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<p>1 Thursday, 10 January 2019</p> <p>2 (10.02 am)</p> <p>3 CHAIRMAN: Yes.</p> <p>4 MR PENNICOTT: Good morning, sir. Good morning,</p> <p>5 Prof Hansford.</p> <p>6 COMMISSIONER HANSFORD: Good morning.</p> <p>7 MR PENNICOTT: Welcome back. On behalf of the legal team</p> <p>8 for the Commission, can I wish you, sir, and</p> <p>9 Prof Hansford, and everybody in the room, a happy new</p> <p>10 year.</p> <p>11 Sir, I understand that you may wish to say a few</p> <p>12 words about why we weren't sitting yesterday.</p> <p>13 CHAIRMAN: Yes. Thank you very much.</p> <p>14 We did receive an enquiry from a section of the</p> <p>15 media as to why we did not commence yesterday. In the</p> <p>16 public interest, we replied to the effect that a brief</p> <p>17 announcement would be made this morning.</p> <p>18 The reason why the Commission did not commence</p> <p>19 yesterday was because two experts in respect of project</p> <p>20 management were able to meet, which is quite normal,</p> <p>21 indeed encouraged in many jurisdictions, in order to see</p> <p>22 to what extent, if at all, their expert reports</p> <p>23 harmonised with each other, and to what extent therefore</p> <p>24 they may be able to put forward a joint statement of</p> <p>25 their expert recommendations in respect of relevant</p>	<p>1 Control Systems Upgrade-Hong Kong MTRC Rail System'</p> <p>2 project."</p> <p>3 Then the queries went on to ask, amongst other</p> <p>4 things, how that would affect Mr Huyghe's ability to</p> <p>5 give independent expert evidence to the Commission.</p> <p>6 Now, Mr Huyghe will confirm what I'm just about to</p> <p>7 tell you in a moment, but MTRC and indeed Mr Huyghe want</p> <p>8 to make it clear that CORE is not and was not</p> <p>9 a contractor to MTR. Specifically, it was not</p> <p>10 a contractor to MTR so far as the power and</p> <p>11 environmental systems upgrade-Hong Kong MTRC rail system</p> <p>12 was concerned.</p> <p>13 The facts of the matter are as follows. After</p> <p>14 Mr Huyghe left Hong Kong in 2014 to return to the US, he</p> <p>15 set up CORE. He agreed to work with a Mr Gerard King</p> <p>16 from Australia to procure consultancy work on</p> <p>17 a collaborative basis. Incidentally, Mr King is well</p> <p>18 known to me because he was my programming expert in</p> <p>19 a large LNG arbitration I was instructed in in Australia</p> <p>20 last year.</p> <p>21 The profile and experience of Mr Gerard King in</p> <p>22 those circumstances was set out on CORE's old website.</p> <p>23 One of the projects that Mr King -- I emphasise</p> <p>24 Mr King -- had done about 20 years ago was the power and</p> <p>25 environmental control systems upgrade-Hong Kong MTRC</p>
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<p>1 project management issues.</p> <p>2 Both Prof Hansford and myself are delighted to say</p> <p>3 that the time spent yesterday was very fruitfully spent</p> <p>4 and in fact late yesterday afternoon a joint statement</p> <p>5 of the project management experts was provided to us and</p> <p>6 we now have that here.</p> <p>7 That joint statement appears to have achieved very</p> <p>8 largely what we were hoping for and why the adjournment</p> <p>9 was given.</p> <p>10 Thank you, Mr Pennicott.</p> <p>11 MR PENNICOTT: Thank you very much, sir. On that basis, can</p> <p>12 I then pass the baton to Mr Boulding for MTR, who is</p> <p>13 going to call Mr Huyghe, the MTR's project management</p> <p>14 expert.</p> <p>15 MR BOULDING: Yes. Good morning, sir. Good morning,</p> <p>16 Professor. Happy and healthy 2019 to you both.</p> <p>17 Before I call Mr Huyghe, I would also like to put on</p> <p>18 record a matter concerning a media enquiry which MTR</p> <p>19 received yesterday from the Apple Daily. Perhaps I can</p> <p>20 be permitted to read the query:</p> <p>21 "The independent expert on project management</p> <p>22 appointed by MTRCL, Steve Huyghe, is the chairman and</p> <p>23 founder of CORE International Consulting LLC. According</p> <p>24 to previous records, CORE International Consulting is</p> <p>25 a contractor of MTRCL in the 'Power and Environmental</p>	<p>1 rail system project.</p> <p>2 Mr Huyghe was not involved and did not do any work</p> <p>3 at all in relation to that project. Because of the fact</p> <p>4 that it looked as though Mr King and Mr Huyghe were</p> <p>5 going to work collaboratively, Mr King's project, the</p> <p>6 name of which I have just referred to, was set out on</p> <p>7 CORE's old website -- CORE's old website.</p> <p>8 In the event, upon Mr Huyghe's return to the US,</p> <p>9 because of Mr Huyghe's commitments and Mr King's</p> <p>10 commitments, they agreed no longer to proceed to work</p> <p>11 together to procure consultancy work on a collaborative</p> <p>12 basis; they were simply too busy. As a result,</p> <p>13 Mr Huyghe removed the profile and experience of Mr King</p> <p>14 from the CORE website. In fact, the new CORE website</p> <p>15 does not contain any references to the profiles of</p> <p>16 Mr King or indeed the work he did for MTR. And as I've</p> <p>17 said already, but it is important so I repeat it for the</p> <p>18 benefit of the media, Mr Huyghe confirms that he has not</p> <p>19 done any work for MTRC in the past, including in the</p> <p>20 power and environmental control systems</p> <p>21 upgrade-Hong Kong MTRC rail system, and accordingly</p> <p>22 there is no conflict.</p> <p>23 I hope that's helpful, sir.</p> <p>24 Now, against that background --</p> <p>25 CHAIRMAN: Sorry, Mr Pennicott, you have no problem with</p>

<p style="text-align: right;">Page 5</p> <p>1 that?</p> <p>2 MR PENNICOTT: Sir, I have no problem whatsoever with that.</p> <p>3 I'm sure, as Mr Boulding has just indicated, Mr Huyghe</p> <p>4 is going to confirm those facts.</p> <p>5 Mr Boulding was kind enough to inform me of what he</p> <p>6 has just told you this morning. Certainly the legal</p> <p>7 team's position for the Commission is that no point</p> <p>8 whatsoever will be taken in relation to Mr Huyghe's</p> <p>9 independence. We are perfectly satisfied that he is</p> <p>10 independent and is giving evidence independently from</p> <p>11 MTR.</p> <p>12 CHAIRMAN: Thank you very much.</p> <p>13 MR BOULDING: Thank you very much, Mr Pennicott.</p> <p>14 CHAIRMAN: In which case, certainly we would obviously -- we</p> <p>15 haven't been involved in this, but unless something</p> <p>16 should appear which concerns us, we are prepared to work</p> <p>17 on the basis of our own counsel's recommendation, on</p> <p>18 an objective matter such as this, and it is an objective</p> <p>19 matter. But as I say, should anything arise which</p> <p>20 concerns us, then we would obviously look at it.</p> <p>21 MR BOULDING: I'm much obliged, sir.</p> <p>22 Against that backdrop, I wonder if I can call</p> <p>23 Mr Huyghe.</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 7</p> <p>1 page of that joint statement, with a date of 9 January</p> <p>2 2019 at the foot of the page?</p> <p>3 A. Yes.</p> <p>4 Q. If we could go on to page T-5, I hope we will see your</p> <p>5 signature below Mr Rowsell's signature above the date of</p> <p>6 9 January 2019?</p> <p>7 A. Yes.</p> <p>8 Q. As we've been told, that is the joint statement, the</p> <p>9 agreed joint statement, which occupied so much of your</p> <p>10 time and Mr Rowsell's time I think yesterday?</p> <p>11 A. That's correct.</p> <p>12 Q. Now, as a result of that joint statement, matters have</p> <p>13 moved on slightly from your report, but taking account</p> <p>14 of what you've agreed and what you've written in your</p> <p>15 report, insofar as you refer to facts, are those facts</p> <p>16 true to the best of your knowledge and belief?</p> <p>17 A. Yes, they are.</p> <p>18 Q. And insofar as you express opinions, are they opinions</p> <p>19 which you honestly hold?</p> <p>20 A. Yes.</p> <p>21 Q. Now, Mr Huyghe, you were sitting there two or three</p> <p>22 minutes ago when I referred to the query from the</p> <p>23 Apple Daily. You heard what I said?</p> <p>24 A. Yes, I did.</p> <p>25 Q. Are you in a position to confirm the accuracy of what</p>
<p style="text-align: right;">Page 6</p> <p>1 MR STEVEN ALBERT HUYGHE (sworn)</p> <p>2 Examination-in-chief by MR BOULDING</p> <p>3 Q. You have given your full name. Would you like to give</p> <p>4 your professional address to the Commissioners, please?</p> <p>5 A. My address is in Atlanta, Georgia, 1273 Peach Tree</p> <p>6 Street in Atlanta, Georgia, 30327.</p> <p>7 Q. Thank you very much. It's correct, is it not, that you</p> <p>8 have prepared a report for the Commissioners' assistance</p> <p>9 in this reference? And I think if we can go to</p> <p>10 bundle ER1, tab 2, page 1, I do hope that we will see</p> <p>11 the first page of that report.</p> <p>12 Is that the first page of your report there,</p> <p>13 Mr Huyghe?</p> <p>14 A. That's correct.</p> <p>15 Q. If we could go on to page 84, I hope we will see your</p> <p>16 signature. Is that your signature there above the date</p> <p>17 of 4 January 2019?</p> <p>18 A. Yes.</p> <p>19 Q. But we know it doesn't stop there because, as the</p> <p>20 learned Chairman has stated already, you have managed,</p> <p>21 have you not, to agree and sign off a joint statement</p> <p>22 with Mr Rowsell, the Commission's expert?</p> <p>23 A. Yes.</p> <p>24 Q. Just for the record, perhaps we can stay in bundle ER1</p> <p>25 but this time go to tab 9, and there do we see the first</p>	<p style="text-align: right;">Page 8</p> <p>1 I said, Mr Huyghe?</p> <p>2 A. Yes. Very accurate.</p> <p>3 Q. So far as you are concerned, are there any conflicts</p> <p>4 that would prevent you from giving independent evidence</p> <p>5 on behalf of MTRC to assist the Commissioners?</p> <p>6 A. No, there are none.</p> <p>7 Q. With the leave of the Commissioners, you have been given</p> <p>8 permission to make a short statement summarising your</p> <p>9 relevant project management views, so I would ask you to</p> <p>10 do that now. I understand that you have a little crib</p> <p>11 sheet in front of you, because it's not a memory test.</p> <p>12 Can I hand the floor over to you, Mr Huyghe.</p> <p>13 CHAIRMAN: Mr Huyghe, before you do so, the reason -- it's</p> <p>14 a little unusual that we would ask you to sort of give</p> <p>15 a schematic overall summary at the beginning, but it's</p> <p>16 very easy for us, when we've read your statements and</p> <p>17 when we've read other expert reports, to understand by</p> <p>18 plunging directly into the deep end of the pool, so to</p> <p>19 speak, and swimming with you.</p> <p>20 But for the media and the public, it is not so easy</p> <p>21 to understand, and that's why we are of the view that</p> <p>22 this would help if given by you and by Mr Rowsell later</p> <p>23 and by other experts so that there's a pocket guide, if</p> <p>24 I can put it that way, without being derogatory in any</p> <p>25 sense at all, to assist the public, to assist the media,</p>

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1 and frankly to assist us as well. Thank you.  
2 A. No, I agree, and it's my pleasure to do so if it can be  
3 of assistance.  
4 I thought I would tell you a little bit about me,  
5 some background information. I graduated from Purdue  
6 University in Indiana in the States, with two degrees,  
7 one civil engineering and one a bachelor of science in  
8 construction management. So that's my educational  
9 background.  
10 My work experience is now 50 years long. I spent  
11 the first 23 years of my work life as a general  
12 contractor, actually building large infrastructure  
13 projects, waste water projects, throughout the  
14 United States. In the early 1970s we were one of the  
15 largest general contractors performing that work. We  
16 were one of the only general contractors that actually  
17 did our own formwork and our own rebar work. So I just  
18 thought that would be of interest.  
19 So for 23 years I was an actual contractor building  
20 projects. For the next 27 years, I've been  
21 a construction professional, dealing in projects  
22 regarding disputes, construction means and methods,  
23 issues like project management issues, primarily  
24 internationally. I've worked on projects in  
25 16 countries. Three of those years were spent here in

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1 Hong Kong, working on projects here locally, and from  
2 this base I did many projects in the Middle East and  
3 Asia Pacific. So I have done a lot of project  
4 management work not only in the United States,  
5 obviously, but around the world.  
6 I thought I would list a couple of projects that may  
7 be of interest, because they are similar to this  
8 project. I spent ten years in New York City, for the  
9 New York City Transit, working with the head of design  
10 and construction, as he developed his procedures to  
11 handle all the various subway stations, underground  
12 tunnelling, in New York City. I helped him to monitor  
13 the work. I helped him to manage the work, and I also  
14 was retained to provide training to 350 resident  
15 engineers, to use their project management procedures  
16 properly and also to help keep their projects on time  
17 and on schedule. So I provided that to New York City  
18 Transit.  
19 In addition I worked on the Tren Urbano project in  
20 Puerto Rico, which was a \$3 billion project. It had  
21 16 stations, 17 kilometres of rail, tunnelling,  
22 cut-and-cover work, and it was very similar to this  
23 project in nature. I worked for Siemens. They were  
24 designing a building, the entire project --  
25 CHAIRMAN: Can you give the name of the project again,

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1 please?  
2 A. It was Tren Urbano project.  
3 CHAIRMAN: Thank you very much.  
4 A. So I helped them as they provided their project  
5 management services throughout the project.  
6 I can go on to many more, I worked for many --  
7 Department of Transportation in the United States that  
8 provided the same type of services, but those are fairly  
9 relevant to this project regarding this scope of work.  
10 Regarding to project management specifically, I just  
11 finished an assignment in Saudi Arabia on a \$22 billion  
12 project, where I was retained to review the construction  
13 management procedures, how they provided the procedures  
14 with three large CM firms, and it was built by eight  
15 international contractors that all had to follow the  
16 same procedures that were established on that project.  
17 So I was engaged in looking at their performance and  
18 based on their ability to implement those project  
19 management procedures.  
20 CHAIRMAN: Sorry, again, CM firms?  
21 A. They were construction management firms.  
22 CHAIRMAN: Thank you.  
23 A. So that's basically some relevance to my past history  
24 and my education --  
25 CHAIRMAN: And your expertise, your professional expertise.

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1 A. And my expertise.  
2 I thought it also may be helpful to kind of walk you  
3 through how I analysed this project, because it's pretty  
4 straightforward but how I look at these projects  
5 regarding to a project management perspective is I look  
6 at the way the project management was planned to be  
7 enacted, by looking at all of the relevant documents.  
8 I then, to find out, you know, what actually happened,  
9 look at how they planned to do the work, and then  
10 I looked at how it was actually performed, and to  
11 understand how it was actually performed I looked at the  
12 witness statements and the testimony, to try to  
13 determine what actually occurred on the site.  
14 I knew the plan, I knew the actual, and I identified  
15 the differences, and believe me there's differences on  
16 all projects of this size. There were differences in  
17 New York City, every place I went in -- the world is not  
18 perfect. There were problems on those projects and  
19 there were problems that existed on this project.  
20 So I identified the differences and as I was  
21 identifying the differences I came up with  
22 recommendations that I thought may be helpful in the  
23 future, that mitigate or even maybe prohibit some of the  
24 problems that occurred on this project.  
25 So that's the process I went through. Now, to give

<p style="text-align: right;">Page 13</p> <p>1 a little bit detail -- I don't know how I'm going on 2 time -- but I looked at the entrustment agreement, the 3 BD letters of acceptance, I understood that the PMP 4 flowed from that and the PIMS were the segue, adding 5 more detail. I understood the SSP that was required 6 under the BD regarding how Leightons and how MTR had 7 jointly prepared the SSP. I looked at that in detail. 8 I looked at the Leightons quality assurance plan and how 9 that then segued into the ITP and all the various 10 documents that were recorded for the hold points and 11 things that are necessary when you are doing work 12 on site. So I looked at the ITP. And I also understood 13 the QSP, and how that was addressed with regards to the 14 actual coupler installations, not only the supervision 15 and the time required for the supervision but the actual 16 kinds of documentation that were to be provided 17 underneath that. 18 So that's how I basically analysed the project. 19 Just to give you a summary, I found that the project -- 20 CHAIRMAN: I should say, by the way -- you said you are not 21 sure how you are doing for time -- you are fine for 22 time; we haven't started yet. What you have done so far 23 is proved your expertise, subject to any questions that 24 may be asked, and to set out how as an expert you set 25 about your analysis. So your summary comes now. Thank</p>	<p style="text-align: right;">Page 15</p> <p>1 but others have come up with will help in the future. 2 When I came to Hong Kong to finalise my report, 3 I was pleasantly surprised to hear that MTR had already 4 started to deal with action plans with some of the 5 recommendations that were in the Turner &amp; Townsend 6 report that I took into consideration in my analyses. 7 So I set out in my expert report, where you'll see at 8 the end -- I was trying to be helpful and put together 9 my recommendations, I also then received Mr Rowsell's 10 report, I included his recommendations, the 11 recommendations from Turner &amp; Townsend compared to the 12 actions that I understood that MTR was putting in place. 13 MR BOULDING: Mr Huyghe, I just wonder whether we can have 14 a look at that. If you could go to ER1, tab 2, and it's 15 internal page 67. 16 Do you there see, "Table 3 -- summary of the project 17 management recommendations"? 18 A. Yes. 19 Q. Is that what you are talking about and if so can you 20 just explain for the Commissioners' benefit what this is 21 intended to show? 22 A. Yes. In fact this kind of helps the time line that 23 I just explained. If you look to the far left, by 24 category, item 1 is "Overall MTRCL", those are the 25 recommendations that I started to come up with when</p>
<p style="text-align: right;">Page 14</p> <p>1 you very much. 2 A. Okay. For having read all the documents -- and I have 3 to say that the documents that are provided on this 4 project -- and by "documents", I refer to the PMP and 5 the PIMS -- they are very similar to the New York City 6 Transit because you have such a wide spectrum of types 7 of work that they have to cover. They have to cover 8 station work, they have to cover tunnelling, they have 9 to cover cut-and-cover. So there's a lot of 10 generalities in the PMP and even to an extent in the 11 PIMS, because they cover -- it's not project-specific. 12 It's not project-specific for contract 1112. 13 So I found that by looking at that and looking at 14 the actual work performed in the field, I believed that 15 the project management procedures set out and 16 followed -- I think that with the PIMS -- the PMP first 17 and then the PIMS, they provided a very robust basis for 18 the development and implementation of this project. 19 I do say that there are some things that I would 20 recommend that were done differently, and I think that 21 there's some record-keeping and some communications that 22 were lacking, and I go into those in detail in the 23 report. So, on any project, there's room for 24 improvement, and I certainly hope and I desire that some 25 of the recommendations that not only I've come up with</p>	<p style="text-align: right;">Page 16</p> <p>1 I identified the differences. So I started putting up 2 recommendations that I thought would be helpful. 3 When I received Rowsell's report, I looked at his 4 recommendations and I tried to place them in the same 5 category. When I came to Hong Kong, before I finished 6 my report, I found out that MTRCL -- I met with them and 7 they are enacting the various things that you see on the 8 right, that basically falls under the same category as 9 listed on the far left, and also in the centre of those 10 are all the T&amp;T recommendations that I feel go with that 11 topic. 12 So I thought it would be helpful to the Commission 13 to be able to see all the recommendations and see the 14 actions that were already in place and what were 15 occurring in one location. 16 COMMISSIONER HANSFORD: Mr Huyghe, I think this is very 17 helpful. You mention that you looked at Mr Rowsell's 18 report and you inserted his recommendations in there as 19 well. You haven't inserted all of his recommendations, 20 have you, just the ones that refer to your 21 recommendations; is that correct? 22 A. But if you -- yes, that's true, but if you look at each 23 category, those are his recommendations that refer -- so 24 there will be recommendations probably that he has that 25 are additional to what I -- I just put them by my</p>

Page 17	<p>1 recommendations so we can just compare some. But they</p> <p>2 are very similar; they are very, very similar.</p> <p>3 COMMISSIONER HANSFORD: Okay. Thank you.</p> <p>4 A. So then, after I had made this table, and I was</p> <p>5 finishing my report, then I noticed, by reading</p> <p>6 Mr Rowsell's report, that we had so many things in</p> <p>7 common, which is somewhat unfamiliar to me in this</p> <p>8 business. So I and Mr Rowsell -- I met Rowsell, we</p> <p>9 met --</p> <p>10 COMMISSIONER HANSFORD: I think it's Rowsell.</p> <p>11 CHAIRMAN: We've got interesting names from both experts.</p> <p>12 Yours caused us a good deal of exploration yesterday.</p> <p>13 A. In fact, when I spoke to Mr Rowsell in the first</p> <p>14 instance, I said, "Let's first do some housekeeping: my</p> <p>15 name's Huyghe, what's yours?"</p> <p>16 Then we met and we went through and we discussed our</p> <p>17 opinions, and you can read the statement, they are</p> <p>18 fairly well -- all aligned, and we thought that since</p> <p>19 we -- it would be also helpful in the joint statement to</p> <p>20 take the recommendations that were in our reports, and</p> <p>21 he went through this list with me and we inserted some</p> <p>22 of the ones that we thought were relevant, maybe more</p> <p>23 relevant, into our joint statement, so that we could</p> <p>24 also include not only what we agreed upon but also what</p> <p>25 we felt were the recommendations that may be helpful for</p>	Page 19	<p>1 list that MTR had provided that listed all the various</p> <p>2 things that they were putting in place or had put in</p> <p>3 place or were working on. So I took that action, I met</p> <p>4 with MTR, I took that action list, and I simply lifted</p> <p>5 from the action list those things that basically</p> <p>6 coincide with these various item numbers, because this</p> <p>7 is just one item. There's the PIMS and the PMP and</p> <p>8 there's other issues. And I tried to identify which</p> <p>9 ones in the MTRC actions were in correspondence with or</p> <p>10 compared to the same ones that I had listed for myself</p> <p>11 and Mr Rowsell and the T&amp;T.</p> <p>12 Q. I wonder whether we can look at another document in your</p> <p>13 first report, ER1, tab 2. It's a document which is</p> <p>14 about five or six pages from the end. Unfortunately,</p> <p>15 it's not been paginated yet. But it's a document on MTR</p> <p>16 notepaper headed, "T&amp;T's interim report dated October</p> <p>17 2018". Appendix D I think it probably is. It's the</p> <p>18 last appendix.</p> <p>19 Can you explain, please, Mr Huyghe, what this is and</p> <p>20 what its purpose is?</p> <p>21 A. Yes. When I looked at the various action plans that</p> <p>22 were provided by MTR, I wanted to make sure that, you</p> <p>23 know, if in fact the T&amp;T interim report basically</p> <p>24 identified the same types of recommendations, and this</p> <p>25 was a letter that was prepared that actually outlines</p>
Page 18	<p>1 the project in the future.</p> <p>2 MR BOULDING: I wonder, Mr Huyghe, whether you can just</p> <p>3 explain a little bit about the column headed</p> <p>4 "Corresponding T&amp;T recommendations" -- what does that</p> <p>5 refer to?</p> <p>6 A. Yes. T&amp;T had provided a report for the MTR, and it had</p> <p>7 the various nomenclatures that pointed to particular</p> <p>8 types of activities. So what we did was -- I wanted to</p> <p>9 go in and see exactly what T&amp;T were saying and compare</p> <p>10 it to the categories on mine. So I just went through</p> <p>11 the report and picked those out and did</p> <p>12 a cross-referencing to make sure that I had the same</p> <p>13 corresponding recommendations.</p> <p>14 COMMISSIONER HANSFORD: And in fact I understand we have</p> <p>15 Turner &amp; Townsend's report in bundle B, which we may</p> <p>16 refer to at a later stage.</p> <p>17 MR BOULDING: That's correct.</p> <p>18 A. Yes.</p> <p>19 COMMISSIONER HANSFORD: Thank you.</p> <p>20 MR BOULDING: I think finally on this table, "Actions</p> <p>21 already taken by MTRCL to this date to address T&amp;T's</p> <p>22 recommendations" -- can you tell the Commissioners the</p> <p>23 source of your information so far as the implementation</p> <p>24 of those recommendations was concerned?</p> <p>25 A. Yes. When I arrived in Hong Kong, I was given an action</p>	Page 20	<p>1 the work that MTRC is actually doing in regards to</p> <p>2 implementation of those action plans.</p> <p>3 Q. I see. And that's signed off, is it, at the bottom by</p> <p>4 Mr Stephen Hamill, the MTRCL project</p> <p>5 management-technical support?</p> <p>6 A. That's correct. I had met with Steve and he prepared</p> <p>7 this document and signed it and I included it in my</p> <p>8 report.</p> <p>9 COMMISSIONER HANSFORD: We are just commenting that they are</p> <p>10 all called Steve.</p> <p>11 A. You can refer to me as "the older Steve".</p> <p>12 MR BOULDING: I may have taken you off your course somewhat</p> <p>13 there but is there anything else you'd like to say by</p> <p>14 way of introduction before you are questioned?</p> <p>15 A. I think I've covered everything.</p> <p>16 MR BOULDING: Now, the procedure now is you will be asked</p> <p>17 questions, a few questions I understand by Mr Pennicott,</p> <p>18 and then there are various other lawyers in the room who</p> <p>19 will have the option of asking you questions. The</p> <p>20 Commissioners of course can ask questions at any time</p> <p>21 that takes their fancy. And then it may well be that at</p> <p>22 the end of your evidence I might ask you a few more</p> <p>23 questions. So please sit there.</p> <p>24 Examination by MR PENNICOTT</p> <p>25 MR PENNICOTT: Good morning, Mr Huyghe.</p>

<p style="text-align: right;">Page 21</p> <p>1 A. Good morning. 2 Q. First of all, thank you very much for coming along to 3 give evidence to the Commission. Thank you for your 4 report and thank you for your joint efforts with 5 Mr Rowsell in providing to the Commission the joint 6 statement which, as has been indicated, is very useful. 7 As I understand it, just taking a step back from the 8 joint statement, essentially what yourself and 9 Mr Rowsell have done is taken the first couple of 10 columns from your table and worked your way through the 11 respective wording, to try and come up with some joint 12 wording which we now find in the joint statement. 13 I mean, that's essentially the process, as I understand 14 it. 15 A. Yes. 16 Q. As a consequence of that process, I don't really have 17 an awful lot to ask you. There are just a few points 18 that I want to ask you to clarify by reference to the 19 joint statement, and it may be that when I ask these 20 questions I may also need to ask Mr Rowsell the same 21 sort of questions as well. 22 Could I ask you to be shown the joint statement, and 23 in particular, to start with, paragraph 17. 24 Paragraph 17 is under the general heading, 25 "Rebar/coupler inspection at the EWL slab"; do you see</p>	<p style="text-align: right;">Page 23</p> <p>1 A. Yes. 2 Q. We know that in the PIMS document, the MTR's document, 3 as it currently exists, the criteria which is used or 4 adopted as to when an NCR may or may not be issued is 5 whether the incident is significant. That is the word 6 that is used in PIMS, "significant". 7 A. That's correct. 8 Q. As I understand it, by reference to what Mr Rowsell 9 describes as the near-miss principle, I think normally 10 used to refer to matters of health and safety in the UK 11 in particular -- 12 A. Yes. 13 Q. -- he believes that there should be, as it were, 14 a downgrading of the word "significant". I'm not quite 15 sure how one puts it. But less significant incidents 16 should be the subject matter of NCR, and I think you 17 agree with that general proposition; is that correct? 18 A. Yes. 19 Q. In fact, if one goes to the Turner &amp; Townsend document 20 that Mr Boulding took you to earlier, I think also they 21 agree with that proposition as well. 22 A. That's correct. 23 Q. Could we just look at it so everybody's got it clear in 24 their minds. If we go back to the appendix D to 25 Mr Huyghe's report, please, and if we go to the next</p>
<p style="text-align: right;">Page 22</p> <p>1 that? 2 A. Yes. 3 Q. At 17 you both say: 4 "We agree that if the bottom layers of the rebar are 5 obscured by the subsequent top layers, then 6 an individual inspection by layer (or by mat) should 7 have been performed. Separate inspection forms (ie one 8 for top mat and one for bottom mat) should have been 9 prepared for signing off the rebar inspections." 10 Mr Huyghe, can I ask you this: in a nutshell, is 11 what you are saying there that there should have been 12 an additional hold point once the bottom mat had been 13 completed? 14 A. Yes, they should go through and they should actually do 15 the inspection to make sure that everything is installed 16 properly before they move on to the second mat. 17 Q. Okay. So there should have been a separate RISC form, 18 effectively, for the bottom mat, which was signed off by 19 Leighton and MTR? 20 A. That identifies the couplers, yes. 21 Q. And which identified the couplers, yes. Okay. All 22 right. That's very clear. Thank you. 23 The next point I wanted to ask you about is the 24 following section in the joint statement, "F. Process 25 of non-conformance reporting"; do you see that?</p>	<p style="text-align: right;">Page 24</p> <p>1 page, please -- that's it -- and then if we can 2 highlight or expand/enlarge PP8, please, towards the 3 bottom of the page. 4 This is obviously a document that somebody at MTR -- 5 Mr Hamill at MTR has prepared, and we can see that he's 6 listed out here the T&amp;T recommendations, and PP8 is the 7 one I'm interested in: 8 "NCRs to be re-categorised to capture lower less 9 'significant' defects." 10 That, as I understand it, is a process that is 11 taking place already, to your understanding? 12 A. That's what I understand. 13 Q. Have you seen how they are going about re-categorising 14 these -- the less significant defects? 15 A. Not specifically, because I know that they are going 16 through quite a process. If I could step back a second, 17 they are trying to get into a BIMS modelling programme 18 and they are trying to use electronic documents, how to 19 make these definitions, so it's a lot easier to be used 20 in the field. 21 COMMISSIONER HANSFORD: Sorry, did you say PIMS modelling or 22 BIMS? 23 A. BIMS. 24 MR PENNICOTT: We are going to get BIMS and PIMS in a 25 minute. We've now got BIMS.</p>

