

**Edinburgh Tram Inquiry Office Use Only**

Witness Name: ALAN ROBERTSON

Dated: 27 March 2017

**THE EDINBURGH TRAM INQUIRY**

**Witness Statement of Alan Robertson**

Statement Taken by Drew Fox on 13 April 2016.

My full name is Alan Robertson. My date of birth is [REDACTED]. I am currently the Chief Executive of VolkerWessels UK. My contact details are known to the Inquiry.

*Statement:*

**GENERAL**

1. Over the last twenty years I have been a Director and Chief Executive of various UK plcs. Before Alfred McAlpine Infrastructure Services (AMIS), I was Chief Executive of Eve Group plc. They were subject to a takeover by Peterhouse Group plc. in January of 2000. Around March 2002 I became the Chief Executive of Peterhouse Group. Peterhouse Group plc. went through a strategic shift when they took over First Engineering. They sold the building and property business. In October 2003 Network Rail announced that they were taking rail maintenance in-house. That resulted in about one third of the staff being transferred back into Network Rail. Subsequent to that there was a takeover bid by Babcock. That was eventually completed around about June 2004. I stayed with Babcock for about nine months dealing with the integration of Peterhouse Group into Babcock. I left Babcock in May 2005 and joined the Board of Alfred McAlpine plc as Managing Director of AMIS.

2. AMIS's turnover was about £400m. Around £300m of the turnover was in utilities and about £100m in road maintenance. I had a number of Divisional Managing Directors reporting to me alongside the Finance Director and the Commercial Director. My role then, and in subsequent businesses I have been involved with, could be almost likened to a non-Executive Chairman. In other words, I had Managing Directors assigned to particular sectors who would have direct one-to-one contact with the clients e.g. there was a Water Managing Director who would liaise with the likes of Severn Trent Water, Scottish Water etc. I would periodically meet with those clients as and when required. This would be when the Managing Directors required particular problems to be resolved. I didn't have day-to-day or week-to-week contact with the clients during my time with AMIS.
3. I don't recall having any significant direct involvement with the Edinburgh Tram Project. There would have been one or two meetings in terms of the bid process where I was involved but I don't recall this specifically. I may have had meetings with senior people in TIE. There were occasions on big projects like this that I had no interface with the clients. This wasn't unusual.
4. I signed off the strategy for the Edinburgh Tram Project but the detailed day-to-day / week-to-week management was generally done by the project team themselves. I had a Commercial Director, Steve Hudson, who oversaw some of the key commercial strategies. He and I worked very closely together. Steve would consult me on our approach on some matters relating to the Edinburgh Tram Project. Andy Malkin was the person who was the direct overseer of the contract with TIE. He was junior to Steven Hudson. Steve Hudson and myself sat on the Board. Rob Memmott was the Finance Director. The other senior Board member was Steve Cocliff . We all periodically had an input into the MUDFA contract. Andy Malkin, however, had day-to-day contact with TIE.
5. I left AMIS on 5 October 2007. I left some two weeks or so before the takeover bid by Carillion. I had no direct involvement with Carillion. There had been a reorganisation within Alfred McAlpine plc and it was agreed that I would leave the business.

6. The names of the senior persons I worked with at AMIS were Steve Hudson, (Commercial Director), Rob Memmott (Finance Director), Steve Cocliff and Mike Snee (Managing Director of Water).
7. I only recall having contact with two persons at TIE. One was Steven Bell. Steven Bell was a Director with First Engineering when I was Chief Executive of Peterhouse Group plc., which bought First Engineering in 2002. He later left First Engineering. I don't know what he did in the intervening period. I next dealt with him as one of the Project Directors on the client side at TIE. The only other name that I have any recollection of is Willie Gallagher. I had contact with him in terms of the MUDFA contract and the work that AMIS were doing rather than on a personal level.
8. I did not have day-to-day involvement with the Edinburgh Tram Project. I would only be brought in if there were distinct problems that couldn't be resolved lower down. The way in which I run my businesses is that I have full monthly reviews of either business units and / or projects. The MUDFA contract was of such a size and significance that, to a degree, it stood outside some of the business units. For example, in my business I had a Highways Managing Director, a Managing Director of Water (I believe he covered the gas side of the business as well) and a Managing Director who looked after the electricity and telecoms. Because this was a multi-utility project, and was of such a size, Andy Malkin reported to the Board rather than through the other Managing Directors. Reviews would happen monthly. These reviews will have been reported into the AMIS Board through formal papers on a monthly basis. On an intervening basis I might have had sight of various correspondence or emails or other documents.

## **OVERVIEW**

9. AMIS had a very strong presence in Scotland. At the time we were working for Scottish Power, Scottish Gas, British Telecom and Scottish Water amongst other clients. We had contracts with all of those organisations. We felt, because of this, that we had a very strong offering to deliver the multi-utility works under MUDFA. If any non-resident contractor in Scotland had won the MUDFA contract there could

have been severe disruption to the labour market. They would have sucked a lot of our expertise and labour onto the project. We were very keen to win the contract. We didn't want any new entrant coming to the market and disrupting client or labour relationships. We already had sub-contractors and direct staff in place. We knew that, because of this, we were probably the prime candidate to secure the work.

10. My recollection is that TIE was a fairly autonomous unit within Edinburgh City Council (CEC). I recall TIE being headed by Willie Gallagher. I might be wrong but I don't think TIE had delivered a big transport infrastructure project. My impression at the time was that they were not fit for purpose to be a client organisation. I hold that opinion now and base that on my experience of various clients over the last twenty years. If TIE had been a smaller tighter knit organisation, rather than a client organisation, with the management of the programme and commercial discussions contracted possibly to a major project manager then that would have been a far better way for CEC to deliver the project. Having a bespoke organisation created from scratch, and without past experience, was a recipe for challenge from day one.
11. By way of comparison, we do a lot of work for Transport for London (TfL) at VolkerWessels UK. TfL is a big robust organisation delivering a whole range of large infrastructure projects. They've delivered tunnels, bridges and cycle super highways. They've got the expertise in-house to deliver those projects. It is a longstanding organisation. It hasn't been created from scratch to deliver one project. That is the difference between an organisation that is fit for purpose, as a client organisation, and one that is created. TIE did not have a proven track record in delivering large scale infrastructure projects.
12. My recollection is that there were some very good people at TIE. There were people like Steven Bell. I recall there was a commercial manager called Susan Clark. They were good talented people with good skill sets. The problem was, however, that they were working within an organisation structure that wasn't fit for purpose because of the fact that it was newly created.

