

A copy of my CV is attached.

There has been considerable time between what happened on the Edinburgh Trams project and this Inquiry; I have to the best of my recollection given my account of what I understood to be the issues at the time and also my involvement in the early days of the project. Many things may have faded into the past and I apologise in advance for any omissions. I have not kept the many press articles and letters I wrote over the period but suggest these could be obtained from the National Library.

### **Preface**

Before I start my introduction I should explain my view of certain issues that will appear in my statement.

As can be seen from my CV, I have extensive experience in Public Transport. I have no objection to tram systems or, indeed, the City of Edinburgh Council. I got involved in the Edinburgh Trams initially by invitation and I made some early judgements based on what I saw and the people who were then involved in the delivery of the scheme. With the benefit of hindsight, I am content that my gut instinct regarding the project was right. I do not claim that I could have delivered this project on time and on budget, but I do know that, in any project, the initial work in setting up a complex project such as Edinburgh trams has significant effect its future and I believe that the Tram Project was fated, almost from the start.

From 2007 onwards, I monitored my initial judgements against performance and noticed that CEC and TIE were treating some of the objectors with complete disdain. I disagreed with this conduct and decided to apply my experience and technical knowledge to counter the misinformation which I believed was emanating from CEC and TIE.

I made a conscious choice to stay in contracting, I left consulting engineering because, as I progressed up through it, I saw a future of having to compromise both my drive and my ethics in order to progress. In my view, it is now common for consulting engineers to use their ability to justify a client's requirements. This often requires reverse engineering where one starts with the answers and works back towards a justified solution. This was not for me; my drive was more towards motivation, acquiring knowledge and experience and the application of that using my commercial acumen to making money for my employer.



I should also explain my understanding of what a contractor is, how they think and what are their drivers. Based on 20 years as a contractor, working through the ranks to the top, I believe that what drives most people in the industry is the buzz one gets from motivating people to get the best out of themselves and to maximise profit. It is the drive to employ the best, be the best and it is a highly competitive environment. A good contractor wants his client to have the best that he/she has specified because contractors want “return business”. This can only be done by satisfying the client, providing what it wants, on time and to an acceptable price. This has got to be couched in the context of the tender information supplied at the time of tendering: good clients specify tightly their requirements and they or their advisors understand that a good contract works both ways. A contractor has at his disposal a number of contract hardened specialists, who will analyse every detail of the tender information and make commercial judgements on any weaknesses or strengths. A good set of tender documents restricts a contractor’s ability to make those commercial judgements; the opposite is true if the documents are weak. A contractor will often conjecture as to the likely outcome of a project, manage the risks involved, minimise these with regards to his company and plot a path to maximise commercial returns. In many ways, this is an intellectual exercise which pitches the best of the contractor’s abilities against those of the client. Once this route is decided at tender stage, this philosophy will be strictly adhered to through contract execution: opportunities will be taken and weaknesses will be exploited. The golden rule on both sides is: do what you promise undertake to do and don’t change your mind, changes cost contractor’s time and money and if these are at the behest of a client the contractor will expect reimbursement.

It may also be useful to the Inquiry to set out the importance of the contract program. I will explain this in more in greater detail later in my statement. When a client goes to the extent of prescribing the order and sequencing of the works, as in the case of the Edinburgh Trams, and then makes this a part of the contract, it should come as no surprise that, if it is flawed, then it can be used against them contractually when they do not meet the requirements of it. The TIE program for the trams was one of the most detailed I have ever seen, it listed every conceivable activity, their linkage, the order in which they were to be achieved and the duration. In effect, it was TIE’s program bar chart that set out what to do, when to do it, how long to do it for, and what to do next. TIE should have taken heed of the early warnings that their program was too restrictive and that it left no flexibility for problems that might arise.

## **Introduction**

I have, over the last twenty years, been involved in three of the largest rail project in Europe. I was a senior member of a consortium that bid and won the JNP (Jubilee, Northern and Piccadilly Lines) concession for the privatisation of the London Underground, the



concession members were Amey, Jarvis and Bechtel. My roles were to lead the Amey contribution to the Joint Venture; and Commercial Director in an integrated team. We concurrently bid (unsuccessfully) for the Sub Surface Lines that eventually went to Metronet.

Following this, I was again Amey's chief representative on the bid to win the design, build and operate concession for the introduction of TGV trains from the French SNCF network into Amsterdam; this was a consortium of Amey, Bechtel and Arup. I was responsible for the Amey share of the consortium. This was another integrated JV and, again, I looked after the commercial and performance issues. I was also one of the team that interfaced with the Dutch Government on a day to day basis and also as part of all formal presentations.

Following this, I was approached by Iain Coucher, who had previously lead the JNP to a successful conclusion, to join a small team of people who would report direct to Tony Blair and be funded by the SRA to take Railtrack out of administration. The team was headed by Sir Adrian Montague, with Iain Coucher as Executive Director. My role was to investigate and analyse the various issues associated with a National Rail network. We were given a target by Government of getting Railtrack out of Administration by the October of 2002; this date was an absolute, being within one year of being put into Administration. During this time, I was principally responsible for the compilation of the Business Case along with substantial parts of its drafting. 'Network Rail' was the eventual name given to this team and would become the name of the re-born National Rail entity. On taking over the asset in October 2002, I became the Director of Business Planning and Regulation, and, later, the Director of Maintenance for the whole rail network.

From this experience, I can justifiably claim expertise and extensive knowledge of railways.

My CV also outlines my experience in bridge building. During my time at The Miller Group, I was responsible for initiating the concept of building a bridge to Skye and took the project from a conceptual idea to completion. I was directly responsible for dealing with the Scottish Road Directorate, building knowledge and negotiating with other potential consortium members to build, finance and operate the Skye Bridge. The know-how to build the biggest balance cantilever bridge in the World was unique to a handful of international contractors, mainly French and German. We eventually formed a Joint Venture with Dickerhoff and Widmann from Munich; they had already completed a smaller balanced cantilever bridge over the River Liffey, near Dublin. During this period, I spent a large amount of time securing the initial financial advisors, who eventually were Bank of America, and speaking to potential funders.

I saw the project through a Local Public Inquiry and negotiated the Concession Agreement with Government. I was Managing Director of the construction JV and a Director of the concession company, Skye Bridge Ltd.



During the early 1990s, the Government, through the Scottish Executive, floated the idea of a second Forth Crossing. I was responsible for forming a consortium of Miller, Amec and Vance to bid for this project. The French were keen to build a cable stay bridge and we appointed Michel Virlogeux, who is one of France's pre-eminent bridge Architect/Engineers: he designed the Ponte de Normandy cable stay bridge and later became the designer for the Millau Bridge in the Alps - the conceptual design being done by Sir Norman Foster. During this time, the consortium looked at a tunnel alternative to another bridge and made a recommendation regarding the concept of a relief tunnel that could be used as a "Tidal Flow" bi-directional tunnel to augment the traffic congestion going South in the morning and North in the evening peak flows.

