Transport Committee

Oral evidence: Rail infrastructure investment, HC 582

Monday 26 March 2018

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Watch the meeting

Members present: Lilian Greenwood (Chair); Steve Double; Huw Merriman; Grahame Morris; Graham Stringer; Daniel Zeichner.

Questions 284 - 389

Witnesses

I: Joanna Whittington, Chief Executive, Office of Rail and Road; John Larkinson, Director of Railway Markets and Economics, Office of Rail and Road.

II: Mark Carne, Chief Executive, Network Rail; Jo Kaye, Managing Director, System Operator, Network Rail.
Examination of witnesses

Witnesses: Joanna Whittington and John Larkinson.

Q284 Chair: Welcome, and thank you very much for coming along this afternoon. For the record of our proceedings, would you introduce yourselves?

Joanna Whittington: I am Joanna Whittington, the chief executive of Office of Rail and Road.

John Larkinson: I am John Larkinson, director of railway markets and economics.

Q285 Chair: Thank you very much. We will be looking at everything that has happened in CP5, as well as looking forward at CP6. As an opening question for you, Joanna, how does the Office of Rail and Road measure its own success—how well it has operated—as the economic regulator of railway infrastructure?

Joanna Whittington: At a high level, we really want what Government and industry want for the rail industry. We want a safer railway; we want better customer service; and we want value for money for taxpayers and funders. If we just measured those outputs, we would not separate what difference the ORR has made as opposed to the industry, so we measure our success in two quite different ways.

The first is to look at individual project or intervention level, to see whether that has made a difference. A good example is the work we did on compensation in 2016. In response to concerns that passengers were not sufficiently aware of compensation, we carried out an investigation. We made a number of recommendations about improving transparency, improving the quality of websites and making the process simpler. We repeated the analysis a year later and found that 10% more people who were eligible to claim did actually claim. We felt fairly happy that in that individual intervention our work had made a difference. The repeating of a question one year on can demonstrate the changes that we would like to see.

The other area where we look to measure our success is around the influence that we can bring to bear in important decisions. In that context, I would cite the work we did last year in support of the statement of funds available and, relevant to this inquiry, in terms of Network Rail’s funding. The Government were asked to commit to a five-year funding settlement in June but did not feel that they had the information available to do that at the time, so we carried out three very specific pieces of research.

First of all, we published a consultation on our view of the causes of inefficiency in the previous five years. We then had an industry seminar where we brought Network Rail, train operating companies and, importantly, the supply chain into one room to have one conversation
about what they thought were the causes of inefficiencies. We think it is so important to understand that, to make sure that we do not repeat the mistakes in CP6.

Finally, we commissioned a piece of work. We asked Nichols, as independent reporters, to look at the business planning process that Network Rail had under way, and say whether or not they thought it was a robust basis on which to produce business plans as part of the review. As a result, in part, of that, Government felt sufficiently confident that in October they were able to commit to a statement of funds available and announced £47.9 billion of public expenditure for the railway.

As I said, there are two ways in which we think of our success. There is the very narrow way: has that intervention made a difference? Separately, are we actually influencing the decisions that we want to see and that fulfil our strategic objectives around a safer railway, with better customer service and better value for money?

Q286 **Chair: In today’s session, we will be assessing the response to the problems of CP5. They have been well documented and spoken about over a long period. It will relate to yourselves and Network Rail. What is your assessment of the ORR’s performance in CP5? What have you done well and what are the things where you think lessons require to be learned?**

**Joanna Whittington:** An area in which we did well was to press Network Rail on putting in place measures to improve its asset management capability. We are beginning to see the benefits of that now. We had specific requirements to develop the capability of planning from a bottom-up basis and improving decision-making tools. There was the introduction of ORBIS, which is a system that allows those who are planning to have instant information on the quality and condition of the assets. There are a number of other factors in that asset management piece, all of which led to us wanting them to achieve excellence in the AMEM model. We are now beginning to see the benefits come through in the continuous plans that form part of the CP6 determination. That was an area of real strength and focus from the Office.

One of the areas that, with the benefit of hindsight, was not such an effective decision was around efficiency. We reached a view that Network Rail would be able to achieve efficiency numbers of about 20%. In practice, that has not taken place, for a number of reasons. We have very much changed our approach to efficiency in terms of how we are going to challenge Network Rail through this settlement. We are also in the process of developing a very different approach to our ongoing monitoring of efficiency as a result. Rather than just being in a position of saying, “Oh, they have not delivered efficiency,” what we are looking to do this time around is to put in place leading indicators that give us confidence that they will be able to deliver efficiently. That is a change in mindset. We are not just looking back at what went wrong but trying to
provide stronger incentives to do better going forward. It is another learning for us.

Q287 Chair: Do you think the failure to achieve the efficiencies set out by ORR was partly an ORR responsibility and failure?

Joanna Whittington: The failure was to recognise that we were being very backward-looking in our monitoring and were not providing the right ongoing incentive to deliver efficiency. It is the case that Network Rail’s transition from a body, a long time ago, as Railtrack gradually fully back into the public sector, and the process of reclassification that took place after the determination was settled but before the control period started, also created other problems. There were a number of other causes of inefficiency that we brought out in our document in the summer, the most significant of which was just not being ready for the first year of the control period.

John Larkinson: It was a really big issue for us. We could have started the control period in a different way. We let Network Rail enter the control period making its own plans. We were not monitoring the plans before the control period. One of the big lessons we have learned from this is about transition between control periods.

We are looking now at Network Rail’s plans for the start of the control period. For example, is it putting the necessary procurement and contracts in place to make sure there is no hiatus at the start of the next control period in terms of its letting work? That is where we probably did not get involved in that sort of level of detail before. I think that is a real lesson learned for us.

What we are intending to do is publish information about Network Rail’s progress towards the start of the next control period. If you look at the figures for what Network Rail planned to do and what it actually did, in terms of the volumes of renewals work, all the main volumes of renewals work were between minus 10% and minus 60% lower than planned in the first year. With better leading indicators, we think that could have been anticipated. That is something we are going to do differently this time.

Q288 Chair: We will come back to the issues about the transition between control periods in our later questioning. In our last evidence session, we heard from Professor Smith. He suggested that the bottom-up approach to regulation, through scrutiny of Network Rail’s plans, would be enhanced by more top-down regulation—for example, by comparing Network Rail’s costs and performance with railways overseas or other regulated sectors. Do you think he is right on that score?

Joanna Whittington: It is about using a range of different techniques. John can talk about some of the techniques we are using in a minute. The really exciting thing about this control period is the opportunity that we have, for the first time, to make comparisons between routes. That is
something that has been open to other regulators for a number of years in gas, electricity and water. For the first time, we will be able to do that.

The reason why that is so important is that it gives us an opportunity to set a really challenging target, and one that we know is going to be deliverable, because somebody else is doing it. There are two elements. First, can we do anything econometrically? That was implied by Professor Smith’s questions. It is early days, because we have only had two years of routes and there are only eight routes, so there are not that many data points, but I very much hope that by the next control period we will be able to do something in that vein.

We can already see the difference, because we have business plans with different approaches in them. Instead of just having a theoretical conversation about how you can do better, you can take very specific examples and say, “On the list of things they are looking to achieve from an efficiency point of view, route A has chosen to adopt this approach but route B has not. Why?” That already starts a much better and more robust and challenging conversation. There is a step change in what we can do, merely by comparing the different businesses.

I will hand over to John just to tell you a little bit about—

Q289 **Chair:** Before we hear from John, I appreciate what you have just said about Network Rail route devolution providing the opportunity for better scrutiny, but wasn’t that Network Rail’s response to what was happening rather than the ORR’s? Isn’t that just you reacting to what they have done rather than you using your power as a regulator to try to ensure some kind of top-down regulation?

**Joanna Whittington:** For a long time, we have been an advocate of Network Rail’s transition to routes and, in particular, the establishment of the system operator. It is the responsibility of the company to structure itself in the way it thinks is the best to deliver the outcomes that we want as a society. We have been strongly supportive all the way of Network Rail’s transition to routes. That is not just because of the comparative element, which from a regulatory point of view is really helpful, but because it creates much more manageable business units that reinforce the line of sight between Network Rail and its customers, who, for the avoidance of doubt, are not the regulator, but the passengers and freight customers who use the railway every day.

Q290 **Chair:** John, in your response, I would be interested if you could address the issue of comparators, not in the UK but overseas comparators, and the way in which that can be used to discover whether Network Rail is operating efficiently or not.

**John Larkinon:** We have done this in the past. If you look back through the work that ORR did some years ago, we actually used to rely quite heavily on international comparisons. In the last periodic review we did quite a lot of work on international comparisons. The issue was what
you made of the information you got. If the information showed, for example, that Network Rail was X% more inefficient than another country, there were often debates about which data that came from and how reliable it was. Even if you believed the data, the question for us was, how much more efficient could Network Rail become over a given period of time? That is not necessarily the same as, what is the gap between Network Rail’s efficiency and another country’s efficiency?

We found that trying to use aggregate level international comparisons was quite difficult. That is not to say that there is no benefit from international comparisons. Network Rail spends a lot of time looking at processes used around the world to see if somebody has a better way of doing things than the company has. I think that is entirely right.

It is also the case that we still use sector comparisons. We do not just compare Network Rail entirely by itself. For example, in part of Network Rail—say, the support functions of IT and finance—how does Network Rail’s efficiency compare with other sectors? We make use of information such as that. As Joanna was saying, we make use of a range of sources, but we have found aggregate international level comparisons quite difficult to use.

The final point is about ownership of the efficiency plans. What we see differently now at route level is that individual route managing directors have created their own efficiency plans, which they believe they own. You might say whether they are too high or too low, but I do not think that an international comparison, “That’s the reason why your efficiency should be this rather than that,” generates the same sense of ownership, commitment or indeed deliverability.

Q291 **Graham Stringer:** In previous inquiries, we found that the access charge for freight was between two and three times higher than the international comparisons. What is it at the moment? Isn’t that a meaningful comparison?

**John Larkinson:** In terms of freight charges, in the past we have been in a debate about the movement in charges over time. When freight operators and freight customers come to see us, it is frankly less about comparisons across different countries that they make representations to us; what they are concerned about is the profile charges over time. Are they going to go up by a certain amount or not? That is the area where we spend the most time. We do not spend a lot of time making comparisons of charges across countries. There is a particular method for calculating freight charges, and it is based on freight costs in the UK. Most of the discussion we have had with the industry has been around understanding those underlying costs, how they are translated into charges and what that implies for charges over time.

