SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
16 September 2025

Day 9
30 September 2025
Robert Calderwood

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(10:02)

THE CHAIR: Good morning, Mr Calderwood.

MR CALDERWOOD: Good morning, my Lord.

THE CHAIR: Now, as you understand, you're about to be asked questions by Mr Connal, who's sitting opposite you, but, first, I understand you've agreed take the oath.

MR CALDERWOOD: I have, yes.

Mr Robert Calderwood

Sworn

THE CHAIR: Thank you very much, Mr Calderwood. Now, your evidence is scheduled for today and tomorrow. Whether it takes that time, we'll simply have to see. We take a coffee break at about half past eleven during the morning, and we'll take a lunch break at one. If at any time you want to take a break, just give me an indication and we'll take a break.

THE WITNESS: Thank you very much.

THE CHAIR: Now, Mr Connal.

Questioned by Mr Connal

Q Good morning, Mr Calderwood. I'm going to start by asking you the formal question I always ask witnesses, which is this: that you have produced a witness statement for the Inquiry – are you content to adopt that witness statement as part of your evidence?

A Yes, the witness statement in front-- is my answers to a series of questions and supplementary questions that I was asked over three sessions with lawyers from the Inquiry. They do come across as being a bit repetitive and out of-- out of sync, but it was just the way they have been recorded.

Q But I need to ask you, just to deal with the formal question. I accept that the witness statement is long and at times, as you say, doesn't seem to be logically ordered at every point. Never mind whose responsibility for that; it's ours ultimately. But are you content to accept it as part of your evidence to the Inquiry?

A I am indeed, yes.

Q Now, I'm going to use the witness statement as we go through the evidence. I'll ask you some early questions, and then we'll perhaps try and pick up some themes or topics. If I do that, it will probably involve hopping around, for the reason you just mentioned, to different parts of the witness statement, so if you just bear with me as we do that.

If I raise a point that you think I'm missing your answer, I'm not picking up correctly what your answer is, or you've said something better somewhere else, please simply indicate that and we'll try and deal with it. It may be a slightly untidy process, but I'm sure we'll get there in the end.

Now, if we could have the witness statement on screen, it's on page 3 of the witness statement bundle. Now, just to deal with the, if you like, formal background, you were Chief Executive of NHSGGC from, I think, 1 April 2009 to 31 March 2017?

A That is correct.

Q So that's, for our purposes, from before the contract was signed to build a new hospital to after it had opened.

A Correct.

Q Essentially, your career, which you deal with in the early parts of your witness statement and also by providing a skeleton CV at the back, is essentially one of being an administrator in the healthcare world. Is that correct?

A That is correct, yes.

Q Over a very long period, in fact – 45 years, you say.

A Yes, yeah.

Q Now, prior to being the Chief Executive, you were the Chief Operating Officer. Is that correct?

A Yes, I was Chief Operating Officer for, initially, Greater Glasgow Health Board in October 2005, and then we became Greater Glasgow & Clyde Health Board on 1 April 2006, and I continued as Chief Operating Officer until I was appointed Chief Executive in April 2009.

Q Just so we get that, on the next page of your witness statement when you're asked, essentially, "What was your job as Chief Operating Officer?", you say that you were in charge of the management of the acute hospital services within, initially, Greater Glasgow. Is that right?

A Correct, yes.

Q So, you say your "responsibility was to oversee the day-to-day running of all of the hospitals".

A Correct.

Q If we said, "What did you do?", that was essentially what you did as COO?

A Yes, I mean-- Yes, in the context of the Chief Operating Officer's key remit, it was to look after the acute services.

Q Then, obviously, you became Chief Executive. Now, I suppose what I need to ask you is quite a broad question about that. If we look on to page 5, just so we have some context for it, where you talk about being the Chief Executive

and there being schemes of delegation beneath that, ultimately, did the responsibility for building the new hospital land on you?

A In the context that the Chief Executive reports through the Board to the Health Secretary in Parliament, then, yes, all-- all reporting arrangements come back. The schemes of delegation which were set up in response to Standing Financial Instructions, Standing Administrative Orders or Scottish Government directives, they set out the day-to-day responsibility for discharging those responsibilities.

Q But, ultimately, if the buck worked its way up the ladder, to mix my metaphors, it would land on your desk and stop with you.

A Yes.

Q Yes. I have to ask you this because of the context in which this Inquiry is operating, which is of unfortunate circumstances. I'm not using that to belittle what these were, but just as a convenient adjective. Does that mean then that if what was delivered as a hospital turned out to be not in compliance with guidelines or not what the Board actually hoped for, ultimately, that responsibility was yours?

A Well, that would-- that would depend on the context of the issue we were discussing and whose day-to-day responsibility that was. It could well be that, as Chief Executive, I would be instructed by the Health Board to deal with any poor performance in relation to a senior member staff who had that day-to-day responsibility, but if the Board were to take the view that I had not followed through on my responsibilities to see it-- then, yes, the ultimate responsibility would lie with the Chief Executive.

Q I just want to ask you one or two other preliminary questions before we turn to some of the sort of themes that emerge and repeat in your statement. In paragraph 8, you're asked about some of the processes that were in place at the time that you were Chief Executive, and you say at the end of paragraph 8:

"... the Performance Review Group was the major sub-committee of the Board."

Now, just tell us why that was an important sub-committee.

A Basically, the structure of the Board and its sub-committees was reviewed by the Chairman and the Board members on a fairly regular basis, but at the time in question, when I became Chief Executive, the Performance Review Group was the major sub-committee of the Board, and within the Board's scheme of delegation they were allowed to take a number of executive decisions in the absence of the papers going to the full

Board.

That board-- or that committee, as I mentioned in the statement, met on a monthly basis in private, whereas the Board meetings were public meetings to-- which the public attended, and therefore, when the Board members wished to get into much more sensitive information, it was pertinent to take it through the Performance Review Group.

Q Can we just look at bundle 42 (sic), please, volume 4, page 46? Is this the kind of document that you would have been accustomed to seeing when you were there as Chief Executive, an annual report from IPC?

A No.

Q No. Okay, thank you. Take that down. Now, you go on in the next paragraph of your witness statement to explain some of the practicalities of operating the different systems, what the Board would and wouldn't do, and you try, I think, to give a flavour in these paragraphs of what the Board was inclined to get into and what it tended not to do.

You mentioned, in fact, in paragraph 14 on page 7, the Acute Services Strategy. We've heard something about this from other witnesses. This was a document which had to go up to the Health Secretary as your strategy for dealing with acute services within the Board area. Is that right?

A That's correct.

Q Then you talk about what we've heard described as something of a shift towards ambulatory care, the idea that you can have hospitals which are not designed for people to stay in but are designed for people to attend for treatment and then leave the same day.

A That's correct.

Q Because that then leads to a point that we'll perhaps come back to later, which is that, because your strategies of that kind go all the way up to the Cabinet Secretary, that means that different cabinet secretaries may take different views about any strategy that the Board has put forward. Is that right?

A Yes, the Acute Services Strategy evolved over the period 2000-- well, yes, from late 1999 through 2000/2001. It then took on different aspects of the Acute Services Review through 2003/04/05, ultimately resulting in the decision to set out what it was going to be on the new Queen Elizabeth University Hospital campus, and that involved two health secretaries at the time.

Q Yes. I think I'm right in saying that originally there wasn't going to be a children's hospital there, but that was effectively a decision that was pressed by somebody at Cabinet Secretary level.

A Yes, the background to the Board's Acute Services Strategy was: we first of all looked at adult acute services. That-- At that time, Glasgow had five major inpatient units, and the whole process of this was to modernise these services but also get fit-for-purpose healthcare buildings.

So the first phase of that strategy was looking at adult acute services, which resulted in the recommendation that the Board would concentrate on two major acute receiving sites. The other three would close and be replaced by these ambulatory care hospitals. So that was Phase 1, and that was the strategy that went through the Health Secretary at the time, which was Susan Deakin, and went to ultimately a parliamentary vote because of the closure of three major hospitals within the Greater Glasgow area.

Phase 2 was then looking at laboratory services to support that configuration. Phase 3 was looking at maternity services, and it was during Phase 3, looking at maternity services, where the Board took the decision to recommend the closure of the Queen Mother's Hospital, which was collocated on the then-Yorkhill campus. At that time, Malcolm Chisholm, who was the Health Secretary, took the view that we should include moving the children's hospital to be beside the new maternity services and the new adult acute site. So that was how the thing politically and operationally evolved.

Q I think you point out, if we go to page 8, that when there was a change of political party – paragraph 19, rather – the new Cabinet Secretary appeared and said she didn't like your Acute Services Strategy, but in any event you're not going to get doing PFI anymore for any projects that you had in mind, so that altered the procurement approach. Is that right?

A Correct, yes.

Q Now, you say, just so I'm sure I understand what you're saying, in paragraph 20:

"... in financial terms, that made the procurement strategy easier in the short term..."

Why did avoiding PFI make it easier?

A Fundamentally, the financial aspects of PFI. In those days, in simple terms, for every £100 million you borrowed through a PFI-funded project, you incurred a revenue cost of about £10 million a year. Under capital funding, where you get Treasury funding, the payback on the capital investment is the depreciation over the 60 years of the building.

So, in revenue terms to the Health

Board, on a day-to-day basis it's cheaper to have Treasury funding. But, as I say in the statement, you can't guarantee over the life of the building that you will always access future capital for backlog maintenance and maintaining. So, in financial terms, had we gone down the PFI route, the Board would have to have identified significant savings per annum to be made available to pay the PFI consortia costs. So, that made the phase going forward from 2008, in revenue terms, easier to plan for.

Q The one thing that would change, of course, moving from PFI to a traditional form of funding, would be, as you say, the maintenance role, which would be picked up by the PFI consortium – now has to be picked up by the Board. Is that right?

A The assumption in the business case is it will be picked up by the Board, but the Board receives capital funding annually sent by Parliament and the Health Secretary. So, the Board cannot be certain what its capital allocation in future years will be, but in the context of the business case-- the assumption in the business case is that you will get access to future years' capital to maintain the building safely.

THE CHAIR: Does that quite answer the question, if I understood the question?

MR CONNAL: Well, maybe I'm just not understanding the answer, my Lord, and that may be my fault.

THE CHAIR: As I understood, the question you were asking was, in a PFI project, part of what the client gets is the maintenance of the facility. Now, that's what I thought you were asking about. If I've understood the answer, it was in terms of the funding of the cost.

MR CONNAL: It may be we've just got slightly crossed purposes in our communications, Mr Calderwood, and the fault is probably mine. I think the first point I was trying to pick up was, am I right in understanding that, under a traditional contract, the party responsible for maintaining, looking after, dealing with the building, then went back to being the Health Board?

A That's correct.

Q Yes, and what you were telling me, as I understand it, was that that was the basis on which the business case would read: the Health Board have to do this task, but you get financial funding from government each year.

A Correct.

Q Am I right in understanding that the point you were making is you weren't sure how much you would necessarily get each year?

A Yes, I've set out-- I've tried to set out in paragraph 21, you-- Backlog

maintenance is an annual allocation alongside the Board's revenue funding and that is determined by the Parliament voting how much are they setting aside for health in both revenue and capital terms per annum. So, that was a variable number, and I think you may have seen, Audit Scotland has continually, over the years, commented on the perceived extent of the deficit of backlog maintenance in healthcare premises in Scotland.

Q Why do you call it backlog maintenance? Because if you were operating just a normal little business, you would maintain the premises, and then you would discover that there was something that you hadn't done and you would call that a backlog.

A Yes. Well, in the context of PFI versus Treasury funding, PFI does not do day-to-day maintenance, you know, repairing a broken tile or replacing the theatre lights. That is routine maintenance which would be undertaken by the NHS staff. Backlog maintenance is, say, at Year 25, you are replacing major elements of the mechanical and electrical systems, that in Year 15 you're replacing all of the windows in a certain unit. These are big life-cycle maintenance issues that, in PFI contracts, the PFI consortia have to pay for at that point.

