

**Transport Committee
2 February 2011**

Transcript of Agenda Item 6: Crossrail

Valerie Shawcross (Chair): Welcome to Terry Morgan, Chair of the Board of Crossrail – but known to us from his previous life in Tube Lines – Rob Holden, departing Chief Executive of Crossrail Ltd – and that is an issue that we want to take up with you – and Ian Brown, former Managing Director of London Rail, Transport for London (TfL) who is now acting in a consultant advisory capacity to Crossrail. Welcome all of you and thank you for being with us today.

Rob, we are very grateful for you coming today but it would be important, given the press speculation and the things that have been said and, also, the crucial stage that the Crossrail project is in, if you would like to put on record the reasons for your resignation and explain it to us today.

Rob Holden (Chief Executive, Crossrail Ltd): OK. As I said to Terry when I advised him that I was leaving Crossrail there is no one specific reason. It is a multitude of reasons which are both personal and, in my view, beneficial to the Crossrail project. I have now been at Crossrail almost two years. I was asked to do a number of things at the outset and we have made very good progress. The project, after the comprehensive spending review (CSR), is secure. The award of the four principal civil engineering contracts just before Christmas was a very significant milestone. As we move forward the nature of the project changes. The skill sets required of the Chief Executive, in my opinion, change. Aligning that with my own personal ambitions I think this is the time for me to move on. It was a difficult decision.

There has been speculation in the press. Most of that speculation is exactly that. It comes from a number of different sources. Amongst those who have commented the editor of New Civil Engineer – who also speculates – also says, “In many ways the timing of his departure could work well for the project”. I thought very carefully about this. Antony Oliver [Editor, New Civil Engineer] is right. I am moving on. I hope and wish the project every success. I am sure the people that I leave behind and the team that I have helped create will do a tremendous job.

Valerie Shawcross (Chair): Thank you for that, Rob. We would not want to question you on any personal issues but it would be very important if you could say if there is anything about the current arrangements. There has been a lot of press speculation about the governance arrangements for Crossrail compared with those that you operated under your previous working life, for example, at the Channel Tunnel. Is there anything about the governance arrangements that you find difficult at all? How effective are they do you think?

Rob Holden (Chief Executive, Crossrail Ltd): We have to accept that Crossrail is jointly sponsored by the Department for Transport (DfT) and TfL – rightly so because they both have very important parts to play in the funding of the project. That, in itself, makes the situation very different than the situation that I have had previously at the Channel Tunnel Rail Link. I am not criticising that. I accept that. I have worked in those arrangements successfully. I have helped, with the Chairman and others, to evolve the governance arrangements. They will evolve further once the project goes through review four at the end of March 2011, beginning of April 2011. They are arrangements which we have to work around. They are different than I have worked with in the past.

I do not think people should make too much of an issue here. I am going very much for personal reasons. The arrangements I have worked in over the last two years are different. I have found it difficult to adapt. That is me. I just want to move on.

Valerie Shawcross (Chair): OK. Ian, I wonder if I can bring you in on this?

Terry Morgan (Chair of Board, Crossrail Ltd): I am sorry, Chair. Do you think I could say something on Rob's departure?

Valerie Shawcross (Chair): That would be helpful, Terry. I appreciate you have sent us a lot of written information about progress on Crossrail. Some things have gone well and some things are rather stuck. I want to say that this Committee had previously explained some concerns about the complexity of the governance arrangements for Crossrail so that is why it is an issue that we do particularly want to pick up.

Terry Morgan (Chair of Board, Crossrail Ltd): I understand.

Valerie Shawcross (Chair): Terry, what would you like to say?

Terry Morgan (Chair of Board, Crossrail Ltd): Going forward, it is very clear from my point of view, and from the Crossrail point of view, we did not want Rob to resign. I respect his personal decision to do so but, at the same time, this was a decision that he made and we will cope with that, but it is not a decision that we wanted him to make.

Secondly, in terms of governance, to reinforce what Rob said, it is, by its very nature, a huge project. It has a lot of interest. There were some difficult governance issues that were in place when we met you last time. We made some significant adjustments last year. As Rob said, we make further adjustments at the end of March 2011 when we finish the review with Treasury in terms of the wellbeing of the programme; all in line with the programme that had been predetermined at the early stages of Crossrail. There are some further changes to occur on governance and the very last decision we have to make at the end of March 2011 will clarify that the governance arrangements about giving accountability and authority in the way it was always described for Crossrail will be in place in April 2011. That is the current plan.

Valerie Shawcross (Chair): Looking at an organisational diagram of the structures and all of the partners it does look, quite frankly, like a scrabble board. It is extremely complicated with such a lot of sponsors and partners. I would be quite interested to hear if you are looking at this with fresh eyes and you know the machine from inside TfL. Do you have any comments on it? The Committee's concerns might be around - accountability is not the issue here - whether or not there is enough scope for decisive action and decision making. Are things signed off quickly enough?

Ian Brown (former Managing Director of London Rail, TfL): The important part of governance from my point of view is the Joint Sponsor Board: two from TfL and the DfT. Four things come to mind that have moved on significantly.

The first one is that the project is in very good shape now, when it was not some time ago. That has been demonstrated through the major project review process which is a tough series of hurdles but when you have been through them you are better off having passed them. As Rob and Terry mentioned, the next real goal button is major project review number four which will be completed in April 2011.

The second very important point to make on sponsorship is that this project is funded, which it may not have been given all the other projects around. That has been through a change of government, a change of Mayor and a whole change of the economy and yet the project,

because it is in a good format and because of its business case about regeneration and the economy etc, still stands. The key test is, is it managerially competent. That test has been passed through the project review group.

Quite a lot of hurdles but, with big projects, to have these hurdles at the beginning, rather than halfway through when you are halfway reversed, gives some strength to the project and confidence for the way it goes forward.

Caroline Pidgeon (Deputy Chair): I wanted to pick up from Terry's comments about the reasons for Rob's resignation. I have heard a lot of rumours that the two of you do not really get on with each other and that has been a very great difficulty in taking Crossrail forward. I wonder whether there is any truth in that rumour?

Rob Holden (Chief Executive, Crossrail Ltd): I wish people would stop listening to rumours and drawing on speculation. What evidence has anybody got that we have not worked together to get the project to where it is? I am very frustrated that those sorts of issues are being raised. I am also extremely frustrated that we are spending so much time on this issue to the detriment of taking the project forward.

The project is not about me. If you are a football follower, Kenny Dalglish [Manager, Liverpool Football Club] said the other day the club Liverpool is much greater than any individual; irrespective of the fact that somebody spent £50 million on Torres. Crossrail is the same. It is more than individuals. I am proud that I have helped to put together a team that will take the project through successfully.

