

APPLRG / pteg: Light Rail and the City Regions

Transcript

Day 1 - 27 October 2009

Session 1 – Light Rail Transit Association

Questions 1 - 18

Paul Rowen: Welcome to the All Party Parliamentary Light Rail Group / pteg inquiry into light rail and the city regions. Do you want to start by introducing yourselves?

Clive Betts: Clive Betts, MP for Sheffield Attercliffe.

Tom Harris: Tom Harris, MP for Glasgow South.

Paul Rowen: Paul Rowen, MP for Rochdale.

Matt Brunt: Matt Brunt, Assistant Director of pteg Support Unit.

John Attlee: I'm John Attlee on the Conservative Transport Team.

Andrew Braddock: I'm Andrew Braddock, Deputy Chairman of the Light Rail Transit Association.

Q1 Paul Rowen: Today's the first of three sessions that we're going to have on light rail. Almost five years since the Transport Select Committee did a report on light rail. And we thought it would be very good, in view of what's happened in the last five years and with a general election looming, to actually revisit some of the issues that were raised by that Select Committee report, and also look at some others that have come up. We're going to adopt the same sort of procedure used by Select Committee. Today we're starting with the Light Rail Transport Association. We're going to invite you, if you want, to give an introduction first, and then we'll invite the members to ask you questions. If you want to start, Andrew.

Andrew Braddock: Thank you very much. First of all, by way of personal introduction, I'm Andrew Braddock. I've been a member of the Light Rail Transit Association for more years than I care to count. I joined its council in 2006 and became Deputy Chairman in 2008. My connections however with trams and light rail go back a very long way. I suppose just over fifty years ago, when as a school exchange student aged ten, I first visited the city of Amsterdam. Having already by then developed some sort of an interest in transport, what struck me about Amsterdam was the massive tramway network and what a sensible form of transport the tram is. And what a good idea it was in their case to have kept it, where we threw it away. Going back to the origins of LRTA, as the Light Railway Transport League, it began really as a campaigning group seventy-two years ago, with the aim of trying to stop the abandonment of London's tramway network. It was of course up against the all powerful London Passenger Transport Board, which in fairness was doing no more than act out the recommendations of the Royal Commission, which in principle said "Trams are old-fashioned, out of date, they get in the way of cars and we should get rid of them." So that as a nation is what we did. And I suspect our transport background has suffered ever since. It is a good opportunity for us to bring forward to you some of our concerns about light rail, and I know these are shared by, I'm sure, every giver of evidence to your inquiry. We seem to not get very far. We know that small towns in France like Le Havre, are having a tramway, and Leeds apparently can't have one. We