<p style="text-align: right;">Page 25</p> <p>1 A. I don't know specifically how they are capturing that in 2 that electronic document. 3 Q. Right. 4 A. But if I may, I did make one suggestion. Could I fill 5 that in there -- 6 Q. Please. 7 A. -- from a construction perspective? I always -- and 8 it's in my report so this isn't something that I'm 9 offering that's outside the realm of my testimony. As 10 a contractor, if you find an activity going on on 11 a project that is defective work and it can be 12 immediately corrected, I often would not issue an NCR 13 because it was actually something you found and you 14 corrected. It's not to say you don't take it seriously, 15 it's not to say you don't alert the contractors. It's 16 just that if it can be actually corrected that day, then 17 an NCR would not be issued. 18 However, if that same type of defective work 19 occurred again, then an NCR is issued. So if you could 20 correct the problem that day, then an NCR wasn't issued. 21 Obviously you took into consideration what type of 22 defective work it was. But that was something that 23 I was trying to offer, to try to get -- because when you 24 start talking about something significant/insignificant 25 in construction, that's somewhat hard to do.</p>	<p style="text-align: right;">Page 27</p> <p>1 significance. You should at least raise that 2 immediately and go to the sub-contractor and find out 3 what is going on with that work. 4 CHAIRMAN: Then it's a choice of approach, perhaps, either 5 you inform other people in the organisation to be aware 6 of this, so that they know that it's happened, as well 7 as having it dealt with immediately, or perhaps it 8 becomes the subject of an NCR? 9 A. That's right. My take on -- if I try to put -- I always 10 try to put myself in the boots of the people on the 11 ground, and I guess if I was out there and I found 12 an incidence of that and I thought it was a one-off, the 13 first time it happened I may not make an issue, if they 14 corrected it immediately. And as I state in my report, 15 if it happened a second time, then you raise it -- not 16 only -- you raise it to everybody, the contractor, you 17 raise it to your own staff, to put everybody on alert 18 that they should be looking for this. By the time the 19 second incident came around, I think that should occur. 20 COMMISSIONER HANSFORD: Mr Huyghe, I saw that report. 21 I thought that was interesting. The difficulty I've got 22 is that if one inspector spots it and it's corrected, 23 and therefore he chooses not to record it because it's 24 corrected and it's a one-off for him, but it happens 25 somewhere else and another inspector spots it but wasn't</p>
<p style="text-align: right;">Page 26</p> <p>1 CHAIRMAN: I appreciate that it's very difficult to reduce 2 to absolute specifics a term of principle like 3 significance, but would you agree that "significant" 4 would include "novel", in the sense of "unexpected" or 5 "different"? The reason I ask that is because, during 6 the course of the evidence that's been given, a couple 7 of fairly senior officers of either Leighton or the 8 MTRCL have said that they had never heard of cutting of 9 rebars or trimming of rebars in order to put them into 10 a coupler before, and it would seem to me that if, 11 therefore, during the course of your work, you come 12 across something which may not of itself be highly 13 significant, but is nevertheless novel and may indicate 14 some unsatisfactory trend towards a building, that 15 perhaps should be made the subject of an NCR. 16 That's a bit of a long rambling proposition. 17 A. I understand. I think if you'll see the nature, not 18 only in my report, in our joint statement, if you find a 19 cutting of a rebar, even though in this matter there are 20 about five instances that I understand were found, 21 albeit there were three defective couplers, 22 I understand, were encased in concrete. So it's not 23 really -- if you only find one or two instances. You 24 actually have to go to what was actually done, what was 25 that issue, and the cutting of rebar is something of</p>	<p style="text-align: right;">Page 28</p> <p>1 aware of what the first inspector had spotted, that 2 learning, that cross-learning, is not happening between 3 the two inspectors. 4 A. That's true. 5 COMMISSIONER HANSFORD: So I've got a small difficulty with 6 a point of, "If it's corrected immediately it's not 7 recorded." 8 A. That's a good point. You are depending on the other 9 inspectors to be looking for the same thing. But 10 I could only go on what the witnesses had stated in 11 their testimony. 12 COMMISSIONER HANSFORD: Yes. I'm thinking looking forward 13 to future jobs rather than perhaps this one. 14 A. If you want to look forward to future jobs, what I would 15 do is get spray paint, simply get spray paint of 16 different colours, and when you are checking the rebar 17 couplers, if it's a one-level inspection, you simply go 18 through and you spray that coupler that it's acceptable, 19 and if it's not you spray it with another, so you can 20 physically see it. I've done that not on specifically 21 rebar couplers but on other defective work issues, and 22 that helps for everybody to raise issues, so everybody 23 can physically -- if you have a rebar coupler that's 24 been cut and you see 17 fluorescent orange markings on 25 couplers, everybody should be able to understand.</p>

<p style="text-align: right;">Page 29</p> <p>1 CHAIRMAN: That's actually an interesting point, because, 2 from a layman's point of view, one of the issues that 3 obviously has arisen -- and I'm not suggesting any 4 decision has been made in this regard whatsoever but 5 it's out there in the ether, if I can put it that way; 6 it may be rejected entirely, it may not, I don't know -- 7 is that with inspections of course there's the issue of 8 you can say inspection should be committed or should be 9 undertaken but whether they are in fact undertaken and 10 the level of enthusiasm with which they are undertaken 11 is another matter. On a sort of military analogy you 12 can say that a perimeter must be patrolled every ten 13 hours, but if the patrols go out 10 feet and sit under 14 a tree, smoke cigarettes and listen to the radio, you're 15 not actually having a patrol of the perimeter conducted. 16 A. That's right. 17 CHAIRMAN: Then the question is how do you ensure that? It 18 seems to me your answer is delightfully simple and 19 effective. 20 A. It may be too simple. But, as Mr Pennicott took me to 21 earlier, there should have been record sheets kept, just 22 like they did for the diaphragm wall. 23 CHAIRMAN: Yes, the record should be kept as well, but 24 sometimes records can be kept after the event, if you 25 know what I mean.</p>	<p style="text-align: right;">Page 31</p> <p>1 I know how construction works. Oftentimes NCRs aren't 2 issued for a day or two. What you want to do is you 3 want to get to the root of the issue, so as soon as you 4 see something -- you know, everybody on that site is 5 trying to do their best job. I do believe that in 6 construction. I think everybody still today tries to do 7 what they feel is right, and if you come across 8 an incidence like this, you should tell everybody that 9 you know who is involved in that inspection process and 10 the contractor, and everybody that is involved in that 11 inspection/supervision process should be made aware of 12 that issue. 13 Q. It just seemed to me that that sentence there and what 14 you've just said meets Prof Hansford's point -- may meet 15 Prof Hansford's point that if you've got different 16 inspectors, if there is a communication process, then 17 you might be able to cover that point. 18 A. That's right. 19 Q. Can I just -- it may be helpful or it may not be -- 20 let's try to apply paragraph 22 to what, on one 21 analysis, happened here, in our case. 22 So we had what we call the first incident of bar 23 cutting, which we, on the evidence, understand may have 24 involved one or two bars, remedied on the same day, and 25 therefore, on the basis of your agreement with</p>
<p style="text-align: right;">Page 30</p> <p>1 A. Exactly. So if you spray-mark them, you do your 2 inspection, you have to sign off a record sheet, it's 3 just kind of -- I call it belt and suspenders to make 4 sure you have caught everything. 5 COMMISSIONER HANSFORD: Belt and braces. 6 CHAIRMAN: Yes. Thank you. 7 MR PENNICOTT: Mr Huyghe, can you go back to a question that 8 Prof Hansford asked you a few minutes ago and look at 9 paragraph 22 of the joint statement which seemed to me 10 to be directly relevant to the point that was being put 11 to you. 12 What you and Mr Rowsell say there is: 13 "We agree that an NCR need not be issued if the 14 defective work is identified, corrected and immediately 15 signed off on the same day." 16 Which is a point you reiterated just a moment ago. 17 Then you say this: 18 "However, all site supervision and construction 19 engineering teams should be made aware of this defective 20 work and put on notice." 21 As I understand it, what you're both saying there is 22 that even if an NCR isn't actually issued on the first 23 incident, nonetheless some form of communication should 24 be made to all concerned? 25 A. That's right, and the reason I say that is because</p>	<p style="text-align: right;">Page 32</p> <p>1 Mr Rowsell, no NCR to be issued, but you would, on your 2 evidence or on your agreement, have expected a memo or 3 something to have been circulated to draw attention to 4 that issue. 5 A. That's correct. 6 COMMISSIONER HANSFORD: Which was not done. 7 MR PENNICOTT: Which was not done, correct. 8 We then move to the second incident, which also 9 involved one or two bars, as we understand it on the 10 evidence. Now, on your agreement, at that point, for 11 the second incident, you would have expected an NCR to 12 be issued? 13 A. That's correct. 14 Q. Okay. 15 COMMISSIONER HANSFORD: Which was not done. 16 MR PENNICOTT: Which was not done. And when you say NCR, 17 you mean an NCR by MTR, not just by Leighton? 18 A. You could -- I would prefer if the contractor took 19 responsibility and issued the NCR. That would be my 20 preference, because an NCR coming from a contractor to 21 their sub-contractors, there's a contractual 22 relationship, and I think that there may be more meat on 23 the bones if you do it in that fashion. 24 Q. So there's a slight qualification to that agreement: 25 an NCR by the contractor, or possibly by MTR but</p>



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1 certainly by the contractor?  
 2 A. That's right.  
 3 Q. And that of course didn't happen, as Prof Hansford  
 4 rightly says.  
 5 Can I just test the proposition in this way, or test  
 6 that paragraph, 22, in this way. Let's assume that the  
 7 first incident was actually the third incident, so we  
 8 didn't just have one or two bars, we had five bars, in  
 9 two areas, close to each other, in what appears to have  
 10 been a fairly complex area of rebar. We've got five  
 11 bars this time, cut, not connected. So in terms of  
 12 quantity, on one view, rather more significant than the  
 13 first two incidents, would paragraph 22 still hold if  
 14 incident 3 had in fact been incident 1?  
 15 A. So if I could re-state, I think what you are asking me  
 16 is if in fact there was five rebar discovered on the  
 17 same day.  
 18 Q. And it had been the first incident.  
 19 A. And it was the first incident?  
 20 Q. Yes.  
 21 A. I think if they could have been corrected, I'm not so  
 22 sure I would have issued an NCR if they could have been  
 23 corrected, because you are talking about, you know,  
 24 30,000 couplers out there, and even though I don't --  
 25 cutting rebar is not something to be taken lightly, but

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1 I think that I would probably follow that same  
 2 guideline, as long as they were corrected.  
 3 But then, again, you need to make sure that  
 4 everybody --  
 5 Q. The memo or --  
 6 A. Exactly. Let me step back from the memo. All these  
 7 people break bread together, they sometimes go to the  
 8 same bars together, they all are on the job site, so  
 9 memos are good but also basically just going up to  
 10 everybody and saying, "Hey, guess what I saw" -- you  
 11 have to have a close working relationship. So the  
 12 memos, obviously they are important -- I'm not trying to  
 13 belittle that at all -- but I think just the  
 14 communications between inspectors and the engineers,  
 15 that is also something I would like to emphasise.  
 16 COMMISSIONER HANSFORD: On that latter point, much reference  
 17 is made in your report and in Mr Rowsell's report about  
 18 digital platforms for records. Is that assisted -- is  
 19 that communication between parties assisted by more  
 20 digital platforms for communications?  
 21 A. Very much so, because the projects today are being --  
 22 you've got your pads, your iPads and all types of  
 23 various electronic data that when you catch something,  
 24 you can take a picture of it and send it to everybody  
 25 on the site. So the digital communication world, of

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1 being able to talk with electronic information,  
 2 especially with the younger generation because they know  
 3 how to use it -- so if you can just submit that to  
 4 everybody quickly, then that is the new form of  
 5 communicating, as well as I think word of mouth can't be  
 6 belittled.  
 7 COMMISSIONER HANSFORD: Okay. Thank you.  
 8 MR PENNICOTT: The third brief topic, Mr Huyghe, I just  
 9 wanted to touch on was as-built records and as-built  
 10 drawings that again you and Mr Rowsell have dealt with  
 11 in paragraphs 23 to 25 of the joint statement. Just  
 12 trying to draw it together, we are all agreed, you are  
 13 agreed, that MTR ultimately has a responsibility to  
 14 submit as-built records and as-built drawings to the  
 15 government?  
 16 A. Yes.  
 17 Q. To facilitate that objective, under the Conditions of  
 18 Contract with Leighton, in the conditions themselves and  
 19 in the General Specification, certain obligations are  
 20 imposed upon Leighton to produce as-built records and  
 21 as-built drawings?  
 22 A. That's correct.  
 23 Q. As I've understood it, from paragraph 25 of the joint  
 24 statement, what you are -- and I think, if I may say so,  
 25 there might be one word missing and one typo in this

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1 paragraph, which Mr Rowsell has pointed out to me this  
 2 morning. It should say, "We agree that the  
 3 documentation setting" -- the word "out" perhaps should  
 4 be there?  
 5 A. Correct.  
 6 Q. "... as-built records requirements should be reviewed  
 7 for consistency and clarity of responsibilities. The  
 8 arrangements should ensure that records are", rather  
 9 than "and", "submitted progressively and promptly."  
 10 Would you accept those two minor changes?  
 11 A. I accept those changes.  
 12 Q. Standing back for a minute, my understanding is in  
 13 paragraph 25 essentially what you and Mr Rowsell were  
 14 saying is, "Look, the obligations in relation to  
 15 as-built records and as-built drawings are to be found  
 16 in a number of different places in the contract and in  
 17 the agreements"?  
 18 A. That's correct.  
 19 Q. And what you are saying is it would be helpful to, as it  
 20 were, draw all those together in one place?  
 21 A. Exactly, and describe them. But also, I was a big  
 22 proponent when I was building projects that the project  
 23 close-out documents start on day one. You have to get  
 24 everybody's understanding that it's very difficult to  
 25 get as-built records because contractors -- it's very

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1 hard. So not only does it need to be brought into one  
 2 location but you need to give the timing of when those  
 3 records are supposed to be submitted, because some  
 4 contractors leave the projects earlier than others, so  
 5 you have to make sure you have a clear understanding of  
 6 when documents -- as-built records, which includes  
 7 drawings, that are to be submitted after certain surveys  
 8 are done, such that those records are coming on  
 9 a progressive basis, not waiting until the end and  
 10 trying to get all of them.  
 11 Q. Yes. You make that point, the last sentence:  
 12 "The arrangements should ensure that records are  
 13 submitted progressively and promptly."  
 14 A. Yes.  
 15 Q. That really ties into the issues that we know a lot  
 16 about, that is the problems that have been encountered  
 17 with regard to, to put it neutrally, the top of the east  
 18 diaphragm wall?  
 19 A. Yes.  
 20 Q. All right. Similarly and lastly, on the question of  
 21 supervision, which you deal with in the joint statement  
 22 at paragraphs 26 to 28 -- again, without listing them  
 23 all out, Mr Rowsell in his report -- and I think there's  
 24 no disagreement between you about this -- so far as both  
 25 MTR is concerned and Leighton is concerned, the

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1 supervision obligations again are found in a host of  
 2 different volumes?  
 3 A. That's correct.  
 4 Q. And with different definitions, different words used,  
 5 and essentially what you are saying in 28(b), as  
 6 I understand it, is it would be helpful to everybody to  
 7 have what is called a supervision manual so that all of  
 8 this material could be collected in one place?  
 9 A. That's right, and also electronically now.  
 10 Q. Right.  
 11 A. Because they can be -- the responsibility of the  
 12 supervisors can be laid out and also the timing of all  
 13 the inspections and supervision can be actually  
 14 identified now, as to when this occurred and who was  
 15 supposed to have accomplished it.  
 16 COMMISSIONER HANSFORD: And that site supervision manual  
 17 that you and Mr Rowsell are recommending here should be  
 18 project-specific?  
 19 A. Yes, because I think again --  
 20 COMMISSIONER HANSFORD: Or even contract-specific?  
 21 A. Yes. It goes to the nature of the work. It goes the  
 22 nature of the work. It should be specific to the type  
 23 of work that's being performed, like if you've got top  
 24 bars and bottom bars -- it should be specific to the  
 25 type of work that's being performed.

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1 COMMISSIONER HANSFORD: Yes.  
 2 CHAIRMAN: During the course of the Inquiry -- and again  
 3 this is not said critically -- but there was certainly  
 4 one witness who said, "Well, our own PIMS is  
 5 all-inclusive. So we've got the young engineers on site  
 6 and we don't need to tell them about anything, other  
 7 than the obeying of PIMS or following that", which  
 8 of course excluded other aspects of inspection that came  
 9 in the quality requirements and things like that.  
 10 A. Yes.  
 11 CHAIRMAN: And what you suggest here, perhaps, is that for  
 12 each contract, depending on the size of the contract,  
 13 whoever is in charge there reduces down to a single  
 14 manual the various obligations that may be contained in  
 15 collateral documents?  
 16 A. And they share it with all the other parties.  
 17 CHAIRMAN: Yes.  
 18 A. The PIMS document -- and again -- I believe it was  
 19 a very well-prepared document, I think it's very  
 20 overall -- completed in a proper way, but the PIMS  
 21 document is not project-specific.  
 22 COMMISSIONER HANSFORD: No.  
 23 A. And you have to go into various categories within the  
 24 PIMS document -- like I went into the construction  
 25 management category to look for specific things, but it

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1 doesn't contained a detailed listing that you're  
 2 describing now.  
 3 COMMISSIONER HANSFORD: I hesitate to correct the Chairman,  
 4 but I think --  
 5 CHAIRMAN: You mustn't hesitate at all.  
 6 COMMISSIONER HANSFORD: Okay. But I think the witness the  
 7 Chairman was referring to previously wasn't referring to  
 8 PIMS as such, he was referring to his company's quality  
 9 plan.  
 10 CHAIRMAN: Yes, quality plan, that's right.  
 11 A. Okay.  
 12 COMMISSIONER HANSFORD: And the inference was, in his view,  
 13 that company's quality plan was all-inclusive and  
 14 therefore they didn't need to go to the specifics.  
 15 A. The Leightons quality plan does lay out particular  
 16 guidelines as to what inspections are supposed to occur  
 17 when.  
 18 COMMISSIONER HANSFORD: Right.  
 19 A. It is very detailed, and I've seen -- I've not seen  
 20 others that are basically any better. So it did lay out  
 21 specific guidelines for when things were supposed to  
 22 occur.  
 23 COMMISSIONER HANSFORD: But is that contract-specific?  
 24 A. In construction, with regards to those, it probably --  
 25 if it's talking about rebar, the rebar on a contract,

<p style="text-align: right;">Page 41</p> <p>1 it's basically rebar on a contract, other than if you 2 are talking about the actual rebar couplers on this 3 project. 4 COMMISSIONER HANSFORD: Yes. 5 A. But I do think that they had a good quality assurance 6 plan. I think their ITP, with coming up with the RISC 7 forms and the hold points, I think that it was a good 8 plan. But -- but -- there's always a way to make 9 improvements and I think that's what Mr Rowsell and 10 I are talking about, is how you can actually -- you 11 know, it's like peeling an onion, you get to another 12 layer of transparency. 13 CHAIRMAN: The manual, the inspection manual. 14 A. Yes. 15 CHAIRMAN: Thank you very much. 16 MR PENNICOTT: I just wanted to ask a couple more questions 17 about -- that was a general question about 18 supervision -- a couple of more detailed points. 19 If we could look, please, at paragraph 26 of the 20 joint statement. I ask you about this because it's not 21 really something that we've looked at in any detail, if 22 at all, during the course of the hearing so far. 23 "[You and Mr Rowsell] agree that 'full-time and 24 continuous supervision' does not mean 'man-marking'. 25 The first point, the term "full-time and continuous</p>	<p style="text-align: right;">Page 43</p> <p>1 you see that in practical terms working, the 1:10 ratio? 2 A. Again it gets into the type of work. If you have ten 3 iron workers out there putting in rebar, as a general 4 contractor you should have somebody out there, maybe not 5 full-time but they are coming by very regularly to look 6 at the work. The reason they say that is you have to 7 take into consideration the actual work. Sometimes you 8 can do a bay of steel, it takes a day to put it in, and 9 you get to the next, it takes a day, so you have to kind 10 of plan your work. Good contractors and good 11 superintendents know the foreman's working on the job 12 and they come by and they come by when they feel it's 13 necessary. So to stand there full-time watching them 14 when they may not be actually getting the work 15 progressed for another two or three hours -- you 16 actually determine your day based upon the work that's 17 going on on the site. So when I see these things about 18 one supervisor for every ten workers -- you may need one 19 supervisor out there for two workers, depending on what 20 they're doing. It all depends upon the type of work. 21 Q. The issue we've got here -- as I say, I'm not going to 22 go into it with you -- is one has this obligation for 23 the full-time and continuous supervision on the one 24 hand, and then one has this one supervisor for ten 25 workers on the other, if you like --</p>
<p style="text-align: right;">Page 42</p> <p>1 supervision" comes from the QSP -- 2 A. Yes. 3 Q. -- and it applies to Leighton, not MTR? That part of 4 it, the full -- 5 A. Yes, yes. 6 Q. I know there are other parts that apply to MTR, but that 7 part applies to Leighton? 8 A. That's right. 9 Q. Okay. Then it goes on in the joint statement, a point 10 that's mentioned in Mr Rowsell's report: 11 "The requirements for supervision by the contractor 12 are set out in the General Specification ..." 13 And I put in brackets for the purpose of the 14 transcript that's G3.9.1 clause in the General 15 Specification at C3/2040. 16 "... and require a minimum ratio of 1 supervisor to 17 no more than 10 workers." 18 I'm trying to envisage a situation where Leighton, 19 through their sub-contractor, Fang Sheung, are 20 installing rebar into couplers in a particular bay, and 21 let's say they are doing the bottom mat, and let's say 22 there are ten workers on any particular workfront or 23 workface. I know it's ultimately a question of 24 contractual interpretation, Mr Huyghe, which I don't 25 really want to go into in too much detail, but how do</p>	<p style="text-align: right;">Page 44</p> <p>1 A. That's right. 2 Q. -- and somehow you've got to put those two things 3 together to make them make sense. 4 A. That's right. That's where the supervision manual would 5 come into effect, to get into the type of work you're 6 actually going to be watching over. 7 MR PENNICOTT: Yes. Understood. Thank you very much, 8 Mr Huyghe. I have nothing else. Thank you very much. 9 Questioning by THE COMMISSIONERS 10 COMMISSIONER HANSFORD: I have two questions at this point, 11 Mr Huyghe. One is a question of detail and the other is 12 a bit more general. 13 On the detailed question, if I can find it in your 14 expert report -- it's paragraph 245 of your expert 15 report. If we can go to paragraph 245, in the second 16 sentence you say: 17 "Leighton, along with its design Atkins team B, came 18 up with an alternative plan to deal with coupler 19 alignment issues by using thousands of drill-in dowel 20 bars." 21 I hadn't remembered that from the evidence of the 22 last couple of months, this thousands of drill-in dowel 23 bars, and I wonder if you could tell us where you got 24 that from? 25 A. I was thinking that I had read that. But I do know that</p>

<p style="text-align: right;">Page 45</p> <p>1 their alternative plan was to put in dowel bars. 2 COMMISSIONER HANSFORD: Yes. 3 A. And I can't recall whether I read the thousands or they 4 would be -- if you looked at the whole length of the 5 D-wall, whether or not I just extrapolated that 6 myself -- but I thought I had read it. 7 COMMISSIONER HANSFORD: Because I had it in my mind, 8 Mr Huyghe, that this was a detail that would be used 9 occasionally when required, and I hadn't had it in my 10 mind that it was a proposal for thousands of dowel bars, 11 and I just wondered if I had got it wrong. 12 A. What I read it to be was they were, instead of using 13 through-bars, going to be drilling in, doweling in 14 rebars, all along the top of the diaphragm wall, and 15 then they would grout those in, what I call hot 16 grouting, and that would be the connection of how they 17 were going to deal with the top of the wall versus 18 cutting the wall down and putting in through-bars. 19 COMMISSIONER HANSFORD: Right. 20 A. If in fact they were going to have to drill and put 21 dowels in all along that wall -- I can't recall whether 22 I read it or whether I was just looking at the length of 23 wall and determined it would be a lot. 24 COMMISSIONER HANSFORD: Okay. But in the event, they didn't 25 do that?</p>	<p style="text-align: right;">Page 47</p> <p>1 on site, and Mr Rowsell was not saying that he thinks 2 Mr Steve Chi is going to be out there doing it, but he 3 was making the point that there is an engineer of record 4 and that's the gentleman that signed the PMP. 5 COMMISSIONER HANSFORD: Right. So it's not an area that you 6 disagree? 7 A. We don't disagree, it's just that -- Mr Rowsell can 8 explain, but he was just pointing out that there is 9 an actual engineer of record and it is the gentleman who 10 signed the PMP, and that we agreed on. 11 COMMISSIONER HANSFORD: Okay. I'm sure we will cover that 12 when we get to Mr Rowsell, probably later today. Thank 13 you very much. 14 MR PENNICOTT: It's Stephen Chik. Inevitably it's Steve, 15 but Mr Chik. 16 COMMISSIONER HANSFORD: Thank you. 17 CHAIRMAN: Did you have another question? 18 COMMISSIONER HANSFORD: No, that's all from me. 19 MR SO: No questions from China Technology. 20 MR CHANG: No questions from Leighton. 21 MR KHAW: Just a few questions from the government. 22 MR PENNICOTT: I should say that Fang Sheung are not here 23 but they have indicated they've got no questions. Thank 24 you. 25 CHAIRMAN: Atkins?</p>
<p style="text-align: right;">Page 46</p> <p>1 A. Yes, because it would have been a very long and arduous 2 process. 3 COMMISSIONER HANSFORD: That helps me. Thank you. 4 A rather more general point, Mr Huyghe. In 5 Mr Rowsell's expert report, he refers quite extensively 6 to the role of the engineer under the contract, and in 7 your report you don't, and the joint statement between 8 you doesn't make reference to that either. Is that 9 a point you disagree with Mr Rowsell on? 10 A. We talked about that, and in fact we talked about that 11 in detail, and Mr Rowsell can offer his own opinion. 12 COMMISSIONER HANSFORD: I'm sure he will. 13 A. But the engineer of record is actually in the PMP, it's 14 signed by Stephen Chi, I believe -- I could have that 15 name wrong. 16 COMMISSIONER HANSFORD: Stephen Cheuk, I think, isn't it? 17 A. But he would be the engineer of record and he would be 18 responsible for this project regarding the engineering. 19 My opinion was I agree with that and if there's 20 an engineer of record, but in my evaluation I was 21 referring to the engineer who would, like, sign off on 22 hold points which would be the construction engineers on 23 the project. So I was always talking about if there's 24 an engineer needed to sign off on a hold point or sign 25 off on the work in the field, that was somebody that was</p>	<p style="text-align: right;">Page 48</p> <p>1 MR CONNOR: It's the government first. 2 CHAIRMAN: Thank you. Sorry. 3 Cross-examination by MR KHAW 4 MR KHAW: If I may refer you to the joint statement, 5 paragraph 26, the paragraph that Mr Pennicott has just 6 referred you to, in relation to full-time and continuous 7 supervision. We can all see what you and Mr Rowsell 8 have agreed on here. 9 If I can ask you to just take a look at your report 10 on this point. It's page 38 of your report, 11 paragraph 147. Thank you. 12 It's under the heading of "3.4.2", Mr Huyghe; can 13 you see that? 14 A. Yes. 15 Q. In fact, in this heading, you've referred to 16 paragraph 78 of Mr Rowsell's report; do you see that? 17 A. Yes. 18 Q. In paragraph 147 you said: 19 "Rowsell sets out his view on full-time and 20 continuous supervision under the QSP requirement. He 21 states that 'a contractor's supervisor needs to be 22 present at all times where mechanical coupler works are 23 underway'. 24 You have also quoted another sentence from his 25 paragraph 78.</p>