Changes have to be made during the course of Crossrail, including the skill sets of the Chief Executive. It is my firm belief that the skill sets of the Chief Executive need to be different than those which I have and those which I have used over the last two years to get the project to this point in time. It is right for me and it is right for the project to move on.

Caroline Pidgeon (Deputy Chair): You are saying that you need a different set of skills to complement Terry's skills in taking this forward for the Chair and the Chief Executive. Is that what you are saying?

Rob Holden (Chief Executive, Crossrail Ltd): I think the skill sets for the new Chief Executive going forward need to be less managerial and more engineering. People like Andy Mitchell [Programme Director, Crossrail Ltd] and David Allen [Finance Director, Crossrail Ltd] - the two executive directors that I am leaving behind - will benefit from somebody who has those skill sets to help them in their career ambitions and to help them in delivering Crossrail.

Valerie Shawcross (Chair): Thank you, Rob. We should just say that this Committee is an opportunity to put things on record and tackle rumours and innuendo head on. I hope you do not feel offended by these questions.

Terry Morgan (Chair of Board, Crossrail Ltd): Can I respond to the question that was asked of both of us. Just step back. Remember we came here last year. There was huge uncertainty. We had the funding capacity. As Rob said, there was a change of Government. Were we going to get through the test in terms of whether this was still going to be prioritised? There has been a huge CSR; a value for money assessment. This project is still on track. We offered up £1 billion savings because that is the way we thought we could make the programme more efficient and a better engineering programme. We let contracts in December 2010 for £1.25 billion. That is how you have got to measure us.

I deny the question in terms of relationship. This is a huge project. There are lots of tensions. There is a lot of push. We are trying to get momentum into the programme. I regret Rob leaving. We were working together. People can say what they like. Measure us against the output that has been achieved to date. We are delivering to London a project. Many other projects have been put at risk and are still uncertain in their future. Crossrail is no longer just a development programme. We are now putting real value into the ground. That is how you should be assessing us.

Richard Tracey (AM): We can say to Rob that, as politicians, we know only too well about press tittle tattle so you have our sympathy on that score. You have got to expect some tough questions I am afraid because this is a critical project and one that the Mayor has put his neck on the line, in a sense, with the Government.

Can I ask one or two factual questions – this question of governance and TfL. It is on the public record that we in the Assembly have criticised various elements of TfL governance over the last few years. On the matter of the Sponsor Board, who are the members of that Sponsor Board? Not just the organisation. Who are the personalities involved in that?

Rob Holden (Chief Executive, Crossrail Ltd): There are five members of the Joint Sponsor Board at the moment. As Ian says, there are two representatives from TfL. They are Steve Allen, the Chief Officer for Finance and until Ian's retirement, he was the second TfL Board Member. His position has been taken over by one of his former colleagues, Howard Smith [Chief Operating Officer, London Rail, TfL].

The DfT representatives, again until recently, were Dr Mike Mitchell [Director General DfT National Networks Group], who was responsible for rail and Lucy Chadwick [Director of Rail Projects] who runs major projects. Dr Mitchell has recently retired and he has been replaced by Bronwyn Hill [Director General City and Regional Networks], who is a Director General.

The fifth member has been James Stewart. He is a non-voting member. James Stewart, I am sure you will know, is currently the Chief Executive of Infrastructure UK, a position he moved into from Partnerships UK. He is leaving his position at the end of this month. I understand, in future, that the Joint Sponsor Board will be simply the four members, two from each of the two sponsors.

Richard Tracey (AM): OK. We are going to come back to some elements about sponsorship later on.

You said that New Civil Engineering had said that the project might well benefit at this moment from your going. I, personally, find that difficult to understand, not being an engineer. Can you specify how it might benefit, apart from what Terry has already said?

Rob Holden (Chief Executive, Crossrail Ltd): Repeating what I have already said, the skill sets that the project requires will change and evolve as the project goes through different phases. As we move into construction the skill sets of certain positions change. I believe that includes the Chief Executive. Lots of things which I have done over the last two years hopefully are one offs and will not be required in the foreseeable future. Lots of the issues about turning the project into a delivery organisation, dealing with the governance issues, getting the project through the review points, review three – in fact it was not even through review two when I joined the company. There was a special interim review two put in because of the state the project was in. We got through that three months after I joined the project. We got the review three in March last year. We are in good shape to get through review four at the end of next month.

My colleagues, and in particular my engineering colleagues, moving forward in what is a very complex project, will benefit from a person who has much more hands on project management experience than I have, who is more of an engineer and can talk the same sort of language. I believe passionately in that and that is one of the principal reasons for me deciding to move on at this point in time.

I really do not see what the problem is. I have said to Terry and to others, if people wish me to continue with some involvement in the project, I am quite happy to consider that. That offer remains open.

Valerie Shawcross (Chair): Sorry to intervene, we have carried that ground now, Richard. There were some issues about delivery strategy that we need to get to.

Richard Tracey (AM): I just wanted to ask when is your successor going to take over? There is an interim at the moment isn't there?

Terry Morgan (Chair of Board, Crossrail Ltd): Let me give you the status of where we are right now. Rob tendered his resignation three weeks ago. He is on six months' notice. Just to illustrate the spirit of the way this is being handled, the intention is that Rob will work his full notice period and will continue to act as the Chief Executive.

Rob Holden (Chief Executive, Crossrail Ltd): Until Sunday, 10 July 2011.

Caroline Pidgeon (Deputy Chair): You are counting!

Murad Qureshi (AM): He is counting the days!

Terry Morgan (Chair of Board, Crossrail Ltd): In the meantime, in exactly the way that Rob has described, we are reviewing the specification of the Chief Executive and we will be doing a beauty contest for a search company this week and next week and we expect to start that search during February 2011. Do not be surprised if you see an advert in the *Sunday Times*, for example, back end of February 2011, advertising for people to apply. In an ideal world what I really would like to do is, at a minimum, to be able to name the Chief Executive before Rob's departure and, ideally obviously, to have that individual in place before Rob does leave. That is the plan. Again, you will not be surprised in terms of what we would do if Rob's departure was before a new Chief Executive arrived; we know what we would do. There is nothing going to affect the programme.

Can I add one thing on governance to put it into perspective? There is this concern in terms of governance. It is a fact that when we placed the contracts for £1.25 billion before Christmas it was not a very simple process, but we hit every date we intended to in getting approval. In spite of recognising there were a number of hurdles to overcome we had a date we fixed that we wanted to get those contracts out and we hit it on the very day we said. That is a compliment to the executive and recognised that we knew how to work the system.