13. Some things went well and some things badly because that's the way life is. Life isn't perfect. I think there were some very good talented people at TIE with good expertise. However, the way the organisation came together wasn't tried and tested. TIE's internal communications, mechanisms and processes weren't tried and tested because it was a bespoke new organisation. New people had come in off the market to create an organisation and deliver a project. It was a recipe for disaster.
14. If a public authority is setting up a separate entity it has to start somewhere, however, it does not need to do everything. They can contract high level expertise through a project management organisation who have the experience of doing this type of work day in day out. In other words, TIE could have been a thin client rather than a thick client. Maybe TIE should have been no more 20 people as opposed to, possibly, 200 / 300 people. Those 20 people would then interface with a project management organisation like Bechtel who would then manage the works. Other infrastructure clients have a thin client at the client level, the TIE level. Through the contract they offload a lot of obligations to the likes of AMIS because AMIS do these kind of projects week in week out. From recollection, CEC tried to create a fat organisation from day one. It wasn't a tried and tested approach to doing things.
15. I don't believe I have come across a set up like this i.e. a public authority creating a bespoke fat (large) delivery company in my career. The vast majority of projects of this size are delivered through significant existing authorities e.g. Network Rail, the Environment Agency and TfL. A local authority doesn't have that strength and depth of expertise to deliver £500m or £1bn project. Over the years I have not done extensive amounts of work in Scotland. I recall doing work for Glasgow City Council. However, those projects were worth in the region of £20m. It was flood defence work. I certainly, from my experience of working with them, think that they could not deliver a £500m or £1bn project.
16. I joined AMIS in the middle of 2005. I believe that we started working on the Edinburgh Tram Project from the middle of 2006 and put boots on the ground towards the end of 2006. We had some very good people with tried and tested

expertise and good communication. The Edinburgh Tram Project was very typical of the kind of work that we did. There were quite a number of projects, or sequences of projects, that we were delivering at £20 / £30m a year. We knew how to bid and how to minimise and manage our risk. I don't know whether there was a proper comprehensive understanding on the other side of the table at TIE. I don't think that they were an informed buyer of our services. Individually yes, but collectively no. I base this comment on the fact that TIE was created from scratch.

17. There aren't many tram projects around the country which have been great successes. The contract for Nottingham tram lost a lot of money because of the way in which the contractor had entered into a contract on utility diversion. We knew of that and therefore weren't prepared to take an open-ended approach to risk. Subsequent to Nottingham there is only one major similar project which I have been involved with. It proved to be a great success. That was Manchester Metrolink. That project had a different form of contract to MUDFA. MUDFA was different to the all-encompassing risk that was taken on in Nottingham in early 2000.
18. The Edinburgh Tram Project is a project that is probably in the bottom quartile of all the projects over the last 10 20 years that I have been involved in. I say this because we had a client which was not fit for purpose in terms of procuring £1bn of work. There could and should have been a realisation amongst the ultimate funders that things were not going well. At that point CEC could have saved money through bringing in a professional project management organisation to sit between a reduced size TIE and ourselves as the contractor.
19. I am aware Bilfinger Berger and Siemens (BBS) had challenges with TIE later on. However, by the time I had left AMIS they had hardly been involved. We had had minimum involvement with them. I think they might have just been awarded their contract. I do recall that Andy Malkin and I had had discussions with TIE about them (TIE) coordinating high level meetings between ourselves, as the MUDFA contractor, and BBS, as the INFRACO contractor. I don't think that the meeting ultimately happened. It might not have been in TIE's interests for us to meet with BBS because of the problems that we encountered from very early on. If we had

raised those issues in an open forum with the INFRACO contractor they may have run a mile.

20. It did not surprise me when I heard that BBS were having problems later on after I left. Tram projects are notoriously complex and difficult - working in an urban environment. It's known right across the construction industry that, particularly with utility works, as soon as you open the ground up you can find anything. The records of the statutory undertakers are notoriously bad. That's across the board and most certainly was the case say 10 years ago. It's a lot better now. It was very bad in mid-2000's.
21. The privatisation of the utilities didn't cause issues for the likes of ourselves. It created opportunities for AMIS because the water companies and electricity companies were being held to account by the regulators. They would hold people to account in terms of standards, the investment, the delivery of services, the records and everything else. That actually opened up opportunities for businesses like AMIS. The privatisation of the utility companies didn't directly have an effect on the records of where the utilities were located. However, through the late 90s, and the turn of the decade, there was a digitalisation of a lot of records. In the old days it was pen and paper as to where an electricity cable was running. After that it was using GPS. It was proper digitised records. Privatisation just happened at the same time as the utility companies becoming digitalised. Across the board records were moving towards a better position because of technological advances.
22. We fully anticipated before we went into Edinburgh that there would be issues with the records. The client organisation should have recognised it to a greater degree as well. I am talking about this from the perspective of the structure of the contract. We knew that and we weren't prepared to sign up to a contract with open-ended risk. I think, without going through the contract in any great detail, in all certainty the client organisation took on too much risk themselves. This meant that they didn't appreciate the risk or how to mitigate or manage the risk.
23. In all certainty CEC took on more risk than other public authorities. If I compare TIE with say Scottish Power / Scottish Water, they were established businesses over

quite a number of years. They had more developed processes and experience of contract negotiation.

24. I can't really comment whether there were organisations and / or people that were obstructive or were helpful to the process. I don't have any recollection of organisations that were obstructive. With regards to people, there were very few people that I could put a face to a name or recall. There were some very talented people. There were some challenges with BT. More so than I think there were, from recollection, with Scottish Power, Scottish Gas etc. BT are still an on-going challenge because of its monopoly position. They hold all of the cards.
  
25. Political interference is very typical in local authorities and on a wider scale. The timing of certain decisions and certain processes are very often governed by political events or interference. An example of this can be seen with the mayoral election in London. There are impacts on the flow of work in Greater London because of the mayoral elections. You head into a General Election and the flow of work, from some of the larger public sector clients, doesn't run smoothly because the priorities of an incoming Government might be different should the Government change. I think for that reason there were some delays during 2007. It is par for the course that this happens. It's just a challenge with the industry we are in. The priorities of an incoming Government might be slightly different to those that are currently held.
  
26. I don't believe that the relationship between TIE and AMIS had broken down to any great degree by the time I left. We couldn't afford the relationship breaking down because of our very significant presence in Scotland working for all the utilities. We were somewhat of a buffer between TIE and the utilities themselves. It is the nature of my management style with the people who work with me to find solutions, to try and overcome them and to bend over backwards. If, at a subsequent date, the relationship broke down, it was because TIE had almost certainly entered into a contract which wasn't fit for purpose. The organisation wasn't fit to procure a multiple hundred million pound project. Contractors will always protect their position. We do it day in day out. We manage and mitigate risk. I'm basing my

comments about TIE and the breakdown of the relationship on my knowledge of the content of the contract and the time prior to me leaving.

27. I don't recall the dates when the MUDFA works were due to be completed. I left before they were completed. I am aware that the MUDFA works ultimately overran. There are a few people who have mentioned to me that it went on a year or two past whatever from the original date was.

28. The reasons why the MUDFA works were delayed, before I left, were mainly design related. You can only design an upgrade to utilities infrastructure if you know what's there. If somebody says "*there's the water main and I want you to move it to here so we can put the tram down here*" and it turns out that the water main is somewhere else you have to come up with a different design. This was the fundamental problem. We would say "*we have excavated where you told us the water main was to move it but it is actually over here and not there*". At that point everything stops. Contractors need to recover the cost for our people who were stood up and extend the time of the project.

29. I can't recall whether the designs and approvals were any slower in the Edinburgh Tram Project than other projects. These processes are typically quite challenging. To get designs signed off, the process can be quite onerous and quite clunky. Nobody wants to accelerate designs and end up with something that is wrong. If you do, you've then got to go and redo all the work. There are usually protocols in terms of the design checking process to make sure they meet various standards. I can't recall whether the approvals and consents process was any more clunky or less clunky here than other projects.

