of the railway including platform doors) before completing the stations, which it acknowledges was not the optimal way of completing the programme. The Department and Crossrail Limited will not fully know how much the programme is now expected to cost until they have agreed a revised schedule to completion and have secured revised contracts with Crossrail Limited's main contractors. We are therefore not convinced that the £2.8 billion of additional funding will be sufficient to see the programme through to completion.

**Recommendation:** *The Department must write to the Committee immediately after reaching agreement with Crossrail Limited to outline how it has assured itself that the revised schedule and cost to completion are robust. The Department should also detail how the £2.8 billion of extra funding should be allocated.*

5. **The Department and Crossrail Limited's governance arrangements have been weak and characterised by a catalogue of failures to adequately oversee performance.** The Department, as a joint sponsor of the programme with Transport for London, failed to ensure that the governance arrangements it put in place continued to be fit for purpose as the programme progressed. The Department acknowledges that it did not do enough in response to the recommendations in 2014 that governance arrangements should be changed to reflect the programme moving from construction to integrating the elements of the new railway, such as stations and signalling systems. The Department told us that the autonomy it and Transport for London gave to Crossrail Limited hindered their ability as sponsors to understand and challenge progress during the later stages of the programme. This, and Crossrail Limited's failure to properly report the position of the programme and risks, meant that the Department did not understand the true position of the programme. The Department accepts that its governance arrangements were insufficient to properly capture the risks to the programme as it progressed and that it should have reviewed its governance arrangements several years ago. In the last year, the Department and Transport for London have replaced senior staff responsible for overseeing the programme and added new appointees to the Crossrail Limited Board that have relevant experience. We are not convinced by the Department's assertion that it stepped up its challenge of the programme in 2018. Crossrail Limited told us that it is now working more closely with sponsors. However, we are concerned that the Department, Transport for London and Crossrail Limited have effectively given up on the previous contractual structure without any sense of clarity on what the new relationship is.

**Recommendation:** *By July 2019, the Department must explain how it has changed its contractual relationship with Crossrail so that it can properly exercise oversight and hold Crossrail Limited to account for its performance managing the programme to completion.*

6. **Despite acknowledging that there were major failings in the programme, the Department and Crossrail Limited have been unwilling to accept their responsibilities for the significant delays and cost overruns of the programme.** The Department is ultimately responsible for ensuring that the programme delivers value for money for the taxpayer and for the funding it provides to Crossrail Limited. Crossrail Limited's Board is accountable to the Department and Transport for London for delivering the programme to time, quality and cost. Both the Department and Crossrail Limited identify the compressed delivery schedule and a failure to properly identify risks as the fundamental problem in the programme which led to unacceptable levels of cost increases and delays. They also accept that governance arrangements failed to adequately identify these risks. However, neither are willing to identify who should be held responsible for these failures, and simply assert that there are systems failures. We are entirely unconvinced by this rationale as the Department and Crossrail Limited were responsible for creating and managing the system that enabled these failures to occur. The Department accepts that there was an insufficient level of accountability regarding the amount of money that senior executives were paid within Crossrail Limited. Some of Crossrail Limited's former executives are paid much more than senior executives in the Department's arm's-

length bodies to deliver programmes or project of equal weight. These executives were paid to bring expertise into the programme and deliver an operational railway, but failed to do so.

**Recommendation:** *The Department should, as a matter of urgency, write to the Committee clearly articulating what it, Transport for London and Crossrail Limited are responsible and accountable for in relation to Crossrail and what the consequences have been for those senior officials in positions of accountability and responsibility for failures on the programme. We expect this letter by the end of April 2019.*