The point I am trying to make is that, post April 2011, when the Major Projects Review Group process is completed, we will not have to refer £1.25 billion of commitment back to the sponsors. That responsibility will lie with the Crossrail Board. That is quite a substantive change and why the governance arrangements will get simpler.

Valerie Shawcross (Chair): Right. They are set to improve. Richard, carry on.

Richard Tracey (AM): I mentioned sponsorship. When you were talking to us last year you did indicate that you really wanted to move away from sponsor control. Terry, to what extent --

Terry Morgan (Chair of Board, Crossrail Ltd): That is it.

Richard Tracey (AM): That is it is it?

Terry Morgan (Chair of Board, Crossrail Ltd): Yes. The sponsors are and always will. We have to report to them about the quality and the status of the programme. They are responsible for specifying what they want us to provide. That is their responsibility. Once it is specific our job is to deliver it.

Richard Tracey (AM): It might be appropriate at this point if I can just ask a few questions about the financing of Crossrail. You know, here talking to you and, indeed, talking to the Mayor in Mayor's Question Time, I, and colleagues, have several times raised the idea of the areas outside London that Crossrail will cover - Maidenhead on the one end and Shenfield on the other - making some contribution to the costs. It is becoming more and more sensitive now that we are hearing about the community infrastructure levy (CIL) contributions that developers will have to make within London. What do you think of these other people making a contribution? It surely makes total sense to ask to the public and perhaps to you?

Terry Morgan (Chair of Board, Crossrail Ltd): I have to be frank with you. I mentioned what our role is. The funding capacity is delivered by the sponsors. Personally, I could not take issue with the point that you have made. Clearly, in that regard, Essex and Berkshire will benefit from the fact that Crossrail exists. I am more interested in getting certainty into my programme and so I have to rely on the sources of funding that have been identified, which does include putting the railway into Berkshire and Essex in the way we have described. That is the way it has been set up.

I almost have to take the mirror back to you. This, for me, is more of a political view about who should be contributing to Crossrail. I just know we have a funding model in place that is based on a very full contribution from London in its fullest sense.

Richard Tracey (AM): Has Ian got anything to say about this?

Ian Brown (former Managing Director of London Rail, TfL): My understanding of the situation is that Crossrail is seen by Government as a national project as well as a London project. The business case, certainly, is about the economy of London and the economy of the UK.

Richard Tracey (AM): Exactly.

Ian Brown (former Managing Director of London Rail, TfL): The DfT contribution, which is just under half, to Crossrail is on behalf of those national benefits. The answer to the Maidenhead Shenfield question is it seems in that equation from the DfT funding of the project. It has not been localised I admit.

Richard Tracey (AM): All of us here are representing London boroughs one way or another. I can see the funding of Crossrail conceivably being jeopardised because the London boroughs are going to fight a pretty steamy battle about the CIL contributions. Indeed, it has appeared this morning. Sutton started the war and it will be quite soon that others will. Are you not worried about the future funding on this particular point alone?

Terry Morgan (Chair of Board, Crossrail Ltd): No, I have to tell you that I spend so much time doing the reverse of what you are describing; trying to explain why London - if you take the rest of the regions around the UK - has got a programme like Crossrail and we have not got the same level of investment around the rest of the country. We spend most of our time

defending the model that we have, which is based on a very full contribution coming from the London boroughs. That is why we are doing this.

To be frank with you, with the scale of this programme, there will always be those directly on the route who will see direct benefits and those who are more distanced from the route perhaps being less obvious in benefits. We have a job to do in reinforcing not just direct benefits on the route but the regeneration and the job opportunities that comes by Crossrail that affects the whole of London. We have got more to do in that regard. We have started that.

Tony Arbour (AM): On the specific point I wonder if I can ask Ian a question on this funding. You have explained to us that this is seen as being national benefit as well as London benefit and the DfT has made its contribution on that basis. Are you able to tell us whether or not the direct beneficiaries outside London - Berkshire and Essex - were asked to make a contribution?

Ian Brown (former Managing Director of London Rail, TfL): I do not know, to answer the question, whether there has been a specific request but I do know that the business case was done on a national basis, rather than a Berkshire localised basis. It was done at an aggregate level. I think the answer is no, but I will check whether there has been a specific request. Not to my knowledge.

Tony Arbour (AM): Thank you, Chair.

Valerie Shawcross (Chair): Thank you. This is the general issue of strategic projects; that they affect such a wide area. It is a bit like the Olympics, in parallel. We have some of the same arguments but we are glad it is going ahead.

Caroline Pidgeon (Deputy Chair): Let us pick up, move forward and look at how the project is going. I do not know whether you would like to give us a brief update: a timetable. When do we expect various sections of the route to open to the public? It would be good to have that out and clear for everyone to understand.

Rob Holden (Chief Executive, Crossrail Ltd): A huge amount was achieved in 2010. When we met last year the design of the project was going forward involving most of the major design houses based here in the UK. By and large the design of the projects has now been taken through to what is generally known as the Royal Institute of British Architects (RIBA) E, which is one stage before you involve the people who are going to build - the constructors.

During the early part of the summer there was a huge amount of work done in preparation for the CSR and getting the result, which Terry has referred to. In parallel with that, we continued the property acquisition and a number of enabling works, particularly in central London - diverting electricity cables, sewers, water pipes, gas pipes etc - and issuing invitations to tender (ITTs), particularly for the major civil engineering works involving the two main tunnel drives through central London and the station tunnel cavities in the central section stations between Paddington and Whitechapel.

That, in December 2010, as we have already heard, led to the award of four very significant contracts, which added up in total prices to around £1.25 billion. That has enabled the successful consortia to come on board last month - just a couple of weeks ago. For the first 100 days or so we are working with those new consortia, with the design people, to identify how we think we can do things even better than was the case as we went into the CSR.

At the same time the final designs for the tunnel boring machines are being agreed. Orders for tunnel boring machines will be made shortly, which will enable those machines to be delivered into the country towards the end of this year, beginning of 2012. They will be received at the two principal portals. Royal Oak, where work is ongoing at the moment to be able to receive

the machine coming from Royal Oak in the west through to Farringdon in the middle. Similarly, enabling work to create the portal to receive the tunnel boring machine in the east at Limmo is underway, where the machines - there are two machines from each portal - will travel, again, through to Farringdon. As I speak the teams are evaluating submissions from the contractors in respect of two further tunnels: the Thames Tunnel and Connaught Tunnel.