## **THE MUDFA CONTRACT**

### *THE OVERVIEW OF THE CONTRACT*

30. The one very high level assumption was that our client knew what they were procuring. TIE could not have known what they were procuring because in practice nobody knows what is in the ground until they open it up. Very often the way

people get around this is that they use ground probing radar. This is not by any means fool proof. The other way is undertake a significant amount of trial holes. At the end of the day, unless you do a 100% coverage of the trial holes, as opposed to 2% or 3%, you're not going to know what is down there. TIE took on the responsibility for the design. They didn't know what was there because you can't know what's there. Surveys and radar detection will never be sufficient. I do not recall who undertook the surveys. I couldn't put a number on the usual percentage level of surveys for a project such as this.

31. I can say that invariably the contractor would not want to take the risk on in a project such as this. In a congested urban environment you would not take the risk. I recall the client taking the risk here. That's why the contract value went up. No contract is ever going to protect the risk of what is under the ground in an urban environment. Standardly the contractor does not take on the risk in infrastructure projects such as this. The only example I can think of the contractor taking on the risk in a project like this is on the earlier Nottingham tram Project. I would certainly view that as an unusual approach by a contractor.

32. I don't recall the scope of the works. I don't recall how the works were split into sections. I may have had involvement in these aspects I just don't have any recollection of the detail.

33. I don't recall specifically how the contract was priced. However, the conclusion that I would jump to, on the basis that the contract value went up, is that it was priced on the basis that AMIS would not be taking open ended risk. We would be paid for the work that we were doing. We wouldn't do more work and take that risk. I can't recall exactly how the contract was put together.

34. In general, I can comment that you sign a contract based on a programme but there would be a lot of conditionality put in place. In other words, we will deliver such and such work by December based on you delivering full and final designs by March. If those designs aren't right, and they have got to go back into that iterative process, we won't be held accountable for not being able to deliver in December. We can't deliver the impossible. I use the analogy of building an extension on your

house. If you say to builder "can you do it by December?" he'll say "what am I building, what have you designed?" If you just say "well, an extension" he will come back and say "what does it look like? Is it two-storey or one-storey? Big or small?" Nobody is going to commit to a date unless you know what it involves. The builder building your house might say "I'll commit to doing it by December so long as it is single storey, shallow foundations, one storey etc." Then when you produce the design and it's double storey he is going to say "December is out the question because you said single storey". From recollection there was nothing unusual in the way in which the MUDFA was structured. There was nothing different here from any other contract I have been involved with.

35. Invariably the designs are better progressed and more robust in the other projects I have been involved in. Manchester Metrolink, where my present organisation has done more work, had a much better recovery mechanism from the contractor perspective. This is based on the unknown factors in the ground. We will be effectively paid for that delay. A better contract builds up a better relationship between the contractor and the client.
36. It is good practice, in principle, to clear the way for the civil engineering works by doing the utility diversions ahead of the civil engineering works coming in. It is almost impossible to do both simultaneously. You clear the path before you carry out the civil engineering works. In reality this does not entirely always happen. Under the MUDFA contract we may have intended to clear the way for BBS to come in to put in the civil works. There would have been a degree of change in design. That may have resulted in a little bit of further utility diversion further down the line. In a perfect world you would clear the path so that the civil contractor can just carry on without disruption.
37. The progression of design in our industry is one of the single biggest headaches for construction. It wasn't a surprise that the designs were late because of the unknown quantity of what was in the ground. You've got the Shard being built in London. They were going up in the air. They weren't going to discover something up in the air. As soon as you go into an existing piece of infrastructure e.g. Victorian trains, Victorian water mains, heavily congested pavements or into

roadways in or around Edinburgh, problems occur. It's par for the course across all projects that there is difficulty with designs. This is particularly true when you are working in the ground with infrastructure.

38. I know that we were perpetually frustrated because of late designs. I don't believe that we had a direct contractual relationship with SDS Parsons Brinkerhoff. Our relationship was through TIE. We would complain to TIE that their designs were late. TIE would then complain to Parsons Brinkerhoff. We could have had a direct relationship if PB had been our subcontractor. It would have been a slightly different relationship. It is not entirely unusual to have the client in between the contractor doing the utilities and the designers.

39. I left Alfred McAlpine before the takeover bid landed from Carillion. I think it completed in February 2008. The reasons for the takeover was that the Alfred McAlpine share price had been weak throughout 2007. Because of this there was always the possibility that there would be some kind of takeover. The reason for the name change was because Carillion was a larger organisation

#### *THE OPERATION OF THE CONTRACT*

40. Preconstruction works are undertaken before construction work starts. On major projects you quite often look to complete the design and project development phase before you actually start work. You haven't actually done any construction on the ground during the preconstruction phase. There are inevitably some overlaps because, during the preconstruction works, there will be a bit of design development going on which will continue until you finish the project. It is not unusual to see the preconstruction and construction work overlapping. It is good practice, on the part of the client, to get the preconstruction done to a good enough degree before you commence the works. It is good practice to get all of the designs, understand all the risks and understand how things might get delivered.

41. I do not think that enough preconstruction work was done before we got boots on the ground. I see proof of this in some of the minutes. Very early on in this project,

before I left AMIS, there are records of us being frustrated by the lack of design development. They hadn't done sufficient work.

42. I don't recall the detail of the number of works that were to be carried out. I do recall that we did quite a lot of trial digs. I don't know the detail or the percentage for that. Unless you do a 100% trial dig you'll never know for certain what is under the ground. That isn't practical as you may as well just do all of the work. The number of trial digs will never be sufficient. There isn't a standard for the amount of trial digs you do. I don't believe there are guidelines as to how many should be done. I think, from recollection, AMIS were contracted by TIE in terms of some of the preconstruction works i.e. to do some of the trial digs. I might be wrong with that. It could be that some of the utilities themselves were doing some of the trial digs. I can't comment whether I recall any other contractor being brought in to do the surveying.
43. The ordinary assumption that a contractor has is that, when they start work, they would be unhindered because the design and the access would allow them to continue day after day. My recollection is that, with this project, we were moving forward in fits and starts. That is a very inefficient way of working. It is also very costly because the contractor can recover those costs. The work proceeded in fits and starts because of the lack of design development.
44. I should know what a C4 estimate but can't recall.
45. I can't recall the split between the amount of utility works that were going to be carried out by AMIS employees against subcontractors. We had a very large direct workforce which was topped up with subcontractors from time to time. I don't recall whether it was 80:20 or 20:80. Broadly speaking it shouldn't make any difference because the outputs, the rigour and the way in which we managed our direct teams as opposed to subcontracted teams was no different.
46. I don't recall the detail of the extent of the works that was anticipated to be carried out by the Statutory Utility Companies (SUCs) / other third parties. We were already working for all the SUCs in Scotland, almost without exception. This meant

that the work that we carried out was to an approved standard level. It is likely that we were able to carry out the utility work without having to go back and be reaccredited by the likes of Scottish Power or Scottish Water. This was because we were already working for them. A third party, or another contractor coming into Edinburgh, who didn't have the accreditations to work on Scottish Power's network, would not have been as efficient. I don't recall what was envisaged in terms of who would carry out what work or indeed what did happen.

47. I wasn't involved at a level whereby I could explain how construction utility drawings, bills of materials and cost estimates were provided. I would rarely if ever be involved with that level of detail.

48. I don't know who decided when each section should be done. There is normally an agreed programme. This is the most efficient way of delivering a project. This is normally suggested or proposed by the contractor and accepted by the client. Occasionally the client might say "*actually change the sequence there because of this reason or that reason*". I can't comment specifically on what happened in this project.

49. I can't comment on what design information was provided and its level of detail. To the best of my recollection, the responsibility for providing design information was with TIE.