<p style="text-align: right;">Page 49</p> <p>1 In fact there are just a few sentences in 2 Mr Rowsell's paragraph 78 that I wish to seek your 3 comment on. If we can have a look at Mr Rowsell's 4 paragraph 78, the seventh line of this paragraph, where 5 he said: 6 "I consider that the interpretation of this 7 requirement" -- "this requirement" being the full-time 8 and continuous supervision requirement -- is very simple 9 and requires the need for the coupler works to have 10 continuous supervision. That means, in my opinion, that 11 a contractor's supervisor needs to be present always 12 where mechanical coupler works are underway." 13 If we can just stop here. 14 Just looking at this sentence, where Mr Rowsell says 15 it means "a contractor's supervisor needs to be present 16 [at all times] where mechanical coupler works are 17 underway", do you have any objection to what he said 18 here? 19 A. No, but again, as I defined "continuous" -- I think the 20 issue comes back down to the continuous supervision. On 21 a construction project, I think the supervision of work 22 of this nature depending upon how the work is installed, 23 does not require somebody to be out there continually 24 because there may not be a need for them to be there 25 overseeing each and every hour of the work.</p>	<p style="text-align: right;">Page 51</p> <p>1 for example, being present elsewhere on site or in the 2 site office carrying out other tasks." 3 I suppose you would also agree with Mr Rowsell on 4 this point; is that correct? 5 A. Where are you at? 6 Q. Sorry. You see the footnote 21 here after "Mr Aidan 7 Rooney"? 8 A. Yes. 9 Q. Then the sentence starts from, "In my opinion" -- can 10 you see that? 11 A. Yes. 12 Q. It's that sentence that I have referred you to. 13 A. Yes, and you can speak to Mr Rowsell about that as well. 14 You know, I again say that the inspections that are 15 carried out, there may be times that the superintendent 16 has to go to the office and actually fill out paperwork, 17 there's things that go on during the day that, as long 18 as they are experienced and they know that they are 19 fulfilling their obligations to inspect the work, is the 20 key, in my opinion. 21 Q. In your report, if we can go back to your report in 22 relation to this particular topic. If we can have 23 a look at paragraph 156, where you said you agree with 24 Mr Brewster and also Mr Stephen Lumb in relation to 25 their views on full-time continuous supervision; do you</p>
<p style="text-align: right;">Page 50</p> <p>1 Q. Right. 2 A. So I think that a lot of the confusion -- and I hope we 3 can clear it up in the future -- is this normal -- this 4 word of "continuous" supervision on a construction 5 project. 6 Q. Thank you. But I think you agree with Mr Rowsell that 7 continuous and full-time supervision would require 8 somebody present at the time when the actual coupling 9 works were being carried out; that you would agree? 10 A. Yes. 11 Q. Thank you. Then another sentence from Mr Rowsell's 12 report, that is: 13 "The objective being to ensure that the work is done 14 properly in accordance with the specifications and any 15 problems are resolved without delay. It does not have 16 to be the same supervisor for the whole of a working day 17 but continuous supervision has to be provided for the 18 full time that work is underway." 19 Do you have any objection to this statement of 20 Mr Rowsell? 21 A. No. 22 Q. Thank you. Then further down, after he referred to what 23 was said by Mr Paulino Lim of BOSA, he said: 24 "In my opinion, the obligation requires a supervisor 25 to be present at the site of work activity rather than</p>	<p style="text-align: right;">Page 52</p> <p>1 see that? 2 A. Yes. 3 Q. If I may just very quickly take you to have a look at 4 Mr Lumb's evidence which was given at this Inquiry. 5 It's transcript Day 25, page 57. 6 There, Mr Stephen Lumb was giving evidence in 7 relation to his interpretation of full-time supervision. 8 He said: 9 "Full-time supervision' for me means that someone 10 is fully engaged on the project, as opposed to 11 part-time, which is often used in the BD language, which 12 means they are visiting the site, the site being the 13 whole project, at a certain frequency." 14 Then if we move on: 15 "Continuous supervision', again I think, in the 16 context of Hong Kong supervision, just means the normal 17 daily supervision and inspection regime. It certainly, 18 in my opinion, doesn't mean that you are man-marking 19 someone who is actually physically screwing a bar in." 20 That is consistent with what you and also Mr Rowsell 21 said in your joint statement in relation to the 22 man-marking theory; do you see that? 23 A. Yes. 24 Q. If we move on, the Chairman started to ask Mr Lumb some 25 questions regarding his interpretation of the</p>

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<p>1 requirement. The Chairman said: 2 "No, no. The point I am making is perhaps a 3 different one. I accept entirely that 'splicing 4 assemblies' doesn't have to mean necessarily purely the 5 act, and that it might have a broader term meaning once 6 the connection has been made. All I'm asking here is, 7 within this particular paragraph, it says that you will 8 be responsible to carry out full-time and continuous 9 supervision of the splicing assemblies. Now, if in fact 10 you're talking about assembling that's already been 11 done, it strikes me that you don't need then to have 12 full-time and continuous supervision of it. Do you see 13 the point? It would seem to me that in the context of 14 that sentence, what you are asked to do is to have 15 full-time supervision of the actual process of assembly, 16 because otherwise it's like saying -- otherwise you're 17 walking around looking at something that's been done, 18 just a lot of iron." 19 Then his answer was: 20 "I don't think it's ever been read like that, in the 21 context of the Hong Kong construction industry. I'm 22 certainly never aware of circumstances where we've had 23 individuals just literally stood there, watching the 24 physical act of a bar being screwed, because again, in 25 my opinion, that is impractical. You would need to</p>	<p>1 continue on and you wouldn't need to be there with 2 a continuous supervision; you could make your rounds and 3 come back. 4 So again I think it boils down to the experience of 5 the individual and how much time needs to be provided 6 and looking at the coupler work and the rest of the mat 7 that goes -- that is installed. 8 Q. Thank you. Another topic I wish to discuss with you is 9 a point set out in paragraph 27 of the joint statement. 10 In the last sentence of this paragraph it says: 11 "We are also agreed however, that there was a lack 12 of clarity for the designated responsibility of formal 13 inspections and for maintaining records." 14 Do you see that? 15 A. Yes. 16 Q. Correct me if I'm wrong, this point of lack of clarity 17 was not initially picked up in your report; is that 18 correct? 19 A. I don't know if I used the word "clarity" but I pointed 20 it out, and that's in regards to under the QSP it's 21 a requirement that they were supposed to provide 22 20 per cent -- the MTR was supposed to provide 23 20 per cent supervision and they were supposed to 24 provide a TCP-3 inspector, and they didn't designate 25 specifically Kobe Wong, and Kobe Wong was the one who</p>
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<p>1 probably multiply by a factor of ten the number of 2 supervisors on a site to actually carry out that 3 process." 4 That seems to be somewhat inconsistent with what 5 you've just told us; that is someone would actually be 6 required there to actually stand there, during the 7 process, when the actual coupling works were being 8 carried out. Would you agree? 9 A. I don't think this contradicts anything. One of the 10 things I would like to point out is that when you screw 11 the rebar into the coupler, at that same time you 12 normally have iron workers shaking out the steel that 13 follows the coupler work, that you attach and you go 14 forward and put in your mat steel. 15 So I think because of the issue here and this matter 16 has been in the spotlight, the spotlight is on couplers, 17 I don't want to take away from the fact that the iron 18 workers out there that are attaching to that rebar and 19 they are putting in the slab or the steel work, that 20 also needs to be inspected for spacing and requirements. 21 So the idea of a superintendent that watches the 22 couplers go in, once the rebar mat starts to go in, the 23 shake-out of the steel has to be performed, they have to 24 get, obviously, the right sizes of steel, the right 25 spacings, the right chairs in. So that work would</p>	<p>1 provided those inspections. So this, meaning lack of 2 clarity that Mr Rowsell and I spoke about, that was 3 pertaining to that, Mr Kobe Wong was never designated 4 but he was the designee on the diaphragm wall couplers 5 and he performed those duties for the EWL slab but he 6 wasn't actually identified, and that's what we mean by 7 "clarity". 8 Q. Yes. If we can have a look at Mr Rowsell's report, 9 page 54, paragraph 82. He said this: 10 "The procedure for undertaking inspections described 11 by Mr Louis Kwan (a construction engineer ...) in his 12 evidence does not appear to me to be well controlled. 13 He explained that as far as he was concerned, he was 14 only responsible for the inspection of reinforcement 15 bars in the slabs and not the coupler connections 16 although he might look at them. He was not aware 17 however, of who was responsible for coupler inspections. 18 He considered that it was the inspection team which 19 should conduct inspection of the coupler connections in 20 the EWL slab. Mr Kobe Wong, a senior inspector of works 21 of MTR, however, considered that the responsibility for 22 inspecting the couplers connections should lie with the 23 construction engineer team and not the IoWs [the 24 inspectors of works]. There would appear to have been 25 a breakdown in the management communications if it was</p>

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<p>1 not clear where responsibilities lay." 2 Mr Huyghe, I take it that your agreement with 3 Mr Rowsell as stated in the joint statement in relation 4 to the lack of clarity point arose from this particular 5 paragraph of Mr Rowsell's report; is that correct? 6 A. It's part of it. It's not everything. But it's the -- 7 the role that Kobe played was an IoW, but he was a TCP-3 8 under the Geotech stream, so he had the right 9 credentials but he performed the work on the EWL slab. 10 Yes, that would be a part of it. 11 Q. Thank you. Apart from the lack of clarity, in your 12 report you have also commented on Leighton's general 13 lack of awareness of the QSP; do you remember that? 14 A. Yes. 15 Q. The evidence also reveals that in fact none of 16 Leighton's engineers involved in the inspection works 17 was a qualified grade T3 TCP as required under the QSP; 18 do you remember that? 19 A. I'm sorry, will you repeat that again? 20 Q. Yes. The evidence also reveals that none of Leighton's 21 engineers who were involved in the inspection process 22 was a T3 TCP as required under the QSP? 23 A. I don't think they -- they weren't to be designated 24 under the QSP, but they did -- if you look at their 25 quality assurance plan, then they do provide the</p>	<p>1 Q. One final question, Mr Huyghe. When you were preparing 2 for your report on MTR on project management, were you 3 aware of any difficulty that MTR had ever encountered in 4 terms of its communications with any government 5 department? 6 A. No. 7 MR KHAW: Thank you. I have no further questions. 8 CHAIRMAN: Are you likely to be very long, or even moderate 9 length? The reason I ask is it's now 11.35 and perhaps 10 the tea adjournment? 11 MR CONNOR: Moderate, I think, sir, but a good time, 12 I think. 13 CHAIRMAN: Good. Then we will have 15 minutes. Thank you 14 very much. 15 (11.35 am) 16 (A short adjournment) 17 (12.02 pm) 18 MR PENNICOTT: Sir, counsel for China Technology are just 19 taking instructions on a matter but they have indicated 20 that they are happy for us to continue in their absence. 21 CHAIRMAN: Yes. I think one of them has just come in. 22 Apologies for keeping you. Administrative matters 23 arose, as they do from time to time, and that has 24 extended the tea break. Thank you. 25 Cross-examination by MR CONNOR</p>
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<p>1 necessary supervision/inspections of that work. 2 Q. Yes. On this note, if I can ask you to have a look at 3 your paragraph 54 -- it may be just a matter of 4 presentation but I just want to clarify that with you. 5 Paragraph 54 starts at page 15, but my focus is on 6 paragraph 54(c), where you started the sentence by 7 saying: 8 "Even though MTRCL and Leighton provided proper and 9 continuous supervision and inspections of the 10 rebar/coupler [connections] that were required of 11 them ..." 12 Given the lack of clarity in relation to 13 responsibilities that we've identified, given that we've 14 also identified that in fact Leighton was not aware of 15 the QSP requirements, I'm just wondering on what basis 16 did you say that "MTRC and Leighton provided proper and 17 continuous supervision and inspections of the coupler 18 installations". 19 A. Yes, "that were required of them". 20 Q. Yes. 21 A. And the requirement of them basically goes back to the 22 QSP with 20 per cent supervision, and that was provided 23 by Kobe Wong, and under the QAS of Leightons, they also 24 provided continuous supervision over the quality 25 control, based on the QAS and the ITP.</p>	<p>1 MR CONNOR: Thank you, sir. Thank you, Professor. 2 Good afternoon, Mr Huyghe. 3 A. Good afternoon. 4 Q. We have met but for the record I'm Vincent Connor, 5 representing Atkins China Ltd, and I have a few 6 questions for you in relation to matters arising in your 7 joint statement with Mr Rowsell and arising from your 8 report. 9 A. Great. 10 Q. Thank you. 11 There are two main areas on which I have some 12 questions, but perhaps just before we come to them 13 I might pick up on a point that arose through some 14 questions earlier, I think from Mr Pennicott. 15 If you have in front of you, which I think you do, 16 your own report, and in particular -- sorry, which for 17 the record is ER1, tab 2 -- and turn to paragraph 245 of 18 it, please, which appears on page 57 -- a short point, 19 Mr Huyghe, which doesn't touch on the two areas on which 20 I have questions, but you remember Prof Hansford I think 21 in particular asked you about your comment in this 22 paragraph. The paragraph begins, "In this context", and 23 in the second sentence you make reference to 24 an alternative plan for tying in the rebar with the 25 cast-in couplers, to deal with coupler alignment issues</p>

<p style="text-align: right;">Page 61</p> <p>1 by using thousands of drill-in dowel bars. 2 The short point I think is this, Mr Huyghe. When 3 you were asked about that earlier by Prof Hansford, 4 I think you were not clear as to what document you may 5 have seen in all your work that gave rise to that point. 6 Firstly, maybe I might ask you, in the time since the 7 professor asked you that question, has it occurred to 8 you where you might have seen that? 9 A. No. 10 Q. Thank you. The particular reason why I do ask you is 11 that you have no doubt seen a lot of the evidence that 12 the Commissioners have heard so far, and in particular 13 the evidence that arises through the preparation of 14 either temporary works design submissions or permanent 15 works design submissions, and you have heard 16 references -- forgive me for many a reference number -- 17 to TWD-025C1, to TWD-4B3 and 4B2, PWD-59A3, DAmS 310 18 TQ33 and TQ34 -- I stand to be corrected but I don't 19 think any of those actually deal with a particular 20 detail of the scope and range of the kind that you refer 21 to there. 22 So, to help you, that's probably why at least one of 23 us, maybe more than one of us, was asking the question 24 and is now asking the question. But upon reflection you 25 can't really help us?</p>	<p style="text-align: right;">Page 63</p> <p>1 section D, and that appears on page T-3 and 2 paragraphs 15 and 16. 3 Dealing firstly with paragraph 15 of the joint 4 statement, you say there: 5 "We agree that it is not a good practice for the 6 same design firm (ie Atkins) to provide services to the 7 employer and to also represent the contractor in making 8 design revisions or modifications, because it poses 9 a real or perceived conflict of interest." 10 Yes? 11 A. Yes. 12 Q. You then go on to say that "MTRC should develop 13 a conflict of interest policy and procedure for 14 a conflict of interest check on all design-related 15 services". 16 A. Yes. 17 Q. I'd like then to deal, if I may, in a few questions, 18 with this section first, and we will come back to 19 communication as a separate point in just a moment. 20 Just as a preliminary point on this question of 21 conflict of interest, given that you are instructed for 22 the purposes of this Commission by MTR Corporation, do 23 you recall as part of your instructions whether you were 24 furnished with any such conflict of interest policy that 25 they have?</p>
<p style="text-align: right;">Page 62</p> <p>1 A. I can't. 2 Q. Thank you. I'm happy then just to move on. 3 My starting point in my moderate time with you this 4 afternoon is the joint statement, if I may, but if you 5 keep your report in front of you, please -- if we have 6 on the screen, please, the joint statement, which is 7 ER1, tab 9. 8 There are, as you will recall, two broad areas 9 arising in your report and therefore in this statement, 10 which touch upon the interest of Atkins in relation to 11 the matter. The first of them is covered in section C 12 of the joint statement, and particularly you will see at 13 page T-2, paragraph 12. 14 You say there: 15 "We agree that, even though interactions had 16 occurred, there was a lack of meaningful communications 17 between MTRCL's DM and CM teams, Leighton, and Atkins." 18 You recall that? 19 A. Yes. 20 Q. Then in paragraph 14 you go on to deal with some 21 suggestions on how the communications might be improved. 22 If you will bear with me, I would like to come back 23 to this section in just a moment, but for completeness 24 the second broad area that you deal with in your report 25 and therefore also in this joint statement appears in</p>	<p style="text-align: right;">Page 64</p> <p>1 A. I don't recall seeing one. 2 Q. Did you hear about one in particular in the course of 3 your engagement by MTR? 4 A. No. 5 Q. I think I'm right in saying that this particular forward 6 recommendation regarding the provision of a conflict of 7 interest policy did not arise in your own report or 8 table 3 but is one which Mr Rowsell has covered and 9 which you agree with? 10 A. Yes, we discussed that and the specific reference to 11 this conflict of interest was that -- it goes back to 12 when Atkins was first retained as team A and then it 13 progressed along and then became team B. So the 14 discussion Mr Rowsell and I had was that if there was 15 possibly a conflict of interest policy for the design 16 process -- that's how the topic began. 17 Q. My question which is about to come is not intended to be 18 critical, it's just more to explore where you are with 19 that recommendation. You do not go further at this 20 stage to delve into what the detail of that policy would 21 consist of? 22 A. No. 23 Q. Simply that there ought to be one? 24 A. Yes. 25 Q. So does one take it from that that it is at least within</p>



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<p>1 your range of expectation that it is possible in the 2 future that one could have a situation again, as we did 3 here, where a designer is engaged by both employer and 4 contractor, but simply that they will be so engaged 5 under the auspices of such a conflict of interest 6 policy? 7 A. Yes, as long as -- the issue that we're referring to, 8 regarding to, again, the process of how the engineer was 9 retained is separate and apart from just an overall, 10 I think, comment that you've just made. 11 Q. Let me just unpack that a little bit. If I understand 12 your future recommendation, it is that, if I may put it 13 in my words, if there is to be another occasion in the 14 future where MTR and the contractor each engage the same 15 consultant, then it is important, in your 16 recommendation, that they do so with a conflict of 17 interest policy in place? 18 A. It spells out specific requirements regarding the use of 19 an owner having an engineer and then the contractor 20 employing the same engineer. 21 Q. Understood. 22 And in fairness, at this stage, if you and I think 23 Mr Rowsell -- quite clearly he can speak for himself -- 24 but you don't go to the extent of dictating or writing 25 what that policy would look like but simply that there</p>	<p>1 least on the face of it, it would appear that, at the 2 stage of Atkins being invited to tender for services to 3 MTR, there was at least some consideration given to two 4 things: one, that it is possible that they might have 5 been appointed in due course by the successful tendering 6 contractor also; do you see that? 7 A. Yes. 8 Q. And also, shall we say, a direction that if that 9 happens, that they should avoid the situation of 10 conflicts of interest? 11 A. It's very broad language, but yes. 12 Q. So this will be a matter of submissions in due course, 13 but if that be the case, that doesn't necessarily go 14 quite as far as what you and Mr Rowsell talked about in 15 terms of a conflicts of interest policy, but at least 16 there's something there that gives the warning and the 17 steer to the appointed consultant as to what he should 18 do if he is appointed also in due course by the 19 successful contractor; yes? 20 A. That's correct. 21 Q. Thank you. 22 CHAIRMAN: The only problem, again -- of course it's 23 a comment with a question mark -- but at the end it's 24 very broad language, is it not? 25 MR CONNOR: Absolutely, sir. I think it's a matter that one</p>
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<p>1 ought to be one? 2 A. Yes. 3 Q. I raise the next document not with a view to casting 4 doubt on that at all, just simply by way of background. 5 Could you have before you a document, please, B8214. 6 That is a page from the tendering document of the 7 consultancy agreement C1106 which we understand to be 8 the consultancy agreement eventually entered into here 9 by Atkins and MTR. 10 Have you seen this document before, Mr Huyghe? 11 A. I don't recall seeing it. 12 Q. If we might scroll down, please, to condition Y3.8. 13 I pause at this point, and accepting that you 14 haven't seen this document before, then if you can for 15 these purposes take my proposition to you that it forms 16 part of the tendering materials for the purposes of the 17 consultancy agreement that we've been discussing. 18 You'll see at paragraph Y3.8, there's a provision 19 there that: 20 "The Consultant shall avoid the situation of 21 conflicts of interest that may arise should the 22 Appointed Tenderer wish to engage him as his technical 23 adviser." 24 Now, you haven't seen this before and it wasn't 25 brought to your attention apparently before, but at</p>	<p>1 would submit to you in due course on. But I think it's 2 not something which has been brought out before you so 3 far. 4 CHAIRMAN: No. 5 MR CONNOR: And I think it is important for the Commission 6 to understand that clearly MTR had this in anticipation 7 as a possibility at that stage. 8 CHAIRMAN: Yes. 9 MR CONNOR: And what the consultant ought to do. 10 CHAIRMAN: Yes. The only thing -- my reading of what's been 11 said by the experts is that they're looking at conflict 12 of interest policies that are a lot more specific and 13 would say, "In this instance you don't do X" or "In this 14 instance you can do Y but it must be subject to the 15 following safeguards." We talk about Chinese walls and 16 things like that in finance companies and that kind of 17 thing. It's similar. 18 MR CONNOR: I'm sure the Chairman is right but I think 19 Mr Huyghe has said already and he and Mr Rowsell in 20 their recommendation do anticipate a policy, and 21 one assumes that a policy goes much further than two or 22 three lines. 23 CHAIRMAN: Yes. 24 MR CONNOR: But in fairness to the witness, what he said is 25 they haven't got as far as seeking to articulate what</p>

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<p>1 that policy would look like, just that there should be 2 one. 3 CHAIRMAN: Yes. 4 COMMISSIONER HANSFORD: Just for my part, Mr Connor, I don't 5 understand what "shall avoid the situation" means in 6 this context, but that's just for my part. 7 MR CONNOR: Understood. Again, Professor, I think that's 8 not something that's, I think, fair to take this witness 9 into, but again just for your and the Chairman's 10 benefit, I think we do have some factual evidence from 11 before Christmas as to at least what a number of the 12 players, shall we say, in relation to the consultancies, 13 saw as being the boundaries. 14 COMMISSIONER HANSFORD: Yes. 15 MR CONNOR: And Mr Blackwood in particular as to where he 16 saw those boundaries and what they should do in the 17 event those boundaries were discovered. I think 18 actually, in response to you, Professor, he explained 19 that there were indeed -- pardon me, in response to 20 Mr Pennicott, I think it was -- a number of situations 21 where that boundary was seen to have arisen and it was 22 not crossed. But again -- 23 CHAIRMAN: We'll come to that in submissions. 24 MR CONNOR: We will, sir. Thank you, both. 25 Thank you for that, Mr Huyghe. Just going back then</p>	<p>1 involved with them they were actually also doing their 2 temporary works, and they were appointed to 3 a contractor, and the contractor would take issue with 4 the original design drawings, and therefore lay the 5 problem because they were their own engineer on the site 6 and there were disputes, major disputes, that arose out 7 of that problem, because the engineer -- or the owner 8 and the contractor's appointed engineer -- were one and the 9 same, and that caused massive problems on that, for 10 them. 11 Q. So that is one example that you've come across in your 12 career where it has happened and has not been a happy 13 outcome. 14 A. Correct. 15 Q. But there is, I think, in the industry a much greater 16 pattern of this type of activity, namely the appointment 17 of a designer by both owner and contractor, of the type 18 we see here, than might be suggested. It happens, 19 doesn't it? 20 A. Yes. It happens in a lot of industrial projects where 21 the FEE drawings, the basic design is done by a CM and 22 then the design is done by the same firm and then they 23 are the ones on site who are looking at their own 24 drawings. So it is in the industry, yes. 25 Q. And in the industry, perhaps in Hong Kong -- we'll come</p>
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<p>1 to -- we've looked at your joint statement with 2 Mr Rowsell, and you of course had the backdrop of that 3 in your statement. You say in the joint statement 4 itself that it is not a good practice for the situation 5 to have arisen where Atkins were appointed to both MTR 6 and Leighton. 7 But we have your assistance in the last short while 8 on the fact that in some circumstances it may be 9 acceptable, or at least one being, if there is, as you 10 say, in due course a conflict of interest policy 11 articulated, that would give the comforts that you 12 indicated. Have you come across it before in your 13 extensive career? 14 A. A conflict of interest policy that -- 15 Q. No, I beg your pardon. That's my fault for not asking 16 the question. Have you come before, in your extensive 17 career, a situation which we had here, namely where the 18 owner had appointed a designer on one package of support 19 and the tendering contractor had appointed the same one? 20 A. Yes. 21 Q. So it's not unknown? 22 A. It's not unknown from -- I don't understand your 23 question. It's not unknown -- there was a situation 24 that I dealt with regarding to New York City Transit, 25 that they do their own design, and when I first got</p>	<p>1 to that in a moment -- but certainly in the US, in 2 Europe, elsewhere? 3 A. I find it primarily on big industrial undertakings is 4 where it's prevalent. 5 Q. In the situation that we had here -- you have no doubt 6 read the testimony that we've had from a number of 7 witnesses, some from Atkins, Mr Blackwood in particular, 8 Dr McCrae from Atkins; have you read their testimony? 9 A. Yes. 10 Q. Mr Buckland of Leighton, Mr Taylor from Leighton; you 11 have read theirs? 12 A. Yes. 13 Q. What one sees -- I'm very happy to take you to the terms 14 of it -- but there is, I would suggest to you, a flavour 15 that there was recognised to be a value, in this 16 particular case, on this particular project, in 17 appointing Atkins through the team A and then 18 subsequently the team B role, and those witnesses 19 articulated that around the use the expression 20 "synergy", and they referred to knowledge and the 21 ability to effectively make things move more smoothly 22 because of that shared knowledge. You have read that 23 testimony? 24 A. I've read that, yes. 25 Q. You will have also read the evidence from Mr Blackwood</p>