We have issued Official Journal of the European Union (OJEU) notices for stations work and station procurement will be a huge activity during 2011. We are just about to go to the market and invite submissions to build a station at Paddington and, during the spring and early part of the summer, we will do the same for stations in the central section.

Alongside that, of course, we will be going to the market to procure the trains; a fleet of just over 60 trains and the depot at Old Oak Common.

There is a huge amount going on. There probably will not be a huge amount to show for it in 12 months' time but as those machines get moving in 2012 in two years' time there will certainly be a great deal of physical progress to see.

Caroline Pidgeon (Deputy Chair): That is very helpful. As you say, there will not be a lot to see immediately but there is all this preparation and all this other work going on. The public out there want to know when it will be operational. When do you expect the different sections of the route to be open to the public? It is not clear whether it is going to open in sections or whether you are going to open the whole thing at once.

Rob Holden (Chief Executive, Crossrail Ltd): The railway was never going to be opened all at once. It was always going to be opened incrementally, starting with the commissioning of the new trains on the existing Great Eastern and the existing Great Western before they were introduced to the central section. That was very important in terms of lessons learned from previous projects, both the Channel Tunnel itself and the Channel Tunnel Rail Link.

It was then envisaged that, from the central section, the limbs would be added over a period of six months, which is still a relatively short period of time given the complexities of joining the central section to existing, very complex infrastructure, particularly bearing in mind the additional requirements of meeting intra-operability and new technologies.

The central section, as a result of the CSR, will be delivered and trains will be running through that central section around the third quarter of 2018. In terms of adding on the limbs we are still doing some work with the sponsors, consequent upon the CSR, to determine the most efficient and effective way of bringing the railway into full use with minimum disruption to the travelling public.

Referring back to speculation, there was clearly a lot of speculation leading up to the CSR as to whether some limbs were in danger. I certainly can confirm and put on the record that we are working on all aspects of the scope from Maidenhead in the west through to both Shenfield and Abbey Wood in the east.

To the extent there is any doubt it is Woolwich Station which, I guess, is a subject we will come to in a moment. Perhaps just making reference to that, the last two days the sponsors have been working very hard with representatives from Berkeley Homes in order to conclude the financing arrangements for the Woolwich Station. There is an agreed programme of activity with necessary experts over the coming few days with a view that documents will be capable of being signed on Tuesday of next week.

Caroline Pidgeon (Deputy Chair): Does that have any damaging impact on the project in that delay or will that still keep it all on time?

Rob Holden (Chief Executive, Crossrail Ltd): We have had to accommodate changes in schedule. We have been working very hard with Berkeley Homes in order to give the sponsors the confidence that we meet their requirements. The sooner we can sign those documents and engage the designers and the contractors the more secure the project will be.

Caroline Pidgeon (Deputy Chair): Is there any risk that they will not sign next week?

Rob Holden (Chief Executive, Crossrail Ltd): There is always a risk that they will not sign!

Caroline Pidgeon (Deputy Chair): How great a risk is it?

Rob Holden (Chief Executive, Crossrail Ltd): As I understand it, from the briefing I had last night, the last two days have been very productive in addressing the issues. There is page turning with the lawyers on Thursday and Friday this week which will enable those documents to be signed next Tuesday. I am confident as anybody can be that the Woolwich Station issue will be brought to a successful conclusion within the next week.

Caroline Pidgeon (Deputy Chair): Fantastic. I want to go back to this scheduling. You said the central section will be delivered and operational by the third quarter of 2018. You have confirmed all the limbs - you did not mention Heathrow but I am assuming that is in it as well - are being worked on. That is great. The whole project is going ahead. Are you saying another six months before all the rest of it will be operational and what do you mean by the central section, just to confirm it for people who might be listening?

Rob Holden (Chief Executive, Crossrail Ltd): The central section is generally referred to as Paddington through to Whitechapel and Custom House. The work is ongoing. We are working very closely with Network Rail. It has huge amounts of work to do with the upgrade of the Great Western. Recognising the disruption that these works will cause to the travelling public we want to do the work together. That is efficient from all sorts of perspectives. That work is ongoing. We will report to the sponsors during the course of this year and take our guidance from them.

Caroline Pidgeon (Deputy Chair): You cannot give us any exact timetable then for the rest of it to be open?

Rob Holden (Chief Executive, Crossrail Ltd): It is an issue we have to discuss. The sponsors have asked us to address it. We are addressing it with them. We will go through the issues with them during the middle of this year. Hopefully, as the Minister has said, she will make a statement in the House at the appropriate time.

Caroline Pidgeon (Deputy Chair): It looks like a lot of it will be 2019 probably.

Rob Holden (Chief Executive, Crossrail Ltd): We will do this in the most efficient and effective way. There are lots of issues that will emerge over the course of the delivery of Crossrail that we will have to address. I can assure you we want to do this as quickly as we can because, once we get into construction, cost is a function of time. That argument has not applied to date. Certainly, as we go forward, the sooner we deliver this railway and have it up and running the better all round for all sorts of reasons.

Caroline Pidgeon (Deputy Chair): I have one final quick question. Looking at the route and looking at the stations, there has been a lot of talk before about trying to add additional stations in. I know the Deputy Chair of TfL is very keen on one in his home borough. Are you working on that or is that completely off the sheet at this time?

Terry Morgan (Chair of Board, Crossrail Ltd): For the record, Caroline, can I just say Daniel Moylan has not lobbied for a station at Kensal Green. That would obviously be --

Caroline Pidgeon (Deputy Chair): His borough; his home borough.

Terry Morgan (Chair of Board, Crossrail Ltd): -- something he would be very careful not to do. It is true we have got a heavy lobby from Kensington and Chelsea for a station. The current status is that Network Rail is still looking at the implications of a station there against the criteria that the Mayor has previously set; no additional cost, no effect on timetable and no effect or delay on this programme as a criteria for assessing whether a station can be fitted. That work is still ongoing.

Caroline Pidgeon (Deputy Chair): Still ongoing. When do we expect to hear on that?

Terry Morgan (Chair of Board, Crossrail Ltd): Network Rail is doing the work now. My anticipation is it is going to probably be another two or three months before that is concluded.

The added complication of that is that there is also another study going on with High Speed 2, which has earmarked Old Oak Common as a potential interchange station. There are a number of complications round that area that still have to be resolved.

Caroline Pidgeon (Deputy Chair): Thank you.

Terry Morgan (Chair of Board, Crossrail Ltd): Not to mislead the Committee, in terms of Woolwich, we are confident that we will get there but please remember, in the questions you have been asking, it will not be available, as things currently stand, as a station. What we are building is the capability to have a station.