So, there's a difference between day-to-day maintenance, which always remains the responsibility of the Health Board and its revenue allocations, and major elements of Estate replacement, which were-- or are referred to as backlog maintenance schemes.

Q Well, I'm going to come back to this point a little later, so I'll just ask one more question about it. If you have a new hospital that is being built under PFI, the operating company – just call it part of the same consortium for the sake of argument; it's not often a different legal entity, but often part of the same group – it takes possession of the hospital from the part of the group that's built it. Is that correct?

A Yes, yes. The PFI company that you enter into a contract with is more or less an off-the-shelf company. They sub-contract the construction and the design. They bring the money in, and that's the company that you deal with through the life-cycle of the building. They may not bring back the original construction contractor to do major backlog maintenance or major recycling replacement programmes.

Q I'm just thinking of the job of saying, on Day 99, "Here's a hospital nearly built," Day 100, "Here it is, up and ready to go." That's all done by the PFI consortium, making sure it's up and

ready, all kitted out and operational. Is that right?

A No, they would only-- they would only seek to hand it over to the health body. The health body would still have to ensure that all of the facilities were clinically operable.

Q Right. And if they weren't?

A The consortia would be required to make any changes or improvements, but the same-- In Treasury funding-- At that stage, the same applies in Treasury funding under the defects liability period, which in the context of this scheme was two years.

Q Okay. We'll come back to that topic, I think. I want to ask you about a topic concerned with water and water safety. Now, you'll understand that a lot of the topics that I'm going to ask you about-- I'll try and deal with them roughly in chronological order, although I probably won't succeed entirely, but a lot of the topics I'm going to ask you about have been driven by the issues that the Inquiry has been asked to look into. One of them is water and water safety.

I'd just like to look at what you've said on this topic. Can we go to page 12, paragraph 35, where you're asked about a Scottish guidance document, SHTM 04-01, and you say in your witness statement you had never seen it before – so before you were having the discussions about the preparation of this witness statement – and then you say:

"I do not believe that I was under any requirement under this document but would expect it would be delegated through the various executive lines of responsibility. I do not know where that delegation would be set out."

Now, is it not quite a surprising answer to give, that the standing Scottish guidance on water safety for health care premises was something you hadn't seen before?

A In the context of the question I was asked, which was, "Had I seen this particular document?", the answer was, I hadn't. In relation to the second question, which was-- "I don't know where the delegation was set out," the question I was asked was, "Where could the Inquiry look to see where the scheme of delegation was?"

If you look at the document and subsequent documents that are in the papers I've been sent to look at, the scheme of delegation is set out schematically in a number of those documents which sees the responsibility that was on the Chief Executive being cascaded down and delegated and-- through the Water Safety Committee and through the Chief Operating Officer and through, ultimately, the hospital directors and the hospital Estates staff.

The role of the Chief Executive would be exception reporting. So, things would come up to the Chief Executive and therefore the Board in exception reporting.

Q Well, can we just maybe have a look at SHTM 04-01? So, that's bundle 15, document 5, at page 381. Now, 381 is the front page, so that's just to tell us what its formal title is. Perhaps if we went to 386. (After a pause) Now, as you see in the second narrative paragraph there:

"Healthcare providers have a duty of care to ensure that appropriate engineering governance arrangements are in place and are managed effectively."

And then it goes on to explain that this document will deal with a lot of that. So, that's a duty of care that's said to be incumbent on the Board as a healthcare provider. Do you agree?

A Yes, and the Board delegated that responsibility through-- through a scheme, and would expect to get reports back where the Board was not compliant, and later in the document there is a schematic that sets out how that would be normally achieved.

Q If we go to 394, now what that starts out by doing is pointing out this is a management responsibility and management has the overall responsibility for implementing procedures to ensure that the water, basically, is safe, and it talks about the L8 system for looking after Legionella, and a need for a written scheme. It says:

"These procedures should demonstrate that any person on whom the statutory duty falls has fully appreciated the requirement to provide an adequate supply of hot and cold water of suitable quality."

Now, if we then go on to 416, you see in paragraph 6.3, there's a reference to the Chief Executive being "The Duty Holder".

A Yes.

Q Now, is that not an indication that whoever happens to be the Chief Executive at the time has the, let's call it, legal responsibility for this process?

A No, they have-- in my opinion, they have a legal responsibility to set up a scheme to deliver the responsibilities for that. In an organisation-- The Chief Executive of an NHS board, particularly the size of Greater Glasgow & Clyde Health Board-- At that time there were some 46,000 staff. There were 18 direct reports to the Chief Executive and a budget of over £3 billion. It is impossible for a single postholder to personally discharge all of these responsibilities.

Q Well, I think we can understand the concept that you need to

delegate.

A Yes.

Q But am I not right in thinking that doesn't alter the fact that the Chief Executive remains the Duty Holder?

A Well, I can't disagree with the fact that, through exception reporting, the Chief Executive should be made aware where there is a failure to comply, and that it would then be their responsibility to work with the teams to resolve the area where we were not in compliance, and that might well be issues of money and/or personnel, but it is not possible for the Chief Executive to personally know and have the skill set to take forward these very specific and technical areas of responsibility.

THE CHAIR: I think I can understand that but, I mean, just looking at the text:

"Management is defined as the owner, occupier, employer, general manager, chief executive or other person who is ultimately accountable..."

Now, if we take just for the moment that "Management" with that definition would include the Board, going to 6.3 and the first bullet:

"Management [and for the moment, let's think of that as the Board] are required to have evidence of commitment and structure to meet the regulatory requirements and a scheme, setting in writing the detail of the principles and procedures for managing and controlling Legionellosis and Water safety risks. This will involve: ensuring the Chief Executive (The Duty Holder) and Management Teams (Duty Holders) are aware of and co-ordinate the policy and are familiar with their devolved responsibilities, duties and relevant procedures."

Now, I take the point that the Chief Executive of Greater Glasgow & Clyde is a person with many, many, many, many responsibilities and, no doubt, it's not necessarily practical for that person to personally discharge them or possibly personally make himself or herself aware. But what this document seems to say is that the Board has a responsibility to ensure that the Chief Executive is aware of his duties. Now, I take the point that being aware of your duties is not the same as discharging these duties, but if you were not aware of the existence of this document, has there not been a failure somewhere in bringing this document and your duties to your attention?

A My Lord, there may well have been a situation where when this document came in in July 2014, the Board's responsibility is to go over the document and ensure that the scheme we had in place was compliant, would be

an exercise that would be undertaken and I have seen, in the context of this, a schematic which sets out Greater Glasgow & Clyde's responsibilities naming the postholders and it's quite the substantial scheme. To the extent that, in answering this question, I said I personally had not had that document put on my desk, that is correct. The Board secretariat would deal with incoming correspondence, would set up a system whereby it was sent out for people to confirm what were the actions of the Board and were they still compliant?

But yes, ultimately, you know, the role comes back to the Chief Executive to make sure that that's in place, and if it wasn't in place, then clearly it would be the Chief Executive's responsibility. My understanding within Greater Glasgow & Clyde is that we had a substantive scheme, we set out these roles and responsibilities and that the Water Safety Committee met, chaired by the director of Estates and Facilities and that these duties were discharged.

THE CHAIR: Do I correctly understand your evidence that, as a matter of historical fact, you were not aware of-- Well, first question, were you aware that you were the Duty Holder?

A Not-- Not in the way it's set out in this document, no.

THE CHAIR: No, and if you were not aware of the Duty Holder, you would not be aware of the duties?

A That would be correct.

THE CHAIR: And the reason for that is no one made you aware of it?

A The reason for that, yes, is that the Board had a scheme in place, it was checked, it was deemed to be compliant and there was no exception report sent to me to suggest that I had to take action.

THE CHAIR: Now, you drew our attention to the fact that this is a document of July 2014. I think I'm right in saying it's not the first edition of SHTM 04-01.

A There would have been earlier versions of water safety and the requirements to take on board learning across the public sector, yes.

THE CHAIR: All right. Thank you. Mr Connal.

MR CONNAL: I think the question being put to you is essentially around this proposition, Mr Calderwood: the drafters of this document seem to have intended that the Chief Executive should have the words, "The Duty Holder," attached to them, and that that should actually mean something. Now, if the Board doesn't tell you and you don't find out, that's potentially quite a significant issue, is it not? Because the person responsible, ultimately, is not on top of the issues.

A I can't comment on how Health

Facilities Scotland would have drafted the documentation. They use the term, "Duty Holder," at both levels of Chief Executive and Management teams.

Q (After a pause) Let's just go on to 417 before we leave the document, because one of the issues that's arisen in the Inquiry, Mr Calderwood, is that there were a series of officers supposed to be appointed to different posts, authorised persons, responsible persons and so on and so forth, and that wasn't actually, it turned out, all in place at the time the new hospital was set up. Now, am I right in understanding from your evidence that no one ever said to you, as the Duty Holder, that some of these things haven't been done?

A That is correct. As I've alluded to elsewhere in my statement, in the period from the beginning of 2015, we amalgamated three hospitals into the new Queen-- well, four including the Children's Hospital, into the new Queen Elizabeth campus. The various directors went about appointing their teams in preparation for the hospital opening in May 2015.

The director of Estates would have been expected to appoint the new senior maintenance and the Estates staff to the Queen Elizabeth campus and to make the appropriate appointments to the authorised persons, water etc., and

ensure that they had the skills and competencies to discard those responsibilities. On a day-to-day basis, that would not necessarily have been reported to me at all in the context of who was successfully appointed to which post.

Q Well, I can see that if things are going in accordance with the requirements, it wouldn't necessarily be reported to you, but did you use the phrase, "Exception reporting," to indicate circumstances in which something would come to you?

A Yes, I did.

Q So if something wasn't done, that should be reported to you as the duty holder?

A Correct.

Q And do you remember any exception reportings about the system of appointments for the new hospital coming to your attention?

A None at all.

Q Now, just so we're clear on what you've said about water responsibilities which, as I mentioned at the outset, appears at various points-- If we take that document down, thank you very much. If we go to page 23, now this has become an issue of controversy at various levels, and we'll come back to why in a moment, but if we go to paragraph 81 – forget validation for the moment, because that's a different topic

we'll come to – you weren't aware of "the requirement for an LAP occupational risk assessment". What we're actually talking about there is a water risk assessment for Legionella purposes for the new hospital. You weren't aware that that was required?

A Not specifically. I was aware-- well, "aware" is the wrong phrase. The commissioning process set out a whole series of steps that should be taken by the Operational teams to assure that the building was fit for clinical services to be moved in. The reference to LAP occupational risk assessment, I was not aware of that particular phrase. The requirement to have the water systems validated would be an essential part of the commissioning programme.

Q Just for completeness, in the next paragraph, you say:

"… albeit I was recorded as the duty holder that was the extent of my personal involvement."

Because am I right in thinking that you weren't told of your Duty Holder responsibilities and you didn't find out about them when you became Chief Executive? Am I correct on both counts?

A I've tried to explain that the roles and responsibility of the Chief Executive specifically in relation to the water systems policy, I did not execute any tasks or take on any personal responsibilities as Chief Executive. I was assured that the systems and the staff were in place to make sure that the Board was compliant with its responsibilities.

Q We go on to page 33, as we're working through a number of the issues that crop up under heading of "Water". So you say in paragraph 117:

"In relation to the water at the hospital, I wasn't involved in anything to do with it and I wasn't aware of the Water Safety Group; these were meetings I wasn't involved in."

Do we take that literally, that you weren't aware that there was a Water Safety Group, or is it just that you weren't involved in it?

A It was, I wasn't involved in the Water Safety Group as a-- as a member, or I did-- and I did not receive the minutes of those groups. As I have endeavoured to say, the expectation was that had something come out of the Water Safety Group that could not be resolved, then that would be reported through the appropriate scheme and, if required, I would get involved in its resolution.