Q292 **Graham Stringer:** I cannot remember the name of the report, but the man who used to run British Airways did a report where he made a big issue about international comparisons of freight charges. Obviously, year
on year, customers look at what they are charged. If it is going to be less
than last year, they are probably happy; if it is going to be more, they
are probably unhappy. When you are looking at the system as a whole,
do you not think it is a reasonable comparison to get access to the French
or German system, if it is only half the price it is here?

**John Larkinon:** The issue is that for certain types of charges, called
variable charges, the legal requirement is that you pay costs directly
incurred. It is the costs on the UK network that you pay. There is then a
question about whether you pay further charges to try to cover some of
the wider costs of the infrastructure. There is a very specific legal test
around that; it is called the market can bear test. To some extent, what
we do is constrained by the framework in which we operate.

The other factor is that, ultimately, if there is a set of costs and they are
not paid by, say, freight operators, they have to be paid by somebody
else. The costs do not go away. There is also a public policy question
about who wants to pay for which cost. That involves Government
decisions. I understand the point of your question, but it has not proved
to be the most relevant factor in the discussion we have had with
industry or Government about freight charges, in my experience over the
last couple of years.

Q293 **Graham Stringer:** In answer to Lilian, you mentioned that one of the
issues at the start of control period 5 was a change in the designation of
Network Rail from private to public, so that they could not do their own
borrowing. Can you fill that out a bit and explain in detail what problems
it caused?

**Joanna Whittington:** The situation that had existed before was that
Network Rail was able to raise any money that it required on the public
debt markets. Following reclassification, it was given a fixed debt limit by
Government, which included some headroom, but applied capital
restraints to Network Rail in a way that arguably it had not faced before,
and perhaps should have faced before. The effect of that, together with
its poor start— not being ready for it in the first year of the control
period—created a cycle of re-planning and lower volumes, which
increased unit cost and repeated itself. It created a financial problem for
the company that meant that CP5 has been quite a challenging
environment.

Q294 **Graham Stringer:** What was the driver for that restriction? Was it
overspend? In a sense, there should have been more headroom, because
the Government find it cheaper to borrow than Network Rail would have
done on the open market. What drove that restriction?

**Joanna Whittington:** It was a Government decision to put the
borrowing limit in place. Weaning the company off a position where it
could raise more and more money was always going to be challenging for
it. Doing that in an environment where it was already struggling to
deliver against its plans made the situation worse. A combination of
events that took place in the beginning part of the control period created the cycle of re-planning and financial constraint that we have seen throughout CP5.

Q295  **Graham Stringer:** Last week, we had the RMT here. They wanted to put you out of a job, really. They said that they thought there were too many people influencing you, that you were not strong enough as a regulatory body and that the Minister should do the job. How would you respond to that criticism by the RMT?

**Joanna Whittington:** To be very clear, the Secretary of State is responsible for appointing ORR board members, but, once we are appointed, the board members exist to take decisions against a set of statutory functions. We can be legally challenged on those decisions. Our board members take very seriously our independence from Government and from the industry that we regulate.

There are a number of decisions where it is very important that we exist because of that independence. Part of that comes down to monitoring Network Rail. Independent of the industry, we are able to give confidence to funders and stakeholders, and more broadly to passengers and freight customers, about whether Network Rail is delivering what we are expecting it to deliver.

There are one or two decisions where it is really important for future customers that we exist. For example, every time there is a periodic review, there is a process of matching. Have the Government given sufficient funding to deliver what they expect the Network Rail settlement to include? In effect, do the SoFA and the HLOS match? That is an important protection for future consumers. It prevents Government from saying, “We want the Network Rail company to deliver all of this, but we’re not prepared to fund it.” There is a really important role for an independent monitor, not just for current consumers but also for future consumers.

Q296  **Graham Stringer:** What about the point RMT made about too many bodies influencing you? Do you accept or reject that?

**Joanna Whittington:** Too many bodies seeking to influence the decisions we make?

**Graham Stringer:** Yes.

**Joanna Whittington:** The nature of the decisions we make, in particular around access to the network, means that a lot of people are interested in who has access, whether it be train operating companies, franchising authorities or customer representative groups. As I said at the beginning, the decisions we take are taken in accordance with our statutory functions and are open to legal challenge. They are quasi-judicial in nature. I just observe that we continue to take those decisions, and there is a mechanism for challenging us if people think they are wrongly taken.
Graham Stringer: You have two objectives that might be seen as contradictory. One is to ensure that Network Rail is as efficient and effective as possible. The other one is to get resources for the railway. How do you balance those two objectives? One is asking for more money and resources, and the other is saying, “Use them efficiently.” They can often be in conflict.

Joanna Whittington: I can see theoretically how that is the case, but let me start by explaining how the beginning of a review takes place. At the heart of a really good settlement determination for customers is a good-quality strategic business plan that brings together three things. It is clear what customers and passengers want. The route is clear what assets they have and the condition they are in. Finally, it is clear what asset policies it is going to apply to those assets to minimise the whole-life cost of the asset. Those three things create an efficient work bank. Our job is to test whether that work bank is efficient, and then to test whether or not overall it is deliverable.

In effect, right from the beginning, we are baking in the idea of passengers’ interests alongside efficient outcomes. It is not a sense that at the end of the process we have to switch a dial between passengers and efficiency. The very beginning of the process brings them together in a good-quality strategic business plan.

Chair: We want to go on to look at the regulatory control period process, in particular the suggestion that it has led to stop and start investment.

Grahame Morris: Previous witnesses have suggested very vociferously to the Committee that the sharply defined five-year regulatory period is the cause of start/stop investment in the railway. Do you accept that the five-year period is the cause of the problem? To what extent do you recognise it as a systematic problem?

Joanna Whittington: What I absolutely accept is that in the last couple of control periods we have seen a cyclical effect through the control periods, with renewals volumes in particular dipping off at the back end and then peaking in the middle of the following control period. What I do not accept is that that means the control period concept per se is flawed. We need to move to a world where we have good-quality, continuous planning that underpins it, and is reflected in a contracting strategy that passes some of that certainty to the supply industry.

Yes, we have seen a problem emerge in the last couple of control periods, but the answer is not to get rid of the control period process; it is to make sure that there is good-quality planning underpinning it and there is then transparency of the plans. Those plans should run for longer than the five years. Indeed, information that we get from Network Rail looks at their plans over 10 years by asset category. We need to give that transparency and, over time, increasingly give confidence, through the contracting strategy that Network Rail adopts, to the supply chain.

Grahame Morris: A little earlier, in your answers to the questions that
were put about your duties and how you would measure the performance of the ORR, you mentioned that it is not just about getting best value for money but looking at project level or specific interventions. You gave some examples about delayed trains, compensation and so on. Is it a legitimate charge to say that you might be responsible, either intentionally or unintentionally, for the start/stop investment problems, because of the style of regulation?

**Joanna Whittington:** As I said earlier, we made a big effort in CP5 to improve the quality of asset management planning in Network Rail. We very explicitly identified capability and the sorts of changes we would expect it to make to underpin a move to a continuous planning process that would mitigate some of the worst effects of the cyclical spend. I absolutely acknowledge that we have seen a cyclical spend in the last control period and the one that preceded it. We recognise that in CP5, and we should start seeing the benefits of a new approach coming through in CP6.

**Q300 Grahame Morris:** You do not see that cyclical investment characteristic as in any way a consequence of the interventions of the ORR.

**Joanna Whittington:** I see it as a failure to recognise the importance of good-quality planning. The control period sits on top of that and exacerbates an already poor situation. The solution is not to get rid of the control period, because there are good things that come from a control period. The solution is to improve the quality and transparency of the plan and to start passing on some of the confidence the supply chain needs from that plan through a contracting strategy that straddles control periods.

**John Larkinson:** The other area is around delivery of the plan. For this control period, as Joanna was saying, Network Rail made big improvements in its planning, but what has happened is that because of cost escalation, which we were talking about earlier, particularly on renewables, in order to keep within the cost limit, work has had to be deferred. Around £3.7 billion-worth of renewals work will be deferred. That is a pretty big stop/start in the overall process. Alongside that, Network Rail certainly recognises the importance of cost discipline, because, unless you have that, you are always at risk of having to defer work to keep within cost limits. Delivery and planning need to come together in that sense.

If you look at the profiles for CP6, one of the reasons why we have a bit of a difference, in terms of a dip-off and then a step forward, is that work has been deferred at the end of this control period.

**Q301 Grahame Morris:** I follow that, but is there merit in simplifying the periodic review process and looking at it in a different way, completing it earlier in the cycle?

**Joanna Whittington:** At the end of every periodic review, we absolutely carry out a lessons learned, and look at areas that we can improve on;
and we will definitely do that again this time. In defence of the process we have, we are talking about £48 billion of expenditure. The fact that we take two years to scrutinise it does not strike me as at all disproportionate. It is entirely appropriate that there is a really serious look, not just because of the public spending but because of the implications for the railway if we get it wrong. It is difficult to imagine significantly reducing that time.

The other thing you alluded to was the idea that we might reach a decision earlier in the year—by implication, giving the supply chain longer to prepare following the final determination. The reason we choose October, leaving in effect only six months, is that it means we can use the year four data—the audited actual data—to make sure that we are on track for setting a determination that in year one of CP6 will be deliverable. If we do not see the audited year four data, we are going from estimates of year four audited data from the middle of the previous control period. Although it would look like we were giving the supply chain more time to get ready, actually we would be increasing the uncertainty over the overall settlement, because there would be a greater risk that year one of the next control period would look very different from where the company actually was at the end of the previous one.

Q302 **Grahame Morris:** I want to ask you about longer regulatory control periods in a moment. Just before we go on to that, it seems—looking at everything in black and white terms—that it is a bad thing if we cannot smooth out the work flows. It is a bad thing for the supply chain, for investment and so on. You mentioned continuous planning control and oversight, but are there specific things that could be done with Network Rail? Are there particular projects that could help smooth out work flows more effectively?

**Joanna Whittington:** There are some things that they are already looking at in relation to how the framework contracts work. There is something about the transparency of the planning process. When we talk about engagement with stakeholders, we do not just mean representatives of passengers and freight customers; it is as much with the supply chain as well. We would like to see more of that in the next control period.

