House of Commons

Committee of Public Accounts

Update on the Thameslink Programme

Twentieth Report of Session 2017–19

Report, together with formal minutes relating to the report

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The Committee of Public Accounts

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Summary

The Thameslink Programme is a highly complex investment in infrastructure, trains and new services for passengers. The delivery of the programme has progressed well since we examined it in 2013, but there are still substantial challenges that will need to be carefully managed to ensure that the programme as a whole is delivered successfully.

The Department for Transport (the Department) has now announced that it is delaying the full introduction of the new services by a year, to December 2019, to reduce the risks of disruption to passengers. The Department and Network Rail must ensure that the Thameslink programme does not suffer from further delays. The Department and Network Rail have been slow to appreciate the importance of early planning for how the new services will operate, and how they will organise the rail industry to do this. The discovery that another £900 million of maintenance work is necessary to deliver reliable Thameslink services also raises concerns about Network Rail's understanding of the performance and condition of the network. Whilst we acknowledge that the programme has progressed, this is yet another example of a rail project which has been delayed and will cost the taxpayer more than originally expected.

Introduction

The Thameslink programme is designed to increase capacity and relieve crowding on rail services throughout London and the South East, improve connectivity and reduce journey times. The programme was approved in 2007, and when it is completed in December 2019, 24 trains an hour will pass through central London. The programme includes £5.5 billion of infrastructure works managed by Network Rail to redevelop Farringdon, Blackfriars and London Bridge Stations, as well as introduce new signalling technologies. The Department for Transport (the Department) has procured 115 new, longer and more spacious Class 700 trains as part of the programme which contain the hardware and software required to use the new signalling technologies. The cost of leasing these trains and their supporting depots is £2 billion. To support the delivery of the programme, maintain passenger services during disruption from the works, and introduce the new trains and services, the Department merged three franchises into the Thameslink, Southern, and Great Northern franchise. The Department awarded the new franchise to Govia Thameslink Railway in 2014, which is expected to operate the franchise until 2021.

Conclusions and recommendations

1. **The Department for Transport and Network Rail took too long to start planning how the new railway would operate, and to decide to introduce the new services in phases rather than a single big bang.** In October 2017, just over a year before the Thameslink programme was due to complete, the Department for Transport (the Department) decided to delay the full completion of the programme from December 2018 to December 2019, and to introduce the new services more gradually up to that point. This decision reduces the risks of passenger disruption, but it also means that passengers in some locations will not receive the full benefits of the programme for up to a year later than planned. The Department and Network Rail only started to focus on planning how they would bring these services into use from late 2016. The Department accepted that it could have started planning how the new services would be introduced earlier. It asserted that it may not have been possible to do so much farther in advance, but did not provide a detailed explanation as to why.

   Recommendation: ***The Department and Network Rail should establish clear arrangements at the outset of future programmes to plan how services will be introduced and run. These arrangements should be on an equal footing with other aspects of programme management and planning, putting passengers at the heart of the programme.***

2. **The complexity of the Thameslink programme required a new approach to collaboration within the rail industry.** The Department intends to establish closer working relationships and incentives between Network Rail and train operators in future, but has not yet finalised how it will do so. When we last examined the Thameslink programme as a whole in 2013, we recommended that the Department should focus on integrating planning and aligning decision-making across the different elements of complex programmes from the very start. In late 2016, the Department and Network Rail established the Industry Readiness Board as a forum for the wider rail industry to contribute to, and finalise, the plans for bringing new services into place. The Thameslink programme would have benefited from this arrangement being in place from the outset. In November 2017, the Department published 'Connecting people: a strategic vision for rail', which describes how it aims to establish closer working relationships between Network Rail and private sector train operators in future, and ensure incentives are aligned across delivery bodies. We are concerned that the potentially wide range of models for how this will work in practice could result in a lack of clarity about who is accountable and responsible for passenger rail services.

   Recommendation: ***The Department should, by June 2018, write to the Committee to provide details about how it intends to create better working relationships between Network Rail and operators, in order to provide high quality services to passengers.***

3. **The Department and Network Rail had a poor understanding of the performance of the rail network, and did not monitor the impact that increasing services and failing infrastructure would have on either passenger disruption or the planned benefits of the Thameslink programme.** Network Rail told us that since the start of the programme, growth in the number of passengers in the South East has been

far higher than it and the Department anticipated, requiring more services to accommodate them. The congestion on the network means that delays caused by its underlying condition, such as track and signal failures, cause further delays as the knock on effect of disruption spreads. This has caused a decline in the performance of the railway. Network Rail did not fully understand the effect that this congestion would have on Thameslink until 2016 when it began to focus on how to introduce the new services. Network Rail identified that it needed an additional £900 million to improve the condition of the railway to a level which can reliably support the planned 24 trains an hour service through central London. The Department and Network Rail have only made £300 million of additional funding available up to the end of the current 2014–19 rail spending period. Network Rail and the Department told us that they have agreed a substantial increase in funding for infrastructure maintenance and renewal, as part of the £48 billion of funding for the next 2019–2024 railway spending period. We are concerned about how this money may be spent, given Network Rail's poor understanding of the performance and condition of the rail network.

Recommendation: ***The Department should, by June 2018, write to the Committee to explain how it will ensure that Network Rail's plans for spending £48 billion on the network between 2019 and 2024 are based on a clear understanding of the condition of the network, and where work will be needed to support future major programmes.***

4. **Network Rail's estimate of the costs of the programme lacked the sophisticated understanding that it needs to manage its wider portfolio of projects effectively.** In 2015, the Department and Network Rail increased the budget for the programme's infrastructure works by £474 million (9.4%), as a result of forecast cost increases predominantly associated with the redevelopment of London Bridge Station. Whilst a 9.4% increase compares favourably to other rail projects that we have seen, it demonstrates that there are weaknesses in Network Rail's approach to estimating the costs of projects. Network Rail was reclassified as a public sector body in September 2014, and since then has no longer been able to borrow money to meet cost increases on its projects. Now that it is directly funded by the Department, Network Rail faces new challenges to keep project costs under control. Network Rail has had to abandon projects to remain within its available funding, such as the Foxton level crossing, meaning that it has not delivered to the expectations of some local communities. The Department and Network Rail told us that they are taking steps to improve their approach to estimating the cost of programmes, and to ensure that they only commit to projects once they are confident that they can deliver them within the funding available.

Recommendation: ***The Department and Network Rail should write to the Committee by March 2018, outlining what new arrangements they have put in place to better estimate and oversee the costs of projects, and how these have improved the way that they work.***

5. **The Thameslink programme has produced some valuable lessons, including what challenges arise when managing complex railway station projects, which will be critical for the success of future programmes.** Network Rail told us that the condition of London Bridge Station was more complex than it had expected, which

caused the majority of the cost increase on the programme. The redevelopment of Euston Station for High Speed Two could be even more complex. The lessons that Network Rail has learned about planning and estimating costs during the redevelopment of London Bridge will be valuable in meeting this challenge. Network Rail told us that it has adopted advances in risk modelling to better understand how risks in one part of the Thameslink programme may affect other parts during its delivery. More advanced technology for surveying construction sites has also been developed, which was not available when the redevelopment of London Bridge was being planned.

Recommendation: ***The Department and Network Rail should, by June 2018, establish formal processes through which learning from the Thameslink programme can be applied to future major programmes, including High Speed Two.***

1 Delivering the Thameslink programme

1. On the basis of a report by the Comptroller and Auditor General, we took evidence from the Department for Transport (the Department) and Network Rail on the delivery of, and remaining risks to, the Thameslink programme as it approaches its completion.[1]

2. The Thameslink programme aims to increase capacity and relieve overcrowding on rail services throughout London and the South East, by connecting previously separate parts of the network through central London. Fewer interchanges in central London will reduce passenger journey times and relieve overcrowding on the Underground. The programme includes £5.5 billion of infrastructure works managed by Network Rail to redevelop Farringdon, Blackfriars and London Bridge Stations, as well as introduce new signalling technologies. The Department has procured a new fleet of 115 longer and more spacious Class 700 trains, which contain the hardware and software required to use the new signalling technologies, to enable the new connecting services. The cost of leasing these new trains and their supporting depots is £2 billion.[2]

3. When the programme is complete, a 24 trains an hour metro-style service will be in place through central London, between St Pancras International and Blackfriars stations. To support the delivery of the programme, maintain passenger services during disruption from the works, and introduce the new trains and services, the Department merged three rail franchises into the Thameslink, Southern, and Great Northern franchise. The Department awarded the new franchise to Govia Thameslink Railway in 2014, which is expected to operate it until 2021.[3]

The timetable for delivery

4. The Thameslink programme was due to complete in December 2018. Since we last reported on the programme in 2013, it has run broadly to schedule. However, in October 2017, the Department decided to delay the completion of the programme by a year. The Department and Network Rail had planned to introduce a 20 trains an hour service in May 2018 and the final 24 trains an hour service in December 2018. Instead, the Department has decided that the new services will be introduced more gradually, with the final 24 trains an hour service starting in December 2019. This approach aims to reduce the risks of passenger disruption from large big bang changes being introduced on the network. The Department told us that it decided to delay the introduction of the new services in response to advice from its Industry Readiness Board and lessons learned from other programmes, such as those on the London Underground. The Comptroller and Auditor General's report recognised that this was a sensible step to protect value for money and passengers from further disruption.[4]

5. The Department told us that the revised schedule means that passengers will receive 70% of the programme's benefits in May 2018, and around 80% of the benefits by the end of 2018. The delay means, however, that some passengers will not see the full benefits of the programme until up to a year later than initially planned. For example, the Department

1 Report by the Comptroller and Auditor General, Update on the Thameslink Programme, Session 2017–19, HC 413, 23 November 2017
2 C&AG's report, paras 1–2
3 C&AG's report, paras 1–2
4 Qq 19–21; C&AG's report paras 15, 3.22–3.24

told us that services through central London between Cambridge and Maidstone East will not be introduced until December 2019, and the service between Sevenoaks and Welwyn Garden City will also be delayed. The Association of Public Transport Users, which represents commuters between West Hampstead Thameslink and Harlington, told us that while it recognised that the delay is a sensible course of action, it would like to see the Department review if the full delay is necessary in early 2019. The Department anticipates that these delays will be cost neutral, as although revenues from passengers will be lower than anticipated, costs will also be reduced by fewer services being run in the interim.[5]

6. We were concerned that the decision to delay the programme was made as late as October 2017, just over a year before the programme was due to be complete. The Department and Network Rail only began to focus on planning how the new services would be run from late 2016. The timing is surprising given that new services require new technology, new ways of managing passengers at stations, and new maintenance procedures to be devised, which represent a substantial change in how the railway in this region functions. The Department accepted that it could have started planning how the new services would be introduced earlier. It asserted that it may not have been possible to do so much farther in advance, but did not provide a detailed explanation as to why this was the case.[6]