know of brilliantly innovative schemes that would reduce the massive congestion in the South Hampshire area, the South Hampshire rapid transit scheme, crossing the waterway between Portsmouth and Gosport, was rejected on pure financial grounds. And yet it would have made a superb transport investment. As a country we have to get to grips with those problems. Clearly what you are concerned to do I think is build on the rather damning report that the Select Committee gave the Department of Transport on light rail some years ago. The government doesn't really seem to have responded to that. Our concern is a pretty simple one – we face enormous problems as a nation with urban congestion and the growing impact and concern about climate change. And in the middle of all that, trams and light rail make enormous sense. But we have to have a means of delivering them. Currently the complications are pretty extreme. There are planning difficulties, there are funding difficulties, there are structural difficulties of one kind or another. You only have to look at what's happening in Edinburgh to see how those difficulties can create a massive opportunity for the press to be damning, for politicians to be involved. And all of these backdrops are plainly not helpful. I guess our major concern starts with funding – trying to understand why it is that everything goes through HM Treasury. If we look at what's happened in North America, in most of continental Europe, certainly Germany, France and Spain, now the bulk of the funding for local public transport developments and particularly fixed track developments, comes from local sources. In the United States there are local sales taxes, and these are frequently voted on by the population themselves who have the chance to say “Yes, we want light rail. And yes we're prepared to make a contribution towards the cost of building it.” In France we have the Versement Transport, which is a fancy name for a payroll tax. But the brilliant innovation there is that local business becomes immediately involved in discussions about funding a fixed track transport scheme and knows it's going to be paying a significant proportion of the cost. And if the mayor, and the mayor can be a very useful adjunct in all of this, is getting business on his side, it will have support, even to the point where they're quite willing to pay those funds. Here we have the Manchester example, we asked the people, little bit like turkeys voting for Christmas “Do you want a congestion charging scheme to pay for extensions to Metrolink?” And should we be surprised when the answer is no. We're convinced there are more intelligent methods that should be adopted. We also have concerns about the way in which schemes have been constructed in the UK. Not having been a tram and light rail country for more than forty years, we can see all the disadvantages of a lot of heavy rail thinking in the light rail schemes that we have in Britain. Just take overhead line equipment for one and contrast a city like Nantes with a city like Manchester. Most of the overhead line equipment in Manchester is ugly, it's stitched catenary, it would be capable of transporting a hundred and eighty-six mile an hour high speed train. You don't need that. It winds people up. Look also at some of the concerns over track. Track has been rebuilt on almost every light rail system in the UK because there wasn't a clear understanding of how to build light rail track in city streets and how to cope with issues like the interface between wheel and rail. You have to have a better understanding of that. Above all, I think we need to at least visit the overall political structure. There's been much talk in the UK for many years among all of your parties about change. We've seen local government reform of one kind or another. We've seen little reform to HM Treasury, which continues to hold all the purse strings. We believe strongly that for cities to develop, for cities to overcome the key issues of congestion, of pollution and of the ongoing dis-benefits of climate change, there must be a new approach to local controls. We must get back the respect that local politicians deserve and that will almost certainly mean in the major urban areas, some form of city region. And certainly some ability in those city regions to raise money for all sorts of projects, but notably transport and other infrastructure problems. We have seen a long period of waste in the UK. We've had several schemes which have been promoted by PTEs and others. We have seen a lot of money spent on taking those through to the point where somebody, either in the DfT or in the Treasury, gets their red pen out and says “No”. And millions of pounds have gone on that. Of course, trams and light rail are expensive. They're more expensive than bus schemes. But they deliver far more benefits. We've got to look at these things as a whole life investment, and not just the next few weeks, or months, or years. We've perhaps also got to understand that whilst

they're expensive, an interesting statistic at the moment is that towards the end of this year, just one bank will be paying out a sum of money in bonuses to its employees, ten per cent of which would pay for a very high quality light rail system for one of our cities. If you take the money that might be distributed in bonuses by all of the banks, and you took just ten per cent of it, you'd probably solve most of the UK's transport problems. Have we got our funding mechanisms right? Last, but not least, we believe that people favour light rail. The electorate favours light rail, but is rarely given the chance to express a view. What is clear however, is that people vote with their feet. Light rail has a much, much better chance of getting people out of their motorcars than a bus scheme will. The fact that it's a fixed track investment engenders confidence among the users. It isn't something that's here today, gone tomorrow, to be diverted. Of course, that then gives problems when there are needs to dig up track, to relocate services. All of these things also need to be in the melting pot of what we're looking at. But in summary, the LRTA's strong position is that we must be doing more not less of tram and light rail development all over the UK. We must be sensible in our approach. Many, many people will come forward with a tram scheme for a small town that perhaps has no hope of achievement. And yet, when we look at some of the issues concerned with ultra light rail, there may be ways there in which that sort of thinking can assist. And undoubtedly from a small start which is expected to be made soon, tram/train could be a significant contributor in the UK as well. So chairman, happy to take questions on our submission, which of course you've had a chance to read, and see where we go.

Q2 Paul Rowen: Right. I think the first thing we've got to say is we can't sort the Treasury out, and I don't think any of us are going to attempt to do that. So I think you've got to start with an assumption that, whatever financial regime the government of the day decides, that's going to be it, and it is as it is. In terms of changes, I'd like to begin by asking you if you were to make specific changes to the way in which light rail is procured, what would they be? And how would you go about doing it?