In March 2010, I gave evidence to the Second Forth Crossing Parliamentary Committee on an alternative to a second bridge and I managed to have this concept included in the SNP manifesto prior to their election to Government in 2007. During this period, I launched a website called 'ForthTAG' for Forth Tunnel Action Group, which is still running to this day. One of the members of ForthTAG was past Lord Provost of Edinburgh, George Grubb.

From this experience, I can justifiably claim some expertise in bridge building.

I was never employed or engaged on the Edinburgh Tram Project. I was an outside observer and most of the information I used to write the numerous articles and letters was derived from information in the public domain or from FOI requests. It was what was not contained from these sources that gave rise to my concern.

### **Initial Involvement (2003)**

I left Network Rail in April 2003 and was approached by Ian Kendal, in October 2003, who was, at that time, Project Director of the Edinburgh trams company, TIE. I had met Ian previously when I was Head of Infrastructure in Amey Developments; a subsidiary company of the Amey Group. He was responsible to the Board I was on for the reporting of the Croydon Trams concession company. Ian was Amey's representative in the concession company. Amey's interest in this Consortium was as an investor and provider of any future maintenance. I should add that I had absolutely nothing to do with this concession; it only raised its head as part of the monthly reporting. We lost contact after I moved onto the JNP project as a senior member of that integrated team.

I was invited to Edinburgh to meet Ian and several other people in the tram team. It was quite a small team at this time, having been only recently formed. I was effectively being asked if I wanted to run the project (Project Director), although no job title was discussed at the time. I spent three or four hours with him, talking about the project, listening to the plans for construction and looking at the conceptual drawings and construction programme, which I presumed formed part of the Parliamentary Bills - from memory, they were high level concept documents, basically lines on Ordnance Survey copies. By this time in my



career, I had had considerable experience of similar meetings, for me these usually followed a standard format where I asked strategic question and listened intently to the answers. Having asked the questions and heard some of the answers, I was becoming distinctly uneasy: difficult to explain, but the combination of what was being said, the body language and the lack of certainty in the project all added to my unease.

Having worked most of my life away from my home in Edinburgh, I was initially keen to get involved in the Edinburgh Tram Project but I was not getting the right vibes from the team which was fixated on rolling out “x” meters of tramline on a monthly basis, starting in Newhaven and eventually finishing at Edinburgh Airport. I asked several times about the PU (Public Utilities) and how they were to be dealt with and I was not getting the right answers. I asked Ian Kendal if there was any chance of a change in their approach to dealing with the services and a change in the programme and he was definite that it could not be changed. I eventually came to the conclusion that the tram project was not one in which I wished to be involved and I informed Ian that I did not believe it could be delivered in that way and turned down his approaches.

### **Some detailed thoughts on Project Program (in 2003)**

My recollections of the documents I saw was that they were very conceptual, basic drawings, just lines on Ordinance Survey maps, that formed the initial approach to the construction programme which was outlined to me as starting at Newhaven and finishing at Edinburgh Airport, rolling out a requisite number of meters of track per week/ month. I considered and discussed these documents with Ian and his colleagues, bearing in mind that, in 2003, TIE had not started the design so there was essentially no other documentation. The construction programme in any project tells you a lot about the project by way of methodology, sequencing and resources. TIE seemed to be fixated with rolling out X meters of track per week/month and had diagrams showing the progress they expected. Their initial programme sequence, told me a lot about the ways they intended to work, it also for me highlighted some of the problems that the project might face. It was obvious that the big problem would be the Public Utilities (PU’s). There was no way that they could be cleared quickly enough to keep the proposed track laying on schedule. Starting construction from Newhaven was also not the best way to construct the line. It was obvious at this stage that the CERT corridor was an easier option and would yield less conflict issues by way of PU’s, there was also the opportunity to start on different fronts on the on street section, all of this had been ignore in their drive to roll out a completed line in from Newhaven to Edinburgh Airport.

The programme was problematic because TIE had no real idea about where and how many PU’s they had to divert, linking the infrastructure to the diversion of services, to me seemed highly problematic. My experience in Edinburgh and Glasgow was that the PU entities had no real idea what was where, especially in the older parts of the Cities. Most of these



services were done by the old Town Councils, state owned Water and Electricity companies whose records had long since been destroyed in numerous reorganisations.

Basically TIE wanted to let two contracts within months of each other and they had decided to take responsibility for managing the interface. I later met with an ex-Carillion employee called John Osborne who had experience on the Nottingham trams who had also been approached by TIE to run the project for them. He also told them that it would be very difficult to keep the PU diversions sufficiently ahead of the infrastructure construction and that this would lead to major delays. He too turned down their offer of employment.

### **Interest revived in 2007**

I picked up on the tram project again in 2007 when the SNP was elected to Government in May 2007. It was heavily politicised and, in the end, the SNP came to a deal with the Lib Dems and Labour about what each of them wanted in the Government's programme. The Lib Dems got what they wanted, the Edinburgh Trams.

### **The Final Business Case Version 2 and the Appendices (TFBCv2)**

My initial thoughts, after reading the above document, were that TIE still intended to run the service diversions separate and ahead of the infrastructure works and form the programme which was Appendix V to the document; they still intended starting work at Newhaven and building towards the Airport. One of the main tenants of this chosen methodology was that all roads along the route were to be kept open to traffic and progressive sections were to be finished as the construction moved on. This was still an issue for me and it appeared to be almost counter intuitive, given that the Tram Depot was to be built near the Airport at Gogar, it would have been logical to strike out in two directions from the depot. It was also highly likely that the construction would be less difficult on the off street sections of the works, which would mean that quick gains could be won on these initial sections. In the end all roads along the route were closed for construction and no sections were finished in the method envisaged.

The TFBCv2 also contained a comprehensive list of risks and, sure enough, there was the interface risk of the two contracts. The document went on to apportion those risks with this risk going to CEC/TIE with a comment that "they were in the best place to manage this risk". This, in my view, sealed the fate of the project as TIE were never going to be able to manage this risk, as proven by the subsequent 6 – 7 year.



Subsequent to this, CEC/TIE issued a statement that they had negotiated a contract with Bilfinger Berger that was fixed price with 95% of the risk transferred to the contractor. This statement in itself is a contradiction. It is impossible to negotiate such a contract, especially knowing that the interface risk was in that remaining 5%. From my experience of Edinburgh and Glasgow, the streets would be full of uncharted services and dealing with them using the statutory agencies would be problematic. I had several articles and letters published in the national press on this issue and visited the leaders of the various Council political groups to tell them that the Business Case was fundamentally flawed and that my estimate of the cost, should the project go ahead, was in excess of £1.3 Billion.