# 1 Delays and cost overruns

1. On the basis of a report by the Comptroller and Auditor General, we took evidence from the Department for Transport (the Department) and Crossrail Limited about the Crossrail programme.<sup>1</sup> The Department and Transport for London (TfL) are joint sponsors of the programme. Crossrail Limited is responsible for delivering the programme and is a wholly-owned subsidiary of TfL.
2. Crossrail is a major programme to run new rail services between Reading and Heathrow Airport, through a new underground section beneath central London, to Shenfield in Essex and Abbey Wood in south-east London. The new line, to be called the Elizabeth Line, aims to reduce congestion and journey times, increase capacity in London's transport network and support economic growth. When complete, the new railway will be around 73 miles (118km) long, with around 26 miles (42km) of new tunnels. Ten new stations are being built and a further 31 are being improved.<sup>2</sup>
3. Some services, operated as TfL Rail, are already running on parts of the route between Shenfield and London Liverpool Street and between Heathrow and Paddington. Services through the central section were due to commence in December 2018, but these have been delayed. A full east-west service, with 24 trains per hour in each direction, will now not run as planned in December 2019.<sup>3</sup>
4. Crossrail Limited described the Crossrail programme as the single, biggest railway project the country has ever undertaken. It told us that, a lot of brilliant work had been done in the first five or six years of the programme, particularly the tunnelling and major civil construction work, and that the systems engineering component of the programme was notable globally as setting a benchmark. The Department similarly told us that the engineering involved in the programme was world-class and an enormously complex task of systems integration and operations.<sup>4</sup>

## The delivery schedule and cost of the programme

5. In the 2010 Spending Review the programme sponsors set a funding package of £14.8 billion for the programme, including contingency but excluding the trains and main depot. Reflecting increases in costs, the Department announced in July 2018 that programme sponsors had agreed an additional £0.59 billion of funding, bringing the total funding package to £15.4 billion. In December 2018, after further cost increases and delays, the Department announced that it would loan £1.3 billion to the Greater London Authority (GLA) for the programme, which the GLA intended to repay via London's Business Rate Supplement and from the Community Infrastructure Levy. In addition, the Department committed to making a £0.75 billion loan available to TfL as a contingency, and the GLA committed to making a cash contribution of £0.1 billion. The total funding package for the programme is now £17.6 billion, £2.8 billion (19%) higher than set at the 2010 Spending Review.<sup>5</sup>

1 C&AG's Report, [A memorandum on the Crossrail programme](#), Session 2017–2019, HC 1924, 28 February 2019

2 C&AG's Report, pages 7 & 8, 10–12

3 C&AG's Report, pages 8 & 25

4 Qq, 10, 15–17, 21, 40

5 C&AG's Report, page 14

6. While originally due to open in December 2018, the central section of the railway has been delayed and a revised opening date has not yet been set. Crossrail Limited told us that it had spent an enormous amount of time over the past two months, working at pace, to revise the schedule for the remaining works. It told us that the complex schedule had become “tangled” as delays compressed the work that needed to be completed in the time available. Crossrail Limited told us that a “logical sequence” for the remaining work had been prepared. This included two ‘critical paths’—one for the software on the trains and complex signalling systems, the other for the stations. It told us that it was confident that this sequence was robust because of the capable, experienced people working on it. However, it told us that it planned to commission independent assurance on the sequence “just to make sure”. The Chairman of Crossrail Limited’s Board similarly told us that they aimed to get as much independent assurance on the schedule as possible. However, we also heard that Crossrail Limited did not yet have agreement with the contractors who would be delivering the sequence, nor on the assumptions Crossrail had made about the contractors’ productivity rates, which it accepted would both be needed before it could agree a revised delivery date. The revised schedule was due to be considered by the Crossrail Limited Board on 28 March 2019, and then scrutinised by programme sponsors.<sup>6</sup>

7. Crossrail Limited told us that it would not be possible for the central section of the railway to open in 2019 because of the amount of work still to complete, but that its aim was for it to open in 2020.<sup>7</sup> Crossrail Limited told us that it expects to announce in April 2019 when the railway will fully open. However, it told us that it would not be naming a single date, but would instead announce a range of dates that it expects to narrow over time as levels of risk and uncertainty reduce. It told us that a wide date range may be announced initially.<sup>8</sup>

8. Crossrail Limited told us that the programme did not yet have a revised cost estimate because there was not an agreed schedule to completion or a plan of work. However, it expected the final cost of the programme to be within the revised total budget that was set by the Department in December 2018. The Department confirmed that it expected Crossrail Limited to deliver the programme within the revised budget, which had some contingency built into it. Crossrail Limited was similarly unable to provide us with a detailed assessment of its level of confidence that the additional funding would be enough.<sup>9</sup>

