

QUESTIONS FOR BRIAN COX

Introduction

1. Could you please set out your main qualifications and vocational experience?
2. Prior to the Edinburgh Tram Project, what, if any experience, did you have in delivering major infrastructure project including tram or light rail projects?
3. We understand that you were a Non-Executive Director of Tie Ltd (Tie) between 22 January 2007 and 5 July 2011 and that you were a Non-Executive Director of Transport for Edinburgh Limited (TEL) between 9 April 2008 and 5 July 2011. What were your main duties and responsibilities in these roles?
4. It would be helpful if you could explain the circumstances surrounding your appointment e.g. were you asked to become a director of these companies or did you apply to become a director of these companies? If the latter, what prompted your application e.g. did you see an advert for these directorships?
5. We further understand that you were a director of Lothian Buses plc between 1 November 2002 and 10 June 2009. To what extent, if at all, was that a factor in your becoming a director of Tie and TEL? Incidentally, were you a member of Lothian Buses' remuneration committee? If so, were you chair of that committee?

Governance and project management

6. It would be helpful if you could briefly explain your understanding of the role of each of CEC, Transport Scotland, Tie, TEL and the Tram Project Board in the tram project (both before and after the award of the Infracore contract in May 2008)?
7. What did you understand the relationship to be between Tie and TEL? What was the relationship between these companies and Tram Project Board (TPB)?
8. Did you sit on or attend the Tram Project Board (TPB)? If you attended only some of the meetings, who or what determined on which occasions you would attend? Papers were prepared for meetings of the TPB. Were you provided with these and, if so, were you given them for all meetings or only some? If you had attended a TPB meeting, were you able to review the minutes of that

meeting and/or follow up what was being done in relation to issues raised.
Did you sit on or attend any sub-committees of the TPB?

9. Which body or organisation do you consider was in charge of the tram project (again, both before and after the award of the Infraco contract in May 2008)? Were changes made to this over time and, if so, why? Did these changes affect your role and how you performed it?
10. Which individual did you consider was the Senior Responsible Owner for the project and what did you understand this role to entail?
11. Were you content with the volume, quantity and timing of the information provided to you as a non-executive director? Did you consider that you were properly informed in relation to the decisions that you required to take? Do you consider that you were able adequately to perform your challenge function as a non-executive director?

Procurement strategy

12. What was your understanding in early 2007 of the main aims and objectives of the procurement strategy for the tram project and how these aims and objectives would be met?

Award of the Infraco contract in May 2008

13. At the time of seeking Council approval for the Final Business Case (December 2007) and of the award of the Infraco contract (May 2008), what was your understanding of each of the following matters (including the basis of your understanding):
 - (1) The extent to which design was complete and all approvals and consents had been obtained and how risks arising from this were allocated between the parties?
 - (2) Which party bore the risks arising from any further delay in completing design or obtaining outstanding approvals and consents?
 - (3) The extent to which there had been or continued to be difficulties or delays in completing the utility diversion works?
 - (4) The risks that arose to Tie/CEC if the utility diversion works were not finished before the Infraco works commenced (and the likelihood of these risks materialising)?

- (5) The extent to which the Infraco contract was for a fixed price and the extent to which the price was likely to change after contract award?
- (6) The extent to which the Infraco price was based on a number of pricing assumptions, some of which were known not to be accurate and which would result in a Notified Departure or Departures (with consequent price increases) shortly after contract close?
14. At the two dates referred to, how did the agreements proposed give effect to the procurement strategy for the project?
15. Did your understanding of the above matters change in any way after the award of the Infraco contract award and, if so, when and why?
16. In the period from December 2007 to May 2008 was there any discussion in either Tie or TEL as to whether the procurement process should be halted? If so, what factors were said to justify a halt and what factors justified pressing on? What was the role of the non-executive directors in relation to this? What was your view? As a non-executive director, what was your view of the increases in price demanded by the contractors between December 2007 and contract signature in May 2008?
17. How was the decision taken in May 2008 that the company should enter into the construction contracts? In January 2008, an Approvals Committee consisting of David Mackay, Neil Renilson and Willie Gallagher was formed (see **CEC01246826** – Paper for TPB Meeting on 13 February, pages 8 and 35-40). What was it intended that they should determine and what work did you consider would be undertaken by the Committee to satisfy itself of the matters falling within its remit? What role did you as a Non-executive director have in relation to this?