Andrew Braddock: I think there's a need, this is an ongoing subject within UK Tram, the representative body which is part funded by the department, to look at the contract structure. How we start to attempt to build a light rail system is actually key to this. Should there be private money involved? My answer is – yes of course, because a lot of money is available in the private sector. And there's very little doubt that in the modern world, perhaps especially in the current financial circumstances, that you cannot reasonably expect all money to come from the public sector. But engaging the private sector has to be worked through on an intelligent basis. If you say to the private sector “We want you to take all the risks”, they may well be willing to do so, but they'll price up for them. And this is critically the case with revenue risk. There'll be sets of figures which are really no more than assumptions of the numbers of people who might travel on a light rail line and from that you can generate estimates of fares income. If the whole of the risk of that money coming in to balance the cost of running the system rests with the private sector, they will (a) be worried and (b) they will price up for it. We think it is better, at the very least for there to be a clear understanding between public and private sector about sharing that risk. But in all probability, certainly in the early years of the scheme, it may well make more sense for the public sector to take the risk on revenue. Clearly also in the contracting structure, there's the whole business of how you achieve. If you look at the Edinburgh problem, there is a very high level contract with a consortium involved in track construction, rolling stock, overhead line electrification. We question whether that is necessarily the best way. What often happens in other countries is that there are separate contracts for rolling stock procurement, separate contracts for track construction, separate contracts for overhead line, depending very much on the expertise of the individual private sector businesses that are involved in those fields. It isn't necessarily the case that there are automatically transferable lessons between building track and putting up overhead. So I think we'd like to see a thoroughgoing review of the way in which those contracts are prepared and the procurement process that goes with them.

Q3 Paul Rowen: You say those are specific issues for the government, what do you think about them and how should they be addressed?

Andrew Braddock: I think in overall terms, the government has to take the lead. It would be nice to see the government endorsing a template for the future. We know in recent times, very little different under the current government compared with its predecessor, that there's a liking of PFI structures. That's fine, but there are too many different variations on that theme. I think what we need to see from government is some steering of the way. And this hopefully will emerge from our debate within UK Tram and the Department over how you review and re-manage the contracting structure and the financing arrangements.

Q4 Clive Betts: You know they must do cost benefit analysis when before they build tram systems on the continent. They come up with different answers. Is it that they place a higher value on the advantage and benefits of tram, compared with those that we place in the analysis? Or is it simply that they actually have lower costs which they're looking at in terms of the way they are instructed to deliver the system?

Andrew Braddock: Yes, yes. I mean certainly if you take France as an example costs can actually be quite high. Because very often what the package is doing is remodelling the entire city. Bordeaux being a good example. It wasn't just "Build a tramway", it was "Let's remodel the city". Setting that aside for one minute, I think there are three key differences. Much greater emphasis is placed on the environmental value of a light rail system in continental countries and in North America. We don't do that. We have the reverse. The Treasury effectively discounts the benefit of carrying more people by public transport by saying "Oh to us there's going to be reduced income from fuel tax. If fewer people are driving to work, we the Treasury will earn less money, so that must be taken into account in the light rail scheme development." Of course there will be reasons why the Treasury earns less money. It's earning a lot less money at the moment because of the state of the economy. But actually, almost spitefully saying "Well we're going to do down the tram scheme, because it means less people using cars", where what you should be trying to achieve is less people using cars per se to improve the environment. I think also we have to recognise that in most other countries, North America included a lot more emphasis is placed on the benefits that fixed track systems can deliver over the long term. We tend usually to be looking for five to ten year periods. Now clearly, if you're laying rails on or off street for a rail system, heavy or light, it's going to have a life of a hundred or more years. Classic example is the London underground – struggling now through a very high blown PPP to renew its infrastructure. But most of that infrastructure had a hundred year life. We shouldn't be trying to assess things over ten to fifteen. And we should be looking at thirty-five as an absolute minimum in our view, and probably fifty and above. Then you start to get slightly different figures.

Q5 Clive Betts: You just mentioned the different way in which the benefits are taken account or accounted. Is there any rigorous analysis that's been done to show different comparisons? I mean "This is how they do it there and yes we've got proven evidence to show it. This is a different way to what we do in this country, that's why we get different results."

Andrew Braddock: I'm sure pteg had some information gathered, at least in terms of comparisons with France not so long ago, which was looking at all the issues, comparing the existing light rail schemes in the UK and what had happened in France, rather more of them, and comparing the criteria, cost per mile of construction and some of the issues on cost benefit analysis. I'm not sure how much of that is available. Perhaps you can have a look at that. There's certainly something been done. I think more needs to be done, because as we've said in our paper, there always seems a great reluctance in most parts of UK government, certainly the DfT to say "Well it's not relevant. You know, Karlsruhe, it's nothing to do with Leeds." But it's

a lot to do with Leeds actually. The challenges and the problems faced all across the developed work are precisely the same. It may well be a different story in the Congo or in Indonesia, but it's pretty similar in Strasbourg and Sheffield.