Q Now, we go on to page 34, you're shown another document. Perhaps we could just get that up, bundle 27, volume 2, page 20. Oh, that doesn't seem to be the right reference. My apologies. Well, can we just see the title page for volume 2? No. Sorry, go back

to the title page. Sorry, the next page. Right, can we have page 5, please? Now, this is a 2015 Water Systems Safety Policy. So in existence at least for part of the time that you were there. Can we just open that document and go on to the next page? Now, you see immediately, "Table of Contents ... Roles and Responsibilities ... Chief Executive – Duty Holder," and then a list of other people with other responsibilities. Go on to the next page.

You see under "Roles and Responsibilities", "3.1 Chief Executive – Duty Holder". Now, I know to some extent this is repetitive, Mr Calderwood, but in your witness statement at page 34, you were shown this document – the reference is slightly misleading, but it's the same document – and you say, "I've never seen this," and you've shown me the page where it gives the responsibility to the Chief Executive.

Basically, if you've never seen it, you didn't know anyone that written this down. The reason I ask you is that it doesn't, on the face of it, appear that NHSGGC has drafted its paperwork on the basis that the Chief Executive essentially has nothing to do with it, just sits and waits for somebody to raise a problem. You see where I'm coming from?

A No, I appreciate the point

that's being made. I cannot but repeat the point. I mean, in the beginning of the document, you see the authors. It's dated May 2015, totally appropriate because of the changes in the management structures at that time, and to the best of my knowledge, the correct people were involved in drafting the document. Section 3.1 is a repetitive list of another document that's inserted here, and I have explained how the Health Board went about doing that.

So I contend that, basically, the requirement for that document to be updated in May 2015 was done by the director of Facilities, supported by Infection Control, etc., and reported to the Water Safety Group. It didn't then come to me either for approval, for information, or with a request to take any action.

Q And in fact, I think you say in paragraph 120 of your witness statement that the responsibilities set out in that document in that way are something you only really became aware of in preparation for appearing at this Inquiry. Paragraph 120.

A Yes.

Q Can we go on to 166, which is on page 49? Now, the reason you were being asked these questions, as you probably know, and as we'll pick up a little later on, is that a report done in 2015 kind of foundered somewhere along its

progress, and therefore there's been a fair amount of attention on it. But so far as the DMA Canyon report of 2015, which I won't bother calling up-- This Inquiry has seen it many times----

A Yep.

Q -- and I think you saw it in the context of preparing for this Inquiry – your position is that you, at least, hadn't seen it before.

A Never, no.

Q And then you were asked about the delegation of the Duty Holders point, which you've probably covered already. I asked you about the DMA Canyon report because who saw it and when has become a matter of some controversy with lots of other witnesses and I wanted to check that your position is you've never seen it.

A No, I've never seen it; and as I say later in my statement when I was asked about it again, the commissioning of the report in March, April 2015 to me is a fundamental part of the commissioning programme, so that in my view was a prudent move taken by the Project team and the Estates staff. The fact that it's now been shown that the recommendations made within the DMA Canyon report were not actioned is of some puzzlement to me because, having read it now and having not seen it at the time, the vast majority of the actions it requested would have been the responsibility of the contractor. So why it wasn't actioned is surprising. The fact that it was commissioned by the Estates team and sent to the Estates team was quite reasonable.

Q Possibly quite important as well.

A Well, I believe so, yes.

Q I suppose we're just trying to get our understanding of who ought to know what. We've asked this of other witnesses. This is a new hospital with a very large and very complex water system; at least, that's what we've been told. An assessment has to be made to make sure it's safe, to identify any issues and, in respect any issues, to suggest what needs to be done about them. Something of that importance, should you as a Duty Holder not have known about it?

A Only if the report required action to be taken that was not within the competence of the Commissioning team and the Estates staff. Again, with the benefit of hindsight and reading that report, there was nothing in the report that could not have been easily actioned by the programme director as part of the commissioning programme and liaison with Multiplex and with the Estates Management team in relation to access to capital funding. So there's nothing in

that report, having read it now, that would have, in my opinion, resulted in me being involved.

Q So making sure it was done would not be something that needed to be reported back to you.

A No. Only if the----

Q "Good news, we've done the report."

A When the project director advised me, and through me the Board, that the building was fit for clinical occupation, these tasks should have been performed and satisfactorily actioned. That information should also have been conveyed to the operational management team that then took the decision that we were able to go ahead with the clinical movement of services into the building; and as I've highlighted in a number of points throughout my statement, there is quite a comprehensive list of tasks that need to be performed during the commissioning period to take the building from a physical entity that the contractor hands over to a clinically safe environment for patients, and that is the day-to-day responsibility of the programme director, the Commissioning team and ultimately the Management team to sign off.

I've mentioned in the report that the Board made available significant millions of pounds in revenue to support that commissioning period in both staffing and in reference to funding.

Q Okay. Well, I'm going to come back to some of the staffing issues elsewhere. Apologies if I seem to be fixated on single topics, but otherwise we'll get lost because they----

A No, I appreciate that.

Q -- appear in so many different places. Can I just ask about one point that I think I may have touched on, but I want to make clear I have your answer? In paragraph 169, you're making the same point: the Chief Executive can't do everything.

A Yeah.

Q Fine. The Chief Executive doesn't have every technical qualification necessary to do all the technical things. No issue, I suspect, arises over that; but then the last sentence on that page:

"They [that's the Chief Executive] are obliged to ensure that a scheme of delegation exists where individuals are tasked to carry out those functions..."

And going on to the next page, at paragraph 170, essentially you're asked, "Well, okay, if that's the job of the Chief Executive, ensure there's delegation in place, what did you do about it?" Am I right in understanding your answer to be you didn't actually do anything about it; you just assumed that whatever scheme of delegation was needed was in place?

A Again, in relation to paragraph 170, the actual question that I was asked in relation to that was specifically in relation to when I became Chief Executive, did I set out a scheme of delegation for water? It wasn't in relation to subsequent changes that we've talked about in relation to the 2014 document or in relation to the appointment of staff to the new Queen Elizabeth campus and their roles and responsibilities in the spring of 2015.

The point I'm making in relation to that question, which is-- Unfortunately the question's not there, but the question was, "Did I set about a new scheme of delegation or review the whole scheme of delegation in April 2009?", and the answer was I didn't. I went over a number of areas, but at that time, the schemes of delegation that existed were still in place. There was no structural change on my appointment.

Q Okay. Well, just so I'm clear about that, the Chief Executive doesn't do the work himself. He ensures delegation is in place. When you became Chief Executive in 2009, did you do anything to check what delegation arrangements were in place about water safety?

A I cannot recall whether I specifically had discussions with the Board directors about all the schemes of delegation that were in place, and specifically water, no.

Q And you go on in subsequent paragraphs to explain that most of these delegation arrangements were found in standing orders, rather than in schemes of delegation themselves and so on, and I don't think I need to delay you on these. Can we go to paragraph 175, which is on page 52? We've had discussions about delegation with various witnesses, and obviously, the premise has been put to you that delegation requires the person delegating to undertake some level of supervision over those to whom responsibilities have been delegated, which includes at a bare minimum ensuring that delegated tasks are being performed, and you say at the start of that paragraph you agree.

Now, I suppose that the question is, if we're thinking about water, that type of requirement, making sure it's been done, you wouldn't have done that in relation to water because you said you would rely on exception reports coming up to you. So unless an exception report came up, you just assumed everything was fine.

A I think we're looking at slightly different aspects of the same issue. The point I was making was that in my annual review of the 18 direct reports to me, which included the Chief Operating Officer and the director of Estates and Facilities, in the performance

management reviews, meetings and paperwork, there would be a checklist of these schemes of delegation where they would be asked to confirm that these tasks are being performed. There was not a specific line of inquiry that was only to do with water, which, as you will respect, involved at that time probably 50 to 60 premises, because this wasn't-- The water issue in context of the Board's responsibilities was for every site. It wasn't unique to or specific to the Queen Elizabeth.

Q Was there anything specific done annually to check that the water structures for ensuring safety were in place and operating correctly?

A The Water Safety Group, as I understand it, produced an annual report reflecting that the duties had been discharged. I would pick that up through my performance management meetings with the director of Estates.

Q Just sort of pausing here at the moment, one of the things that an inquiry like this does inevitably is it approaches it with the benefit of a great deal of hindsight. That's just the nature of the operation that we're doing. So I want to ask you two associated questions. With the benefit of hindsight, do you think you should have done more about water safety?

A I think in the context of the day-to-day responsibilities of the Chief Executive and responsibilities set out in the Scottish Health Technical Memorandums, etc., for water safety, I don't believe there would be much more I could have done on a day-to-day basis in the period from appointment in 2009 through to 2017.

I think specifically this morning we have been discussing the period around-- if we take operational Estates issues, period from 2015 to '17 specifically in relation to the Queen Elizabeth. Could I and should I have done more in relation to that one aspect of water? I would say that's very difficult, as the Chief Executive, to have taken that on board.

Q I think it may be suggested by some involved in the Inquiry that having a situation where the identified Duty Holder is not aware that they're the identified Duty Holder, or of the duties of the Duty Holder, is not a satisfactory situation. Can you assist us on how that kind of problem might be avoided in the future in case we wish to make recommendations about it?

A I would find it difficult to offer a specific recommendation about how the-- the thing could be improved in detail. In relation to this, I would suspect that one recommendation that could be considered that would be, again, benefit of hindsight, beneficial is that the water--

the annual Water Safety Group report should be presented to the Board publicly so that it is seen that the actions have been taken and it's subject to wider scrutiny. That would be, I think, the way of ensuring that there's greater scrutiny of the Water Safety Policy.

Q Can we move on to a slightly different topic? Although it's related to water, so I'm just going to deal with it just now. Can we go to page 117? Now, you were asked about whether the Water Safety Group would have a role in relation to taps, and of course you point out that you didn't attend the meetings of the Water Safety Group and you wouldn't necessarily see the minutes either. Is that right?

A Correct.

Q Yes. Then we come onto the DMA Canyon report, which you touched on earlier. You were making a point about the contractor. Is that the point you're making in paragraph 420?

A Yes.

Q Did you have an understanding about how important the proper handling of the water system was for patient safety?

A Yes.

Q So, could we go on to page 118? First of all, you make the point you made earlier:

"... for the Estates Department to get the report, to commission it, pay for it and get it, was good. That was good practice. To then tell the project director in the context of opening the hospital, "Feel free to bring patients in next week because everything's hunky dory" ... [You] can't understand [that]."

Now, that suggests some kind of communication between those who receive the DMA Canyon report and the project director in the context of opening the hospital. Now, it was prepared some months after handover of the hospital had taken place, but perhaps before patient migration.

A Correct, yes.

Q Why do you say that something was said to the project director about this?

A Well, in the context that I was making an assumption that the project director would have sought assurances from the Estates that the water systems were operating and were compliant. That is a major part of the commissioning programme and the Commissioning team's responsibility. Again, having looked at the report with the benefit of hindsight, there had been a breakdown in communication there. Actions should have been taken and, in my opinion, reading the report, they would have been relatively straightforward to do. So I can't understand how the Estates team and the

project director would not be on the same page.

Q Yes. Well, if we go to paragraph 422, you say you didn't know the DMA Canyon report had been commissioned, you didn't know when it had been done, and you say, "I had been assured that it had been done..." Is that right? Did somebody tell you that the necessary L8 risk assessment had been done?

A No, I-- We're back here to the different-- The term "L8 risk assessment" is not a term I recognise. What I was told by the project director was that the water systems were operational within the hospital and fit for patients to be moved into the hospital. As I have said on numerous occasions, it is part of a comprehensive checklist of commissioning tasks that have to be performed before you accept the building is clinically ready. There is a significant differentiation between taking the building from Multiplex in February 2015 as a finished construction, subject to defects, repairs, to then a hundred days later confirming that the building is fit for clinical services.