50. No SUC is going to let a third party just work on their asset because, once that the work is concluded, the asset would be "adopted". The third party would consequently need to approve the design. There would have been an approvals process there but I am not sure how it worked on this project.

51. The process of getting works accepted by the SUCs once completed was in all certainty a complex process. It always is. It probably did cause delays and problems. I have no recollection of what specifically happened.

52. I don't have any recollection of how cooperative the SUCs in the overall process. The level of co-operation varies from project to project. It depends on the amount

of utilities that are underneath the road. It is known up and down the country that certain SUCs are better than others. BT are not very good. At the end of the day the SUC's primary focus is delivering a service to their customers. They are very cautious about the public not having access to their utilities. The whole process needs to cause as little disruption as possible to their customers.

53. I can't recall the process by which completed sections would be handed over to the INFRACO contractor to enable them to commence the infrastructure works. I think the INFRACO contractor had only just been appointed when I left. I don't know how that was structured. In general terms, the INFRACO contractor coming in would have based their bid on the assumption they had a clear run of the works. They wouldn't expect to be moving forward in fits and starts because the utility contractor couldn't progress or couldn't finish the works because the designs weren't finished. If the designs have got to go through an iterative process it means that the utility contractor can't clear the path and the INFRACO can't really commence.
54. From the contractor's perspective you often cover yourself in terms of conditions to make sure you can recover costs for the ineffective working. If it's going to cost twice as much then it's not going to be a risk that the contractor is willing to take on. You would make sure that you pass the risk back to the client.
55. You would presume there would be more fits and starts where you were going through the centre of a city. It is a whole lot easier building HS2 through farmers' fields than upgrading the west coast mainline. This is because the west coast mainline is a live, active Victorian train line. It is not necessarily true that if you are going through the city you would want to be paid higher because you would be taking on more risk. You want to be paid the same but with a clear recognition by the client and contractor that things are going to be less efficient because of the public interface, existing bus routes, shop owners, general public and the fact that designs will always go through that iterative process. To do 100 metres on a public highway in Edinburgh city centre is going to cost a lot more than 100 metres in a rural area. This is because it is more congested and there are difficulties with access. If TIE had an appreciation of that they didn't write the correct contract to

cover it off. Any contractor who would sign up to that kind of risk is probably not in business any more.

56. The transfer of utility works from Carillion to the INFRACO happened after I left so I can't comment whether it was to address the delays in MUDFA and the deteriorating relationship with AMIS.

57. I am referred to the AMIS MUDFA Project Monthly Report from May 2007 found at (CAR00002659). It states "*In the next reporting period AMIS/MUDFA will review the TIE Ltd commercial agreement and will take time out to evaluate the current position and create an alternative or ultimate approach given the critically and direct dependencies on the imminent INFRACO works.*" I am not familiar with this document. I can't recall the detail of the commercial arrangements. It is entirely par for the course that this happens on a monthly basis, if not more frequently, on all major projects of any variety. There are weekly, or at least monthly, discussions between clients and contractors as to how the commercial arrangement is working. I wasn't involved in that level of detail anyway. You will have to ask BBS what the assumptions were when they signed up to the contract about the state of completeness of the MUDFA works. I don't recall and I don't know what was envisaged by the client or by INFRACO. I don't know what was the outcome of the review carried out by AMIS / MUDFA.

#### *THE UTILITY DESIGN FOR PHASES 1a AND 1b*

58. I have no recollection in relation to the utility design for phases 1a and 1b. I don't recall whether the utilities works were done down to Leith.

#### **THE COMMENCEMENT OF UTILITY WORKS**

59. I can't recall when the utility works commenced and on which sections. I'm sure the records will tell you that. I can't recall when works were commenced and what the agreed programme was for undertaking and completing the works. I don't recall what the sequence for undertaking the works were on the different sections.

60. I can speak to why the programme changed in general terms. Programmes change all the time on every single construction project up and down the country. I wouldn't see it as unusual that the programme was changing.

## **THE DIFFICULTIES EXPERIENCED**

### *OVERVIEW*

61. It is in my nature, and Andy Malkin's as Project Director's, to try to find solutions to overcome design delays. We would not carry out the work without a sufficiently developed design. To do so would be lunacy. We would do everything in our power to aid the development of those designs to the level where we could carry out the work. We don't earn a reasonable return as a contractor waiting for designs. It's dead time. We make money by producing things and getting on with the works. It's not in our interests to sit around waiting for designs. We want them so we can carry on. In all certainty we engaged with the client so that we could speak with the designers. Designs still take time to develop.
62. You're going to get some of the design process achieved by the SUCs (I vaguely recall that we had discussions with some of the utilities like Scottish Power and Scottish Water) but they still have to go through their own internal protocols. It is entirely usual for there to be difficulties in and around negotiating the third party agreements.

### *THE DELAYS IN THE PROVISION OF THE DESIGNS*

63. I had forgotten the name but, looking at some of the documents, I am reminded that it was PB who were responsible for carrying out the design of the works. At one level the causes for delay with the designs were the records of the statutory undertakers. It is a fact that nobody but nobody knows what is in the ground until it is opened up. I do recall significant pressure was placed on the designers by TIE. We aided that as much as we could. TIE ultimately weren't successful otherwise the project would have been delivered on time.

64. I think we did everything we were able to do or allowed to do to speed up the production of the designs. We possibly put a construction engineer from our business in PB's offices. I don't recall. That's the kind of thing you do where you've got a theoretical design looking at either 2 dimensional or 3 dimensional designs, card designs / paper and pen type designs and designing something that is fit for construction. We might well have put one of our engineers with them to aid that process. I don't recall if we did or did not but that's what we typically did. Designers notoriously come up with things that you can't build.

65. In the first Monthly report (CAR00000266) we raised concerns in relation to detailed design. The same concern is noted in the monthly report for March 07 (CAR00000237). At Section 3: re Design: Overview it confirms that TIE, SDS and AMIS / MUDFA specialists continued to hold bi-weekly design and technical liaison meetings in order to provide technical support and assistance in relation to C4 / SUC Utility Detailed Design. We specify concerns still remain in relation to the lack of technical definition and detail by the SDS provider to support material take-off and construction planning. This amount of support / input into the design process is by and large normal. By and large it smoothes the process. It isn't always required. If you are designing something from scratch and the design organisation, or the individual designer, has done a lot of the work before then it can be 100% ready for build. Where there are unique complexities or the organisation doesn't have the experience in terms of managing design you get backed into the long running iterative process. In most cases the design requires input from somebody who has been on the ground. Someone to say "*this design just doesn't work*". It's useful to bring all the parties together - the client, the designer, the contractor.

66. It wasn't in our interests to sit on our hands. You don't generate profit sitting on your hands. We might recover our costs but what we want is outputs.

67. I don't recall having a direct role in seeking guidance and clarity on contract requirements, interface issues and proposing a further spring cleaning session. It is very likely that I would have been involved at a high level on the basis that the business that I was running would have to forecast profitability over the coming six

or twelve months. Profit wasn't coming in because we were sitting on our hands. We weren't delivering this project. To resolve this we would go back, look at the solutions and re-evaluate what the programme looked like.