Events following Infraco contract award

18. What was your understanding of the main reason or reasons for the dispute that arose between Tie and the infrastructure consortium?
19. A dispute arose in or around February 2009 in relation to the works at Princes Street. What was your understanding of the main cause or causes of the Princes Street dispute?
20. The Princes Street dispute was resolved by parties entering into the Princes Street Supplemental Agreement. To what extent, if at all, was approval sought

from the Tie Board or TEL board to enter into that agreement? What was your understanding of, and views on, the agreement?

21. Following a decision in July 2009 as to what strategy to adopt, Tie engaged the contractual dispute resolution procedures in relation to the disputes with the contractors. What role did you and the other non-executive directors play in relation to this decision? Did you favour this approach and what was the basis for your view? What did you understand to be the matters that were in dispute? Why were these matters taken to adjudication? Was there discussion of what the position would be and what strategy would be adopted if the decisions went against Tie? There were a number of adjudication decisions in late 2009 and 2010. What were your views at the time on the extent to which these decisions favoured Tie or the infrastructure consortium? Did there come a time (and, if so, when) when you considered that the adjudication decisions did not support Tie's position in the dispute? If so, did that cause you any concern or change of strategy on the part of Tie? What information were you given about the outcome of the adjudications? Were you given – or did you ask to be given – copies of the decisions in those adjudications?
22. What was the strategy adopted in 2010 and what was it intended that it should achieve?
23. Had Tie or TEL taken legal advice in relation to the matters that were in dispute? If so, from whom had it been taken? Where you shown that advice or provided with a summary of it?
24. What were your views on the settlement agreed at the Mar Hall mediation in March 2011 with the infrastructure consortium? What role, if any, did the Tie or TEL board play in discussing or approving the settlement?
25. Why did you cease to be a director of Tie and TEL?

Bonus payments

26. We understand that you were chair of Tie's remuneration committee. Is that correct? If so, between (approximately) what dates were you chair of that committee?
27. We understand that Willie Gallagher was also a member of the Tie remuneration committee? Is that correct? Was Colin McLaughlin, Tie's HR

Director, also a member of the remuneration committee? We further understand that members of the City of Edinburgh Council (e.g. Councillors Ricky Henderson, Maureen Childs and Gordon Mackenzie) were, from time to time, members of Tie's remuneration committee. Is that correct? Were there any other members of Tie's remuneration committee?

28. It would be helpful if you could explain the criteria for awarding bonus payments to directors, senior staff and consultants of Tie? How were decisions to award bonuses taken in practice?
29. To what extent, if at all, were bonuses paid for meeting procurement milestones?
30. How were bonus payments assessed in relation to the award of the Infraco contract? We note, for example, that 30% of Mr Gallagher's bonus for the period from 1 January to 30 June 2008 appears to have been based on achieving Infraco and Tramco contract award within the budget of £498m (**CEC01515065**). Is that correct? If so, who proposed and decided that that was an appropriate basis upon which to base part of Mr Gallagher's bonus? Did Mr Gallagher play any part in suggesting or deciding that part of his bonus should be based upon that criterion?
31. We further note that senior Tie staff and consultants appear to have been paid a bonus following the award of the Infraco contract, which was partly based on the estimated cost of the project (**WED00000140**) (pages 4-5) i.e. the lower the estimated cost of the project the higher the bonus. Who proposed and decided that that was a relevant factor to take into account when assessing bonus payments? Was any consideration given to whether that could provide an incentive (whether conscious or sub-conscious) to report a low estimate for the project cost in order to obtain a higher bonus?
32. The Combined Code on Principles of Good Corporate Governance (**CEC02084834**) recommends that bonus schemes and individual payments are transparent (page 3, B.2). Were (1) members of the Tie Board and (2) the City of Edinburgh Council (with the exception of those councillors who sat on Tie's remuneration committee) advised of the criteria for awarding bonus payments and the individual bonus payments made to directors, senior staff and consultants of Tie? If not, why not?