**John Larkinson:** We are doing more of that as well. We have spent a lot of time over recent months discussing with the supply chain. One of the things they have been really interested in is how our process is evolving; what issues we have identified; and whether there is any area where they can contribute. That was enormously important last year in the debate over efficiency, to which Joanna referred. As well as Network Rail doing a lot more work with the supply chain, we have rightly spent a lot more time with the supply chain in the last few months.

Q303 **Grahame Morris:** Joanna, you mentioned that you were in favour, at least in theory, of a longer regulatory control period, presumably because that would allow increased opportunities for innovation and investment. If
that is the case and you are in favour of a longer period, are you open to industry-wide discussion, with stakeholders and the supply chain as well as passenger groups, about how the regulatory control period process could be improved?

**Joanna Whittington:** I think it is no to the first, and yes to the second, but let me explain why. The length of a control period is something we always consult on. It was in our initial consultation document. It does not usually get very much attention because it has been five years for as long as everyone can remember.

What we are trying to do in determining the length of the control period is to balance two things against each other. One is to give certainty to the company that is responsible for maintaining and renewing very long-life assets. The other is to cope with the fact that some things change very quickly, or certainly more quickly than five years, which is around forecasting costs. We try to give them a reasonable amount of certainty to allow them to innovate and invest, but equally not to expose them either favourably or unfavourably to big variations in costs. Traditionally, regulators have started at five years, and there has been some variation from that.

If we moved significantly away from five years, it would only make sense to have a control period if we had a funding settlement that equalled it. Currently, Government are prepared to commit to five years of funding. That gives every Government the opportunity during an electoral cycle to have a say in the funding for railways. If we moved to a longer period, we would not get that, and for me that intuitively does not feel right, but obviously it would be a matter for Parliament to discuss.

**Grahame Morris:** Finally, in reply to an earlier question, John, you mentioned looking at other sectors. I think you mentioned IT. Are there lessons to be learned from your experience? From your biographical details, I see that you worked in the office of the gas and electricity regulator, Joanna. Are there any lessons to be learned from regulating other sectors that we could apply to the railway?

**Joanna Whittington:** Yes is the short answer. In fact, we play an active part in the UK regulators network. There are lots of parallels. Let me identify a couple of them. I mentioned earlier the scope for benchmarking routes, and that is very much the approach taken by gas, electricity and water regulators. There are some things that the water regulators have done really well around consumer challenge panels. We have seen the establishment at route level of route supervisory boards and how those can be brought in to challenge a route on delivery. I would like to look further at whether there is scope for some of that to be replicated in railways.

The other one that is really interesting is the system operator. Gas and electricity both have a system operator. In the railway case, it is responsible for everything from timetable planning to the creation of
long-term strategic plans. How you regulate that is an interesting and tricky question. It is about the quality of the plans they produce, not about meeting particular targets. There is potentially quite a lot that we can learn from other regulators about regulating for quality, rather than delivery against particular output measures in the more conventional sense.

Q305 **Chair:** You talked about the potential for improving planning. How much will it cost to do that and how can we be sure that the costs of the regulatory system do not outweigh the benefits that arise from it?

**Joanna Whittington:** That is a valid concern. I know what the costs of my office are; they are about £30 million a year. That covers the full breadth of responsibilities, consumer protection, safety regulation, occupational health and so on, as well as our regulation of Network Rail. It is a relatively small part of the overall settlement when you think of the costs of the industry in total.

There are other ways that regulation can impose costs, which is through what we require the industry to do. That is why we take as our starting point the structure that Network Rail has and create a framework around it. We do not seek to run the company for the company. Indeed, as I said earlier, we are not its customer either. We are looking to create a framework that we can then monitor its delivery against.

I recognise that some of the transitions to eight route businesses and eight strategic plans raised concerns, at least initially, that that might drive an increase in costs. The important thing for us to think about is how we make sure that it does not do that and that we use the information we get from those eight plans differently. Our regulation needs to change to reflect the new environment.

**Chair:** We are going to go on to look at ORR’s role in enhancements, long-term planning and third-party investment.

Q306 **Daniel Zeichner:** It seemed to us that there was a change in your role. When you wrote to Network Rail back in January 2017, you suggested that you were no longer going to be so involved in some of the long-term planning issues. What was the rationale behind that?

**Joanna Whittington:** I will say a few things by way of introduction and then hand over to John. I do not think we were withdrawing at all from the planning process, but there were a number of recommendations, from the Bowe review in particular, about making our role in relation to enhancements more effective; in particular, because DFT and Network Rail now have a stronger client relationship than before. What we were proposing in that letter about the long-term planning process was still to retain responsibility for making sure that Network Rail carries out that planning process; to act as an appeal body in the event that people were not happy with the process; and to reflect the reality that Network Rail and the Department now have a stronger client relationship and that our role has changed slightly as a result.
John Larkinson: That is right. What we used to do, effectively, was to approve specific plans that had been drawn up by Network Rail. The question, as Joanna was saying, was what value that really added at the end of the day. They had been through an extensive stakeholder consultation. Network Rail has also, over time, been changing its planning processes, so that, as well as very big studies that take a long period of time, it is moving to snappier studies over a shorter period of time to try to make it more relevant. Recognising that changing world, the question was how best we could perform our role overall. This goes back to Joanna’s point about the system operator.

Ultimately, the system operator function in Network Rail is responsible for the long-term planning. The bigger strategic question for us is how well it is doing that job, and that is really about staff capability. It is about analytical tools. One of the issues in the past has been basic stuff about how well you can forecast performance, or how much capacity there is on the network. If you cannot get agreement on some of that basic analytical stuff, which might sound a bit dull but is the core of everything else, it is very difficult to talk about what the options are.

We have focused on the capability of the system operator. The big advantage of devolution is that there is now a separate system operator function. It publishes its own strategic business plan, so you can see what it is proposing to do differently. It is about scrutiny of that plan and then monitoring the delivery of the overall system operator capability. We decided to focus on that instead of just approving very specific studies. We changed focus.

Q307 Daniel Zeichner: Given the changing world, and you responding to the changing focus, your statutory basis, as I understand it, goes back to the 1993 Railways Act. There are a series of duties outlined in it, including to contribute to “the development of an integrated system of transport of passengers and goods”—and—“development of that railway network, to the greatest extent that it considers economically practicable.”

Those are bigger, long-term goals. Do you feel that you are able to fulfil them, or do you actually think that maybe those original terms of reference should be revised to meet changing circumstances?

Joanna Whittington: We have a lot of duties, if you have read the Railways Act.

Daniel Zeichner: Indeed.

Joanna Whittington: We create a business plan by setting around six strategic objectives. Then we prioritise our resources. First of all, is it likely to further one of our strategic objectives? The second one we look at is, are we best placed to do that? Are there other people in the system who are already doing it? What we are saying is that, with the DFT playing a bigger role in relation to the specification of enhancements following Network Rail’s reclassification, our role has marginally changed.
Let us be really clear. There are a number of areas where I think it has not changed in relation to enhancements. Importantly, we will continue to monitor Network Rail’s delivery of enhancements as well as its OM&R, because you cannot meaningfully separate renewals and enhancements once they are being constructed on the ground. We certainly do not want to introduce any gaming whereby, “If I classify this as an enhancement, I will get less scrutiny than if it is called a renewal.”

For monitoring to have any value, it has to be independent of the project. In that sense, it cannot be Network Rail or the Department reporting on their own monitoring, because they are part of the project.

**Q308** Daniel Zeichner: Wasn’t the changed status of Network Rail a rather fundamental change in the relationship between you as a regulator and that organisation? It is not typical of other parts of the economy where there are regulators, is it?

**Joanna Whittington:** It is absolutely the case that we regulate a publicly owned, arm’s length body of Government, yes.

**Q309** Daniel Zeichner: Would you not expect some change in the way the Government set out that structure?

**Joanna Whittington:** What we have been able to demonstrate is that there has been a very important set of changes in how we regulate, which is what we have been trying to describe today. We have been placing, for example, much greater emphasis on our monitoring and reporting of efficiency, because we think the incentives to be efficient are different under this model.

It also recognises that our independence from Government as well as our independence from the industry are both important facets of our role as a regulator. One of the things that we have not had to do, but might have to do at some point in the future, is to call a mismatch, if there ever was one, between the statement of funds available and the expectations of Government. It is a very important protection for future customers that you have a body that acts independently and is prepared to do so.

Yes, our role has changed, and the way we carry it out has changed, but I think it is still very consistent with the aspirations set out in the Railways Act.

**Q310** Daniel Zeichner: Something else that has changed, of course, is the way that enhancements are going to be done, with the move to the so-called pipeline process. Does your regulatory oversight any longer extend to ensuring that enhancements are undertaken in an efficient and value-for-money way? Do you still feel that you have a role there?

**Joanna Whittington:** Exactly how our work pans out will be decided as part of the draft determination and then the final determination. What I can say is that during CP5, following the Bowe review, we agreed a slightly different approach with the Department, whereby they took over
responsibility for determining the efficient costs of enhancements in the way that they had done previously as part of the Thameslink project, but we continued to have the monitoring role, as I said, of whether they had met the milestones. The process is that, in effect, they act as the client and agree with Network Rail what they are going to buy. That creates a set of milestones. We change-control those milestones into Network Rail’s delivery plan. We then monitor Network Rail’s delivery of those milestones and publicly report on them on a six-monthly basis.

Q311 Daniel Zeichner: Is there not a slight danger that there are almost two different approaches to the two different parts in the way things are being done—the renewals process and the enhancements process?

Joanna Whittington: The difference is at the point at which you challenge the costs. In future, the Department will challenge the costs of the enhancements to satisfy itself that they are efficient, but it is critically important that we monitor and report against all of Network Rail’s activities for exactly the reasons I gave earlier: to avoid gaming, and because we are the only people who are sufficiently independent of the project to be able to report with confidence on its delivery. It does not have to be that way. There are other funders who value the cost challenge work that we do, and we will continue to provide that to any funder who would like us to do that work.

Q312 Daniel Zeichner: But if there are those two different approaches, how do you avoid unintended consequences when the parts potentially overlap or do not overlap? How do you make sure that one bit of the railway is not being dug up one day for one purpose and a different one on another day? How do you separate the processes?

Joanna Whittington: That is why the change control piece is so important. It gives the opportunity for the route in particular to determine whether there are any features of the route’s business plan that need to change in response to the enhancement. As the pipeline generates new projects and they come along, our expectation is that the DFT and Network Rail will confirm the official cost for those projects and the outputs, and the route will be given the opportunity to think about the implications for its business plan. There will be a change control process that sits around that, and we will monitor against the agreed set of outputs for the whole suite of activities, for operating, maintenance and renewal and enhancements.