The other issues that appeared anomalous were the passenger numbers and the BCR. The passenger numbers looked as if they had been reverse engineered to fit the costs and there appeared to be no reassurances from Lothian Buses that the passenger numbers were achievable. There was no clear indication of how many anticipated tram passengers would otherwise have chosen to drive but it was clear that most would divert from existing bus services. This raised the issue of environmental benefits and, as far as I could see from the TFBCv2, there were no direct benefits to be won. The BCR also looked contrived, there were journey time savings of a few seconds that had huge values attached to them, yet there did not appear to have been any Traffic Management Plans available to substantiate this claim.

One other issue of considerable doubt at the time was “Concessionary Fares” these were included in the project viability on the income side of the equation, given that TS knew at the time there would setting a precedence that would allow schemes like the Glasgow underground to qualify. TS administer this concession and they were fully aware at this time that the funds available were already stretched. Marco Biagi SNP MSP issued a statement regarding the issue, the content of which is in JRTC/0017 which was the subject of a 24<sup>th</sup> August 2011.

All in all, it was a very poor document and had the then Councillors bothered to read it in its entirety; they may have quickly come to the same conclusion.

### **The Grant letter (JRTC/0001)**

Linked to the contract negotiations was the SNP Government’s approach to funding the project. Several documents were obtained from Transport Scotland (TS) under the Freedom of Information Act (Fol). The first document was a heavily redacted copy of the Grant document from which it could be seen that the Government had put conditions precedents on the signing and administration of it.

They were:

- Line 1A should be built in its “entirety” for the maximum sum of £545 million.



- The project should maintain a BCR>1.
- That the project will not result in imposing a subsidy on the bus company.
- The Government to approve the Final Business Case and the Construction Programme.
- Government to pay on completion of milestones.

The latter was further explained in a letter from Mr John Ramsay (JRTC/0002), the Project Director for TS, who advised that these would be “finely grained” and that they would ensure that there was no over payment. He also said there would be four-weekly meetings to review the applications and three-monthly high level meetings to review progress.

Another condition of the Grant was that the applications were to be made by CEC and accompanied by two certificates: an Audit Certificate; and a Statement of Compliance (JRTC/0001).

I refer you to letter JRTC/0006 from John Swinney to Alison Bourne, in it he clearly says ““Gateway” reviews were a requirement prior to Parliament’s decision in June 2007 and it was a consequent requirement of the Financial Agreement that the project should undertake all recommendations of these reviews to contract close” yet attempts to flush out these using Fol requests to Transport Scotland (TS) were unsuccessful with them denying knowledge of such procedures. The attached letter seems to acknowledge that this process was not undertaken by TS in this particular application. (JRTC/0003)

### **The Audit Certificate**

The Audit Certificate required the Council “to ensure that adequate internal expenditure controls are in place and that all resources are used economically, effectively and efficiently.

The Council shall hold all funding related to the project comprising both Grant from the Scottish Ministers and its own cash funding in a separate bank account for the Project and shall not make payments to “tie” in advance of need.

Etc

The statement shall be signed by the Council’s Director of Finance.”

### **Statement of Compliance**

“This is to confirm the grant claimed by City of Edinburgh in relation to the above project during the Financial Year ending (31<sup>st</sup> March 20xx) was properly due and was used for the intended purpose(s) in accordance with the terms and conditions of the Grant Agreement.”

To be signed by the Director of Finance.



There is a further condition that says “The grant shall be used for the purpose of meeting part of the Eligible Capital Costs of the Construction of the project incurred until 31<sup>st</sup> March 20xx and for no other purpose whatsoever”.

### **The MUDFA Contract**

I believe this contract was effectively a schedule of rates for the various sizes and types of services i.e. 150 mm diameter water pipe at such and such a depth or 100 mm gas main. The order and sequencing of these works were laid out in the contract program which was appendix V to the Tram Final Business Case Version 2 (TFBCv2) (see compact disc CDJRTC/1001). The problem with this type of contract is that the price and the timescale are dependent on the number and extent of the service listed in the contract. If the overall numbers increase and/or there are unanticipated services in certain areas, then there is no compunction on the part of contractors to “man up” to cope with such increases. The contractor is off the hook for any resultant time delays, as was the case with the initial MUDFA contractor with Alfred McAlpine/Carillion. TIE let them leave site and terminated their contract because they had no hold on them, by the time they left site, they had far exceeded TIE’s initial estimate of the nature and number of the various services and, therefore, far exceeded their contractual obligations.

There was absolutely no way of determining the extent of the services under the old streets of Edinburgh, short of digging every one of them up. Promises regarding the results of Ground Radar Surveys were so unreliable as to be meaningless. It was certain that the Service Agencies would not have historic records of the individual services in an ancient city. The advice and experience from the various cities which had built tram systems in the UK and Ireland would have highlighted the difficulties: Manchester, Nottingham and Dublin all experienced delays and disruption caused by unrecorded services. TIE had numerous visits to these and other places to ascertain their respective experiences. More recently Nottingham has experience considerable difficulties with their tram extension, this was a PFI project and these were borne by the contractors and the concession company.

### **The Infraco Contract**

I have never been allowed to see this contract. Latterly, CEC said I could come in and see a redacted copy of it but that was in 2010/11. My understanding of the contract was that it was prepared by DLA Piper; it is a bespoke contract which, in itself, is a very odd way of going about a project like this. There are plenty off-the-shelf contracts from the Institution of Civil Engineers, FIDIC or RICS that could have easily been adopted to meet the needs of the Tram Project. I know from various sources that the contract was deficient in certain areas, from the TFBCv2, that it was intended to be a fixed price construction contract. This



was confirmed from various sources including press releases from David Anderson of the City of Edinburgh Council (CEC), and the information contained in the Reports to the Council at this time.

I suspect that issues arose from the concept of price fixity (or the lack of it), this would have been apparent at an early stage well in advance of the Infraco Contract signing when the MUDFA contractor was late in every area undertaken. In terms of procurement, the main issues were about who takes the risk of the utilities contract over runs and how the infraco construction programme was phased with the diversion of Public Utilities (PU's). The MUDFA contract was let in mid 2006 and it was obvious that the contractor was making heavy weather of the service diversions during the time of the issue of the TFBCv2 and, even more obviously, by the time the Council delegated authority to Mr Tom Aitchison, the then Chief Executive of the City of Edinburgh Council, at their meeting in December 2007. It is no surprise that it took until May of the following year for the contract to be signed. Rumours were rife at the time that the Infraco contractor, who had already started work under cover of a Letter of Intent, was submitting substantial claims for addition money due to delays in the MUDFA contract. I can remember writing to Mr Aitchison, under Fol Act, requesting information on the claims submitted to date by the time of signing, only to be told there were none.