Q6 Tom Harris: You compared the absence of the Leeds super tram with the ability in France for example to go ahead with the schemes in relatively small towns. Presumably you think that the decision to cancel the Leeds super tram was the wrong one. That being the case, is there any upper limit that that scheme could have cost which you think the government should have said no to?

Andrew Braddock: Excellent question. I think the principle of running a long period with the hope in that city of having a light rail scheme, and then dashing those hopes, is the fundamental problem. Of course what it would have cost and whether that gives the right benefits, I'm not really equipped to say at this moment. I don't have all the figures in front of me. I had a small involvement because during my latter career in Transport for London and I was on a six month secondment with the French group Transdev, mainly concerned with the South Hampshire scheme, assisting them with drawing up the final bidding. But also a fleeting involvement with Leeds. There were two or three things about the Leeds scheme that concerned me. Would they have been right, compared with some continental schemes? But no more than that a sort of fleeting involvement in it. What I would say is that it's very hard to put upper limits on things. There has been a lot of discussions in France about should a tramway cost more than fourteen million Euro per kilometre to construct. And all of the people who pile in on those arguments point out the world of difference between the kind of construction you've got. Are you in the street? Are you on a separate track bed? Are you reusing, as we have done often in the UK, some part of old under utilised or non utilised heavy rail infrastructure? All these things make a difference. So it's very hard to put a figure on saying there should be an upper limit. Intuitively, I start to get worried when somebody says "This scheme is going to cost more than five or six hundred million". That's quite a lot of money. But nonetheless you've got to look at what's packed into that. And seriously consider what the benefits are. If we do nothing, the alternative is potentially going to cost us a lot more. How are we going to get out of cities like Leeds eventually seizing up? Because we're not doing much to stop the onward path to gridlock. And in many ways that's why North America has turned back to light rail, because they've seen the example of Los Angeles, you go on building roads until you have no city left. And the kind of congestion you achieve is massively bad for the environment, for local health and for the costs of all of those things. The cross sector benefits are rarely considered in the UK. But if we had fewer accidents, if we had less pollution, we would have better life styles in urban areas. All of those things contribute, but they're rarely taken into account on the cost benefit analysis.

Q7 Tom Harris: But does LRTA believe that tram systems are always appropriate to just about any town regardless of the size?

Andrew Braddock: No, no, certainly not. I can certainly tell you among our three thousand eight hundred and fifty members, you will find plenty of people who believe there should be trams everywhere. That's crazy. What we've got to do is target the investment in the expensive public transport schemes. High speed rail is the classic example. Should we have some? My view is yes we should. It may not be everywhere. Renewal of particularly suburban heavy rail infrastructure in areas like Glasgow, Manchester, Liverpool, that's important too, but you're not going to do it everywhere. Tram and light rail is clearly filling a gap between heavy rail and bus. And if you take the London example, in this city we have eight and a half thousand diesel buses, maybe some hybrids, not making very much difference, plying the streets every day. Between that and London Underground and the massive heavy rail network around the city, there's a crying need for more light rail. We have Croydon, a superb start – there should be more. The current mayor, maybe he was right to say "I can't afford cross river tram because nobody's told me where the money's coming from", but to simply abandon the scheme without

any real consultation, is bad news, and I am critical of that. I think London desperately needs, in the centre, where the old tramway never was, the kind of things that have been delivered in cities like Bordeaux, like Strasbourg, like many in North America. It's the core central area networks that buses are struggling to serve. The very fact that there are eight and a half thousand buses in London is because there are no trams. We need fewer buses.

Q8 Tom Harris: I was struck by a comment you made when you were talking about the democratic process, and how we actually get into a position where the public supports the tram. And of the Manchester referendum, you said, I think quite dismissively, that we should be able to come up with more intelligent ways of getting decisions made. I mean these voters are a nuisance aren't they? I mean...