9. We pressed the Department on how it protected taxpayers’ money when overseeing the delivery of Crossrail. The Department asserted that it was a large, complex programme that was difficult to deliver. It was scrutinising what had happened over the last two years to learn lessons from the difficulties that had arisen. We were not satisfied with the Department’s response because it failed to identify what it had done proactively on this programme to protect taxpayers’ money. Instead, it asserted that it aimed to consistently learn lessons from issues when they arise and apply those to new projects. Also, we were not convinced that it had a grip on the root causes of the delays and cost overruns, which must be established before lessons can be learned. Crossrail Limited was similarly unable to provide us with a detailed assessment of its level of confidence that the additional funding would be enough.<sup>10</sup>

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6 Qq 46, 97, 99–101

7 Qq 47, 48

8 Qq 67, 98, 101

9 Qq 25, 107–111

10 Qq 24–31, 105–109

## Warning signs of programme failure

10. Crossrail Limited told us that there was an “extreme commitment” both within, and outside, the programme to meet the December 2018 milestone, set in 2010, for the start of train services running through the central section of the railway, between Paddington and Abbey Wood.<sup>11</sup> The Department acknowledged that this date had become politically important to TfL, the Mayor of London and the Department, and that this was not conducive to the effective management of this complex programme. However, it asserted that the creation of Crossrail Limited as a separate delivery body was a way of enabling a responsible view to be taken of what could be delivered, and that it was Crossrail Limited’s responsibility to tell the Department if the delivery date could not be achieved.<sup>12</sup>

11. We heard that the commitment and pressure to meet the December 2018 milestone, plus the challenges the programme had already overcome, led to optimism bias in Crossrail Limited on what could be achieved in the time available and a failure to properly assess the risks to the schedule from delays. The Chairman of Crossrail Limited’s Board, who has experience of large programmes but was not in post at the time that the failures emerged, told us that the courage required to challenge the schedule and stop such a large programme would have been “immense”.<sup>13</sup> The Department recognised that there were broader lessons for government and the scope of the work it had commissioned following the problems with this programme included considering how government and the public sector can be more realistic about schedule pressure in complex programmes.<sup>14</sup>

12. Crossrail Limited believed that there was no systematic failure in how the programme was organised or designed, but a failure to understand the scale and complexity of the programme. We heard that London Underground would typically build three stations at once and commission or put into service, one or two a year. The Crossrail programme was of a different magnitude and involved building and commissioning 10 new stations.<sup>15</sup>

13. Crossrail Limited explained that the work on the stations started to slip in 2016 and that this had a ratcheting effect of building up risk within the programme. It told us that it had now re-sequenced the programme to complete the stations after the railway systems (such as signalling systems and operational systems to control parts of the railway including platform doors), a situation it did not want to be in. It accepted that this re-sequencing should have happened earlier when the stations first became delayed.<sup>16</sup>

14. In November 2017, there was an explosion at an electrical substation at Pudding Mill Lane, which had “far-reaching consequences” and the “explosion set off a chain reaction of glitches—delaying power to the central tunnels and thus all the extensive testing that needed to be done”.<sup>17</sup> The Department told us that this set off significant alarm bells and had an enormous impact on the programme because three months of the schedule was lost, with only 13 months to go before the December 2018 opening. It told us that this had prompted it to question Crossrail Limited on whether the December 2018 milestone

11 Qq 3, 6, 67

12 Qq 86–87, 94

13 Qq 6, 38, 68, 69; Tony Meggs was previously the Chief Executive of the Infrastructure and Projects Authority. He became the Chairman of Crossrail Limited’s Board on 14 January 2019.

14 Q 94

15 Qq 41, 43; C&AG’s Report, page 7

16 Qq 50–52

17 Financial Times, [Crossrail: how Europe’s largest transport project stalled](#), 20 December 2018

could still be met and that Crossrail had assured it that by revising its plan for testing and commissioning, it could still deliver the railway in December. It told us that it was disappointed that it had not received better information and that over-optimism had led to inaccurate assumptions being made about what was possible. Crossrail Limited told us that while the explosion was a significant event, it was not the main cause of the delays as at the date of the explosion there was already a lack of installed signalling systems and the stations were a long way behind schedule. It asserted that the risk profile of the programme at that stage was such that, even if the explosion had not happened, the programme would still have failed to deliver on time. It recognised that individuals and teams were working in silos and were not able to identify the impact that individual delays had on the overall programme, so this information was not communicated upwards.<sup>18</sup>