33. The Combined Code further recommends that the board should report to the shareholders each year on remuneration, that the remuneration report should form part of or be annexed to the company's annual report and accounts (page 8, B.3.1) and that the remuneration report should include full details of all elements in the remuneration package of each director by name, including annual bonuses (page 8, B.3.3 and page 13, Schedule B, para 1). That guidance does not appear to have been followed (see e.g. Tie's annual accounts where a total figure is given for directors' remuneration but the remuneration, including the amount of any bonuses, paid to individual directors by name is not stated: years ended 31 March 2007, **TIE00899959**, page 22; 31 March 2008, **TIE00899960**, page 24; and 31 March 2009, **TIE00899961**, page 24). Is it correct that the preceding provisions of the Combined Code were not followed? If so, why was the guidance not followed? Should the guidance have been followed?
34. The Combined Code further recommends (page 8, B.2.2) that remuneration committees should consist exclusively of non-executive directors who are independent of management and that the members of the remuneration committee should be listed each year in the board's remuneration report to shareholders (page 8, B.2.3). We understand that Mr Gallagher was a member of the Tie remuneration committee. Is that correct? If so, why was Mr Gallagher a member of that committee given his role as Chief Executive of Tie? What was Mr Gallagher's involvement in the remuneration committee, both in relation to considering the criteria on which bonus payments were made and in relation to considering the amount of bonus payments made to individuals? To what extent, if at all, was Mr Gallagher involved in his own bonus payments, whether by being involved in discussions regarding the criteria by which his bonus payments should be assessed, whether he had met these criteria and the amount of any bonus payment he should receive?
35. We understand that you were also chairman of TEL's remuneration committee. Is that correct? If so, between (approximately) what dates did you fulfil that role?
36. It would be helpful if you could also answer the questions noted above in the same way as if they were addressed to the TEL bonus scheme. In particular, were bonus payments made to directors of TEL and, if so, which directors?

What criteria were used to assess any such bonuses? Was the criteria for making bonuses and individual bonus payments made reported to (1) other members of the TEL Board and (2) CEC? Were the provisions of the Combined Code noted above followed in relation to how any such bonus payments were reported in TEL's annual accounts and, if not, why not (see, in that regard, TEL's accounts for the years to 31 December 2006, **CEC02086813**; 31 December 2007, **CEC02086814**; and 31 December 2008, **CEC02086815**)?

37. Did you have any concerns (whether at the time or later) as to whether bonus payments made to directors, senior staff and consultants of Tie and/or TEL were reasonable and appropriate?

General

38. Did you have any concerns, at any stage, in relation to the performance of any of the bodies or organisations involved in the delivery of the tram project (or in relation to any of the senior employees or directors in these organisations)?
39. Did you have any concerns, at any stage, in relation to the reporting to the Tie or TEL Boards or reporting by those boards to other bodies?

Concluding comments

40. What do you consider were the main reasons why the tram project was not delivered on time and within budget?
41. Do you have any comments on how the cost and time overruns in the Edinburgh tram project might have been avoided?
42. Are there any other comments you would like to make that fall within the Inquiry's terms of reference and that are not covered by your answers to the above questions?

Answers provided by Brian Cox via email on 1 February 2018

Answers to Questions put to Brian Cox

Introduction

QUESTION 1

BA Hons, Manchester, 1968, followed by 34 years in the bus and rail industries in planning and management roles until my retirement in 2002. I was employed by the British Railways Board, two English local authorities (in transport co-ordination), the Scottish Transport Group, and Stagecoach (from 1987 to 2002, including 10 years as an executive director from 1992).

QUESTION 2

None (see Q4).