Andrew Braddock: I apologise if I impugned the voters of Manchester. My concern there was that clearly government was quite keen to see somebody somewhere fly the flag of a local congestion charging scheme outside London. Mayor Livingstone was voted in on a ticket that said "I am going to introduce it" and people voted for it so it was no good complaining. In both Edinburgh and Manchester we have a slightly different experience. What I mean by more intelligent is something which says "If you're going to get people to back paying for something, then I think you've got to start in a more collective way. You've got to look at business." It's very interesting the mechanisms that are now turning in Nottingham, on the workplace parking levy. I think Boots for example are saying "We will move all our car parking a hundred yards or something into the county, out of the city." Well okay, they don't like the idea. Others are less vehement. The business community in Nottingham is actually not totally opposed to the idea of workplace parking levy. And I firmly believe that if we can somehow... and I take your point, you can't change the Treasury, that's not the remit of this committee, but the over centralisation in the UK is wrong. You know I think Bulgaria has a less restrictive system than the UK when it comes to spending money. And it's crazy that we cannot have the business community in Manchester, through its representative organisations, having an intelligent debate with the city authorities, with the ITA, with the Department of Transport, to say "Well rather than have a congestion charge and expect people to be in favour of that, what about we ask you to pay some of your money?" Clearly you're going to have to do that on the basis that business in overall terms is exposed to the same sort of expenditure. But rather than it all going to the Treasury and it all going in business rate, some of it needs to be put into something like a Versement Transport, that they can then back. They can see the benefits for their business, for their employees in the longer term. And that's exactly what's happened in France.

Q9 Paul Rowen: I was looking at some figures last night for Liverpool and when they were able under the old rules to issue their own bonds. And Liverpool city under a Conservative administration, owned sixty per cent of the debt in terms of municipal bonds at the turn of the last century. Is that what you'd like to see our cities going back to?

Andrew Braddock: I'm not sure that we want to go back to where we were. I think what we want to see is a much more lively debate, and ultimately a different approach to the way that investments are made, critically transport. That's the area that we're interested in, there may be others. And there's no real reason. We already have examples of prudential borrowing where some issues have been taken on the basis that there will be a revenue stream. Clearly there's going to be a revenue stream from a development like light rail. And just look at the recent figures from France. I read last night that in Le Mans, where a new tramway has opened just over two years ago, public transport use is now forty per cent greater than it was. Take all the fares income that's coming from that, take all the reduction in congestion, take all the reduced need for car parking in a busy city centre, factor all of those things in, and it's not that difficult to see where some of the money might come from.

Q10 John Attlee: I'm just going to ignore your caution on the Treasury if I may. A while ago I

was dimly aware that there was some peculiarity in the Treasury on how they assess transport schemes. And we're obviously talking about the way that they consider the reduction in fuel duty as a dis-benefit. I've been sat in the House of Lords since 1992, I mainly do defence and transport and engineering and I wasn't consciously really aware of this problem. So what has your association done to lobby parliamentarians about this specific problem? Because it's not just relevant to light rail, it's relevant to every transport decision. If the Treasury are saying no to something because the fuel duty issue just tips it into negative, because actually if you've got a scheme that is going to reduce fuel duty for the Treasury, I mean I'd say that's always a benefit, not a dis-benefit. So I mean I would love to have raised this at question time in the House of Lords, because it would be seen as a no brainer. So what have you done on that?

Andrew Braddock: Yes, right. The LRTA has an organ, a monthly magazine Tramways and Urban Transit, which we describe it as the international light rail magazine. This brings news from all over the globe on light rail developments. And we use this as a campaigning tool, so we would pitch and play about these issues in here. Increasingly now we're getting much better in our own organisation at responding to government consultations and to watching developments like the All Party Parliamentary Light Rail Group, and picking up on the discussions there and acting on those. We're now using a brand, Tram Forward, as our campaigning voice, so we will be ready, willing and able to make comments wherever and whenever we can, within the local scene, where cities are thinking about light rail developments and need a helping hand. But we have got to sharpen our act. We perhaps have been for fifty years more of an enthusiast organisation than a lobbying and campaigning organisation. The new regime, of which I'm part, is very much geared towards changing that. So we say, often to the upset of our own members, "No it doesn't make sense to reopen the Llandudno and Colwyn Bay light railway. It does make sense to look at trams for Coventry or Bristol or Newcastle." And that's where we want to position ourselves. I'm sorry that we haven't done enough of that up to now. But we're certainly more than happy to work with you, Earl Attlee, and others to take these things forward.