Working together in the interest of passengers

7. The significant impact that the Thameslink programme will have on rail services in London and the South East means that it is important that train operators across the region are involved in planning how the new services will eventually operate. When we last examined the Thameslink programme in 2013, we recommended that the Department needed to focus on integrating planning and aligning decision-making across the different elements of complex programmes from the very start. Whilst a programme board made up of senior staff from the programme's delivery organisations was in place from the outset, the Department did not bring together other parties in the wider rail industry until the Industry Readiness Board was established in late 2016. The Industry Readiness Board acted as a forum for the wider rail industry to contribute to and finalise the plans for bringing the new services into place. The programme's governance arrangements did not initially provide sufficient clarity over roles and responsibilities for planning and decision making for the programme's final stages. The Department sought to resolve this with a governance review in mid-2017. The programme would have benefitted from establishing both the Industry Readiness Board and clear governance arrangements from the outset, which would have allowed the wider industry to contribute to planning from the start.[7]

8. The Department told us that it is currently examining how collaboration between Network Rail and operators can be improved for both future programmes and the day-to-day running of the network. Network Rail explained that the financial structure and balance of risks against rewards is very different between itself and train operators, and for this reason, aligning incentives will be key to ensuring that the railway serves the interests of passengers. In November 2017, the Department published 'Connecting people: a strategic vision for rail', which describes how it aims to better integrate the

5 Qq 21–23, 25, 26, 28; Association of Public Transport Users (THP0002), para 4
6 Qq 31–41, 45, 46, 83, 84, 86; C&AG's report paras 3.20–3.21
7 Qq 19, 20, 83–85; Committee of Public Accounts: Progress in delivering the Thameslink programme, October 2013, Conclusions and recommendations para 5; C&AG's report paras 3.19–3.20

management of the track and train elements of the railway. The Department told us that in most instances this will not mean that a single entity will be created to control both the trains and the tracks. Instead, it is looking at different ways to establish closer working relationships between Network Rail and private sector train operators, and to ensure incentives are aligned across delivery bodies. The Department intends to put its strategy into practice on the next Intercity West Coast franchise, where the franchisee will also manage the initial High Speed Two services, and on the next Intercity East Coast franchise. The Department also told us that the new East-West Rail link between Oxford and Cambridge will operate under a new model of closer working between Network Rail and the private sector. Network Rail said that it supported moves towards greater industry integration, and has, for example, created alliances on certain routes between itself and operators, such as the current Scotrail alliance in Scotland.[8]

9. There are a number of models available to improve alignment between the organisations operating within the rail industry, including local alliances between Network Rail and operators, the Thameslink Industry Readiness Board, and the new approaches that have been proposed. Accountability for passenger service needs to be at the heart of any future arrangement for enhancing and operating the railway. We were concerned that too much focus on new approaches could lose sight of this. Network Rail recognised that having a single person who can speak with one voice about the performance of the railway is important, and told us that, on some parts of the network, independently chaired boards have been established to provide this for passengers. These boards include representatives from Transport Focus to ensure that the track and train elements are working in the interests of passengers.[9]

8 Qq 95–98
9 Q 99

2 Funding rail infrastructure

The cost of the Thameslink programme

10. When we looked at the programme in 2013, the Department for Transport (the Department) and Network Rail had agreed a budget of £5 billion to fund infrastructure works as part of the Thameslink programme, and the Department and Network Rail had made significant efforts to keep the works within this budget. However, these efforts were not enough to prevent the costs from increasing. In 2015, the budget for Network Rail's infrastructure works as part of the programme increased by £474 million to £5.5 billion, an increase of 9.4%. Whilst this increase compares favourably with other Network Rail projects we have seen, such as the Great Western Route Modernisation (which saw a 70% increase in the cost of electrifying the route between Cardiff and Maidenhead, equivalent to £1.2 billion), or the Sheffield Tram Trains project (which saw a 401% increase of £60 million), it nonetheless demonstrates that Network Rail still has room to improve in its cost estimation and planning.[10]

11. Network Rail told us that the budget increase was largely a result of forecast increases in the cost of the works at London Bridge station, where the condition and complexity of the site was not as Network Rail had anticipated. London Bridge station is over 180 years old, and has been progressively expanded throughout its life. It also suffered significant bomb damage during World War Two, which was repaired quickly to make the station operational again. Network Rail told us that it had plans of the station, but much of the site was not sufficiently well-documented. It stated that the station also had to be kept open for passengers throughout the works, with only limited closures for major works over bank holiday weekends, as it had judged that dispersing the tens of million passengers using the station to other London stations was infeasible. Network Rail explained that it was difficult to undertake intensive site investigations whilst keeping the station open, meaning that certain aspects of the station's structure did not become clear until construction began. For example, sections of the station contained another layer of arches built on top of those at the ground level, which could not be seen until demolition works began. As a result, the detailed design phase took longer, and subsequent works had to be accelerated to meet the limited closures in the schedule, incurring additional cost. The Thameslink programme also had to fund an additional £66 million for technology to help signallers make decisions, after Network Rail cancelled a proposed national programme on which Thameslink had depended.[11]

12. Network Rail accepted that it did not have enough contingency within its budget for the redevelopment of London Bridge Station. It told us that it had been working to improve its risk modelling to provide a more realistic assessment of how much contingency will be required, particularly where there are interdependencies between signalling, track and other works. It has now adopted a "cause association modelling" technique to understand how risks that emerge at earlier stages of a programme can affect other areas.[12]

10 Qq 51–53, 65, 66; Committee of Public Accounts, Modernising the Great Western Railway, Session 2016–17, HC 776, 3 March 2017, para 1; Committee of Public Accounts, Sheffield to Rotherham tram-trains, Session 2017–19, HC 453, 15 December 2017, para 1; C&AG's report paras 2.8–2.9

11 Qq 51–53, 61; C&AG's report paras 2.8–2.9

12 Qq 54, 62

13. Adopting more sophisticated risk modelling techniques has meant that Network Rail has allocated more money to the most complex parts of the Thameslink Programme. Network Rail told us that improvements in surveying technologies, such as using CCTV cameras to explore hidden voids, which were not available when the redevelopment of London Bridge was being planned, could enable it to better understand sites from the outset of a project. These lessons will be important for the future redevelopment of Euston station as part of High Speed Two, which is also a highly complex scheme. The Department told us that the Thameslink programme team have met with the Department's High Speed Rail directorate to share the knowledge they have gained during the programme. Network Rail similarly told us that it was ensuring that the knowledge and experience it had gained from the programme was shared by recruiting staff with experience of working on the Thameslink programme for High Speed Two.[13]

14. Learning lessons about improved planning and cost estimation will be important for Network Rail as it manages its portfolio in the future. In the past, Network Rail could borrow money from financial markets to meet cost increases within its portfolio. In September 2014, Network Rail was reclassified as a public sector body, and has since been funded directly by the Department through a grant and a loan facility with a fixed cap. As Network Rail can no longer borrow privately, it has had to abandon projects to stay within its available funding when overspends occur. In 2015, many projects were cancelled as part of the Hendy Review, and others, such as the Foxton Level Crossing, have been discontinued since the Hendy Review. As such, the accuracy of Network Rail's cost estimation has a direct impact on its ability to deliver to the expectations of local communities. The Department and Network Rail have stated that they are now ensuring that cost estimates are at an appropriate level of maturity before they commit to a project, and that they only commit to projects once they are confident that they can deliver them within the funding available.[14]

Managing the performance of the wider rail network

15. Growth in the number of passengers in the south east has been far higher than Network Rail and the Department anticipated when the Thameslink programme began. In 2009, as construction on phase one of the infrastructure works was underway, Network Rail anticipated that the number of passengers in the south east would grow by between 0.5 and 1% per year over the lifetime of the programme. Thameslink now carries 40% more passengers than it did seven years ago. The increase in services needed to accommodate the growth in the number of passengers has meant that the rail network has become increasingly congested, and that delays can spread more readily across the railway. Any delays caused by problems with the railway infrastructure, such as track and signal failures, cause further delays as the knock on effect of disruption spreads. In 2009, 91.4% of trains were reaching their destination within five minutes of their scheduled arrival time, but this has now fallen to 83%. Around 13% of the delays are caused by failures in the infrastructure supporting the rail network.[15]

13 Qq 61–64

14 Qq 70–74; Committee of Public Accounts, Network Rail's 2014–19 investment programme, Session 2015–16, HC 473, 20 November 2015

15 Qq 29, 42

16. In 2016, Network Rail identified that another £900 million of additional renewals and maintenance work in the wider network would be needed to reliably support the new 24 trains an hour service through central London. We were surprised that this substantial amount of work was not identified earlier, and Network Rail accepted that it did not fully understand the effect that this congestion would have on Thameslink until it began to focus on how to introduce the new services. The Department and Network Rail have so far only made £300 million of funding available up to 2019, however. £250 million of this is additional funding from the Department, while the remaining £50 million has been diverted by Network Rail from other projects. Network Rail is considering including the remaining £600 million of work in its plans for the period 2019–2024. Network Rail told us that it will be spending more than £2 billion in total on these routes over that period.[16]

17. The Department has agreed a funding package of £48 billion for maintaining and improving the rail network over the next railway spending period from 2019 to 2024. It told us that as part of this, it has agreed a substantial increase in funding for the maintenance and renewal of rail infrastructure. Network Rail told us that it welcomed this settlement as a remedy to what it considers historic underinvestment in the railway. However, we were concerned about how Network Rail will spend this money, particularly as that it was slow to understand changes in the performance and overall condition of the rail network, and where additional investment may be needed to ensure train services perform at an acceptable level.[17]

16 Qq 29–30, 34, 37; C&AG's report para 11

17 Qq 35, 37, 50

Formal minutes

Monday 5 February 2018

Members present:

Sir Geoffrey Clifton-Brown	Nigel Mills
Martyn Day	Layla Moran
Luke Graham	Bridget Phillipson

In the absence of the Chair, Sir Geoffrey Clifton-Brown was called to the chair.

Draft Report (*Update on the Thameslink Programme*), proposed by the Chair, brought up and read.

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

Paragraphs 1 to 17 read and agreed to.

Conclusions and recommendations agreed to.

Introduction agreed to.

Summary agreed to.

Resolved, That the Report be the Twentieth 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 21 February 2018 at 2.00pm

Witnesses

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

Wednesday 6 Dec 2017

Question number

Bernadette Kelly, Permanent Secretary, **Matthew Lodge**, Senior Responsible Owner, Thameslink Programme, Department for Transport, **Mark Carne**, Chief Executive, and **Simon Blanchflower**, Senior Responsible Owner, Thameslink Programme, Network Rail Q1–101

Published written evidence

The following written evidence was received and can be viewed on the inquiry publications page of the Committee's website.

THP numbers are generated by the evidence processing system and so may not be complete.

1 Association of Public Transport Users (THP0002)

2 Siemens Mobility (THP0001)

List of Reports from the Committee during the current session

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.

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Third Report	Hinkley Point C	HC 393 (Cm 9565)
Fourth Report	Clinical correspondence handling at NHS Shared Business Services	HC 396
Fifth Report	Managing the costs of clinical negligence in hospital trusts	HC 397
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HOUSE OF COMMONS

Public Accounts Committee

Oral evidence: Thameslink Programme, HC 466

Wednesday 6 Dec 2017

Ordered by the House of Commons to be published on 6 Dec 2017.

