Transport Committee

Oral evidence: Network Rail: Update, HC 255

Monday 9 June 2014

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Watch the meeting

Members present: Mrs Louise Ellman (Chair), Jim Fitzpatrick, Karen Lumley, Jason McCartney, Karl McCartney, Mr Adrian Sanders, Chloe Smith, Graham Stringer, Martin Vickers

Questions 1-68

Examination of Witness

Witness: **Mark Carne**, Chief Executive, Network Rail, gave evidence.

Q1 Chair: Good afternoon, Mr Carne, and welcome to the Transport Select Committee. You took over as Chief Executive of Network Rail in April. What do you see as the major challenges in front of you?

Mark Carne: Actually, Madam Chair, I took over a little bit earlier because of the flood issues; I took over at the end of February. David and I accelerated it a bit. When you look at the challenges for the railways today, they are really positive challenges in many respects. Last week the ORR announced that last year 1.6 billion people travelled on our train network in this country. That is an extraordinary fact in itself. The last time 1.6 billion people travelled on the trains in the UK was around 1920. For 70 years there was inexorable decline in the railways, until about 1995 or 1996 when there were only 750 million passengers, and in the last 18 years that has more than doubled. There has been huge growth in the railway industry over the last 20 years, and it is set to continue.

It is a challenge brought about by the successful transformation of the railway, but the challenges for Network Rail today really fall into four distinct categories. The first is around safety. How do we improve safety in the railways as a whole? I can talk specifically about the challenges that I see there. The second is about improving the reliability of the network. We know that customers' satisfaction is driven by the reliability of the service that they see, and we know that we did not do a good enough job in CP4 to deliver the reliability that customers want and expect.

Thirdly, that enormous growth in the railway is set to continue, and we are going to need to invest to create more capacity on the railways in Britain so that we can meet that demand. Fourthly, and very importantly, we need to reduce the costs. Ticket prices on the railways today are a major concern for the travelling public. Although we do not set the ticket prices, our costs are a large part of the total costs in the rail system. We need to drive down our costs, and that is what we will do over the coming five years.

Those are the four areas of challenge. I am happy to give you my thoughts on each of them in turn or to take questions on any area of it.

Q2 Chair: Members will want to ask you questions on those particular areas as we progress through the meeting. At this point I was looking for general perceptions. You have brought considerable private sector experience to Network Rail. How do you think you can apply it?

Mark Carne: I have spent my working life in the oil and gas sector in many countries around the world. For the last 15 years or so I have been leading big operational ventures, from running our operations in the North sea, with over 20 platforms, to businesses in the jungles of south-east Asia, to the deserts of Arabia and the frozen steppes of Kazakhstan. They are very different kinds of environments but they have a lot in common with the railway industry. The oil and gas industry is a major engineering challenge. It is a technological and operational challenge. It is absolutely safety critical. It is also politically very sensitive and economically vital to the countries in which we were operating.

I bring experience from running businesses with all of those ingredients. I have found in the few months that I have been in the railway that they are very transferrable and relevant to the railway industry. Of course, there is a lot to learn. There is a huge amount to learn and a lot of the jargon is different, but the fundamental challenges and what drives a successful business are very similar.

Q3 Chair: Network Rail is to be reclassified as a Government body. What difference is that going to make?

Mark Carne: At the moment we have a debt of about £32 billion, which in the previous structure of the company was guaranteed by Government but we were a not-for-dividend company. When that debt moves on to the Government books as a requirement of the European legislation, on the one hand it should not make any necessary difference because it does not in itself drive particular changes in the way that the company works with the Government. Clearly it is important that we work with the Government to make sure that we are really clear about the interfaces with Government. That is what we are doing at the moment. We have very good relationships and discussions with both the DFT and the Treasury so that we are clear about how Network Rail will operate in its new guise from 1 September. I am very satisfied with the way those discussions are going.

Q4 Chair: Will the change affect the investment that Network Rail receives?

Mark Carne: I have been given absolutely no indication that that is the case. The £38 billion settlement that was made in CP5 is, as far as I am aware, completely secure, and that continues to be the case. I do not see why, in the longer term, it should make any fundamental difference.

Q5 Graham Stringer: Isn't there a level of naivety about that? It was always a bit of a con, wasn't it, that this huge debt was not on the Government's balance sheet? It now is on the Government's balance sheet, and therefore Treasury officials will want to take a closer look at it, I guess. Don't you think you are being naive to say that it will not change the way things work?

Mark Carne: What I said was that at the moment what we are doing with the Treasury and the DFT is to describe the controls the Government will have on Network Rail. As I said, I am not really expecting there to be significant changes. There are some; there are some real changes. You mentioned the Treasury. Let me give you one particular example where it is definitely going to change. In the past when we needed to raise money we went to the markets and raised money, with a Government guarantee to support the low interest rates that we were able to attract to raise that money. In the future it is very unlikely that we will do that. The Treasury will raise the money that we need. Why would they not? They have said, “No, we will raise the money that you need for investment in the railway.” There are some changes, but it does not fundamentally change our role as the infrastructure operator and owner.

Q6 Graham Stringer: How much do you estimate you will save by the Treasury borrowing for you?

Mark Carne: I am not sure that it will necessarily save anything. We were able to borrow money at very good rates because we were achieving Government-supported loans. We have a very small treasury department so I do not think there are any material savings that would accrue.

Q7 Graham Stringer: In changing your relationship with Government, which you will do, are you still satisfied with your governance structure? It was a bit of a con pretending that the debt was not in the public sector. The governance structure is unique and strange, isn’t it? You are not really accountable to anybody.