I have highlighted that there are areas that are discharged by specialists. So, all of the major imaging equipment has to be inspected, signed off as operationally compliant. The Renal

Dialysis Unit and all of the inpatient areas need specialised treated water. That has to get certification that the water is running through the system and is meeting the purity required before any patient could be connected to the dialysis machines as an operational issue. So there's-- And the theatres have to be commissioned. So there's a whole series of responsibilities down to-- and I think I refer to it later on in the statement, down to ward sisters ensuring that all of the pharmacy, all of the supplies are in the clinical area on the day, or in the days before, you can then see it is fair and reasonable to move patients. So it's a very comprehensive process.

Q What were you told and by whom?

A Well, I was told by the project director that we were good to go. I was then told by the Chief Operating Officer and the Senior Management team, who were leading the patient migration, that we were good to go on the particular weekend that we picked to move in the services that were then in the old Southern General Hospital. And I attended the hospital later on that Saturday to see the patients coming in and talk to some of the staff.

Q Was that David Loudon?

A David Loudon was the project director at that time, yes.

Q Was this done-- Did you get a report? Was it a conversation? How was it done?

A It wasn't a written report; it was a verbal report. There was a written report I believe went to the Health Board in the form of saying that the building is ready for clinical occupation and setting out the dates that we were planning the migration and the work that the Operational team, through the Chief Operating Officer and senior directors, were taking to move in, but I-- It wasn't-- That paper to the Board wasn't backed up with any written reports.

Q Just pausing there then, I mean, if one accepts that the safety of the water system is a matter of some importance before you bring patients in – which I think you agree, correct?

A Correct.

Q And if it's not in the state it should be, then that could have – I put it no higher – consequences for the health and safety of the patients. Did it occur to you at the time that you should have got something more than a word from David Loudon to be comfortable that everything was in order?

A No, I didn't at that time have any reason not to accept the information that the project director and the Chief Operating Officer were providing to me about where we were on the process of

commissioning and the context of opening.

Q Well, we'll just finish this section by picking up a couple more paragraphs. Can we go to 124, please? Paragraph 445, I think you're being asked here, "What was the state of your knowledge by the time you were moving on in March of 2017?" and you say you:

"... had no understanding in respect of the risk of microbial contamination of the domestic water system or the management of this. I didn't know anything about it. On the basis that there was a risk in 2017, I would have expected Estates to have been responsible..."

So this is something that hadn't really crossed your consciousness by the time you left?

A Well, I don't think I would use the word "consciousness". The question I was asked was: did I have an understanding that there was a risk? And the answer was, no, it had not been raised with me. And, again, this question was in the context of the DMA Canyon report and the subsequent DMA Canyon follow-up report, and therefore that-- that is the answer, that at the time of the-- So, in the period between the hospital going operational over May/June of 2015 through to my retirement, nothing was brought to my attention about deficiencies in the water system that had not-- that

were not being or could have been addressed.

Q Yes. Just so we complete that answer, if we can jump back to page 43, please, and we look at paragraph 150, you say:

"I have been asked when I first become aware of issues with the water and ventilation..."

Let's leave ventilation aside. You say:

"I've never been aware of issues with water."

That's by the time you left:

"I [only] became aware when I was interviewed..."

I think that's the independent Inquiry team of Drs Montgomery and Fraser----

A Correct, the Inquiry team, yes.

Q And that's when this first came to your attention?

A Yes, as part of the questioning for that in the-- I think that was the beginning of 2021, my colleagues, Drs Montgomery and Fraser, commented on the DMA Canyon report, which is the first time that report came into my consciousness.

Q Right. Let's leave that topic, move to a slightly different part of the narrative. I want to ask you about the contract that was put in place, the structures, and some questions around that so we can understand what you did or didn't know at the time. The particular form of contract which has been discussed with other witnesses, I think you only touch on that very briefly at paragraph 24, which is on page 9. This is where you've been describing people going out and seeing what the market would or would not tolerate in terms of proposals, and then you say in paragraph 24:

"… the government and all the advisors, including our own Project team, came back and said that the most attractive way that we could get competition was going to the marketplace in this way, and that we should go and look at using NEC3 contract terms."

Now, simple question: when you were told someone wanted to use NEC3 contract terms, was that a contract you had any experience of?

A No.

Q So, when you set out in the subsequent sentences how they were supposed to create competition and incentive and so on, that's you simply reporting something that you've been told. Is that right?

A Yes, that was part of the report into the procurement strategy that went to the Board. During the discussion, NEC3 contract terms at a high level were-- were drawn to the attention of what they-- what they brought. This was an attempt-- The

use of NEC3 was an attempt to try and bring in some of the disciplines that the public sector had learned from PFI procurement projects. The public sector, healthcare, have a history of projects becoming, you know, overspent and coming in late. PFI brought the discipline to the procurement process where, in the main, PFI projects come in on time and within agreed budget variations during the process. So, the aim was to try and take the learning from the PFI procurement about incentivisation and about putting the responsibility for design within the contract with the construction consortia, and NEC3 was highlighted as being a contract form common within the industry which brought some of these disciplines into play.

Q Did you have occasion to work with anybody from that point on who was familiar with actually having run a contract under NEC3?

A I don't believe so, in the sense that our own Project team, in the context of NHS employees, would not----

Q Let me rephrase the question so it's clear to you. We have asked a number of participants in the Inquiry if they were familiar with NEC3 in the sense of having run a contract under it, as opposed to having heard of it or having attended a seminar on it or whatever, and we haven't found anyone yet who said they were, I don't think. I just wondered whether you could remember coming across anybody who was familiar with actually operating a contract under these terms?

A No, I can't identify anyone who proclaimed to have that experience.

Q The other question I wanted to ask you about that, and I'm sorry, I don't have the reference immediately in front of me, but one of the things that we were told when the question of contract form selection was going to be explored with the Board was that one of the-- let me just call it an issue, I won't call it a problem, let's call it an issue, with NEC3 was that it put a great deal of responsibility on the project manager role. That became very important under NEC3. Now, first of all, do you remember being told that?

A No.

Q Now, you mentioned design, and one of the issues that's cropped up in the Inquiry is the extent to which the vast number of people who are helping putting everything together to make this contract come into existence appreciated the way a design and build contract worked. Had you experience of operating design and build contracts?

A In the context of me personally being within a Project team, no. To the extent that the Board had procured a

number of buildings through the PFI and its success of the PPP initiatives, then yes.

Q So, these were PFI contracts where the consortium was going to take over the building and do the main running of it for 30 years or whatever the figure was. Correct?

A The maintenance of it, yes, yeah, but PFI contracts included design.

Q Now, one of the phrases that crops up in looking at the structure of the contract for the new hospital-- I'm sorry, I'm just calling it the new hospital to avoid getting tangled into whether it's one or two, and what you call it----

A Yes.

Q -- is the phrase "Employer's Requirements," which we've heard is actually quite a critical element of the process. You were asked about this on page 61 of your witness statement, paragraph 201, and you don't remember ever actually hearing that term before. Is that right?

A **"**Employer's Requirements", no. I would understand that as being the clinical specification.

Q You go on, in fairness to you, to say, "Well, I assume it's the specification of facilities. Do we want 22 theatres or 20? Do we want set numbers of beds?" Is that what you think Employer's Requirements are?

A Yes, and obviously there's significant information contained within that. The examples I gave were very superficial high-level examples, but yes.

Q Yes, because in fairness to you, you go on to say that you understood there were a whole series of clinical working groups reporting in through the Project Board, then the finished document was presented to the Board and accepted. So, something that you now recognise as Employer's Requirements came back to the Board?

A Yes, they-- at a very high level, and the point I was making was that, from the Board paper's point of view, it was these issues that-- "What were the departments? What were the scale of the facilities that we were seeking to procure?"

Q Yes, and you understood that if someone was responsible for this thing that you now think might be the Employer's Requirements, that would be with Helen Byrne.

A Helen Byrne led that project at that time, yes.

Q Now, can we go to-- Apologies, my Lord, the way this statement has been put together means that sometimes things that appear to be out of order arise from the way the questions have been asked as much as anything to do with the answers. Can we

go to page 19? I just want to ask you about what you say in paragraphs 62 and 63, because here you're saying:

"In respect of Employer's Requirements you previously asked about, which I am not too familiar with, or 'getting reports about the proposal not complying with the guidance, which was inserted into the Employer's Requirements'…"

You have no knowledge of things being reported to you that were not being in accordance with the Employer's Requirements. Am I correctly summarising that?

A Correct.

Q And you say:

"Nothing regarding this was ever explained to me, not even by [the] legal team when [I was] signing the contract."

Is that correct?

A Correct.

Q And you say in paragraph 63 – I'm going to come back to the next point in 62 just in moment – essentially the point you made earlier:

"The Employer's Requirements were created by the Project Team through engagement with a clinical network... [You] had no involvement. The issues of whether or not there was compliance with the Employer's Requirements did not come up in the groups [you] attended. The only process [you were involved with] was the design of the wards and the mock up units… so [you] could see what they would look like."

Is that right?

A Correct.

Q The reason we ask you these questions, Mr Calderwood, is we're trying to understand what you, as a very senior Board official who had some connection with what was going on, as opposed to not knowing anything about it, knew about the significance of Employer's Requirements in this process. What did you think they were intended to do?

A Well, as I have endeavoured to explain in the context of my understanding of Employer's Requirements being the clinical specification, it was to ensure that we got the facilities that we required to the quality and regulatory standard that we had stipulated or accepted during the detailed design phase. There were-- and I think comes out in these questions, there were two stages to the award of the contract. The first stage, up to December 2009, when Multiplex were-- when the contract with Multiplex was signed, the design was at a very high level. I refer in the statements to being primarily 1 to 200 drawings and clinical adjacencies with the requirement to take specific departments down to a 1 to 50 drawing.

Between January 2010, after the contract was signed, through to the beginning of 2011 when the final design was signed off, all of the clinical involvements into the detailed design where every department, every room was taken down to 1 to 50 drawings, and the M&E services and everything were signed off as acceptable, occurred in that sort of 12/13-month period.

Q Okay, can we just then go to the signing of the contract? Can we go to page 86? You were one of the signatories on the contract. Is that correct?

A That's correct.

Q I think I have elsewhere in your statement that you were actually in and out of the lawyers' offices over a period of some days because there was so much going on. Is that correct?

A No.

Q No, just the one?

A For-- Well, yes, I was only in the lawyers' office on the one occasion, to-- to sign the contract. Our Project team, our lawyers, and Multiplex and their legal advisors were together for some number of days in-- well, setting out, approving and vetting the contract documentation. I think I was invited, on two or three occasions, to be ready to join the meeting with regards-- or the group with regard signing the contract, and then, ultimately, on 18 December, I came along to sign it.

I was in the lawyers' office for two or three hours leading up to the signing of the contract, and again, as I say in my statement, I was one of, at that time, only three Board Executives who had the delegated responsibility to sign contracts of this value.

Q What you say in paragraph 298 is that you were taken through the framework structure:

"… at a very high level in the hour before the contract documents were produced."

So am I right in thinking from that answer that when you use the phrase "at a very high level", you are not looking at all the contract documents scrutinising their content and so on so forth?

A No, no, I'm-- In that particular afternoon I was discussing with the Legal team and the Project team, were we getting everything that we expected at the price that had been reported to the Board which resulted in Multiplex being appointed as preferred contractor? So there were only two or three aspects of the contract that I was seeking to ensure were watertight in relation to our responsibilities.

Q Well, in your witness statement at 299, you were asked a question, you know, "Did you ask whether the contract

delivered the same hospital which was being proposed in the Outline Business Case?" and you say, well:

"… probably not in those words, but yes, I did ask the project director to confirm that we were getting everything that we had specified for the money and in the contract, yes."

A Yes.

Q And the answer to that was?

A Yes.

Q Insofar as the phrase, "Employer's Requirements", which is the one that you weren't sure you'd heard-- Do I take your next answer as indicating that you don't think that came up, compliance with the Employer's Requirements, during the advice that you got?

A That's correct.

Q Thank you. My Lord, this might be an appropriate time to take the morning break.