The contract was signed on 1 May 2008 and a report, dated 12 May 2008, was sent to the Council, entitled "Edinburgh Trams-construction programme" (JRTC/0004), which highlighted a complete change in sequence of the various section of the works. This program still had the requirement of maintaining access at all times with few exceptions. It also contained the assurance that the works would be substantially complete by January 2011 with commencement of tram operations in July of that year. Item 4 of the report, "Financial Implications", says "There is no financial implication to the tram contract as a result of this report. All Associated costs are contained within the tram budget previously approved."

There are huge omissions in this statement. There is no mention of delays up to the date of signing to the MUDFA contract. The document sets out a new order and sequence for the MUDFA contractor, this in itself would have constituted a variation to their existing contract. Instead of the linear approach starting at Newhaven and finishing at Edinburgh Airport (EA) they now had multiple activates some of which were obviously out of date at the time of signing. There is no mention of any requirement for design after the completion of MUDFA sectional completion. The other glaringly obvious issue not addressed was the SDS obligations which Bilfinger Berger (BB) were about to assume on novation of the SDS subcontract. There is also no mention of the claims already submitted by BBS or the delays to date, these by rumour were for substantial sums of money.



## The Design requirements

I was not privy to the information about the design or the design process. TIE took the project through the Parliamentary Bill Stage and was adamant that they were not going to spend money on initial design prior to Parliamentary Approval (PA). On receiving PA they immediately let a contract for the SDS, this should have ensured that the design was taking place well in advance of the other contracts but to my knowledge, they never did catch up on the design. The original intention with regards to the MUDFA contract was to divert all service away from the track bed areas, this was later heavily compromised in particular in Princes Street, Haymarket and West Maitland Street where this proved to be not possible, this must have had a huge impact on the SDS design. Bear in mind that it was in 2003 that I initially spoke to TIE about my reservation regarding the PU's, the Bill Stage was completed in early 2006, and my reawakened interest was in mid 2007.

This situation directly contradicts the Objectives of the Procurement Strategy in the TFBCv2 which stated;

*"It is clear from the TFBCv2 that the SDS contract would be let on the following intentions;*

### **SDS**

#### **7.47 Procurement approach**

*The principal attributes of procurement approach for this contract are:*

- *Scope – provision of design work up to detailed design stage including obtaining all necessary approvals;*
- *Approximately 3-year contract duration;*
- *Lump sum price with the supplier taking the inflation risk;*
- *Milestone payment regime to incentivise completion to time;*
- *Provisions to novate the contract to Infraco; and*
- *Performance bonds and warranties to secure redress in the event of major default."*

The clear intention here is to have a design up to "detailed design" prior to novation; this clearly did not happen and along with the MUDFA delays formed the other major part of the delays and cost overrun.

### **"7.9 Objectives of Procurement Strategy**

*The objectives of the Procurement Strategy are summarised as follows:*

- *Transfer design, construction and maintenance performance risks to the private sector*
- *Minimise the risk premium (and / or exclusions of liability) that bidders for a design, construct and maintain contract normally include. Usually at tender stage bidders would not have a design with key consents proven to meet the contract performance obligations and hence they would usually add risk premiums for this.*
- *Mitigation of utilities diversion risk (i.e. potential impact of delays to utilities diversion programme on Infraco works).*



- *Gain the early involvement of the operator to mitigate risks on takeover of the operation Tram Network”*

The TFBCv2 goes on to say

#### **“7.22 Early involvement of designer**

*Another key strand of the procurement strategy was the early involvement of the design contractor. The SDS contract was awarded in September 2005. This contract has allowed tie to advance design work of the tram, thereby reducing the planning and estimating risks, in respect of scope, to which bidders for the Infraco contract are otherwise exposed. It has also facilitated the opportunity to procure advanced works on utility diversions and identify, at an earlier stage, the land requirements and permanent traffic regulation requirements of the identified Tram Project scope. During the Infraco procurement process, price critical design elements have been provided to bidders to refine their pricing and improve the reliability of the construction programme.*

#### **7.23 Utilities diversions undertaken in advance of infrastructure**

*A significant benefit arising from having undertaken early design work is that tie was able to procure the necessary utility diversions, to enable delivery of the permanent infrastructure work, prior to commencement of the system construction. This provides very significant construction programme benefits and, therefore, cost benefits, due to reduced risk exposure of the infrastructure provider, creating the best opportunity to minimise disruption and maximise infrastructure construction productivity.”*

At the time of drafting the TFBCv2 and the Appendix V, these were already completely misleading and out of date: the design was nowhere near completion and, indeed, large elements of it were still outstanding during the discussions that took place at Mar Lodge in 2011.

#### **Risk**

This, of all of the sections that make up the FBCv2, is the worst, in terms of overall conceit of those running TIE and of the officials in CEC. The balance between what should have been done to transfer the risks and what had actually been completed must have been great - so much so the people involved in drafting this document would know that it was not an accurate reflection of affairs at the time.

The opening paragraph from the TFBCv2 says;

*“11.1 Appropriate risk allocation is fundamental to achieving value for money for the tram system.*

*Risks are being allocated to the parties best placed to manage and / or bear them, allowing significant risk transfer to the private sector while maintaining scheme affordability. The purpose of this section of the FBCv2 is to address the following aspects of risk analysis:*



- *Types of risk that needed to be considered from development to residual value for the tram system;*
- *Extent of identification, analysis and management of risk undertaken;*
- *Effect of tie's procurement strategy and risk allocation achieved; and*
- *Overall contingencies and their consideration in the cost estimates for the tram project."*

This was drafted during a period prior to the 7 December 2007 when it should have been obvious that the MUDFA contractor was making next to no progress and the design was nowhere near complete.

The risks retained by TIE in the TFBCv2 are quite clearly laid out in;

***"11.69 Risks retained by Public Sector***

*The extent of public sector retained and shared risks has been assessed by tie and tie's procurement advisors and has been reviewed by CEC officials. This has identified the risks that will be retained through the proposed contractual arrangements and will need to be vigorously managed by the public sector. At the DFBC stage, the principal retained risks were associated with:*

- *The acquisition of land to allow construction to commence;*
- *The design development and advance utility diversion works;*
- *Granting of Prior Approvals and Temporary and permanent TROs;*
- *The completion of all necessary advance works prior to commencement of main construction works;*
- *The procedures for processing of potential stakeholder instructed changes during design development;*
- *Care in the selection of tram vehicle supplier in achieving compatibility with infrastructure (albeit integration risk is to be taken by Infraco); and*
- *Potential future VAT, tax and legislative changes that could influence the scheme."*

I know now that there has been considerable discussion at the current Edinburgh Tram Inquiry as to the nature and drafting of the Infraco contract, some or all of these discussions could have been negated had TIE read their own words and acted accordingly. It was all too obvious that the Infraco contract was going to have to accommodate the risks TIE allocated to itself to manage. It was obvious to me from the day I picked up the TFBCv2 that it would have to have a contract that allowed variation and by dint of this, clauses to evaluate those variations. I could never understand why TIE informed CEC and issued press statements saying that the contract was a fixed price, I could equally never understand why no one in CEC including the Councillors, who were meant to have read the business case, never challenged the concept.