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<p>1 and Mr McCrae that the scope of the original package of 2 work which was given to team B of Atkins grew 3 extensively as the demands of the project developed; 4 yes? 5 A. Yes. 6 Q. So, in that situation, where the parties see a value in 7 relation to capturing the synergy, capturing the shared 8 knowledge, keeping up with the speed of development on 9 the projects and ensuring that progress is maintained, 10 subject to your comments earlier about the necessity in 11 your recommendation for an appropriate policy, you would 12 share, at the very least, or recognise why people might 13 think that such a benefit existed? 14 A. I read that, but again, as I explained earlier, on my 15 methodology, on how I evaluated the project, I looked at 16 the way the project has planned and then the actual, how 17 it was actually performed. 18 Regarding the engineering and the design -- and the 19 reason why I basically wanted to point it out in my 20 report was that with specific regard to the actual, in 21 the top of the diaphragm wall, there were no working 22 drawings, and the TQ34 that was issued on 27 July was 23 actually issued after construction began. 24 And so when I read testimony -- and I'll call it the 25 warm and fuzzy but how it should work, when I look at</p>	<p>1 initially of that evidence. If you look at line 11, 2 please, of that testimony, there's reference here to 3 a meeting of the PSC, which Mr Coleman is referring to; 4 do you see that? 5 A. Yes. 6 Q. He refers to a meeting of the PSC on 30 December 2015, 7 and a reference then to, as you will see on line 19, 8 a Mr Chan. 9 If you read on down to line 21, there's a reference 10 to Mr Chan as being present for the M&amp;V consultant as 11 deputy project manager-financial. 12 If I can just pause at this point, is this a tract 13 of evidence that you have seen before? 14 A. I believe I have read this, yes. 15 Q. Take a bit of time to go through it. 16 There is reference then to a statement by Mr Chan at 17 line 24 to 25 "that some of MTRCL's design consultants 18 had also been appointed by some contractors as their 19 designer for alternative works under the same contract, 20 for example contracts 1106, 1112, 1114 and 1123." 21 It goes on to say: 22 "It appears there might be a conflict of interest. 23 MTRCL was requested to review their procedures to ensure 24 that adequate firewall was in place. Pypun would review 25 the responses provided by MTRC and advise the finding in</p>
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<p>1 the actual progress of what happened on site, it didn't. 2 So that then, I guess, supported my opinion on what I've 3 seen on past projects about the owner and the contractor 4 being one and the same as far as the designer. 5 Q. Thank you for that. Perhaps you can come back to that 6 specific example in a moment, but really my question was 7 driven towards whether or not that objective, that 8 aspiration, the rationale for the dual appointment is 9 one which you read and you can understand and respect as 10 being an appropriate thing to do? 11 A. Yes, yes. 12 Q. Whether it happened in fact or not -- 13 A. I agree that when you look at construction, you start 14 off with turnkey operations and then the design and 15 build, that was always the intent, for there to be this 16 continual flow of information on the project. That was 17 the intent. 18 Q. Thank you for that. And that particularly on a complex 19 project? 20 A. Yes. 21 Q. Did you read also the testimony of Mr Ron Yueng of 22 Pypun, the M&amp;V consultant? 23 A. I believe so, yes. 24 Q. Just to help you in that regard, if you can turn to the 25 transcript, please, of Day 35, and in particular page 12</p>	<p>1 the next meeting." 2 Then it goes on with -- Mr Coleman continues to ask: 3 "As I understand the answer you gave to the 4 Chairman's question, Pypun did review the responses and 5 reported back that there did not appear to be a 6 conflict, or at least not one that was not protected by 7 different teams and walls? 8 Answer: Mr Chan told me that MTR -- in the MTR 9 management system, they did not object to having one 10 contractor in a contract serving the MTRC and another 11 contractor. So we looked up the acceptance letter and 12 we saw that -- we looked up the clauses in the 13 acceptance letter. We also followed up with the 14 organisation chart. There was no overlapping between 15 team A and team B. So, in the subsequent meeting -- so 16 in January 2016 we reported that back to the RDO." 17 Then there's a reference to a witness statement, 18 which I won't trouble you with at that point, but if you 19 carry down to lines 24 and 25, here referring to 20 supplement engagement, it continues "so an engagement on 21 top of the M&amp;V", and then it continues at that point. 22 Pausing at that point, Mr Huyghe, and I appreciate 23 this is not evidence that you have necessarily seen 24 before and there is no criticism intended here because 25 there is a huge amount of material here, but again</p>

<p style="text-align: right;">Page 77</p> <p>1 a matter for submissions to the learned Commissioners in 2 due course -- but if there is evidence here, 3 Mr Huyghe -- and we'll come to communication later -- if 4 there's evidence here that MTR not just as far as Atkins 5 is concerned but in a number of other packages on the 6 Shatin to Central line have acceded to, agreed to and 7 allowed to happen the appointment of design consultants 8 that they have already engaged also by contractors, then 9 it appears to be a very deliberate policy, no doubt to 10 address the kind of efficiencies, synergies, sharing of 11 knowledge, et cetera, that we touched on earlier. Do 12 you agree? 13 A. I would agree, but that also said -- in the preceding it 14 said that if you have separate people working on team A 15 and team B, and there's been testimony given here that 16 I've read that their team A and team B were intermixed 17 and they had the same boss. So that was another point 18 that I took into consideration when I made my opinion. 19 And let me say, using designers in this fashion, 20 there are circumstances, there are projects I know of, 21 that they are using it. However, I have never, in my 22 experience, seen that it worked out clean-cut and it 23 worked out properly. Therefore, I guess maybe I'm 24 getting old but I try to eliminate problems in that if 25 you don't do it to begin with, you don't have the</p>	<p style="text-align: right;">Page 79</p> <p>1 you see -- but if in principle an arrangement of the 2 kind that MTR and Leighton had with Atkins here can in 3 the future be done, subject to your comments about 4 policy, your point here is that you are worried if in 5 fact there is some crossover between the personnel? 6 A. Yes. 7 Q. And you have mentioned a particular point about where 8 the boss is the same a moment ago, and do you mean by 9 that the same project director? 10 A. Yes. 11 Q. We'll come back to that point in a moment, but as far as 12 the extent of crossover here is concerned, again 13 a matter of submission to the learned Commissioners in 14 due course, but it's my recollection that really the 15 evidence that the Commissioners have heard suggests that 16 two or three individuals may well have made that 17 crossover. Does that match your reading? 18 A. Yes. 19 Q. And that, in a project in which -- as between MTR and 20 Leighton and sub-contractors and other sub-consultants 21 involves thousands of people; yes? 22 A. Yes. 23 Q. And that, in a situation where Atkins themselves, as you 24 will have seen from the evidence, had at one point over 25 300 people working on the project?</p>
<p style="text-align: right;">Page 78</p> <p>1 problem to deal with. So my recommendation was it's bad 2 to do that, you should take another alternative if you 3 can, because that would stop it, I think, at the ground 4 zero. That's just my opinion. 5 Q. Yes, I understand that, Mr Huyghe. But you will also 6 understand that a professional like yourself, like some 7 of the professionals in this room, tend to see the 8 projects that have the problems rather than those that 9 go smoothly. 10 A. I understand. Believe me, I understand that point. 11 Q. Against that background, you did talk about numbers of 12 people. It is a point that you make, and I think you 13 make it actually in your own report, where you talk 14 about the situation where Atkins had been appointed. 15 I think it's in paragraph 143 on page 37 of your report 16 at ER1/2. You make your point at paragraph 143 with 17 reference to Mr Rowsell's report, and it's there that 18 you make your point about good practice. You finish 19 that by saying: 20 "This is particularly the case where the two teams 21 comprise some of the same staff members, as I understand 22 happened in this instance." 23 Just to unpack that a little bit, because you helped 24 us with it a moment ago -- if in principle, Mr Huyghe -- 25 you don't really like it because of the kind of projects</p>	<p style="text-align: right;">Page 80</p> <p>1 A. Yes. 2 Q. Is it not really in that sort of context that you may 3 hold to your point of principle that there should not be 4 crossover, but you are not really suggesting to the 5 Commissioners that the crossover, if I put it this way, 6 of two or three people makes a difference between 7 a properly governed arrangement and one that's not? 8 Particularly, if I may just add to that, in a situation 9 where it has arisen, as the evidence suggests, through 10 the exigencies of progress. 11 A. Again, it's not the number of people. And let me -- 12 I did refer to this in my report and I think it's 13 important to make this comment. 14 I learned a long time ago that people in our 15 industry, in construction, believe that design is a work 16 product. They think that when they get a set of 17 drawings, 100 per cent set of drawings, that that's 18 a work product. And design is not a work product. It's 19 a process. The process starts when you get those set of 20 drawings, and there are revisions made for a number of 21 reasons. There could be revisions made because that 22 designer did them wrong. There could be revisions made 23 because there are constructability issues that arise. 24 So if in fact you agree with that concept, that 25 design is not a work product but a process, you should</p>

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<p>1 not intermix the individuals in that process because you 2 will find there are normally issues that do arise based 3 on that initial design package that people think is work 4 product, that in reality, from my experience, it's not. 5 Q. So respecting that view, Mr Huyghe, and looking to the 6 future, that is the thing you say or one of the things 7 you say should be avoided? 8 A. Yes. 9 Q. Looking to the past and what has happened here, you do 10 not point -- nor indeed, in fairness, does anyone else, 11 I think -- to a situation where conflict of interest on 12 the part of any individual within Atkins is demonstrated 13 by the way in which they behaved or issued their 14 documents? 15 A. No. I'm not saying that. No. 16 Q. You do not point in your report or in the joint 17 statement to a single situation where, perhaps with the 18 exception of the question that was raised in the Pypun 19 investigation we looked at a moment ago, you do not 20 refer to any situation where a question was raised as to 21 a perception of conflict of interest on the part of any 22 Atkins person during this project? 23 A. I have not read that, no. 24 CHAIRMAN: I'm happy with that, except of course we're 25 talking about expert evidence here, not evidence of</p>	<p>1 Commissioners -- in paragraph 140 you are referring to 2 Mr Rowsell's observations and it's there that you give 3 support to what he said and accord with it. 4 In paragraph 141, you describe that your focus, as 5 you had said in the introduction in your report, would 6 be on the defective coupler and rebar installations and 7 the change in connection detail issues, and you go on to 8 say the defective installations do not appear to be 9 related to that dual role. 10 Then the paragraph I was taking you to a moment ago, 11 142: 12 "Regarding the change in connection detail ..." 13 Which we all understand to be the connection detail 14 between the EWL slab and the D-wall. 15 "... the key project management issue appears to 16 centre around communication and coordination among 17 related parties or teams, which I will discuss in 18 further detail in section 3.6 under ... F ..." 19 Do you see that? 20 A. Mm-hmm. 21 Q. So before we look at section 3.6, as I've alighted upon 22 earlier on, it is your conclusions in your report on 23 this point that then lead you to the joint statement, 24 paragraph 12. Again, if you just have that in front of 25 you, that is your agreement with Mr Rowsell:</p>
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<p>1 fact. 2 MR CONNOR: Indeed. 3 CHAIRMAN: I appreciate that an expert has to have some 4 facts upon which to draw conclusions, but I would have 5 been concerned if the expert witnesses here, which they 6 have not done, had taken one step further and purported 7 to be decision-makers on fact. 8 MR CONNOR: Understood, sir. The question was really put to 9 Mr Huyghe purely on the basis of those facts of which he 10 had been apprised for the purposes of making his report 11 and no further than that. 12 CHAIRMAN: Yes. That's why I said I'm happy with it, but 13 I just didn't want to step over the line. 14 MR CONNOR: No, and I share that view, sir. Thank you. 15 Thank you for that, Mr Huyghe. I did say that we 16 would come back to the other point, about communication. 17 For the purposes of your report, you deal with it in 18 section 3.3. It is there, in 3.3, that you deal with 19 the question of Atkins' roles in supporting MTRC and 20 Leighton, and that is set out in page 36 at 21 paragraph 140 and subsequent. 22 In particular, you say in paragraph 142: 23 "Regarding the change in connection detail ..." 24 Sorry, maybe just for completeness and fairness to 25 you I should put this in context -- it might help the</p>	<p>1 "... that, even though interactions had occurred, 2 there was a lack of meaningful communications between 3 MTRCL's DM and CM teams, Leighton, and Atkins." 4 Yes? 5 A. Yes. 6 Q. If I can put it this way, Mr Huyghe, just to help me, at 7 the very least: what we see, in your 3.3 and, as we will 8 come to, at 3.6, is what led you to your agreement with 9 Mr Rowsell that we see in paragraph 12? 10 A. Yes. 11 Q. Then returning to your report, ER1/2 -- it's in 12 section 3.6, as you mentioned a moment ago, that one 13 looks for the key conclusions that you come to to 14 support your view and your agreement with Mr Rowsell; 15 yes? 16 A. Yes. 17 Q. If I read it properly -- and we can go through it 18 paragraph by paragraph, if that helps -- but really what 19 you centre upon here -- what your conclusions are all 20 consistent with here is a communications process between 21 MTRC's design management team and their CM team. That's 22 the big point here, isn't it? 23 A. It's the primary point, yes. 24 Q. Because we see that in paragraph 241, yes, where you are 25 agreeing with Mr Rowsell?</p>

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1 A. Yes.  
2 Q. It is this point that then leads to your view expressed  
3 at the beginning of paragraph 244, where you talk about  
4 the change in connection detail being  
5 "a constructability issue"; yes?  
6 A. Yes.  
7 Q. We find that then arising, not unsurprisingly, from the  
8 evidence that you have looked at and considered for the  
9 purposes of your report, set out then on paragraph 247  
10 onwards, dealing with Mr Kit Chan's evidence, and indeed  
11 that of Mr Andy Leung. In particular, in  
12 paragraphs 249, 250, 251; do you see that?  
13 A. Yes.  
14 Q. Then you return to it in the context of the change to  
15 through-bars, which is then set out at paragraph 253 and  
16 subsequently: 253 and 254, where there is the reference  
17 to the return to the original construction detail; 255  
18 in relation to the means that was ultimately used; and  
19 257, where Mr Chan's evidence about the minor nature of  
20 the change in construction detail is noted; and 259,  
21 where you identify the key issue in the  
22 communication/coordination between the CM and DM teams.  
23 Correct?  
24 A. Yes.  
25 Q. You do not, just in fairness to you, point to a failure

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1 in communication that arises from, for example,  
2 a technical query which is asked of Atkins in relation  
3 to the breaking down of the D-wall on change to  
4 through-bars which is not answered?  
5 A. No.  
6 Q. The problem, as far as you are concerned, lies as  
7 between the CM and DM teams in MTR?  
8 A. That's correct.  
9 Q. Given its future view in terms of your recommendation,  
10 because I think it's what you and -- perhaps just to  
11 bring it right up to date, what you and Mr Rowsell look  
12 at, in paragraph 14 of your joint statement, ERI/9,  
13 where you say:  
14 "Suggestions on how the communications between  
15 MTRC's CM and DM teams can be improved include:  
16 Review the liaison arrangements between the  
17 contractor's design team, the DA and MTRC's design and  
18 construction management teams to ensure that there [is]  
19 a common understanding of submission requirements and  
20 that all parties are aware of design issues and the  
21 forward programme submissions."  
22 Yes?  
23 A. Yes.  
24 Q. Then secondly:  
25 "Develop and implement the use of BIM as

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1 a collaboration tool."  
2 A. Correct.  
3 Q. Again there's no criticism; this is your forward  
4 recommendation -- all of this stems from the breakdown  
5 in communication between the CM and DM teams in MTR?  
6 A. Yes, but also there were discussions that were being  
7 held obviously with team A and team B. But what I saw  
8 the communication and what I opined on was there were  
9 weekly meetings between CM and DM to go over all issues  
10 regarding design, and I would have felt that in those  
11 meetings this issue regarding the diaphragm wall would  
12 have been front and centre and that there would not have  
13 been any misunderstandings because of the nature of the  
14 work to be performed, and that's why I came to my  
15 conclusion.  
16 Q. Understood. I think also, in fairness to you, what you  
17 also identify I believe in your report and certainly in  
18 your joint statement is the view that certainly, for  
19 work to proceed, in terms of the breaking down of the  
20 diaphragm wall, and for the replacement of through-bars,  
21 you would have expected and required drawings, working  
22 drawings, to demonstrate all of that?  
23 A. That's correct.  
24 Q. So dialogue, discussions, and so on, between team A and  
25 team B, putting all of that to one side, the key thing

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1 here is that who knows, there may have been views held  
2 by parties within the CM and DM teams, and the learned  
3 Commissioners have heard all of about that, there may  
4 well have been ideas as to what might be done, and who  
5 knows, there might even have been some misapprehensions  
6 about what would be an appropriate thing to do and what  
7 would not.  
8 But I think your evidence to the Commission,  
9 Mr Huyghe, is that regardless of all of that, you don't  
10 make a step in relation to a change of the kind we are  
11 talking about in the absence of there being clarity, and  
12 if there's no clarity you ask for clarity, and you  
13 certainly don't proceed unless you have the design in  
14 front of you to build to?  
15 A. Yes, and in this particular instance what drew my  
16 attention to it was that all these conversations and  
17 communications that were ongoing were primarily after  
18 TQ34 was actually -- on 27 July, I think it was, was  
19 when it was actually issued. If you look at the  
20 as-built records, the construction at the top of the  
21 diaphragm wall was going on before the TQ and all these  
22 conversations were occurring.  
23 So, as we say -- I'm a farm boy -- the horse was out  
24 of the barn, if I may say; they were going forward with  
25 the construction prior to even having the TQ34 reviewed,

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<p>1 and then the following conversations afterwards.</p> <p>2 Q. That's a key point you point to to suggest that</p> <p>3 whatever's happening in construction, there isn't</p> <p>4 a meeting of minds as regards those who are preparing</p> <p>5 the design because, whether it's TQ34 or whether it's</p> <p>6 PWD-59A3, none of that matches what was actually being</p> <p>7 built?</p> <p>8 A. That's correct.</p> <p>9 Q. As part of your reading, you will have picked up the</p> <p>10 fact that as far as Atkins were concerned, the knowledge</p> <p>11 of the breakdown of the D-wall and the use of</p> <p>12 through-bars was something that they certainly did not</p> <p>13 have until June 2018?</p> <p>14 A. Until after the issue was brought up, that's right.</p> <p>15 Q. So when we take a step back, Mr Huyghe -- and we have</p> <p>16 a situation, if I can put to you the proposition, where</p> <p>17 the dual appointment has been entered into between MTR</p> <p>18 and Leighton and Atkins for both appointments -- it's</p> <p>19 been entered into in the full knowledge of all parties;</p> <p>20 there has been an intention to keep separate teams, but</p> <p>21 there has been modest crossover of some personnel at</p> <p>22 a later stage. Do you follow?</p> <p>23 A. Okay.</p> <p>24 Q. There is no evidence that has been shown to you that</p> <p>25 suggests that anyone has been acting with either actual</p>	<p>1 team within MTR would discuss with Leighton, and that</p> <p>2 Leighton would discuss with Atkins team B?</p> <p>3 A. No. The CM would discuss with their own team B what</p> <p>4 this proposed change was, and then the proposed change</p> <p>5 was supposed to be submitted to MTR and team A. They</p> <p>6 were to review that change and then submit a working</p> <p>7 drawing back to team B.</p> <p>8 Q. There's a missing link in there, isn't there, because if</p> <p>9 we follow it, it is whatever Atkins team B is asked to</p> <p>10 do, it goes to Leighton, as contractor. It then goes to</p> <p>11 MTR's construction management team; yes?</p> <p>12 A. Well, I think that the way I perceive it is you've got</p> <p>13 the CM team. In this instance they were dealing with</p> <p>14 this existing condition that they had to come up with</p> <p>15 a way to get around. The CM team would go to -- to come</p> <p>16 up with something to submit to MTR and team A, they had</p> <p>17 to come up with an idea or a submission saying, "This is</p> <p>18 what we're going to collectively do." CM comes up, they</p> <p>19 work with team B, they give it to team A and MTRC, they</p> <p>20 say yes, and then they issue a working drawing.</p> <p>21 Q. And that didn't happen?</p> <p>22 A. That's correct.</p> <p>23 Q. It didn't happen.</p> <p>24 Just to go back to your comment of a moment ago, and</p> <p>25 again it's a matter for evidence and therefore</p>
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<p>1 or perceived conflict of interest; correct?</p> <p>2 A. Correct.</p> <p>3 Q. But all we have is a suggestion at 2015 that the CM team</p> <p>4 within MTR and the DM team within MTR are not at</p> <p>5 a meeting of minds as regards the breakdown of the</p> <p>6 D-wall and the use of through-bars?</p> <p>7 A. Well, to this extent: the CM team, when they discovered</p> <p>8 that there was this issue, the process should have been</p> <p>9 that they got with their team B and they would come up</p> <p>10 with a proposal to submit to team A and the MTR -- if it</p> <p>11 was agreed upon, they would prepare a working drawing</p> <p>12 that then would be submitted right back to the CM and</p> <p>13 team B. So I believe that everything we're talking</p> <p>14 about, I can't say that -- I'm not pointing fingers, I'm</p> <p>15 just saying it's hard to me to understand that team A</p> <p>16 and team B weren't aware of the issues regarding the top</p> <p>17 of the diaphragm wall.</p> <p>18 Q. That's noted, but if I may step back a little bit in</p> <p>19 your chain -- and forgive me because I might now seek to</p> <p>20 correct something that you got absolutely correct;</p> <p>21 I will be corrected on that -- but if it were the case</p> <p>22 that there was to be a change of the kind that we have</p> <p>23 been talking about, there's a connection detail at the</p> <p>24 EWL slab D-wall, then as I think you were indicating</p> <p>25 that is something that the CM team would take to -- CM</p>	<p>1 submission to the Commissioners in due course, but if</p> <p>2 you may take my proposition at the moment -- there is no</p> <p>3 evidence that Atkins had any knowledge whatsoever about</p> <p>4 the intention to break down the D-wall and the use of</p> <p>5 through-bars. If you take that as a proposition,</p> <p>6 standing to one side the terms of the temporary works</p> <p>7 documents and standing to one side the terms of TQ33</p> <p>8 and 34, which are for very particular areas, there was</p> <p>9 no knowledge.</p> <p>10 So against that background, if the issue as you</p> <p>11 conclude is all about the CM and DM teams within MTR not</p> <p>12 being of a common view as to what was to be done, none</p> <p>13 of that, you will agree with me, connects to an action</p> <p>14 or inaction or otherwise of Atkins, either team A or</p> <p>15 team B?</p> <p>16 A. My comment to that is if you are on a construction</p> <p>17 project and you are CM on the job for MTR, and you are</p> <p>18 looking at doing the demolition of the diaphragm wall --</p> <p>19 which obviously Leighton is aware of that -- to be able</p> <p>20 to start breaking down that wall, there would have been</p> <p>21 communications obviously between the CM and design</p> <p>22 team B, because they would be thinking about when you</p> <p>23 start breaking down that wall, you are going to have to</p> <p>24 come up with the working drawings that come from MTR and</p> <p>25 team A once you submit them. They were never submitted.</p>

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1 That was the issue.  
2 Q. So perhaps we can find a way of agreeing on this,  
3 Mr Huyghe. If I substitute "there would have been" in  
4 the proposition you just made to the expression "there  
5 should have been" -- because if you accept -- at least  
6 for these purposes, my proposition to you is that there  
7 was no such communication -- so, in the absence of  
8 that -- you say there should have been but, in the  
9 absence of that, clearly there is no involvement of  
10 Atkins within that communication issue; do you agree  
11 with me?  
12 A. Yes, but there's a point -- I would use the word "had".  
13 There had to be communications going on on that job site  
14 about that issue. There had to be.  
15 Q. Yes. Perhaps we had better leave it there because that  
16 will be a point of submission in due course, and in  
17 fairness to you the Commissioners have heard all the  
18 evidence and they are going to hear much more, I'm sure,  
19 from us all about what to make of that evidence in due  
20 course, but if I just close on this thought then,  
21 Mr Huyghe. When you make your point, therefore, as you  
22 do in your report, and then in paragraph 12 of the joint  
23 statement, where you talk about the lack of meaningful  
24 communications between the parties that are mentioned  
25 there, including Atkins, that is premised upon your

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1 view, from your experience, that there had to have been  
2 conversation and communication of the type you've just  
3 described to us?  
4 A. Yes.  
5 MR CONNOR: Thank you. Therefore, it will be a matter for  
6 submission in due course to yourselves, gentlemen, as to  
7 whether or not there was such evidence.  
8 Professor?  
9 COMMISSIONER HANSFORD: Language is an important thing and,  
10 you know, even -- some of us may come from England and  
11 some may come from America but we might use language  
12 slightly differently.  
13 Mr Connor is talking about whether -- when you say  
14 there had to be, did you mean there should have been?  
15 Did you mean must have been, is that the point you're  
16 making?  
17 A. That's a better word. If you're on a job site and  
18 you've got this diaphragm wall that is, you know, as far  
19 as you can see, and you are going to be -- and you come  
20 up with a constructability issue, you are the CM, and  
21 you're going to start knocking down this wall, there had  
22 to be, must be, conversations going on with, "Okay, when  
23 we knock it down, what is our answer, what is our  
24 solution to this issue?" There had to have been, there  
25 must have been, whatever word that this --

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1 COMMISSIONER HANSFORD: I'm not trying to put any words in  
2 your mouth, Mr Huyghe. I'm just trying to understand  
3 what you're saying. It seems to me you are saying --  
4 sorry, this is not me putting words into your mouth --  
5 but are you saying that it's inconceivable that those  
6 conversations could not have taken place?  
7 A. To me, yes, it's inconceivable that they wouldn't have  
8 taken place.  
9 COMMISSIONER HANSFORD: Thank you.  
10 MR CONNOR: If I may just follow on from that. That's  
11 a very helpful question.  
12 So, inconceivable to you, and that's on the basis of  
13 your experience. Is that influenced by, in practice,  
14 the extent to which the parties involved in that, as you  
15 say, eminently conceivable conversation have presence  
16 on site?  
17 A. Or communicated about that issue, both.  
18 Q. So, in your experience, it would almost always happen  
19 that there was such communication; inconceivable that  
20 there would not be, I think is what you are saying?  
21 A. Yes. I think it took place.  
22 Q. So if, therefore, you indulge me and suspended your  
23 disbelief for a moment, and I told you there was not one  
24 iota of evidence to suggest to the learned  
25 Commissioners, which they will hear about in due course,

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1 that there was such communication, then that is a highly  
2 unusual situation for you, but I guess you are not in  
3 a position to deny it for these purposes?  
4 A. That's correct. I can only express my opinions on what  
5 I have read and what I understand.  
6 Q. Of course. And in that highly unusual situation -- and  
7 we have been dealing with quite a few highly unusual  
8 situations throughout this Commission of Inquiry -- then  
9 if that situation prevailed here, namely there was no  
10 such communication, then what sits beneath your  
11 agreement with Mr Rowsell in paragraph 12 must be cast  
12 into doubt as a factual proposition upon which your view  
13 is based?  
14 A. That's correct.  
15 MR CONNOR: Thank you. Mr Huyghe, you have been very  
16 helpful. I hope I have been moderate in the extent of  
17 my questioning, even by my standards.  
18 Sir and Professor, Mr Huyghe, thank you.  
19 CHAIRMAN: Thank you very much.  
20 COMMISSIONER HANSFORD: I have one further question at this  
21 point, Mr Huyghe.  
22 In your experience, is it desirable for designers to  
23 have a site presence?  
24 A. Yes.  
25 COMMISSIONER HANSFORD: And is it essential for designers to



Page 97	1 have a site presence? 2 A. Yes. 3 COMMISSIONER HANSFORD: Right. Thank you. 4 MR BOULDING: Sir, I have a few questions. I don't know 5 whether you want me to pose them now or do it after 6 lunch. 7 CHAIRMAN: There was some suggestion we might try to finish 8 before lunch. 9 MR PENNICOTT: We are not going to. 10 CHAIRMAN: We are not going to so we might as well come back 11 this afternoon and maybe we might see about sitting 12 a little later than normal. 13 MR BOULDING: That would be good. 14 CHAIRMAN: It would be good if we can allow Mr Rowsell to go 15 away later this afternoon, being aware that he's 16 completed his evidence, but we'll see how we go. 17 MR BOULDING: I also mention that Mr Huyghe is hoping to get 18 a flight tomorrow, which he would be able to do, 19 I think, if we finished all of the project management 20 evidence today. 21 CHAIRMAN: That's back to the US, is it? 22 A. Yes. 23 CHAIRMAN: I think they leave early afternoon, don't they, 24 often? 25 A. I have to leave by noon.	Page 99	1 bars." 2 A. Yes. 3 Q. Do you recall being asked whether you have seen 4 a document to that effect or whether it was 5 a calculation, to which you said you couldn't recall? 6 A. No, I do not normally make calculations and put in 7 reports like this. In thinking of it over the break -- 8 that bothered me that I can't recall it -- I'm thinking 9 that that may have come from a technical query that was 10 being suggested prior to TQ34, but I'm not sure. 11 Q. You are getting very warm. I wonder if we can look at 12 a document together, bundle B, page 320. Here we've got 13 a witness statement from Mr James Ho of the MTR, and do 14 I assume that this will have been one of the documents 15 you read for the purpose of preparing your report, 16 Mr Huyghe? 17 A. Yes. 18 Q. Would you be kind enough to be taken to paragraph 59, 19 which I think start at page B338, and would you be kind 20 enough to read to yourself paragraphs 59 and 60? 21 A. Yes. 22 Q. Read down paragraphs 59 and 60, through to the end of 23 paragraph 60. 24 MR PENNICOTT: 60.1 and 60.2. 25 A. Yes.
Page 98	1 CHAIRMAN: Okay. Good. We will see how we progress. We 2 will try our utmost to try to accommodate both of you. 3 Thank you very much. 4 MR PENNICOTT: 20 past? 5 CHAIRMAN: 2.20. Thank you. 6 (1.09 pm) 7 (The luncheon adjournment) 8 (2.21 pm) 9 Re-examination by MR BOULDING 10 MR BOULDING: Good afternoon, sir, good afternoon, 11 Professor. 12 Good afternoon, Mr Huyghe. I would just like to ask 13 you one or two matters, if I may. If we could start 14 off, please, by going back to your report which is in 15 bundle ER1, tab 2, and I'd like to go to internal page 16 number 57. 17 There you will see -- you will if it's scrolled down 18 a bit -- paragraph 245. Do you remember being asked 19 about this particular paragraph, Mr Huyghe? 20 A. Yes. 21 Q. In particular your attention was drawn, I suspect you 22 will recall, to the second sentence, where you said: 23 "Leighton, along with its designer Atkins' team B, 24 came up with an alternative plan to deal with coupler 25 alignment issues by using thousands of drill-in dowel	Page 100	1 MR BOULDING: 60.2. 2 A. Yes. 3 Q. Does that assist you with where you got your figure of 4 thousands of drill-in dowel bars from? 5 A. Yes. 6 Q. Just to close this out, perhaps we could look at 7 a document together which is referred to there, B16, 8 page 12537. 9 Is this a document you have seen before, Mr Huyghe? 10 A. Yes. 11 Q. Again, do we see a reference to some 4,000 holes for the 12 whole of the HUH in the second paragraph thereof? 13 A. That's correct. 14 Q. So I take it from that that that's the source of your 15 figure of using thousands of drill-in dowel bars? 16 A. Yes, and thank you for that. That makes me feel a lot 17 better. 18 Q. It's part of my job, Mr Huyghe. 19 A. Thank you. 20 Q. Now, you will recall being asked various questions about 21 the joint statement that you signed off with Mr Rowsell 22 yesterday, in particular paragraph 12, by Mr Connor. 23 I wonder if we can get that joint statement up, please. 24 It is ER1, tab 9. 25 You have agreed with Mr Rowsell in paragraph 12:

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<p>1 "We agree that, even though interactions had 2 occurred, there was a lack of meaningful communications 3 between MTRCL's DM and CM teams, Leighton, and Atkins." 4 Now, can you tell me what meaningful communications 5 you consider should have taken place involving Atkins, 6 Leightons and MTR's DM and CM teams which ought to have 7 taken place but in the event did not take place? 8 A. Well, the process should be that Leightons would come up 9 with a TQ, and that would be ran by the CM/design 10 team B. Then that should have been agreed upon 11 regarding to the type of construction and then sent to 12 MTRC, the design team, and reviewed by design team A, 13 and then a working drawing would be submitted. 14 However, when I looked at the meeting minutes and 15 I tried to track the correspondence regarding to those 16 conversations, they occurred after the construction had 17 been commenced. 18 Q. I see. So what you consider ought to have occurred? 19 A. Yes. 20 Q. And those conversations, based upon your experience, 21 what would you have expected them to have comprised of? 22 A. Well, when the field -- when Leightons came up with a TQ 23 regarding the proposed temporary works, there had been 24 discussions with obviously Atkins team B, because it 25 would be that process that would be the submission to</p>	<p>1 been implemented already or are in the process of being 2 implemented? 3 A. Yes. 4 Q. Do I see there that there are various digital reporting 5 matters, digital devices that are being referred to? 6 A. That's correct, and you will find it in many of the 7 categories under the actions that were taken or that are 8 being taken by MTR. 9 Q. I don't want to go to them all, but if we were to go 10 down to item 12, again, in that implementation column, 11 do we see reference to various digital devices and 12 procedures and the like? 13 A. Yes. 14 MR BOULDING: Mr Huyghe, I have no further questions for 15 you. I don't know whether the Chairman or indeed 16 Prof Hansford have any. 17 CHAIRMAN: No. Thank you very much indeed. May I thank you 18 for your report. It's been of very real assistance to 19 us. Thank you. 20 WITNESS: My pleasure. 21 MR BOULDING: Thank you, Mr Huyghe. 22 CHAIRMAN: And a good trip back to the States. 23 WITNESS: Thank you. 24 (The witness was released) 25 MR PENNICOTT: Sir, I now intend to call Mr Rowsell.</p>
<p>Page 102</p> <p>1 the MTRCL's DM team along with team A. So there would 2 have been communications back and forth about that 3 process. 4 Q. I see. Do I understand that the suggestions you have 5 made together with Mr Rowsell as referred to in 6 paragraph 14 are intended to remedy that situation? 7 A. Yes. Those are some of the things that could be -- that 8 we would propose, yes. 9 Q. Right. I think I have one final matter. Do you recall 10 discussing with Prof Hansford various project management 11 procedures and in particular matters that could be 12 implemented to improve those procedures? 13 A. Yes. 14 Q. And Prof Hansford referred, do you recall, to the use of 15 digital devices? 16 A. Correct. 17 Q. I wonder if we can have a look at your report. If we 18 could go back to ER1, tab 2, and go to page 67. 19 Here we have, do we not, Mr Huyghe, the summary of 20 project management recommendations that you and 21 I discussed something like two or three hours ago? 22 A. Yes. 23 Q. I wonder if we can go to item 6. There do you see 24 various recommendations relating to PIMS, and in the far 25 right-hand column the recommendations which have either</p>	<p>Page 104</p> <p>1 CHAIRMAN: Yes. 2 MR STEPHEN GORDON ROWSELL (sworn) 3 Examination-in-chief by MR PENNICOTT 4 MR PENNICOTT: Mr Rowsell, in front of you there should be 5 a file, labelled ER1, and behind tab 1 I hope you will 6 find a copy of your report. 7 A. I do. Thank you. 8 Q. If you could please first of all go to paragraph 113 of 9 that report, starting at page 65. I understand that 10 there is a word missing in this paragraph. We pick it 11 up right at the end, on page 65. It says: 12 "The sub-contract final settlements need to be 13 within the terms of the approved sub-contract 14 arrangements otherwise they would" -- and I think the 15 word "not" should appear there; is that right? 16 A. Yes. An unfortunate word to omit, but yes. 17 COMMISSIONER HANSFORD: Sorry, where are we? 18 MR PENNICOTT: At the top of page 66, the second line down. 19 The word "not" should be inserted after the word 20 "would", "would not be paid in accordance with the 21 provisions of the main contract." 22 A. Apologies for that. 23 Q. And, Mr Rowsell, if we can go to page 89 in the bundle, 24 do we see there your signature? 25 A. Correct, yes.</p>

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<p>1 Q. And the report that you've produced for the Commission 2 is dated 20 December 2018? 3 A. Yes. 4 Q. In addition to your report, we all know that you have 5 also, in conjunction with Mr Huyghe, produced a joint 6 statement. 7 A. Yes. 8 Q. You will, I hope, find that behind tab 9 in the same 9 file. 10 A. Yes. 11 Q. We can see on the very first front sheet it's the joint 12 statement of the project management experts. Your name 13 appears. It's 9 January, that is yesterday. 14 Then if we go, please, to the last page, hopefully 15 we will find your signature -- 16 A. Yes. 17 Q. -- along with Mr Huyghe's? 18 A. I do, yes. 19 Q. Mr Rowsell, insofar as the report and the joint 20 statement contain matters of fact, do you believe them 21 to be true? 22 A. I do. 23 Q. And insofar as the report and the joint statement 24 contain expressions of your views and opinions, are they 25 views and opinions that you honestly hold?</p>	<p>1 Agency's procurement director and a member of their 2 management board, and a member of the UK's senior civil 3 service. 4 I then subsequently set up a small procurement 5 consultancy, and in that role I have acted as head of 6 procurement on the Crossrail project in London, which is 7 a 15 billion pound project, I would say due to open 8 later this year but Prof Hansford may raise an eyebrow 9 at that. I actually advised on that project for about 10 eight years. I am now advising on a range of major 11 transport infrastructure projects, including the new 12 high-speed railway project in England. 13 So it's a mixture of project management on the 14 planning and design side, on the construction side and 15 on the procurement side. My CV is attached, I believe, 16 to my statement. 17 CHAIRMAN: Yes. 18 A. So I don't intend to say a great deal more about my 19 background. 20 If I can move on to the sort of summary of my 21 report. I would just like to say -- just start by 22 setting out the background to the project from my point 23 of view, because the Shatin to Central Link Project is 24 clearly, by any standards, a major civil engineering 25 project. The Hung Hom Station Extension is one of the</p>
<p>Page 106</p> <p>1 A. I do. 2 Q. Thank you for that. I do have a few questions for you 3 in a moment, but in accordance with the protocol that 4 the Commission have endorsed, we are going to give you 5 ten minutes to give a brief synopsis of your report, or 6 indeed anything else you want to say. 7 CHAIRMAN: And perhaps a little introduction, if we may, as 8 to your qualifications and background. Thank you very 9 much. 10 A. Okay. Thank you very much. 11 Yes, briefly on my background, I'm a civil engineer, 12 a fellow of the Institution of Civil Engineers, a fellow 13 of the Chartered Institution of Highways &amp; 14 Transportation and I was their president the year before 15 last, and had the pleasure of visiting Hong Kong in that 16 role, to visit our members here. I'm also a member of 17 the Chartered Institute of Procurement &amp; Supply. 18 My background is a combination of quite a long spell 19 in the public service, working for the Highways Agency 20 and its predecessors for some 30 years, where I spent 21 about 15 years in the project management of major 22 highway infrastructure projects. I then had about ten 23 years, or seven or eight years, in the construction arm, 24 looking after national schemes under construction in 25 England, and then eight years in procurement as Highways</p>	<p>Page 108</p> <p>1 most complex contracts on that project. The challenges 2 involved in it are considerable, but the organisation 3 and companies involved in its delivery are clearly very 4 experienced and have successful track records. I think 5 it's inevitable that on projects of this nature, 6 problems and issues will arise in the delivery of these 7 types of complex projects. 8 As a project and construction management expert, 9 with over 40 years' experience in the delivery of those 10 major transport infrastructure projects in the UK, I've 11 also been involved in projects in Europe. I have been 12 asked to review the adequacy of MTRCL's project 13 management and supervision and quality assurance 14 systems, I've been asked to review the extent and 15 adequacy of the monitoring and control mechanisms of the 16 government, and in the light of those two factors, to 17 make recommendations on suitable measures to promote 18 public safety and the assurance of quality of works. 19 The report I have produced is set out in those three 20 parts. 21 My starting point was to review and set out the main 22 obligations on MTRCL in the delivery of works flowing 23 from documents such as the entrustment agreement, the 24 instrument of exemption and the conditions of contract, 25 for the construction of the works, and the associated</p>

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<p>1 project management plans. There are a considerable                  2 range of obligations and requirements placed on MTRCL in                  3 its delivery and it's been quite a challenging task to                  4 identify them all, as you will be well aware.                  5 Fortunately, the companies involved are very                  6 experienced in delivering projects of this nature and                  7 over the years have developed comprehensive management                  8 systems and procedures, and I have had a close look at                  9 those.                  10 A major challenge is to translate the generic                  11 management systems that have been developed over that                  12 time into tailored project plans and procedures, and to                  13 communicate those to all of its workers involved in the                  14 delivery of the project. My review has identified some                  15 issues involved in the development of the                  16 project-specific plans and I have set out some                  17 recommendations for improvements to help give greater                  18 assurance on future projects.                  19 My review of the documents before the Commission                  20 together with the witness statements of people who have                  21 presented evidence identified seven what I would call                  22 high-level specific issues which I consider to be of                  23 particular relevance to the project management issues                  24 being investigated by the Commission. Very briefly,                  25 these issues are: issue A, consequences of adopting</p>	<p>1 could have been improved, as could the procedures for                  2 monitoring of records was being developed progressively                  3 and promptly.                  4 On supervision, in relation to the supervision and                  5 inspection of the works by Leighton and MTRCL, there was                  6 extensive guidance and requirements set out in a range                  7 of documents. Those different documents, however, made                  8 it difficult to clearly and easily identify requirements                  9 and this wasn't helped by the varying use of                  10 terminology. It is clear to me that the requirements of                  11 the quality supervision plan were not well communicated                  12 and that supervision may not have been delivered in line                  13 with the plan. There appears to be potential to                  14 introduce an all-inclusive supervision manual to make                  15 requirements clearer and to improve the terminology.                  16 There is also clearly an opportunity for the enhanced                  17 use of technology to support site supervision duties.                  18 The reporting of non-conformances identified in the                  19 supervision and delivery of the work is important as it                  20 provides the opportunity for continuous improvement and                  21 the learning of lessons across teams and across                  22 projects. Some inconsistency has been identified in                  23 documents which define NCRs and the associated reporting                  24 procedures, and recommendations have been made to make                  25 improvements.</p>
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<p>1 a target cost contract; B, the production of as-built                  2 drawings; C the joint roles of the designer, Atkins, in                  3 the project delivery; D, levels of site insurance and                  4 record-keeping; E, non-conformance reporting; F, design                  5 submissions and the application of the Buildings                  6 Ordinance and its consultation provisions, and                  7 commercial settlement procedures.                  8 Just, hopefully very briefly, in the next few                  9 minutes I will just give a flavour of some of those                  10 issues. I can't refer to all of the issues in my                  11 report, but the key findings include the use on target                  12 cost contracts, the use of those types of contracts as                  13 used by MTRCL are recognised, certainly in my experience                  14 as representing best practice, providing that they are                  15 supported by the development of the partnering or                  16 collaboration arrangements and incorporate robust                  17 control procedures and record-keeping. MTRCL has                  18 developed procedures to support these requirements but                  19 there are some aspects that I believe can be further                  20 developed, including the role of leaders in setting the                  21 right culture and behaviours.                  22 On as-built drawings, the responsibility for the                  23 production and submission of drawings and records was                  24 split between MTRCL and Leighton and I am of the view                  25 that the specification requirements and responsibilities</p>	<p>1 In relation to design submissions and the                  2 application of Buildings Ordinance provisions, it is                  3 apparent that there were some weaknesses and failings in                  4 communication between the parties and the teams. These                  5 need to be addressed on future projects and the position                  6 could be further improved by the use of building                  7 information modelling -- BIM -- techniques and I would                  8 suggest that could be in line with the position achieved                  9 in the United Kingdom.                  10 Another part of my review or my instructions was in                  11 relation to the adequacy of the government's monitoring                  12 and control mechanisms and there my focus has been on                  13 how the systems for supervision, monitoring control and                  14 management may be strengthened. My main findings                  15 include that the government has wide-ranging interests                  16 in the project with a range of different departments                  17 having a role to play in the specification requirements                  18 and in overseeing the delivery of those requirements at                  19 construction stage. It is important that there are                  20 efficient and effective communications and controls to                  21 administer and coordinate the government's input into                  22 the environment of a large construction contract.                  23 I consider that the government's project sponsorship                  24 arrangements should be reviewed to consider                  25 opportunities for making improvements and mitigating</p>

<p style="text-align: right;">Page 113</p> <p>1 risks. The government's monitoring requirements could, 2 I believe, be better supported by enhancing the role of 3 the monitoring and verification consultant. On this 4 contract that role was performed by Pypun, but the role 5 excluded assurance on quality procedures. 6 The government has a strong governments committee 7 structure but I considered it may be desirable to review 8 the operation at the highest-level interdepartmental 9 committee, the project supervision committee, to ensure 10 that it is operating at a strategic level as was 11 intended, I believe. 12 I consider that there may also be opportunities for 13 the government to show leadership to the construction 14 industry here in setting out a vision and targets in 15 areas such as the use of collaborative contracts, early 16 contractor involvement methods, and the development of 17 BIM techniques which I have already mentioned. My 18 report also sets out some detailed aspects of project 19 management plans and procedures where it would be 20 desirable to ensure that the government has sufficient 21 transparency of issues to give effective scrutiny. 22 Finally, I was pleased to note that the government 23 has already been proactive in putting in place 24 initiatives to take forward improvements in some of 25 these areas.</p>	<p style="text-align: right;">Page 115</p> <p>1 but in the construction industry it has more recently 2 been introduced to help planning and design and 3 construction of infrastructure, and buildings as well 4 of course, and of course a major benefit is that the use 5 of BIM during the planning and construction helps us 6 look at whole-life cost aspects of structures, 7 infrastructure and buildings as well. 8 Some people look on it initially as a way of 9 displaying three-dimensional modelling of the assets 10 that are being provided. BIM itself goes quite some way 11 beyond that. So, computer-aided design has been in the 12 industry for some time, to produce 3D modelling. BIM 13 takes it a stage further. It is able to use 3D 14 modelling to help aspects of design such as the 15 avoidance of clashes in the detailing of the project. 16 But beyond that it can be used to look at the scheduling 17 of construction so that scheduling information can be 18 linked into the computer, and you can also use it in 19 terms of using it to support the development of 20 quantities and cost to help ensure you are getting value 21 for money. So BIM itself is a technology-based solution 22 to help get much better value. 23 In the United Kingdom, BIM is described in terms of 24 a number of different levels of maturity, ranging from 25 level 0 up to level 3 -- four levels, 0, 1, 2, 3. The</p>
<p style="text-align: right;">Page 114</p> <p>1 There is much more detail in my report but I hope 2 that has given a flavour of the key issues identified 3 during my review. I would like to take the opportunity 4 to thank the Commission's legal team and the Secretariat 5 who have ensured I have had access to all the necessary 6 documents and whilst being somewhat remote from some of 7 the proceedings I have been kept well informed about the 8 progress of the Commission. 9 That's it. Thank you. 10 CHAIRMAN: Thank you very much. 11 MR PENNICOTT: Thank you very much, Mr Rowsell. 12 I just have I think four points I want to ask you 13 perhaps to expand upon. 14 We have heard a couple of times from Mr Huyghe and 15 indeed a couple of times from you just now reference to 16 BIM -- not PIM but BIM -- and indeed you and Mr Huyghe 17 refer to BIM in paragraph 14(a) of the joint statement. 18 It may be helpful if you could, albeit as briefly as 19 possible, Mr Rowsell, for the assistance of perhaps 20 those not necessarily in this room, if you could just 21 tell us a little bit about BIM and how it could be used 22 as a collaborative tool, those being the words that you 23 and Mr Huyghe have used in the joint statement. 24 A. Yes. The BIM, the building information modelling, has 25 been in use in various industries for quite some time,</p>	<p style="text-align: right;">Page 116</p> <p>1 very basic level really just means parties are using 2 software which may not talk particularly well to each 3 other but each company involved in the development of 4 the design is using techniques on their own. What the 5 UK government did was to introduce an expectation or 6 a requirement that public sector projects, clients in 7 the public sector, would reach a maturity level referred 8 to as level 2, which meant that the BIM systems that 9 were being used were all capable of talking to each 10 other and information can be shared on a realtime basis, 11 which is where the collaboration aspect of BIM comes in. 12 So the BIM can be used by all parties, allowing them to 13 talk to each other and to discuss the design and to 14 consider clashes and ways of improving the design, 15 particularly moving forward into the maintenance and 16 operations of the infrastructure. 17 I could keep going for another half-hour -- 18 Q. Probably not. Can I just ask you this, however, 19 a rather more practical point, perhaps. If one thinks 20 about the problems that arose in relation to the top of 21 the east diaphragm wall, which obviously are problems 22 that are still being resolved at the moment, could BIM 23 have assisted in any way in relation to that issue? 24 A. It should have been, particularly if used in the way 25 I describe as a level 2 BIM project, with all parties</p>

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1 having access to the design data and able to identify  
 2 the issues that would have arisen and to look at the  
 3 construction sequencing and, you know, things like  
 4 monolithic pouring and other terms which have been  
 5 before the Commission, I think those aspects, I would  
 6 have expected those to have been identified and resolved  
 7 in advance rather than waiting for them to be built  
 8 before realising there was a problem.

9 Q. All right.

10 COMMISSIONER HANSFORD: Sorry, just to take that one step  
 11 further, Mr Rowsell -- what about the use of BIM -- to  
 12 what extent would BIM assist with as-built drawings,  
 13 collecting as-built information through the progress of  
 14 the project?

15 A. Well, absolutely. The use of BIM clearly allows -- and  
 16 again, it's BIM supported by other technology, elements  
 17 that -- tools would have been heard today. So the  
 18 recording of as-built records through a technology-based  
 19 system which interfaces with BIM and allows those  
 20 records to be logged straight into the data system  
 21 clearly is a much more efficient and quicker way of  
 22 producing those as-built records. So the BIM model  
 23 itself is part -- well, would be part of the as-built  
 24 records, but it has the big advantage that it's then  
 25 taken forward into the maintenance and operation so that

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1 the development of all the information necessary for the  
 2 operation of the asset is well supported by the BIM  
 3 products.

4 COMMISSIONER HANSFORD: Thank you.

5 MR PENNICOTT: That takes me neatly on to the second point  
 6 which you have just mentioned, technological-based  
 7 applications, which again yourself and Mr Huyghe have  
 8 referred to in paragraph 28(c) of the joint statement.

9 Am I right in thinking, Mr Rowsell, that such  
 10 applications first of all are readily available; is that  
 11 right?

12 A. They are, yes.

13 Q. And accessible?

14 A. Yes.

15 Q. And, from your knowledge, what are the principal forms  
 16 that might be adopted in terms of technological  
 17 applications?

18 A. I think I was in the room when Mr Huyghe was asked to  
 19 look at what was being proposed by MTRCL and I see they  
 20 were using a -- I believe it was a cloud-based  
 21 application. You can get sort of mobile smartphone  
 22 applications as well. So there's a range of  
 23 applications which can be used to support the technology  
 24 systems. Devices could be smartphones or they could be  
 25 tablets, but I think it's -- in the United Kingdom now,

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1 it would be quite unusual to find projects or operations  
 2 on infrastructures which were not using technology  
 3 systems of that type, and obviously the software to  
 4 support it. There's a whole range of systems available  
 5 on the market and it's for clients to choose the ones  
 6 which they think best suit their requirements, but there  
 7 are quite a lot of options available.

8 Q. I think you have also made reference to the Turner  
 9 & Townsend report, and there are quite a lot of  
 10 recommendations in there, I think, about that particular  
 11 aspect of improving matters. As I understand it, you  
 12 generally agree with those parts of the Turner  
 13 & Townsend report?

14 A. Yes, I had an opportunity to see and indeed we had  
 15 a meeting with Turner & Townsend during the course of  
 16 preparation of my report, and much of what I saw I would  
 17 very much support, yes.

18 Q. Thank you very much.

19 COMMISSIONER HANSFORD: Again, just to take that one step  
 20 further, Mr Rowsell: do those applications replace  
 21 paper-based records, particularly paper-based quality  
 22 records?

23 A. That is a good question. I think -- yes, I think the  
 24 enlightened clients would now be using the soft  
 25 versions, the electronic versions, of reports, with the

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1 databases. You get some clients who like the comfort of  
 2 having a hard copy as well, but that's not a very  
 3 efficient way of doing it. The more you can rely on the  
 4 technology, the more efficient it is. But it also  
 5 supports communications between the teams so that --  
 6 again we have heard today how you can immediately use  
 7 the systems to send out messages and notifications to  
 8 all members of the team or indeed stakeholders.

9 So there's a big move towards relying on electronic  
 10 records rather than the paper copies.

11 COMMISSIONER HANSFORD: So is it your view that paper-based  
 12 records as well is sort of a transitional position until  
 13 more confidence is reached in digital records?

14 A. I think it's a cultural thing and perhaps a generational  
 15 thing, that where you've got leaders who have worked in  
 16 the industry for 30 or 40 years like myself, they are  
 17 a little bit reluctant to let go, make that final  
 18 departure from some of those systems, but there's no  
 19 real reason why. You can get the comfort through the  
 20 backup, provided you have proper contingency plans and  
 21 backup arrangements, then it should be totally feasible  
 22 to rely on electronic records.

23 MR PENNICOTT: It's the same in the law, Mr Rowsell, I can  
 24 assure you. That's why you see some of the younger guys  
 25 around here using their tablets and the rest of us using

<p style="text-align: right;">Page 121</p> <p>1 paper -- or pens, Mr Boulding says. 2 Mr Rowsell, can I then thirdly ask you to turn up 3 paragraph 129 of your report. It's a point that you 4 touched on in your synopsis just a moment ago. It's at 5 page 71 of your report. 6 You have a heading there, "Government's monitoring 7 committees"; do you see that? 8 A. I do, yes. 9 Q. In the first bullet point of paragraph 129 you refer to: 10 "the project supervision committee described as 11 a high-level interdepartmental committee which meets 12 monthly." 13 Then over the page, you make reference to the fact 14 that the meeting structure that you set out in the 15 previous paragraph is in line with what you would expect 16 and is in line with good practice. Then you make 17 a particular observation about the highest-level 18 committee which, as we have just seen, is the project 19 supervision committee, and you say in paragraph 131: 20 "If government considers that existing attendance is 21 at the right level then an alternative option may be to 22 consider a higher-level project board consisting 23 appropriate government directors supported by external 24 non-executive board members from specialist backgrounds 25 who could bring experience of best practice from the</p>	<p style="text-align: right;">Page 123</p> <p>1 the high-level performance of information, to see 2 whether at that strategic level they need to get 3 involved, and I was just concerned -- you know, it's not 4 for me to tell government exactly how to do it, but 5 I would be concerned with that number of people 6 involved. There are risks to the delivery of the 7 objectives of that particular high-level group. 8 Q. All right. Thank you. 9 Then lastly, in paragraph 152 of your report, you 10 have a heading, "Leadership", do you see that on 11 page 79? 12 A. I do, yes. 13 Q. Then it was paragraph 152 that I just wanted to ask you 14 about. You say: 15 "To support collaborative working on projects, 16 establish a cross-party senior leadership forum to 17 monitor working relationships and cultural aspects of 18 service delivery and to agree ways of developing 19 collaborative working." 20 Can you just expand a bit on this senior leadership 21 forum? Again, is this something that you have 22 first-hand experience of and what does it involve? 23 A. This is in the process of encouraging collaborative 24 contracting. We can go back 15 to 20 years in the 25 United Kingdom to an industry that was very</p>
<p style="text-align: right;">Page 122</p> <p>1 wider industry to provide strategic advice." 2 Is this project board idea something that you have 3 come across previously in your experience over the last 4 few years? 5 A. It is, yes. Most of the major infrastructure projects 6 on which I have worked have that high-level project 7 board and we are seeing an increasing involvement of 8 non-executive specialists to provide advice on delivery 9 issues. 10 Q. What sort of size, what sort of membership, would you 11 envisage this higher-level project board having? 12 A. The size I'm used to experiencing would be sort of five 13 to seven members. What concerned me about this -- 14 I mean, I know there are different cultures or there can 15 be different cultures between the UK and Hong Kong, and 16 there may be different practices, but I have seen, going 17 back four or five years, a committee which was meant to 18 be high level but something similar to this would have 19 fewer people. But where you've got over 30 people 20 attending, there is the risk that meetings are 21 distracted, and get down into a level of detail which 22 means you are not getting that proper strategic overview 23 by the strategic leaders in the organisations. I think 24 it is important to have that strategic view, the leaders 25 and directors taking a step back and having access to</p>	<p style="text-align: right;">Page 124</p> <p>1 confrontational, many claims and disputes, many 2 contracts running over budget, running over time, and so 3 in the United Kingdom, since the mid-1990s, there's been 4 a move towards partnering or collaboration, alliances, 5 whatever you want to call it. 6 But one of the big lessons learned is that to be 7 successful with collaboration, you've got to get the 8 relationships right, and that really requires the 9 leaders in the organisations to define the culture and 10 the working relationships and the behaviours that the 11 leaders want to see in practice throughout the delivery 12 of the projects. 13 So it's something which is separate from the 14 day-to-day delivery of the contract. It's looking at 15 how the relationships between the parties are working, 16 whether -- you know, for example, some contracts such as 17 the NEC have this requirement about mutual trust and 18 cooperation, just to see whether that trust is being 19 built up in a way that allows the parties to communicate 20 well, to discuss issues that arise and to work together 21 to common objectives to deliver best value. 22 Experience has shown -- I have had a major role in 23 taking forward collaborative contracts in a range of 24 sectors, and it's a message or a lesson that I learned 25 very early on that the leaders need to be involved and</p>