68. I attended commercial meetings in order to protect our interests. It was important to work collaboratively with the client. I recognised fully that this project was probably, I am guessing, 20% complete before I left. It isn't in anyone's interest to pick a fight with your client when you're only 20% complete. You want to find innovative solutions to any challenges and try to overcome them. It wasn't my impression that a fight was going on at the stage before I left.
69. I don't know who prepared the AMIS document produced shortly after October 2006 and found at (CAR00000002). I have looked the document as it was sent to me by the Inquiry. It is standard practice to place the contractors logo at the top of documents. If the document is being shared for example in bilateral discussions with the client then that is done because it looks all very pretty. If this was for AMIS eyes only as an internal document it wouldn't have necessarily have had TIE's logo on it.
70. I don't recall specifically whether there were changes in design for the track that meant that works already carried out had to be redone. It is highly likely. That happens across all projects of this type.
71. Document (CEC01636547) appears to show that in June 2007 AMIS claimed that the delay with design was 22 weeks behind schedule. However design trackers produced in June 2007 appear to show that the designs were on time – documents (CEC01472357) and (CEC01640670). A similar picture is in document (CEC01472357). I am asked to explain this apparent contradiction. It can only be, and I am jumping to a big conclusion here, that your tracking gets different dates. In other words 22 weeks behind schedule might have been the programme of the schedule that was the original contractual schedule whereas the other design trackers were against an updated programme. Typically programmes are updated at least monthly and sometimes more frequently than that. That said, I have no specific recollection as to what was going on here.

## *ISSUES WITH THE STATUTORY UTILITY COMPANIES*

72. I wasn't directly involved with any discussions with the SUCs. I am generally aware that SUCs are notoriously sensitive over their assets. If work undertaken by us on Scottish Water's assets results in 1,000 or 10,000 of their customers being off supply, that is just a nightmare. They are notoriously rigorous about their processes for somebody working on their assets. If we were contracted to Scottish Water, for example, that's one thing. On this we were not. We were contracted to TIE. Therefore, the SUCs would have been even more sensitive. It doesn't surprise me that there were discussions regarding difficulties with the SUCs, however, I have no recollection of being involved. Every single project that I have been involved in that includes utilities works has resulted in challenging discussions with the SUCs. I don't view the presence of discussions with SUCs here as being anything unusual. I don't think I was ever or ever would have been involved in the discussions.

## *OTHER DIFFICULTIES*

73. Invariably no resident or business wants disruption outside their front door. This is because businesses can lose trade. Residents are normally okay with it as long as they can get access to their property. Disruption is one of the hazards of the nature of our industry. We seek to minimise it but there are always challenges. Disruption to the public is inevitable. Nobody likes disruption and change, particularly businesses. I have no recollection of anything unusual in the Edinburgh Tram Project in terms of the effect it had on the public other than, I suppose, the huge extent of the works right across that route. Invariably if the route is more confined then there is less disruption. In this project there were many residents and businesses disrupted. You can't get round that. A tram project is very linear. It doesn't go straight up into the sky because it is horizontal. Disruption was always going to be an issue. The disruption here was exactly the same as with the Manchester tram project.

74. The industry at large is far better at managing the public communication interface than it was 10 or 20 years ago. The industry is now a lot better at managing

communication. Communication with the public has been somewhat aided by modern communications technology. If we were doing a tram project now we would get all the businesses and residents to hook up to a twitter feed, a mobile phone feed or a text feed. Now, if there are some major works happening on a Sunday we can text everybody saying "major works". In those days we might have printed off a letter and put it through everybody's post box. 10 or 20 years ago it was more likely that the client would be dealing with the public interface.

75. It comes back to the general comment that I made that a tram project is very linear. You will be passing the front door of many businesses and residents. You are working on some of the essential services that are getting delivered to them e.g. the water, the traffic lights, the loss of parking spaces. All of these things are crucial to those people or businesses. There will always be a big communication exercise. Every effort is always made to minimise disruption. The business that I ran was not cavalier by any means. I know that people like Andy Malkin, in his role as Project Director, took the communication aspect with the public very seriously. He used to walk the route frequently, I wouldn't say how often, but very frequently to make sure our workforce and any subcontracted workforce were complying with best practice. I saw the level of disruptions and issues with the public as being nothing unusual when compared to other projects of a similar type. It was a long linear project on a public highway in an urban environment. There will always be challenges.

76. I am not sure if it is relevant for Scotland, but in England there is the Considerate Construction Scheme (CCS). You will see banners up at the vast majority of construction sites for this scheme. Construction sites are evaluated against a set of criteria. The results are published. It is all about raising the image of the industry in dealing with, by and large, the third party public. It is also about the image internally behind the hoardings on the site itself. I have no recollection of what the equivalent scheme was in Scotland or if there is currently an equivalent in Scotland.

## *POLITICAL ISSUES*

77. I seem to recall that the election happened in May 2007. Whether this issue was specifically raised by TIE I don't know. Maybe we jumped to the conclusion that actually some of the delays in the progress of the project were to do with the political change of Government. I think there might even have been a question about whether the project might be cancelled by the incoming Government. However, I have no specific recollection of that. I have no recollection of the works being paused during my time with AMIS. I have no recollection of the Scottish Government auditing the project.

## *LACK OF RESOURCES AVAILABLE FROM AMIS TO CARRY OUT THE WORKS*

78. I don't have any recollection of lack of resources and availability of contractors, subcontractors to work on the project. There wasn't typically a lack of resources, contractors or subcontractors before then during my time at AMIS. Given my experience of projects I was involved with at AMIS, I don't believe there would have been a lack of resources on the Edinburgh Tram Project. As far as I was aware we had the supply chain in place to start the work.

## *QUALITY OF THE WORKS DONE BY AMIS*

79. I have no recollection of any poor quality of work carried out by AMIS. We were one of probably four or five of the largest utility contractors in the country. We wouldn't have been there if we delivered poor work across the board. I don't think there were any problems with quality before I left. I know that we were frustrated by the progress of the project but that was because of the designs being late. I don't recall any discussions with TIE regarding the quality of our work.
80. I have no recollection of there being any issues with the tidiness, quality of workmanship and handling of materials specifically on Leith Walk.

*GREATER LENGTH OF SERVICES THAN ANTICIPATED AND CONGESTION OF SERVICES*

81. When you open up the ground you discover things that the designer or the client, TIE, didn't know they were there. Your starting point is the records of the utility companies. That's your starting point, it was 10 or 20 years ago and it still is now. You would never, even to the very present day, solely rely on the records of the utility companies. You would dig your own trial pits. You would do your radar surveys. By way of example, if an electrical cable is shown by the SUC to be 500mm beneath the surface but, subsequent to that drawing being put into their records, somebody comes and resurfaces the road, or the pavement, suddenly it's not 500mm, it's 400mm or 600mm. There are also lot of redundant services. This is part of the problem. You only know they are redundant if you start testing them. You open up the pavement because Scottish Power say there is a power cable there. Then, once pavement is opened up, you discover there are two power cables. You can test to see which one is live. However, if there is one that is not live then you have to ask yourself why it is there. Is it there because it is an additional circuit they have put in for future use? Is it a wholly redundant circuit? Where does it tie-in down there or down here? You don't just rip it out because they could be energising it next week. You open up the pavement and you just pull your hair out.
82. You would never solely rely on the records of the utility companies. It's a starting point. You have got to start somewhere. You would never solely rely on the surveys done by the client. You wouldn't construct a contract where the client says *"this is what is there"*. I will give you another example. Say I am excavating the road outside my office here. Scottish Power may have said to me *"there's an 11kv main running through there and it is 500mm beneath the surface"*, however, when we start excavating with a mini-digger we suddenly discover it is 400mm beneath the surface and accidently hit and damage the cable. That can possibly result in an explosion and then HSE will have to get involved. Ordinarily you would say *"Scottish Power told me it was 500mm beneath the surface so we were excavating down to 400 mm"* and then after that we would hand dig and repair the cable. It is always our risk from a safety perspective and from a repair cost perspective. In

other words, the SUC records are for guidance purposes only because they can't say absolutely "*its 500mm beneath the surface*". They can only say it was when it was built. Fundamentally you cannot rely on the SUC records both from a safety perspective or from the perspective of attempting to avoid repairs that cable. The records are for guidance only for very obvious reasons.