QUESTION 3

To independently scrutinize, challenge and support, especially on strategic matters, bringing my experience, knowledge and judgement to bear.

I served as Chair of TIE Board's Remuneration Committee, and for a time as Chair of TIE's SHE (Health & Safety Committee).

(I resigned from TIE and TEL Boards on 13 May 2011, not 5 July).

QUESTION 4

I responded to a press notice seeking NEDs for TIE and was interviewed by a CEC panel. I was one of four NEDs appointed, two of whom had infrastructure project experience. My own experience was in passenger transport planning, management and integration, and I also had some experience of a problematic large rolling stock implementation in the franchised rail sector.

I was subsequently asked to become a Director of TEL.

QUESTION 5

I sought a NED role with TIE due to my directorship of LB. I hoped my experience of the transport industry in general and of Edinburgh's transport would enable me to contribute to the development of the tram project and towards a successful integrated transport system in the city.

I chaired LB's Remuneration Committee.

Governance and Project Management

QUESTION 6

CEC was the owner of TEL and TIE (latterly through TEL), and project sponsor; TS was the prime project funder. TIE's task was to procure the delivery of the tram project. TEL was established initially to co-ordinate Edinburgh's bus and tram operating interests, but subsequently took over TIE. TPB latterly became a formal sub-committee of TEL; its role was to manage the tram project on a day to day basis by bringing together all key stakeholders.

QUESTION 7

Latterly, TIE became a subsidiary of TEL, enabling a better interface with CEC to be established. I believe TPB was always technically a committee of TEL, later becoming a sub-committee with formal delegated powers, tasked with overall project management, and was the main channel for securing effective communication and co-ordinated action amongst the various agencies involved.

QUESTION 8

I and the other independent NEDs were invited to attend TPB from early 2008, and I attended whenever possible or relevant (many meetings were arranged on the same day as TIE/TEL Boards to reduce repetition of issues and briefings). As far as I am aware I received all papers, minutes and follow-up reports. I sat on the BROR (Benefits Realisation and Operational Readiness) Committee which was established latterly.

QUESTION 9

TIE was responsible for delivering the tram project on CEC's behalf, latterly under the strategic direction of TEL. NEDs became more involved over time, due to attendance at TPB, various committees and separate briefings.

QUESTION 10

The Tram Project Director was the Senior Responsible Owner for the tram project. I understood this to mean the SRO was the principal person responsible for ensuring the contract was delivered to specification, on time and within budget.

QUESTION 11

I and the other NEDs received a significant amount of relevant information throughout the time we were involved with the tram project, all timely and to a professional standard. I am not aware of any information not being made available, and further material was always on offer to be supplied if requested. In this context,

I always found that that the presence of the NEDs was welcomed, and all help to enable them to carry out their functions freely given. At the time I considered I was able to adequately perform my challenge function as a NED.

Procurement Strategy

QUESTION 12

At this distance in time I have no recollection, but I would have had relatively little knowledge of the tram procurement strategy in early 2007 when I joined the TIE Board.

Award of the Infraco contract in May 2008

QUESTION 13

#1 I cannot recall to what extent in December 2007 design was complete and approvals and consents obtained, but I recall a design figure quoted of around 70-75%. I knew that there was a serious problem with SDS design performance (the risk ultimately falling to TIE), which had been a major subject for discussion at every Board meeting. I also knew that consents and approvals were a risk that had to be managed carefully if they were not to lead to delay and extra cost.

#2 Following the novation of the SDS contract to Infraco, Infraco would become responsible for all risks associated with normal design development, but changes to design and delays in consents and approvals would be at TIE/CEC's risk. The Board was assured that the contract was 95% fixed price, with the remaining 5% largely known and quantifiable and allowed for in the project budget, all this however being dependent on no changes to the project specification.

#3 There were already delays to the utility diversion works, but my recollection is that at this time it was believed the original completion date, which I believe was Summer 2008, could still be achieved.