15. Since December 2018, TfL has published some Crossrail programme documents on its website, including project status reports by the Project Representative.<sup>19</sup> The Project Representative is a team appointed by the programme’s sponsors, embedded in Crossrail Limited, to undertake reviews and provide commentary to the sponsors on progress.<sup>20</sup> The Project Representative’s May 2018 project status report, even though redacted, includes statements such as “significant completion and integration challenges remain” with the stations, tunnel portals and shafts, and “technical difficulties and poor progress” in the completion of other rail systems. The operational readiness assessment within the report notes that 16 readiness tasks are rated as ‘red’ and a further 5 are rated as ‘amber’. None are rated at ‘green’. The report summarised that the schedule “remains highly ambitious” and there “remains a high risk that [the December 2018 opening date] will not be achieved”.<sup>21</sup> Around the same time, in June 2018, a member of the Committee visited a Crossrail site and was told by programme representatives that the programme was on track and would be delivered on time. Crossrail Limited told us that it did not believe there was any intention to deceive or mislead, but that programme staff probably failed to understand the work still to complete or the amalgamation of risk.<sup>22</sup>

16. The Department was unable to explain how it reconciled the Project Representative’s bleak assessment with other information it was getting from Crossrail Limited that the programme would be delivered on time. The Department argued, unconvincingly, that the Project Representative was a small team undertaking deep dives into small aspects of the programme, compared to thousands of members of staff in Crossrail Limited. It told us that while it was aware of delivery risks to the December 2018 delivery date, it expected these to be a matter of weeks not months and the scale of the problems emerged far faster than it expected. It recognised that there had been warning bells in March and April 2018 because of projected cost increases, but given the scale of the programme, it had believed these were not as major as the problems that crystallised over summer 2018.<sup>23</sup> The Department told us that in 2018 there was a “real stepping up” of its challenging, and the questions that it was asking, of Crossrail Limited’s executive team in order to get

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18 Qq 62–65

19 Transport for London, [Crossrail project updates](#)

20 C&AG’s Report, page 16

21 Jacobs, Project status report 111, Period 1 FY 2018–19, 1 April 2018 – 28 April 2018, 24 May 2018

22 Qq 65, 74–77

23 Qq 82–85, 143

clarity and assurance on progress, and that Crossrail had remained confident consistently that the delivery date of December 2018 could be achieved.<sup>24</sup> The Department was not able to explain sufficiently what changed as a result of this reported increased scrutiny.<sup>25</sup>

17. The new Chief Executive of Crossrail Limited, who took on this role in November 2018, asserted that individual reporting of risks was managed well and that there was a good audited risk process.<sup>26</sup> However, they accepted that the management team did not have a good enough grip or understanding of the work that was still to be completed and that there was a systematic failure to properly assess the amalgamation of individual risks from delays to the interrelated work on the stations and signalling systems. The Department similarly asserted that staff involved were not incompetent and were acting professionally and in good faith. However, it told us that “risks were not adequately identified, assessed, mitigated and reported on by and within Crossrail Ltd”.<sup>27</sup> The evidence we heard focused on explaining the failure to properly identify and get a grip on systematic risks across the programme. However, we did not hear a convincing explanation of the root causes of the delays that led to the schedule becoming compressed.<sup>28</sup> We look forward to the results of a NAO review into the root causes of the delays.

18. We questioned the Department on its confidence in the risk assessments for other departmental projects and programmes. We heard that the arrangements for delivering projects and programmes varied. It asserted, however, that it did have detailed risk registers for all the projects it directly managed and that it looked at cumulative risk across its portfolio of projects. Where it did not directly manage projects, the Department expected all risks to be reported to it by those delivering the projects and that it would challenge and assure reported risks. It was, however, keen to learn lessons and would be implementing the recommendations from a review it had commissioned jointly with the Infrastructure and Projects Authority on the wider lessons from the Department’s delivery of major projects.<sup>29</sup>