Mark Carne: I do not agree with that point. It is a slightly strange governance structure, but it mirrors very largely the governance structure of FTSE companies—private companies. We have a non-executive board, to which I am accountable, with a non-executive chairman. The difference is that, instead of having private shareholders, we have members, who are volunteers from society who act and represent the interests of society and hold their board to account. In that sense it is unusual, but the way the board operates, the governance structure of the board and the sub-committees of the board—an HSE committee, an audit committee, a treasury committee and so on—is exactly the same way that a FTSE company would operate.

Q8 Graham Stringer: I suspect, given your record and your professional career, that you are not a naive person. There is a huge difference, isn’t there, between the governance structure that you serve under and that of a FTSE-100 company? A FTSE-100 company has shareholders who want to make money. The people you present reports to are part of the industry; their vested interest is quite different from that of shareholders. Now that you are properly part of the public sector, do you think you can carry on with that unusual and unique structure?

Mark Carne: We need to be really clear here about what is broken or what needs to change. The structure that we have today is a unique structure. It certainly is not exactly the same as a FTSE-100 company and neither is it regulated in the same way. We have a regulator almost exclusively dedicated to us. The way we work is that high level output statements are defined by Government—what is it that they want to buy from Network Rail. We define how that programme can be delivered and the regulator then holds us accountable to deliver it. That is different from the way that a private company operates.

The mere fact that the debt is now supported in a different place does not require the unpicking of that whole governance and regulatory structure. I would argue that one should be extremely careful about unpicking that because it works pretty well. At a time when we are investing an enormous amount of money in the railway we need to be focused on that and on making a success of the railway.

Q9 Karl McCartney: I want to pick up on one of the points that my colleague Mr Stringer mentioned regarding the management structure and the way many across the rail industry saw Network Rail as perceiving themselves to be untouchable. Your predecessor made some good but limited changes; he perhaps got halfway down the road he wanted to get to. Do you not think that maybe in the relationship with the Government changing, the fact that your senior managers and some junior managers will now have to answer to the Treasury might mean there is a better relationship than perhaps there has been in the past? Do you perceive that your management mantra might be the same as your predecessor's, or will you not be making too many changes from where we are now to what you have just hinted at?

Mark Carne: I certainly feel extremely accountable for the success of the business, both to the Department for Transport and ultimately to Parliament. I certainly feel that accountability very strongly. I believe that as part of that accountability we have an obligation to be open and transparent with the public about the way we run our business. I am very supportive of our drive to increase transparency in the way we run the business; I see no virtue in us trying to put up a screen and hide behind it. We have some very difficult challenges to tackle in the railway, and the more that we openly debate those challenges with society, the better the quality of the ultimate decisions will be. In that sense I am very much committed to driving forward the transparency and open agenda.

I come from a business world where I drive performance; that is what I strive to achieve. I want to achieve great things with this company. I am determined to also drive performance in the areas of safety, reliability, capacity and cost. That is what I came to this job wanting to do and I am very determined to do it.

Q10 Karl McCartney: My question was set in an historical context. I was looking at how your approach might be different from that of your predecessor.

Mark Carne: I never had the pleasure of working with Sir David so I cannot comment on his specific leadership style. All I can say to you is that many of the initiatives that he kicked off, particularly the transparency one—the more open approach to the way we run our business—are something I very much support. I think it is exactly what we should be doing. I welcome this opportunity to come and talk to you about the challenges that face the railway. I think that is what we should be doing, but inevitably I will bring other skills and perspectives to the industry, which I hope will be helpful in driving it forward.

Q11 Martin Vickers: Mr Carne, you spoke of your vast experience in the private sector. Governments present and past, and I suspect in the future, have spoken and will speak about bringing people in from the private sector in order to increase productivity and so on. In an industry that is heavily reliant on public resources the environment is very different. What are your early thoughts on how that different environment will restrict what you want to do?

Mark Carne: I do not think it is that different in many respects. The fundamentals that drive business performance, whether it is the structure of Network Rail or a private enterprise of the sort that I have worked with in the past, are not that different. Are you really clear about what your strategic priorities are? Do you have proper performance management systems in place? Is accountability really clear? What is it that drives performance in the business? All of these things are the same in all walks of life. When I look at Network Rail there are a lot of things that we can do to improve in those areas. That is perhaps what I will bring and what I am excited about applying.

Q12 Martin Vickers: But the influence of the Treasury and political pressure is something that is very different in this job from the private sector.

Mark Carne: Yes, that is true. What is different about the railway industry, I suppose, is that it is immediate. There are 4.4 million passengers every day. If we do not deliver today it is headline news tomorrow, so it is very immediate. It is very politically central because every Member of Parliament has an interest in improving rail services to the people in their constituency. You are right; that is different.

The things that then deliver the products that those people want and the way the business functions to deliver the outcomes that people want is very similar. That is where I believe there is great opportunity to bring about improvements in the way that the railway performs.

Q13 Chloe Smith: I would like to go on to a couple of other aspects of running a big organisation, as you have quite rightly been at pains to put it. In particular I would like to ask a couple of questions about the procurement that you operate and the contractors you need to use to run the thing.

Could you explain to the Committee the range of contractors you use? Could you then say a word or two about the confidence that you have in them, and indeed any points for concern? I have one in mind from my own region. On 19 May at Colchester a blockage was caused due to engineering works at the weekend, which caused significant disruption to commuters all the way through Monday morning. It is obviously not acceptable—indeed your spokesperson said so at the time—to have that kind of thing go over schedule. Where do you see the pinch points happening in the contractors that you need to use to complete all the engineering work?