Watch the meeting

Members present: Meg Hillier (Chair); Bim Afolami; Heidi Allen; Geoffrey Clifton-Brown; Caroline Flint; Nigel Mills; and Gareth Snell.

Sir Amyas Morse, Comptroller and Auditor General; Adrian Jenner, Director of Parliamentary Relations, National Audit Office; Lee-Anne Murray, Director, NAO; and Marius Gallaher, Alternate Treasury Officer of Accounts, HM Treasury, were in attendance.

Questions 1-101

Witnesses

Simon Blanchflower, Senior Responsible Owner, Thameslink Programme, Network Rail; Mark Carne, Chief Executive, Network Rail; Bernadette Kelly, Permanent Secretary, Department for Transport; and Matthew Lodge, Senior Responsible Owner, Thameslink Programme, Department for Transport.

HOUSE OF COMMONS

Report by the Comptroller and Auditor General

Update on the Thameslink programme (HC 413)

Examination of witnesses

Witnesses: Simon Blanchflower, Mark Carne, Bernadette Kelly and Matthew Lodge.

Q1 **Chair:** Welcome to the Public Accounts Committee on Wednesday 6 December 2017. We are here today to examine the Thameslink programme, which we last looked at in 2013 when work at London Bridge had just started.

A number of us have been down to London Bridge to see some of the work going on there, and the work for Crossrail 2. The NAO's Report looks at how the programme has progressed. I remind those who do not remember that it was originally called "Thameslink 2000", so progress has not been as fast as everyone anticipated when it was established. We recognise, however, that there has been significant progress on the programme since 2013, when we last looked at it. That has focused on delivering the infrastructure and getting the lines through. One of the concerns that we want to tease out today is how that will actually deliver for passengers. At the end of the day, a number of us on the panel have a particular constituency interest. In the end, that is where the proof of the pudding will be.

Before I welcome our witnesses today, I want to welcome a number of parliamentary colleagues from around the Commonwealth who are here today, I'm sure, to learn about how to run a really excellent rail project. I am teasing our witnesses: hopefully you are setting an example of how the UK can lead the world on rail projects—please don't let us down. Likewise, we are here to demonstrate how effectively we can challenge you to make sure that you are actually going to do what you say you are.

From my left to right, I welcome: Matthew Lodge, the senior responsible owner for the Thameslink programme at the Department for Transport; Bernadette Kelly—welcome back—the permanent secretary at the Department for Transport; Mark Carne—you are becoming a frequent flyer here at the Committee, and I am sure you enjoy it every time—the chief executive of Network Rail; and Simon Blanchflower, the senior responsible owner for the Thameslink programme at Network Rail. That is our team of four today. For anyone following on Twitter, we are using the hashtag #Thameslink.

Before we get into the main session, I want to ask you, Ms Kelly, about the announcement by the Secretary of State about the East Coast franchise in particular. Is this a bail-out?

Bernadette Kelly: Absolutely not. The Secretary of State has announced a plan that from 2020 we will develop a new public-private partnership, to ensure that we will take east coast services forward on a sustainable basis, in the interests of passengers. I think we have been absolutely clear, and my Secretary of State has been extremely clear, that this is not a bail-out.

Q2 **Chair:** Why, then, did you start timing it from 2020 and not the end of the franchise?

Bernadette Kelly: Let me just finish the point, which was that we are absolutely ensuring that VTEC—that is Stagecoach, the owning group—absolutely honours its financial obligations and commitments on this franchise. You will have seen only this morning that Stagecoach has said in its own results that it fully expects the full amount of the parent company support that it committed at the point at which the franchise was awarded to be drawn down. That is absolutely the commitment that we will hold it to. There is no question of this being a bail-out. What we want to do, as I said, is use the opportunity on the east coast to develop a new franchising model, which we believe will be in the interests of passengers and taxpayers in the long run.

Q3 **Chair:** Did you consider any other options other than this new franchising model?

Bernadette Kelly: We had been looking at many options. It was last December when my Secretary of State first set out his thoughts and plans for alignment of track and train and for developing different models to deliver train services across the network. A huge amount of work has been going on since then, including with Network Rail and with train operators, to think about the sorts of models that could be developed.

Q4 **Chair:** Presumably, the current franchise operators have co-operated fully in the early termination of the franchise.

Bernadette Kelly: We have said that the contract will be terminated. We are in discussions with VTEC—with Stagecoach, the owning group—about the terms of the future operation of the franchise.

Q5 **Chair:** Will there be any cost to the taxpayer for the early departure of the franchise?

Bernadette Kelly: We have said, I repeat, that we fully expect all the financial obligations that Stagecoach entered into to be met in full.

Q6 **Chair:** Presumably, you have legal and other advice to make sure that you are extricating the Department from this franchise—

Bernadette Kelly: We are absolutely acting on extremely carefully considered legal and commercial advice to ensure that what we secure is the best possible outcome for both taxpayers and passengers. That is absolutely our focus.

Q7 **Chair:** Can you explain, then, why this is a better outcome than allowing the franchise to run to the end of its time, and stick to the deal on the table?

Bernadette Kelly: We need to recognise that this is a franchise that, on its own admission, is in some financial difficulty. We need to find a way forward that preserves services for passengers and delivers a good deal for those passengers and for taxpayers. That is what we are focused on: finding a commercially sustainable way forward for this franchise, which also delivers better services for passengers. My Secretary of State's clear view, as he set out in his statement, is that from 2020, a public-private partnership is the way to do that.

Q8 **Caroline Flint:** I travel on this particular rail line every single week, and so have seen it under many different types of operators, private and public. In the paper, the figure of £3.3 billion is mentioned. There have been headlines, perhaps lurid, about this forming a £3.3 billion bail-out, and letting the company off the hook. You say that, actually, the operators will meet all their financial obligations, so could you explain to the Committee and those listening, what is the £3.3 billion figure?

Bernadette Kelly: I won't try to explain the £3.3 billion—I don't know how that has been extrapolated. I can say that for the remaining period of this operator, we will ensure that it meets its obligations in full.

Q9 **Caroline Flint:** Presumably, the main period has been brought forward to 2020. You are using that as your benchmark?

Bernadette Kelly: The plan is that from 2020 we will compete to introduce a new model of franchise operator on the east coast, which we believe will—

Q10 **Chair:** Ms Flint's point is about the £2 billion that it would have paid in premiums to the Department between 2020 and 2023. Can you just clarify that?

Bernadette Kelly: I understand that is, presumably, what those figures refer to. I am saying that what we will do now is, from 2020, compete to develop a new model—a new public-private partnership on the east coast—and in that process we will look to secure an outcome that delivers a good outcome for passengers and for taxpayers. Clearly, I can't tell you exactly what that will be in advance of the award being made.

Q11 **Caroline Flint:** When the contract was awarded to the Virgin East Coast partnership, which Stagecoach has 90% control of, presumably the payments back in that it had to pay were straddled over the time span that was originally set. I am not questioning the Government's decisions about this point of bringing track and rail together, which I understand is part of this, but if the Government have decided to bring that contract forward earlier, that questions the formula that spread out those payments over the full contract period, and therefore the taxpayer may be losing out. Is that something that you will look at?

Bernadette Kelly: I don't think that is necessarily how I would see it at all. Clearly, as I say, we will have a new operator, or a new arrangement, in place from 2020. As to your point about bail-out, I want to keep repeating the point that this is an operator—this is an owning group—that will be honouring its financial commitments to the taxpayer and to the Department. Those commitments are very significant. This is an operator that is incurring losses, and it will—we fully expect it to and it has said it will—provide the full level of parent-company support that it contracted to provide at the point at which the contract was awarded.

Q12 **Chair:** So those commitments on the premium between 2020 and 2023 will be paid in full.

Bernadette Kelly: No, what will be committed is the full amount of parent-company support that was contracted at the time at which the franchise was tendered and awarded.

Q13 **Caroline Flint:** Obviously, in determining who will take over the new franchise—I understand that Virgin and Stagecoach are interested in taking it forward to 2023—concerns have been raised about the operation of this line. It has been loss-making. In fact, if you remember, National Express had similar problems in 2009 and we actually ran a publicly owned vehicle for six years.

I understand that Stagecoach wants to remain a bidder for this new development, but it is also bidding for three upcoming rail franchises. Are you not worried that a company that has proved that it cannot meet the terms of present contracts by making losses is in pole position to take up both the east coast and maybe other franchise bids?

Bernadette Kelly: We have not said anything to suggest that they will be in pole position for any of these bids. They will be in a position to bid, alongside other operators. Whether they are successful or not will depend upon the quality and the rigour of the bid that they provide.

Q14 **Caroline Flint:** Will you take into account their past performance, then? They were not actually able to deliver on contracts they have already acquired, and they have shown themselves to be loss makers when it has come to running a rail service.

Bernadette Kelly: What has happened on the east coast, as I say, is that revenues have not grown as fast as anticipated. There are a number of reasons why that might have happened. We have set out in the rail strategy some wider moves that the Department is taking to ensure that we do have a commercially sustainable and secure way of ensuring that franchises, when awarded, are able to be operated successfully for their terms. We will be looking at that in all our future competitions.

Q15 **Geoffrey Clifton-Brown:** Ms Kelly, with great respect, you didn’t quite answer the Chair’s question, which was: are any costs going to fall on the taxpayer? Is the taxpayer liable for any claims from the franchisee against lost profits, or indeed from anybody else who has suffered because this franchise has been terminated early?

Bernadette Kelly: I am not aware of any such claims that could be made. Obviously, the franchise operator made some assumptions and took some risks at the point at which they entered into the contract. We fully expect them to absorb those risks, which they are responsible for.

Q16 **Chair:** Did you consider asking for a ministerial direction before this decision was reached?

Bernadette Kelly: No. There has been no requirement for me to seek a ministerial direction thus far in this process.

Q17 **Chair:** What would it have taken for you to ask for one?

Bernadette Kelly: It would have taken what it takes for all ministerial directions: clear evidence that the approach being proposed by the Secretary of State was at odds with the requirements of managing public money. I see no evidence—I am aware of no evidence—that that is the situation that we are in at present on this franchise.

Q18 **Chair:** As you know, this Committee has taken quite a keen interest in franchises, along with our sister Committee, the Transport Committee. We recognise it is very early days, but we will be coming to look at this, and I am sure the National Audit Office will be looking at what happens here. I would just observe that there has been a rocky road on franchising in this country, and there is a danger that a failed bidder being able to get out of the contract—whether or not it is a bail-out, and whatever you call it—sends negative signals to those who actually bid properly and have run a franchise properly. Would you agree with that?

Bernadette Kelly: What I would agree with is that there has been some volatility around franchising of late—driven in part, as I say, by the slowdown in revenue growth that we have seen in parts of the network and a number of other factors. Our job in the Department, and my job as accounting officer, is to ensure that we have a model going forward that is secure and sustainable for all parties involved. We are extremely closely focused on doing that.

As I say, the broader set of measures that we are proposing to help make that happen was set out in the rail strategy last week. If the Committee would like me to come back and discuss that in more detail, I will be more than happy to.

Chair: I think you are already coming back in front of us in January or early February.

Bernadette Kelly: I believe I may be, and I look forward to it.