Valerie Shawcross (Chair): The box. You are making it possible to retrofit at a later point.

Terry Morgan (Chair of Board, Crossrail Ltd): It was very clear in the way Crossrail was approved that the funding for that was not going to come from the public sector. That is still an outstanding question.

Valerie Shawcross (Chair): It is still an important thing to do because it will be massively more expensive to retrofit if that box does not go in now --

Terry Morgan (Chair of Board, Crossrail Ltd): It is important to have the enabler - absolutely. If we do not do the box now we never will put a station there --

Valerie Shawcross (Chair): -- so we do want that box to go in.

Caroline Pidgeon (Deputy Chair): Surrey Canal Road.

Valerie Shawcross (Chair): Can I just check something you said there, Rob. Did I hear you say that the tunnel boring might start, for the central section, at the beginning of 2012? Last time we were here, looking back at our records, we were expecting the tunnel boring for the central section to start in October this year. Has there been some slippage there or is that just things tightening up, date-wise?

Rob Holden (Chief Executive, Crossrail Ltd): I do not think there is slippage. Maybe we were too loose with the terminology 12 months ago. We are expecting the machine to go into the ground in the fourth quarter of this year.

Valerie Shawcross (Chair): Right. It depends when you say the work starts really.

Rob Holden (Chief Executive, Crossrail Ltd): These machines are about 400 metres long. It does take quite a long time to get them into the ground and working.

Valerie Shawcross (Chair): That is helpful. Thank you very much.

Tony Arbour (AM): Directly related to the size of the tunnelling project and the size of the machines, there is going to be concurrent tunnelling in London with the new Thames Water intervention tunnel. Has there been any discussion between you and Thames Water on disposal of spoil?

Rob Holden (Chief Executive, Crossrail Ltd): We are in dialogue with Thames Water and I am going to a meeting tomorrow evening to discuss that subject.

Tony Arbour (AM): Will you be using the same machines?

Rob Holden (Chief Executive, Crossrail Ltd): No.

Tony Arbour (AM): So there is going to be a huge sudden new capacity in machines. I assume the tunnel machines are enormously expensive machines and represent a fair amount of your budget. Is there no opportunity of doubling up on any use of the plant, i.e. maybe when you have finished doing a bit? I am sorry, I have got no idea how these machines are transported. For all I know they are assembled underground. It does seem to me that there is going to be the most enormous amount of tunnelling disruption over this period because of these two gigantic projects and there really ought to be some way in which the two of you can cooperate, not just on disposal of spoil but maybe on use of plant. Maybe I have got this completely wrong.

Rob Holden (Chief Executive, Crossrail Ltd): I have no idea what size of tunnel Thames Water is delivering.

Tony Arbour (AM): It says three double-deckers can travel abreast in its tunnel.

Valerie Shawcross (Chair): The problem is that the projects will be building at the same time, in parallel, so I do not think there is a prospect for them going consecutively.

Terry Morgan (Chair of Board, Crossrail Ltd): To put it into context, when these machines go in the ground and they start cutting they are running 24 hours a day seven days a week. These are all round the clock operations. We have a requirement for that until 2015. The question is what will be the condition of those tunnel boring machines in 2015? If there is a resale value for it we will extract them. It is a question mark - to be frank with you - with the cycles that we will putting them through, what will be the condition in terms of re-saleability. If we can we will be moving them back out.

Murad Qureshi (AM): I want to move on to the service provision after Crossrail is completed in 2019. Given we have had some changes during the CSR negotiations to completion of the works in 2018, are there any changes in the passenger forecasts and the service level? Ultimately, that is what this pain and grief is all about.

Ian Brown (former Managing Director of London Rail, TfL): Service level first of all. The forecasts were revalidated as part of the project review process number three. The forecast came out broadly the same - in fact slightly higher. That was a good thing. The service in question, the 24 train an hour provision - with flexibility above that for 30 and even an extension beyond that - has been tested against that and is seen as robust. We are still planning just over 60 trains on that basis.

The thing that did change on service provision, which is relevant to what Rob just said in the very speedy introduction of the service six months after, is the fact that we are not, simultaneously, going to open the door to Crossrail and expect the trains to run, trains commissioned and depots commissioned. The intention is that the franchising process for the Great Eastern and the Great Western should take this into account. We will have a franchise from about 2014 onwards that will commission the trains and commission the staff so that, when the Crossrail tunnel opens, we have an order so we can build that business up.

We are currently, as Rob mentioned, going back to the two sponsors with a timetable to reflect that by about mid-summer. So no changes really.

Murad Qureshi (AM): You mentioned, Ian, the 24 trains per hour. That is, essentially, the central bit. What service are the bits at the end getting? For example, the bit between Paddington and Heathrow, given one of the selling points of the whole scheme was to get people to Heathrow much more smoothly.

Ian Brown (former Managing Director of London Rail, TfL): Specifically it is 12 each end; 12 at each end on the east. On the west the idea was to put the four Heathrow Express trains into Crossrail. That is still part of the plan. However, the Route Utilisation Strategy (RUS) that is being done and published by Network Rail is suggesting it is outside the immediate negotiation of the project and that we look at the Heathrow Express with a view to incorporating that into Crossrail as well. That would be a separate deal at the right time. The other trains, eight of which will go through to Maidenhead and Hayes and Harlington.

Murad Qureshi (AM): My understanding from what I have heard in previous arenas like the Heathrow Airport Consultative Committee was that, from Paddington, out of the 24, six will be shooting through; of that, minus two from the Heathrow Connect. That is four. It does not sound too many to me in comparison with what is going through central London --

Rob Holden (Chief Executive, Crossrail Ltd): Sorry, West of Paddington. Four trains go to Heathrow an hour. Two trains go to West Drayton. Four trains go to Maidenhead. That is ten trains an hour beyond Paddington and 14 trains an hour will turn back at Westbourne Park - under the current arrangements.

As Ian says there is work going on with Network Rail and the RUS in a more efficient use of the Great Western line and negotiations that will have to take place with BAA, the operator of Heathrow Express, to get a more efficient use of the infrastructure, both existing infrastructure and the new infrastructure that is to be introduced.

Murad Qureshi (AM): I am glad you are getting your mind around the franchising. There are some pertinent issues on the west side of Crossrail; for example, the Greenford line. Is it your proposal to drop that or to maintain that line? For people in North Ealing it is very important to do the north south travel which is, otherwise, not possible by public transport.

Ian Brown (former Managing Director of London Rail, TfL): The plan at this moment, to commit the extra capacity on Crossrail, is for the Greenford branch to become more frequent, but a shuttle to and from West Ealing.