Mark Carne: That is a really important question. Thank you for raising it. One of the things that I had observed as being different in the railway industry from the industry that I worked in was indeed exactly that. I am pleased to see today in the railway industry that we are moving much more to long-term alliance-type relationships with major construction companies. For example, of the £12 billion or so that we are going to invest in the next five years on enhancements and renewals to the railway, about 75% of that money is already contracted under long-term alliance-type structures. I think that is a very important step forward because it means that you then give the contractors greater continuity of workload and greater confidence in the kind of work that they are going to get. That enables them to invest more in training and developing their people, and more in building the strong relationship with Network Rail that will enable us to work more efficiently.

The Colchester overrun, by the way, was totally unacceptable. It was a huge problem for many thousands of passengers that morning. Ironically, part of the reason was the transition from one contractor to another, so going into long-term alliances removes or at least reduces the number of times that you have that kind of human problem, because you will have a longer-term relationship. The move towards long-term alliances is a very important one. It is one of the key things that I believe will help us to drive performance improvements going forward.

Q14 Chloe Smith: Thank you very much. Evidently with that, as you say, there are transitional periods, and there are obviously cracks through which things can fall. Are you aware of any coming up?

Mark Carne: I am not aware of any that are coming up. I was not aware of the Colchester one 24 hours before, and that is part of the problem. I would be the first to recognise that more work needs to be done to plan some of these activities in a better way so that we do not get caught out by surprises on the night. The consequences of things changing in the middle of a possession on a Sunday night just before the weekend is over are huge. It is very damaging, so we need to do more to make sure that we are properly prepared and that everything is as it should be before we enter into the possession. Working closely with the contracting companies to ensure that that is in place is part of the things that we can do better.

Q15 Chloe Smith: I want to turn to accountability and performance frameworks. Are there not some tensions within your organisation? You have to operate a very complex matrix of routes versus repairs every which way. There are surely tensions between incentives. Some parts of your organisation need to get something done quickly and other parts need to get it done well. Some parts need to get it done by working with partners and others need to get it done on their own. There must be times when you lie awake at night and think, “Crikey, how is this to resolve itself?”

Mark Carne: One of the things I strive to achieve is a sense of what is right for Network Rail. At the end of the day people have an enormous pride in working for the railways in this country; they are incredibly dedicated. It is sometimes quite unhelpful to drive an individual team ethic too strongly around one particular lens of the business. It is better that you try to get people to recognise that they are part of the greater railway, and that they are delivering for the railway as a whole.

There are some fantastic examples. Everybody knows about the Dawlish example. It is a great example of how so many people from all walks of the company and the contracting community and the train operating community came together to achieve something quite extraordinary. That was a remarkable example. That is the kind of thing I like to see—everybody pulling together to achieve a common goal. It is creating those common goals rather than segmenting it all up. Creating competition within the organisation is something I try to avoid.

Q16 Chloe Smith: How do you translate the ORR’s measurement of you into the expectations you put on the organisation?

Mark Carne: We do that by individual routes. We devolved to a route organisation some two or three years ago. Essentially, we now have nine different routes around the country that are like small companies in their own right. They are aligned much more closely to customers and train operating companies, so we enable fast decision making at a local level.

I am a great believer—this is a non-political statement—in devolution but not independence. You devolve to the roots but it is still one railway. There are still some common things that we have to do across the railway network, whether it is the way we manage the timetables, the engineering standards or the renewals work bank and so on. It is getting the balance right: local decision making, devolved to the roots, together with the common denominator of the high-performance service culture that you want across the network as a whole.

Q17 Chloe Smith: Using those yardsticks, have any heads rolled for 19 May?

Mark Carne: I am not aware that any heads rolled, so to speak, but there will certainly have been consequences because it was not an acceptable level of performance. We will have gone back and looked at what went wrong, why it went wrong and what can be done differently next time. Part of the accountability structure that I want to embed within the organisation is that it is a reward structure, but also that there are consequences if things do not go right. If things do not go right, people must feel the consequences. If they go right, they should get rewarded for it.

Q18 Chloe Smith: How do you assess the technology requirements of the business, looking ahead, and ensuring that you are future-proofed?

Mark Carne: This is a really interesting area. The railways have some tremendous examples of great technology. It is moving quite fast in some areas. There are also large areas where it is technologically very conservative—in my view, coming from a different industry. One of the challenges I will bring is what more can we do with technology to accelerate change in the railway. I think there is considerable opportunity.

Q19 Karen Lumley: I want to go back to the ORR. In the midlands we have great problems with punctuality and the cancelling of trains. Why did you not meet your targets last year and what are you doing about it?

Mark Carne: Last year was a disappointing performance right across the network. We failed through CP4 to meet the punctuality targets set by the ORR. There were three main reasons. First, as I said, the network was much busier. There are a million more trains running on the network than there were 10 years ago. When you have more trains you have more congestion on the network, so when you have a problem the back-up of that problem is much greater, and it takes you longer to recover. Partly it is about extra capacity.

Secondly, we had, as you know, dreadful weather in three of the winters in the last five-year period, and that unquestionably had a significant impact on our network. The third reason was that we did not make the improvements in the underlying reliability of the network that we said we would and that we should have done.

There are two ways of looking at it. Yes, it is a success and it is growth, but we need to handle it better. We need to make our railway more resilient to climate change so that we do not have the same level of impact from extreme bad weather. We need to do a better job of really making the railway reliable so that we do not have these sorts of things. That is what we are committed to do over the next five-year investment period—to work on these areas, and others, to achieve the targets that have been set for us.