Q11 Paul Rowen: Have you done any analysis you know of about tram schemes in terms of CO2 emissions? What the benefits for a light rail?

Andrew Braddock: Some, but not enough. I think within our organisation, we are effectively a voluntary organisation, we depend on our members to be the workers, to get information that we need. But we do work with other agencies. And certainly this is something I think we need to concentrate more on. Just going back to this question about the fuel tax conundrum, I believe this is one of the issues in the finance select committee's very damning report on light rail. And hopefully in the work of your inquiry now that can come out again. Because I think it's a nonsense. It's like saying "We're never going to make any change, because any change means we earn less money."

Paul Rowen: It would be very helpful if you could give us what you know for particular schemes. And if Leeds would be a good one to use because that wasn't successful. And where that tipped the balance.

Q12 Clive Betts: Two things, and first of all I think instinctively I feel and know others feel that, if you're going to get people out of their cars into public transport, that their perception of the tram is different to perception of a bus. And people who wouldn't get on a bus might be prepared to get on a tram. Is there any hard evidence about that? I think instinctively it's something that's felt, and you hear people talk about quality of ride and they feel it's a bit special. But is there anything there that we can get?

Andrew Braddock: Yes, I think there's lots, and from cities like The Hague in the Netherlands, which has progressively extended its tramway network over the last twenty-five, thirty years,

every time they do this, they carry a lot more people when the bus is replaced by a tram. There are several issues within this. First of all, not everyone understands, particularly people actually in the transport industry, that a bus can never be a tram. The advantage that a tram has is that it's running on rails, and therefore automatically the interface between the vehicle and the platform it serves at stops is perfect, unless you've designed it badly. It's very hard to achieve that with a bus. A bus stop is something that everyone else sees as open season to park their car, to go into McDonald's, to park their car to use the bank cash machine. You don't normally find people parking on tram lines, because they know they're going to be pretty stupid, and they're going to get removed very quickly and/or fined heavily. So the poor old bus struggles to do things in the urban environment that the tram just overcomes. Of course the protagonists of schemes like bus rapid transport will tell you well buses can do it, they can do it cheaper than trams. I don't buy that, because if you're going to make a bus rapid transit scheme deliver everything that an equivalent tram scheme could deliver, you're going to spend more or less the same on infrastructure. You're then going to have a problem that you need more vehicles because the capacity is much lower. You need more staff, because it's the drivers who cost you money and maybe the conductors if you have them too. I think all of these issues in the round need to be taken carefully into account. The example of all of the French cities, where there is a much easier mechanism for co-ordinating between bus and the new light rail line, because it's a highly regulated system. That's not to say we can't do that in the UK, because we've got new mechanisms under the Local Transport Act 2008 to achieve it. Sheffield is actually quite an interesting example where you have Stagecoach operating the tramway and running many of the bus services, co-ordinating the two – it can be done. Where you achieve this high level of co-ordination and integration, and yes you do make people change between modes, but you make the change seamless. If you follow the average resident of Zurich between their home and their place of work they probably use three modes of transport, excluding walking. And they think nothing of changing from heavy rail to tram to bus. When you tap them on the shoulder as they go in through the office door and say “All this changing, it's awful isn't it? We wouldn't do that in Britain” they go “What changing?” They don't really notice it happen. Because it's all organised to work that way. And back to the example of Le Mans, the most recent figures I've seen, and there are many others, forty per cent increase in overall public transport use. It's only about twenty-five per cent of that I think that comes from the tram. The rest is people using the network, because the network functions in a better way. Faster connections from point A to point B. I was travelling with a friend in Nottingham yesterday, and we went to look at the feeder bus which Trent Barton, a private company, provides as a commercial venture to connect with the tram at Hucknall. Those buses feeding around the housing areas of Hucknall deliver people right to the tram stop, next door to it. You get on the tram, you're in Nottingham, no time at all. They no longer take the bus from Hucknall to Nottingham, which is a bit of a dis-benefit for Trent Barton. But they've seen the wisdom of ensuring they've got a foot in both camps. They feed the tramway because that's the best way to get to town and yet they still run their own bus.