**Appendix V to the TFBCv2 (pages 1-8 of 75) (CDJRTC/1001)**

I have supplied a CD (CDJRTC/1001 and a hard copies of the first 8 pages (JRTC/000 of Appendix V.



This document also gave a completely false picture of how the project stood in late 2007. Page 1 highlights colour coded areas of what, at the time of drafting, were activities that should have been substantially underway or complete. Activities A18740 to A17860 encompass the period up to the drafting of this document. It also covers the design completion of all of the on street works from Newhaven to Haymarket. It must have been obvious to TIE, Transport Scotland and CEC at the time of drawing up this very detailed that this design was nowhere near complete. This programme also highlights the activity called "Transport Scotland Hold Points" which has a start and finish date of the 7 December 2007. The implications of this activity were that the "Conditions Precedent" had been met and the Grant Letter was ready to sign. I never understood what TS were going to do with this mass of document, if the supply of them was one of the conditions for the award of the grant, then I presume that TS had an obligation to read and approve such documents. If that is the case why did TS not realise that they did not have all of the documents and also had they read what they had been given not comment on the quality of them or was this just a box ticking exercise?

There is also an activity, PR1200 *"Detailed Design Input to MUDFA contractor – Line 1a"*, with a completion date of 29 February 2008. Rumour had it at the time that this had not been completed or perhaps even started. I should add that it was widely known that the design was way behind programme and certainly not as indicated in TFBv2, Appendix V.

There are numerous other activities that jump out as issues for TIE, Transport Scotland and CEC. The glaringly obvious one is the contract negotiation. CEC had a Full Council Meeting 20 December 2007, where it delegated authority to the Chief Executive to sign the Infracore contract, including the novation of the SDS and MUDFA contracts. Again, it was widely known that these were in no fit state to be signed. The programme activities PRL3010 -3116 highlight a process of final contract negotiations which start in 7 November 2007 and completed by 12 December 2007. This was obviously not the case.

Given that the Chief Executive of the Council, Mr Aitchison, who had been charged by the Council in December 2007, to sign off on the contract, only achieved this in early May 2008, it should have been obvious to him and his advisors from the TFBCv2 Appendix V programme that a large proportion of the activities prior to this date had not been met. The MUDFA contractor was bogged down in undiscovered service diversions. It must have been obvious to TIE, Transport Scotland and CEC that the programme was not achievable and that certain key activities, such as the completion of the detailed design and the MUDFA contract completion were seriously delayed and highly unlikely to be completed to programme.

All these issues were ignored. Indeed, in my view, the TFBCv2 programme was essentially torn up in the days immediately prior to signing the Infracore contractor, with the Infracore Contractor totally reprogramming the works. (see JRTC/0004)



This reprogramming, and the implication in the Sub-Committee's reporting to the Tram Committee, should have been ringing alarm bells throughout the TIE, Transport Scotland and CEC. This was a major divergence from the linear approach of starting at Newhaven and working towards the Airport. It also directly conflicted with the programme from which MUDFA and SDS contractors were supposed to be working to.

### **Audit Scotland**

The 2007 Audit Scotland report did untold damage to any case we could put together to argue that the project should be cancelled. It did not investigate the project in any depth, and in the end came to the conclusion wrongly that the project was in a good state. Had they looked at the various documents I have listed in my submission which in the main were freely available then any experience auditor would have come to the same conclusions as me.

The 2011 Audit report was even more of a problem, in that it again skimmed over all of the major issues. I was in correspondence with a journalist friend of mine who raised some of the issues directly with Audit Scotland prior to them doing the 2011 report; I have attached the correspondence JRTC/0010 in it you will see we had concerns regarding this report. It should not have been any surprise to them that there were issues surrounding the grant payments, they were well aware of them from this correspondence.

You will see that I formally objected to the City of Edinburgh Financial Statements for 2010/11 (JRTC/0016) on the basis that the tram figures were not up to date, it was obvious that there was no progress during this period and considerable liabilities were building up which should rightly have been accounted for in this period, yet Audit Scotland refused to investigate these issues.

### **Transport Scotland**

TS was an integrated part of the tram development they sat on the Tram Project Board up until their removal in August 2007, up until this time, were jointly responsible for all decisions take by that Board, by the time TS stepped down the die was cast on the path the project would take.

It should be emphasised that this period covered the formative period of the tram development, including the programming, contract drafting, appointment of SDS contractor and, above all, the risk allocation. May 2007 saw the election of the Scottish National Party to Holyrood. This introduced uncertainty into the project and there was a period of negotiation between the SNP and the Lib Dems regarding the respective infrastructure projects that each favoured. The upshot was that, amongst other projects, the Lib Dems got the tram project and the SNP got projects, like Borders Railway.



The resulting offer of funding from the Scottish Government was by way of a Grant offer. This also required the Transport Scotland representatives to step down from the TPB. My earlier comments and those in Alison Bourne's submission to the Inquiry deal with this in some detail. My view, having observed Transport Scotland closely during the period 2003 to 2011, was that they were part of the problem with the mismanagement of the project and never looked like contributing to the solution.

TS were part of the design and structuring team up to August 2007, they had full knowledge of all the issues and were integral to the path chosen, the Grant letter set strict conditions all of which were eventually not adhere to. They were given or should have demanded the documentation required to award the grant, had this process been strictly adhered to the project should not have been offered the grant in the first instance. It should have been obvious to them after the award of the grant that the conditions precedent were not being met.

### **Grant Payments from Transport**

There was a four-weekly and three-monthly meetings procedure laid down in the Grant letter. The four-weekly one was to review the application against the "Finely Grained Milestones" specified in Mr Ramsay's letter JRTC/0001 and to check progress against the drawdown schedule of expenditure agreed with CEC. Mr Ramsay of TS was effectively responsible for validating payments against these parameters whilst Mr McGougan, CEC's Director of Finance, had responsibility for certifying these payments. There were proforma forms that had to be completed and signed as being factual and a certificated application in line with the Grant Letter conditions. The three-monthly meetings were at a higher level between Transport Scotland Directors and CEC to review issues and check on progress.

It would appear that this process, almost from Day 1, was totally abused and obviously mis-use in that applications were made and payments made when it was obvious that there was no corresponding progress being made.