Q20 Karen Lumley: To what extent do you think the train operating companies are responsible for this? Do they take responsibility?

Mark Carne: Obviously the trains have to work as well. The train operating companies are responsible for about a third or so of the delays as a whole. Obviously I am not here to answer for the train operating companies. We need to work really closely with the train operating companies—more closely even than we do today—to help deliver a better quality service. Today we know that there are many conflicts already built into the timetable. The timetable requires enormous skill to run every day. We have to try and work with the Department for Transport and the train operating companies to modify the timetable and to help the trains run more smoothly. There is lots of opportunity there as well.

Q21 Karen Lumley: I want to go back to accountability. Now that you are part of the Government arm of transport, who hired you and who is your boss?

Mark Carne: We move on to the Government books on 1 September. I was recruited and hired by the nominations committee and then appointed by the board of the company.

Q22 Karen Lumley: Who is your boss?

Mark Carne: My boss is the chairman of the company.

Q23 Chair: You say that you are not responsible for the train operating companies, but from where the passenger is, if a train is late or delayed, it is the fault of the railway. It could be the operating companies or it could be Network Rail, but it is a problem.

Mark Carne: I agree.

Q24 Chair: How important do you think it is for you to identify where there are problems and actually do something about it? You spoke about learning lessons, but what lessons have you identified in relation to this issue?

Mark Carne: I totally agree. The general public cannot possibly be expected to understand—and why should they—the complexities of the railway; they just want to get on a train and be confident that it is going to get them there on time. The intricacies of where the fault lies, if you like, are of no interest to the travelling public, in my view, but it must be of interest to us, because to understand the problem is effectively the first step towards solving it. That is why working really closely with the train operating companies is so important, and why over the last few years, and I am sure in the years ahead, we are moving more towards building alliance-type structures with the train operating companies to enable us to work ever more closely with them. We can then make better decisions for the railway as a whole and for the travelling public.

Q25 Chair: But have you identified any specific things that need to change in relation to that?

Mark Carne: Maybe I can give you an example to explain what I mean. This is a very specific example, but it is just one to highlight how working better with the train operating companies can make a huge difference. We have a very expensive piece of equipment called a high output track renewal machine, which is about half a mile long and costs £250,000 a day to run. In the middle of the night, we bring it in to replace old track. It takes about an hour and a half to set it up and an hour and a half to take it down. If you have a four-hour possession—you are allowed to work on the railway for only four hours—you might get an hour of effective work.

If we can work with the train operating companies to cancel some of the late trains or some of the really early trains to give us a six-hour opportunity to work on the railway, it inconveniences some passengers on those trains but we can perhaps be two or three times more efficient in the way the work is done. That is for the overall benefit of passengers because it means that the cost of maintaining the railway becomes less. This sort of thing can only happen when you have a good relationship with the train operating companies and when you are both thinking about the overall benefit for the passenger.

Q26 Chair: Would you say that good relationship is there?

Mark Carne: It is there; yes. All the train operating companies are different, and they all have different ways of wanting to work with us. Part of our challenge and our skill is to adapt the way we work to operate effectively with those different train operating companies. The central theme has to be working more closely together so that we iron out the interface issues and try to do the best things for the travelling public.

Q27 Chair: Coming into this position, would you say that those issues have been sufficiently addressed? The problem was identified a long time ago when the McNulty review took place. It was one of the areas identified where action needed to take place and change had to happen. We are quite a long way on from that.

Mark Carne: Yes, we are.

Q28 Chair: Would you say that enough has been done to deal with that—not just to recognise the problem, but to do something about it?

Mark Carne: Great strides have been made. In the last five years operating costs in Network Rail have reduced by about 15%. We are still quite some way off where McNulty said we should be, but if we are successful in delivering the plans that we have over the next five years I think we will achieve the McNulty targets with another 20% reduction.

In answer to your question, I do not think we are there. It is not solved, but we know what we need to do differently and I think we are a long way down the road towards achieving it.

Q29 Graham Stringer: When you say you are going to be there in just over five years, does that mean reducing the access charges for freight to the best level of costs worldwide? I am not putting this very clearly. McNulty said that the access charges for freight were about twice the level of the most efficient systems that he could find in international comparisons. When you say you are going to improve, are you going to get there?

Mark Carne: To be honest with you, I cannot answer that specifically today but I would be happy to come back to the Committee on the point about access charges on freight. What I was really alluding to was the underlying cost per train kilometre of running the infrastructure. That is what we are driving down. Ultimately—

Graham Stringer: That comes back to access charges.

*Mark Carne***:** Absolutely. That creates the opportunity to reduce the costs to freight operators and train operating companies.

Q30 Mr Sanders: You mentioned Dawlish and the fantastic work that the orange army—as they have become known locally—has done and is continuing to do. In the control period that has just ended where did the money to repair the railway at Dawlish come from?

Mark Carne: There were two sources. Part of it was insurance. As a ball park figure, around half of it was insurance and the other half came from our own resources. Essentially, we had to fund it from within our own capability.

Q31 Jason McCartney: Mr Carne, returning to punctuality and train cancellations, I have had quite a few bad experiences on the east coast main line over the past 12 months. How recently have you had to stand on a long-distance journey, and how did you find that experience?

Mark Carne: I had to stand on a train this morning because it was delayed, but it was not a long-distance train, I confess. Listen, I fully understand that the level of congestion, or the lack of capacity, on the railway today creates a very unacceptable travelling experience for many people, particularly on long-distance journeys. That is why we need to invest in more capacity to create more opportunities to run more trains. Passenger growth is 5%, or in some areas even higher; it was 7% in London in the last year. It is a very significant challenge for us.