THE CHAIR: Certainly. Mr Calderwood, as I said, we take a coffee break. If I could ask you to be back for five to twelve, please?

A Certainly.

(Short break)

THE CHAIR: Mr Connal.

MR CONNAL: Thank you, my Lord. (To the witness) I want to ask you-- I'm still sticking to issues that relate to the sort of original early periods that we're looking at when we're dealing with the contract and matters relating to the contract. What I want to ask you about is your understanding of the role played by guidance documents. The reason I want to ask you about this is that at different points in your statement you say slightly different things, and I want to make sure we're not misunderstanding what you are trying to tell us. Now, if we go first of all to paragraph 62, which is on page 19, because this may be important. You'll remember we discussed the Employer's Requirements----

A Yes.

Q -- and the importance of the Employer's Requirements in the contract process. Now, in the latter part of paragraph 62, having quoted some questions about not complying with guidance or understanding that Employer's Requirements were obligatory or something not being in accordance with the requirements, you say:

"… I have no knowledge of that. Nothing regarding this was ever explained to me, not even by legal team when signing the contract. [You say] I was not aware of there being a distinction in the Employers Requirements regarding compulsory and recommended compliance with guidance. The Project

team would have been aware of this."

Now, if we just pause there for a moment, is that your position? That you weren't aware that there was a distinction made between guidance which was regarded as compulsory and guidance which was simply there, as the word suggests, as guidance?

A Yes. At no time did I see the documentation that was shared with Multiplex in the run-up to appointing them as the preferred bidder. Therefore, it is only since my discussion with the Inquiry that I have been aware of the distinctions in the Employer's Requirements of compulsory compliance and recommended guidance to be considered.

Q You can understand why it might turn out to be an important distinction, just like any other provision. A provision is compulsory or a provision is simply one you have to look at and make what you wish of it.

A Yes.

Q I just want to pick up the other points where you touch on or around this issue. If you go to page 85, where we're talking about the 3 air changes issue – and I'm coming back to that.

A Yes.

Q We will come back to that, but you say in that answer:

"… we were not in non-compliance with anything, bearing in mind that the guidance was guidance."

Now, that presumably is as distinct from compulsory guidance. So what you're saying there is that what you understood was that the air change rate information was merely guidance, not compulsory?

A That was my understanding and the advice that I received from the Project team, yes.

Q The advice you received from the Project team?

A In the context of looking at that issue retrospectively, yes.

Q And when you say----

THE CHAIR: Sorry, would you maybe give me that context? Did you have a discussion with members of the Project team about air change rate?

A Not at the time. My involvement in the debate about air changes came when I became involved in the issue with regard to Ward 4B.

THE CHAIR: So we're talking about post-2015?

A Yes.

THE CHAIR: Right. Okay. Thank you.

MR CONNAL: Yes, my Lord, I'm going to the topic of what's been called the ventilation derogation in due course, and I'll make sure I pick up everything that the witness says about that; but my

understanding of the witness's evidence in his statement accords with what he's just told my Lord, that he was not involved at all in discussions about this until somewhere around 2013 or '14.

A Yes, it would be early 20-- Well, it would be part of the commissioning period and the series of debates that follow on from that with regard to the Infection Control team, once they had been appointed for the Queen Elizabeth complex, raising issues with regard to the suitability of various clinical areas, and at that point I got more involved, and it was at that point that this issue of 3 air changes plus chilled beams and the acceptance or otherwise of that became part of my knowledge.

THE CHAIR: Mr Connal, just on this compulsory guidance point, to make sure that I'm keeping up, you've referred Mr Calderwood to paragraph 62, and we can see what is said there, but what is your understanding, as I say, just to make sure that I'm keeping up?

MR CONNAL: Well, I was intending, my Lord, to refer to the discussion that we've had with other witnesses over what was contained in the Employer's Requirements, which obviously is a lot of technical detail, but also a list of guidance documents, some of which were allocated to a box marked "compulsory" and some of which were allocated to the box "to be considered", or words to that effect.

THE CHAIR: Okay. I've now caught up, because quite frankly I'd forgotten that distinction in the Employer's Requirements.

MR CONNAL: I think this witness says, "If there was such a distinction in the Employer's Requirements, that was not something that came to my attention."

A Correct, yeah.

Q And that he had been told in the context of the air change rate debate, which we'll back to, that the guidance was simply guidance, just that.

A That's what I was subsequently told when I became involved in looking into the differences of opinion between the Infection Control team and the clinical users.

Q Yes. We'll come back to the Ward 4B issue and whether there was a debate quite in that form in due course. I'm going to deal with 4B with you separately, if I may. The only other references I wanted to pick up on the topic of guidance are two.

First of all, on page 61 of your witness statement in paragraph 205, you're asked about guidance that would have been placed for the specification of wards and ventilation, and you say there was a guidance in Scotland through SHTMs, some of which were mandatory

and some of which were purely for guidance. So at that point, at least, when you're asked about the SHTMs as opposed to the Employer's Requirements, you're aware that some provisions are intended to be compulsory and others merely for guidance. Is that correct?

A Correct, yes.

Q And then the only other point I wanted to come back to, because this is where it starts to get connected to the air change discussion we'll return to-- If we go to page 72, you say there in paragraph 240:

"SHTM 03 was guidance; it wasn't mandatory. So, at no point had the statutory guidance not been achieved..."

We'll come to the description of 3 air changes per chilled beam in due course, and also the type of patients that were anticipated. Then you say:

"For the client group that was in the building, the system as designed was deemed to be acceptable and compliant because SHTM 03 was, as I understand it, or at least was told, is guidance."

Now, first of all, I'm assuming that when you say "guidance", you mean as opposed to compulsory, something to be complied with.

A Correct. That's what I was meaning by reference to the word "guidance".

THE CHAIR: "In a regulatory sense"? Are we talking about a regulatory sense as opposed to a contractual sense?

MR CONNAL: In a contractual sense. (To the witness) So you were told, as I understand it from this paragraph, by someone that the SHTM 03-01, which is the ventilation one, was simply guidance.

A In the context of air changes, yes.

Q Did you have an understanding that that was the case yourself, or are you simply reliant on what you were told?

A I'm reliant on what I was told, but I'm referencing this to the question about the building in total. There were specific clinical areas in the building which had different specifications.

Q Yes.

A So this is a generic comment about the ward areas specifically for the general population.

Q We'll come to your understanding of what specialist areas there were shortly. Who told you that it was just guidance? Do you remember?

A The Project team.

Q Anyone in particular, or----

A It would have come up, I think, in general conversation with Alan Seabourne when he was the project

director, and more specifically with David Loudon when I got involved in the issues in 2015.

Q So you're not in any doubt, Mr Calderwood, the reason we're asking you this is if you went to the Employer's Requirements and you looked up the list of guidance and you looked up the box marked "compulsory", you would find SHTM 03-01 in there. But anyway, you were told it was just guidance.

A Well, I think we are discussing two different issues. SHTM 03, as issued by Health Facilities Scotland as it is now, I believe-- In relation to the recommendation contained within it suggesting 6 air changes, I was told it was guidance. In the documentation that we sent to the bidders and the statement that we put it into the "compulsory" box, that was a choice that the Project team put in the documentation.

They subsequently accepted a design solution that was different. So it's the difference between the guidance being mandatory or guidance. The contract boxes are different. Again, they're not the same thing. If we put something into the "compulsory" box but it's not mandatory on the Board to achieve it, then the Board's at liberty to move it out of that box, which is what I understand, with the benefit of looking at it retrospectively, is what happened.

Q I think I'll move on, my Lord. Let me ask you another question, just so we try and get a picture of what was the objective here, what were you trying to achieve with this new hospital. It's been given various titles, "flagship", words of that kind. Now, you're asked questions which sort of touch on this at various points, so I just want to pick up your answers so we can understand them so we can think about where it ended up as against what the objective was.

Now, if you go to page 18 and paragraph 57, you've been asked questions about compliance with various regulations and guidance and so on and so forth; and then you're asked in paragraph 57 a question which suggests you might just be interested in meeting regulations, and you answer:

"I was interested with the project being compliant and being the best-quality environment for the clinical services that we were seeking to provide."

So your aim, insofar as you were involved in the exchanges, was to get the best hospital. Is that right?

A Absolutely.

Q Now, you're asked what is really a follow-up question on the next page, page 19:

"As Chief Executive and wanting the hospital, at that point, to be following

good practice as well as being compliant with all the relevant regulations, I wasn't aware that it didn't nor wasn't. So, I can't comment on your question whether in hindsight I think that it should have met all the guidance, good practice."

In terms of the role you were occupying, you were obviously engaged in communications of some kind with the project team. We have some details here. Were you taking any steps yourself to try to ensure that this "best hospital" did comply with all the good practice, good guidance and so on?

A I as an individual didn't take on any tasks or issues with the meetings with the Project team and seeking their reports on actions that we were taking in relation to this project. I think I've highlighted throughout my attempted statement that in the period up to signing the contract and in the period up to the start of construction in 2011, the patient groups which have been the subject of comment thereafter were not in the specification for the hospital.

So all of the actions that were being taken up to and including the signing off of the design and the start of the construction was for a defined group of patients. The Board subsequently took decisions in 2013 and then 2014 for other patient groups to be considered for transfer to the Queen Elizabeth campus.

Q Well, I'm not sure that-- I do need to ask you about what appears to be your impression of what the patient groups were. I'm going to suggest it was not correct. But let's leave aside what happened in 2013 and '14, because what you're talking about there are the introduction of the Adult Bone Marrow Transplant Unit and the Infectious Diseases Unit, which we'll come to in each case. I think what I was asking you really was this: if you've got an aim in your head, "This is to be the best hospital; I want this to be top hospital, great hospital," whatever phrase you want to put to it, were you actively taking any steps to try to make sure that that happened?

A Not on the day-to-day basis of getting involved in the detail. My major role in the period beyond 2011 was working with colleagues in the Scottish Government over the total capital availability and timing and dealing with the opportunity to try and accelerate Phases 2 and 3 of the scheme, which was to allow for additional investment on the Queen Elizabeth site.

Q Well, come back before that when the hospital-- you know, the hospital is in the design phase and then construction starts.

A Yes.

Q Are you taking any action in

your communications to try to ensure that what comes out the other end is the best it can be?

A Other than reiterating the comments to my colleagues-- The clinical input process was led by the Chief Operating Officer through a very comprehensive series of clinical engagements and working groups. The project director by 2010 was Alan Seabourne. Helen Byrne had moved on. In discussions with those two individuals, I would be stressing the Board's desire to get that-- you know, the term you used, which I would have used, is a flagship hospital for the NHS in Scotland being constructed within Glasgow.

Q Well, that's probably reflected, if we look in your witness statement at page 20, paragraph 66. You say:

"... the expectation was that we were seeking to build and develop the best hospital possible..."

That's what your aim was.

A It was, yes.

Q Now, just so we don't misunderstand another phrase that crops up, page 39, paragraph 136, the phrase "gold standard" appears from time to time. I think what you're trying to do in 136 is explain what you understood "gold standard" was about.

A Yes, the reference to "gold standard" was in respect of, as I say, the clinical adjacencies and the fact that a major centre incorporating regional maternity and neonatal services, the full range of paediatric services, critical care and adult specialties in adjacency is considered to be the gold standard for a major campus. And in relation to the understanding that in the-- at that time that the expectation was that hospital would become the West Scotland Regional Trauma Centre, the clinical adjacencies of neuroscientists and spinal injuries was also considered to be linked to achieving that gold standard.

Q So, as you say in the answer there, if you're heard to talk about the gold standard, you're not talking about the physical environment; it's this adjacency of different services in order to achieve this bigger picture that you're talking about. Is that correct?

A Yes, correct. Yes, I mean, my use of the word "gold standard" is that that's what we were seeking to achieve, and it was a phrase used about the clinical adjacencies.

Q If you were trying to get the best hospital possible, would you expect the physical environment also to be to a gold standard?