<p style="text-align: right;">Page 125</p> <p>1 the leaders need to come together to ensure that 2 culture. So it's something outside of the engineering 3 and the technical issues, and there needs to be a focus 4 on leadership and to establish a senior leadership forum 5 of some description, which drives the collaborative 6 working, is quite important. 7 Q. And that would be a forum that had membership from, 8 what, on the facts of this particular government, 9 government, MTRCL, Leighton? Is that right, first of 10 all? 11 A. I would expect that as a starting point it would be 12 MTRCL and Leighton as the employer and the contractor. 13 The government have such a key role because of the 14 Buildings Ordinance and the consultation process, that 15 it could be desirable for them to be involved in 16 an appropriate way. 17 But what I would also normally like to see are key 18 sub-contractors, the leaders of key sub-contractors, or 19 leadership at an appropriate level, involved in that 20 forum because on projects of this nature 70 or 21 80 per cent of the work might be done by 22 sub-contractors, so it's important that they are brought 23 into the collaboration arrangements for the partnering 24 approach. 25 Q. Thank you very much.</p>	<p style="text-align: right;">Page 127</p> <p>1 but on this project there was a non-contractual 2 partnering arrangement put in place by MTRCL, which is 3 good, and I support that and I know from other work I've 4 done that MTRCL are seen as being very proactive and 5 positive in that relation. 6 So that's a good step on the way, but I think in the 7 United Kingdom that's probably where we were five to ten 8 years ago, and rather than being non-contractual 9 partnering, we see many more examples of contractual 10 partnering. 11 COMMISSIONER HANSFORD: Thank you. 12 MR PENNICOTT: Thank you very much, Mr Rowsell. Others may 13 have some questions. 14 MR CHANG: No questions from Leighton. 15 MR TO: No questions from China Technology. 16 Cross-examination by MR KHAW 17 MR KHAW: A few questions from the government, Mr Rowsell. 18 First of all, on behalf of the government, we would like 19 to thank you for all the suggestions and recommendations 20 regarding how our monitoring and control mechanism could 21 be further improved, and the government will certainly 22 take into account all your suggestions and 23 recommendations in reviewing the system, and as you have 24 pointed out we have already put in place some 25 initiatives in the process.</p>
<p style="text-align: right;">Page 126</p> <p>1 COMMISSIONER HANSFORD: If I have understood that point, 2 Mr Rowsell: the senior leadership forum is more about 3 behaviours, whereas the project board is more about 4 execution of the project; is that right? 5 A. That's correct, yes, sir. 6 COMMISSIONER HANSFORD: So they couldn't be the same thing? 7 A. Inevitably, there could be a bit of overlap, but I think 8 to meet separately, to focus on behaviour as a culture 9 is quite important, particularly where you are going 10 through a transition stage from -- well, in the UK, we 11 went from a confrontational relationship where nobody in 12 the industry trusted anybody else, through to what is 13 now a much more closely working industry, with parties 14 understanding each other's requirements. The supply 15 chain understands clients' objectives much better than 16 they used to and they are more willing to cooperate in 17 the delivery. 18 So focusing on relationships separately, albeit 19 there may be some overlap, but I think it would be for 20 those people to ensure that any overlap between those 21 roles was kept to a minimum. 22 COMMISSIONER HANSFORD: So you would advocate both? 23 A. I would advocate both, yes, certainly during the 24 transition stage from where the industry is at the 25 moment, and I don't know the Hong Kong industry as well,</p>	<p style="text-align: right;">Page 128</p> <p>1 Just a few questions to discuss with you in relation 2 to a few points you have raised in your report. Perhaps 3 I can first take you to paragraph 8 of your report. It 4 starts at internal page 13. 5 A. Sorry, did you say paragraph 8? 6 Q. Yes. Paragraph 8 is a long paragraph. 7 A. It is, yes. 8 Q. But if I can just take you to the page number, page 13. 9 A. Yes. 10 Q. That is 8(j), where you referred to provisions for the 11 applicability of the Buildings Ordinance, et cetera. 12 You can see from the second paragraph of (j), you 13 have referred to various documents, including the 14 Buildings Ordinance, the entrustment agreement, the 15 operating agreement, et cetera, and I believe on the 16 next page you set out your observation in the final 17 paragraph of this subparagraph: 18 "My overarching observation is that it would have 19 been clearer and more helpful for all of the provisions 20 to have been pulled together to set out a clear and 21 precise description of the requirements for the project 22 with a clear allocation of responsibilities." 23 Mr Rowsell, correct me if I am wrong, I take it that 24 you are not suggesting that all the relevant documents 25 should be merged into one single composite document.</p>



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<p>1 What you are trying to suggest is that something would 2 need to be done in order to ensure that the respective 3 obligations, the contractual responsibilities for 4 example, are set out clearly so that all parties would 5 be able to understand what they would need to do. 6 Is that the gist of what you are trying to suggest 7 here? 8 A. Yes. I understand the sort of statutory background, and 9 that it would be extremely difficult to change statute 10 to bring all those together into a single form, but for 11 government -- I mean, on this occasion, you've got 12 companies who have worked on these types of projects and 13 that have a very good understanding and that has helped 14 them with their understanding. On future projects you 15 may get companies who perhaps are less familiar with the 16 Hong Kong statute and the Hong Kong requirements, and in 17 those circumstances I think there could be quite a high 18 risk that they might not follow all of the complexities. 19 And so for government to pull it together into a single 20 document which makes it easier to see how all of those 21 things get together, fit together, I think would be 22 quite desirable. 23 Q. Right. In fact, if we have a look at your joint 24 statement, which was issued yesterday, perhaps a way to 25 achieve this has been set out in paragraph 11 of your</p>	<p>1 basically where you are looking to bring the input of 2 the contractor and the supply chain into the early 3 design and development of the project, so that you are 4 using the advantage of their skills and capabilities to 5 develop best-value solutions. So ECI principles can be 6 applied in a whole range of different ways. It's not 7 just a single form of contract where it gets used. 8 There are ways of bringing the contractor into those 9 early stages, otherwise the value that they can add 10 might be lost because you are bringing them in too late. 11 Q. Yes. 12 A. So actually the more complex the project, then the more 13 opportunity there is for the contractor and their 14 suppliers to add value into how the project has 15 developed. But it also ensures that if the contractor 16 is available at an early stage, then they can plan their 17 resources, they can develop the skills that they are 18 going to need, they can take the opportunity of their 19 early involvement to ensure that their teams understand 20 the risks and find ways of mitigating the risks, and 21 there is a whole range of benefits -- I should have 22 brought my PowerPoint presentation on this but you are 23 probably glad I didn't. 24 Actually, the more complex the project, the greater 25 the potential for added value, but ECI principles can be</p>
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<p>1 joint statement. Would you agree that the way to 2 achieve what you have just suggested can be found in 3 subparagraph (a), which says: 4 "Consideration should be given to preparing 5 a cross-referencing system between the PMP and the PIMS 6 to help identify the roles and responsibilities of the 7 various staff members, including contractual roles and 8 responsibilities." 9 That's one way to achieve this? 10 A. I think that would be one way of doing it, yes. 11 Q. Thank you. 12 Then if I could just take you back to your report, 13 paragraph 59. It's on internal page 46, where you have 14 talked about this trend of adopting the ECI contracts. 15 A. Yes. 16 Q. Would you agree that whether an ECI type of contract 17 should be adopted should be evaluated on 18 a project-by-project basis? 19 A. I would agree that it's always appropriate to consider 20 the project-specific circumstances and develop 21 a strategy for the individual projects, yes. 22 Q. Can you identify any particular features, say in 23 relation to a project, which might call for the adoption 24 of this ECI approach? 25 A. The ECI, yes. Early contractor involvement principle is</p>	<p>1 applied to any project. You know, I'm aware that some 2 elements of ECI were applied on this. 3 Q. Yes. And obviously, if we decide to bring in 4 contractors at an early stage of the project, costs will 5 have to be increased? 6 A. Costs would be increased? 7 Q. Yes. 8 A. No, far from it. No. You normally find that bringing 9 in the contractor early actually adds value and saves 10 money, because they are able to identify solutions which 11 are easier to build, easier to maintain and easier to 12 operate. So particularly if you look over the whole 13 life of a contract, whole life of the asset, then the 14 use of ECI will deliver considerable costs savings. 15 There may -- rather than paying money to a design 16 consultant and then bringing in specialists to advise, 17 what you are doing is you are paying the money to 18 a contractor and a consultant. But in overall terms 19 there is a clear potential saving of some considerable 20 significance. 21 And I'm not underestimating the change that is 22 required in a culture in order to do that, but again, in 23 the United Kingdom, over the last ten years, ECI has 24 become a more common approach, with some considerable 25 success in terms of certainty of outcome and certainty</p>

Page 133	<p>1 of time of delivery.</p> <p>2 Q. If we go to page 68 of your report, paragraph 120, under</p> <p>3 the heading of "The government" --</p> <p>4 A. Sorry, which paragraph?</p> <p>5 Q. Paragraph 120.</p> <p>6 A. Thank you.</p> <p>7 Q. Under the heading of "The government's organisation to</p> <p>8 support project delivery". You say:</p> <p>9 "Efficient and effective communications and controls</p> <p>10 are required to administer and coordinate the</p> <p>11 government's input into the environment of a live</p> <p>12 construction contract. The government's governance,</p> <p>13 controls and administrative procedures need to operate</p> <p>14 alongside the contractual procedures and timetables to</p> <p>15 allow work to proceed without delay. I set out in</p> <p>16 paragraph 8(k) above potential risks which may your</p> <p>17 where there are different lines of communication with</p> <p>18 different government departments or where</p> <p>19 responsibilities are not fully clear. In my opinion,</p> <p>20 the government should review roles, responsibilities and</p> <p>21 lines of communication to provide improved clarity of</p> <p>22 the government's project sponsor role. I consider that</p> <p>23 there should be single point responsibility for</p> <p>24 administering the agreement with MTRCL ..."</p> <p>25 Do you see that?</p>	Page 135	<p>1 with about ten different -- well, at least ten different</p> <p>2 government departments.</p> <p>3 Q. Yes.</p> <p>4 A. So it seems to me that there is potential for a conflict</p> <p>5 here between what was set out in the project management</p> <p>6 plan, which I believe was approved by government, and</p> <p>7 what was in the entrustment agreement. So the way the</p> <p>8 project management plan is set up, there is certainly</p> <p>9 a risk that MTRCL or members of MTRCL might be going</p> <p>10 direct to other government departments.</p> <p>11 So I can see what the intention is, and I agree that</p> <p>12 the intention is a good one, but then the project</p> <p>13 management plan potentially undermines that a little by</p> <p>14 encouraging MTRCL to go direct to other government</p> <p>15 departments, and when that happens, the communications</p> <p>16 may break down a little.</p> <p>17 COMMISSIONER HANSFORD: Just on that point, in the preceding</p> <p>18 paragraph of your report, in paragraph 119, you say:</p> <p>19 "... there is scope for improving the government's</p> <p>20 project sponsorship arrangements ..."</p> <p>21 Could you just elaborate on what you mean by</p> <p>22 sponsorship and is that the same point that you make in</p> <p>23 paragraph 120 or is it a different point?</p> <p>24 A. The points are linked. I mean, "project sponsorship" is</p> <p>25 a term that we certainly use in the UK where rather than</p>
Page 134	<p>1 A. I do, yes.</p> <p>2 Q. If I can just take you to have a look at the entrustment</p> <p>3 agreement. It's at G7, page 5639. If you go to the</p> <p>4 bottom of this page, under the existing -- this is</p> <p>5 EA3 -- under the existing EA3, there's a provision that:</p> <p>6 "The RDO ... is the representative of the Transport</p> <p>7 and Housing Bureau in executing this Agreement. Any</p> <p>8 notices, certificates or other communications to</p> <p>9 Government in connection with this Agreement shall be</p> <p>10 sent to the Principal Government Engineer/Railway</p> <p>11 Development at ... Government Offices ..."</p> <p>12 So according to the existing EA3, there's</p> <p>13 a mechanism where the RDO has been acting as a contact</p> <p>14 point in relation to the enquiries and also</p> <p>15 communications with different parties.</p> <p>16 Do you think that that at least would be one way of</p> <p>17 dealing with the issues that you have addressed in your</p> <p>18 paragraph 120, that is if RDO can continue to be</p> <p>19 a contact point in receiving or dealing with the</p> <p>20 communication with other parties, would that help?</p> <p>21 A. Yes, to get to that position would help. The reason</p> <p>22 I raised this point was partly because of that</p> <p>23 paragraph 120 refers back to paragraph 8(k), and 8(k) is</p> <p>24 about the project management plan, and in the project</p> <p>25 management plan there's reference to MTRCL consulting</p>	Page 136	<p>1 direct project management, the overall owner of the</p> <p>2 project is looking after -- they have a team to look</p> <p>3 after their specific interests. So in this case MTRCL</p> <p>4 are managing the project but the government still has</p> <p>5 a close interest and government needs to have a team</p> <p>6 that looks after its relationship with MTRCL, to make</p> <p>7 sure that its overall interests in the projects are</p> <p>8 being delivered. So there's a small team and it might</p> <p>9 well be a team that the government has pointed out in</p> <p>10 the entrustment agreement, but then that team needs to</p> <p>11 be sufficient to ensure that the interests that the</p> <p>12 government has are being well looked after and that the</p> <p>13 government is receiving the right level of information</p> <p>14 to be able to take any action it needs to do to keep the</p> <p>15 project delivering what its expectations are.</p> <p>16 COMMISSIONER HANSFORD: So, in your terminology, is the</p> <p>17 sponsorship for this project in government or is it in</p> <p>18 MTR?</p> <p>19 A. The sponsorship is in government.</p> <p>20 COMMISSIONER HANSFORD: And are you telling us that in your</p> <p>21 view the role of sponsorship is broader than is set out</p> <p>22 in that paragraph that Mr Khaw took us to in the</p> <p>23 entrustment agreement?</p> <p>24 A. Having a single point of communications is a start but</p> <p>25 it's not just acting as a postbox. It's receiving --</p>

<p style="text-align: right;">Page 137</p> <p>1 COMMISSIONER HANSFORD: Exactly. 2 A. The project supervision committee might well have a role 3 in the sponsorship, but on a day-to-day business the 4 project supervision committee will obviously need a team 5 to be ensuring that the government is receiving the 6 information it requires to ensure that its interests are 7 being maintained in the delivery of the project. 8 COMMISSIONER HANSFORD: So -- sorry to push you on this -- 9 it's not just a postbox. What is sponsorship? 10 A. It's a team like -- if I can give an example, I'm 11 working on High Speed 2 in England. High Speed 2 has 12 been set up as a delivery organisation sort of similar, 13 I suppose to -- not quite the same as MTRCL but HS2 Ltd 14 is a company that's been set up to deliver a project but 15 the Department for Transport retains a team, and the 16 numbers are actually quite high on the Department for 17 Transport's sponsorship team. 18 COMMISSIONER HANSFORD: What sort of numbers? 19 A. It went up from a team of about ten into a figure closer 20 to 100, but that's quite unusual. I'm not recommending 21 100. That followed the problems that the government had 22 on the West Coast Main Line in the United Kingdom. 23 COMMISSIONER HANSFORD: But at least ten? 24 A. Yes, at least ten, and this would be a team that take 25 a high-level view of how the project is being delivered.</p>	<p style="text-align: right;">Page 139</p> <p>1 A. I think elements -- I don't want to be overcritical 2 because there are clearly elements of a project 3 sponsorship role that are being looked after by various 4 parts of the government. So you've got the Buildings 5 Department and you've got the Highways Board -- I don't 6 know as to relevance -- 7 COMMISSIONER HANSFORD: But they are in different places. 8 A. -- but it wasn't as clear to me as it could have been 9 that those parts of the organisation were working as 10 well together as they could be. 11 COMMISSIONER HANSFORD: That's helpful. Thank you. 12 A. But that doesn't necessarily mean that I think there's 13 been a major problem. I just see, by reviewing that and 14 perhaps bringing a bit more sharpness to those 15 arrangements, then it would help to mitigate future 16 risks. I'm not saying the consequence of the current 17 arrangements there's been particular problems. 18 COMMISSIONER HANSFORD: I understand that. The Commission 19 is looking to what recommendations it might make for 20 future projects, so this is quite helpful. Thank you. 21 MR KHAW: If we can then have a look at paragraph 124 of 22 your report at page 70, where you are dealing with the 23 work of the monitoring and verification consultant. You 24 say: 25 "I note that the MVC undertakes audits of project</p>
<p style="text-align: right;">Page 138</p> <p>1 They get their receiving performance information and 2 they can analyse that and seek to influence the delivery 3 organisations, if they are starting to see trends that 4 go against the objectives of the project. So they will 5 give early warnings to senior civil servants, to 6 ministers, if you're seeing cost increases that are 7 going to impact on government expenditure, if you're 8 starting to see risks to the delay in the implementation 9 of projects, it's being able to bring some high-level 10 either departmental or government influence into the 11 delivery of the projects. 12 COMMISSIONER HANSFORD: So this is not the same role as the 13 M&amp;V consultant in place here for government? 14 A. Well, the MVC consultant -- they would be provided 15 information to the department, and the department would 16 be acting on the information received from the MVC 17 consultant. 18 I think that's a good example because the 19 information that the MVC has to go somewhere within 20 government and in my experience that would now be going 21 to the project sponsorship team. It's a term that is 22 not easy to define but it's looking after the interests 23 of the ultimate employer. 24 COMMISSIONER HANSFORD: And you see that as being absent 25 here?</p>	<p style="text-align: right;">Page 140</p> <p>1 procedures at the instruction of government. In my 2 opinion the role should make provision for the MVC to 3 identify areas at risk and to propose an audit 4 programme. If proposals for audits are not accepted and 5 the MVC remains concerned about potential risks to 6 government, then the MVC should have a facility to 7 challenge the programme and make representations to 8 a senior position in government." 9 Now, if I can just very briefly take you to have 10 a look at some of the documents relating to the MVC's 11 work in the present case. If we can have a look at 12 G9/7666. It's clause 6.7.4, under the head of "Audit 13 plans" and it says: 14 "The consultants [ie Pypun in this case] shall 15 prepare an audit plan for each of the audit sessions. 16 The audit plan shall include but not be limited to the 17 following [items]." 18 And we can see that the scope includes scope of 19 audit, a rationale in the selection of the construction 20 contracts, a detailed proposal on the approach and 21 methodology, the composition of the names of the audit 22 team, et cetera, et cetera. 23 If we can then look at -- 24 A. Sorry, this is the brief? 25 Q. Yes, that's a brief. It sets out the obligation of the</p>

<p style="text-align: right;">Page 141</p> <p>1 M&amp;V consultant in relation to the preparation of the 2 audit plan. 3 A. Yes. 4 Q. Then if we can take a look at another document, at K1 -- 5 A. Can I comment on that? 6 Q. Yes, of course. 7 A. The context within which I raised this was that the 8 witness from Pypun and I believe the inception plan that 9 they produced, it was based very much on -- again, I'm 10 using my memory here -- it was focused on safety, time 11 and cost, I believe, but they didn't see themselves 12 having a role in quality, and to me there's 13 an inextricable link between quality and those other 14 three elements. I think, when they were developing the 15 audit plan, they weren't considering audits which 16 related to assurance on quality management. So I think 17 that was my main concern in relation to that, although 18 I accept that clearly there is an opportunity for them 19 to feed into audits in those other three areas, yes. 20 Thank you. 21 Q. But would you agree that under the existing system, 22 according to the brief and also the verification plan 23 that we have seen -- would you agree that once the 24 government has agreed on the verification plan, then 25 there was an opportunity for the M&amp;V consultant to</p>	<p style="text-align: right;">Page 143</p> <p>1 here. 2 And where the project representative works inside an 3 organisation like MTRCL, they are sitting there, they 4 are located there; you know, it means they are the ears 5 and eyes for the government and being there, networking 6 informally and building up relationships with those 7 other people. I think that the physical presence is 8 better than relying on technology, but technology 9 clearly helps, up to a point. 10 Q. Yes. At present, we know that there are working-level 11 meetings at about weekly intervals. 12 A. Yes. 13 Q. And also management meetings and other senior management 14 meetings. They are being held to enhance discussion 15 between the government and MTR. Would you agree that 16 such meetings would also serve similar purposes? 17 A. I wouldn't say similar. They are helpful. It's helpful 18 to have meetings and, you know, regular contact. But 19 again it's quite a formal environment, isn't it? 20 There's an agenda, you go through the agenda, you might 21 get an opportunity under "any other business" to raise 22 something. But where you've got -- well, if you know 23 that someone from the government or the project 24 representative is going to be there every Thursday or 25 whatever it is, then that allows you -- that allows</p>
<p style="text-align: right;">Page 142</p> <p>1 liaise with the government regarding how to implement 2 the plan? So at that time actually the M&amp;V consultant 3 will be able to express their opinions and share with 4 the government regarding what should be done; would you 5 agree? 6 A. That sounds encouraging, yes. 7 Q. Paragraph 133. There's a suggestion that government 8 staff members could work alongside members of the 9 project team in their offices on a regular basis of say 10 one day every fortnight. 11 A. Yes, to give an example. Whatever is appropriate. 12 Q. Yes. Would you agree that given the modern technology 13 that we have discussed, the electrical devices that we 14 can use now, the physical presence of the government 15 staff members may not be strictly required, so long as 16 they are able to maintain constant contact with the 17 project team on a regular basis through other means. 18 That can also achieve the same purpose; do you agree? 19 A. I think technology can help up to a point, but again, in 20 recent years, I've seen some good examples of integrated 21 working where either the government or -- I mention 22 elsewhere in my report that a similar role to the MVC is 23 a project representative role. I think it's a very 24 similar sort of organisation but project representative 25 in the UK has a slightly wider remit than the MVC had</p>	<p style="text-align: right;">Page 144</p> <p>1 people in an organisation such as MTRCL to say, on 2 an informal basis, "Good, I know they'll be there. 3 I can sound them out informally on some things." It 4 allows more informal discussion. It allows work 5 planning to be undertaken on a more effective manner 6 than relying on the formalised environment within 7 a meeting. 8 Q. Correct. 9 A. So it's good that that happens, that there are those 10 weekly or regular meetings, but I think the actual 11 physical presence -- where I've seen this in operation, 12 it has been quite beneficial. 13 Q. Finally, if I can ask you just one point regarding this 14 old term "full-time and continuous supervision". 15 A. Yes. 16 Q. You have given us a very detailed interpretation of that 17 term. It's really a matter of common sense, according 18 to what you said. 19 If we can just go back to your analysis, internal 20 page 52, paragraph 78, the last three lines, starting 21 from the words: 22 "That means, in my opinion, that a contractor's 23 supervisor needs to be present at all times where 24 mechanical coupler works are underway." 25 I take it or I gather from this particular sentence</p>

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<p>1 what you mean by full-time and continuous supervision is 2 that someone needs to be present at the time when the 3 coupling installations are being carried out, and they 4 have to be present during the whole process, not just 5 part of the process. Is that what you mean? 6 A. Yes, someone needs to be present. It may not be the 7 same person for the whole of that time. 8 Q. It may not be the same person, yes. 9 A. And again it's linked back to the requirement that there 10 is one supervisor for ten workers, so if there were ten 11 workers, for example, working in an area the size of 12 this room, there would be a supervisor. He wouldn't be 13 looking -- you wouldn't expect a supervisor to be 14 looking at the work of each individual worker, but you 15 are able to look around and see whether work is being 16 done properly or whether anything catches your eye or 17 whether somebody says, "We've got a bit of a problem 18 here", and you can get it addressed straight away, so 19 it's having that supervision. 20 Q. He just that he has to be there when the process is 21 underway? 22 A. Yes, where the work -- that would be my understanding of 23 the requirement and that's what the client has set out 24 they require and that's what they are paying for, so 25 that's what should be provided, yes.</p>	<p>1 touch upon the interests of Atkins. I might go to the 2 second of them, first, if I may, which is at section D 3 on page T-3. 4 Sorry, for the record, this is ER1/9. 5 It is in this section, as you will recall, that you 6 and Mr Huyghe deal with the question of your agreement 7 that "it is not a good practice for the same design firm 8 to provide services to the employer and to also 9 represent the contractor in making design revisions or 10 modifications, because it poses a real or perceived 11 conflict of interest". You go on in paragraph 16 to 12 say: 13 "We agree that MTRCL should develop a conflict of 14 interest policy and procedure for a conflict of interest 15 check on all design related services." 16 A. Yes. 17 Q. You will recall very well it was only yesterday that you 18 crafted those words, but you will recall that I asked 19 Mr Huyghe some questions about that earlier on. 20 A. I do, yes. 21 Q. The backdrop to at least part of that sits within your 22 report, as you well know, which is ER1/1. If I might 23 ask you to look at paragraph 53 and I have a few 24 questions on this particular section, if I may. 25 A. Yes.</p>
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<p>1 MR KHAW: Excellent. Thanks very much. I have no further 2 questions. 3 MR CONNOR: There will be some questions on behalf of 4 Atkins, with your leave, sir, but I think given the time 5 it may be appropriate to take an afternoon break. 6 CHAIRMAN: Yes. Certainly. 15 minutes. Thank you. 7 MR CONNOR: Thank you. 8 (3.42 pm) 9 (A short adjournment) 10 (4.01 pm) 11 CHAIRMAN: Yes. 12 Cross-examination by MR CONNOR 13 MR CONNOR: Thank you very much, sir. 14 Good afternoon, Mr Rowsell. 15 A. Good afternoon. 16 Q. I am Vincent Connor, I represent Atkins China. 17 A. Thank you. 18 Q. I have some questions for you in relation to the joint 19 statement and report, and probably the starting point, 20 which makes sense, and you were here during Mr Huyghe's 21 evidence earlier on -- 22 A. I was. 23 Q. -- is to turn to the joint statement and work one's way 24 back from there. As you know, there are two areas in 25 your joint statement in which you address matters which</p>	<p>1 Q. You say in the third line of paragraph 53, which appears 2 on page 42: 3 "The arrangement involving Atkins working for the 4 employer and at the same time for the contractor is, in 5 my experience, unusual." 6 If I may just pause at that point and ask you if you 7 might just expand on that a little bit, Mr Rowsell. 8 Unusual but not unknown, if I can put it that way? 9 A. I'm happy to accept that, yes. 10 Q. And the experience -- sorry, let me go back a moment. 11 Do you have direct personal experience of working on 12 projects or indeed advising on the outcome of them where 13 there has been a similar arrangement to that which we 14 are discussing as between owner, contractor and the same 15 design consultant? 16 A. Yes. 17 Q. And were those situations where you were involved on the 18 project as a professional working on the project, or 19 were they where you were brought in at a later stage to 20 advise upon issues? 21 A. I have direct experience where I've had project 22 responsibilities. The couple I'm thinking of is where 23 I had procurement responsibilities, and there were 24 arrangements, not identical to this, but similar. 25 There were problems that arose, and what I found --</p>

<p style="text-align: right;">Page 149</p> <p>1 this is generally in the United Kingdom but these are 2 working for major clients on major transport 3 infrastructure projects -- I know that it is possible to 4 try to put in place mitigation arrangements where you've 5 got this type of arrangement, but there were a couple of 6 examples where things went wrong and generally clients 7 that I've been involved with, as a matter of policy, 8 moved away from this position. So they have asked 9 consultants to take a choice, whether to work on the 10 client's side or on the supplier's side, and the client 11 has said that they won't accept arrangements where 12 you've got somebody working at the same time on the same 13 contract. They could be working on the client's side 14 and the supply side on different projects. 15 Q. Of course. 16 A. But where it's on the same contract, it all becomes 17 quite difficult, in my experience. 18 Q. Thank you for that. That arises from your particular 19 experience, and if I may ask you, are you aware, outside 20 your direct experience, of projects carrying on today in 21 the UK where a similar arrangement is permitted? 22 A. I am, yes. 23 Q. So it is a practice -- 24 A. It's a practice that happens. 25 Q. -- notwithstanding your views on it?</p>	<p style="text-align: right;">Page 151</p> <p>1 and complexity that it has also, shall we say, allowed 2 the introduction or required the introduction of 3 a conflict of interest policy, committee, panel and so 4 on? 5 A. It has, yes. A conflict of interest was drawn up. As 6 well as a policy, it set out details of where -- 7 conflicts which would not be allowed. So it went more 8 from a policy into a plan as well, and a committee was 9 established that would consider any potential conflicts 10 that were identified and would come to a ruling on 11 whether they may be permitted or not. 12 Q. So both policy and also sort of monitoring and dealing 13 with any issues that arose? 14 A. Yes. 15 Q. To your knowledge -- and if you can help me with this, 16 please let us know -- is that High Speed 2 arrangement 17 you have just described to us one that has had cause to 18 deal with a situation like the one we are discussing 19 here, namely the arrangements by which a design 20 consultant might work for both procurer and a contractor 21 who was working on the project? 22 A. I'm not familiar with all of the conflicts that have 23 gone up to HS2. One of the projects, such as Crossrail, 24 I'm aware of examples similar to that, which were 25 considered by the conflicts committee.</p>
<p style="text-align: right;">Page 150</p> <p>1 A. Yes, yes. 2 Q. You go on to explain -- and I would like to ask you 3 a little bit more about one of your forward 4 recommendations that goes around the conflict of 5 interest policy, and are your thoughts on that 6 influenced to some extent by your own personal 7 experience that you shared with the Commissioners 8 a moment or two ago as being a sensible arrangement to 9 have in place for the handling of conflict of interest? 10 A. I mean, the experiences that I have are largely based in 11 the public sector, so I can think of examples where 12 clearly in the private sector this type of arrangement 13 will operate, but in the public sector I think there is 14 a need to have higher standards of propriety to make 15 sure that perceived conflicts are addressed as well as 16 real conflicts. So in the public sector there is 17 clearly a need to have higher standards and to ensure 18 that, you know, the opportunity for those conflicts to 19 arise, they are avoided rather than mitigated. 20 Sorry, I might have missed your question there. 21 Q. You are absolutely fine, thank you. To take that point 22 a little bit further, you mentioned among your current 23 experience that you are working on, that you have 24 involvement in the High Speed 2 project in the UK. Is 25 that the sort of project which is of a scale and type</p>	<p style="text-align: right;">Page 152</p> <p>1 Q. That's helpful. 2 Taking all of that and reverting to this morning -- 3 you were with us while Mr Huyghe gave his evidence to 4 the Commissioners, and you will recall, if I attempt to 5 paraphrase where he and I got to on a particular issue, 6 that with reference to paragraphs 15 and 16 of the joint 7 statement, while in Mr Huyghe's view he continued, just 8 like your goodself, to have reservations about the dual 9 appointment arrangement at all, he could see situations 10 going forward where that might be permitted, and I think 11 he agreed with me that it might arise from rather 12 similar situations, a complex project, a demanding 13 programme, an increased volume of work that had to be 14 done. 15 Can you just help me and the Commissioners with 16 whether you accord with Mr Huyghe's view that in 17 principle, in those circumstances I just described, that 18 would, in your view, be tolerable, subject, in fairness 19 to you, to the terms of paragraph 16 of your joint 20 statement, and indeed the more detailed comments you 21 make about the conflict of interest committee and so on 22 that arise in your report? 23 A. My position is that if you've got a policy and you've 24 got a committee, then, you know, it's sensible that you 25 allow them to take those decisions. So, you know, there</p>