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24 Qq 63, 78–81, 85

25 Qq 80–87, 90–93

26 Qq 12–14; Mark Wild was previously a non-executive director on Crossrail Limited’s Board.

27 Qq 2, 13, 17, 37, 65

28 Qq 32, 33

29 Qq 53, 54

## 2 Governance arrangements

19. The Department for Transport (the Department) and Transport for London (TfL) are joint sponsors of the Crossrail programme. Sponsors' oversight of the programme has been through appointed non-executive members of Crossrail Limited's Board and through discussions with the Crossrail executive at a sponsor board that meets monthly to discuss progress. The sponsor board is supported by a sponsor team made up of sponsor representatives. The sponsors have contracted for a Project Representative team (Jacobs) made up of engineers and project management specialists to provide advice to the sponsor team and board. The Project Representative conducts detailed reviews of aspects of the programme, as well as analysing Crossrail Limited's regular progress reporting.<sup>30</sup>

20. Crossrail Limited, a company wholly-owned by TfL, is a delivery body created by programme sponsors to manage the Crossrail programme at arm's-length from government. A Project Development Agreement between the Department, TfL and Crossrail Limited defines Crossrail Limited overall responsibility for delivery of the Crossrail programme, including construction, integrating the programme and preparing for operating the new line.<sup>31</sup>

### Governance

21. The Department told us that Crossrail Limited had been set up at arm's-length from government to provide independence, protect it from political interference from the sponsors, and to enable it to deliver this complex and large programme to a fixed budget. It asserted that while this was an effective delivery structure for the first seven or eight years, this autonomy made it difficult for the sponsors to challenge and understand programme progress during the later stages of the programme, protecting Crossrail Limited from necessary and important challenge. Crossrail Limited told us that there were benefits from its status, which included enabling it to attract the best and brightest staff in a way that the civil service found difficult and also protecting it from money being stripped from the programme. However, the new Chairman of Crossrail Limited's Board described this as an example of "extreme autonomy" and recognised that with hindsight, more periodic deeps reviews and external scrutiny would have been beneficial. The Department asserted that other arm's-length bodies it sponsors, such as High Speed Two Limited and the Highways Agency, operate on a different basis and have different governance arrangements.<sup>32</sup>

22. Crossrail Limited has always been responsible for integrating the different elements of the new railway being delivered by contractors, Network Rail and suppliers of the trains.<sup>33</sup> The Department and Crossrail Limited recognised that there were insufficient people involved in the programme with the necessary skills and experience of integrating elements of a railway. The Department also acknowledged that Crossrail Limited's Board did not have sufficient strength or depth of expertise in systems integration that it needed to effectively challenge programme performance. It told us that sponsors had strengthened the Board in 2018 by appointing additional non-executives, including people with skills in systems integration. The Chairman of Crossrail Limited's Board told us that both the

30 C&AG's report, pages 15–17

31 C&AG's report, pages 16–17; Committee of Public Accounts, [Accountability to Parliament for taxpayers' money](#), Thirty-ninth Report of Session 2015–16, HC 732, 4 May 2016

32 Qq 31, 70, 113, 114, 127

33 Qq 11–12

Board and executive team now had a different set of skills, with a “tremendous” amount of experience in complex railway systems brought into the programme.<sup>34</sup> Both the Department and Crossrail Limited recognised that if they had acted earlier to enhance Crossrail Limited’s capability, some of the issues on the programme could have been picked up sooner.<sup>35</sup>

23. The Department accepted that there should have been a fundamental revisit of the governance structure two or three years ago, and that this should have been built into the programme from the outset.<sup>36</sup> However, we note that this is an area that was raised by the NAO and others in 2014. In its report on Crossrail, the NAO recommended that the Department put in place governance arrangements appropriate for the programme’s transition from construction to operations, together with a transition plan.<sup>37</sup> We questioned the Department on what changes were made following the NAO’s recommendation. The Department told us that it had appointed a new Crossrail operations director who attended the sponsor board and that there were regular discussions and updates on bringing the railway into use. The Department told us that Crossrail Limited produced a transition strategy which was signed-off by Crossrail Limited’s Board and the sponsors in 2015. It also told us that the Board began to meet monthly, instead of every two months, and operational teams started working together. It was not, however, able to provide any practical examples of what it had done differently in response to the recommendation, or what had changed on the ground. The Department acknowledged that it should have done more in response to the recommendation, and that the programme did not move quickly enough from construction to systems integration.<sup>38</sup>