Q13 Clive Betts: Could I just go back to something I raised a few minutes ago, when I was asking whether it was the way we measured benefits or the actual cost of schemes and you said you didn't really think the costs were an awful lot different. Again it's perception, having seen how much cost went to digging roads up for the utilities when the trams were put in Sheffield, in terms of the actual physical labour and materials, but the disruption to the whole community for a couple of years. Shopkeepers, motorists, the whole lot were completely disrupted. And I go to Amsterdam, and you mentioned that, and you see people working on the utilities under the tram tracks while the trams are running. They seem to be able to accommodate that, but it's not deemed safe in this country. Equally if you look at the method of operation, it's almost as though we've developed a train system through the centre of our cities, the signals that are needed, the gaps between the trams. Again you go to Amsterdam, they run one after the other like buses do. It's a different approach, which increases the capacity as the track amenity. Are there significant differences in cost both in running and installation of the tracks that we ought

to be aware of?

Andrew Braddock: Yes, yes and yes. There are many examples in continental Europe. One of the best I can think of is the city of Ghent in Belgium, which has completely rebuilt its tramway network to modern light railway standards, the utilities are still under the track. Because they accept that there will be times when they have to operate a single line or, you know, maybe they have to divert on a different piece of track. What they've never done in Ghent is run a replacement bus while they've rebuilt the tramway. They've constantly upgraded themselves, they've rebuilt everything. The utilities are still there under the street. I don't know enough, perhaps not as much as I should, about utility legislation in the UK, but it strikes me that anyone, from a cable TV company to Transco can just, at a moment's notice, go and dig up a street. That's why there's this terrifying problem in the UK and we feel we have to relocate the utilities before we lay a tram line. In Belgium to the best of my knowledge it is a highly legislated scene, and the utilities, one utility saying "We've got a problem, we've got a leaky sewer and we've got to repair it." All the other utilities are told "You've got to get in that same hole at the same time. It's no good coming back for five years, other than an absolute emergency." And there tend not to be absolute emergencies. You're absolutely right – continental systems manage the show with single line running. They are much less beholden to the great god health and safety than we are in the UK. I don't know why this is. We have many silly practices. Every bus driver for First Group in the UK is told to carry a high visibility jacket. Now I remember my days working in London Transport and Her Majesty's Railway Inspectorate, here at Westminster station gave London underground a massive bollocking because they started putting everybody in hi-vi jackets. And HMRI said "Wait up – the idea of these things is to have one, maybe two people that the public know are in charge and might know what's going on when there's a crisis. And if everybody's in hi-vi jacket, you've completely failed to understand the purpose of having it." I'm afraid that's what we do in the UK – we lap up this safety culture, and we say "Oh no, wait a minute. Having a man with a pickaxe doing something on this track, while a tram passes on that track... or a railway train passes on that track..." Look at the misery of west coast main line rebuilding. Four tracks – we close all four of them, because the sleepers are being renewed on one of them. This is absolutely crazy, we've got to get away from it. But relocation of utilities, we've mentioned in the paper, is something that we believe is up for review. You don't necessarily have to do it certainly everywhere. Maybe in Edinburgh's case, Princes' Street – good idea. The rest of that network, perhaps not. Got to ask the question, because it's big money.

Q14 Paul Rowen: Have you done some estimate of the costs?

Andrew Braddock: I think the estimates are pretty well available from examples like Edinburgh and all the other UK ones.

Q15 Tom Harris: Could I just ask one last question. And it's, it's kind of tangential, but you're the one that raised it. I'm fascinated by your figure about the ten per cent of one bank's bonuses being enough, presumably one bank was this year, being enough to build tram schemes everywhere. Could you give us some more figures on that? Because I think the Chancellor will be very interested.

Andrew Braddock: Yes. I was hoping you wouldn't ask me that. What I picked up was the Goldman Sachs' figure which I think was 5.2 billion. And ten per cent of that is five hundred and twenty million. Edinburgh - well they're not sure of the final outcome, but it's around the five hundred million mark. In fairness, a lot of other schemes I think could be achieved for less. But you're probably not going to get a huge amount of change from two hundred million plus for a modern light rail scheme in most UK cities. So if you gross that up, just across the kind of money that all the various banks are talking about, I'm not carrying a flag, bearing a torch for George Osborne's idea that there may be a need to rein in the banks. But it does seem to me to

be pretty silly that all that kind of money can be sloshing around, and yet we're not investing it in our futures. Not all of it, but some of that is our money, very critically in the case where we taxpayers have bailed out lots of banks, and own more than sixty per cent of their shares. Are we mad to let that be frittered away and go in the pockets of individuals, when we have a desperate need to upgrade our infrastructure and make our cities work?