Q32 Jason McCartney: I have a picture here of my young children sitting outside the toilet when they came down to visit London last year. They had to sit on the floor outside the toilet, up against the toilet door and the train door, with their young friends, for three hours on a delayed train. My daughter was seven then—she is eight now. The previous train had been cancelled due to engineering work, and that meant that reserved places were not valid on the next train. That is something that has happened regularly as well.

We did not bother chasing up compensation because we just wanted to get off the train and get some water for everyone because it was very hot. When compensation is paid, does that come from the train operators themselves or from Network Rail?

Mark Carne: Application for compensation in such circumstances has to be made to the train operating company. It may well be that we will have made a payment to the train operating company if the fault lay at our door. Obviously I cannot comment on this particular case, but the compensation comes from the train operating company.

Q33 Jason McCartney: That was the journey down; the 09.58 had been cancelled altogether so we got on the 10.30 one. On the journey back the train was cancelled completely. I think it was when the lines were down during August. They then had to come back with friends. I had to stay in Parliament because we had the Syria debate. They had to travel up with friends via Manchester with Virgin. That was a complete nightmare couple of days coming down to London.

My colleague Mr Sanders was talking about the extra money that was made available in Dawlish. When there are circumstances like that—you took on the challenge of Dawlish—do you have a fund of money that is available to tackle bottlenecks when they happen, so that overcrowding can be tackled as quickly as possible so that passengers don't have to face it?

Mark Carne: The way the funding model works essentially is that the Department for Transport will define what it wants to buy as increased capacity from Network Rail. It will work with us during our planning process. We will define what all the different options are for improving the capacity of the railway. The Department then decides which ones it wants to—

Q34 Jason McCartney: Obviously you worked at breakneck pace with Dawlish, which everyone massively appreciates in that part of the world. Are you able to do it with other projects?

Mark Carne: That was a very unique set of circumstances. It is important to recognise that although it was the headline grabbing event—rightly so—we had 280 areas across the network where the railways were flooded. There were over 100 landslips on the railway, so we had many, many other areas where we had to deliver extraordinary efforts. That is what we have to do, but we cannot de-bottleneck a complete railway line and change our five-year investment plans because we have had one series of particular issues.

Q35 Jason McCartney: One major investment in our part of the world is the electrification of the TransPennine route, which is obviously going to be very costly. We have had some initial meetings in my part of West Yorkshire, which is Marsden Slaithwaite going through the Pennine tunnels. They are talking about £1 million per bridge. That is a huge investment for you as well. We now have an extra issue with TransPennine Trains switching over from diesel to electric trains. We have an issue with the franchising and the letting of the rolling stock. One solution suggested by the boss of TransPennine was to speed up electrification so that it can invest earlier in the new rolling stock. Is that an argument you are aware of?

Mark Carne: The general issue about electrification is a really important one for the country. Electrified trains are quieter and faster. They accelerate and decelerate faster. They are significantly more energy efficient—they have 25% to 30% lower greenhouse gas emissions—and they are more reliable. The programme of electrification that we have in the next five years is the biggest programme of electrification in this country for 20 years. We have not really had a major electrification programme for 20 years, and now we are kicking it off again and moving towards electric trains. That is a really necessary step.

Unfortunately, a lot of our railways are criss-crossed by old bridges. We need to raise the level of those bridges to allow the electricity line to run underneath and maintain a level height. If you cannot maintain a level height, you have to slow the train down, so you defeat part of the objective. Unfortunately it is the case that we have to make these interventions on many bridges on our electrification lines, and that is a major element of the costs associated with electrification.

Q36 Chair: Has all of that been taken into account? Is it correct that the electrification of the great western main line will go over budget?

Mark Carne: The way the funding works is that we do not have a defined cost for the great western electrification project, as indeed we don't for many of the projects in the next five-year funding period. At the start of the funding period the actual cost of the project is not yet fully defined. The way it works is that we work with the regulator in a series of tranches. We sit down and say, "This is what the cost of this part of it will be. Do you agree that that will be an efficient use of funds?" In the case of the great western, we have spent about £300 million and the ORR said, "Yes, that is sufficient funds." We have about three more of these processes. It is called the ECAM process—the enhancement cost adjustment mechanism. It is the means by which the regulator sits down with us and defines whether or not it is the most efficient way of delivering the project. We still have those three steps to go, over the next six months or so on that project, because it is very early days.

Q37 Chair: What about plans for the Liverpool, Manchester and Preston electrification? Are they going to go ahead as anticipated or are there further problems?

Mark Carne: I cannot give you the exact details of what we are going to do in that area here and now. Obviously the northern hub project as a whole is hugely important for us in the coming years. If there is a specific aspect of that railway which you are concerned about I would be happy to come back to you on it afterwards.

Q38 Chair: Are the plans for electrification of that area going to go ahead as planned, or is there any problem that you are aware of?

Mark Carne: No; I am not aware of any problem. We have the plans for the electrification within that area in the next five years, including the TransPennine and so on, and that is what we are doing. We are working towards achieving all of those objectives.

Q39 Chair: Is there a problem with the Ordsall curve?

Mark Carne: The Ordsall chord is in the planning permission stage at the moment. It is a very important part of the project, but we are waiting for the final approval.

Q40 Graham Stringer: I have a couple of points. You gave a very interesting answer on the costs of the electrification of great western. The *Financial Times* said that there had been extra costs incurred partly because of the weather last winter, which we understand, but also because of rows with councils and problems caused by the protection of bats, dormice and, I guess, great crested newts, which cause problems for everybody in my experience. Is that the case and how much more do you think it has added to the bill?