83. I don't recall a company by the name of Aiden. I've never heard of them. I don't know what company undertook surveys. I can't give you a rule of thumb as to how many surveys should be undertaken. There might be a rule of thumb but it is not something I am familiar with. There aren't other ways which would provide a complete picture of services to be moved. There wasn't then and there isn't now. The discovery of additional services and congestion certainly resulted in redesign. The level of impact would be based on what you discover. This is all a very common problem.

## **CONSEQUENCES OF DIFFICULTIES**

### *PROGRAMMES AND DELAYS / CAUSES*

84. It is entirely normal on a construction project to review the programme at least monthly. I have no recollection of there being an exceptionally large number of different programmes on this project. I can only comment by saying that, with all the design issues that prevailed, in all certainty we would have had to have issued more frequent programme revisions than would otherwise have been the case. If the designs had all been done in advance and were 100% perfect we wouldn't have needed some of the programmes.
85. Before you start you would only have one programme excluding any other impacts e.g. if it snows for a month (which would mean you can't get on with your work). The vast majority of the change to the programme would be because the designs were late or inaccurate or had to be redone. I would not have been involved in the detail or on the variations to the programme. I don't know who was responsible for the issuing of programmes on this project. Invariably it is the contractor who proposes a new programme. Then the client might either accept it (and the

consequences of a delay of the programme) or reject it. That all comes back to the contractual mechanisms. Andy Malkin possibly would have been the person overseeing the programmes but I couldn't say that for certain. I have no recollection of whether the programmes were provided on time. The name Taryne Lowe doesn't ring a bell at all.

86. I think the one thing that might need to be borne out through all of this is that when we talk about claims being made it comes down to the formal contract that was signed. In other words, very often you might go to the courts or to adjudication, or whatever, to find out whether a claim has got any validity and whether there is the ability in the contract to recover sum.

87. We might assume that over a 12 month cycle we will suffer four weeks delay because of weather. If we suffer six weeks delay that's our problem. On the other hand, two weeks of bad weather would be to our advantage. It comes back to the contractual mechanism. If claims are largely successful then that means they are entirely reasonable and substantially valid under the contract.

88. I am asked whether I have any comment, from the contractor's perspective, on the quality of a contract where there are a lot of claims made. All situations are unique and bespoke. It all depends on the circumstances and factors that come together. My only recollection of the MUDFA contract was that there was a disproportionately large level of potential for claims because of the design issues. I do not recall anything specifically about the structure of the contract that was unusual.

89. There was slippage before I left because of the design delays.

*WHAT WERE THE CONSEQUENCES FOR AMIS?*

90. I understand that by March 2009, which was some 18 months after I had left, Steve Hudson was still working for Carillion. I am still in very infrequent contact with Steve Hudson because he now works at HS2. We are bidding for works for HS2. I can't really comment on the consequences for AMIS.

91. I refer to the letter from PB dated 1 May 2007 and found at (CEC01664017). I don't recall this letter. It is not improbable that works that were done which then became redundant because the designers changed the environment. I don't know the extent of work which became redundant. From the Inquiry's perspective it might be worth trying to determine how much wasted cost there was for work that had to be done where there were subsequent changes to the alignment. If we had to redo work because of this then that is just a waste of money. I don't know if that is going to be a small figure or a large figure.

#### THE EFFECT ON THE INFRACO WORKS

92. I don't know whether it was planned that MUDFA and INFRACO would be carried out at the same time. I don't recall it but, if it was, that sounds wholly illogical. You can't be excavating the public highway to divert the utilities at the same time as working to put the civils in. It's illogical and it's improbable. It could well have been presented that way to enable the end date to be hit. I have nothing to base that on. That's speculation on my part. I don't recall how the overlap was to be managed.

93. I am referred to the report for the June 2007 meeting found at (CEC01565583). There is a note that the new programme 6 is being discussed and that regard is being had to the requirement of INFRACO. I have no recollection of whether there was a real concern that the two parts of the project would be run in parallel after all. It would surprise me if it did. I base this on my experience of other projects I have been involved in. It is unusual for these two phases to be intentionally run in parallel. You could in theory phase in work in parallel. You could never deliver it exactly in parallel because it is illogical to be working in the ground as well as on the ground at the same time. The client was probably trying to do this to meet the end date. Again, that is speculation.

94. I am referred to the document titled AMIS/MUDFA Report dated May 2007 and found at (CAR00002569). It states *"In the next reporting period AMIS/MUDFA will review the TIE Ltd commercial agreement and will take time out to evaluate the current position and create an alternate approach given the criticality and direct*

CAR00002569  
should be  
CAR00002659

*dependencies on the imminent Infraco works".* What I interpret this statement to be is that AMIS were trying to understand the implications for their contract of any disruption caused by the phasing of the INFRACO work and whether this would lead to a claim. We look like we were considering whether we would participate in any phased work. I don't know to what extent the difficulties referred to here resulted in the increased cost of the MUDFA works.

95. I don't have any recollection of difficulties with traffic management on this project. I do have a recollection that there was contractual relationship between the bus companies, CEC and TIE about doing the road works. This was to do with the disruptions of the routes of the bus companies. That was quite a hot potato. I can't recall the detail of it. I have no recollection of working on only one side of Princes Street rather than both sides because of this. That's probably what happened but I can't recall the detail. I do now recall that I think the contractual relationship between the bus companies led to claims upon CEC from the bus companies for lack of passengers and disruption to the routes. I can't recall the detail of that though. I have a vague recollection of that.

96. I can't speak generally to traffic management and how that affected the cost of operating the contract and our works. I have no recollection of any problems.

#### *ALTERATION OF MUDFA AGREEMENT – SETTLEMENTS AND INCENTIVISATION*

97. I don't recall any involvement in negotiations that lead to further agreements between TIE and AMIS. This is likely because they probably happened after I had left. If they were before I left I also don't recall being involved in anything. It is entirely normal, through the contract discussions, to periodically have a degree of renegotiation to make the contract more workable. I don't recall any of that going on. In all certainty it all relates to the delay with designs. The design issues were far greater on this project than I had experienced in the past and since. There was nothing unusual in the approach taken by AMIS.