This opinion is highlights in exchanges of letter with Mr Ramsay TS's project director, in one letter he sets out the concept of "finely grained" milestones and the conditions attached to the payment of the grant which I have highlighted before, the assumption from setting these rules is that breaching any or all of them would halt the payments, indeed the Grant Letter outlines a remedial process when these condition have been breached. Contrast this with his letter of the 23 Dec 2010 to Alison Bourne JRTC/0007 in which he deliberately ignores the main principle of "payment linked to progress" set out in the Grant conditions and takes an entirely different approach stating "Firstly, the grant agreement (Financial Agreement) between the Scottish Ministers and CEC is a legally binding contract which in essence ensures that payment is made on a cost of work done basis. The fact that TIE Ltd



and their civil engineering contractors are in dispute, the budget for the project has risen, and there is severe programme slippage, are not in themselves breaches of the grant Agreement between SG and CEC. Accordingly, and providing that the Council continue to satisfy and comply with the specific conditions laid out in the grant agreement, there is no reason that TS should withhold grant payments due to the current difficulties being experienced, particularly where the project continues to be delivered”

This letter was written in the middle of a period from 2009 to 2011 when TS paid out roughly £200m and there was absolutely no progress on the ground, add to this when an assessment was done of progress made up to the dispute period only 10% had been completed and TS had paid out including the £200 approximately 80% of the grant money had been spent. Given these facts I have got to ask the question “did CEC fraudulently apply for grant money they were not due under the agreement or did TS relax the condition of payment linked to progress?

This is in direct contrast to Mr Swinney’s intervention, in the summer of 2011, when he threatened to not only withhold the outstanding Grant monies but to seek a refund of monies paid.

I attach another email JRTC/0011 from Alison Bourne to Mr Swinney dated 28<sup>th</sup> June 2010 regarding the payments of grants to CED this was prompted by an article I helped write in the Glasgow Herald. The issue of grant payments well in advance of progress should not have been unfamiliar to Mr Swinney.

I also attach various exchanges of emails JRTC/0012 between Alison Bourne and Mr Ramsay on the issue of the grant, these were all written during the period of the dispute from 2009-11.

It always amazed me that CEC and the Councillors always bemoaned the departure of TS from direct involvement in the project.

## **TIE**

The conclusion I formed of TIE, since my initial involvement in 2003, was that the structure CEC used for the project was wholly inadequate for the purpose.

Professor Bent Flyvbjerg, a leading authority on the subject of megaprojects which suffer cost overruns and benefit shortfalls, has concluded that such projects are usually over-optimistic at the start. He talks about optimism bias and reverse engineering of business cases. He talks about professional standards that must be adhered to and rigorously policed. All these issues, in my view, are highly relevant to the Tram Project.



In this case, we had a Council owned arm's length company set up with apparently no checks and balances and the subsequent inclusion of Councillors as Directors of TIE proved ineffective. This gave the impression that the tram project was receiving an additional level of scrutiny; however, these Councillors were well out of their depth, having little relevant Board experience/professional qualifications or technical knowledge. They apparently did not understand the issues concerning the respective role of Councillor and the fiduciary duties that being a Board Director entail. None of these Councillors appear to have been of benefit to the eventual outcome of the Tram Project.

The concept of a Council owned arm's length company in the context of the Tram Project was, in my view, fundamentally flawed. For it to have worked properly, it needed, above all, competent managers with direct experience of building a tram system through an ancient city like Edinburgh; an educated client; unbiased competent professional advice and a Board that rigorously policed strategic direction and progress. From what I have seen over my period of involvement, they never got the managers with the requisite experience; CEC was not an educated client; they were let down by their external professionals, including Transport Scotland; and the structure of the Board was completely ineffective in holding TIE to account.

The political drive to have this project was inappropriate. The concept at the time, under a Labour administration, was to get the project up and running and hope that, should it encounter escalating costs, it would be bailed out. Professor Flyvbjerg describes this as "the survival of the un-fittest" where projects are, at the outset, made to look the best on paper are the ones that amass the highest cost overruns and benefit shortfalls in reality.

Willie Gallagher the Chief Executive of TIE, is on record as saying, just before he left Tie, that the project would overrun on cost and that he told the Infracore contractor at the time not to worry about it, as it would get paid. There was a political drive to have the project at all costs from a client that was over optimistic.

In an ideal World, you would have a top quality Government department to deliver such projects. I do not include Transport Scotland in this as, given their performance on the Tram Project, it would appear their capabilities and understanding of tram projects is somewhat limited.

In that ideal World, you would not allow entities like the CEC to embark on project of this nature and magnitude. Every authority that wants to do that would go through a new learning curve, re-inventing the wheel. However, in a centre of excellence you have the acquired knowledge and experience gained on previous projects and a strict control mechanism on delivery.



We are in danger, in the City of Edinburgh, given the irrational drive yet again towards promoting Stage 2 of the tram project to make the same mistakes. So, far the only published facts on the proposed extension were riddled with mistakes. There is no-one left from the original team and it is being fleshed out by hired consultants who, by nature, are incentivised through earning large fees to promote the project and downplay the difficulties – the classic Flyvbjerg scenario of an over optimistic client who promotes a project for the wrong reasons. I attach an article written recently on the issue “ Groundhog Day” over tram project”.

In 2009/10 I spoke to one of Mandy Heaburn Little’s assistants, the purpose of the call was to ask various questions about progress and the costs to date. She volunteered apparently on the behest of Richard Jeffrey to arrange a meeting with him, apparently he was keen to meet with me. The meeting was duly arranged for half an hour of his time. I turned up for the meeting and waited twenty minutes, when I met Richard Jeffrey he told me off hand I had ten minutes. I briefly outlined my concerns about the lack of progress and the cost of the project, he listened, got up, was quite rude mumbling something under his breath and ushered me out of his office. Before I hit the street my mobile was ringing off the hook from a journalist on the Evening News who wanted to know why I had stormed out of Richard Jeffrey’s office in a rage. It was obvious that his PR machine was out to score points.

### **The decision to stop at Haymarket**

I spent a considerable time emailing Councillors Andrew Burns and Jeremy Balfour on the day prior to the full Council meeting of 25th August. The information I provided them convince them that they should join forces to resist the trams being extended to St Andrew’s Square. I have attached as a bundle of document (JRTC/0015) various email exchanges mainly between myself and Andrew Burns.

I also attach (JRTC/0014) a Press Release 24<sup>th</sup> August 2011 during my bi-election campaign, in it you will see that I raise the issues associated with the pending Council Meeting and highlight the issue of lack of information, The Conservative Leader explicitly asked the Senior Officers on 30<sup>th</sup> June for the mutually agree figure from Bilfinger Berger and goes into the issue in detail. It must be said that there seem to be a deliberate attempt on behalf of the Senior Officers to hide both the amicable price to walk away and also the agreed cost of completion to Haymarket.