Murad Qureshi (AM): OK. You may hear different views from Ealing Council who have been making representations on that.

The other thing is the huge amount of overcrowding that you have on the First Great Western. Recent figures last week of the overcrowding on commuter trains coming in to London. Seven of the ten trains which were overcrowded were trains on the First Great Western coming into

Paddington, which would be along this line. I am hopeful that you will be mindful of these pressures, although you will not immediately make a difference to this at all.

Ian Brown (former Managing Director of London Rail, TfL): Letting the franchise prior to Crossrail, building the service up before going in the tunnel and commissioning the new longer trains compared with what runs there now will address that issue. The Great Western is one of the most overcrowded lines at the moment into London.

Murad Qureshi (AM): Like I said, seven out of ten of the worst overcrowding is on those trains coming into Paddington and they do pick up commuters in Ealing and Hillingdon from the stations in Greater London.

The other thing about the service level, you mentioned BAA. I am struck at some of the pricing. For example, residents in Hayes to go one stop from there into Heathrow have to pay £4.70. Are we going to get rid of anomalies like that in whatever franchise you decide in the future?

Ian Brown (former Managing Director of London Rail, TfL): If that deal is done successfully and financially, Rob makes the point, which I agree with, how to use that capacity best and how to finesse the stops. At the moment the Heathrow Connect train stops everywhere and the Heathrow Express does not stop at all. There may be a blend of the two if we do that deal.

Murad Qureshi (AM): That is one thing that I want to register. Finally, will you be looking at the knock-on effects on the Tube system because, presumably, it takes less pressure off the Piccadilly line? Or is that not envisaged?

Rob Holden (Chief Executive, Crossrail Ltd): Yes. One of the issues that we have been working with TfL and London Underground in particular about are the interfaces with the Tube and making sure that the connections that are envisaged are capable of coping with the advised passenger numbers, which Ian referred to previously. There is a lot of cooperative work going on there.

Terry Morgan (Chair of Board, Crossrail Ltd): The big challenge, to be frank with you, is not Piccadilly, it is the interchange with Northern and Central and Jubilee, District and Circle: the central section. The interchange issues there are very complicated. You cannot do these stations without understanding those interchange issues.

Murad Qureshi (AM): Hopefully you are mindful of those issues. The residents in Hounslow particularly are keen not to see too much luggage on that Piccadilly line.

Valerie Shawcross (Chair): Can I come in on the back of that? I hope this is not a silly punter question but it is a question that often bugs me. How is it, whenever there is a new service commissioned be it the Overground or the Underground or any kind of heavy rail, we always seem to end up with a purpose-designed new built train, rather than an industry standard train design that is adapted for the new service?

Terry Morgan (Chair of Board, Crossrail Ltd): An objective of Crossrail is that we have a determination that we are not going to be first on any technology.

Valerie Shawcross (Chair): Right.

Terry Morgan (Chair of Board, Crossrail Ltd): We are fighting that corner very hard. It will look like a new train but we will be looking for examples. That central section is a very harsh environment for any train set. The determination of satisfying ourselves that we are buying proven systems is a key element of our procurement.

Valerie Shawcross (Chair): So you will not be commissioning a new unique design; it will be an adapted design?

Terry Morgan (Chair of Board, Crossrail Ltd): I am sure it will look very pleasing to the eye but, fundamentally, in terms of the running gear, it will be proven technology.

Valerie Shawcross (Chair): We have had problems with the Victoria line doors. We have had problems with the reliability on the new Overground trains. There does seem to be blips every time a new train of any style comes into service.

Terry Morgan (Chair of Board, Crossrail Ltd): Like I say, Chair, that is the whole point of why we want to buy these trains early. The combination of commissioning new stations, new track, new signalling and new trains is not a combination that you would want London to suffer from. We have to try to mitigate the risk in reliability growth as much as we can which is, as I say, fundamentally why we want these trains in early. We are looking at ways of trying to mature those designs before we enter them into full service. There are a lot of lessons to be learned there.

Victoria Borwick (AM): We have talked about the track and the service. Could we talk a bit more about how the rest of the project is developing? Reading through some of the paperwork that you have produced we see a sentence which said, "Why has the design work not yet reached the level of maturity you would have hoped". Do you want to give us a quick update, particularly following on from the comments that Murad made?

Rob Holden (Chief Executive, Crossrail Ltd): We had to mobilise very quickly in 2009. It was originally envisaged that mobilisation would start before then. We have been trying to catch up. That is one reason why we have been delayed.

I guess another is what we have just been talking about. This is a hugely complex project with a huge range of interfaces and there is a great deal of expectation to get those interfaces right and to use opportunities which, as we move forward, will not exist. The great Japanese maxim is the more you invest upfront the better you will have the end product at the end of it.

I am not concerned that the design has fallen behind original schedules. It is important that we focus on the designs which need to support the construction on the critical path. That is where attention has been directed. That is why, in doing that, we were able to award the contracts in December 2010. We are focusing and prioritising our efforts on the station designs over the coming months to support the issue of ITTs relative to the critical path that now supports the CSR results.

Victoria Borwick (AM): Thank you. I am glad we are getting back on track. As we talked before about the size of the contracts, and as Tony referred to, all the other tunnelling going on at the same time, is there a lack of capacity about the industry at all on bidding for contracts or are you happy that these are progressing according to your plan?

Rob Holden (Chief Executive, Crossrail Ltd): There have been several references about lack of capacity. Again, it is probably a clumsy use of words.

One of the contributory factors to the savings that we have been able to identify is that we have been entering in a marketplace where there has been lots of capacity and people have been keen to bid very competitively to get substantial parts of work to support their business as, hopefully, the economy starts to come out of recession.

It is fair to say and acknowledge that, without exception, all our contractors on big contract ITTs have asked for further time to make their submissions. We have accommodated that because we believe it has been beneficial to get the best possible bids. The management of these bids is a hugely complex task in itself.

One of the things we have done is ask contractors to price various combinations and to put forward their own ideas as to how we can deliver this railway more effectively and more efficiently. That, necessarily, involves time. These contracts have assessed that just throwing more people at it is not the right answer. I can understand that. You then get disjointed approaches to something which needs to be very joined up. I support their approach of managing their team sizes so they are operating efficiently. At the end of the day we get a better bid and it helps us in our own evaluation process.

Victoria Borwick (AM): Thank you. Are there any contractors who are not in your control? Network Rail? Are there any things that are not in your gift to run?