Chair: You have a frequent flyer ticket here, or even a season ticket. We will give you a discount of some sort. Thank you very much for that. We will return to this. As I say, we are liaising with our sister Committee, the Transport Committee. We are keeping a beady eye on it to make sure it is going well. I have no doubt that, professionally, you want to do a good job, but a lot of questions remain to be answered. We will now move to our main agenda.

Q19 **Nigel Mills:** As the Chair said, it has been a relatively long programme. We are in 2017, compared with 2000. I was expecting to read this Report and find that everything was fine and we were nearly finished, but then I read that we have another year’s delay. Ms Kelly, can you tell us how come the final end of this project has got delayed by another year?

Bernadette Kelly: First, as I hope the NAO Report shows, this is by and large a very successful delivery of an extraordinarily complex and strategically important project. I hope that during the course of the hearing, we have the opportunity, as the Chair suggested, to explain just how effectively and successfully this project has been delivered.

As for the delay highlighted in the NAO Report, this is a very conscious decision taken by the Department and my Secretary of State in response to advice from his expert industry readiness board to phase the full timetable for Thameslink for one year, in order to de-risk the delivery of the programme.

We know that very extensive "big bang" timetable changes create a heightened risk of disruption for passengers. We are very keen to ensure that that does not happen in relation to this project, and that is why we have undertaken that phasing, which the NAO Report acknowledges is a serious and sensible step to manage those risks.

I add that the vast majority of this project's benefits will still be delivered by the end of 2018. Indeed, many have already been delivered. We have the stations, we have new trains and most of the timetable changes will come in in May '18 and 2018. But it is true that the final timetable changes and improvements—the full 24 trains per hour—will not be delivered until December 2019.

Q20 **Nigel Mills:** Was it the case that you originally planned for a big bang that you now decide you knew was not a good idea, or was the big bang because everything got concertinaed?

Bernadette Kelly: It has not been concertinaed. The timetable that existed before the decision in October this year to phase the introduction had been set out from an early stage in the project.

The decision to phase reflects two things. First, it reflects the lessons we have learned over the past years from other projects and other significant timetable changes. One of the things we have learned is that a sensible amount of phasing generally is a way of delivering those changes without creating a huge amount of disruption.

Secondly, it is a reflection of the fact that we now have a very expert independently chaired industry readiness board helping us and all parties in this project to deliver and execute the final stages of this programme as successfully as possible.

Q21 **Nigel Mills:** So when you said you had always known that big bangs were a bad idea, you meant you have recently discovered that big bangs are a bad idea, so you stopped planning to have one in this situation. Does it mean that this timetable was never achievable and that December 2018 was not possible all along?

Bernadette Kelly: I might ask my colleague, Mr Lodge, to say a little bit more. I do not think it reflects that it was never achievable. Obviously we set, quite rightly for a project of this scale and cost, ambitious deadlines and timescales for its delivery. All this reflects, as I say, is a slightly more measured approach nearer the point of final delivery of the timetable and following a great deal of consultation with the industry to do this in a slightly more phased and hence less risky way. Mr Lodge, would you like to add to that?

Matthew Lodge: We are delivering an enormous amount of change in May '18. That is new technology—we are bringing in new trains and ETCS signalling—and new services across the network. We are delivering something like 70% of the benefits from May. That builds up to around 80% of the benefits in December. What we have looked at is how other operators do it.

If you look at London Underground, it does these small phases, a step-by-step approach on a process in which: you introduce; you review it; you make sure it's stable; you revise your processes so that you make sure it is stable; and then you build on that. So what we have tried to do is say, "Let's look at a sensible approach that builds it in slightly smaller steps, and everyone learns and improves at each step so we have a robust base for each of these timetable enhancements we are trying to do."

Q22 **Nigel Mills:** That makes perfect sense. You must be wondering why you did not plan it that way all along—I suppose we have made that point. Is this definitely the end now: there won't be any further delays past December 2019? We will have the whole service up and running, with all the timetable running by that date.

Matthew Lodge: I do not see any reason why we cannot have all the trains timetabled as planned in December 2019.

Q23 **Nigel Mills:** Are there any costs to this delay? Have you had to compensate the operator or anyone else for the fact that not all the trains will be running? Presumably, passenger numbers will be lower than we were hoping for.

Matthew Lodge: The analysis we have done with GTR is that actually in terms of costs it is broadly neutral, because you are actually running fewer train miles. So those two things broadly work out. And you have to weigh that against the potential disruptive costs if you get this slightly wrong. So we weigh those two things together and say, "Broadly, they look neutral in cost terms."

Q24 **Chair:** Has that been agreed by all parties?

Matthew Lodge: We have agreed that with GTR.

Q25 **Nigel Mills:** That wasn't quite the question I asked. That implies that you can pay some money to do this and balance it against stuff you might have had to pay if full implementation had gone wrong. Have you had to agree compensation with the operator or anyone else for the fact that you will not be running the full amount of trains?

Matthew Lodge: We have not agreed anything with GTR about additional costs we need to do. As I say, in actual cost terms, it is broadly neutral. That is even if you put aside the disruptive costs.

Q26 **Nigel Mills:** Okay. I am not sure how it can be broadly neutral with or without some of the costs. That implies some maths is a bit awry, but I guess we have laboured the point. Are you expecting some passengers will not get their service through their station for another year, or is it just the volume of trains that will not go up to the full number?

Matthew Lodge: There are some corridors where we are introducing new train services later. For example, the Cambridge to Maidstone East service comes in in December 2019. That is about a year later than had been planned.

Q27 **Nigel Mills:** But do passengers know that has happened? Everyone is informed and they have been apologised to, and all those things.

Matthew Lodge: We are not taking anything away. This will be an additional service over and above the current service they are expecting to get. So we are not reducing services on the network as part of this change.

Q28 **Chair:** Are there any other lines where the service is coming in later?

Matthew Lodge: Off the top of my head, I think it is Sevenoaks to Welwyn Garden City, which is a service that runs to the Blackfriars bay platforms for a period of time rather than running through the core.

Chair: So it is coming into London but—

Matthew Lodge: They are not running through the core. That is the basis of the phasing that we are doing. We are running things either into Kings Cross or into Blackfriars and then eventually connecting them up through the core to make the complete service.

Q29 **Nigel Mills:** Can we turn to some of the additional things that have come to light? I think it is the case that you discovered that you could not quite make the service work without spending £900 million on neighbouring services. Mr Carne, can you talk us through how that happened and how we did not seem to know that £900 million-worth of work needed doing before we could—

Mark Carne: I will be very happy to do that, actually. I think it is important to understand that when the Thameslink programme really got under way around 2009, the performance of the Thameslink railway at that time was around 91.4%. By that, I mean 91.4% of trains arrived at their destination within five minutes of their scheduled arrival times. That was the performance of the railway at that point in time.

At that time, it was anticipated that passenger growth would be around 0.5% to 1% per annum. That was baked into the Thameslink programme. In fact, over the last seven years the railway has been an enormous success in that part, and the passenger growth has been far higher than that; it now carries around 40% more passengers than it did at that point in time. There has been a very undesirable side effect, which is that the train performance and the reliability of the network as a whole have dropped significantly, and today we are running the network at about 83% PPM. That is an 8% drop in the reliability of passengers' experience.

You may ask why that has happened. The first thing I will say is that the underlying infrastructure that the trains run on is much more reliable. The points, the signalling system and the track are about 30% more reliable than they were in 2009. The reason essentially lies in the congestion brought about by the additional passenger growth.

If you look at the underlying performance of the railway today, because trains spend a little longer at every station, because there are more and more people coming on, and because of the incredibly complicated nature of the network, as soon as one train is delayed by a bit, it has a contagion effect on the network, which affects many other trains, which then affect many other trains. We have a very critically balanced network today, which was not anticipated when the original decision for Thameslink was taken.

That is important because Thameslink, unlike any other railway, has a European train control system, a digital railway in its core, and will run 24 trains an hour through the core. That is going to work perfectly well, but you have to get the trains to the front of that core exactly in time. Reviewing that over the past couple of years, we felt that, given the poor performance of the network as a whole today, we have to do everything we can to improve that so that we can present the trains into the core in the right way.

Chair: That brings us back to Mr Mills's point.

Mark Carne: That brings me exactly back to Mr Mills's point. That is why we then said, "Okay, how can we improve the performance and reliability of the railway so that we can give these trains the best possible chance to get there?"

Q30 **Chair:** And that is the £900 million?

Mark Carne: That is the £900 million. It is worth pointing out, if I may, Chair—

Chair: Briefly, please.

Mark Carne: —that about 13% of the train delays are caused by infrastructure failures. It is a relatively small proportion of the total delays, but clearly we have to do better.

Chair: It is pretty insignificant, but nevertheless it has to be resolved.

Q31 **Nigel Mills:** Mr Carne, you have given us a fascinating history, but the rise in passenger numbers did not just start a couple of years ago and catch you by surprise, did it? That rise in passenger numbers has been happening year on year for nigh on 20 years. It was earlier this year, wasn't it, that you had to decide to spend the £900 million? Was this an issue that you knew was there and no one had decided to deal with, or was it an issue that you did not know was there and you had to go and investigate in the last couple of years?

Mark Carne: It is a fair question. In the last year we have seen a significant shift in the performance of the railway, and probably last year—

Q32 **Chair:** Sorry, but just to cut to the chase, I think Mr Mills's question was who was keeping an eye on this and whether it was a surprise.

Mark Carne: I would not say that it was a surprise, because clearly the performance of the railway has been declining over the last few years, but the full significance of that decline, as passenger numbers have grown, has really only been addressed in the last couple of years, as we started to think about the operational consequences of running the timetable and running the services.

Q33 **Nigel Mills:** Your job is to maintain and inspect the railway and to know what its condition is. Is it the case that you did not know that the deterioration was happening, or it was happening faster than you thought it was? Or did you know and just not tell anyone? That is what we are trying to get to.

Mark Carne: Clearly, we could see that the performance of the railway as a whole was declining. I could also see that the performance of the railway was getting better and the assets were getting more reliable, but that was not good enough, because the passenger experience was declining because of the congestion on the railway. Therefore, we needed to act, and we have taken a number of steps to improve the performance of the railway.

Core to that is the way in which we work in an alliance with the train operating company, creating a one-team culture to address the overall performance of the railway. Core to that is the operational right-time railway approach that we now adopt for the running of that railway. We are striving to get every train through every station to the minute so that we deliver the service that people need. We are pursuing multiple avenues as part of a plan, which we call the Galaxy plan, to deliver improvements. The £900 million is just one element of that plan.

Q34 **Chair:** You have talked about the deterioration since 2009, but as Mr Mills rightly highlighted it is only in the last couple of years that it came together that you needed to spend this £900 million to help deal with the deterioration. As you say, there are a number of factors, but the infrastructure element is the bit that is right in your bag. Why did it take so long to come to a decision? Was it internal rail world politics? That is with a small p, I stress—or maybe a big p. Was it that Network Rail wasn't on the case? What was the reason for the delay?

Mark Carne: We were absolutely on the case, but we operate within five-year funding agreements. I have to manage the railway within that five-year funding agreement. When we identified that this additional funding would be valuable, with great support from the Department for Transport we got £250 million of additional funding, and I redirected £50 million from elsewhere to get the first £300 million done. We are on track to deliver that £300 million investment.