In bundle (JRTC/0015) you will see that I emailed all of the party leaders with detailed question regarding the report attached to the Council paper. In this document it can be seen that there were major issues that needed to be addressed before any decision was taken with regards to the alternatives. It was apparent from the papers for the meeting that there were prices missing for two of the options to be discussed; this prompted me to phone



Richard Walker of Bilfinger Berger to ascertain what his price would be to “walk away” or to finish at Haymarket. His reply to that was they, Bilfinger Berger, were heartily sick of the situation and they were prepared to tidy the site, seal it off and walk away for no additional money. He thought that his bosses in Germany had had enough. He also answered my other question regarding the cost of finishing at Haymarket, his view being that it would be below £600 million.

Also in bundle (JRTC/0015) are replies to the party leaders from e-mail from Councillors Andrew Burns and Alison Johnstone. The replies differ in their content, with Labour supporting the termination at Haymarket, and the Greens taking the view that they support the building to St Andrew’s Square. It should be noted that the Greens highlight ongoing losses, if the trams are terminated at Haymarket, which raises the issue of the openness and clarity of CEC officials

What has never been produced is a full balance sheet and profit and loss account, including the existing profit and loss of the direct running costs against the revenue. These currently appear to ignore the maintenance costs of the project; the half life renewals of the rolling stock; the lack of concessionary fares contribution from the Scottish Government; the charges levied by Edinburgh Airport; and all of the interest on the £276 million loan, which is predominantly borrowed through Provincial Borrowing. In my view, if this were done, these accounts would show an increasing capital commitment and a substantial year on year loss in the region of £25 million, with no prospect in the near future of the project breaking even or the debt reduction. I attach a draft article which best sums up my views at the time (JRTC/0018) it was drafted on the 6<sup>th</sup> July 2011.

### **My stance at bi-election in the City Centre Ward 19<sup>th</sup> August 2011**

During the period from June 2011 when the Mar Lodge negotiations and the decision being taken on the completion of the tram project in a reduced form, there was a By Election taking place in the City Centre Ward of Edinburgh.

I was approached by people associated with the Moray Feus to stand as a candidate. I decided to do this on a ‘Stop the Trams’ basis, which allowed me to put the case of the trams debacle to the people of Edinburgh. We ran a strong campaign, attending all of the hustings, canvassing door to door and leafleting all of the ward properties. During this period, we issued various election statements, mainly relating to the current situation and the likely outcomes. In the end, we were second last in the initial vote beating the ruling Lib Dems (see initial count results).

On the day of the election, the City of Edinburgh Administration issued a press release which resulted in a front page headline “*Trams Full Steam Ahead*”. This was released on the



morning of the By Election and was on the streets mid-morning. It resulted in a formal complaint from me to Ms Sue Bruce, who was, at that time, the Election Officer and Chief Executive of CEC (see Press Cutting and complaint).

### **The decision to terminate at St Andrew's Square taken at the Special Council meeting of 2<sup>nd</sup> Sept 2011**

Suffice to say I did not agree with this decision, I remain to be convinced that borrowing the difference between the cost to Haymarket against the cost the St Andrew's Square/ York Place (YP) which was probably in the region of £200 million was good for the people of Edinburgh, there was a compelling argument which was supported by the much discredited TFBCv2 that most of the passenger movement were predicted between Haymarket and Edinburgh Airport and that taking it to YP would not justify the investment. We were and still are in a period of austerity, I am sure the people of Edinburgh faced with cuts to street cleaning, refuses, libraries, day centres and school would much have preferred the £200 m to be spent on these essential services.

### **My thoughts on the history of the Edinburgh Tram and the future extension**

In my view, no lessons have currently been learnt from the tram debacle and the conclusions and recommendations of the Tram Inquiry should guide the decision process about proposed future tram works.

As matters stand, it is difficult to conclude anything other than that we (the taxpayers) are about to be led by the nose into another costly and damaging shambles by a set of equally inexperienced and overly optimistic councillors and officials.

The City of Edinburgh Council lacks the requisite management structure and is currently dependent on a few consultants, who were hired on during the final years of the project. Again, there appears to be no form of independent or balanced scrutiny of the proposal. It should be appreciated that once the Mar Hall decision was taken that the responsibility and the onus was with the contractors, CEC had little to do with the eventual delivery.

What the taxpayers of Edinburgh require is a safeguard from the same irrational "political will" that, during the last phase of the tram project, drove the city to such financial and reputational calamity.

The Draft Business Case is full of holes and lacks the requisite Optimum Bias, the un-quantified risks are yet again are incomplete design and unregistered services, those like the last time will caused huge delays and add £ tens of millions to the price.

A statement that accompanied the launch of this document reads as follows:



The Outline Business Case (OBC) for taking Edinburgh's tram service down to Leith and Newhaven has been

Key points included in OBC:

**"Rapid population and economic growth**

- Over the next decade, Edinburgh and surrounding area expected to be home to faster growing population than anywhere else in Scotland. National Records of Scotland projections published in 2016 suggest city should be planning for an additional 47,000 people by 2024 and additional 102,000 by 2039 (20% increase)
- Number of households forecast to increase by over 38,000 (16%) by 2032. A quarter (25%) of this growth is forecast to occur in Leith Docks and Western Harbour area
- Employment levels in Edinburgh are projected to grow by 7.6% between 2013 and 2022"

**"Costs & benefits**

- Capital Cost estimated at £165.2m, including risk and inflation
- Patronage forecast to almost double in opening year to 14m, reflecting high population densities along the route
- For every £1 spent the economic return to the city is £1.64
- OBC includes wider economic benefits, including social inclusion, and completing the line will provide access to jobs and support business and opportunities in the area."

This Capital Cost estimate does not included the required level of Optimum Bias, the BCR does not include the ongoing debt from Phase 1 which currently stands at £276 plus the lack of accruals from profits not earned the cover the maintenance of the existing track and the half life rolling stock refurbishment. The Patronage forecasts yet again match sums required, as far as I can ascertain there are no new analysis of modal shift, the original FTBCv2 Appendix III concluded that only 1% over the City wide and some 7% locally of car owners would move on to the trams, in the light of no new information the passengers that are in the 14m will predominately (> 90%) will come from the existing bus services, incidentally the services in this case are THE most profitable in the whole of LB. The BCR is nonsense, for every benefit there is to the tram extension, there is an equal and opposite dis-benefit to LB i.e for every pound profit in the tram extension there is a pound lost in LB.

This makes the tram extension like the existing line a total waste of money any profits earned will be at the expense of LB and will squander dividends which historically were rightly should for the benefit of the people of Edinburgh.