Rob Holden (Chief Executive, Crossrail Ltd): Again, there have been some concerns expressed in the past about Network Rail. Twelve months ago there were some concerns about Network Rail. Network Rail has worked very hard over the last 12 months. In September last year it submitted revised proposals to us which gave us confidence that it was now looking at delivering its scope within the available funding for the on-network works. Most of us in the rail industry have seen a very different Network Rail under the chairmanship of Rick Haythornthwaite than was the case previously.

We have been reading in the papers in the last couple of days statements made by David Higgins [Chief Executive, Network Rail] as to how he wants to take Network Rail forward from his start of work yesterday. We are encouraged by that and we will work closely with Rick and David to achieve their objectives. I can say that my team and Network Rail's team, under Robbie Burns [Major Programme Director, Network Rail], have achieved a huge amount over the last 12 months. It is a very cooperative working relationship. Given that we have a slightly different timetable for delivering Crossrail than we had a year ago, we are working very closely with them as they also develop their plans for the Great Western line, to do something of mutual benefit.

Victoria Borwick (AM): Fine. Thank you for that reassurance. Finally then, are there any particular risks you want to highlight to this Committee?

Rob Holden (Chief Executive, Crossrail Ltd): This is a hugely complex project in many ways. There are areas where we are behind where we would like to be. That is because we are addressing the risks. For example, in central London, there are great concerns about the tunnelling and the impact on buildings above and ground settlement. We are taking that on board very seriously. It does mean taking additional mitigation measures and we are putting additional ground shafts in which, unfortunately, causes a bit more disruption than people were routinely expecting. That is addressing the risk issues.

We cannot underestimate the risks and it will be a continuous effort to be monitoring the risk and to be putting those risks that we have gone through behind us to make sure that there are no new risks coming up and surprises. Most importantly, it is having the capacity to deal with the surprises. In an eight year programme like this there will be things you cannot anticipate. At the end of the day a measure of success will be the project's ability to take those surprises in its stride and deal with them so that you and others that we impact on really do not see it as a big issue.

Victoria Borwick (AM): Thank you. Thanks for that reassurance.

Valerie Shawcross (Chair): Thank you very much. We have a few more local impact questions before we finish.

Joanne McCartney (AM): I wanted to touch upon the skills and employment strategy. I understand you have a strategy that was published in July last year which has the aim to support the local labour market and a target of 400 apprenticeships over the lifetime of the programme. To date I believe you have five apprenticeships and there are four employees who were previously unemployed. I am wondering where this skills strategy is at. Are you going to publish targets and updates on how you are working towards those targets?

Terry Morgan (Chair of Board, Crossrail Ltd): We are really determined to do something very different. I could take you down to Newham now, Ilford, and you will see a skills academy being built, a tunnelling academy. Going back to the earlier question, we are talking to Thames Water, EDF and National Grid about how they can use that as a means of training and accreditation.

In the contracts that we let just before Christmas there is an obligation inside those contracts that the contractors will employ apprentices directly on Crossrail. We followed very much a TfL model. It is a fairly broad description of those individuals who qualify but we are expecting, in that regard, a specific programme from our contractors that for every £3 million contract there will be the individual that you referred recruited into Crossrail.

Five does not sound very much right now but that is a reflection of where the programme has been. That will be in a very different position when we come back to you next time. It has started. Five might not sound very many but if I say in December 2010 there were two. It has started to roll forward and we will make that happen. I am very pleased on that.

We have now got a memorandum of understanding with Jobcentre Plus to use it as our job broker. We also have two visitor centres open now at Tottenham Court Road and at Whitechapel. Again, you will not be surprised that, although we want visitors to come in and look at Crossrail, quite a proportion of those visitors are asking about how do I apply for a job. There are Jobcentre Plus resources inside those visitor centres. We do not want it to become a Jobcentre Plus office but they direct those individuals to where they can get more information on Crossrail. We have made a really good start on the skills agenda for Crossrail.

Joanne McCartney (AM): That sounds really hopeful.

Terry Morgan (Chair of Board, Crossrail Ltd): We will have a really - I cannot use the word iconic - terrific training centre down in Newham that will be the pride of anybody who comes to look at Crossrail in action, and it will be open later this year.

Joanne McCartney (AM): Will you be setting targets yourself and monitoring?

Terry Morgan (Chair of Board, Crossrail Ltd): We have internal targets. Now that we have placed these contracts we will be meeting with the contractors very shortly. Not just, as Rob will worry about, getting the tunnel boring machines in by later this year and getting them tunnelling next year; I want them to tell me what their skills plan is. We will have some very strong details round that. Our obvious commitment is the 400. We will see how that develops. That, for me, is a given. It is just how far we can stretch it.

Joanne McCartney (AM): Again, with the Olympics build we asked this question, are you going to monitor how many jobs go to Londoners?

Terry Morgan (Chair of Board, Crossrail Ltd): Yes.

Joanne McCartney (AM): You are?

Terry Morgan (Chair of Board, Crossrail Ltd): We have those matrices in place.

Joanne McCartney (AM): That data will be available to us?

Terry Morgan (Chair of Board, Crossrail Ltd): I am afraid it is a bit technical but we are developing a model so that when we come back to you we can then describe exactly what opportunities exist and where they are coming from so, in exactly the same way as we have looked at the regeneration opportunities that come through for Crossrail, we will have a similar model for skills and people.

Joanne McCartney (AM): Can I check that you are doing some equalities work in that as well, so looking at employing women and black and minority ethnic communities as well?

Terry Morgan (Chair of Board, Crossrail Ltd): If I said we were not you would be shocked and horrified.

Joanne McCartney (AM): I would.

Terry Morgan (Chair of Board, Crossrail Ltd): The answer is definitely yes.

Joanne McCartney (AM): Good.

Valerie Shawcross (Chair): Thank you very much. We know you are very passionate about training, Terry, so we look for good things there.

Caroline Pidgeon (Deputy Chair): I have a quick question. Following up on from our report last year we were quite critical about the compulsory purchase orders (CPOs) and how that had been carried out with businesses, particularly in Soho and Paddington. Rob, earlier you mentioned that you had continued your property acquisition over the last year as part of this. Did you learn from that and have you made sure that there are improvements in place? Can you update us on that?

Rob Holden (Chief Executive, Crossrail Ltd): We were very disappointed at the way that issue played out. I, personally, got involved in a number of the issues that were being reported. It is very pleasing that I did get a note from one of the main protagonists saying how pleased he was that we took that issue forward. People in those areas now understand a lot better some of the issues. Information has been forthcoming as a result of people engaging the experts that we wanted them to engage. Inevitably a number of issues get referred to the Lands Tribunal. Almost without exception we have managed to reach agreement with property owners before the Lands Tribunal has been scheduled to meet.