Q35 **Nigel Mills:** When did you identify that you needed to spend that extra £300 million?

Mark Carne: That was in the summer of 2016, or thereabouts.

Bernadette Kelly: I think you will recall that about that time the Secretary of State appointed Chris Gibb to work with Network Rail and GTR to identify what more could be done to ensure we were maintaining the performance of the railway. It was partly as a consequence of that work with Network Rail that this additional funding requirement was identified. It came through a very determined focus to ensure that every possible step was taken, by both Network Rail and the operator, to drive better performance on this part of the railway.

Q36 **Nigel Mills:** Okay. I was reading paragraph 3.14 of the Report, and perhaps I was being unduly cynical, but it implied to me that the only reason we found out that shrubs needed cutting back and track needed replacing was because somebody external came in and did some work. We expect Network Rail to know these things all along.

Mark Carne: This is just a small subset of the broader issue that we are dealing with in Network Rail—essentially, the underfunding of the railway over many years, which we are now addressing. I am very pleased that the statement of funds available, which has been announced by the Treasury for the next five-year period, is going some way to redressing this. We are going to see a significant increase in funding, not just—

Q37 **Chair:** Sorry, Mr Carne. I am aware that we can have a lot of discussion about the wider issues. Could you answer the questions, rather than talk about the Secretary of State's recent announcements? We are aware of that. We don't need to go through it all here.

Mark Carne: Chair, my point is that this is a subset of the problem that we are addressing across the railway as a whole. We will be spending more than £2 billion of additional funding on the railway routes that Thameslink runs on in the next control period because we are addressing the fact that we know that there has been underinvestment in the past on some of the critical assets that we have to maintain and renew.

Q38 **Nigel Mills:** What we are getting to is, did you—did the whole industry—miss the fact that, with increased passenger growth, more should have been spent on maintenance quicker? Was that increase a shock—obviously, there is an extra cost for infrastructure maintenance—or was it something you realised all along, and you just didn't spend money on it?

Mark Carne: I don't think it was a shock. It was recognised, and actions have been taken to address it.

Q39 **Nigel Mills:** Looking at Thameslink, we are spending £7 billion on this programme, and then a year before it is due to be finished, someone says, "Oh, God. We can't make these new timetables. We can't get 24 trains to run as we want, because the infrastructure around it isn't going to work. We need to spend £900 million to fix that to make this work." Doesn't it feel like it was a bit out of control, and that we didn't really understand the full extent of the work that needed to be done?

Mark Carne: I wouldn't accept that characterisation.

Q40 **Chair:** Would you like to have another stab at explaining why the £900 million wasn't identified until quite late on? Are you saying that that need was identified but there wasn't the funding available?

Mark Carne: We were taking, over a period of time, many steps to improve the performance of the railway. This is only one element of those steps, as I said. We have been working very hard over a number of years to attempt to improve the performance of this railway, as its performance has declined.

Q41 **Chair:** This is Thameslink 2000 we are originally talking about. It is now 2017, as Mr Mills highlighted at the beginning. It is quite late in the day suddenly to unveil an extra £900 million. We recognise that there are a lot of problems with rail infrastructure and that some of the changes that have taken place at Network Rail since it has come more into the public domain and since you have been there, but this is quite a large amount of money to come in at a late stage. Was it something that was identified earlier but was not funded at an earlier stage?

Mark Carne: This is not an increase in the funding of the Thameslink project. It is not project funding; it is a recognition—

Q42 **Chair:** But it is funding that has a pertinent impact on delivering the Thameslink project.

Mark Carne: It is a recognition of a subset of the increase in funding that the railway as a whole needs to achieve the level of reliability that we need. The overall increase in funding between the two control periods in these routes alone is £2.7 billion. We have been working on that for a number of years to make the case for that increase in funding, so that we can improve the reliability of the railway.

The point about Thameslink 2000, with respect, is an important point to make. The reason it was not delivered in 2000 is because it was considered almost the impossible project to deliver. It is an incredibly complex project. This is the biggest project that Network Rail has ever delivered and the most complicated, rebuilding Britain's fourth-largest railway station.

Q43 **Chair:** Some of us have been to see what is going on there.

Mark Carne: The infrastructure is going to be delivered on time, to the day, on 2 January 2018. That is a source of enormous pride to myself and the team that delivered it.

Chair: Mr Mills, do you want to try again?

Q44 **Nigel Mills:** We will try this. The answer we got a few questions ago was that this extra £900 million of work was needed to enable you to get 24 trains an hour into the core.

Mark Carne: Yes.

Q45 **Nigel Mills:** Then you said that that was completely separate from the Thameslink programme. The question is: should we have known much earlier that this work was required to enable the Thameslink programme to be effective and on time? Or could you not possibly have known? Or did you know and no one listened? Those seem to be three options here.

Mark Carne: I do not think it was reasonable to have known it at the time the Thameslink programme was started because, at that time, the railway was performing at a higher level and was consistent—

Q46 **Nigel Mills:** But could you have known much earlier than a year ago? Could you have known without having to get Mr Gibb to come and tell you?

Mark Carne: It might have been possible to have identified the challenge earlier. It is possible, yes.

Q47 **Nigel Mills:** That does prompt the question: do you know the condition of the rest of the railway? These things were not rocket science, were they? They were overhanging trees and track needing replacing. Do you do regular condition surveys of the railway?

Heidi Allen: Can I add something, given that I worked briefly in this industry? Asset knowledge was second to none. From a safety point of view, there should not be a nut or bolt on any part of the railway that you do not know about. With my little, though admittedly limited, experience I find it surprising to have something that suddenly cost this much at the eleventh hour.

Mark Carne: Of course we know the condition of our assets. We have a world-class, probably world-leading, asset monitoring system in this country, with people from all over the world coming to see how we manage it. We have the safest railway in Europe because we manage our assets so carefully and well. Of course, when you still have points and signalling systems that fail, it is possible to invest more to improve that reliability, and that is what we are now planning to do.

Q48 **Nigel Mills:** I have lost the consistency in the two answers. One: we could have known earlier. Two: we are world leading and, of course, we know the condition.

Mark Carne: We do know the condition. That does not necessarily mean that you have the funding to fix it and improve the reliability further.

Q49 **Nigel Mills:** So, you knew the condition; you just didn't know it would cost £900 million for it to be acceptable. Is that right?

Mark Carne: I can give you some of the specific examples. We have known the condition of some of the tunnels that we have had since Victorian days, because they are Victorian tunnels and have had water leaking into them since Victorian days. Now, we are going to take the decision to improve the drainage around those tunnels, so that the track that runs through the tunnels does not have the problems that it is causing.

In the past, because the overall resilience of the system was not so critical, we were able to run the railway satisfactorily with those kinds of issues. Today we can't, because the railway now is so intensively used that we have to make sure every part of it is operating at the highest level of performance. That is why additional investment is needed. It is like any machine; if you need to get a higher level of reliability out of it, you need to invest more in its maintenance and renewal.

Q50 **Nigel Mills:** So are we investing enough? Ms Kelly, are you going to release some more money for this?

Bernadette Kelly: We have set out very clearly a statement of funds available for control period 6: £47.9 billion. It is a very significant uplift on the funding that was available in CP5. It absolutely recognises the importance of continuing to invest in and maintain the quality and condition of our infrastructure. Absolutely, the Government has made a very clear statement of commitment to doing this.

Q51 **Nigel Mills:** Let us move on from the £900 million that we did not realise we would have to spend to make this work. We had to spend £440 million more on London Bridge than we thought. I have visited London Bridge. I accept that it is an incredibly difficult job that you have done very well, but should we not be a little concerned that, at the start of this, we did not realise how difficult and expensive it was going to be?

Mark Carne: To deliver a project of this scale within 8% or 9% of its original estimate some seven years later or so is an astonishing achievement. Mr Blanchflower can undoubtedly illuminate the Committee on the reasons for the cost increases incurred on London Bridge.

Simon Blanchflower: I am more than happy to do that. As you well know, having visited the station, it is over 180 years old. It is a Victorian station that has been expanded over time. It suffered quite significant bomb damage during the war, which was hastily repaired to get the station operational again.

While we did have record drawings, much of that was not sufficiently well documented in the record drawings we had, and it is not that easy to do intensive site investigations while the station is operational. Clearly there was a level of risk that was unknown when we lifted the lid off London Bridge and started the major construction works. The challenge we faced was—

Q52 **Nigel Mills:** Was that flagged up all along? Did you always say on this project, "Warning: we have no idea what state London Bridge is in or how much it will cost"?

Simon Blanchflower: There were always risks held within the programme around the asset condition and structure at London Bridge. The conditions and the complexity of some of the things we found when we lifted the lid off London Bridge were significantly greater than we had envisaged. When we started to do that and to demolish the station and get into the more detailed design aspects, that took longer. It was more complex, but we had a defined staging programme that we needed to maintain in order to minimise the impact on customers while we were doing those works. That was linking the construction of the station with the track work and signalling work around the station.

The various stages we have taken to rebuild the station were linked to a blockade with major signalling commissioning that took place around bank holiday weekends, Christmas and new year. There was a need to make sure we maintained that programme, and the acceleration that was needed within the station to maintain that was a key contributor to the cost increases that occurred.

It was always a balance between whether we maintain the programme as set out, and therefore minimise the disruption to passengers and the cost of extending the programme, or accelerate the works to make sure we can meet the overall schedule you set out. We chose to do the latter.

Q53 **Chair:** Did you ever consider just closing the station for a period? I know it is one of the busiest stations in London, so that is a big challenge, but was that ever a consideration?

Simon Blanchflower: There was a lot of planning work done in the period leading up to 2012, when we finalised the staging arrangements for the station. That considered a number of quite radical solutions, but none of those was acceptable, on the basis of the number of passengers that London Bridge has to handle.

Even at the start of the programme in 2007, there were 37 million passengers a year using the station. There are now 54 million or 55 million passengers a year using the station. Trying to disperse those passengers to other parts of London just was not feasible, hence the need for us to maintain the station open throughout the construction period, which has been a huge challenge for us.

Chair: We would all recognise that it is a big engineering and logistical challenge to deliver continuous service to passengers. We would put an acknowledgment of that success on the record.

Q54 **Nigel Mills:** Was there enough contingency to cover that risk?

Simon Blanchflower: Clearly not. There was contingency within the programme, but there was insufficient contingency within the programme to cover the need that was identified from the middle of 2014, when those concerns initially came to the surface, through to 2015, when as part of the overall Hendy review the additional funding was found to continue with London Bridge on its existing programme. Hence the increase in cost, which was authorised both internally within Network Rail and within the Department at the time.

Q55 **Nigel Mills:** Do you worry that we committed to a £5.5 billion capital project with that level of uncertainty about how to achieve a fundamental part of it? Wouldn't you have wanted to know at least a little bit more about how you could get the engineering at London Bridge to work and how much it might cost before we were locked into a very expensive programme?

Bernadette Kelly: Actually, I would say that on this programme we had a well-specified, planned and developed infrastructure project from the outset. Way back in 2007, when the project was formally committed to by the then Government, there had been a huge amount of work done—unlike, perhaps, some other projects you may have considered—to understand exactly what needed to be done and the complexity and scale of the work.