A Yes, I mean, the highest possible standard, and I think the fact that this was, to date, the only hospital built in the NHS Scotland with exclusively single

rooms, the fact that there is a significant amount of public space in the atrium, and other aspects of the design that-- we were seeking to get that right as well. One of the lessons of history is that in the past, in trying to get the clinical services correct within the limited funds available, you squeeze the public and other patient spaces. The aim in this building was not to compromise that physical environment.

Q Just while we're on that page, can I just ask you about the last question on the page, simply because I'm not quite sure I understand the question fully, nor indeed your answer to it? The question was:

"At that time, was there the assumption that the hospital would be built to good practice guidelines? Do you recall anything like that?"

And your answer is no. I suppose it's the question there. Do you remember anyone saying to you, "Well, this hospital will be built in accordance with good practice guidelines," and you-- not sure that's cropped up?

A It's not a phrase in relation to when it was asked in the way that it was asked. The phrase "good practice guidelines" wasn't something that I would have-- would have recognised. You know, I've already explained that we were seeking to create the best possible clinical environment and patient environment. I-- In answer to that question, I didn't know what "good practice guidelines" was being referred to.

Q Okay. Well, I'll move on from the broad aim, the hospital, and I'm now moving to another specific point in time, which is around June 2009, because I want to ask you about what we've been calling the "maximum temperature variant". When asking you about this, I'm just going to use the general figures. I'm aware that the details involve numbers of hours and so on and so forth.

A Yeah.

Q Now----

THE CHAIR: Do you have in mind anything beyond the range of 18 to 28-- or, rather, let me start that again – not exceeding 28 or 26 for 50 hours a year?

MR CONNAL: No, no. That's what I'm referring to.

THE CHAIR: Right, okay. It's as straight forward as that.

MR CONNAL: Yes. Part of my reason for asking about this, Mr Calderwood, is you say quite a lot about it in your witness statement in quite a lot of detail. Is this a decision you made?

A No, no. I-- The reason I talk about it a lot is I was asked the same question on numerous occasions during the sessions that I gave my evidence. I didn't become aware of the decision that

the Project team took to ask the contractor to achieve a building that could be maintained with not exceeding 26 degrees.

I explain in my statement that my understanding is that this came out of a debate with the Estates department, which had raised the question that two other new buildings, the New Stobhill Hospital and the New Victoria Hospital, which were similarly large, glass-type steel buildings-- we were in-- the build-up of the temperature internally was making the environment challenging to both staff and patients, and their view--

All of this was explained to me later, but their view was that if in the ambulatory care hospital, where your average working day on your average day was less than 24 hours-- and that was the build-up, the heat was too high, that in a hospital where people could be in for weeks-- that we should seek create a better environment. So therefore asking the contractor to achieve a better ventilation solution which kept the building cooler would provide a better environment for the patients and staff.

THE CHAIR: Mr Calderwood, my fault, it's just I didn't fully note your answer. You explained that this was not a decision you made and "I didn't become aware of it until..."?

A Until later during the kind of-- I can't be certain of the year, but probably around about 2013/14, as part of just the Project team's catch-up reports.

THE CHAIR: Thank you.

MR CONNAL: The information that you've given us about the reasoning behind it-- The information this Inquiry has is that this wasn't a Project team decision at all, because this was made at the point before the contractors' bid had been concluded in June 2009. Now, does that not accord with your recollection, or----?

A I have no idea of the timeframe when the decision was taken. My understanding is that it was an input during the design process, i.e. during the 2010/11 period, when the detailed design was being signed off, and that it was one of the working groups that had been established came up with the recommendation, and that was taken on board by the Project team.

Q The information that you've provided today, and indeed in your witness statement, about the reasoning behind it, where did you get that information from?

A Well, that-- that wasn't "information". That's a statement of my understanding of the reasoning behind going from-- or going down from 28 to 26. The reason it kept coming back up is that people kept referring to this as being a

movement away from the mandatory guidance, and the point I've been trying to get across is that this was an attempt to make the building better for the users.

Q The question may be, first of all, who made the decision? And you think it came up in the design process.

A That's my understanding.

Q Then did anyone to your-- Sorry, I'll maybe rephrase that question. You were obviously told about this at some point.

A Yes.

Q Probably later on. Did anyone tell you about any assessment of the consequences that might flow from that decision when it was first made?

A No.

Q Because obviously you can understand, I suspect, that there are lots of ways of dealing with that particular issue, but I'm just trying to understand if you were told whether they looked at?

A No, I wasn't told any detail of it. I was told that we had requested that the contractor achieve this and the reasoning behind it, and I have to say that when it was explained I thought that was a very reasonable thing to have considered.

Q Do you know whether any risk assessment was done when the decision was taken?

A I have no information at all on

any aspect of that. As it was explained to me, it came up out of the clinical design engagement process. It was taken forward by the Project team, and at no point was that reported as being-- resulting in consequentials that were outwith the programme.

Q The reason I wanted to ask that is that you touch on this on page 17 of your witness statement, where in paragraph 50 you set out some of the material that you have explained to us today, the heat gain from previous buildings and so on. Then, if you go to paragraph 52, you say there:

"... the internal temperature being allowed to rise to 28 degrees..."

Which is the figure that is contained in the guidance document----

A Yes.

Q

"... would make for a very unpleasant environment for both the patients and the members of staff. By bringing it down to 26 – i.e. bringing it down by putting in more plant to make sure that the internal temperature can't rise – you create a better environment..."

Now, just pausing there, who told you that the answer to this issue was you simply put in more plant to bring the temperature down?

A No, that's just a statement of the-- By bringing it down, my

understanding would be that you'd make it more pleasant, but you would influence the design solution, and I've used that as shorthand for putting in more plant.

Q Well, I'm not sure that can be right, Mr Calderwood, with respect. Putting in more plant, if that was the assumption, "Well, let's bring the temperature down. That'll just mean the contractors will need to put in more plant to achieve that." Two things about that: (1) there's a possible cost consequence if there's to be more plant, which-- Were you whether that was assessed?

A As I've explained, wasn't told anything about this in the real time that the decision was taken and enacted. I picked up on it later, but the point I've been trying to make in answering these various questions is, when it was mentioned to me in passing, I did at the time and still think that it was a good thing to do to make the building more capable of being controlled to improve the environment for the users, and the question kept coming up as it being something that was a deviation from a mandatory guidance, which it is, to my understanding, not.

Q It was deviation from standard guidance because that's where the 28 figure came from, wasn't it?

A Yes, but guidance-- had we gone the other way and allowed the building to go to 30 degrees, we would have been outwith the guidance. To narrow the parameters is not going out with the guidance, and I am trying to say that it was put forward in good faith to try and improve the ability to create a better environment for the users.

I have explained numerous times in my statement, and I continue to say, I think that was a good thing to try to do. To the extent that the Project team did work to assess the consequence of that, I don't know what they did, but it clearly didn't take them outwith the parameters of their delegated authority to proceed because they didn't have to come back to the Board for more money or for a delay in the project.

Q The reason I asked you about the timing was that our information is that this was a decision made not by the Project team, but by someone in Estates who now can't remember it, and it was made in----

THE CHAIR: Mr MacIntyre, possibly.

MR CONNAL: Mr MacIntyre in the Estates team in around June 2009 when the contractors' bidding and design process was still well underway, it wouldn't be a question of busting the Project team's budget because you're not at that point yet. You see where I'm coming from?

A Well, no, I'm not actually getting where you're coming-- To go-- If we're talking about the project and the budget, at the time, the exemplar design, i.e. the design produced by the Board Project team against which the project costs had to be assessed, that budget was £628 million for the exemplar design. All three of the final bidders produced designs and costs that were below the 628 million, two of them by significant sums, one by only a few million.

So, when the Board agreed to Multiplex being the preferred bidder, the 628 million which was in the project was replaced by the Multiplex bid which, at that time, my memory – forgive me – may not be right by a few million, but was about £554 million.

So, it didn't have a budget consequence from Day 1, and when the detailed design was worked up subsequently to get to the situation at the end of-- at the beginning of 2011 when the final price was signed off, that had not moved materially from the original, so much so that we were then able to submit the final information to the Scottish Health Directorate Finance department saying that, in moving from preferred bidder to detailed design, the final price was X and it was within the parameters that allowed the Board to proceed.

Q So, the comment in your witness statement about adding more plant, you can't tell us as of today where that came from.

A No, the statement I made in relation to just a general concept of if you improve something, you normally "put in more plant". It's got nothing specifically to do with this-- detailed of this scheme. That was just my phraseology.

Q You're asked in paragraph 55 on page 18, if you know who was involved in the decision now, or who you understood to be involved in the decision, and you say, "Well, the Operating team, Chief Operating Officer and their staff," but you can't say whether anyone from the Clinical team was involved.

A Correct.

Q The reason I asked you about the plant was I was wondering – maybe you can help us – if anybody who was qualified to understand the possible consequences of changing the maximum temperature was involved in the decision-making process?

A Well, in the context of the time frame that you're talking about, in the sense of the information was contained in the guidance to bidders, at that point, my understanding is that the M&E experts on the Project team were Wallace Whittle.

Q Were you told whether they had been involved or not?

A As I've explained, I was never

involved in any discussions in the period about this issue until it came up in discussions and, as I say, I can't remember the exact time but somewhere around about 2013, early 2014.

Q And you've made, elsewhere, the comment that you think this was a good thing and you've explain why you think that's the case, so I won't take you back to that. So, just bear with me. Can we just go briefly to page 71, just in case we've moved on from what's said there. See, at the top of that page, you say:

"I don't know when I first became aware of the removal of the maximum temperature variant."

You now think it might have been 2013 or 2014?

A Yes, I mean, I truthfully don't know exactly when, as I said in my statement, it came up in conversation, and I didn't regard it as anything material then and, as I said, I still don't regard it as material now.

Q You just regarded it as a possible improvement to the patient environment.

A Well, I genuinely believe it is an improvement to the patient environment.

Q Well, let me leave the topic of the maximum temperature variant and move to the not unconnected topic of what we've been calling the ventilation derogation. Now, don't get into a definitional debate with me just yet over that. It's just the label we've been using for it----

A Yes.

Q -- which is the 6 air changes, 3 air changes, primarily. Now, you're asked quite a lot about that in your witness statement, so I'll need to work through quite a lot of your comments to make sure we have your evidence on it.

Can I just pick up, first of all, a phrase that you used earlier and a phrase that also appears, and we can see it in due course in your witness statement, which is "3 air changes plus chilled beams"? Now, that's the way you use the phrase.

A Yes.

Q Does that suggest that chilled beams are adding something to the air changes?

A Technically, I don't know the answer to that. It's just always been referred to me as-- when I got into it in more detail, dealing with operational issues later, it was always referred to me as "3 air changes with chilled beam." My, therefore, deduction from that was that it did add something to the ventilator-- it was a critical part of the ventilation strategy.

Q So, you kind of shifted your phraseology there, so let me make sure

I'm getting it clear. Did you understand it added something to the ventilation or was it just part of the strategy?

A My understanding is that it was part of the strategy that the Project team accepted in the design solution.

Q Well, let's pick this up then from one of the first times it's touched on a new witness in paragraph 75, which is on page 22, where you repeat your comment about the temperature variant being a positive thing. Then you're saying:

"Regarding the decision about the departure from guidance in respect of the chilled beams, well, that was made by the team and they documented, as I understand it, the reasons for that. It wasn't reported to the Board, and it wasn't mentioned to me until much later, when it was mentioned not in a way as it being or not being an 'acceptable' outcome?"

So, can we just try and take the different elements of that answer if we can? The decision about the air change rate you say was made by the team. That's the Project team, presumably?

A Correct.

Q It wasn't reported to the Board. Is that correct?

A It was not, no.

Q And it wasn't mentioned to you until much later. Now, can we get any estimate of when "much later" is?

A No, I-- No, it would be after the construction started.