98. I refer to the TIE and AMIS commercial review meetings held within March 2007 which are set out in the Project Monthly Report attached to the letter from AMIS to TIE dated 23 March and found at (CAR00000237). I note that AMIS/MUDFA awaited issue of further SDS/IFC drawings in order to reach final AFA. I am not able to comment on the meeting as I have no recollection of it. However, from reviewing the document it comes as a surprise to me that as early as March 2007 (which wasn't long into the contract) there was a 15% increase in the final account. I am surprised in hindsight that, so early on in the project, it had gone as high as £68m. That just shows how inadequate the client was in awarding a contract which so quickly shot up to that kind of level.
99. I refer to the letter from AMIS to TIE dated 15 June 2007 found at (CAR00002842). Reference is made in it to the commercial meeting of 23 May 2007. This is a detailed and lengthy letter stating that AMIS/MUDFA have provided, in support of the SDS, many design sketch submissions over an 11 week period. The letter challenges the veracity of the TIE notes of the commercial meeting dated 28 March 2007. I don't recall anything to do with the commercial meeting referred to on 23 May 2007. I have looked at the document. I don't recall what the purpose of the meeting was. It was almost certainly, to progress commercial discussions. I wouldn't be able to comment on who else attended. I am referred to the bottom of the document which says "*MUDFA Project Team – Keith Gourlay, Taryne Lowe, Steve Hudson, Alan Robertson, Rob Memmott*". I am asked whether these were the likely persons that would have attended or whether this is purely a 'cc list' for those receiving the document. It looks like copies. I don't know whether I was at the meeting. It looks like it was copied to me. This is a letter from Andy Malkin to Graeme Barclay. The suggestion here is that I was at the meeting but that looks like it was copied to TIE and some of my senior management. I don't know whether these agreements came to fruition. I remember being in Edinburgh a number of times. As to who was in the meeting, what was the purpose of the meeting, when the meetings were and what the agendas were, I can't remember.
100. I refer to a letter to TIE dated 19 June 2007 and found at (CAR00002859). It sets out the addition costs that arose as a result of the failure to produce IFC drawings. Reference is made to 296 drawings being delayed. It states "*As previously advised*

*the current delay associated with the commencement of sustainable and productive Construction Services indicates a net shortfall in projected turnover in the region of £6.1M. This deficit is derived from the MUDFA Contract documentation, including the Schedule 8 Programme, less the uncontrolled copy of the Limited Payment Certificate No.6, up to and including 1st June 2007. Had this turnover been secured through the provision of adequate and timely utility designs and technical information, as contemplated under the MUDFA terms and conditions, this would have generated circa £530,000 of overhead and profit recovery in excess of that secured to date under the currently uncontrolled copy of the Limited Payment Certificate No.6. On the basis of performance to date by the SDS Provider this deficit will increase exponentially throughout 2007, unless sufficient IFC designs and technical information is made available to AMIS.*" This letter was to put TIE management on notice of the consequences of their mismanagement of the contract. It strikes me as a very important piece of correspondence that could well have, and in all certainty did, prompt some very significant discussions between the clients and ourselves. Reading the document again it strikes me that our concerns had got to a point where something very serious had to be put down in writing. It is not unusual for a piece of correspondence of this kind to be sent to a client. It is absolutely necessary to send this kind of correspondence to the client because if you don't and later down the line then the client can rightly say "why didn't you tell me about this?" and "it obviously wasn't important to you because you didn't tell me about this?" It is entirely appropriate and necessary and quite frequent to send letters of this type. You don't solve these kind of problems by sweeping them under the carpet. A letter such as this isn't something that is unusual. It protects our interests. It makes sure that the client is fully informed of our views on where this contract is going. It preserves the relationship with the client, to a certain extent, to be open and honest with your client. I don't recall the detail but it is very likely that I would have seen a draft of this letter before it went. It is a pretty robust letter. In all certainty I would have been involved in the drafting of this letter. That's the way I operated with the likes of Steve or Andy or whoever. Andy wouldn't have written this letter off his own back. He would have said to me "this is going to the client". This is the sort of thing where I would become involved with the project. If we

hadn't written this letter there could be a breakdown of the relationship along the lines of the client saying "why didn't you tell me six months ago that you were forecasting a problem?" I don't know what the outcome was.

#### SETTLEMENT AGREEMENTS

101. I note the email from Martin Hutchinson to Geoff Gilbert dated 20 March 2007 and found at (CEC018244853) and the attachment entitled Proposals for Transition Period found at (CEC01824854). These note that a revised agreement would be required. I don't know who Martin Hutchison is. I don't think he was one of our people. I have got no recollection of these other agreements. I don't recall that there were any settlement agreements or transitional agreements put in place. I don't know where that came from. I have no recollection of any drafts being prepared. This document looks like an internal proposal from one department to another in TIE. It's not a document that I am familiar with.

CEC018244853  
should be  
CEC01824853

102. I refer to the document entitle Multi-Utility Diversion Framework Agreement (MUDFA) Agreement found at (CEC01630357). I am asked whether this is a draft of the agreement to deal with delays. I am also referred to the letter from AMIS dated 19 June 2007 and found at (CEC01677655). I am not familiar with these documents. It looks like the agreement, whoever drafted it, is for signature by AMIS and TIE. In hindsight, I am quite surprised that this was having to be put in place so early on in the project. This yet again emphasises that the project kicked off prematurely. The designs were just not ready. Ordinarily a supplementary agreement, which is what this looks like, wouldn't be entered into it this early on in the contract. You might do it when you are 50% or 66% of the way through but not in the first 10% or 30% of the project. I don't know what the stage of development was is June 2007. It is really damning if a supplementary agreement was entered into this early. It means that the client put in place the wrong contract from day one. The Inquiry might want to explore how well progressed the project was at this point in time. If it was anything less than say 25% or 33% then it is very damning that TIE had to enter into supplementary agreements do early on. From my experience over the last twenty years this is almost unheard of.

103. There is another contract that we are currently in the process of going through mediation which is coming up to the 50% stage. It is a long term contract. The outcome of that mediation will probably lead to a supplementary agreement. Had that been done at 10% into that project then it would be very damning. Particularly on the part of the client. It comes back to the question which is *"why would you be entering into a supplementary agreement so early in the project?"* Speaking generally, it means you have kicked off the contract when the foundations weren't properly in place, the designs weren't in place, the protocols, the processes or whatever else.

104. I did feel we were starting too early at the time. We didn't have boots on the ground because we couldn't get the work going as a result of the designs not being ready. Not working meant we couldn't make any profit. You don't make profit sitting around waiting for designs that aren't ready. Sometimes the designs aren't ready for valid reasons. They could be not ready because you don't know what's in the ground.

#### *INCENTIVISATION AGREEMENT*

105. I can't explain the draft Incentivisation Agreement with TIE dated August 2007 and found at (CEC00848374). I don't recall anything surrounding this. It says here that *"following a commercial meeting in March 2007 AMIS entirely agree with value engineering in the proposals incorporated into the MUDFA agreement no longer operate and will be removed"*. It comes to the question which is *"by the third quarter of 2007, how far progressed were the works?"* The document states *"the incentive proposals incorporate in the MUDFA agreement no longer operate and will be removed. The parties also agreed that an element of contract incentivisation is desirable"*. I don't recall that a supplementary agreement was entered into. From my experience on projects generally it is unusual at this early stage of the contract to be even drafting agreements such as this. At the end of the day, by and large, the client is in control of contractual process. It doesn't reflect well on the client that they have put in place a contract which, six or nine months into the project, is just not operable. It shows a lack of understanding of what could go wrong. Ultimately, it appears to have gone wrong fairly quickly. In twenty years I

can't think of another example where things have gone wrong this early. I have never seen supplementary agreements entered into this early on in the project.

106. Some of the individuals at TIE I recall as being very competent. Whether they were cohesive, whether they had the collective understanding of the risks and challenges that needed to be overcome – apparently not. It also comes back to the fact that this was a bespoke organisation put together to deliver a project. The organisation wasn't tried and tested with a track record.