#4 It was not felt at the time that the delay would create a significant risk as a significant proportion of the construction work was in off-street locations (particularly out to the airport) where no utility diversion was required, and in any event time lost on utilities work was expected to be regained.

#5 see #2. It was anticipated that any changes would be containable within the remaining funding headroom.

#6 I cannot recall what discussion took place on this matter, other than that the Board was repeatedly assured that 95% of the contract was at a fixed price. On trying to refresh my memory (by use of Tram Inquiry documents) on what was to become a significant issue, I found reference to a "relatively conventional

mechanism" (or similar words) for pricing assumptions, but I still cannot recall what discussion if any took place on this.

QUESTION 14

I am not really clear what is meant by this question, other than as answered above, i.e. that novation of the SDS contract transferred all normal design development risk to Infraco; this should then have enabled Infraco to manage its contract with greater certainty and efficiency.

QUESTION 15

Concerns about Infraco began soon after the contract was signed as its mobilization of sub-contractors was very slow, without any reasonable explanation. It was felt that Infraco had underbid the contract and was hanging on hoping to get more money. My understanding of events changed only gradually in 2008 and 2009, and it was probably not until the first DRP adjudications late in 2009 I came fully to the view that however recalcitrant Infraco had been and continued to be, the contract itself must be flawed.

QUESTION 16

I do not remember any lengthy discussion about halting the procurement process at this time; if my recollection is correct and this was so, I would think this would have been because the expectation was that a satisfactory contract could be achieved. I would have been surprised if there had not been price adjustments to the contract given the transfer of the design risk as the contract firmed up.

QUESTION 17

I do not recall what was discussed in relation to the Approvals Committee. I would imagine that by this stage its task would have been predominantly procedural, but I have no evidence or recollection to back this up.

Events following Infraco contract award

QUESTION 18

The short answer is that Infraco believed the contract entitled it to more money and TIE did not.

Given that Infraco's mobilisation was extremely slow and never adequate, there was a feeling from early on that it had underbid the contract, lacked commitment, and was simply playing for time, in the expectation of getting more money. Delay would further increase the pressure on CEC to pay up. Examples were reported of BB's apparent record elsewhere which seemed to add weight to this view. Infraco was

presumably confident that its interpretation of the contract would ultimately prevail over that of TIE, as turned out to be the case.

QUESTION 19

The need to start work on Princes Street became acute if work was to be finished in time for it to re-open ahead of the Christmas rush. As far as I recall, it was originally planned to be completely closed but this was changed to allow one-way bus access, which would clearly add to costs (just as Network Rail always opts for a complete close-down whenever possible); there were also issues regarding the amount of work to be carried out, which was greater than had originally been anticipated. Infraco refused to start work until these issues had been resolved to its satisfaction.

QUESTION 20

The PPSA was fully debated and agreed, as Princes Street was a critical location and TIE still hoped the agreement would help to create an improved working relationship with Infraco to get the whole project moving. As far as I can recall, the agreement provided for extra payments for more substantial sub-surface works and to offset the effect of retaining bus access. It seemed to me a sensible way to try to make progress.

QUESTION 21

By summer 2009, Infraco's progress was falling ever further behind schedule despite the PPSA, and nothing TIE attempted seemed to lead to any improvement. Use of the DRP thus seemed the only way forward, while at the same time attempts to build better relationships continued in parallel. NEDs took part in the discussions and supported the decision. A variety of cases were selected (only Gogarburn comes immediately to mind) which were considered would have the maximum effect, not only in themselves but also in creating future precedents. Failure to agree left little alternative but to seek adjudication. There was always debate about what the position would be if TIE lost the adjudications, but initially it was confident it would win. However, although TIE claimed victory in cases where the amount of money in dispute was reduced at adjudication, this seemed to me rather hollow as the result still added to the project's costs. Explanations were provided of outcomes and written copies made available. I cannot recall exactly when I felt that TIE was faring worryingly badly in this process, but it certainly caused a swiftly growing concern that something was seriously wrong with all our expectations. I also remember being sceptical that Value Engineering (i.e. making savings by finding more efficient solutions), which had been costed into the contract, would turn out to deliver much benefit.