**"Construction work to take three years**

- Estimated three-year construction period, including 18 months on Leith Walk, followed by approx four months of testing and commissioning on new line.
- Significant proportion of major utility works have already been carried out – remainder carried out in conjunction with main infrastructure works, meaning no 'double dig' "



During this period the City of Edinburgh will have paid out or accrued as further debt a sum approximately equal to £25 million per year. The statement “Significant proportion of the major utility work have been carried out” is completely unfounded, the Public Utility owners have no more an idea of what is in the ground than they did in Phase 1 and I also believe that there are next to no records of the diversion done in the early days of Phase 1.

#### **“Carefully planned traffic management**

- Diversions, road closures, access and crossing points thoroughly planned and modelled
- All key stakeholders, including residents, businesses, emergency services and Lothian Buses will be consulted on the traffic proposals set out in the OBC <sup>h</sup>

This was said the last time, there were absolute guarantees that all of the routes used would be kept open to traffic, in the end when problems started to manifest themselves these route were all closed to traffic. With many of them being opened and then closed to redo work that was below standard or to divert services ignore the first time round.

#### **“Support for businesses**

- Customer and service access to local businesses maintained at all times
- Compensation and support scheme for affected businesses along the route put in place
- Logistic centres and dedicated crossing points provided at 150-200m centres on Leith Walk
- Logistics officers deployed throughout the day to help businesses with deliveries<sup>h</sup>

This has got to be the most insincere, statement in these key Facts, this was the mantra the last time around, CEC ignore complaints from the local businesses, the compensation scheme was totally inadequate and many traders lost substantial sums due to disruption and many went out of business.

#### **“Lessons learned**

- OBC recommends industry-standard contract with rigorous project governance
- Traffic management would give contractor expanded sites and provide flexibility if problems encountered
- Project would benefit from industry networking with other cities (Manchester, Birmingham, Dublin) to ensure best practice
- Consultation with the market and incorporating input from Tram Inquiry <sup>h</sup>

Industry standard contracts were available the last time round, they would have protected CEC in some way but if like now CEC promise to have certain activities complete and in the end they do not deliver then there will be delays and with corresponding price increases. The big issue is the allocation of risk, who manages it and what allowances are there, without this being rigorous there is a distinct probability that the phase 2 will be delayed and cost more that the £165.2. The last time round CEC had great difficulties attracting contractors, only two qualified in the end. Things have changed in Scotland especially in Contracting. It is reputed that the Queensferry Crossing cost the consortium in excess of 0.5 Billion and the current Aberdeen City Bypass in the region of £0.25 Billion, this is supported by looking at Carillion and Galliford Try’s recent announcements of write downs in their



accounts. If I am right then there may just be a dearth of contractors likely to tender for the tram extension, especially with the reputational issues associated with phase 1.

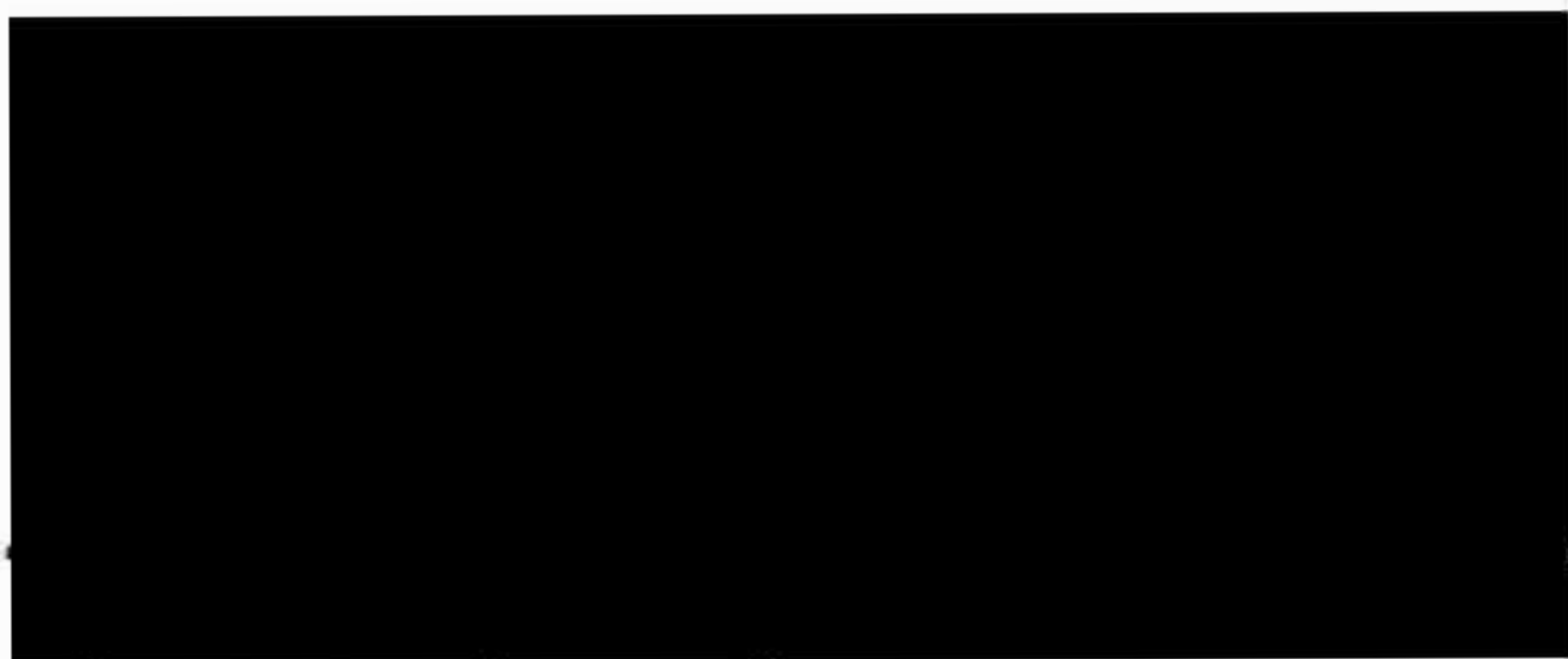
**In conclusion**

The people of Edinburgh will be paying in excess of £25 million per year for the foreseeable future to pay for the current tramline. They are already suffering cuts to services, not least statutory services. The current year’s budget cuts amount to £21m - none of which would have been necessary, had we not been burdened by the cost overrun of the existing trams.

I ask the Tram Inquiry to please save us from a repeat of the consequences of the “Political Will” that has driven this wonderful City nearly to the brink of financial destruction.

I confirm that the facts to which I attest in this witness statement, consisting of this and the preceding 23 pages, where they are within my direct knowledge 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.....13/11/17.....