Q16 John Attlee: The catenaries, you touched on the over specification. Whilst I'd love to drill down into exactly what you mean by that, but my question is – who is determining the requirements that end up with, in your opinion and perhaps others, with an over-specified catenary system so it makes it much more expensive? I think one needs to understand why is it that we're getting to where we don't want to be?

Andrew Braddock: Okay. A lot of it comes from the engineering consultancies employed in the development of light rail plans in the UK. They have a long pedigree in heavy rail, so their thinking has been heavy rail. You can always have a very intelligent debate with people about overhead line equipment. A very good friend of mine for years was the overhead line manager in The Hague in The Netherlands, and I'm critical of their overhead on some of their lines. But he convinced me when they had a problem one day with a city council street light cleaning truck, with one of these Simon arms on the back, not properly tied down. It crossed Louwerse's line 11 on the Conradkade, but it didn't break his overhead. With stitched catenary it acted like a catapult and it sent this vehicle back along the street, I think it demolished five cars, it didn't kill anyone. But trams kept running. He would argue that if it was simple plain trolley wire, that would have been snapped by its encounter with this vehicle. But how often do these things happen? Do we need to have the kind of overhead equipment that would really grace a high speed rail line across Kent, or half way across Europe, just to run what is really a tram? A tram is a street vehicle, a tram is a bus on rails, not a railway train. And the cost of these things has two effects – one is the money and the other one is the environmental damage. A tram should be improving the environment. If you're going to have people standing around saying “That is so ugly, I don't want trams any more”, you've got a problem. Go to Nantes. In the centre of Nantes, the city decided when they built line two that they would have a gracious crossing of the two pieces of infrastructure. And they put up a rather beautiful box shaped archway, that east/west, north/south trams go through. And it's stainless steel and it's an art object. But it supports the overhead lines of the tram. It's very, very intelligent.

Q17 John Attlee: If you were promoting a tram scheme and you want to get it agreed surely you go for the lowest capital cost, provided it didn't start giving you a reliability problem. So why wouldn't you say to your consulting engineers 'I want you to design a system that's not going to collapse with a snowstorm once every hundred years or whatever?' Why would you not just minimize it as much as possible, so you've just got a system that just supports these wires with very little chance of them falling down and causing an accident? But if someone chooses to, you know, drive a, a tyre truck into them, they'll be liable, they'll be financially liable. If you damage the system you're liable.

Andrew Braddock: Yes, of course. I think in many ways we have to address that question to the promoters. And the promoters in the UK have had a hugely difficult job to do; they know it's not going to be easy to deliver a Light Rail scheme. And they have been dependent on the advice that they get, largely from consultants, as to how things should be done. I don't think there's been enough questioning by promoters.

Q18 Paul Rowen: Not in UK Tram, I think there's been a working group to looking at this, and looking to simplify what, what the regulations are.

Andrew Braddock: Absolutely. One of the many things that UK Tram is looking at, and hopefully, will come together with a set of decisions. It's important because you're beginning to

see quite silly arguments in my view, that say 'well, if you go to Bordeaux they have a system called APS,' which is a very, very expensive way of running a tram without overhead wires. Now, Juppe, the mayor of Bordeaux - with his great bridge like Westminster - didn't want overhead lines. But it costs eight times as much and it's a huge maintenance liability. And lord knows what it will cost to renew in thirty-five, fifty years time. Make the trolley wire nice and neat so that it disappears. Trolleybuses have two sets of wires and yet I challenge you to find British people who've visited Salzburg, which is absolutely full of trolleybuses, and you say to them 'what did you think of the trolleybus wires overhead?' And they go 'what trolleybus wires overhead?' Whereas, if you looked at most of the UK tramways and say 'can you see it?' You certainly can.

Paul Rowen: Thanks very much Andrew and thank you for your evidence. If there is particular stuff that we've asked for more information, if you could feed that into us because that'll be useful for us when we do our final report.

Andrew Braddock: Thanks for your time.

ENDS