24. The Department told us that it thought the Crossrail Limited Board should have done more to challenge the Crossrail executive team and ensure that it fully understood whether the information it was receiving accurately captured the programme’s progress. It acknowledged that the sponsor board did not get “under the skin” of the information that was being reported by Crossrail Limited. Both the Chairman of Crossrail Limited’s Board, and the Chief Executive, who were not in place at the time, accepted that information on progress of the programme being reported upwards was not sufficient and did not adequately assess the work to be done. The Department told us that it did not consider there to have been any attempt by Crossrail Limited to deceive the sponsors, and that information had been reported was in good faith, but the information did not give a full picture of some of the risks as they grew and became more complex.<sup>39</sup>

25. The Project Development Agreement sets out a number of actions sponsors could take, and sanctions they could apply if, for example, successful delivery of the programme was under threat or if forecast costs exceeded defined thresholds.<sup>40</sup> The Department told us that these were rarely used and not very helpful, partly because the bar set for triggering them was high, and also because the sanctions available were “a bit nuclear”. Nevertheless, sponsors could not tell us whether these actions and sanctions, or indeed the terms of the Project Development Agreement, still applied. The Department told us that another mechanism for escalating issues, that did not have such formality around it, could be

34 Qq 8, 15, 21, 141

35 Qq 19, 132, 135

36 Q 142

37 C&AG’s Report, [Crossrail](#), Session 2013–14, HC 965, 24 January 2014

38 Qq 31, 55–60

39 Qq 3, 4, 34, 36, 139

40 C&AG’s Report, page 16

developed to improve transparency. Crossrail Limited told us that it was “moving beyond contractual arrangements” and working more closely with sponsors, for example meeting with the sponsors 10 times in the previous five weeks.<sup>41</sup>

### Responsibilities for problems on the programme

26. Given that the Department and Transport for London are responsible for establishing the governance arrangements for the programme, and Crossrail Limited responsible for delivery, we pressed the Department and Crossrail Limited on who should be held responsible for the delays and cost overruns on the programme. They were unwilling to pin-point responsibility to a single individual or entity. Crossrail Limited asserted that it was unlikely that one person could be held ultimately responsible because it was a complex situation and the Crossrail programme was the single biggest railway project in the UK. The Department argued that the governance arrangements did not allow an individual to be pin-pointed as responsible, and that it was important not to over-simplify a complex set of factors that contributed to problems with the programme. We heard repeatedly that this was a ‘system failure’.<sup>42</sup> The Department summarised this as Crossrail Limited failing to identify systemic risk, Crossrail Limited’s Board not challenging Crossrail’s executive team and the reporting of progress, and the Department failing to properly challenge the information that Crossrail Limited was reporting to it.<sup>43</sup>

27. The Department told us that the amounts paid to former senior members of the Crossrail Limited Board were higher than those for the Chief Executives of the Department’s arm’s-length bodies and that the Department had senior executives doing equally challenging roles elsewhere for less. For example, the remuneration of the former Chief Executive of Crossrail Limited over the two year period between 1 April 2016 and 31 March 2018 was approximately £1.7 million. The Department told us that it was not directly involved in setting remuneration packages for senior Crossrail Limited executives and acknowledged that there had been insufficient challenge in setting these.<sup>44</sup>

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41 Qq 112, 113, 115–125

42 Qq 3, 5, 7, 11, 22, 23, 31, 33, 35, 38, 39

43 Q 34

44 Qq 128, 129–131; C&AG’s Report, page 19

# Formal Minutes

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**Monday 1 April 2019**

Members present:

Meg Hillier, in the Chair

Chris Evans      Bridget Phillipson

Layla Moran

Draft Report (*Crossrail*), proposed by the Chair, brought up and read.

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

Paragraphs 1 to 27 read and agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

Summary agreed to.