Obviously, it is true that we have none the less seen a cost increase but, as Mr Carne has indicated, in a project of this size, contextually, we are talking about something in the order of a 9% increase. I do not diminish the importance of that in any way, shape or form, but for something of such scale, complexity and difficulty it is not a completely extraordinary thing to have happened.

I maintain that we had good costings, a good development plan and a good understanding of the project from the outset. A particular set of challenges emerged around London Bridge, which Mr Blanchflower has explained, and as a consequence it was necessary to make some additional funding available. I do not think that undermines the overall narrative here, which is that this is a very successful project being delivered.

Q56 **Nigel Mills:** Let me be clear: we are talking £430 million of extra cost on London Bridge. It is a lot of money, and there were other options. If you had more accurately known how difficult it was and how long it would take, the choice would not have been, "Chuck a load of extra money at it or delay the programme." The choice could have been to phase the work differently and perhaps do it more cost-effectively. That is what we are worried about. Would that have been a possibility?

Bernadette Kelly: I think the whole point, as Mr Blanchflower has explained, is that we could not have known some of the factors arising from the nature of London Bridge station until the project had reached a certain point. It is simply not something we could reasonably have understood and costed into the project way back in 2007, some years before that was done.

Q57 **Nigel Mills:** But isn't it a bit odd that you would commit to a capital programme of £5.5 billion or so in 2007 and it is not until 2015 that you work out how on earth you are going to get through one of the biggest bits of it? We might think, "What have you been doing for eight years not to know what the state of London Bridge is?"

Mark Carne: The project is obviously a huge programme, with a number of phases in it. There was the Blackfriars station and the Farringdon station, and it was always designed that London Bridge, as the most difficult part of it, would be the last part. We were delivering a whole series of major projects and then we had to come to London Bridge, and it was then that some of the challenges Mr Blanchflower has set out revealed themselves.

It is a great credit to the team that, faced with those challenges and a very clearly defined programme, the work was reprogrammed to fit within it so that we minimised the impact on the travelling public of the new information and the changes that had to be made.

Q58 **Nigel Mills:** I accept that you have done a very good job to keep it on timetable to that extent. Standing back from it, though, do you think it is a strange way to plan a project—to go and spend billions of pounds on other bits and then, at the last, try to work out how you do the hardest bit? It would have been a bit embarrassing if you had got to London Bridge having spent £3 billion somewhere else and then thought, "Oh God, we can't do this!" Don't you do the hardest bit first, to at least know the answer?

Mark Carne: We have been here before and had a number of discussions about difficult projects. I have, in the past, described some of them as textbook examples of how not to run a project, but this one is a textbook example of how to run a project.

It has been a really successful project under the most challenging of circumstances. It has had some difficulties along the way, and it has caused disruption to passengers over a number of years. As Ms Kelly said, when you look at it in the round, this is an enormously successful project. It would be unrealistic to think that you could enter into a brownfield project of this scale and not find something unusual in the way that you do it.

Q59 **Chair:** I don't think Mr Mills was suggesting that you would not find something there, but it was which way round you chose to do it.

Mark Carne: Simon has been involved in this programme right from the beginning, so why don't you explain the sequencing of the stations?

Q60 **Chair:** Why did you not do the most difficult bit first? That is the question Mr Mills asked, and it is perfectly valid.

Simon Blanchflower: Because we needed to do significantly more planning around the London Bridge elements of it than around the Blackfriars and Farringdon elements of it. There were also challenges around finalising the scheme at London Bridge in terms of obtaining the final planning permission, which took longer.

Planning permission for London Bridge was obtained in December 2011, following quite an intensive period of discussions with Southwark to find a solution that worked within the context of that borough. A lot of development work was done, particularly around finding signalling staging and track staging that worked with the overall station staging. It is a hugely complex project to deliver, in terms of taking six sequential slices across the station and rebuilding it as you go.

Chair: So in effect, you are saying that if you had done it that way round, it would have slowed things down, by the time you waited for the first bit and all the permissions. We will leave that for now, but we might come back to it.

Q61 **Geoffrey Clifton-Brown:** With hindsight, when you were planning this project was there anything different you could have done to discover some of these unknown unknowns relating to London Bridge?

Simon Blanchflower: Probably little, in the sense that we—

Geoffrey Clifton-Brown: Are there any technical investigations you could have done earlier that you did not do?

Simon Blanchflower: The only thing potentially you could have done was—it is very difficult, because the way the station is constructed is that, in certain sections, you have arches upon arches. You have a base set of arches and another set of arches built on top of those. To get in and find the overall structural form of that is incredibly difficult when you have trains running over the top of it and the station fully operational.

With the advances in technology now, such as boring and putting CCTV cameras into hidden voids, there are potentially things now that were not there a number of years ago. We might be able to find things now that we would not have been able to at that stage. I want to emphasise that this was extremely difficult in terms of understanding the structural form of the station for when we commenced the demolition works.

Q62 **Geoffrey Clifton-Brown:** If you were planning this project again, what would you do differently? With the new science of optimism bias, do you think your optimism bias was big enough at the beginning, given the complexity of the project?

Simon Blanchflower: I don't think I would do anything differently in terms of the overall delivery structure. As an industry, we have looked further into our risk modelling around the delivery of major programmes like this, particularly where there are linkages between signalling, track and major civils works.

We now use something called "cause association modelling" to understand some of the programme challenges that potentially emerge initially in one part of the programme and how that migrates to another part of the programme. As a consequence of that, additional risk money has been allocated to the most significantly complex projects we hold. There has been developing understanding of that, and we are probably at the forefront as an industry in looking at some of that risk modelling work. That has only emerged in the last three or four years and was not available to us at the outset of the programme.

Mark Carne: We are constantly looking at new ways of surveying sites before we carry out work. The technology is changing very fast. For an unrelated project—all of our track renewals work—we now do aerial surveys with drones to actually measure the track, which means we don't need to put people out on to the railway to carry out the survey. Those aerial surveys are amazingly accurate as well.

Your question is right, and there will be things that we would do differently today; the emerging technology in surveying would perhaps have given us a better insight into some of the challenges that materialised.

Q63 **Geoffrey Clifton-Brown:** I want to come to Ms Kelly, because exactly the same parallels at London Bridge are present at Euston with HS2. Is your Department learning the lessons we found at London Bridge in relation to Euston, or will we find the same overrun of budget and time on HS2? After all, I know a bit about it because I sat on the Committee. The Euston project is one of the most complex engineering problems this country has ever faced. Are we learning the lessons that we learned on that project?

Bernadette Kelly: Your general challenge is perfectly fair and reasonable. We will absolutely look at all elements of the Thameslink programme to consider the lessons learned. Your point about there being parallels between London Bridge and Euston is right, I am sure. We will absolutely want to consider whether there is anything that we should reflect on from the experience we had at London Bridge when thinking about the future development of Euston station. The condition of that station and the challenges it might present are something I think Mr Carne is better placed to comment on.

Mark Carne: One of the ways we ensure that that occurs is the transfer of people. The director of projects for HS2, Jim Crawford, used to run the Thameslink programme. Indeed, one of the critical players who played such an important role in the development of this project is now working on the Euston programme within Network Rail.

We move people to the next biggest challenge job so that they take that experience with them, so that we can set the projects up for success. It is partly about technology, but a lot of this is about people as well—having the right people in the right jobs.

Matthew Lodge: It is worth adding that I have extensive discussions with my colleagues in the high speed rail group at the Department about what we can learn from all aspects of this project, from planning around Euston, implementing Euston and about rolling stock. There is lots of stuff that we are taking from this project—learning the lessons and learning good practice—that we are then looking to import into the High Speed 2 project.

Q64 **Geoffrey Clifton-Brown:** Thank you for that helpful answer, Mr Lodge. May I just follow that up? At the beginning of the hearing, Mr Carne or Ms Kelly made some play about the industry readiness board. I assume that that is specific to this project, but in terms of methodology, is it something you could take forward to HS2?

Matthew Lodge: In terms of the methodology that we are proposing, it is very similar to what Crossrail is doing; it is a very similar process that they are going through. We set that up as part of making sure we are ready for May and making sure we are doing everything we need to do as an industry to get ready for May. I think it was actually looking at other big projects of this scale. It is the kind of thing you would do on other big projects going forward.

Q65 **Bim Afolami:** You have kept very upbeat so far. Ms Kelly, I listened carefully to what you said, and it is Christmas, so we should try to be positive. We have already started to talk about what we can learn, in a positive way, for other projects. It is worth pointing out again that the cost increases here—roughly 9%—are, by the standards of Network Rail and the country generally, pretty good.

However, I am really interested in how we stop this happening in the future. Again, we are talking about Network Rail and Transport, but you could probably make the argument across lots of areas of the public sector; I am not just making the argument about Transport. Why is it that these cost increases always seems to happen?

In answering that, there will obviously be a general part to it, but by giving precise examples, could you explain how, on this particular project, the cost increases occurred and why? That would be very helpful to us as we make our deliberations.

Bernadette Kelly: There are two questions there. One is about the specifics, as you say, and what drove the cost increases, and the second is what that might tell us about other projects. I wonder if we might take the second question first because I think it will help to illuminate the answer. Although I am very happy to talk through the key elements of the £474 million cost increase, I think Mr Blanchflower is probably the person with the deepest knowledge on that.

Chair: So, Mr Blanchflower? We might come back to you, Ms Kelly.

Simon Blanchflower: We have already explored some of the issues around London Bridge station itself. There were also some additional costs in terms of signalling works at London Bridge that drove a small element of the cost increase. There was some construction price inflation, which was an element of it. The fourth key element was around the final cost for the traffic management system that we are deploying.

Q66 **Bim Afolami:** If I am right, that is the one that we thought was going to be nationwide but ended up not being so. In effect, Thameslink had to do their own. Right?

Simon Blanchflower: Yes.

Q67 **Bim Afolami:** On that, you have mentioned these different areas; thank you. First, could you explain that in terms of decision waypoints—where you were at point A, then point B, recognising what was wrong, and then point C, therefore, resulting in a cost increase? Could you just walk us through that in a precise way, using one of the examples that you mentioned?

Simon Blanchflower: Let us take the London Bridge station one, which we have explored in a little bit of detail already. From the middle of 2014, it became evident that there were pressures on the contingency that we had within the programme. We were seeing increasing risks emerging, which meant that we were having to draw down on the contingency we had.

That led us to explore what the main underlying causes of that were. That then led us, during the latter part of autumn 2014, to progress with a full bottom-up cost review of the London Bridge station elements to the programme.

It was timely, because clearly there were emerging pressures there. At that stage, to do a full cost review of that part of the programme was absolutely essential to understand the overall scale of what we were talking about. We kept the Department informed throughout that process.

When we got to the early part of 2015 we were starting to crystallise exactly what those costs were and, therefore, started to raise the formal paperwork, both internally within Network Rail but also more formally within the Department, to get the authority to cover that increased cost that was emerging.