Q313 Daniel Zeichner: It is quite a complicated process. The Government say that their new approach is intended to bring in external finance, possibly by bringing in local authorities and the private sector. Are you confident that, overall, the regulatory framework will be able to give the public confidence, given that not everyone has confidence in those approaches?

Joanna Whittington: John, perhaps you would like to pick up on some of the work we have been doing to support third-party investment. Before that, I would say that we stand ready, and have the resources and
capability, to provide a cost challenge function to different funders as they develop enhancement projects.

**John Larkinson:** People made a fair challenge a couple of years ago. It came out in some internal industry reports where it was said that third-party investors did not necessarily see the ORR as open for business. What reaction would they get if they came to us?

We responded to that. Basic stuff like our website was not user-friendly if you were a third party thinking about investing in the network. It was, frankly, written in regulatory speak, rather than in "What can we do to help you?"-type speak. We have revamped all that. We have revamped the guidance we produce. We provide a single point of contact. It has paid dividends.

We have advised Transport for Wales and the Welsh Government on how they could try to put some of Network Rail’s infrastructure into a franchise. That is a fairly novel proposal. It is the first time, as far as I know, that it has been done in a franchise. We spent a lot of time working with Transport for Wales. We met individual bidders about those proposals.

We now meet on a regular basis a number of private sector promoters. They want to talk to us about things like safety by design. They want to talk to us about access charges and access rights. They want to talk about what it means to be the manager of the infrastructure. We are now in regular discussions with third parties, both public and private sector investors. We have worked pretty hard, and I hope reasonably successfully, to make clear what we can offer. Going back to Joanna's point about being clear on our role, there are a lot of areas where they want advice from us, often around safety, access charges and everything about owning and running infrastructure.

Q314 **Daniel Zeichner:** In this brave new world, what is going to be the key priority for you as a regulator, as we see different models emerging?

**John Larkinson:** Showing how we can react to those different models. I have spent quite a bit of time doing this, and it always slightly surprises me that people think there is one regulatory way of doing it and that we will try and impose that on anybody who comes forward, whereas in fact I have found that the regulatory model is pretty flexible.

If people want to build a small piece of track somewhere, they assume that we will try to impose the same structure on them as we would on Network Rail. We do not; we act in a proportionate way. For me, it is how we react to the proposals that are put to us in a way that tries to be helpful and is proportionate and relevant to the proposal.

**Joanna Whittington:** The main point I wanted to make was exactly that. We stand ready to support any sort of investment, because that is in the best interests of consumers in the longer term.
Q315 Daniel Zeichner: As a regulator, how, ultimately, can you guarantee the service to the public? Let me give you a hypothetical example. I am pleased to see possible housing developments in my part of the world linked by a new east-west railway. If that ends up being a private railway and suddenly it goes bust, what happens to all the people whose housing is dependent on it? It is a different world, isn’t it? From a regulator’s point of view, what happens then?

Joanna Whittington: There are two different elements in that. There is who owns the infrastructure and, following a financial failure, who has access to the infrastructure. Separately, there is the question around what services operate over that infrastructure. Following a failure, if it is a franchise service, there are obviously well-known mechanisms for addressing it, but, if it was open access, we would have to think about what protections could be offered to passengers in that case.

There will be a world where there are more infrastructure managers than we have now. We have HS1 and Network Rail, and in due course we will obviously have HS2 and their aspirations around East West Rail. We will have to develop our approach in some of those areas.

Q316 Chair: Picking up on the description of your role in relation to enhancements, are you still a regulator or are you just performance-managing delivery? If the DFT has stepped in, haven’t you stepped out?

Joanna Whittington: What we are saying, to go back to our prioritisation criteria, is that where the situation has changed, and the DFT is playing a different role very closely with Network Rail, very confident in its ability to determine the efficient cost with its strong client relationship with Network Rail, there is not the same value for us in providing that challenge, but we still have the capability within the ORR to provide it. As John described for other funders, we continue to play that role, and we will continue to offer that role to public and private funders who come along.

Q317 Chair: Earlier, Daniel alluded to the statutory underpinning in the 1993 Railways Act. Do you think that is still adequate for the ORR in this new world?

Joanna Whittington: It is a complex set of duties. The way we manage it practically is to create six strategic objectives around which we run our business plan. The ones that are relevant in this context are about a safer railway delivering better customer service and delivering value for money for taxpayers and funders. All our duties, in effect, support that. That is how I explain it to the industry. That is how we explain it to the organisation and the people who work for ORR, so that we do not sit there wondering whether it is duty 23 or duty 11 that we are taking effect on. A translation is required, and probably if I was writing them again I would do it in a way that was slightly more focused. Do I think it makes a difference to the decision making? I am not sure we would take different decisions as a result of having a rewritten form of duties.
Q318 **Chair:** You have already talked about the value of devolved routes and regulating those routes individually. Do your existing powers enable you to do that work effectively?

**Joanna Whittington:** They do, but some changes need to be made both to the regulatory framework and the way our office works in future. As part of the periodic review, we are looking to change the way Network Rail’s licence is structured, specifically to recognise the different components of its business, so that it has some functions that still remain in the centre, some functions that apply only to the system operator and some functions that apply to the route. Although we do not need to do that, what I want is for each route managing director and the system operator to be really clear about what our expectations are; that it has an amount of money, a set of outputs and a set of expectations set in the licence, which together represent our collective expectations about what it is going to deliver over the next five years. That is a really important change, albeit that it does not need to happen in the narrow sense of the word.

Separately, the way our office works needs to change. We have started to think about that already. We already have within the ORR route teams and route leads, and we are creating the analytical framework that will enable us to make comparisons on an ongoing basis between routes. Once we have completed the final determination, we want to look again at whether or not there are further changes we need to make, to bolster the capability that we have to make that sort of analysis going forward. That is a work in progress.

Q319 **Chair:** Do you think you have the capacity and the capability to do that work?

**Joanna Whittington:** I think we do now, but it may require changes later on. We are going to take the opportunity after the final determination to see whether we have made all the changes we need, or whether we still need to do more.

Q320 **Chair:** Thank you very much for giving evidence this afternoon.

Examination of witnesses

Witnesses: Mark Carne and Jo Kaye.

Q321 **Chair:** Welcome, and thank you for joining us this afternoon. For the record of our proceedings, please can you introduce yourselves?

**Mark Carne:** Good afternoon. I am Mark Carne and I am the chief executive of Network Rail.

**Jo Kaye:** I am Jo Kaye, the managing director of the system operator part of Network Rail.

Q322 **Chair:** I know that you were listening to the earlier session, when there was some discussion of the reclassification of Network Rail as an arm’s
length Government body. Looking back, was that properly thought through and communicated by DFT before it was implemented at the start of CP5? Had we thought through what that would really mean?

**Mark Carne:** The decision was taken by the Office for National Statistics in the first place. When the decision was taken, which I believe was in December 2013, it was considered by most people, and indeed spoken about, as a statistical change, and Network Rail would continue to operate in much the way that it had done previously.

Q323 **Chair:** Do you think that DFT did not appreciate the financial implications it held?

**Mark Carne:** With the benefit of hindsight, I do not believe anybody fully anticipated the significance of the change that was going to impact Network Rail at that time. The fundamental reason why that was the case was that the change in the debt structure of Network Rail, and the fact that we would no longer be able to continue to borrow on the market to compensate for changes in project costs, did not become clear for many, many months. In fact, it was probably longer. At the time, it was not really understood that it would have the impact that it ultimately had.

Q324 **Chair:** I wonder whether they should have foreseen it.

**Mark Carne:** I think it was because it was considered as a statistical change. The way the regulatory structure worked and the way that CP5 was set up was that it was acknowledged that there was a long shopping list of projects and an amount of money to deliver them, and a recognition that the cost estimates associated with those projects were very immature, and therefore likely to be wrong.

The regulator recognised that risk, and so they created the enhancement cost adjustment mechanism, which basically said, “If your early cost estimate was wrong and it is going to cost more, we as the regulator can agree that it is going to cost more. We will scrutinise you and make sure that you are right, but, if you are right and it does cost more, then you can go and borrow more money.” We had a regulatory mechanism that compensated for the immaturity of the cost estimates in projects. The problem was that, when we were reclassified, basically ECAM died because there was no more money. Therefore, the fact that we had a long shopping list of projects with very immature cost estimates really came home to roost.

Q325 **Chair:** What are the ongoing implications of that reclassification decision now? How is it impacting on your ability as an organisation to deliver on your duties to manage, maintain, renew and enhance the railway?

**Mark Carne:** Chair, I have been on record many times as saying that there were pros and cons of reclassification. One of the things that I think was really positive about reclassification was introducing capital discipline. The previous way of managing capital projects—£15 billion and here is a shopping list—was not an appropriate way to manage a capital
programme of the scale that we were delivering. It is why I very strongly advocated at the time of the Bowe review that we needed more the pipeline type of approach—frankly, as normal capital-intensive industries operate. All the schemes compete with one another because they are all trying to get the funding, and you pick the best ones and fund them at a point in time when you have confidence that you know what it is going to cost and how long it is going to take to deliver.

That is the key change we made following the Bowe review. I very strongly support it. I do not think the change is fully matured yet. There are still a number of steps that we need to develop to put it into place for the long-term benefit, but it was a really important reform.

**Q326 Graham Stringer:** Can you tell us a little bit about how the shopping list was put together?

**Mark Carne:** The way it worked, and still works today, is that the industry works together—the train operating companies, the freight companies and Network Rail—to identify the best ways that they think passenger and freight services can be enhanced. It was called the initial industry plan for CP5, and for CP6 it is known as the initial industry advice. It is our advice to Government: “These are the things that we think you should consider as you develop your priorities for rail investment.”

We then work up some of those schemes in great detail, but ultimately we do not decide what to invest in. It is the Government who decide what to invest in. We try to inform the Government in the best way. That was key to why we set up the system operator, which Jo runs. It is to try to co-ordinate that advice on behalf of the industry as a whole so that you, in Government, can make the best decisions about where to invest public money.

**Q327 Graham Stringer:** In terms of making the best decision, was the bite-size that the Government chose too big?

**Mark Carne:** You have to look at it as a creature of its time. It was a hugely ambitious programme, which was reflected in the way the regulatory structure was set up, but the rules of the game changed right at the beginning of the control period, and all bets were off. That is why, two years into the control period, we had to restructure the whole programme because there was not enough money to deliver all the things on the shopping list.