QUESTION 22

Once DRP results began to emerge and fresh legal advice was less than optimistic about TIE's position, more serious attention began to be given to alternative strategies, and two main strategies emerged. One was to attempt to improve

Infraco's response by serving it with remedial behaviour notices, which legal advice initially suggested could be a promising approach. If successful, would also open the route to possible contract termination if Infraco failed to meet its remediation obligations. I cannot now recall precisely the outcome of this process but I believe subsequent legal advice stated that the remedial notice approach was unlikely to provide adequate grounds for termination, and as a result it was not proceeded with any further. By this time (I think in fact well before) it had become clear that the project could not be delivered within the available funding, although the degree of uncertainty still meant it was impossible to establish a realistic estimate of the likely overrun; it thus became necessary to focus on termination and scope options. I believe this process was initiated under the title Project Pitchfork and later morphed into Project Notice (how to terminate) and Project Carlisle (how to reduce scope). Once it became clear that termination would be costly and leave Edinburgh with nothing for its outlay, focus switched to reducing the scope of the project, and this process led eventually to the mediation of early 2011.

QUESTION 23

Yes, from DLA and following Richard Jeffrey's arrival also from other lawyers. NEDs were always fully briefed and all relevant papers either supplied or made available on request.

QUESTION 24

NEDs were not privy to the Mar Hall mediation or its outcome, other than a summary subsequently advised to but not debated by TIE/TEL Board.

QUESTION 25

Following the Mar Hall mediation the TIE Board was sidelined, so that NEDs could no longer exercise their functions; hence we all agreed there was no alternative to resignation.

Bonus Payments

QUESTION 26

I think I must have been appointed to the Remuneration Committee when I joined the TIE Board; I was certainly Chairman from July 2007 until I left the Board.

QUESTION 27

Willie Gallagher as Executive Chairman of TIE attended to assist the Committee, but he was not a member and would have left the meeting before his own bonus was discussed. Colin McLachlan as HR Director of TIE acted as Secretary and would assist with information where appropriate, but he also was not a member. After his departure, I believe a TIE PA took over as Secretary. Various Members of CEC and at

least one of the other NEDs were members of the Remuneration Committee at various times. I left an open invitation for other NEDs to attend as they felt fit, and I believe I specifically requested help on occasion.

QUESTION 28

As I recall, a number (typically around 5) of Key Performance Indicators, or Deliverables, were identified for each eligible individual for the forthcoming bonus period, and a weighting for each (totaling 100%) assigned. Each eligible individual was allocated a maximum potential bonus as a percentage of salary, the figure depending on the individual's ability to influence outcomes. When reviewing, a percentage achievement score was given to each KPI, adding to a total bonus. Some of the scores would be objectively easy to assign, others more subjective, depending on the nature of the KPI.

QUESTION 29

Other than the examples shown in **WED00000140** I do not have any figures to hand, but procurement milestones of one kind or another would probably have featured in the bonus criteria for most eligible staff, given the nature of the project.

QUESTION 30

The statement is correct, and the content and weighting of the Deliverables seem to me to be reasonable. I cannot now be definitive as to the procedure followed but it is likely to have been as described in my answer to Q34.

QUESTION 31

I am not entirely clear which dates Pages 4 & 5 of **WED00000140** relate to. I cannot therefore answer with certainty either of the questions for the examples shown. However, using the latest estimated cost as a KPI was repeated later and seemed reasonable to me given the nature of the project, but I cannot recall whether any discussion took place regarding the possible creation of an inappropriate incentive.

QUESTION 32

I would have reported back to TIE Board but cannot recall in what detail. I would have expected the TIE Administration to take care of other Governance Code matters. I am (and probably was at the time) however aware that Willie Gallagher, when TIE Executive Chairman, was reluctant to share remuneration information with CEC because of terms and conditions disparities between TIE and CEC.

QUESTION 33

It appears correct that the Code was not followed. See Q32.