That formal process was completed in Network Rail in early June 2015 and then it was agreed with the Department that that would form part of the review that Sir Peter Hendy was carrying out around the overall enhancements portfolio that summer, in terms of understanding how the overall management of the enhancements portfolio would be taken forward and how that additional cost would be absorbed and managed within the overall cash limits. Does that help to answer the question?

Q68 **Bim Afolami:** That is helpful.

Bernadette Kelly: The first part of your question, which I am coming to second, was more general: about how we stop the costs of major projects increasing once they are in flight. The first thing I would say is that we need to ensure that we do not commit to projects until we have a very clearly specified and well developed project. I know that is something Mr Carne feels very strongly about, given the history of some of the projects that Network Rail has been delivering.

So I think that, first, having a really well planned, properly specified, clearly designed project is absolutely critical and that we do not enter into projects on the basis of costings that are approximate or at a very early stage of understanding. That is the first thing I would say.

Q69 **Bim Afolami:** I recognise that you will choose to express this in your own way, but how does that fit when politicians come out with, "We're going to do this project," with the next question from journalists being, "What does it cost?"?

Bernadette Kelly: That is indeed a challenge that we do face—absolutely. One of the things that we have learned in the world of rail projects is that it is very important that we do not overcommit to projects on the basis of underdeveloped costings before we do have a properly specified project.

This is a key part of the different approach that we have introduced in CP5, and we will be taking it forward in CP6. We are now introducing far greater discipline into the level of commitment for projects, linked much more closely to the maturity of understanding the costs of those projects. That is absolutely the first thing we do.

I regret that there are always political pressures to say more, to promise more and to commit more. We have learned some lessons, and we are working hard to ensure that we minimise those sorts of project risks in the future. There is a host of other things I could point to.

Q70 **Heidi Allen:** That is good to hear, and refreshingly honest. I am interested—a little selfishly—in my constituency of South Cambridgeshire. When we overrun—relatively speaking it is a small degree, but it is none the less an overrun—we are talking big numbers, so it adds up. You are perhaps over-promising without proper costings and over-spending a bit. Is that the reason for what happened with projects such as Foxton crossing? I don't expect you to have all the detail—

Bernadette Kelly: I'm afraid I don't.

Q71 **Heidi Allen:** It is a project in my area that has been on the starting blocks, and Network Rail has been saying that it is going to sort it out for what feels like years. Finally, a couple of months ago, it finally said, "Actually, no. It's not going to happen. You need to fund it yourselves." Is it the small overruns and the lack of cost-grasp at the beginning that has led to disappointment for areas like mine, and other projects not happening?

Bernadette Kelly: I can't, I'm afraid, comment on the specifics of the project that you refer to. What we are dealing with is a certain amount of adjustment around the whole system of how rail projects are committed and entered into.

We are now trying to introduce a far greater degree of realism and understanding that projects can only be firmly committed to when we properly understand what the nature of the project is and what it is going to cost, and when we are confident that the funds are available to fund it. It may be that historically we have not had that discipline, but we are absolutely determined to introduce it now in the way we commit to and promise rail investment in the future.

Q72 **Chair:** The wider point that Ms Allen is rightly raising is about what gets deprioritised when things run over. You have given us a bit about how you would like politicians to be more disciplined, Ms Kelly—I think we would agree with you, even though we are politicians. Has anyone else got anything to add about what gets dropped down the list?

Mr Carne, in your organisation you talk about how you are going to absorb the overruns and the costs. Earlier, you talked about the £50 million that went towards the £300 million, which you found from other programmes. Is that from projects like Ms Allen's crossing, which is not going to get delivered? It is small, but important to local people.

Mark Carne: May I make a couple of important points here? I recognise the disappointment that is caused to constituents when we don't deliver on something that it has been implied we will deliver.

Q73 **Heidi Allen:** And the local economy as well.

Mark Carne: And the local economy as well—absolutely correct. That is at the heart of the issue. We shouldn't promise things we aren't confident we can deliver. As the funding of Network Rail has changed, we now have a much tighter cash ceiling. Basically, there is no more money, so if a cost increases somewhere on one programme, something has to give somewhere else. That can lead to disappointment, because we have to reprioritise and say, "Unfortunately, we can no longer afford that project that we previously thought we could afford."

What it also reveals—level crossings are a very good example—is that we are far better today at taking a proper risked view about how we achieve the greatest safety benefit for the amount of money we are going to spend.

Heidi Allen: Those are the fresh arguments that have just been put to me on that very subject.

Mark Carne: It is a really important point, because obviously I want to try to achieve the greatest level of risk reduction for the amount of money we can spend on level crossings, but that can lead to quite difficult conversations with the communities that are affected. I recognise that. It is important, therefore, that we don't over-commit, while there is still a certain level of uncertainty about whether we will actually have the funding or the capability to deliver.

Chair: I am going to bring Ms Allen back in, and then very briefly Mr Snell and Mr Afolami. I just want to alert Committee members and witnesses that there is a possibility that we may be called to a vote. We are never quite sure whether it is one or four, so if we can do the questions and answers quickly, maybe by a miracle we will get through it before there is a vote.

Heidi Allen: On that particular point, I am fine. If others want to come in in relation to that, they should go first.

Q74 **Gareth Snell:** Very briefly, following on from Ms Allen's excellent point, how many projects that you have in the pipeline are not fully funded and therefore are potentially at risk of being dropped, even though they have been announced, because of over-commitment elsewhere?

Mark Carne: When we did the big reprogramming in 2015 was when the full consequence of this change in the funding arrangement and the immaturity of the project portfolio in CP5 became apparent.

We then did a complete reprogramming. By and large, we have been able to stay within the commitments made at that time. Of course, when you are right up against the buffer, there are always going to be some fluctuations and disappointments but, by and large, we have managed to stay within that ceiling.

The really important point going forward is that, because the funding of projects will be different and we will only seek funding for projects when they have adequate maturity and confidence to deliver, in a way projects will be ring-fenced. We will reach that point, decide to do it and then the project will go.

That will give a much greater degree of confidence to people, but it will require politicians and the public to acknowledge that, before that point in time, we have got a portfolio of projects and we are all working very hard to identify which are the best ones, and none of them is guaranteed.

That is challenging. It is very challenging for you and it is challenging for us, but it is the way to ensure that we give you the confidence that, when we say we are going to deliver a project, we are going to do it.

Chair: Thank you; we watch your reprogramming with interest.

Q75 **Bim Afolami:** I want to take you back to 2013 and the previous report of this Committee. I was not in the House then. A lot of work at the time of that report was done to ensure that the phase 2 budget had been properly scoped and worked through. What happened subsequently that meant that that was not quite right?

Simon Blanchflower: Effectively, we started the construction work at London Bridge and explored the issues that we discussed earlier. Although, I think it is worth recognising that, since 2015, the programme has been well managed. In recent weeks, we have been able to start to release some of the contingency funding that was allocated at that time. I think it is in the Report: we have recently released £23 million back into the portfolio pot through contingency that we now no longer need, because of the successful progress of the programme.

Q76 **Bim Afolami:** That is helpful. I have been thinking about contingency. You mentioned, especially in relation to London Bridge, the use of the contingency. How exactly do you come up with a contingency? How do you do it? Do you have a budget of, say, £100 million and say, "Let's just add 10%."? I have done projects before in the private sector, and that is often how it works. Is that how you do it?

Simon Blanchflower: It depends on the stage of the programme you are at. If we are talking about 2013, by that stage we would have had a fully populated risk register for each of the elements of the programme, so that would have identified, in terms of cost and schedule, specific risks that we had identified during the development phase of the programme.

We would have identified a cost range against each of those risks and the likelihood of that risk emerging. That would have been modelled, using a Monte Carlo-type model that runs a number of iterations through a model. That would generate a curve that tells you the most likely level of contingency you are going to require.

Q77 **Bim Afolami:** What was it at the first phase?

Simon Blanchflower: I haven't got the figures immediately to hand from the set at that time.

Bernadette Kelly: I just want to add a more general point. There is a body of considerable technical expertise that sits behind decisions that are taken about contingency provision for these projects. As Mr Blanchflower has indicated, it will depend in part on the nature of the project, the state of development it is at, the complexity and certainty associated with it. But certainly, within Government, within my Department when we are looking across our portfolio of projects, we will look very hard at that body of expertise. We will take the advice of experts such as the Infrastructure Projects Authority and ensure that the level of contingency that is set for each project is appropriate to that project.

Q78 **Bim Afolami:** So, the IPA are involved in each project, setting the contingency.

Bernadette Kelly: What they are involved in is undertaking regular reviews of the development of projects, to test all aspects of our delivery confidence. That will include asking fairly sensible questions about budgeting and contingency.

Matthew Lodge: It is worth adding that some of that contingency, for example in the programme for London Bridge, has been related to the big possessions that we have had, and achieving those big possessions on time. After each one of those, my team—Mr Blanchflower will hopefully back this up—keep the pressure on him to return money to the portfolio, so that we are sensibly managing that contingency pot to allow other projects to go through, or give money to other projects within Network Rail's portfolio.

Sir Amyas Morse: The IPA does not review every project, does it? You did not mean that.

Bernadette Kelly: No.

Sir Amyas Morse: And they don't stay with the project all the way through the life of the project, either. So I would just like to intervene, before you pass on from that—that is not what you were intending to say.

Bernadette Kelly: No, that is not—but very large projects, naturally, would be of interest to the IPA.

Sir Amyas Morse: But not for the whole of their life.

Bernadette Kelly: No, not at every stage. That is correct.

Sir Amyas Morse: It is not internal control.

Bernadette Kelly: No, it is not.

Chair: Thank you. That is a helpful and important clarification.

Q79 **Bim Afolami:** The last one on this: what is the range, then, of the contingency that you have applied on this project—in percentage terms of the total?

Chair: Ms Kelly, you said that you look at each project individually and you work it out separately, so that would suggest that you would have a range of contingency—

Bernadette Kelly: I can tell you what the current contingency is. I might want to talk to my colleagues—

Q80 **Chair:** Across the range of projects in the Department—so what is the range?

Bim Afolami: Yes, does it go from 5% to 30%, 10% to 40%?

Bernadette Kelly: Some will have higher than 40% contingency, actually. I can't give you an exact number, but I could very happily find that information and provide you with some figures.

Q81 **Chair:** Just give us an assurance that you are looking at them all individually, rather than this 10% figure that—

Bernadette Kelly: No, we absolutely do not pick a random number and apply it in all cases. We apply it on a case-by-case basis.

Chair: It would be helpful to have a list by project.

Q82 **Geoffrey Clifton-Brown:** Ms Kelly, I think the Treasury are working on new models of optimism bias, whereby you start off with a high optimism bias for the unknowns, and gradually, as they become knowns, the bias reduces, so that hopefully, at the end of the day when the project actually starts, you are spot on budget. Are you, as the Department that is the client, beginning to refine some of the ways you look at these contingencies?

Bernadette Kelly: All I can say is that to the extent that better practice and understanding is being developed in the Treasury or through the IPA, then we, absolutely, as a Department with a large portfolio of major projects, will want to ensure that that is embedded in the way we are taking our portfolio forwards.