**Q328 Graham Stringer:** What you are saying is that there would have been enough money had you stayed out of the Government’s financial system and off the public sector balance sheet.

**Mark Carne:** What would have happened had we not been reclassified is that we would have gone back to the regulator and said, “Okay, now we know what this is going to cost. We think it’s going to cost £X million
instead of £Y million and here is why.” If the regulator agreed to that, we would have just borrowed additional money.

Q329 **Graham Stringer:** Whether it was the Government or the regulator saying that the estimates were right, in that very large bite-size, do you think the estimates were reasonable? What I am trying to get at is that the step change was a big increase. In that big increase, was there a loss of focus on what the real costs were likely to be?

**Mark Carne:** The cost estimates at the time, at the beginning of CP5, were at a very immature stage. I cannot remember the exact statistics, but around 80% of the project portfolio was at less than what we call GRIP 2, which is at the very earliest phases. We know we want to electrify a piece of railway, and we know how long it is, but we have not actually surveyed it. We do not know the intricacies or the details of what we need to do. You can give a rough, ballpark figure that it is about £3 million a kilometre or something. You multiply it and end up with a number. It was at that sort of stage, very immature ballpark figures. At the time, the point was that it was okay because there were risk mechanisms built into the regulatory process to handle it as the costs became more mature.

Q330 **Graham Stringer:** Are those original estimates, however rough, one of the reasons why there is now a claim of huge overspend?

**Mark Carne:** Yes, that is exactly it.

Q331 **Graham Stringer:** Obviously some of the reasons were about the detailed specifications—for instance, not getting the specifications of the stanchions on the south-west line detailed enough so that they were all the same. Where would you put the responsibility for those problems? Is it the Government? Is it Network Rail? Is it the people who surveyed the track? Where is the responsibility?

**Mark Carne:** Let’s talk about the Great Western if we may, because it has been the subject of quite a lot of criticism.

Q332 **Graham Stringer:** That was in my mind.

**Mark Carne:** Clearly, that is the cause célèbre for CP5. The current cost estimate for that is £2.8 billion. I think we came into the control period thinking that we had £1.2 billion or thereabouts for the delivery of it. Is that cost increase just poor project management? No, it is not. There is an element of it that would be cheaper if we could do it all over again, because we would plan the job better and do it cheaper. I estimate that the cost of that inefficiency is certainly less than half a billion pounds. The rest of the cost increase is just the inaccuracy of the original cost estimate. It is a combination of the two things.

The inefficiency is also partly driven by the very early schedule estimates, which were, “We will electrify by such and such a time.” Then you suddenly realise that in order to do that you almost have to start building
before you even finish the design. The whole project got off on completely the wrong foot. It was a really poor example of how to execute major projects.

Q333 Graham Stringer: We are getting close to the questions I am trying to formulate. What you are saying is that the speed of aspiration was quicker than any potential delivery of that scheme. Was that the responsibility of Government or was it the information that Network Rail and the Office of Rail Regulation provided to Government? Where was that responsibility?

Mark Carne: I cannot say with any certainty. A lot of the decisions were largely taken quite early on. The early dates for completion of the Great Western were probably set in 2010 as a political aspiration. When there is a political aspiration to achieve something, people work very hard to try to achieve it. A combination of factors probably contributed to the poor structure of the project in its earliest stages.

Q334 Graham Stringer: I remember you coming to the Committee when you took over. You were left with precisely what you are saying now: a series of projects that had been decided and left to you by your predecessor, in effect, through the system. You seem to be doing the same thing now to the person who will follow you. Do you think that is a problem? Was it a problem for you, and will it be a problem for your successor?

Mark Carne: I want to be very clear that I am not blaming my predecessor at all for the ills that we suffered. I have described the change in the circumstances that led to the problems.

Q335 Graham Stringer: I am not looking for culpability; I am looking for structural problems.

Mark Carne: We have spent a huge amount of time in this control period thinking about how best to deliver better performance from the railway infrastructure. Devolution of better decision making, long-term planning and building plans from the ground up have been absolutely at the heart of everything we have done in CP5, and then embedding those changes, with the support of the regulator, in the regulatory structure. I think we have put together the best plan that the railways have for the next five years. It is not my plan. The point is that it is owned by the route businesses. It is their plan. They know what they need to do, when they want to do it and how they want to do it. They are there to deliver those plans.

We have a very strong plan for CP6, and we are in good shape. It is not without challenges. We are an ambitious organisation. We set ourselves challenges in the way we plan our business; of course we do. The whole structure of Network Rail is fundamentally different today from what it was for CP5.

Q336 Graham Stringer: One of the consequences of the change of designation of Network Rail, as I understand it, is that there will be a
separation of enhancements from the periodic review process for maintenance and renewals. Will that hamper the effective management of the whole system? If it does, how will those risks and problems be handled?

Mark Carne: Jo will describe how those two aspects of the periodic review work.

Jo Kaye: Separating enhancements from the periodic review is a positive step. It more accurately reflects the fact that enhancement projects do not neatly fit into a five-year cycle, as was previously discussed about the slightly artificial nature of a control period length. As you will have seen in recent publications, there is a much clearer decision between each part of a project that you are going to proceed. Part of that decision to proceed will include a much clearer and much more robust assessment of all the elements of the system that need to come together to make the project a success.

Those checkpoints include making sure that rolling stock is available, that the franchise commitments are in place and that all the pieces of the jigsaw that need to come together to give the total whole are there. That is a much more formal process than was ever the case previously with enhancements. It will bring benefits to all the projects and, ultimately, to passengers and freight users looking for those projects to be successful.

Q337 Graham Stringer: Do you think you are gaining rather than losing synergy between enhancements and renewals?

Jo Kaye: Yes, because it is a much more robust process, managed through very formal stage gates that were not there previously. Clearly, one of the stage gates includes, “Are we doing the activity at a time that is consistent with the renewals plans that are in place as well?” In that way, we maintain alignment between enhancement projects and the renewals activity going on in each of the routes.

Q338 Graham Stringer: Is it healthy for the sector, effectively, to cut out the independent regulator in relation to the new rail network enhancements pipeline?

Jo Kaye: I think you heard from the previous witnesses that they are not being cut out of the process. They offer a range of services to funders depending on what the funder wants. That is particularly important in the case of third-party aspirations and proposals, or market-led proposals, where proposers will need, I believe, the role of the regulator to be strong and consistent to enable them to see that they have a mechanism by which they could obtain the guarantees they need, or the returns they need, on the investments they are making. Although the role of the regulator may have changed, I do not think it is being cut out of the process for enhancements at all.

Q339 Graham Stringer: What are the implications of the Department getting more responsibility and the ORR less responsibility in terms of your
regulation?

**Jo Kaye:** In the context of enhancements, the Department are the funder. They are paying the money. They have much more clearly taken on the role of determining value for money for the investments they make. Other funders would look to do the same. I do not see that as regulation; I see that as the funder assuring themselves that they are getting value for the money they are spending. The role of the regulator is to see that, once those commitments are made, we deliver them effectively and are seen to do so, and they regulate that in a transparent and open way.

Q340 **Graham Stringer:** Was there a failing in the previous structure in terms of the Department not having that say?

**Jo Kaye:** The structure was very different. As Mark said, there was a sum of money and a shopping list of activities. There was less of a role for the Department under that model for each project to go through those very formal stage gates, so I believe that the process we have now is an improvement on what we had previously.

Q341 **Graham Stringer:** Is the new approach in line with Colette Bowe’s recommendations? Wasn’t it her intention, for example, that the ORR be a signatory to the March 2016 memorandum of understanding on rail enhancements?

**Jo Kaye:** In terms of principles, it is absolutely consistent with Dame Colette Bowe’s recommendations. We worked very closely with the Department in developing that memorandum of understanding. Ultimately, the Department entered into two memoranda of understanding—one with ourselves and one with the ORR. In terms of the progress we have made since that review, and since the Hendy review internally at Network Rail, everything we have put in place is consistent with the spirit of Dame Colette Bowe’s recommendations.

Q342 **Graham Stringer:** I would like to ask Mark one last question. What have been your biggest successes and failures in your time in the job?

**Mark Carne:** There are a number of things that we should rightly be very proud of, and some areas where I know that we need to do better. I am really proud of the fact that we have articulated very clearly a strategy to transform Network Rail. We have stuck to it, and we have made huge progress on it. We are already seeing its benefits in the improved performance of the company today. That will continue to grow.

The physical infrastructure today is the most reliable that it has ever been. It has improved significantly in this control period. The safety of the railway today is the best that it has ever been, and it continues to improve markedly. These are things that I think we should be really encouraged about.
The first two years of the control period were really tough. They were really difficult for many of the reasons we have spoken about. It was a period of enormous challenge and churn for the organisation and the industry as a whole. We are getting through that, and setting out our path and delivering on it is something about which we should be encouraged.

As a previous witness said, we should recognise that we have much more to do to drive cost efficiency in the organisation, really working together with the train operating companies in a new collaborative way to drive down the cost of maintaining and operating the infrastructure. The railway is the most intensively used in Europe; 45% of Europe's congested railways are in Britain, so it is an incredibly intensively used network. It means that, for us to maintain the railway, we have to work closely with the train operating companies to get access to the railway and to maintain it in the most efficient way. There is more opportunity there, and that is probably the area where I would say that overall I am most disappointed.

Q343 Chair: I have a quick follow-up question to Jo. You described it previously as having a shopping list and a set amount of money to achieve it. Would it be right to say that now it is just a shopping list where we are a bit surer about the prices?

Jo Kaye: Clearly, there is the opportunity for a very long list in the early part of the pipeline, but the important thing now is that each project progresses on its own merits and on the strength of its case, both economic and strategic, and that it progresses at an appropriate pace for that project and does so in line with the available funding, from whatever source. That is a fundamental step change from the list, the set amount of money and the five-year control period construct within which previously we were trying to deliver a huge set of very complex enhancements on what Mark has just rightly described as an already very congested and busy railway.

Q344 Chair: One thing about the five-year control period is that it set a point in time at which you had to look at your long shopping list and decide which things you were going to take forward. In the new process, how do you see the possibility of making choices between the things on the shopping list if you do not have a set point in time at which you are trying to decide?