There are still one or two issues outstanding but we have a positive dialogue with all our land owners. We continue to make payments, as is required under the code - 90% of the expected value - when we take possession. As that assessment evolves during the course of negotiation and the provision of additional information, further interim payments are made. As my property director remarked to me, it is rather disappointing that people do not provide us with information as quickly as we might expect, given some of the sums of money which are involved.

Caroline Pidgeon (Deputy Chair): Given that there are some issues with the early CPOs would you say the more recent CPOs have got a lot smoother and you have learned from the earlier ones?

Rob Holden (Chief Executive, Crossrail Ltd): I would say yes to that question.

Caroline Pidgeon (Deputy Chair): Thank you.

Valerie Shawcross (Chair): Thank you. You did provide some environmental information but we needed a bit more detail. Jenny?

Jenny Jones (AM): We need even more detail on that. I have several questions here but we are running out of time. I suggest that I will write to you with the majority of questions. There have been all sorts of changes since the initial estimate about the carbon footprint of the whole project. Have you got a revised estimate now and is it lower than your previous estimate?

Rob Holden (Chief Executive, Crossrail Ltd): Yes, and it is coming down all the time as we get better information.

When we were here 12 months ago I was honest enough to admit I was not up to speed on this subject at all. I have paid quite a lot of attention to it over the course of the last 12 months and I am quite proud of the way this project is moving forward. We are starting to think about not what good targets are today but what good targets will be in seven or eight years' time when this project will be completed. That is what we will be measured against, rather than what we are trying to achieve at this point in time.

We do have a carbon footprint which is coming down. We do have a return on carbon investment which is a much narrower range and a much more acceptable range than it was previously. We are talking with people like the Waste and Resource Action Programme. We do have BRE Environmental Assessment Method and CEEQUAL assessments and they are very good and excellent in interim assessments. We are constantly looking at the use of recycled materials which helps bring carbon down and reduces landfill etc. We will be very pleased to receive your questions and enter a dialogue to take this subject forward because, increasingly, we have a good story to tell.

Jenny Jones (AM): I am really glad to hear that. I was a bit disappointed about the waste because there were all sorts of promises about how the waste would be removed. I gather that has not quite lived up to the promises. There were promises about waste that would be removed by water.

Terry Morgan (Chair of Board, Crossrail Ltd): It is still the plan.

Jenny Jones (AM): I heard it was not.

Rob Holden (Chief Executive, Crossrail Ltd): What we have done in the combination of contracts on the western side is we will have more spoil going by water and by rail than was ever the case previously.

Jenny Jones (AM): Great. That is great. Lovely. Thank you. I will write with the other questions.

Valerie Shawcross (Chair): Thank you very much. We are preparing a Committee response to the Network Rail RUS. We will be maybe integrating some comments from this. We are due to see them informally so we will certainly chase them up about the design work and where they are up to with that. It would be helpful if this Committee would invite a Network Rail representative in the next cycle because it is certainly time we caught up with them on a number of issues.

Before I finally thank our guests today for their time can I invite Ian Brown to say a few words? Ian, this is possibly your last visit to this Committee. You have had a fantastic career within TfL. Let me give you an off the leash moment where whatever valedictory comments you wish to make, without the Transport Commissioner breathing down your neck, we would love to hear from you. One of the things we have really appreciated in the past is that you have been able to give really good overarching strategic advice as well as attending to the details. Do you have any thoughts about rail, London, the future and what this Transport Committee ought to be pursuing?

Ian Brown (former Managing Director of London Rail, TfL): Thanks for that. I do not want to give up railways and railway projects but I do, at 65, want to give my wife, my children and my grandchildren a bit of a look in. That was the deal of course.

Reflecting back on it, my introduction into the world of London's railways was in 1996 when the Government wanted to privatise the Docklands Light Railway. This was just after the National Rail 25 franchises. What I did was go round to DfT and talk to it. The thing we learned was, in a London situation, it is not just about running a franchise railway, it was about doing projects. What we have seen on the Docklands Light Railway - and it is relevant - is setting up the client side to run projects effectively and to make sure the franchisee does exactly what we want. That has seen the Docklands Light Railway, in my time, grow from 17 million passengers a year to 69 million passengers a year, which is something we want to see right across, culminating in Crossrail. The success of delivery of projects - the Lewisham extension, City Airport extension, Woolwich extension, three-car upgrade, the Olympics and the Stratford International extension - that skill set has borne us a lot of fruit.

The big break though, based on the Docklands Light Railway, was the London Overground when we had the franchise for the Silverlink franchise and the discussion between this office and Government was, "If you want to make something of it, have a go at it. Franchise that railway, integrate it with the Tube and provide a very good model to extend the reach of the Tube".

The client approach - the only point I want to make with the Docklands Light Railway - was applied to the East London line. Very similar to Crossrail, it is a bit of traditional railway, a bit of national rail and a bit of new build. The client has to be very strong. That is why I am so pleased that, in Rob's time at Crossrail, that client side has got its act together and is going to control this project and drive it.

Having seen now the overground open and seen the reaction from passengers and staff the key question is whether we stop there or whether we do see further devolution, not just in London but right across the cities of the UK. I feel very strongly that we should be looking at the Mayor's powers, we should be looking at the costs of national rail in London and a budget for these services. There are two models. One is to do more overground and take over a few more lines, which I would love to see happen. Also, as part of the general situation on rail in London, having established a budget, this organisation - in all its facets - should specify exactly what is required of that and should be able to add to it to staff the service properly; to integrate the fares properly; to make some of the gaps such as Lea Valley; and decide what to do with that and put our money where our mouth is and benefit from the income as well. The key thing about the overground is it is growing the business like the Docklands Light Railway (DLR).

I would say thank you very much to all my partners, including yourselves, who have supported this vision and let's hope that we can continue that vision right across London and across the other cities in the UK who are dead keen to see this happen on the basis of what we have done here. Thanks very much.

Valerie Shawcross (Chair): We all say hear hear to that. We share that vision. Thank you so much, Ian, for your time with us today and over the years. Thank you, Rob, for the work you have done on Crossrail, bringing it thus far. We wish you every success in the future although we are very sorry to see you go, but we have had that conversation. Thank you very much, Terry, for steering it this far --

Terry Morgan (Chair of Board, Crossrail Ltd): You will see me again.

Valerie Shawcross (Chair): We will see you again. Please do not go anywhere. Thank you very much for holding the ring during what is a really difficult and challenging period. Thank you for your presence today.