Q83 **Heidi Allen:** We have talked a lot about trains, track, stations—all the big infrastructure that had to be fixed or improved for this project. I want to talk about how you then take that and put these new enhanced services on top of that. It seems from the Report that perhaps the planning for that has happened a little late in the day. I am interested, Bernadette—I do first names, sorry—in what your view is on that. Did you plan how you would bring this thing to life in practical terms a little bit late in the day? I think it was July-August '16 before you started looking at this.

Bernadette Kelly: Can I start, and then I am very happy to see whether Mr Lodge or, indeed, Mr Carne might have something to add. One thing I would say in general, which is a positive aspect of this project, is that right from the outset it has been governed by a programme board, which has included all of the interested parties in the industry.

We very consciously—and this hasn't always been true, but in the case of this project—sought to take a very integrated view of how the project is being delivered. That of course has been in part because right through its delivery it has been having real-terms impact on passengers and on how people experience the railway; so I think by and large this is a project which has demonstrated how it is possible to do that well.

What we have then done, I think, in the last year is really gear up that operational readiness preparation, through the Chris Gibb-chaired industry-wide body, to really ensure we have now got an even more accelerated and enhanced progress.

Q84 **Heidi Allen:** Is that not too late? Is that normal? It seems quite late in the day.

Bernadette Kelly: I think one can always argue we might have started it a little earlier. I would not necessarily claim that it would have been possible to do that. Equally, though, I think that this is by and large a pretty good example of planning in advance. As I say, it was not from a cold start. It was something that sits along the programme board, which has been there right through the project, thinking about some of these issues.

Matthew Lodge: It is worth being aware that quite a lot of work on operational readiness was embedded within the programme as a project. We have had an integrated programme board established since 2008-09. That has all the senior leaders in the project involved in it: the key players, the key parties. That is supported by a system integration team that looks at how we are going to bring it all together.

What we concluded was—I had various discussions with the industry in the summer of 2016—how do we turn this project, this building thing, into the day-to-day operational railway that we need it to be? So the programme, actually, was building the programme. That was where our focus was. We concluded that it probably needed a bit more of a view, because lots of other operators and lots of other bits of the network are impacted by this.

Q85 **Heidi Allen:** That is the point. It is not just the initial project board.

Matthew Lodge: We set up the industry readiness board chaired by Chris Gibb. We have inside of that an independent assurance panel chaired by Chris Green, former head of Network Southeast. That is all trying to say the programme is delivering all that it is trying to do, but alongside that we need to turn it into a day-to-day operational railway delivering seven days a week across the south-east, and how do we make that happen? That board has been remarkably successful in what it is doing. It has brought a new focus to other bits of Network Rail—not necessarily Mr Blanchflower's programme bits, but other parts of the route.

Q86 **Heidi Allen:** It's turning capex into opex, isn't it? So you don't feel it is too late in the day.

Matthew Lodge: We could have done it a little bit earlier, but the timetable development was going on at the same time, so a lot of the work getting ready for the operational readiness board was in train from GCR. We might have done it a little bit earlier. I would not have said you would get a huge amount of benefit by bringing it a lot earlier, partly because if you bring it a lot earlier, it seems a bit distant. There is an argument about whether it could be a little earlier.

Q87 **Heidi Allen:** But on 2 January it will all be great.

Matthew Lodge: I am very confident, and I am sure Mr Blanchflower is. I went to London Bridge this morning to have a look at it. It is all getting there. It looks quite impressive now. I am very confident about 2 January. Then we have got various steps to introduce the services. As a board we have been thinking about how to have a rehearsal day. How do we try and think about getting ready?

Q88 **Chair:** Are you going to have a rehearsal day?

Matthew Lodge: We are looking at how we have a rehearsal day sometime in the spring. How is it going to work around getting 24 trains an hour through?

Q89 **Chair:** With both 2 January and the rehearsal day, can you give any assurance to passengers using London Bridge station about what level of disruption they will face? You have both guaranteed it will open on 2 January. Are you confident, Mr Blanchflower, that there will not be any overruns on engineering work?

Simon Blanchflower: I am confident about 2 January, yes.

Chair: Fine. Everyone is nodding. You have laid your cards on the table.

Bim Afolami: You will have such a good Christmas and new year.

Chair: If it is not there, we will pull you back in on 3 January to talk to you about it.

Simon Blanchflower: It is a really intensive 10-day blockade that we have got starting.

Q90 **Chair:** Exactly. They have overrun in the past.

Simon Blanchflower: We have a highly developed level of confidence in terms of coming out of that blockade successfully with the reintroduction of the Cannon Street services stopping at London Bridge.

Q91 **Heidi Allen:** This is the nervous part: the handover of the project to reality.

Mark Carne: There is still a lot to do. I have every confidence. I have a really fantastic team working on this. They have delivered every bank holiday programme on London Thameslink over the last four years or so without fail, but it is still tough. Let us be under no illusion that we are asking thousands of people to work in very difficult conditions. Who knows what the weather will be like?

Chair: A note of caution!

Mark Carne: I think it is right to say it is a great programme. It has been a hugely successful programme. I have every confidence that it will be there on 2 January.

Q92 **Chair:** What about rehearsal day, Mr Lodge? What will that mean for passengers?

Matthew Lodge: What we are looking at is how to get staff trained. We are moving to a railway that feels a bit more like the underground in terms of the central core.

Q93 **Chair:** How will staff see that? Will that affect their journey on rehearsal day?

Matthew Lodge: We are looking at trying to intensify the level of service for periods of time to check the train dwell times. We need the train doors open for 42 seconds in the core. How do we get all that to work? We are trying to do a rehearsal day sometime in the spring. It might not be a full hour; it might be a half hour.

Q94 **Chair:** Will staff be trained like Japanese staff on the bullet trains? Will they just shove Londoners on board?

Matthew Lodge: I am not sure about that yet.

Chair: Not yet—all right. We will watch for that one.

Q95 **Heidi Allen:** This question is at a slight tangent, I suppose. We met this point of triumph and delivered a fantastic project, with real cross-industry working, and then we heard from Chris Grayling that Thameslink is now going to be ripped up back into three separate parts and the future is now all about track and train together as one operator. I am interested in your views, both Department-wise and Network Rail-wise, about how things are going to change. Is it going to be better?

Bernadette Kelly: I think your first point relates to what has been said about the future shape of this franchise. It is important to recognise that we designed the franchise in the way we did—you will no doubt come back to this in the new year when we have the NAO's Report—to enable the delivery of this extremely complex project. It was always envisaged that there would be a point after the project had been delivered when it might make sense to split the franchise into slightly more manageable operations.

Q96 **Heidi Allen:** So we shouldn't be surprised by it.

Bernadette Kelly: I don't think you should be particularly surprised about it. Through all of this—the delivery of this programme, certainly—we have learned lessons about closer industry integration and working, which will stand us in very good stead for thinking about the future shape and nature of those franchises.

Q97 **Heidi Allen:** I am interested in Network Rail's view. Returning to my area, I look at East West Rail, and it looks like that is going to be built with a very different model again. How does it feel from the Network Rail side of the fence?

Mark Carne: I am very supportive of the bringing of track and train teams closer together to create a more joined-up team. That has been at the heart of Network Rail's transformation strategy over the last few years.

We have devolved our business into eight different geographical businesses so they can work much more closely and collaboratively with train operating companies servicing the needs of those passengers. That is why we have created very deep alliances in certain parts of the railway. In Scotland, we have the ScotRail alliance, which is between Abellio, ScotRail and Network Rail, and is run by a Network Rail managing director. It is important to understand that, beneath that alliance, you can still have separate organisational structures.

Train operations is different. It has a very different balance sheet structure and risk-reward equation to the infrastructure provider. This is not about creating one company. It is about bringing the elements together so they work together in the interests of passengers. Core to that is creating aligned incentives so that both parts of the railway are focused together on the same things, which are what passengers really want. That has been at the heart of a lot of the changes we have been driving in Network Rail. I am really encouraged that that is now the direction of travel within Britain's railway. I think it will really make a big difference over the years ahead.

Q98 **Heidi Allen:** One final point. What does it mean for HS2? What have we learned from this delivery project? Things may look different in the future, so what is that going to mean for HS2?

Bernadette Kelly: What we have already set out for HS2, in terms of its early-stage operation, is our plans for the west coast partnership, which will bring together the train operation services for west coast and the early development of the initial services to be provided on HS2. We have done that consciously to create a really close working relationship between whoever is successful in bidding for that franchise and HS2 Ltd as the new railway is constructed. In all of those different ways, we are learning the importance of ensuring that there is alignment between an infrastructure provider and the provision of train services.

I very much agree with what Mr Carne says. I think we have been very clear in the document that was published last week that alignment of track and train doesn't necessarily mean—indeed, won't generally mean—creating single corporate entities to do that. It means looking at different and creative ways of creating partnership and alignment between those responsible for managing the infrastructure and those responsible for running the services—all in the interest of providing something that the passenger recognises as a better train service.

Q99 **Chair:** When you talk about different and creative ways a chill goes down my spine at the prospect of too much difference and too much creativity.

What about accountability? Perhaps Mr Carne can explain who in the ScotRail example is accountable if something goes wrong on that? Is it the Network Rail director who has overseen the whole thing?

Mark Carne: Yes. That is a really important point. Having a single person who feels accountable to the public for the performance of that railway and is able to speak with one voice about the performance of that railway is actually at the heart of why this is important. It is amazing, when you get the teams together in one room and they are working as one team, how much more quickly and effectively decisions are taken.

Heidi Allen: There is less passing the blame as well.

Mark Carne: Yes, you get less of that. There will always be some of that because of the contractual structures between the different entities, but it is amazing how much more can be achieved when you are working collaboratively together.

In other parts of our railway, we have created route supervisory boards—independently chaired boards with a transport focus representative on them to hold to account the track and the train elements of the railway and ensure that they are working together in the interests of passengers. That is a very exciting development that we have put in place in a number of places and that I think will really take us to another level.

Chair: I chaired a similar board for Transport for London and all the various rail bodies at the time in 2000, so it is not brand new, but I think Ms Allen is right about who points to who and blames who. We are moving on to other areas. Ms Allen, do you have any further points to make?

Heidi Allen: No—that’s lovely, thank you.

Q100 **Bim Afolami:** I represent Hitchin and Harpenden in Hertfordshire. You would be surprised by how many constituents contacted me about this hearing—we are being watched. Can you reassure commuters and passengers across Thameslink that after this is all done, they will get not just more frequent trains, but trains that are at least as fast as those they currently have going into the centre of London? There is a bit of confusion around that.

Bernadette Kelly: The answer is a straightforward yes. The entire project is predicated on more capacity and faster journey times.

Chair: It’s 42 seconds a door at London Bridge, so people have to be on and off quickly. That’s your message.

Q101 **Bim Afolami:** So there will not just be an increase in capacity; journey times will also not be negatively impacted.

Bernadette Kelly: Yes.

Bim Afolami: Perfect.

Chair: We have finished before the Division, so that is a relief. Thank you very much for your time. As ever, the transcript will be up on the website in the next couple of days. As we warned you, Ms Kelly, we will be returning to the franchise issue and working with our sister Committee on that. Our report is now likely to be out in the new year, because we are quite close to Christmas. Thank you very much for your time.