*Resolved*, That the Report be the Ninety-second 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 Wednesday 24 April at 2:00pm]

## Witnesses

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

### Wednesday 6 March 2019

**Bernadette Kelly**, Permanent Secretary, Department for Transport, **Mark Wild**, Chief Executive, Crossrail Limited, **Tony Meggs**, Chairman, Crossrail Limited, and **Matthew Lodge**, Director of Rail Infrastructure South, Crossrail Senior Responsible Owner, Department for Transport

[Q1-201](#)

## 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 2017–19

First Report	Tackling online VAT fraud and error	HC 312 (Cm 9549)
Second Report	Brexit and the future of Customs	HC 401 (Cm 9565)
Third Report	Hinkley Point C	HC 393 (Cm 9565)
Fourth Report	Clinical correspondence handling at NHS Shared Business Services	HC 396 (Cm 9575)
Fifth Report	Managing the costs of clinical negligence in hospital trusts	HC 397 (Cm 9575)
Sixth Report	The growing threat of online fraud	HC 399 (Cm 9575)
Seventh Report	Brexit and the UK border	HC 558 (Cm 9575)
Eighth Report	Mental health in prisons	HC 400 (Cm 9575) (Cm 9596)
Ninth Report	Sheffield to Rotherham tram-trains	HC 453 (Cm 9575)
Tenth Report	High Speed 2 Annual Report and Accounts	HC 454 (Cm 9575)
Eleventh Report	Homeless households	HC 462 (Cm 9575) (Cm 9618)
Twelfth Report	HMRC's Performance in 2016–17	HC 456 (Cm 9596)
Thirteenth Report	NHS continuing healthcare funding	HC 455 (Cm 9596)
Fourteenth Report	Delivering Carrier Strike	HC 394 (Cm 9596)
Fifteenth Report	Offender-monitoring tags	HC 458 (Cm 9596)
Sixteenth Report	Government borrowing and the Whole of Government Accounts	HC 463 (Cm 9596)
Seventeenth Report	Retaining and developing the teaching workforce	HC 460 (Cm 9596)
Eighteenth Report	Exiting the European Union	HC 467 (Cm 9596)

Nineteenth Report	Excess Votes 2016–17	HC 806 (Cm 9596)
Twentieth Report	Update on the Thameslink Programme	HC 466 (Cm 9618)
Twenty-First Report	The Nuclear Decommissioning Authority’s Magnox	HC 461 (Cm 9618)
Twenty-Second Report	The monitoring, inspection and funding of Learndirect Ltd.	HC 875 (Cm 9618)
Twenty-Third Report	Alternative Higher Education Providers	HC 736 (Cm 9618)
Twenty-Fourth Report	Care Quality Commission: regulating health and social care	HC 468 (Cm 9618)
Twenty-Fifth Report	The sale of the Green Investment Bank	HC 468 (Cm 9618)
Twenty-Sixth Report	Governance and departmental oversight of the Greater Cambridge Greater Peterborough Local Enterprise Partnership	HC 896 (Cm 9618)
Twenty-Seventh Report	Government contracts for Community Rehabilitation Companies	HC 897 (Cm 9618)
Twenty-Eighth Report	Ministry of Defence: Acquisition and support of defence equipment	HC 724 (Cm 9618)
Twenty-Ninth Report	Sustainability and transformation in the NHS	HC 793 (Cm 9618)
Thirtieth Report	Academy schools’ finances	HC 760 (Cm 9618)
Thirty-First Report	The future of the National Lottery	HC 898 (Cm 9643)
Thirty-Second Report	Cyber-attack on the NHS	HC 787 (Cm 9643)
Thirty-Third Report	Research and Development funding across government	HC 668 (Cm 9643)
Thirty-Fourth Report	Exiting the European Union: The Department for Business, Energy and Industrial Strategy	HC 687 (Cm 9643)
Thirty-Fifth Report	Rail franchising in the UK	HC 689 (Cm 9643)
Thirty-Sixth Report	Reducing modern slavery	HC 886 (Cm 9643)
Thirty-Seventh Report	Exiting the European Union: The Department for Environment, Food & Rural Affairs and the Department for International Trade	HC 699 (Cm 9643)
Thirty-Eighth Report	The adult social care workforce in England	HC 690 (Cm 9667)
Thirty-Ninth Report	The Defence Equipment Plan 2017–2027	HC 880 (Cm 9667)
Fortieth Report	Renewable Heat Incentive in Great Britain	HC 696 (Cm 9667)