<p style="text-align: right;">Page 153</p> <p>1 may be unusual circumstances which need to be considered 2 and might mean that there's an exception to the rule, 3 but in general I find it very difficult to see how 4 an organisation can work on both sides under the same 5 contract. You know, there's just so much potential for 6 going wrong. 7 You might say this is a personal preference, but 8 I see that the risks associated with that far outweigh 9 the opportunities, and so that's one example where I've 10 seen clients in the UK say, "We are just not going to 11 permit it so don't even think about it". But having set 12 up a policy and a committee I can see the sense in 13 saying: treat each case on its merits. 14 Q. Thank you very much. I will just move on to a next 15 chapter then in relation to your evidence. Thank you 16 for that. 17 Returning to your report, please. You still have 18 that in front of you, and the paragraph you just looked 19 at was paragraph 53. Then, as night follows day, you go 20 on to paragraph 54, which is dealt with in several 21 numbered paragraphs. 22 Just pausing before going further -- the 23 observations that you make here are against the 24 background of, as you have said in the previous 25 paragraph, your concern about the potential for a real</p>	<p style="text-align: right;">Page 155</p> <p>1 Q. And, in addition, as I also asked Mr Huyghe, there is 2 an absence also of any articulation by any party of 3 a perception of conflict of interest, with one exception 4 which we'll come to in relation to the Pypun evidence. 5 But if we set that aside for a moment, there is no 6 evidence of any other suggestion or concern or 7 articulation of a perception of conflict of interest? 8 A. I suppose it depends who's doing the perceiving. The 9 point about a conflict of interest, if it's a perceived 10 conflict of interest on a public sector project, it 11 could be the public or somebody saying that they're in 12 a position where they could inappropriately influence, 13 not that some of these highly respectable professional 14 engineers are likely to do that, but if you don't have 15 a policy then you might get somebody in a role who you 16 can't have that faith in. 17 Q. I think we're at one on this. Again you are looking at 18 it with hindsight and you are concerned about 19 perception, but there is no evidence that anyone at any 20 stage articulated that perception, that they thought 21 there was a problem, with the exception which we can 22 come to happily now of the evidence that you have 23 mentioned in your report of the Pypun witness. Is that 24 so? 25 A. Yes.</p>
<p style="text-align: right;">Page 154</p> <p>1 or a perceived conflict of interest. As I asked 2 Mr Huyghe, it's probably an appropriate point to ask you 3 also, do you agree with me that there is no evidence 4 that appears to be put before the Commission, that at 5 least has been shared with you, that would suggest there 6 is any evidence at all of conflict of interest on the 7 part of individuals within Atkins in the delivery of 8 their services? 9 A. I'm certainly not suggesting in any way that any of 10 those individuals acted inappropriately or influenced as 11 a result of conflict. There's clearly potential 12 conflicts there, as I set out, there's evidence of 13 potential conflicts, but not that the people involved 14 acted inappropriately as a result of those potential 15 conflicts. 16 Q. Thank you for that. But really yours is a view, if 17 I can put it that way, where inevitably because of the 18 point you've brought into matters, you look at what 19 happened with hindsight and I think what you are sharing 20 with the Commission is your professional view and your 21 experience that you can see the potential for conflict 22 within there, but the existence of actual conflict of 23 interest is, as you fairly said, not one for which there 24 is evidence? 25 A. Correct, yes.</p>	<p style="text-align: right;">Page 156</p> <p>1 Q. Thank you. That's maybe an appropriate point now just 2 to look at that evidence, but it may be unnecessary, 3 Mr Rowsell, to take you to it, because as you will 4 recall I asked Mr Huyghe a little bit about it this 5 morning. I guess if one were to sum it up this way -- 6 and I've mentioned it in particular because you do 7 mention it in your report -- is this a fair summary, 8 that it seemed that in late 2015 there had been raised 9 in the project -- in the PMC forum a question as to 10 whether or not there might be a risk of conflict of 11 interest because of the appointment of Atkins as 12 consultant to both MTR and Leighton, that Pypun were 13 charged with looking into it, and having looked into it 14 they reported two things. One is, "We find no evidence 15 of a conflict of interest", and secondly, "This is 16 an arrangement which arises on three or four other 17 contracts also on the Shatin to Central line"? 18 A. Yes. 19 Q. Sorry, do you wish to add something? 20 A. Yes. The position I was looking at was that the 21 original appointment of team B, you know, was linked to 22 the provision of services for the temporary works, and 23 approval was given to that arrangement under the 24 sub-contract -- sorry, under the main contract, because 25 the main contract requires the terms of the sub-contract</p>

<p style="text-align: right;">Page 157</p> <p>1 to be approved, but subsequently there were obviously 2 changes to the role and Atkins team B were required to 3 do additional duties which were then sort of in conflict 4 with the original approval that had been given in that 5 they went outside of -- they went beyond the temporary 6 works services. 7 So my understanding is that that should then have 8 also been approved as a change to the sub-contract. 9 Q. Let's come on to that, because I think that, in 10 fairness, is a slightly separate point, and your point 11 in that regard is not what about Pypun found or 12 otherwise but it's what the extent of the original 13 approval of the Atkins team B appointment was and its 14 extent; is that right? 15 A. Yes. 16 Q. If you would be good enough to have in front of you -- 17 I think you do refer to that in page 42, in paragraph 53 18 at line 8, where you say that your understanding is that 19 Atkins' initial appointment was to provide temporary 20 works design services, and you go on to say it was 21 approved on the basis that there would be complete 22 separation and the services would not involve permanent 23 works design. 24 That should be a point you were just mentioning, 25 I think, isn't it?</p>	<p style="text-align: right;">Page 159</p> <p>1 MR PENNICOTT: J16. 2 MR CONNOR: Thank you very much, Mr Pennicott. That's very 3 helpful. So J16. 4 Just in fairness to you, Mr Rowsell, you see it's 5 the front page of the consultancy agreement which you 6 have seen before. 7 A. Thank you. 8 Q. If you flick on to the next page, J17, you see it then 9 goes into the recitals and the make-up of the document. 10 Is that okay? 11 A. It is, yes. 12 Q. If you are comfortable now that we are looking at that 13 document, if you would return, please, to J46, which is 14 much later in the document but is schedule 2, which is 15 the "Services" section of the consultancy agreement, and 16 as I was saying, we had a series of general items, and 17 then we had a series of items under "Area SAT", 18 "Area A", "Area Coliseum", et cetera, and they are 19 described in the generality and then there are details 20 given to the right-hand side, and there is an extent to 21 which even this work which has been carried out at the 22 earlier stages of the team B appointment involved 23 consideration of certain matters pertaining to the 24 permanent works. Is that so? 25 A. Yes, but the approval was given on the basis that it</p>
<p style="text-align: right;">Page 158</p> <p>1 A. It is, yes. 2 Q. A short point, if you would be good enough to help me 3 with it, to understand that, if you could have before 4 you J46, please. These are the latter pages of the 5 consultancy agreement as between Leighton and Atkins in 6 respect of the team B services. 7 If I may just pause at this point -- I think you did 8 have regard in the course of your work to look at the 9 relevant contracts, namely the consultancy agreement for 10 Atkins A and B? 11 A. I did, yes. 12 Q. In this part of the consultancy agreement, which you 13 will see is headed, "Schedule 2. Services", we see 14 a number of specific areas of work identified, firstly 15 a number under the heading of "General items" -- 16 A. Sorry, is this the team A or the team B? 17 Q. This is team B. 18 A. Yes. 19 Q. This is J46. If it helps you and in fairness to you, if 20 you would like to get the context of it, we could return 21 to page 30 of the same document, which must be around 22 about J10 or so, if colleagues might help. 23 I think a little bit earlier, please. If you go to 24 J10. It's certainly not that. I beg your pardon, 25 sorry. If you go to item 6 --</p>	<p style="text-align: right;">Page 160</p> <p>1 wouldn't involve permanent works design. 2 Q. I understand that, and that may be a matter of 3 submission to the Commissioners in due course as to what 4 was approved, but if we proceed on the assumption -- 5 A. The one I'm looking at, for example, is checking the 6 temporary loading case on the permanent works, but 7 that's interface of the temporary works with the 8 permanent works -- 9 Q. Yes. 10 A. -- not the design -- 11 Q. To determine if any changes were required? 12 A. -- of the permanent works. 13 Q. And a similar provision continues further down in 14 relation to "Area A", "Area Coliseum" and so on. 15 A. But it doesn't say undertake permanent works -- design 16 of the permanent works. It just says "determine if any 17 changes to the permanent works may be required", not 18 that they would undertake it. 19 Q. If you turn on to page J47, you will see that in 20 relation to area B, there is to be carried out: 21 "Feasibility study to check the impact on the D-wall 22 of proposed change to ... strutting. 23 Feasibility study for combining individual pile caps 24 into a continuous pile cap on both sides of the 25 cofferdam ..."</p>



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1 Now, accepting that there isn't a usurping of what  
 2 has been done on behalf of MTR, but nonetheless would  
 3 you agree with me that these items go beyond temporary  
 4 works, into various permanent works?  
 5 A. I think the answer is no, isn't it? It seems to be --  
 6 what I'm reading is determining if any changes to the  
 7 permanent works may be required, not that it undertakes  
 8 the permanent works design.  
 9 Q. That's not quite what I'm saying. But I think the point  
 10 is this, and if you look on to J48, please, you will see  
 11 a further series of feasibility designs, et cetera.  
 12 I think the point might be this. You see those under  
 13 "Area HHS, "NAT", et cetera, in relation to "DSD box  
 14 culvert", but simply for one -- and I'm not suggesting  
 15 it is you that has begun this definition, Mr Rowsell --  
 16 but for one to describe this as a series of services  
 17 that pertain only to temporary works is  
 18 an oversimplification of what appears even at the  
 19 earlier stages of this appointment -- would you agree  
 20 with me?  
 21 A. Yes. I think the point I am making is that the approval  
 22 was made on the basis that the Atkins team that was  
 23 providing services would not -- that service would not  
 24 involve permanent works design. It would involve  
 25 a range of other services but not permanent works

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1 design.  
 2 Q. And that is with reference, then -- and in fairness to  
 3 you, you should have that document in front of you, B241  
 4 to 242. I think this is actually Mr Leung's statement  
 5 that you refer to in your own statement, where he is  
 6 quoting from his own document. But at page 241 he says  
 7 as follows:  
 8 "Under consultancy ... Atkins was appointed ..."  
 9 Four lines down:  
 10 "... LCAL also proposed to engage Atkins as its  
 11 design consultant."  
 12 And he then refers to the minutes of a works  
 13 proposal group meeting which is then quoted from.  
 14 So I think there are a number of key points to that.  
 15 First bullet point:  
 16 "... LCAL's arrangement ... should be set up in such  
 17 a way that this designer is independent and no conflict  
 18 of interest with MTR's designer (Atkins)."  
 19 Yes?  
 20 A. Yes.  
 21 Q. Then the next bullet point:  
 22 "Should [their] services involve the design or  
 23 redesign of [the] permanent structure, LCAL should raise  
 24 this with justification and obtain approval from the ER  
 25 prior to proceed."

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1 A. Yes.  
 2 Q. So it's those provisions that I think you rely upon in  
 3 relation to the view that involvement of Atkins team B  
 4 in permanent works ought not to be done without further  
 5 approval from the engineer?  
 6 A. That's right, yes.  
 7 Q. So, against that background, in your report, you go on  
 8 to make some reference to the terms of the contract  
 9 itself, that is the terms of the construction contract,  
 10 and I think this probably causes us to go to another  
 11 page, which we will come to in just a moment, but really  
 12 I think just to close on that particular issue at this  
 13 stage -- have you had furnished to you in the course of  
 14 your work, Mr Rowsell -- and one takes it from your  
 15 conclusion not -- any further formal communication from  
 16 the engineer in relation to the expansion of the  
 17 services of Atkins as sub-contractor or sub-consultant  
 18 to Leighton?  
 19 A. No, I think -- as I understand the question, I think  
 20 I answered that in subparagraph (b) on page 43, where  
 21 I identified, based on what Mr Blackwood said, that the  
 22 B team's scope was extended to include over 200 items of  
 23 additional works, and I go on to say I have seen no  
 24 indication that the subsequent changes to the team B  
 25 contract scope were submitted to the engineer for

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1 further approval or whether they actually received  
 2 approval. So I have looked through the documents which  
 3 I could find and I couldn't find anything in the  
 4 bundles.  
 5 Q. And it's not your suggestion, I think, that that is  
 6 something for Atkins to do as such, as sub-consultant to  
 7 Leighton, but your point is that it ought to have been  
 8 done?  
 9 A. Yes, the contractor should seek approval to the terms of  
 10 the sub-contract or any subsequent changes, yes.  
 11 Q. I'm going to be tentative about taking you to matters  
 12 that are contractual and so on which will be a matter  
 13 for submission in due course, but if you were to take it  
 14 from me that, at least for the purposes of my question  
 15 anyway, there was no formal requirement upon Leighton to  
 16 have sought further formal approval from the engineer,  
 17 as a matter of contract, is your point more that  
 18 something ought to have been communicated at the very  
 19 least on an informal basis to ensure that there was  
 20 awareness that the services were being so expanded?  
 21 A. I would have some problem because the contract makes  
 22 provision that payments to the sub-contractor shall be  
 23 in accordance with the terms of the approved  
 24 sub-contract. So if the terms have changed and you move  
 25 outside of the approved sub-contract, then strictly

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1 speaking payment shouldn't be made as a matter of  
2 contract.  
3 Q. I'll be very tentative about getting into a contractual  
4 debate with you, lest lots of people stop me doing it,  
5 so I won't do that. Maybe another time.  
6 But it would not be unusual, of course, that in the  
7 course of any consultancy appointment, services should  
8 be expanded by way of further additional instructions  
9 and so on. So if I may put this to you rather more  
10 colloquially rather than contractually, the fact that  
11 payment is to be made against the approved contract is  
12 in one way neither here nor there. If there is  
13 a requirement that on each occasion when the services  
14 are expanded, and on your view particularly if it  
15 includes the permanent works are added, there needs to  
16 be approval from the engineer, one would expect to see  
17 that in the contract, would we?  
18 A. Yes, I accept the point that quite often services will  
19 be expanded, and if they are expanded in a similar area  
20 to those services which were being provided then, you  
21 know, that's quite common. But I think on this occasion  
22 the approval would clearly set out that if it was  
23 expanded to include permanent works then further  
24 approval would be required, which is a document we just  
25 looked at.

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1 Q. Thank you. The engineer, as we spoke about this  
2 morning, named in the contract, this is Mr Chik, is not,  
3 as an individual, someone who has given evidence to this  
4 Commission.  
5 A. No.  
6 Q. But we do know that, as is perfectly normal and  
7 expected, the engineer delegated his powers to others  
8 for the execution and approval and so on of the works;  
9 yes?  
10 A. Yes.  
11 Q. So, for example, if you have before you the statement of  
12 Mr Clement Ngai, which is at B1/17 -- thank you -- and  
13 if you were to go to paragraph 11 of that, Mr Ngai says  
14 at that point the following. And before I take you  
15 through the wording of it, have you seen this statement  
16 before?  
17 A. I don't -- I have probably seen it and scanned it but  
18 I don't recall the detail of it.  
19 Q. Understood. It is a short point for these purposes:  
20 "I have reviewed the letters issued by my  
21 predecessor, Mr Chik, and myself in the position of the  
22 engineer to Leighton regarding the appointment of the  
23 engineer's representative and other persons under the  
24 contract. The engineer's representative and engineer's  
25 delegate appointed by me and Mr Stephen Chik for the SCL

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1 project were", and he then sets out a table which begins  
2 on page 3 and continues to page 4.  
3 The engineer's delegates first were Dr Wong,  
4 followed by Mr Saunders, followed by Mr Reilly,  
5 Mr Rooney and Mr Ng. Then engineer's representatives  
6 were Mr Patrick Cheng, Kit Chan, Michael Fu. Do you see  
7 that?  
8 A. I can, yes.  
9 Q. Again, I will tentatively approach this because it will  
10 be a matter more for submission in due course, but the  
11 awareness of the involvement of Atkins throughout, for  
12 example, the course of 2015 in relation to, via their  
13 team B, certain permanent works matters, it will be  
14 pretty apparent to you from the evidence we have seen  
15 before as known to MTR, that there was awareness on the  
16 part of MTR of that involvement, was there not?  
17 A. I'm not sure. I mean, as far as I am aware, I would  
18 expect that to be the case, yes.  
19 Q. And from the communications you've seen and looked at  
20 and referred to in your document, the preparation of the  
21 temporary works design submissions, TWD-04B2, 04B3, were  
22 all matters which, at least in the latter case, found  
23 themselves on the table of MTR?  
24 A. Okay.  
25 Q. The preparation of PWD-59A3 found itself being produced

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1 through team A and all onto the table of MTR.  
2 My point is this, that if there is no formal  
3 requirement contractually, Mr Rowsell, for the engineer,  
4 as he is named in the contract, to approve an extension  
5 of the Atkins team B approval to work for Leighton, and  
6 yet it appeared subsequently and was as plain as  
7 anything to those within MTR that that is indeed what  
8 they were doing, that Atkins were, through team B,  
9 producing permanent works details, then what is the need  
10 for formal approval? The awareness is there.  
11 A. Well, you can't persuade me that you should ignore the  
12 contractual process. If you are saying that there is no  
13 contractual process, then I would agree with you, but  
14 I'm not agreeing with you that there is no contractual  
15 process.  
16 Q. But that is something we will look at in due course.  
17 A. That's fine, yes.  
18 Q. And that particularly where some of the key players, the  
19 Mr Rooneys and Mr Kit Chans and others who are named  
20 here as those to whom authority and power has been  
21 delegated by the engineer, are part and privy of all of  
22 those discussions regarding the work product of Atkins  
23 team B during 2015?  
24 A. Yes, you would expect the process to take account of the  
25 conflicts of interest which might exist if there is

<p style="text-align: right;">Page 169</p> <p>1 overlap between the teams. 2 Q. And your answers are all subject to your view and your 3 recommendations which we started on earlier, which 4 I accept. 5 Thank you. If you put that to one side. One of the 6 points you make then in your report, if we might go back 7 to that, which is at ER1/1, and on page 43, 8 subparagraph (a) of paragraph 54, is the point you make 9 halfway down paragraph (a) which is as follows, that in 10 your opinion the need for separation between team A and 11 team B was not achieved in practice because Mr Blackwood 12 was project director for team A and team B and Mr McCrae 13 was design team leader for team A and project manager 14 for team B, and Mr Blackwood also set out that there was 15 some overlap in the personnel in the teams; yes? 16 A. Yes. 17 Q. Stepping away from our discussion, at least for the 18 meantime, about conflict of interest and your 19 recommendations in that regard, the need for 20 a separation was something which came from Mr Blackwood, 21 as you know. You have read and heard his evidence on 22 that. Is that so? 23 A. The need for separation? 24 Q. Yes. 25 A. The need for separation was set out in the approval</p>	<p style="text-align: right;">Page 171</p> <p>1 Dr McCrae was similarly clear in this, were very, very 2 clear about where the boundaries lie. Would you not say 3 that's fair? 4 A. The position remains that there is the opportunity for 5 a conflict. 6 Q. But there always is, Mr Rowsell. 7 A. There isn't always, if they're not performing those dual 8 roles. 9 Q. But all the evidence is that it was handled? 10 A. Yes. I think I agreed with you earlier that I've got no 11 evidence to say that there was a conflict, just that the 12 arrangements provided the opportunity for it or 13 a perceived conflict. 14 Q. Thank you. 15 Turning the page in your report, please, to 16 page 44 -- I think this is a very short point indeed, 17 given what you have told us -- at paragraph (c) you set 18 out the following: 19 "Potential conflicts which could have arisen from 20 the Atkins dual-role arrangements could have included 21 the following". 22 A. Yes. 23 Q. Again, I think it's a short point because of what you've 24 helped us with earlier on, Mr Rowsell. These are 25 observations made with a hindsight view of the</p>
<p style="text-align: right;">Page 170</p> <p>1 letter, wasn't it? 2 Q. If you go back to the beginning of your paragraph: 3 "In his witness statement Mr Blackwood states that 4 there was a need throughout to keep both team A and 5 team B independent with no conflicts of interest ..." 6 A. Yes, I think most people involved would probably 7 identify there was a need for separation, yes. 8 Q. Well, it's not "most people", Mr Rowsell. It's some of 9 the people you say form the overlap. So actually what 10 we draw from this, I would suggest to you, is actually 11 those who formed the overlap, by and large, as you have 12 recorded it, were very, very well aware of the risk of 13 conflict of interest, were very clear about how to 14 handle it, and indeed to this Commission Mr Blackwood 15 said in response to questions from Mr Pennicott, which 16 you will have read, that there were occasions when 17 conflict of interest points arose and at that point 18 Atkins did not proceed further. 19 Do you recall all of that, Mr Rowsell? 20 A. I do, yes. 21 Q. Standing that position, I would like to suggest to you 22 that the fact that there was overlap through the 23 gentlemen that you mention here is not a point of 24 particular controversy in a team which consists of 300 25 or more people, when the named individuals, and</p>	<p style="text-align: right;">Page 172</p> <p>1 arrangement that was in place; correct? 2 CHAIRMAN: I don't want to stop you, but potential conflicts 3 which could have arisen because of a position of 4 conflict would be the following. So those are the 5 dangers potentially that you are facing. It's like 6 saying climbing a mountain without a rope you've got 7 potential dangers. One is you are going to fall off 8 a cliff, the second one is you are going to drag your 9 friend down with you, et cetera. I don't think, with 10 respect, that it's being said here by Mr Rowsell that 11 these dangers necessarily presented themselves and were 12 not properly dealt with in fact. 13 A. That's correct, yes. 14 MR CONNOR: Then on that basis I'm very content, sir. 15 CHAIRMAN: Thank you. 16 MR CONNOR: Thank you. 17 Against that background, you come to page 46 and to 18 your overall conclusions, which are set out at pages 46 19 and 47. 20 A. Yes. 21 Q. Dealing with them in turn, you say as follows: 22 "The requirement for independence of the two Atkins 23 teams and separation between them was not achieved." 24 Just pausing at that point and coming back to our 25 discussion just a moment ago, I would suggest to you</p>

<p style="text-align: right;">Page 173</p> <p>1 that while that in fact may be so and indeed accepted by 2 Mr Blackwood, the extent of that overlap, if I may put 3 it, was very limited? 4 A. A small overlap, yes. 5 Q. You would agree with me? 6 A. I would, yes. 7 Q. On point 2: 8 "It is not clear that the engineer's approval was 9 obtained for the subsequent revisions to Atkins team B's 10 scope of sub-contract." 11 Subject to your comment about your view of the 12 contractual arrangements, would you confirm to me now 13 that in the light of your evidence a few moments ago, 14 that you accept that in practice there was at least 15 awareness and knowledge among those to whom the engineer 16 had delegated authority of the involvement of team B in 17 relation to that expanded scope? 18 A. Yes. 19 Q. Thank you. What the Commissioners make of that in due 20 course will be for them, of course. 21 Point 3 we don't need to deal with because in 22 response to the Chairman you have just explained your 23 position regarding the potential conflicts of interest 24 to be perceived. 25 A. Yes.</p>	<p style="text-align: right;">Page 175</p> <p>1 Q. Thank you. 2 Your next point: 3 "Having two teams involved in the development of 4 detailed design of permanent design may have contributed 5 to the apparent confusion over the status of the 6 submission on the modifications to the top of the 7 diaphragm wall." 8 You deal with this later, but I think this might be 9 a good point at which just to move on to that, because 10 you deal with that later on, in I think paragraph 101 11 and those following it. That's set out on page 61, and 12 it's here that you do the following. You describe in 13 101 the procedures that were followed, and you say that 14 they were complicated and rather confused, and that's 15 what's links to the conclusion that we just looked at; 16 do you agree? 17 A. Yes. 18 Q. You say you have reviewed the position on a high-level 19 basis, and you go on to describe, in paragraph 102, the 20 team A original permanent works design, and you go on to 21 describe by way of a reprieve the arrangements regarding 22 team A and B of Atkins. 23 A. Yes. 24 Q. Then in paragraph 103 you then go on to say: 25 "In my opinion the procedure that was followed was</p>
<p style="text-align: right;">Page 174</p> <p>1 Q. You note surprise that the scope of team B was extended 2 to include design of permanent elements of the work. Do 3 you still hold that surprise, Mr Rowsell, in the light 4 of all that you've read and all that you've heard, and 5 indeed the comments of Mr Huyghe this morning about the 6 expanding scope of the contract, the increasing demands 7 that arose during the project itself? Is it not far 8 from surprising that it's -- 9 A. I suppose I was surprised that, you know, the work 10 wasn't undertaken by the Atkins team A. 11 I think I understand the point you make, that if the 12 contractor is -- I think you are saying if the 13 contractor was proposing a change involving the 14 permanent design -- the permanent works, then they 15 required someone to design it on their behalf. 16 Q. That's exactly so, Mr Rowsell, and particularly in 17 a situation which we have heard about, given the massive 18 demands of programme, the huge amount of work, and 19 clearly the very large effort that was pushed upon the 20 contractor. So -- 21 A. Okay. I found it surprising, but make of that what you 22 will, yes. 23 Q. But, upon reflection, your surprise is more subdued; 24 would that be fair? 25 A. I understand the position you are setting out, yes.</p>	<p style="text-align: right;">Page 176</p> <p>1 at best, lacking in clarity and transparency. I am 2 aware that the parties do not appear to be agreed on 3 whether the change in the diaphragm wall detail was 4 properly submitted for approval in accordance with the 5 consultation procedures. It does not appear that the 6 different teams within MTR were agreed on the 7 application of the appropriate procedures." 8 You go on to refer to Mr Kit Chan's witness 9 statement and Mr Andy Leung's statement, and you draw 10 the contrast between them and conclude that this 11 indicates to you that on this issue there was a lack of 12 liaison and communication between the CM and DM teams; 13 do you see that? 14 A. Yes. 15 Q. Again just by way of shorthand, if I may, but I'm happy 16 to go into greater detail, in paragraph 140, when you 17 get to the last four or five lines of that, you talk 18 about Mr Andy Leung, again, pointing to a series of 19 miscommunications between the CM and DM, indicating the 20 change had either not been submitted or approved, or it 21 had not been communicated to the supervision or design 22 management team for further action. 23 You go on to deal with that again in paragraph 105 24 on page 63, and you eventually get to paragraph 108 on 25 page 64. You say you formed the view that the</p>