Mark Carne: I honestly don't think that those particular issues have added very much to the cost of that rail line.

Q41 Graham Stringer: That wildlife did not add costs.

Mark Carne: Sorry. Let me go back. There are, I think, 131 bridges that we have to raise on the great western electrification alone. When you first enter into the project, you don't know the full details of how you are going to do it or how you are going to manage the traffic flow for each individual bridge. As you go through the project, you have to work really closely with the local communities and the council to manage it. In some cases we find that complete closure of the bridge is just totally unacceptable to the traffic management flow. We then may even need, in some very rare cases, to build a temporary bridge. All that adds significant cost to a project of this nature.

We are working pretty well generally with the councils. Sometimes it can be pretty heated, but I think we are working pretty well with them to try to resolve the issues. In the long run of course, they can also see the huge benefits that the great western electrification programme will bring in terms of faster and more comfortable trains. It will be 20 minutes quicker to Bristol with the new trains. There will be twice the number of trains per hour to Bristol and then through to Cardiff, Swansea and so on. There are significant benefits, but some inconvenience is caused during the construction of those sorts of projects.

Q42 Graham Stringer: Louise and I were trying to get at the extra costs. I am not sure we are there yet on what the extra costs were because of disputes with the councils, which I accept are inevitable, and because of the protection of wildlife.

Mark Carne: I am not trying to be evasive, but I just don't think that dispute itself is a major cause of problem, and certainly not the nature of the issues that you have alluded to. Obviously we have to be respectful of environmental concerns and issues, and plan our work as best we can in such a way that it does not disrupt wildlife.

Q43 Graham Stringer: When it came to the northern hub you said that the Ordsall chord was in the planning stage. Can you give us a quick update on where we are up to with the northern hub, and whether you are on schedule for all the different parts of the northern hub?

Mark Carne: Not for each of the individual parts. This is a really important project for us because it is going to facilitate passenger numbers of 45% growth or so by 2020. It is going to double the number of freight train paths to Trafford Park and so on.

Q44 Graham Stringer: This Committee has been strongly supportive of it.

Mark Carne: And your support is greatly appreciated.

Q45 Chair: Mr Carne, I think it would be better if you could send us a note on where we are with the northern hub.

Mark Carne: I am happy to do that.

Q46 Chair: Our concern is if there are any delays or cost increases that might impinge on the timing of the project. It would be helpful if you could let us know.

Mark Carne: I would be delighted to do that.

Q47 Mr Sanders: Clearly an operating company that has a longer franchise is presumably in a better position to plan long term, alongside yourselves. Do you have a view on franchises? Do you prefer working with a company that is on a longer franchise?

Mark Carne: It makes sense in terms of the relationship of the infrastructure provider to have some sort of continuity. We work very well with franchise companies that have short extensions of one or two years. We are able to work efficiently with them under those circumstances as well.

Q48 Mr Sanders: Doesn’t it affect their ability to plan for the purchase of new rolling stock in the future?

Mark Carne: Undoubtedly, yes.

Q49 Mr Sanders: If you were looking at a change in system to electrifying the railway from a diesel-based system, wouldn’t a longer franchise help that company and you in terms of planning?

Mark Carne: It is a question best targeted at the TOCs—the franchise companies—in terms of their procurement strategies for trains and so on. What you are saying makes sense to me. Obviously the longer the opportunity they have to invest and to plan, the better for them.

Q50 Mr Sanders: Are you ever consulted over the franchises by Government in terms of what would be an optimum franchise and what would work best for the longer-term investment?

Mark Carne: Not really. I can give you a current example of what we do. The ScotRail franchise is currently up for renewal, and a number of companies are considering tendering for it. At this stage we work with all of them to see how we can best serve their needs as a franchise operator. As you can imagine, they all operate and interact with us in slightly different ways. We try to sit down with them and say, “How can we help you to operate in the most effective way so that you can offer the most compelling bid?” We offer the same opportunity with each of the franchise companies so that when the Department makes the decision we are on the front foot and there is no misunderstanding between the franchisee and ourselves as to how we are going to work together.

Q51 Mr Sanders: In the great western main line electrification, which is only a small part of the great western main line, it does not help an enormous number of people who are First Great Western or great western service users in the far south-west. We understand there is going to be electrification to Newbury from Reading. I believe there has been some talk that it might be extended to Bedwyn, but only in relation to commuter services, not long distance. If a plan were put together for electrifying further west—in fact all the way west—how many years away could that be?

Mark Carne: It is not currently part of the existing five-year settlement but we have not yet defined the investment for the next five years, or indeed the years after that. We will start to work on our initial plan and our strategic business plan over the next couple of years. We look at all the possible upgrade scenarios across the country and try to rank them in terms of their net overall benefit to people in this country. Further electrification in the south-west will be one of the things that will be considered. To answer your question, it will be at least five years before it will be done.

Q52 Mr Sanders: Therefore, which comes first: the schemes or the budget? Do you say, "These are the schemes we want to do" and hope they will fit a budget, or do you say, "Here is the budget that is available and we now have to prioritise the schemes"?

Mark Carne: No, we look at the schemes. We have what is called a route utilisation strategy. We look at overall routes and say, "What are the steps we can take to increase capacity and customer service on that route? What is the best way of sequencing those things to give the best possible benefit?" There are many more things than are necessarily affordable at any point in time. The Department then has to decide which of those it considers the most suitable for funding in a particular five-year period.