Forty-First Report	Government risk assessments relating to Carillion	HC 1045 (Cm 9667)
Forty-Second Report	Modernising the Disclosure and Barring Service	HC 695 (Cm 9667)
Forty-Third Report	Clinical correspondence handling in the NHS	HC 929  (Cm 9702)
Forty-Fourth Report	Reducing emergency admissions	HC 795 (Cm 9702)
Forty-Fifth Report	The higher education market	HC 693 (Cm 9702)
Forty-Sixth Report	Private Finance Initiatives	HC 894  (Cm 9702)
Forty-Seventh Report	Delivering STEM skills for the economy	HC 691 (Cm 9702)
Forty-Eighth Report	Exiting the EU: The financial settlement	HC 973 (Cm 9702)
Forty-Ninth Report	Progress in tackling online VAT fraud	HC 1304 (Cm 9702)
Fiftieth Report	Financial sustainability of local authorities	HC 970 (Cm 9702)
Fifty-First Report	BBC commercial activities	HC 670 (Cm 9702)
Fifty-Second Report	Converting schools to academies	HC 697 (CCm 9702)
Fifty-Third Report	Ministry of Defence's contract with Annington Property Limited	HC 974 (Cm 9702)
Fifty-Fourth Report	Visit to Washington DC	HC 1404 (Cm 9702)
Fifty-Fifth Report	Employment and Support Allowance	HC 975 (Cm 9702)
Fifty-Sixth Report	Transforming courts and tribunals	HC 976 (Cm 9702)
Fifty-Seventh Report	Supporting Primary Care Services: NHS England's contract with Capita	HC 698 (Cm 9702)
Fifty-Eighth Report	Strategic Suppliers	HC 1031 (Cm 9702)
Fifty-Ninth Report	Skill shortages in the Armed Forces	HC 1027 (9740)
Sixtieth Report	Ofsted's inspection of schools	HC1029 (Cm 9740)
Sixty-First Report	Ministry of Defence nuclear programme	HC 1028 (Cm 9740)

Sixty-Second Report	Price increases for generic medications	HC 1184 (Cm 9740)
Sixty-Third Report	Interface between health and social care	HC 1376 (Cm 9740)
Sixty-Fourth Report	Universal Credit	HC 1375 (Cp 18)
Sixty-Fifth Report	Nuclear Decommissioning Authority	HC 1375 (Cp 18)
Sixty-Sixth Report	HMRC's performance in 2017–18	HC 1526 (Cp 18)
Sixty-Seventh Report	Financial Sustainability of police forces in England and Wales	HC 1513 (Cp 18)
Sixty-Eighth Report	Defra's progress towards Brexit	HC 1514 (CP 18)
Sixty-Ninth Report	Sale of student loans	HC 1527 (Cp 56)
Seventieth Report	Department for Transport's implementation of Brexit	HC 1657 (Cp 56)
Seventy-First Report	Department for Health and Social Care accounts	HC 1515 (Cp 56)
Seventy-Second Report	Mental health services for children and young people	HC 1593
Seventy-Third Report	Academy accounts and performance	HC 1597
Seventy-Fourth Report	Whole of Government accounts	HC 464
Seventy-Fifth Report	Pre-appointment hearing: preferred candidate for Comptroller and Auditor General	HC 1883
Seventy-Sixth Report	Local Government Spending	HC 1775
Seventy-Seventh Report	Defence Equipment Plan 2018–28	HC 1519
Seventy-Eighth Report	Improving Government planning and spending	HC 1596
Seventy-Ninth Report	Excess Votes 2017–18	HC 1931
Eightieth Report	Capita's contracts with the Ministry of Defence	HC 1736
Eighty-First Report	Rail management and timetabling	HC 1793
Eighty-Second Report	Windrush generation and the Home Office	HC 1518
Eighty-Third Report	Clinical Commissioning Groups	HC 1740
Eighty-Fourth Report	Bank of England's central services	HC 1739

Eighty-Fifth Report	Auditing local government	HC 1738
Eighty-Sixth Report	Brexit and the UK border: further progress review	HC 1942
Eighty-Seventh Report	Renewing the EastEnders set	HC 1737
Eighty-Eighth Report	Transforming children's services	HC 1741
Eighty-Ninth Report	Public cost of decommissioning oil and gas infrastructure	HC 1742
Ninetieth Report	BBC and personal services companies	HC 1522
Ninety-First Report	NHS financial sustainability: progress review	HC 1743
First Special Report	Chair of the Public Accounts Committee's Second Annual Report	HC 347
Second Special Report	Third Annual Report of the Chair of the Committee of Public Accounts	HC 1399