<p style="text-align: right;">Page 177</p> <p>1 contractual procedures had broken down, and the position 2 reached was build and design rather than design and 3 build, and you go on to acknowledge the pressures that 4 arise therefrom. 5 Do you see all of that? 6 A. Yes, I do. Thank you. 7 Q. Now, one I think, if I may put it to you, fairly takes 8 from all of that -- as Mr Huyghe similarly told this 9 Commission this afternoon -- that the issue that he 10 considered to prevail here is the same one that you did 11 in your report and continue to take the view, that the 12 communication problem was one between the design 13 management team and the construction management team of 14 MTR. Is that so? 15 A. Yes. I mean, my understanding, when we refer to 16 a breakdown of communications, we would have expected to 17 see all those parties involved. We weren't seeking to 18 point the blame. So there was a breakdown in 19 communications. You know, Atkins weren't involved. 20 I would have expected Atkins to have been involved. 21 So it was the overall process rather than trying to 22 point blame as to why that lack of communication 23 occurred. 24 Q. I understand, and indeed, in fairness to you, with 25 reference to your earlier evidence this afternoon --</p>	<p style="text-align: right;">Page 179</p> <p>1 over the status of submission on the modifications, it's 2 just not supported by the factors which you have 3 included within your report in the paragraphs 101 to 4 108? 5 A. I think the principle of having split responsibilities 6 for permanent design can cause confusion. I'm not 7 saying -- because you were acting as sub-consultant or 8 Atkins were acting as a sub-consultant in both roles, so 9 clearly it's for their employer to take responsibility 10 for driving the management of the work -- but design 11 responsibility is, you know, a fundamentally important 12 element of the delivery and development of a project, 13 and to have to split responsibilities I think can cause 14 some lack of clarity and confusion. 15 Q. That's helpful, Mr Rowsell. But you will understand 16 perhaps why I'm asking the question of you that I am. 17 A. Yes. 18 Q. Because, on the one hand, what you have just said to me 19 is reflective of what you told the Commissioners 20 earlier, which is that in your experience it's not 21 a good thing to do, and that going forward you would 22 certainly be recommending different procedures, 23 definitely a policy, perhaps a committee, and so on. 24 But having made that conclusion that you reached there, 25 the penultimate point of paragraph 60 on page 47, and</p>
<p style="text-align: right;">Page 178</p> <p>1 I now forget who asked you the question, but you were 2 explaining how, as part of your forward recommendations, 3 pulling all of those interested parties into the 4 conversation, particularly using some of the methods 5 that you and Mr Huyghe have described, would mitigate 6 against a repetition of this problem; yes? 7 A. Correct. 8 Q. But what you do not cover and include within the key 9 factors that build up to your summary in paragraph 108 10 is anything which says that the Atkins team A or team B 11 in some way contributed to the lack of clarity or 12 miscommunication which led to the D-wall being broken 13 down and through-bars being used without there being in 14 place any working drawings. Do you agree with me? 15 A. I do. 16 Q. You also take the view, as does Mr Huyghe, that that 17 work should never have proceeded without there being 18 working drawings there. 19 A. I do take that view, yes. 20 Q. Do you accept, therefore, that in those circumstances -- 21 if you go back, please, to paragraph 60 and the 22 penultimate bullet point that you have there -- that in 23 reaching your conclusion there that the existence of the 24 two teams involved in the detailed design and permanent 25 design may have contributed to the apparent confusion</p>	<p style="text-align: right;">Page 180</p> <p>1 you refer to dealing with the specific issue later -- 2 you say that "Having two teams ... may have contributed 3 to the apparent confusion", but in fact there is nothing 4 that you found upon later on to suggest that that in 5 fact happened. 6 So while I don't detract or take away from your 7 carefully held view that you expressed to the 8 Commissioners about the appropriateness of this kind of 9 arrangement, there is nothing, do you agree with me, in 10 the evidence that you have founded upon to suggest that 11 those two teams, and the existence of them and what they 12 did, had any connection at all to this so-called 13 confusion? 14 A. Yes, I understand the point you make, and I am not 15 seeking to point any suggestion that it was, you know, 16 the joint Atkins role here. 17 What I think I have said is that you need clarity of 18 design responsibility. Now, I recognise that the 19 contractor may on occasions wish to develop 20 an alternative design, and so they will need someone to 21 support that. But in situations where the contractor is 22 looking at alternative designs, you would expect there 23 to be communication between the parties to know that 24 that work was going on. And in this circumstance, 25 design responsibility is still held by the employer,</p>

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<p>1 MTRCL, and the only way that a change can be made is by 2 the order of the engineer. 3 So, if the contractor wishes to change a design, 4 yes, they can develop a proposal and they can submit it 5 to the engineer, and if the engineer is satisfied the 6 engineer can order that that goes forward, but you would 7 expect there to be that communication between the 8 parties. 9 So I'm pretty much with you but I'm saying that you 10 need that clarity of responsibility for the design, and 11 you need good communication to know that some 12 alternative might be being developed, and you need to 13 know when that design is going to be developed. If you 14 are only going to get the design after you have built 15 the thing, then you are clearly not in a very good 16 position. 17 Q. Thank you for that. 18 A. I'm not sure if that answers your question but that's 19 the position I'm in. 20 Q. It's helpful. Thank you for taking the time to do that. 21 Just as a follow-up -- but it's my last area of 22 questions for you, Mr Rowsell -- you remember latterly, 23 before lunch, I was asking Mr Huyghe about his own state 24 of knowledge as to when Atkins had first heard that the 25 D-wall -- at least the eastern D-wall had been broken</p>	<p>1 concluded that it was inconceivable that there had not 2 been such a conversation which involved Atkins in 3 relation to the breaking down of the D-wall, but 4 I think, in fairness to him, latterly accepted that if 5 the evidence before this Commission, and if the 6 Commissioners conclude this, that there was no such 7 communication to Atkins at all, then the finding that 8 you and he reached, going back to your joint statement, 9 that there was a lack of meaningful communications 10 between various parties should not, at least as far as 11 paragraph 12 of your joint statement is concerned, 12 include Atkins. Do you remember that? 13 CHAIRMAN: Why not? 14 MR CONNOR: Because -- 15 CHAIRMAN: I'm not looking at facts. This witness is not 16 here to help me with fact. He's an expert witness. So 17 I'm not going to go through the maze of conflicting 18 facts. I'm taking his evidence to say that it's almost 19 inconceivable that there wouldn't have been discussions. 20 There should have been discussions, and those 21 discussions should have involved the design teams. 22 Now, whether in fact you are able to say to me and 23 to Prof Hansford later, "We accept all of that, that's 24 what should have happened, but it didn't, and we bear no 25 culpability for that" -- that to me is a matter between</p>
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<p>1 down and that through-bars had been used, et cetera, and 2 I mentioned to him the evidence that we have heard, 3 which was that it was not until June 2018 that that 4 knowledge arose. Do you remember that? 5 A. I do, yes. 6 Q. Had you been aware of that position, on Atkins' behalf, 7 prior to settling the terms of your report, that they 8 had no knowledge whatsoever that it was the intention to 9 break down the D-wall or the act of breaking down the 10 D-wall and the imposition of the through-bars until June 11 2018? 12 A. I'm happy to accept that evidence, yes. Is that your 13 question, sorry? 14 Q. Thank you. That's helpful. 15 No, my question was slightly different. It was: did 16 you know that, did you know of that position prior to 17 settling the terms of your report? And if you cannot 18 remember -- 19 A. I don't think I did, no. 20 Q. We had a discussion latterly, the professor and myself, 21 particularly I think latterly with Mr Huyghe, about 22 whether or not there had to have been a discussion about 23 the breaking down of the D-wall, et cetera, or whether 24 that meant there must have been anything -- latterly he 25 concluded -- or rather, not quite latterly -- he</p>	<p>1 ourselves and yourself. I don't wish to bring 2 Mr Rowsell into that because he hasn't been brought here 3 as a witness to analyse fact. That's all I'm saying. 4 MR CONNOR: Sir, I'm with you 100 per cent on that, and 5 I don't seek to go beyond it, but the point that arises 6 is that Mr Rowsell and Mr Huyghe have concluded -- and 7 this does refer to their assessment of facts that have 8 been given to them -- 9 CHAIRMAN: Of course, they have to start from a basis of 10 fact. 11 MR CONNOR: And their assessment is there was a lack of 12 communication between the CM and DM teams at Leighton 13 and Atkins, and at least as far as Mr Huyghe is 14 concerned, latterly, he agreed that this agreement that 15 he reached with Mr Rowsell was based upon his view that 16 it was inconceivable that there had not been such 17 discussion. 18 CHAIRMAN: I appreciate that, but the point I'm saying is 19 that on the evidence we have, there was in fact a lack 20 of meaningful discussions. The question you seem to be 21 dealing with is: whose fault was it? Do you see the 22 point? And I'm more than happy to listen to you when 23 you say, "Nobody told us, we knew nothing about this, it 24 all went on behind our backs, that's why there was no 25 meaningful discussion between us, and therefore while</p>

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<p>1 course if you had said to any of the design teams A or B 2 at the time, 'This is what we were doing', we would have 3 said at that time, 'You must consult us, we have a role 4 to play', but you didn't, therefore there was a lack of 5 meaningful discussion for which we were not 6 responsible." I think that's the point I am making. 7 I don't wish to sound aggressive or anything, it's just 8 that -- 9 MR CONNOR: Far from it. Thank you and noted. 10 A. I think that's the point we were trying to make as well. 11 MR CONNOR: Would you like to expand upon that. Tell us 12 what your point was? 13 A. That there should have been discussion between all the 14 parties involved in the design and the proposed change, 15 but it didn't happen and I'm not saying whose fault it 16 was, and if Atkins didn't know this change was going to 17 be made, they should have been made aware. 18 MR CONNOR: Thank you. I'm very content with that as 19 a conclusion to that line of questioning, and with that, 20 happily, I have no further questions for you, 21 Mr Rowsell. 22 Thank you, sir and professor. 23 Cross-examination by MR BOULDING 24 MR BOULDING: Sir, with your leave, I have just one matter 25 I would like to ask Mr Rowsell about.</p>	<p>1 A. It is, yes. 2 Q. If we were to go to appendix D in that report -- it's 3 about five pages from the end I need to go. 4 A. Yes, I'm there. 5 Q. This, you will have seen before, is a memo signed off 6 Stephen Hamill, the MTR project manager; correct? 7 A. Yes. 8 Q. I understand you have met Mr Hamill before; that's 9 right, isn't it? 10 A. I have, on a couple of occasions, yes. 11 Q. It's dated 3 January 2019, and do you see, in the 12 pre-penultimate paragraph, that Mr Hamill has set out or 13 referred to T&amp;T's 38 recommendations which he then 14 summarises in appendix A and he says they can be broadly 15 broken down into six categories; do you see those 16 categories there? 17 A. I do, yes. 18 Q. In broad terms, is that something you would go along 19 with in terms of his categorisation? 20 A. Yes, I'm supportive of that. 21 Q. Then he tells us: 22 "Since receipt of T&amp;T's interim report, MTR has 23 addressed the recommendations in a structured manner. 24 The key issues identified such as training, management 25 of site supervision processes and documentation such as</p>
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<p>1 Mr Rowsell, you discussed, did you not, the T&amp;T 2 report with Mr Pennicott earlier this afternoon? 3 A. Yes. 4 Q. We know they were appointed by MTR in August 2018 and 5 their report is dated October 2018; correct? 6 A. Yes. 7 Q. My understanding is that you are in general agreement 8 with the recommendations that T&amp;T have made in their 9 report; that's correct, isn't it? 10 A. Yes, it is. 11 Q. You have obviously had an opportunity to look at 12 Mr Huyghe's report. I just wonder if we can look at it 13 again. ER1 at tab 2. 14 A. Yes. 15 Q. If you would be kind enough to go to page 67. 16 A. Yes. 17 Q. Obviously you will have studied this table before, will 18 you not? 19 A. I have looked at it, yes. 20 Q. On the right-hand side, we can see the column, can we 21 not, "Actions already taken by MTRCL to this date to 22 address T&amp;T's recommendations"? 23 A. Yes. 24 Q. And I understand that that's been discussed with 25 Mr Huyghe and indeed explained to you; is that correct?</p>	<p>1 NCRs record sheets, as-built drawing procedures and RISC 2 forms, the adoption of enhanced digital management 3 on site and the review of the quality management 4 structure have been given priority." 5 Then he says: 6 "Other long-term goals such as the restructuring of 7 PIMS and introduction of changes to contract 8 documentation, which cannot be easily implemented into 9 live/existing contracts, are planned to be updated and 10 put in place before any newly let/awarded projects 11 commence." 12 On the basis of what you have seen and heard, 13 I assume you would have no reason to doubt what 14 Mr Hamill says had occurred and will occur in that memo? 15 A. I have no reason to doubt that whatsoever, no. 16 Q. Then if we just for the sake of completeness -- we can 17 see, can we not, that if you turn over the page, his 18 appendix A is the "Full list of T&amp;T recommendations with 19 action taken"? 20 A. Yes. 21 Q. That's something you have looked at before, 22 I understand, and indeed once again discussed with 23 Mr Huyghe; correct? 24 A. Yes. I think it's very positive, yes. 25 Q. It's very positive and it's interesting you say that</p>

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1 because whatever the problems were before, I would be  
2 right in thinking, would I not, that this shows that MTR  
3 are indeed taking proactive steps so far as their  
4 project management systems and procedures are concerned?  
5 A. It is a bit like the non-conformance report.  
6 Non-conformance reporting provides the opportunity to  
7 improve, yes.  
8 Q. So the answer to my question I think is yes --  
9 A. Yes.  
10 Q. -- they are taking proactive steps? I assume you also  
11 agree that what we have seen here, what they have done,  
12 what they are intending to do, you would regard as the  
13 actions of a responsible organisation; correct?  
14 A. Correct.  
15 MR BOULDING: Thank you, Mr Rowsell. I have no further  
16 questions for you. Thank you very much indeed.  
17 Questioning by THE COMMISSIONERS  
18 COMMISSIONER HANSFORD: I have two questions for Mr Rowsell  
19 Mr Rowsell, you were in the room when I asked  
20 Mr Huyghe about the references in your report to the  
21 engineer's role under the contract.  
22 A. Yes.  
23 COMMISSIONER HANSFORD: In my reading of your report, you  
24 make many references to the engineer's role under the  
25 contract, and imply that it was not carried out that

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1 way. Would that be correct?  
2 A. That wasn't quite the implication. I think the point  
3 I was -- well, as you say, there are many references.  
4 Quite a number of those references were to the fact that  
5 in some of the generic project management guidance, in  
6 the PIMS it would refer to certain actions like the  
7 design management team would do things or the  
8 construction management team would do things. Under the  
9 contract, it's for the engineer to decide that. Now,  
10 the engineer may well -- as we have discussed earlier,  
11 they may well appoint representatives to fulfil  
12 functions and to delegate functions too, but in looking  
13 at the PIMS procedures and handbooks, it didn't reflect  
14 the fact that there is a role for the engineer, which is  
15 a vital role because obviously under the contract the  
16 contractor only takes instructions from the engineer,  
17 doesn't take instructions from others unless that's been  
18 delegated.  
19 So what was lacking to me, you know, in converting  
20 PIMS into the project management plan which is then used  
21 to support the contract, within the guide, within the  
22 project management guidance an explanation of how the  
23 engineer's role had been fulfilled. Of course you've  
24 got the added requirement under the contract that the  
25 engineer shall act in an impartial manner, whereas not

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1 everyone else in MTRCL has to act in an impartial way.  
2 They can take account of the interests of -- well, I'm  
3 getting into areas of law which I'll get into trouble if  
4 I'm not careful.  
5 COMMISSIONER HANSFORD: But am I right to say that your  
6 recommendation is, going forward, that the project  
7 management systems and processes as expressed in PIMS  
8 and elsewhere should fully accord with the duties of the  
9 engineer under the contract?  
10 A. Yes, I think what should happen is that, you know, the  
11 generic guidance in the PIMS, you know, is first class,  
12 it's been well built up over many years, it's been shown  
13 to be robust. Then that has to be translated into  
14 a project management plan for the specific project.  
15 Now, that specific project may get undertaken under this  
16 form of contract, in which case you've got  
17 an engineer -- I mean, and I know that the NEC contract  
18 is becoming more common within Hong Kong projects. That  
19 doesn't have an engineer, that has a project manager.  
20 So part of the guidance of the PIMS should say that  
21 in developing the project management plan, account needs  
22 to be taken of the contractual roles and how you  
23 translate the generic project management guidance into  
24 specific guidance for those particular contracts.  
25 COMMISSIONER HANSFORD: Right. Am I right to say that you

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1 and Mr Huyghe are agreed on that point?  
2 A. I believe, yes, we are.  
3 COMMISSIONER HANSFORD: Is that what's reflected in -- is it  
4 paragraph 11 of your joint agreement, or is it somewhere  
5 else?  
6 A. It is, yes.  
7 COMMISSIONER HANSFORD: So although you don't actually  
8 mention --  
9 A. Yes, it's in 11(b).  
10 COMMISSIONER HANSFORD: You don't actually mention the role  
11 of the engineer under the contract, but that's included  
12 here under 11(b)?  
13 A. It's intended that that's included, yes. We could have  
14 been more specific.  
15 COMMISSIONER HANSFORD: Had it been more specific -- it's a  
16 difficult question. I was going to ask would Mr Huyghe  
17 have agreed with that.  
18 MR BOULDING: Sir, he's still here. He would be perfectly  
19 happy, I'm sure, to come along and assist you.  
20 COMMISSIONER HANSFORD: I just want to know -- what's your  
21 view on that?  
22 A. There was a question earlier about whether it's going to  
23 be a project plan or a contract management plan.  
24 Obviously, across the project you want as many  
25 procedures and processes to be as common, as consistent



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<p>1 as possible and you would expect over a project that all 2 of the contracts would probably be procured using the 3 same form of contract. It's possible that one contract, 4 it might be a mechanical and electrical contract or 5 something, may be a different form of contract, and then 6 for that specific contract there might be different 7 contractual roles which would need to be reflected in 8 the guidance. So you would have a project management 9 plan but then it would highlight any specific 10 requirements for individual contracts which might have 11 slightly different arrangements. 12 COMMISSIONER HANSFORD: Okay. 13 A. But yes, if you are converting the generic guidance from 14 the PIMS into a project management plan, part of that 15 would need -- it would have to include guidance on how 16 you take account of the contractual relationships. 17 COMMISSIONER HANSFORD: I'm happy with that and I don't 18 think I need Mr Huyghe to help me with that, but thank 19 you for that. 20 I have one other question. It's a little detailed. 21 It relates to the Turner &amp; Townsend report. Perhaps we 22 can turn to that. I understand it's in the bundle. 23 I think it might be B24450; is that right? Let's see if 24 I'm right. 25 CHAIRMAN: For us it's the very last report in our bundle.</p>	<p>1 a disallowable cost, on the contract that was used on 2 this contract, but on other contracts like the NEC then 3 it may be. You can build up an incentive whereby if the 4 contractor is late in notifying it, then there can be 5 a financial penalty, ie they don't recover costs that 6 arise from late notification. 7 So it depends on the existing -- on the precise 8 requirements of the contract. But you can certainly 9 build up incentive arrangements of that support and 10 I regularly use that for that type of incentive. So 11 it's something that I support. 12 COMMISSIONER HANSFORD: So are you telling me you support 13 incentivising this approach but the form of 14 incentivisation would depend on the form of contract? 15 A. Yes. You're not paying them extra for causing 16 a defect -- 17 COMMISSIONER HANSFORD: No. 18 A. -- but you are allowing -- you are reducing the cost, so 19 the incentive might be to reduce the cost impact on them 20 rather than to pay them money. An incentive can be 21 a negative incentive, if you see what I mean. 22 COMMISSIONER HANSFORD: I think the incentive, if I'm 23 reading it rightly, is not an incentive to cause 24 a defect but an incentive to report it? 25 A. Correct, yes, but it doesn't have to be -- that is one</p>
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<p>1 MR PENNICOTT: It's B17. 2 COMMISSIONER HANSFORD: Yes, B17. Yes, that's the report. 3 So, in here, their internal page 27, recommendation 4 CC5, they say: 5 "Introduce a provision which requires the contractor 6 to notify all NCRs, including that of his supply chain, 7 before the employer's team does and incentivises them to 8 do so." 9 He goes on, by way of example: 10 "For example, where a target cost contract is used 11 the cost of rework due to a defect would not be 12 a disallowed cost if the contractor had notified it 13 before the employer's team did." 14 So the suggestion, as I read it, from Turner 15 &amp; Townsend is the incentive to the contractor to notify 16 all NCRs is to ensure that it doesn't become 17 a disallowed cost. 18 My question to you is: do you support that? Is that 19 a way forward that you support? 20 A. I support the encouragement of the contractor notifying 21 NCRs as early as possible. I don't think it needs to be 22 a race as to who can notify it first. 23 COMMISSIONER HANSFORD: Right. 24 A. Under this contract -- I stand to be corrected -- but 25 the cost of rework in normal circumstances is not</p>	<p>1 possible way you could construct an incentive. There 2 are others. I would suggest that if I was writing that 3 recommendation, I would suggest that the wording -- it 4 does say "for example". 5 COMMISSIONER HANSFORD: It does. 6 A. So I suggest that MTRCL should consider the options for 7 providing incentives and to choose one that suits them. 8 COMMISSIONER HANSFORD: I haven't checked it but going back 9 to Mr Boulding's point in MTR's progress report, if you 10 like, on T&amp;T's interim report which he showed us just 11 now, recommendation CC5 is included. 12 A. It's being trialled. 13 MR BOULDING: It's page 3. 14 COMMISSIONER HANSFORD: It is, and that's something that is 15 being taken forward. 16 MR PENNICOTT: And trialled. 17 A. And I would support that, yes. 18 COMMISSIONER HANSFORD: As a trial. 19 Thank you, that's very helpful. 20 MR PENNICOTT: Sir, no re-examination. 21 CHAIRMAN: Good. Mr Rowsell, you will get your aeroplane. 22 WITNESS: Thank you very much. 23 CHAIRMAN: Thank you very much indeed. It's been an immense 24 help, the two expert reports, and may I also compliment 25 you and Mr Huyghe in his absence, unfortunately, for</p>

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1 your ability to come together and reach a joint  
2 memorandum which has saved us a great deal of time and  
3 also makes things that much clearer for us. Thank you.  
4 WITNESS: Thank you very much, sir.  
5 CHAIRMAN: Your evidence is now complete. Thank you very  
6 much.  
7 (The witness was released)  
8 There's just one matter that I want to consider very  
9 briefly.  
10 MR PENNICOTT: Yes, sir.  
11 CHAIRMAN: And that's an application that was suggested on  
12 behalf of China Technology. I'm not saying we will deal  
13 with it now, but I just want to --  
14 MR PENNICOTT: Is this the costs application, sir?  
15 CHAIRMAN: Yes. I just wanted to get indications.  
16 Mr Khaw, there's a letter to you.  
17 MR KHAW: Yes.  
18 CHAIRMAN: And in Roman-Dutch law -- I was trained in  
19 Roman-Dutch law and I have a tendency to want to sort of  
20 wander back in that direction -- there's a brutum fulmen  
21 which means firing an empty arrow into the sky, blue  
22 sky, "thunk", a lethal arrow goes up, goes nowhere and  
23 doesn't hit anything because there's nothing to hit.  
24 I don't have any power in respect of awarding costs  
25 to anybody, and I'm not going to fire my empty arrow

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1 into the sky, unless I'm of the view that it might hit  
2 something, and it can only hit something if government  
3 says, on a purely ex gratia basis, we may be prepared to  
4 consider what the Commission says.  
5 That's not to say what my decision is. That's  
6 a preliminary matter, and I just wonder if at this  
7 juncture you have any position.  
8 MR KHAW: Yes. It's certainly unclear what is going to be  
9 hit but the government certainly doesn't want to be hit  
10 either.  
11 At the moment, we have no instructions that we will  
12 consider any request for funding regarding legal costs.  
13 So I think that is quite clear from the government's  
14 point of view.  
15 MR PENNICOTT: Sir, with respect, if that is the  
16 government's position, which I understand it to be, then  
17 with respect to China Technology and those advising  
18 them, that's the end of the application. There's  
19 nothing, literally nothing, that the Commission can do,  
20 other than on the very limited basis that if  
21 a particular witness within China Technology or indeed  
22 any other party could make out a case for its particular  
23 witness to be reimbursed expenses or something of that  
24 nature -- other than that, this application doesn't get  
25 past first base.

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1 So if that's the government's position, that's the  
2 end of it, as far as I can see.  
3 MR SO: Mr Chairman, in that case, we would reconsider the  
4 position of China Technology, and we also take into  
5 account Mr Pennicott's indications and we utterly accept  
6 those to be the correct legal position and we will  
7 advise our clients accordingly.  
8 CHAIRMAN: All right. I would just add one further thing.  
9 It's not in order to make things even more difficult,  
10 but with respect, on certain of the matters which you  
11 have raised, the application may in any event be  
12 premature.  
13 MR SO: Indeed.  
14 CHAIRMAN: Because, for example -- and I only take it as one  
15 example -- you do pray in aid, if that's the right  
16 term -- and I understand your approach, the assistance  
17 that Mr Jason Poon has given, and you make mention, for  
18 example, of two people who gave evidence which allied  
19 with Mr Poon's complaints, but the problem is these are  
20 the two gentlemen that work for the bar bending -- or  
21 are the bar bending company.  
22 But the difficulty there is both myself and  
23 Prof Hansford still have to assess their evidence, and  
24 their evidence is not actually, when you go through it  
25 in detail, that clear. It shifts between a denial, or

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1 more importantly perhaps it shifts between a purely  
2 hypothetical suggestion and an indication of what in  
3 truth happened. Those are great differences. I might  
4 say it would be really nice to rob a bank if I could get  
5 away with it. It doesn't mean I have done so. Do you  
6 see what I mean?  
7 MR SO: Exactly.  
8 CHAIRMAN: So if I was going to and if government was in  
9 a position -- and it's a matter for itself entirely to  
10 change its approach -- in any event, I think we would be  
11 talking about this matter well after the report was down  
12 or after the report was down, and then we would have  
13 a certain set of circumstances and findings upon which  
14 an application should properly be made.  
15 MR SO: Thank you, sir. We will consider that.  
16 CHAIRMAN: Good. Thank you very much.  
17 Anything further?  
18 MR PENNICOTT: Sir, that takes us not until tomorrow but  
19 until Monday --  
20 CHAIRMAN: Oh, good.  
21 MR PENNICOTT: -- when the structural engineering expert  
22 evidence will commence.  
23 Sir, there has during the course of the day -- I'm  
24 not quite sure to what extent you have been updated on  
25 it -- been a minor alteration in the order in which the

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<p>1 structural engineering experts will be called. What 2 will now happen is that the first expert to be called 3 will be the government's expert, Prof Francis Au. 4 CHAIRMAN: Yes. 5 MR PENNICOTT: My understanding is that the second witness 6 that will be called will be Prof Alfred Yeung from China 7 Technology, who we are informed will be in Hong Kong on 8 15 January, which is Tuesday. 9 Sir, that is, as it were, the menu for Monday and 10 Tuesday. 11 What I have not yet considered is this point, that 12 if Prof Au does not, as it were, last all day Monday, 13 whether we ask Mr Southward, who would be the next 14 expert, to be available on Monday afternoon should we 15 get to him. That, I have say, is not a matter I have 16 discussed with Leighton or indeed anybody else at this 17 stage, but I will do so either this evening or during 18 the course of tomorrow. 19 COMMISSIONER HANSFORD: Can I ask: are we to receive oral 20 evidence from COWI? 21 MR PENNICOTT: Sir, at the moment, I don't know the 22 definitive answer. We have asked all the parties to 23 indicate whether they wish to ask Mr Allan from COWI any 24 questions. The indication by lunchtime was that nobody 25 wished to ask him any questions, including us, save that</p>	<p>1 CHAIRMAN: Could I just say, this morning, when we started, 2 I indicated why we hadn't started yesterday and the very 3 fruitful results that came from that. 4 Can I say for public interest, if there's any 5 question as to why we are not sitting tomorrow, it's 6 essentially the same thing. We have a number of experts 7 now who will give evidence broadly on matters of 8 structural engineering and safety issues. That evidence 9 manifestly is of central importance, and it has been 10 a matter of counsel, all the counsel present, working 11 with each other to ensure that that evidence is ready in 12 time and that the witnesses will be able to give that 13 evidence, starting from a particular date. So Monday is 14 the chosen date so that everybody could be ready, and 15 everything is now in order to proceed. 16 Occasionally, in any hearing, it is necessary to go 17 a little slower to get there quicker, and just 18 blundering on in order to fill up time doesn't achieve 19 anything. I would like to actually thank counsel, all 20 counsel, for the very constructive way in which, behind 21 the scenes, what I might call the administrative matters 22 have been dealt with. Thank you very much indeed. 23 MR PENNICOTT: Thank you, sir. 24 CHAIRMAN: So on Monday morning, then, we proceed. Thank 25 you.</p>
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<p>1 the government have indicated they may have some limited 2 questions. They are taking instructions on those 3 questions, as I understand it, at the moment, and the 4 suggestion has been made by me that if the questions are 5 very limited, they might be put in writing and then 6 could be forwarded via Leighton to Mr Allan in Scotland. 7 Obviously, sir, the principal problem, apart from 8 the subject matter that he deals with, is a logistical 9 one. It just did not seem to us, I have to say, 10 a sensible use of resources, time and money and so 11 forth, particularly for Leighton, to bring somebody all 12 the way to Hong Kong for what might be just a few 13 minutes' cross-examination, or indeed to invite Mr Allan 14 to -- I presume the only alternative would be to get him 15 to go to London and we have another videoconference or 16 video questioning session which also we weren't terribly 17 keen to do. 18 So, sir, to answer your question, I don't know 19 definitively but I think the answer is going to be no 20 but there may be some questions in writing, but no doubt 21 the position will become clearer in the next half a day 22 or so. 23 CHAIRMAN: All right. Good. So we will adjourn then until 24 Monday morning. 25 MR PENNICOTT: Until Monday morning at 10.00, sir, yes.</p>	<p>1 MR PENNICOTT: Thank you, sir. 2 (5.34 pm) 3 (The hearing adjourned until 10.00 am 4 on Monday, 14 January 2019) 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>

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