Q And you sentence, there, ends and says:

"...it was mentioned not in a way as it being or not being an "acceptable" outcome?"

Just help me understand what you're trying to say there.

A Well, again, I'm sorry to keep coming back to this, but the question that I was being asked at that time was regarding what you refer to as derogation, and I accept that we're discussing derogation in the context of the contract and Employer's Requirements, as opposed to mandatory derogation.

During the interview process, it was being presented as being a derogation from the mandatory guidance, as opposed to the Employer's Requirement column, and the point I was making was that it wasn't mentioned to me as being anything other than delivering an acceptable outcome.

Q I think the question that was being put to you would be largely on the basis that the standard guidance, both in Scotland and elsewhere in the UK, for air changes for a general patient room – and that's my phrase; it's probably not the correct technical one – was for 6 air

changes, and that was the same whether it was a single room or not. Were you aware of that?

A No.

Q I think it may be suggested to you that 6 air changes was then, and has continued to be, the standard specification for the number of air changes proposed for a standard room in a hospital. You weren't aware of that?

A No, not in the technical science and the detail.

Q You say in paragraph 76:

"...a number of hospital projects since we built this one, have got less than 6 air changes. In fact, I think you might struggle to find a hospital in Scotland that's got 6 air changes."

That might come as something of a surprise to the Scottish Government, whose guidance it is, but what do you base that on?

A There are very few, up to the period of 2010, hospitals that were being consulted with that kind of ventilation system. The point I was making-- in ward areas-- We're talking here, now, of the general hospital environment, and not the specific environments of theatres or ITU or other Critical Care areas.

Q I used the phrase standard ward room, single room.

A Yes, well the majority of build in Scotland up to that point and, indeed, some since, are six bedded bays, open plan areas with limited single rooms and not sealed buildings.

THE CHAIR: Well, I'll just sort of take you through paragraph 76. As I understand it, at the time the hospital was being constructed – that's up to 2015----

A Yes.

THE CHAIR: -- – you had not been aware that the current guidance expressed in SHTM 03-01 was for 6 air changes per hour in general wards. You had not been aware of that fact, or have I failed to----

A No, no, my Lord, yes, I was not aware of the detail of it. I became aware of the issues during the latter part of the construction and the operational part of the hospital where issues concerning the acceptability of certain areas was challenged.

THE CHAIR: Well, I'm asking you about detail. The figure "6," when did that first come to your attention?

A As part of that engagement process.

THE CHAIR: Do you mean in 2013 or later?

A Probably 2013 onwards.

THE CHAIR: Right. Now, in paragraph 76, you say:

"… a number of hospital projects since we built this one, have got less than six air changes."

A Yes.

THE CHAIR: Which hospital projects that you are referring to?

A That's just a general statement I made personally.

THE CHAIR: Well, what----

A I can't point you to a named hospital or environment. It's just a----

THE CHAIR: Well, it's a general statement upon which I might rely. Are you saying it has no factual basis?

A I'm just saying I can't at this moment in time point you in the direction of some projects that----

THE CHAIR: That has got less than 6 air changes?

A Yes, I can-- No. I mean, that was a statement I made and I'm happy to correct it or to add to it that it is my belief, it's not a fact that I can point you in the direction of.

THE CHAIR: I mean, you would accept it's not really the sort of piece of information that is usually regarded as a belief?

A No, I understand in the context of the statement, but when I made the statement, I made that as a personal statement, it was recorded and, therefore, I said it and I accepted that it would go into my statement. I couldn't delete it because it was-- I did make it.

THE CHAIR: Thank you.

MR CONNAL: Let's just continue to make sure we understand what you did or didn't know on this topic, and I apologise again for the fact that we're jumping around in the paragraphs, but page 70. What you have been referred to at the foot of that page in paragraph 233 is a document about removal of the maximum temperature variant, and we know about that. Then you'll see there's a quote from what's been put to you that:

"'On, or around, 28 May 2009, a document called NSGH Project Issue, 01, Maximum Temperature Variant was produced by or for NHSGGC. The first page is reproduced [so that's the first page of the temperature variant document] as it appears to be relied up on as a reason for the ZBP ventilation strategy document in 2009.""

Now, I think the question is probably directed at whether you were aware of something called the "ZBP Ventilation Strategy" document in 2009?

A No.

Q And are you aware of any discussions-- I have to watch the phrase, "the Board," because the phrase, "the Board," appears in lots of communications----

A Yes.

Q -- but it doesn't actually mean the group of people at the top of the tree, but any discussions with anyone for NHS GGC on that document? Is that

something you know about at all?

A No, at that point, all of this communication between the contractors would be through the project director.

Q The actual ventilation strategy paper, which we can put on screen if you would like, but you may remember it, referred to in paragraph 238, maybe we'd better just put it up, it's bundle 16, page 1657. Now, I don't need to take you through this because this is a document that we know was produced by ZBP, as the previous reference indicated, is your position that you hadn't seen this document before it was put to you in preparation for the Inquiry?

A Correct.

Q Although you qualify that to some extent in paragraph 238, you say:

"This is something that I wasn't aware of at the time that the decision was taken, but I was briefed on it later. I think it would have been probably 2014 that I was briefed on it, in the run up to the handover."

Now, the something that you were briefed on, is that the link between maximum temperature and air change rates?

A I can't comment on that question in the sense of what we were discussing at the time. I mean, the document which was obviously prepared by the Project team and sent to the contractors I had never seen before, which we've just seen. We have gone over my understanding of the 26 degrees and my understanding of the 3 air changes subsequently, and that was, as I say, in the period after construction.

Q You say at the end of 238, "It was not deemed as a major issue." Is that the reduction in air change rates from 6 to 3 or about 3?

A I think that was in reference to both the 6 to 3 and the 26 degrees, and I'm saying it was not deemed a major issue by the Project team and not reported to the Board.

Q But mentioned at some point shortly before handover?

A I attended bi-monthly walkabouts on the construction site, either in accompanying Scottish Government officials or with the Project team, and chaired a bi-monthly meeting to oversee the project delivery and timescale and finance. It would be during one or more of these meetings that these issues could have been raised and discussed. But it was not a specific session linked to ventilation.

Q Well, let me ask you about this. Taking your point you made earlier about the 6 air changes not being applicable to places like theatres or ICU or anywhere else that has special ventilation requirements for more than

that----

A Yes.

Q -- the areas to which 6 might have been thought to apply would be every other single room that didn't have any special requirements, which would be a very large number of rooms in your new flagship hospital. Correct?

A Yes.

Q So, if the guidance-- Let's not get into the compulsory point again. The guidance in SHTM 03-01 for all of these rooms was 6.

A Yes.

Q And you were proposing to build this flagship hospital with a level at 3. Now, did it ever occur to you that this was, at the very least, possibly controversial?

A As I have explained, rightly or wrongly, I was not involved in the decisions taken to go for the ventilation strategy chosen. So I can't comment on the detail. On the basis of reading a number of papers that have been sent to me by the Inquiry, I believe there is papers setting out the thoughts of the Project team when they decided to go with the ventilation strategy that was proposed and subsequently accepted by them.

At no time at that stage was I involved in the project. So if you had asked me in 2010/11 what I understood

to be being built, I would not have known in the context of, you know-- If you'd asked me (inaudible 12:58:28) "Why did you go from 6 to 3?", I wouldn't have known at that point that we were indeed going from 6 to 3. It was within the scope of the Project team to take forward.

Q I'm only asking that because, you know, you're the man at the top of the pyramid. You're the Chief Executive. You're paying some attention to the new build, because it's a big, big thing for the Board. You're on site, you're attending discussions, and it appears someone tells you that 3, not 6, is being proposed?

A No, it had been accepted. It was never presented to me as a proposal for discussion. At the time I became aware of the 6 for 3, the hospital was materially under construction.

Q Okay, well----

A I think I fail to get across I did not-- Whether I should have-- I doubt I had the time, but whether I should have spent more time on the detail of the project when I had a Chief Operating Officer, seven directors, a Project team consisting of 40 staff or so with external consultancy advice, I was confident that these people were taking forward the project comprehensively.

At that particular time, the Board's priority for me was to spend time with the local authorities to establish what are now

Health and Social Care Partnerships, what at that time were Community Care Organisations.

Q Well, can I just try and ask the question again and we'll see if my meaning will become a little clearer this time. I accept, of course, your wide range of responsibilities and concerns. Fine. At the point when you were told about this, you were not engaging with community care, you were going around the hospital with somebody, having a look, chatting to the Project team and others. Correct?

A Yes, I attended the site bi-monthly, so half a dozen times a year or so, and that typically broke into two kind of phases. There was a kind of formal meeting in the Project team's offices on site, and then there was a visit to a specific area which was mainly just look at the finish, kind of thing. As I've explained later in my statement, a lot of these issues with regard to whether things were done right or wrong were down to the validation process which, under the terms of contract, was delivered by Capita to say that what we had asked for, what Multiplex had contractually agreed to build was in fact what was constructed. The process for validation of that was through-- through Capita.

During these either formal meetings

or in the general walk around thereafter, comments would-- you know, points would be made, drawn to my attention. But there was no-- I've tried to explain, there was no formal sit down and saying, "These are proposals that we are making which are at odds with or different to guidance that we think you should be aware of."

Q Okay. Let me try this again. Let me introduce my question by pointing out that one of the issues that emerged in many pieces of the evidence the Inquiry has heard is that when people came to the new hospital, clinicians, IPC, all the whole team turned up in the new hospital, nobody appeared to know that the air change rates were not those specified in the Scottish guidance. Let's stick to the 6 and 3 for the moment.

A Yes.

Q Now, we can come to this, because you deal with it in your witness statement. But the point is, people turned up and went, "What? Surely it should be 6. That's what the guidance says." So nobody had that knowledge on the face of it. So what I'm trying to ask you about is, you're going around 2014, so before the opening, you're having these informal sessions, or more or less informal sessions, and somebody tells you something to the effect that they're not building to the guidance of 6, they're

building the figure of 3.

A Yes.

Q Now, I suppose the question I then ask is, given that this wasn't, you know, the air change rate for room 329 for some special reason, this was the air change rate for hundreds and hundreds and hundreds of rooms, did it occur to you at the time to say, "Oh, what? Hang on a minute, have I got that right? Am I understanding it? Is this going to cause an issue with anybody else? Do I need to report it to somebody?" Did of these things go through your mind?

A I can't say with certainty what went through my mind in those discussions. I did ask, "Were we certain in the process that we had in place to accept the ventilation strategy that was agreed?" I was assured we had been. I was assured that the design solution was acceptable. As I say, in some of the documents you sent to me, one of them is the minute of the meeting where the Project team discussed the ventilation strategy and there were quite a number of people in attendance. There was Infection Control staff seconded to the Project team. I accepted the view that they had debated it and come to that conclusion.

THE CHAIR: My fault entirely, Mr Calderwood. Could I ask you just to repeat that answer?

A In the context of the-- Yes----

THE CHAIR: Yes, I just didn't manage to make a note.

A Sorry. Yes, sorry. In the context of the question, did it cross my mind to interrogate why it wasn't 6 and we had accepted 3, I was asked by counsel whether I-- it hadn't crossed my mind to do-- I'm saying that when I had the general discussion, I was told that the outcome of the ventilation strategy had been debated by the Project team and accepted and was acceptable.

THE CHAIR: Right. Just maybe a little slower, "I'm told the outcome of the ventilation strategy"-- and that's a reference to the document you referred to.

A Yes, the document I----

THE CHAIR: "The outcome of the ventilation strategy had been"?

A Debated by the Project team and was deemed acceptable.

THE CHAIR: And by the "Project team," do you mean simply the in-house-- --

A The in-house team supported by the external consultants that would have been invited to give an opinion on the technical competence of the solution.

THE CHAIR: Thank you. Sorry, Mr Connal.

MR CONNAL: I'm conscious of the time, my Lord.

THE CHAIR: Right. Well, we'll take our lunch break and maybe try and reconvene at five past two.

THE WITNESS: Okay. Thank you.