Jo Kaye: There are a number of ways. The Department has talked about revisiting it at least annually, in a very transparent way, to indicate how projects are moving through the pipeline. Certainly, in our constant role in leading the long-term planning process on behalf of the industry, we will constantly be adding to that list with what we believe to be the best choices for funders to make the best of the railway, as well as obviously indicating to funders where we think the key priorities are and where the bottlenecks are. The feedback loop from the day-to-day running of the railway will automatically highlight the projects that should be brought
forward most quickly because they are things that will solve some of the difficulties that we see in day-to-day operations.

Q345 Chair: In order to have the kind of long-term view that you as a system operator should have, do you need to know how much money is available for enhancements?

Jo Kaye: It is not terribly helpful, because what you really need to know is where the priorities are and what those priorities will do to the railway. It is for those things to speak for themselves in making the case for the sum of money they need. Clearly, we are cognisant, in our role as the system operator, of where money is being spent, not just in other parts of the railway but, for example, on HS2. We also have a view of where we sit alongside other infrastructure sectors, so that our ask is not a ridiculous one. Our role is to give exceptionally good advice to people about the value that individual projects can bring to the railway as a whole and, frankly, to make the case for that funding.

Mark Carne: What we see for the system operator is that it will produce not just the shopping list, but will basically put it to Government and say, “If you have £5 billion to spend, this is what we would recommend you do. If you have £10 billion to spend, then we think you should do this. If you have £15 billion, we think you should do this.” It is up to you ultimately to decide how much you want to invest and whether you agree with the recommendations of the system operator. We think that the industry ought to provide you with that insight. That has not been the case in the past with the degree of clarity that you have a right to expect.

Q346 Chair: Given what you said earlier about wanting to manage and make sure the synergy between renewals and enhancements works, don’t you need more foresight about how many of those projects are going to be taken forward, and not just on an annual basis?

Jo Kaye: But only at the point at which you actually decide to deliver the projects. I have spoken already about the pipeline and the fact that it has a number of decision points deliberately built into it. Not every project that enters the pipeline should necessarily be expected to go all the way through to delivery. That was one of the big flaws of the previous process. People made an announcement about a project at its very early stages, and that built an expectation of utter commitment to full delivery. The point at which you need to make a really tight alignment between renewals and enhancements is the point at which all parties commit to deliver the project and see it through right to the end. That is much more likely to be possible within a five-year control period, because the delivery time is much more realistically aligned to a control period, rather than at the very early stages of a project that can take many, many years to get to the point where you are ready to deliver it.

Q347 Huw Merriman: I was talking to the chief executive of one of the train operators. He was expressing concern as to whether Network Rail
actually had the infrastructure and resources to deliver the renewals programme that has been allocated. For example, if you are dealing with track engineering, do you have enough wagons to do all that is required across the network? I thought you would be an opportune panel to ask that question of.

**Mark Carne:** Thank you. It is a very good point. As has already been alluded to, the first year of CP5 had a lot of real challenges in the delivery of the renewals volumes, which got us off to a very bad start. There was not a good enough plan, and not a good enough contracting structure to support that plan, for the first year of CP5.

It is very different in CP6, because the plans are developed by the routes, based on their requirements. A particular route business will have been working with the train operating company, for example, to say, “This is the amount of track renewal we want to do. This is the access we will need to do it.” That is a critical determinant in the success of any project. That is already now agreed for the first year of CP6 for most of the activity that we want to do. We are in quite a different place, in terms of having that confidence.

There are always some constraints around the physical availability of equipment and plant, or indeed around some human resources such as signal testers or people who are in scarce demand and only needed a few times a year. We still have to take some prioritisation decisions on a national basis to achieve the best outcome for rail passengers in totality, but by and large decisions are now taken at route level and the plans are built from the ground up.

**Q348 Huw Merriman:** My second question touches on what you have just said. In that desire for operators to get renewals and enhancements done in their region, do you think they are making the decision that is best for the customer in terms of when the work should take place, or is it more focused on getting whichever slot Network Rail has available to give them?

**Mark Carne:** No, it is based on what the customer wants.

**Q349 Huw Merriman:** By the customer I mean what is best for—

**Mark Carne:** The train operator.

**Q350 Huw Merriman:** No, for the passenger.

**Mark Carne:** Of course, ultimately, but what we do is work with the train operating company as the representative of the passenger to say, “What is the best time for us to carry out this work that will cause the least amount of disruption to your passengers, where you can create the best alternative arrangements that may be needed for passengers?” It is a very interactive discussion with the train operating company, but very much focused on what passengers want from the service.

**Chair:** We want to look at the issues around the control period process,
particularly the way it has led to stop/start investment.

Q351 **Grahame Morris**: I think you were in the room for the evidence given by the earlier panel, the ORR, on the issue of stop/start investment. From previous witnesses, as well as the earlier panel, we have heard about problems with the stop/start nature of investment in the railways, particularly from supply chain companies, and in fact from Mick Lynch of the RMT. He talked about the impact of losing skilled engineers if work was not fed through on a consistent basis.

As Network Rail, do you accept that this is a problem that needs a solution? To what extent does Network Rail accept responsibility for finding a solution for smoothing out the peaks more effectively? What steps are you taking to achieve more even work flows for your suppliers?

**Mark Carne**: We should start with the positives. Very few supply chains have £48 billion allocated to them for the next five years. There are very few that have the degree of certainty in that five years that the rail industry provides. My old sector—the oil and gas industry—was where there was supply chain uncertainty, I can tell you; it could change drastically from one year to the next in a way the rail industry just does not even begin to recognise.

Having said that, I am very sympathetic to the need to have as smooth a supply chain as possible, because that is a key driver of efficiency. If people understand what the workload is going to be in the longer term, they will recruit more confidently and they will invest more confidently in the technology and skills we need to deliver the work. I absolutely see it as a key driver of efficiency.

Q352 **Grahame Morris**: And innovation.

**Mark Carne**: And for innovation. I hold my hand up; in CP5, it is absolutely the case that there has been too much churn in the work bank, driven by many of the factors that we have already discussed. It is our problem, and in a sense it is our fault. I agree very much with the previous witness who said that at the heart of this must be better planning. Network Rail has to have a really good plan—not a five-year plan, but a 10 or 15-year plan for the assets. It needs to be a rolling plan.

One of the things that we have introduced in this control period is that we have a rolling plan. You can come to us at any time and we will be able to tell you what the activity is for the next seven years. The fact that we then divide it up into five-year funding periods is a very healthy thing to do, but we have to have a long-term asset management strategy and a long-term asset management plan.

Q353 **Grahame Morris**: You heard the responses from the previous panel and you touched on them. Particularly on the point of longer regulatory cycles, if the ORR’s final determination was published earlier in the cycle, do you think it would help to address stop/go investment?
Mark Carne: No, I do not. There are pros and cons with having five years or longer. I would not have less than five years, by the way—absolutely not.

Grahame Morris: It seems completely sensible to me—the idea that that is the mandate of the Government and they are prepared to give that funding.

Mark Carne: That is right, but, as the previous witness said, it becomes increasingly difficult to predict with any certainty what the cost structure will be, too far out. It is already six years between now and the end of the next control period, so it is already quite challenging. I personally think that five years is a good compromise. The funding settlement should be separate from the asset management strategy and the asset management plans. Network Rail has to have, and now has, really good long-term asset management strategies and plans, on which those plans can now be more robustly based.

Grahame Morris: What about the periodic review processes? Are you happy with the timing of those?

Jo Kaye: The previous witness mentioned that, because of the huge sums of money involved, it is right and proper that it is looked at for the appropriate amount of time. We would absolutely recognise that it is quite an intensive process. It is as intensive internally in Network Rail to go through a periodic review as it is for the regulator to do one. On balance, the amount of time it takes has to be proportionate to the amount of taxpayers’ money going into it. It feels about right, and the best compromise we can get in terms of the complexity of the business that we run and the number of things the regulator needs to take into account in making its final determination.

Grahame Morris: On that point, does Network Rail support the RIA’s call for an industry-wide discussion about how the current regulatory system can be improved?

Jo Kaye: We have said previously that that question is asked every time a periodic review is undertaken. We absolutely support that discussion in our own way at that time and will continue to do so.

Grahame Morris: I have some questions about the renewals. You touched on this in response to some questions from my colleague; you mentioned the problems in the first year or two of control period 5, but I wanted to ask about the effects to date on the network costs and the performance of postponing some of the contracts, £3.4 billion of renewals. Is it always the case that delay means it is more expensive?

Mark Carne: No, it is not always the case. Delay can mean that it gets cheaper, because, if you delay work, new technology can become available and create new opportunities or ways of doing things that you did not previously have.
In fact, good asset management usually means trying to delay renewals for as long as possible. It is a bit like the analogy I gave at the PAC. It is like when you own a car. You have a trade-off between how long you own the car and when you choose to replace it with a newer model. The longer you have it, the more you have to spend on maintaining it and probably the more unreliable it becomes. Eventually, you reach a point in time when you say, “It is costing too much to maintain and it is not reliable enough, so I had better get myself a newer model.”

It is exactly the same on renewals of assets. There is always a constant balance between maintenance costs, which are an operating cost, and renewals, which are a capital cost. In this control period, because some renewals were delayed, we had to spend more on the maintenance costs. The good thing is that the reliability of the actual underlying assets improved by 16% in terms of service-affecting failures. The assets are more reliable, despite the fact that a lot of renewals costs were deferred.

Grahame Morris: That is interesting. You have covered the next point I wanted to ask. Might I ask something that was raised by Mick Lynch two weeks ago? You mentioned efficiencies, innovation and so on, and the benefits to Network Rail of ensuring that we have an efficient network. In relation to the casualisation of the workforce that Mick mentioned, the safety regulator has described the casualisation of the workforce as not conducive to a safe railway. This is on safety-critical infrastructure. Do you subscribe to that idea? This is about the gig economy, casualisation and the Carillion effect and so on.

Mark Carne: No, I do not subscribe to it at all. It is important to recognise that in the last four years, for example, in our workforce and in our contractor colleagues working for us, the number of people injured in our workplace has dropped by 40%. In fact, today we were reviewing our performance, and the safety performance of people working on the railway today is the best it has ever been. I do not accept that these things necessarily drive unsafe practices.

What you have to have, however, are proper controls in place. You have to ensure that the people who work on the railway are competent, motivated, properly led and doing the right work with the right tools at the right time. If you do all those things well, they will work safely and in an efficient, highly motivated and successful way. I do not think the other factors around employment are necessarily barriers to the long-term success of the railway.

Grahame Morris: You are not against continued casualisation of the workforce.