There are some cases where it is possible to accelerate projects. Re-signalling in Cornwall, for example, which will happen in the next few years and will have a significant benefit on the train service there, has been brought forward by working in collaboration with the Cornish county council. There are certain circumstances where you can move things about, but major electrification projects would have to stick within the broader five-year programme.

Q53 Martin Vickers: Mr Carne, if I understood you earlier when you were replying to the question about the cost of the great western electrification, you said that in effect it was done in different tranches and you went back to the regulator. Are you satisfied with that process? It does seem rather bizarre. Of course, if you have done two thirds of the electrification, the pressure is on to complete it, but to have to go through a further reassessment at that stage is somewhat bizarre.

Mark Carne: I don't quite see it that way. What happens is that, when you first start to think about a project and you are doing the route utilisation strategy type of work, the cost estimates are inevitably fairly crude, although that is too strong a term for it; there is a wide degree of uncertainty associated with those costs. I would not then want to be held accountable to deliver to a cost estimate that has a huge amount of uncertainty. If I was, I would probably make sure that the cost estimate was as high as possible to cover all those eventualities.

The way the process works is that you say, "No, let's do more work. Let's do the proper design and the proper surveys. Let's look at all the technical standards. Then when you know what you are going to build, let's sit with the regulator and agree what is an efficient cost to deliver it." You don't wait until the end of the project. It is still very early on in the project. We are only about 20% of the way through that project, and within six months all of those costs will have been defined. It is still relatively early on, but I think it is at a point where you can be pretty sure what the cost structure is going to be, whereas two or three years ago it was much more speculative as to what the cost would be.

Q54 Martin Vickers: I want to go back to the issue about engineering possession. I recognise that the actual services provided are down to the train operating companies. Some are probably satisfied with their present arrangements, but I know that others would like to be able to provide a better service by way of a seven-day-a-week service. What improvements do you have in mind to allow that to happen? If I take my constituency as an example, you cannot leave it by train before 9.30 on a Sunday morning. For people getting to airports or wanting to do a return journey on that day it is very unsatisfactory.

Mark Carne: This is an area where we really are hugely challenged. Part of the passenger growth we have seen over the last few years is not just people wanting to travel in rush hour but people wanting to travel on Sundays or very late at night. Trains that used to leave Waterloo 10 years ago at 11 o'clock at night with three people on them are now absolutely mobbed. The whole pattern of people's use of the trains is completely different. We are moving much more towards a seven-day—maybe not 24-hour—intensively used railway as society demands it.

What this requires of us is to become even smarter in the way we inspect and maintain the railway. This is an area where the railway has a lot to be quite proud of. The automatic inspection of the railway today is world class. We have seven inspection trains running pretty much 24 hours a day over the network looking at all of the track. Mainline railways are inspected every two weeks by an automatic train with a high-speed video camera and ultrasonics. This enables us to monitor the condition of the track on an almost continuous basis. Then we only go and fix it when we need to. That sort of technology will enable us to have longer and longer periods when the railway is open and accessible to the train operating companies.

There is more to do; there is a lot more to do. As I said earlier, we need to work in different ways with the train operating companies to enable us to have different kinds of access. There may be occasions when we say, "I am sorry, we have to shut the railway completely for two or three weeks," so that we can be really efficient, go in there and blitz it and fix it once and for all, rather than take a whole series of weekend possessions for months on end. That is very inefficient in the way we work and causes a lot of disruption to passengers over a long period of time.

Q55 Chair: Have you identified any areas where you are planning to do that?

Mark Carne: London Bridge this August is an area where we are doing that. We are going to have a two-week period where we say to people, "Sorry, you can't stop at London Bridge for this two-week period in August." It may be two weeks or slightly less—maybe 10 days. We have started a programme of advertising that and telling the travelling public that that is what we are going to be doing so that they are able, as best as possible, to make alternative arrangements to get to their destination.

Q56 Chair: Are we to expect more of that?

Mark Carne: Generally speaking, yes. I would like us to move to that because it is a much more efficient way for us to execute the work. The stop/start way of working in the middle of the night for a few hours here and there is, as you can imagine, a relatively inefficient way for us to do it. We are good at it, but there is a lot that can be done more efficiently if you are able to take a longer possession. Nottingham station was completely shut for six weeks last year, but then it was done. That is the kind of thing I think we need to do a little bit more of.

Q57 Chair: You mentioned safety as one of the key areas you were going to focus on. In the delivery plan for control period 5, you say that by 2019 you want to reduce the risk at level crossings by at least a further 25%, and reduce train accident risk by 50%. How did you come to those target figures?

Mark Carne: There are three areas of safety that I would like to focus on. First and foremost, passenger safety is absolutely critical. We have one of the safest railways in Europe today, which is a great credit to the kind of work that I was discussing earlier about the way we maintain track. We all know that we must never ever take our eye off the ball in terms of passenger safety. Indeed, I am committed that we should take further strides to improve safety.

The specific target of a 50% reduction in the risk of a train accident is fairly notional, but we are now working with the teams to say, "What will it take to really deliver that? What are the things that you have to do to deliver that, and how can we go about achieving it?" From the work that I have seen so far, I am confident that we will be able to build a programme of activity that will achieve that kind of improvement.

Q58 Chair: Your target is to eliminate all fatalities and major injuries among the work force. We have heard representations from the work force about the impact on safety of cuts in staffing and spending. Can you achieve that, and what are you going to do to make it happen?