QUESTION 34

I have covered this in part in Q27. Willie Gallagher would submit a proposed bonus scheme for those staff eligible for bonuses and submit it to the Remuneration Committee. The Committee would separately consider appropriate arrangements for Mr Gallagher; to help inform its discussions, he might well have been asked if he had a view on possible criteria for his own bonus. A similar procedure would be followed to agree actual bonuses at the end of the bonus period.

QUESTION 35

I do not recall that TEL had a Remuneration Committee.

QUESTION 36

I do not believe I ever had any knowledge of any TEL bonuses.

QUESTION 37

I was never entirely comfortable with the level of or procedure for TIE bonus payments during the period of Willie Gallagher's tenure, but found myself between a rock and a hard place. TIE had encountered difficulty in recruiting and retaining staff of a sufficiently high calibre to deliver a project of such size and complexity, with no promise of a secure long-term career. Willie had rebuilt the team, and he was very concerned that if team members were not adequately incentivised it could result in a significant risk, potentially adding perhaps millions of pounds to the project's cost. It seemed to me safer, and the committee agreed, given this scenario, to approve the proposed bonuses.

Looking back now, I would have subjected to much closer scrutiny the proposed bonus arrangements and levels, and the likely risk and cost to the project of further key staff losses, but whether I would have reached a different conclusion I don't know.

Under David Mackay's subsequent chairmanship, bonuses were cut back in the deteriorating situation, with which I was in full agreement.

General

QUESTION 38

All the bodies and organisations I encountered seemed professional and competent, and their directors and senior staff appeared to co-operate well together. Nevertheless, as I stated in my answer to Q21, by the second half of 2009 I became fully aware that something had gone seriously wrong on TIE's side (rather than just on Infraco's side).

QUESTION 39

See Q11. No, I had no concerns, but I was not party to the reporting between TIE and CEC and so cannot comment on it.

Concluding Comments

QUESTION 40

In my view the fundamental reasons why the tram project as constituted (i.e. with TIE and separated design and construction) was not delivered on time and to budget were design delays and a weak and premature contract that left TIE unable to enforce contract compliance on an Infraco contractor which had consistently been singularly uncooperative.

Lack of leadership from TS and (until 2011) CEC cannot have helped, nor the failure to achieve political consensus. Staff turnover at TIE and experience issues both at TIE and in its legal advisers also seem likely to have been important, but I cannot make a real judgement on this.

The separation of design from construction has often been cited as a major contribution to the project's problems. I have no reason to disagree with this but at the same time no relevant technical experience to support it. Adoption of a combined design & build approach would have required different governance arrangements from the outset and this was not a practical option by the time I joined the TIE Board in 2007.

QUESTION 41

Without a firm understanding of what work is to be carried out and accompanying sensitivities and risks, along with a contract that is fit for purpose with proper provision for dealing with uncertainties, there will almost inevitably be cost overruns and delays unless the funding headroom is unrealistically large. It was always intended that design should be complete before the Infraco contract was let, but this was not adhered to. Had it been, the extra time needed to complete the design, and the resulting improved precision, could have been used to formulate a better and tighter contract that would almost certainly have resulted in the time lost being more than made good by speedier and less disputative implementation. The contract price would almost certainly have been higher, but "getting it right first time" would most likely have resulted in a lower price than was eventually paid. The higher contract price might have exceeded available funding; this would have forced into the open at the outset the attainable scope of the project and its viability, and it would have enabled rational decisions to be made about the trade-off between additional funding and an aborted or curtailed project. This more disciplined process could have been facilitated by stronger leadership from TS and CEC, advised as necessary; TS and CEC would also have been in a position to ensure that whatever delivery

structure had been adopted to deliver the project, technical staff and legal advisers with deep experience of similar large infrastructure projects were in place. TS and CEC in concert should also have been in a better position to tackle the issue of political consensus.

QUESTION 42

Nothing immediately comes to mind that I can usefully add.

Brian Cox
1 February 2018