Mark Carne: I do not like the term “casualisation.” These are highly skilled and dedicated workers, who give a huge commitment to the railway. They just do not happen necessarily to have permanent employment contracts. We work very carefully with a code of conduct across all suppliers of the workforce to ensure that they meet minimum
standards in terms of their competency, equipment, protection equipment and skills. That has been key to driving both safety performance and improved business performance.

Q360 Chair: Can I go back to the issue of renewals not being more expensive if they are delayed? Are you saying that it is never the case, or that it is sometimes the case that it is okay to defer renewals?

Mark Carne: It is not a good idea. If you have decided that you want to do a renewal at a certain point in time, it is usually because you have determined that that is the optimum time from a whole-life perspective. Deferring it means that you are losing some economic opportunity, but it is not as simple as saying that it just becomes more expensive. It may become cheaper. There are certain areas of our renewals activity, for example, where we are actively trying as best as possible to delay.

Earthworks are an example. We have a number of landslips every year. We have renewals programmes to try to identify where we might have a landslip and to replace it. To be honest with you, it is extremely difficult to know where the next landslip is going to occur. If we had better technology that enabled us to identify more accurately where those things could occur, we could do it much more efficiently. That is why we are now using drones, satellite technology and laser-guided trains.

Q361 Chair: But that is not about deferrals; it is about having a better understanding of your underlying asset, full stop. Then you can plan renewals.

Mark Carne: Yes, it is. Absolutely. What we are also saying is that, as technology is being developed so quickly and great strides are being made, perhaps it is okay to wait for a few years while the technology is developed, because once it is developed we will make much better decisions.

Q362 Chair: I understand completely that, if you understand your assets better, you can plan when to renew them, rather than doing it on a periodic basis.

Mark Carne: Absolutely, and that has been central. It is the same with track renewals. Our ability today to inspect track and identify where there are flaws is completely different from what it was just two or three years ago. Just last week, I was looking at a job where two or three years ago we would have replaced all the rail because of suspected cracking. Now our improved inspection techniques have proved that the rail is perfectly serviceable. This is where technology can make a huge difference in our efficiency.

Q363 Chair: Can I go back to postponements and their impact on the reliability of the network?

Mark Carne: Yes.

Q364 Chair: We have evidence, both from the Department and from other
witnesses, that postponements have affected the reliability of the network. I want to check whether you think that is the case.

**Mark Carne:** Even in a good year, you might renew 1% or so of the assets. Just deferring it by a year or so does not make a huge difference in the immediate reliability of the asset. We have an asset base of £430 billion, so we should not allow one or two years of deferral to skew us unduly.

However, the reality is that for decades we have been under-investing in the renewals of our railway. We have a bow wave of renewals that we know we have to do. It is quite right that we should be held to account to execute that bow wave in the most efficient way, and get on with it. The duty that is required of the railway today is going up and up. Therefore, the reliability required of the railway is going up and up. We need to invest in those renewals, and that is why I am so pleased that we were able to attract a statement of funds from the Government that was a significant increase in renewals, to enable us to start tackling that backlog.

**Graham Stringer:** If I understood your answer to Grahame’s previous point, you were saying that, on renewals, not having directly employed people was not a problem. It was not casualisation, because they were highly skilled. I think that is what you were saying. Can you explain the difference, not in terms of finding out whether tracks are laid but in terms of replacing them, between the situation now and the casualisation under Railtrack that definitely led to catastrophic results?

**Mark Carne:** I really think that any comparison between Network Rail and Railtrack is—

**Graham Stringer:** I just want to understand the difference.

**Mark Carne:** I cannot speak in detail about Railtrack obviously, because I was not in the industry at the time, so forgive me if I am a little bit general on this. Fundamentally, Network Rail’s responsibility is to the asset management of the railway. We have to make the right decisions about when to renew assets, and how to inspect and maintain them so that we run the railways safely. It was poor management of those processes that led to the demise of Railtrack. The inspections were not carried out properly. The maintenance was not carried out properly and, as a result, there was a series of appalling and tragic train accidents.

Today, we manage all those processes very specifically in-house, but the execution of some of those activities is managed by the broader supply chain.

**Grahame Morris:** You do not like the term “casualisation.” I am not quite sure how we use those terms. Do you think it is likely to increase over control period 6?

**Mark Carne:** No, I do not think so. We try to create an environment that enables contractors to employ permanent employees. That is preferable,
because they can invest in the skills and, as we discussed earlier on, the technology and innovation. Wherever possible, if we can create enough stability in a work bank to create a framework contract, which we can award for a number of years, that is definitely my preference. Even within that, there are cases where there are significant peaks and troughs in the workload on the railway. Take the Easter weekend; we are going to need tens of thousands of people just for this weekend. Of course, we will still need to attract other people to work on the railway in short bursts.

**Chair:** We are going to move on to talk about the transformation plan, particularly route devolution, which we obviously see as very important, and I know that you do, too.

**Daniel Zeichner:** As a system operator, you are now dealing with a route-based system, which devolves considerable responsibility and powers to those areas. There is always going to be a tension between devolution and having an overall strategic framework. How do you ensure that national, strategic and cross-route activities are properly delivered in that environment?

**Jo Kaye:** One of the things that we do in the system operator is to provide a framework within which colleagues in the routes undertake certain activities that are critical to the network nature of the railway. A good example is planning engineering possessions and engineering work. We write the standard by which that must be done. We provide monitoring of that. We do some assurance activities. Although the physical activity of planning work goes on in the routes, our role as system operator is to make sure that it is done in a consistent way, and to make sure that all our customers are treated equally, for example. In extremis, the system operator may need to make a decision between two conflicting pieces of work, to make a judgment about which should go ahead.

The whole purpose of the framework, of course, is to make sure that those interventions are very few and far between, but it is a very important part of our role to set the frameworks appropriately, to make sure that the best interests of the network are catered for in the day-to-day running of the railway. That is what we do.

**Daniel Zeichner:** Presumably, the route managers are always having to make trade-offs and trying to decide on priorities. On the digital railway, for instance, how do you make sure that there is a consistent approach, or will there not be a consistent approach? Will that be one of the consequences of the devolved approach?

**Jo Kaye:** There are a number of areas in which consistency is really important. How we deal with those kinds of things is laid out not just in system operator policies but in company policies more widely. We work very closely with each of the routes, so there is an embedded part of the system operator team within each route, to make sure that network cohesiveness is maintained throughout. Mark might want to comment on
the specifics of digital railway, but it is one of a number of areas in which clear policies enacted across the organisation, in our matrix, are important in making sure that the sum of the parts is greater than the whole.

**Mark Carne:** Devolution with the eight geographical route businesses and the one freight business is absolutely core to our strategy going forward. Just as important as devolution is the national framework within which those devolved businesses operate. The system operator is one of those frameworks, so that we make consistent and efficient decisions across the network as a whole.

The technical authority is another of the framework entities, because I want the same technical standards whether a train is running in Inverness or in Penzance. Equally, I want to ensure that where possible we harness the commercial power of a national organisation to buy goods and services at the lowest cost. We have a route services organisation working on behalf of the routes to do that.

Devolution is not independence. It is devolution within a national framework, so that you get the best of both worlds: local decision making close to customers, but harnessing the power of a national organisation.

Q371 **Daniel Zeichner:** That of course is the classic dilemma. It is almost like central and local government and getting the balance right. The system operator sits within Network Rail. Would there not be a case for having the system operator slightly outside Network Rail?

**Jo Kaye:** Those conversations come up from time to time. At the moment, Network Rail is the predominant infrastructure manager in the UK. Clearly, those things will change over time, so the whole purpose of setting up the system operator as a distinct part of Network Rail is that people can make different choices about where we sit in the industry in the future.

My personal view is that we are much better off inside Network Rail at the moment. That is where we are, and where we intend to stay, until the nature of the industry changes such that we would need a more visibly independent role. All the things that we put in place in the system operator would allow for a future, more distinct status, if people felt that the time and the circumstances were right.

**Mark Carne:** What is really important about the system operator is that its work must be transparent to the industry as a whole. There must be no mystique about what Jo and her team do. It must be absolutely transparent, and it should be demonstrably independent of any one vested interest. The governance structures that we are putting in place around the system operator, with an independent chair of the supervisory board and so on, will provide the industry with confidence that it can be independent and transparent, with the capability to do the task that we now want it to do.
The system operator staff are, by and large, in the routes, because they are people who understand the railway in intimate detail. They know exactly how you can make this railway perform better. That connection to the railway is absolutely crucial to its success. Stripping them out of that would be a very serious mistake.

Q372 Daniel Zeichner: It has been suggested by some that, because you are part of Network Rail, you will inevitably tend to come up with an infrastructure-based solution.

Mark Carne: I understand that concern. It is why I constantly say that the system operator is a co-ordinator on behalf of the industry as a whole, from the train operating companies to the ROSCOs and the freight companies. How can we, as an industry, serve the needs of customers better? It is our job as an industry to provide you as funders, and other funders, by the way, such as the devolved transport authorities, with our best advice as to how you could best spend taxpayers’ money to improve the performance of the railway.

The system operator is not Network Rail. The system operator is co-ordinating on behalf of the industry as a whole to provide you with the best advice. We cannot produce a route study without the intimate involvement of the train operating company to look at what the effect of longer trains would be, or faster trains or different kinds of trains.

Jo Kaye: It is exactly that. The route studies that we publish very clearly start with looking at options that are not infrastructure related. We look at different timetabling solutions, different rolling stock and different uses of rolling stock. Are there are other things we can do before we get close to heavy infrastructure interventions?

There are still heavy infrastructure interventions. At its core, we have a very Victorian railway that still has a lot of physical constraints in it. Some of those still need to be addressed, but it is not our first port of call. As part of Network Rail, I am acutely aware of the difficulty of delivering any of those heavy infrastructure interventions. I do not have a natural tendency towards them at all, actually. I am very clear on the risks and challenges they bring, which is why we fully explore all the other alternatives first, albeit that in some cases there are no non-infrastructure solutions, so those will still be the case.

Q373 Daniel Zeichner: We spoke earlier about the redesignation perhaps being more significant than planned at the time. Of course, alongside the route set-up now, you could argue that for anyone who wanted to go back to a privatised system having a set of routes would allow cherry-picking of some over others. Would you agree that it could be seen as a pathway back towards privatisation?