Mark Carne: I feel very passionate about this particular area. I come from an industry that has a completely different way of looking at work force safety. In the oil and gas industry, the chance of you getting injured is about 10 times less than in the railway sector on the work force side. In my opinion the railway has a lot to do to raise the standards of work force safety. Focusing on work force safety is an absolutely central tenet of my whole philosophy for the way the company has to work. I fundamentally believe that driving work force safety will deliver performance improvements in the railway as well. Work force safety and performance go hand in hand. Clearly I believe there is a lot that we can do to improve work force safety.

It is not about cutting jobs. The way to improve safety is to make sure we have properly trained people with the right skills and the right level of supervision working on the right things, which need to be done in the right way using the right equipment. If you have all those things in place, they will deliver the job for you right first time, and they will deliver it safely. Far too often we see people get hurt because of late changes to plans, and when they don't have the right equipment to do the thing that they need to do. They are rushing to get a job done and we end up with an injury. Better planning will be absolutely critical to the way we drive improvements in work force safety.

Q59 Chair: What else have you started to do in relation to improving safety for the work force?

Mark Carne: One of the things I have done is to issue what I have called a safety vision. I have it here. It is my vision and beliefs around safety—that everyone should get home safe every day. This has been shared throughout the contractor and subcontractor community and right through the work force in Network Rail. It starts with the belief that safe performance and outstanding business performance go hand in hand. They are not in conflict with one another. There are then a series of commitments about what we have to do in terms of the way we behave and the way we work together to drive performance and safety. Some of these things are quite simple statements, but they are very important in terms of changing the culture within the organisation.

Q60 Chair: Is this something you have started to act on?

Mark Carne: Absolutely. This was the first thing that I identified. To be honest with you, it was one of the reasons why I wanted to do this job. I looked at the employee and work force safety performance. Having come from a safety-critical industry, I felt that this was something that I could help to make a difference on. I know when I see that kind of work force safety performance that there is also an opportunity to improve the underlying business performance. If work force safety can be improved, I know that business performance can be improved.

Q61 Chair: I am sure we will be asking you more on that, and seeing what you have achieved on it. Finally, I would like to ask you about traffic management system procurement. You will be aware of the controversy in relation to Delta.

Sir David Higgins wrote to us in February following completion of Network Rail's review of its traffic management procurement and said that DeltaRail does not offer a traffic management system and "can only offer an automated signalling control system." Do you agree with that? Is it something you have looked at yourself?

Mark Carne: We have done an exhaustive review of our traffic management system procurement over the last several months, as has the regulator. I am satisfied that the conclusions of the procurement process that we went through were the correct conclusions. Perhaps it is important to explain this. The implementation of a traffic management system is one of the biggest steps that we can take to improve train reliability in the next few years. It is absolutely crucial that we deploy traffic management fast. That is why I am extremely pleased that we have now awarded the contracts and are moving forward with the deployment of traffic management. For us to deliver our outputs in the next five years, it is essential that we have the traffic management system in place.

It is not unusual for tenderers who lose in competition to be unhappy with the outcome. We have done an exhaustive review of the way the traffic management system procurement process was executed. It has been independently looked at by the regulator and everybody is satisfied that it was done in an appropriate way.

Q62 Chair: Do tenderers who lose normally pursue the issue in the same way that DeltaRail pursued it?

Mark Carne: No; they have been particularly persistent in the way that they have addressed it, but it doesn't make them any righter.

Q63 Graham Stringer: It is not just sour grapes, is it? *Modern Railways* agrees with them and claims that the tenders you have accepted could be obsolete by the time they are implemented. It is not just a losing tenderer saying it.

Mark Carne: Let's also be realistic. If we were to say, "Okay, let's change in the middle of this procurement strategy," is that what people really think we should do? It would be absolutely crazy.

Q64 Graham Stringer: This Committee brought the issue up because we were told that the difference in the price was £1 billion.

Mark Carne: No.

Q65 Graham Stringer: I am just saying what we were told; I am not saying it is accurate. This Committee cannot be in a position where it can judge between different tenders—that has to be your job—but obviously we are going to be concerned if somebody tells us that they think you have made a fundamental error and that you are putting in a system that will be out of date when it is in, and somebody could put in a more modern system more cheaply. That is our interest. We know there will be costs of cancelling. What I would really like to be assured of is that the system is better than the DeltaRail one, is not going to cost more and won't be obsolete very quickly.

Mark Carne: It certainly won't be obsolete. This is an area where technology is continuously evolving, as you can probably imagine. We are trying to deploy systems that will enable us to continue to evolve over time. The really big prize comes from deploying traffic management quickly. We have been through a long procurement process. It has been a completely transparent and fair procurement process, where every tenderer was evaluated on the same criteria. We have made the choice. It has been independently looked at and we now need to move on. The real benefits will come from the delivery of that system in the railway.

Q66 Graham Stringer: I have a completely different question. The Davies commission recommended that you give greater priority to rail going to airports. This country has a very poor record of investing in railways going to airports. How have you responded to that?

Mark Carne: The issue of rail to airports is very important for us. We are looking at the western access to Heathrow, and we are looking at accelerated times to Stansted. That is around London. We are looking at the northern hub and Manchester International airport. We are very conscious that that connectivity is a very important part of a joined-up transport strategy.

Q67 Graham Stringer: We know about the northern hub, and we are going to know more when you present us with the report. What is the schedule for upgrading to Stansted, which I do not think we know about?

Mark Carne: There is some work within CP5 on that area. There is further work that will be considered as part of CP6 to improve the speed to Stansted within the next five-year funding period. The objective is to get to 30 minutes to Stansted.

Q68 Chair: Thank you very much for answering our questions. I am sure we will hear from you again, and we will have more questions.

Mark Carne: It will be my pleasure.