107. I have experience of bespoke organisations being set up and delivering projects without external assistance but only on the supply side not the client side. Can I think of any one off clients being created, as a fat client or a thin client, to deliver an infrastructure project on this magnitude? No, I can't. TfL, Transport for Greater Manchester, Network Rail, the Environment Agency are all longstanding robust organisations. The vast majority of these major projects are delivered by Government or quasi-Government bodies. Local authorities typically don't have these kind of budgets. Edinburgh City Council doesn't spend £1bn a year on these kind of projects.

108. I can't think of any other bespoke organisations clients are being established to deliver a big infrastructure project. It is more likely to be a Government department that is involved or an agency like Bechtel or some quango or something like that. Nothing springs to mind. We are currently doing a £250m project on the west coast main line. That is working with Network Rail. They can deliver these things day in day out. The next one that could be a problem is the likes of Swansea Bay Lagoon. That'll be pick a number - £1bn or £2bn. The current one that is actually a bit of a problem is Hinckley. EDF are the client delivering Hinckley. We are not involved with that project. EDF doesn't build a £22bn nuclear power station month after month, year after year. That's why a project that should be delivering power by 2017 won't be delivering until 2025.

109. I have never had any involvement with Transport Scotland (TS) directly running infrastructure projects in Scotland. If TS is similarly mandated to do what TfL, TFGM or the newly formed Transport for the North, then it is similarly mandated to

deliver these sort of projects. A project of this size needs to sit way above everything or use a thin client concept. It has to be way above a local authority city council type arrangement. I base this comment on my experience of other local authorities delivering infrastructure projects.

110. I have no recollection of the Incentivisation Agreement. I don't know who produced it. I can't say whether it was carried through to a final agreement. I don't have any specific recollection of a meeting with Willie Gallagher on 15 March 2007. I recall meeting with him a number of times but how many times I don't know. Whether this meeting was prompted by him or me or just mutually agreed, I don't know. Perhaps we recognised that this project was not gathering pace like it should be. I don't know who prompted the meeting. If he didn't, I should have because my budget and forecast for 2007 was due. The project was probably drifting sideways and we weren't generating the volumes as a result of not getting the designs. It is not wholly unusual for me to meet persons high up in client organisations to monitor progress. An example of this would be the Head of Highways for London. I meet with her probably once a year. We just review how we are doing. It will normally be a cup of coffee and a *"you tell me the big issues"* kind of conversation. I don't know whether there was or wasn't a plot or something more there. I have looked at Willie Gallagher's email of 15th March 2007 found at (CEC01816533). The email states *"MUDFA and tie requirement to be satisfied on "value for money", before we give them any additional scope of works. I also stressed the importance of looking for ways to get them incentivised financially in the delivery of MUDFA"*. It would appear from this email that TIE wanted to be satisfied regarding value for money before they gave us additional scope of works and that they were looking for ways to get this incentivised. It would probably have been very difficult for TIE to further incentivise us because we weren't in control of the designs. We would have been saying *"give us the designs and we will deliver it as quickly as we can"*. If the designs weren't being delivered we would be sitting on our hands.

#### **TERMINATION OF CONTRACT**

111. I don't know why the obligation to carry out some of the works was transferred to the INFRACO contractor. I have no idea why the MUDFA contract was brought to

an end before the utility works were completed. This was after my time. I was not involved in the formal processes for ending the contract. I have no idea about whether there was a formal handover to TIE/Carillion to assist with completing the remaining utility works. I wasn't there when the final payments were made to AMIS.

#### *RELATIONSHIP BETWEEN AMIS AND TIE*

112. We weren't in control of the key element here which was the design. You give us the design and we'll build it. If you don't give me the design, or you give me a design which is incomplete, then I can't build it. I don't know whether I would describe the relationship between AMIS and TIE as being acrimonious. I know that I and the team were frustrated. I wanted to deliver within my budget for with my shareholders, however, I couldn't deliver because the client wasn't giving me the work to get on with. It was frustrating.
113. I note the letter from AMIS dated 23 August 2007 and found at **(CEC01702113)**. It claims that a lack of response from TIE escalated the problems and that TIE behaviour has "*led AMIS/MUDFA into excessive correspondence*". At the end of the day it is the role of our commercial teams to protect our business. Very often that means writing sometimes very blunt and challenging correspondence. Very often the clients don't like seeing this sort of correspondence. They prefer to bury it under the carpet. Bad clients tend not to reply to correspondence. They just ignore it and hope it will go away. If they don't reply then what more can we do? All we can do is keep sending the correspondence and demand meetings to progress matters. Pushing problems into the long grass doesn't help. You have got to deal with problems as they arise and confront them. I don't recall whether TIE specifically were kicking problems into the long grass at the time but, looking at this correspondence, it would appear to be the case.

#### **MANAGEMENT AND GOVERNANCE**

114. There were a number of good people at TIE that I can recall. They were, however, probably within a dysfunctional organisation structure. I don't recall specifically but looking at the paperwork sent to me by the Inquiry it appears that SDS weren't up

to the job. It looks like the volumes were beyond their capability. This view is in hindsight though and I can't say that this was my view at the time. I had no direct involvement with CEC. I doubt I would have been corresponding directly with CEC for the approvals processes. I think Andy Malkin had some interface with the Tram Project Board but I didn't. I don't recall having any interface with Transport Scotland at all. I don't know at what level they were involved.

115. I don't recall who was typically at the AMIS/MUDFA progress meetings but the minutes will show. I have no idea or recollection about how the AMIS Board or the AMIS/MUDFA Board communicated with the Tram Project Board.

#### **OTHER**

116. The big issue for me is the creation of a bespoke client organisation from scratch. That is a recipe for disaster (even if it is populated with a number of individuals who are very good in their own right). If it had been a slim organisation (with a smaller senior team) with an exterior contractor brought in to manage the process then I think a lot of the problems could have been avoided. By way of comparison the £14.8bn Crossrail project is a lot bigger than the Edinburgh Tram Project. Crossrail sits under TfL. Crossrail is a robust organisation set up to deliver huge multiple phases. Crossrail, however, rely on Bechtel for some of the project delivery i.e. project management, even though they are a very big, robust organisation working on a much bigger project.
117. It is often the situation that there are issues with getting as much of the design done upfront as possible. It is not always possible. It is certainly not possible when you discover things under the surface you never knew were there. In those situations it is inevitable that you are back to the start with the design.
118. I don't recall whether there were pressures at the time. From piecing together some of these documents presented to me by the Inquiry it certainly looks as if the project hit the ground too quickly, otherwise you wouldn't be entering into supplementary agreements that soon.

119. As a Chief Executive of a big Civil Engineering Infrastructure Contractor, my hopes of the outcome of the Inquiry are that the public sector procurers of construction services improve. The mistakes made today are the same mistakes that were made ten years ago. This is one of the most dire characteristics of the construction sector. You don't see this in other sectors. You don't see that in the motor industry. There you see advancements year upon year upon year. In construction we make the same mistakes that we made ten and twenty years ago. The Scottish Government needs to make sure that they do not allow major procurement construction infrastructure to be procured by organisations that are not fit for purpose.

I confirm that the facts to which I attest in this witness statement, consisting of this and the preceding [35] pages are within my direct knowledge and are true. Where they are based on information provided to me by others, I confirm that they are true to the best of my knowledge, information and belief.

Witness signature.....  .....

Date of signing..... 24-3-17 .....