Mark Carne: Let me put it in a slightly different way. Part of the reason why devolution is so powerful is that you are able to experiment with different ways of working in different parts of the network without, if you
like, betting the farm on one particular strategy. We want to innovate. We want to try different things to work out how best to perform, which is why, as was mentioned in the earlier evidence, the current plans from these different businesses look and feel different. There was no central recipe given to them as to how it should look. No; you come up with your own ideas for how you want to run your bit of the railway.

It opens up opportunities for different types of partnerships with train operating companies, and for us to experiment with that and try it in different places. We are doing it in Wales. It will be a different infrastructure manager. In Scotland, we have a very different model, where we have an alliance, run by one person, between the train operating companies and ourselves. It happens to be a Network Rail person, but it could equally have been a train operating company person. We use different models in different places. In a way, Network Rail has created a model that allows us to be slightly schizophrenic and depend on what the customer wants. If the customer wants a deeper alliance, we will work with them that way. If they do not, we do not have to. There is no one size fits all.

Q374 **Daniel Zeichner:** If you were genuinely to separate the systems into separate businesses, is it the case that some would be much more profitable than others?

**Mark Carne:** Yes, of course. Clearly, there are some parts of the railway that are verging on the profitable, or actually are profitable, and there are others that are very heavily subsidised. Of course that is the case; it is just a physical attribute of the railway. If you wanted to privatise, sell off or concession parts of the railway, you could do so with the model we currently have.

Q375 **Chair:** Finally, I want to turn to the area of third-party investment. It follows on from the whole reclassification piece. As you have already recognised, the Government set out quite a generous settlement for CP6 for operations, maintenance and renewals. That is the focus of the work. I suppose we are expecting a slowdown in enhancements work. What do you think the implications of that are going to be?

**Mark Carne:** I do not think it should necessarily represent a slowdown in enhancements. There is roughly £10 billion already allocated for enhancements. We have made it clear that our job now is to present funders with really attractive opportunities in which they want to invest. If we can come up with enough of those really exciting opportunities, it may well be that funders will be prepared to invest. I do not just mean Government, but other funders who may be prepared to invest in the railway. Part of our strategy has been about trying to be attractive to other investors, so that they choose to put money into the railway to help improve its performance and capability.

Q376 **Chair:** Realistically, how confident are you that third-party funders will step in? There are huge expectations from passengers, and possibly
freight operators, for you to provide new enhancements. That shopping list is very long. How confident are you that they are going to be able to come in and start to pick up some of that work?

**Mark Carne:** Again, I want to make a very clear distinction between funding and financing. I am now talking about funding. Essentially, funding is somebody giving us some money to build a station, for example, which will then service a new housing development that they are building. They will make a return on their investment through the wider benefits that the railway will bring. There is a lot of opportunity for that kind of funding of railway projects. A large part of East West Rail between Oxford and Cambridge is intended to be paid for by the housing developments that will benefit from that new railway. I am very optimistic about that.

In the past, which is again a feature of the way Network Rail was set up, because we could just borrow more money, we did not put an awful lot of emphasis on the business development side of our business. Today, the route businesses all have business development leads who are going out to communities and talking to councils, developers and freight companies, saying, “What do you want from the railway and, by the way, how much are you prepared to help pay for it?” It is amazing how much opportunity is out there. I am very optimistic that we can shift the model more to a funded model, paid for by the people who will directly benefit through better transport links.

Q377 **Chair:** Last week, the Department published its call for ideas. There are examples of market-led proposals, things like reopening a little branch line or setting up a new route. There is a link with housing. How realistic is it to expect significant third-party investment in a wider range of infrastructure assets? Previous witnesses have talked about signalling, but they have not talked about lots of other traditional enhancements that make a difference to the railway.

**Mark Carne:** The digital railway is an area where third-party financing is potentially quite attractive. Financing is different from funding because they make a return from their investment in the railway. We have an example of that in Great Western at the moment, where a company is investing their money in a traffic management system, which is, essentially, a computer to help us with the movement of trains and to run the railway in a more efficient way. If it is successful and we end up running a more reliable railway, we will pay less in fines to the train operating companies, and a portion of that return will then be paid to the private sector investor.

That is a simple example of how private sector financing brings innovation, creativity and new ideas, and does not cost the taxpayer any money. Why not extend that to other forms of the digital railway? The digital railway will unlock enormous capacity on the railway as a whole, as well as providing greater reliability for the railway and faster journey
times. That will create economic value, and part of that economic value ought to be able to pay the finance charges of the investors.

Q378 **Chair:** Thinking about the full scope of enhancements that we have seen on the network in the last control period or two, some of them will fall into the category of new or reopened lines, or new stations, but probably fairly few and it will be pretty limited. I appreciate the potential for the digital railway, but lots and lots of enhancements that do not fall into those categories are improvements to the existing Victorian infrastructure.

**Mark Carne:** Yes, they are, and they will still need central Government funding.

Q379 **Chair:** Can you see any prospect of there being third-party financing of those sorts of enhancements, or do you think it will be too difficult or too risky?

**Mark Carne:** I am not saying it is too difficult. It can be furiously difficult from an accounting perspective, because, if you want to get those financing costs off the Government balance sheet, it can be very difficult to construct the deal in a way that enables that to happen. That is why traditional financing of big projects is generally not a good thing to do, but I am not ruling it out. There are certain circumstances, and we are looking at some projects where third-party financing of conventional projects might be quite attractive.

**Jo Kaye:** Work on conventional existing stations, not necessarily building new ones but working on the ones we have, is also more likely to be open to third-party funding, because the benefits of better station environments often accrue to people who have nothing to do with the station directly. If you look at the transformational schemes that have taken place at King’s Cross and Birmingham New Street, the benefits do not just accrue to passengers using the railway; they are much wider than that.

Renovation of stations, particularly with the digital railway, will enable us to enhance the frequency of services to stations. That is a great thing, but many of those stations will need work in themselves to be able to cope with the additional number of people. That is an area where people can see much more clearly the benefits of the funds that they might choose to put into them.

Q380 **Chair:** Whether it is third-party funded or financing, how confident are you that the Department will be able to turn around proposals sufficiently quickly to bring forward projects in CP6?

**Mark Carne:** We are all learning about this slightly new way of working. That is why I asked Professor Hansford to do the study last year to help us think about how to do it. The recent framework produced by the Department and the publication of our list are all stepping stones in this new way of thinking. The market itself will have to evolve and develop,
and politicians will have to evolve and develop their thinking on what schemes should be developed and who should pay for them. We should try to avoid the old way of working, which is, “Let’s all lobby everybody else and see if we can get our scheme to the top of the pile,” and say, “No, let’s make more economically rational decision making based on really good advice from an independent system operator and see, wherever possible, if we can find third-party people to help fund or finance it.” We would only come to the taxpayer as a funder or financer of last resort.

Q381 Chair: If you were making predictions, how much money do you think will be spent on enhancements in the CP6 process? I know it is a difficult question, but I can ask it.

Mark Carne: I hope it is a great deal more than the £10 billion, because I hope we identify really exciting opportunities that you will find completely compelling and will want to invest in. At the moment, the £10 billion does not include a significant investment in digital railway. The digital railway is a perfect example of a scheme that is not a five-year scheme. It is a 15 or 20-year scheme, but I believe it to be a national imperative and we need to grasp the nettle.

If I could make a specific point on renewals and the digital railway, it is a very interesting case study, because in the next 15 years we will have to renew about 63% of Britain’s signalling system. At today’s prices that will cost around £20 billion. We have a choice now. Do we want to spend that £20 billion on renewing it with a conventional signalling system? Alternatively, do we want to spend that £20 billion on transforming our railway into something that looks and feels very different and provides a completely different service?

Q382 Chair: Do we have the processes that drive us to doing the sensible, long-term thing, which would be to go for the digitised system?

Mark Carne: We are working very hard with the Department and across the industry to put together the compelling business case that ultimately Government will need, or that private financers will need, to make that a reality. There is still some work to do to put it together in such a way that you can be confident that it will deliver and that we can deliver it. There is still more work to do, but huge progress has been made on that in a very short period of time.

Chair: Do members of the Committee have any further questions?

Q383 Graham Stringer: I have one last question. In terms of the long-term strategy for the railways, the Secretary of State is cutting back on the electrification programme at the moment. He is saying we should invest in dual-power locomotives rather than electrifying. Instinctively, I feel that is not a good idea. Have you been asked to assess the balance of those two different investments, in locomotives or electrification? If you have not, what would be the method you would best use to quantify the balance between those two different investment strategies?
Jo Kaye: Assuming you are referring specifically to the diesel discussion—

Q384 Graham Stringer: The diesel/electric service, which will wear out the lines more quickly and cost more up front, or electrification, which will cost a lot more up front but will last quite a long time.

Jo Kaye: Yes, we are playing a role in that evaluation from a technical perspective. Our safety technical team is looking at what is possible. It is not just the difference between diesel and electric. Clearly, there are other possible modes of propulsion for trains in the future that we are also looking at. That is an important part of it.

Overall though, it is important not to focus on the mechanism by which you do something but what you are trying to achieve. Electrification is just one way of, for example, speeding up trains. There are other things you can do as well. The important thing is retaining a focus on the outcome you are trying to achieve. That is the key, rather than necessarily focusing on a particular mechanism of delivering that output. That is clearly some of the debate around electrification or not. In the case of electrification, there are also wider environmental and economic benefits to bear in mind. All of those will ultimately play a part in the final decision that the Department might choose to make.

Q385 Graham Stringer: That of course is what the Secretary of State says, almost word for word, in terms of looking at outcomes.

Jo Kaye: I did not write it.

Q386 Graham Stringer: What I am asking is whether you have assessed that particular case between dual-powered locomotives and electrification. If not, are you going to in the future?

Jo Kaye: We will certainly be playing our part in that evaluation.

Q387 Graham Stringer: But you have not done it so far.

Jo Kaye: We have looked at specific cases, but the challenge the Minister has posed is now a much broader one, and that requires us to look at the question in a slightly different way, whereas previously individual case studies were being looked at.

Q388 Graham Stringer: Have you made any recommendations in terms of what you have looked at so far?

Jo Kaye: Not yet.

Q389 Chair: Obviously, one of the comments that has been made is about the elimination of diesel-powered trains from the network by 2040. Is it specifically that question you are looking at, rather than the best way to deliver improvements to journey times on specific lines?

Jo Kaye: On the back of the Minister’s challenge, the industry is absolutely working together to determine the best way we could meet
that challenge and how much it would cost—all the features you would look at. Clearly, it is a recently posed challenge so we have yet to form a complete view.

**Chair:** Thank you very much for your time, and thank you for giving evidence.