(Adjourned for a short time)

THE CHAIR: Good afternoon, Mr Calderwood.

THE WITNESS: Good afternoon.

THE CHAIR: Now, Mr Connal.

MR CONNAL: I'm obliged, my Lord. We're talking about what we in the Inquiry have called the ventilation derogation, and I'll give you the same caveat: please don't get into a semantic debate about that here and now, because we'll be here forever. Just before lunch, we'd got to a point where you learned something of it in the course of an informal visit, but at that time it didn't particularly jump out to you as something that you ought to do something about or express concern about.

A Correct, yeah.

Q Let me just ask one supplementary question. I think you have dealt with it in your witness statement. You gather that this had been decided by the Project team at an earlier stage and was thought acceptable. Do you know or do you not know who, if anyone, gave Infection Prevention and Control advice on that decision?

A No, I don't know.

Q Thank you. That, for my Lord's note, is paragraph 241 of the witness statement, where the witness says precisely that.

THE CHAIR: Thank you.

MR CONNAL: Now, if we can try and move the narrative forward a little bit because, as you gather, this has become of considerable interest. I put to you earlier on, or I asked you to accept from me, that when those arriving in the new hospital turned up, clinicians, doctors, Estates, IPC, they didn't know that there had been a change from the SHTM figure of 6 to 3. That's what we've been told. Can I try and deal with this by looking, please, at page 73 of your witness statement where you're asked about an email?

Let's just put it up on the screen quickly: bundle 20, page 1495. Now, as you can see, this is an email from Ian, who is Ian Powrie from the Estates team, to Teresa, who is Teresa Inkster in IPC, and confirms certain arrangements and supplies some material to support it. You were asked about this in your witness statement and you say, "Well, this is not an email I've ever seen before preparing for this Inquiry." Is that right?

A Correct, yes.

Q I think I'm possibly using it for these purposes as an indication that here

we are in May 2016 and efforts are being made to try to find out from IPC to Estates, who would then go to the Project team, what the answer is to this question about air change rates. So you may accept it from me that that is what was happening at the time, and I think the only point that you were really asked there was, "Well, when it says 'accepted by the Board', it doesn't mean the Board in the form of somebody like yourself, it means the Project team."

A Correct.

Q Okay. But you begin to see perhaps why it's starting to create an issue, because nobody knows. People are having to dig around and try and find out the answer. In your witness statement – go back to page 73 – after touching on the email and the point about the Board in 243, 4 and 5, you say:

"There was never a decision taken to reduce the air changes. There was a ventilation strategy..."

Well, it might be suggested to you that is splitting hairs a little bit. If the standard guidance for a single room says, "Provide 6 air changes," and the decision is made not to provide 6 air changes, that appears to be reducing the figure that is provided in the guidance. For good or bad reason, but reducing it. Would you agree?

A I accept that that-- Yes.

Q And you say in that sentence:

"...the fact that Dr Inkster… is suggesting that six air changes is needed in every part of the adult hospital is clearly not the opinion that was formed by the people who took the decision."

Well, I suspect were Dr Inkster here, she would say, would she not, "It's not me that's suggesting 6; 6 is what's in the guidance."

A Yes. I'm not-- I mean, Dr Inkster, when she was appointed as the Infection Control Doctor in the summer of 2015, I believe, when the teams were all being formed for the new Queen Elizabeth University Hospital, embarked on a series of testing in clinical environments and raising issues, and that was correct in her role that she did this, and it was correct that the people answer her inquiries.

Q I think as far as we were able to find out, the email from Mr Powrie was probably the first time that, leaving aside your informal intimation in 2014, anyone outside the Project team was told that this had been done.

A That may be correct. I have no knowledge of the debates that took place within the clinical working groups during the sign-off of the final design in 2010. One would expect that the environment that they were signing off on, they would have discussions about

various aspects of the environment as well.

Q Okay, well, let's take that in stages. The decision to go with, as you put it, 3 air changes plus chilled beams – and I'm not going to get into an argument about whether it's precisely 3 or slightly more or less; it doesn't matter – was taken just before you signed the contract, so in the latter stages of December 2009.

A Yes.

Q Now, do you have any knowledge about any discussion of this issue re-emerging during the design period in 2010?

A No, I have no personal knowledge.

Q I ask the question because one of the complaints Mr Seabourne made was-- He assumed that ZBP, whose idea this was, i.e. the Multiplex M&E people, would have been saying in various meetings they attended, "You're not getting 6, you're only getting 3, and this is the reason for it," but apparently we haven't found any evidence that that happened. Do you have anything to help us on that?

A No, I can't, no.

Q And you say, just for completeness, at the foot of page 73, you never looked at the SHTM guidance, nor did you ask questions about the decision not to follow the guidance; the Project team was responsible for bringing in the Employer's Requirements. So, if we move on, you say at the second half of paragraph 249 on page 74 that the team took a decision that 3 plus chilled beams was acceptable, and that was the step. Fair enough. Can I just ask you about paragraph 250? You have given us some evidence about the Gateway Reviews, and the Gateway Reviews are not in and of themselves, I don't think, controversial in this process, but you say:

"The Gateway Review throughout that whole process would know if it was the air changes plus chilled beam, and at no time did they ever comment that that was an unacceptable decision…"

I'm just wondering if you're suggesting that someone else knew about it that hasn't come to our attention as yet.

A Again, no direct-- My understanding of the Gateway Review process is, through Gateway 1, 2, and elements of 3, they had a significant number of meetings with the Project team going over aspects of the clinical specification and the design, and I assumed that that would have been discussed as part of their inquiry.

Q I see. And in fact, your position, as I understand it – and we'll come back to why you say that – is that really this whole question of air changes

is irrelevant until you hit 2013. That's the point you're making at the foot of page 74. Sorry, page 74, paragraph 250, near the foot of the page.

A Yes, sorry. My understanding was that the ventilation strategy accepted by the Project team on behalf of the Board was acceptable in the generic ward areas. There were a number of areas within the building which had specific requirements which had to achieve a different ventilation strategy and environmental outcome. In respect of the patients that were going into the building up to and including the beginning of 2013, my understanding was that all of the specialist areas plus the generic wards had an appropriate and acceptable ventilation strategy in place.

Q Okay. Well again, just for the notes, you repeat some of the same comments in paragraphs 267 and 268, which is a reference to the Board, meaning the Project team, after a quotation from the exchanges that happened in 2009; and you say at the top of page 80 of your witness statement-- You make same point. You understood it was always 3 plus chilled beams; and then we get into a little bit of a debate as to whether that's a derogation or it isn't, and I suggest we just let that one sit, because it's interesting but doesn't take us anywhere, I might suggest. The derogation, you say in 271, was never reported to you, and the only briefing was the one that you mentioned to us earlier today. Is that right?

A Correct.

Q And you don't know about any risk assessments, you say, in paragraph 272. Can I just ask for completeness: Helen Byrne's name crops up from time to time as having a responsibility for the project – did she ever tell you about this ventilation change?

A No.

Q I mean, I think Ms Byrne's evidence is no one told her, but I just wanted to check whether you recollected her telling you.

A No. Well, if anybody would have told me about it at the time, it would have been Helen Byrne, because she was the responsible officer to me and therefore the Board.

Q Can we look at, please, bundle 12, page 816? Now, let me just get this right. I think this is a situation where it is said by Mr Loudon in June 2016 that you have asked him to establish why there was a variation to recommended air changes for a single room in a ward from 6 air changes per hour as to-- I think it's HTM 03-01, which is the English version, but it doesn't matter, and the process to sign off. So what prompted you to send Mr Loudon in 2016 on that particular trail?

A I can't recall. I assume it is the existence of the SBAR report, which is an escalation that the situation was unacceptable or a challenge and had to be-- and has to be addressed by the Board. My previous, as I've said in the statement, detailed involvement was around the clinical environment that we were seeking to create for Adult Bone Marrow Transplant, and why the decision was taken to incorporate Infectious Diseases into the building that-- neither of these two services were in the specification that resulted in the building being built as was.

Q I mean, I suppose the question I have to ask you now, because obviously we're pulling together a lot of threads, or at least trying to, is that you appear to have been asking David Loudon to find out something which, on the face of it, you already knew about by that time because you'd been told, you know, at some point about the decision and about why it was reached and how it linked to the temperature variant and so on.

A Sorry, I'm not-- On that last point, the temperature variation----

Q Well, if you remember in one of the documents that was put to you in your witness statement, the existence of the change of the temperature from 28 to 26 was mentioned as one of the reasons why the air change rate was being changed. Do you remember that?

A No, I-- I remember the statement, but I don't think it was, from my point of view, a statement in relation to the reasons for the change. I think, throughout the discussion and the questions I was being asked, I was trying to state that, from reading the documentation, the ventilation strategy evolved from a series of decisions that the Project team conveyed to Multiplex and their design partners, both, as we've now established, before contract signing and subsequently. And I, in my statement, make reference to two particular aspects that were included in those guidance: one was the decision to have the building as a sealed building; and the second was in relation to trying to control the temperature.

In this particular email trail, I can only conclude that an SBAR report was raised in relation to specific areas which said 3 was not acceptable in specific areas, and my attempt to address that was to say, "Why did we take the decision in those areas if in fact it's wrong?"

Q Thank you. Now, again, for my Lord's note, that's the matters covered in paragraphs 278 and 279 of the witness statement, when the witness gives essentially similar responses to the ones that we've heard today, perhaps

slightly shorter.

Can we take that one down? Thanks. Go back to the witness statement. Go to page 84. I think what we're now coming to, I suppose, is the hindsight world that we're all occupying, which is, if somebody had come to you and said, "Scottish Government guidance for single rooms, guidance which we have currently sitting in the list in the Employer's Requirements as compulsory, but even leaving that aside, Scottish Government guidance, same as UK Government guidance, says 6 air changes recommended for single rooms. There's a proposal to change that and only provide 3," how would you have reacted to that? Your answer, as I understand it from 290 and 291, "Well, it would depend on what material was put in front of me, and if it had been properly explained, maybe we would have agreed it." Is that essentially what you're saying here?

A Well, I'm saying that if a paper had come to the Board setting out the reasons why we would propose to go from 6 to 3, that would contain a series of pertinent information which would allow the Board to form a view whether the proposal to accept the change was acceptable or – excuse me – unacceptable. So, I go back to the-- the Project team brief on the reasons why

they accepted that. If that had been all set out in the paper to the Board, then I-- I don't know, obviously subject to the Board members' debate. There would have been a debate about it and a conclusion reached, and if the conclusion had been not to accept the Project team's recommendation, then that would have been enacted.

Q Would it ever have occurred to you in that scenario that if public money was about to be deployed to build a flagship hospital as part of the Scottish Government's healthcare network, of which you are a part among many----

A Yes.

Q -- that you might need to tell the Scottish Government that that was proposed at an appropriate stage before it was locked in?

A Well, clearly at the time-- Excuse me. Clearly at the time people didn't think that was required and didn't report it up the line. Clearly, had it come to the Board as a paper, the Scottish Government would have automatically received the paper because they receive the Board papers, and colleagues in the government would have then reflected on whether they wished to step in and offer an opinion.

Q Thank you. I didn't take you through your discussion of this because you've given us it orally. I think the only

reason that an exchange continues a little bit on page 85 in paragraph 292 is that you keep using this phrase, “guidance is guidance,” but if you were aware at the time that when the Employer’s Requirements were constructed SHTM 03-01 was selected as one of the guidance documents to go in the compulsory box, would that have influenced your view?

A It would clearly have been challenged by the Board as to why it was felt at one period in time that it was mandatory and why now the recommendation coming before us was to accept, as you call it, a derogation in the contract.

Q I may be able to leave that topic, if my Lord would just bear with me one minute. Some of the other sections, which for my Lord’s note include paragraphs 320, 374, essentially are repetitive of the material I’ve just taken from this witness already.

Let me just sort of move a little bit into the practicalities of it and go to page 120 of your statement, paragraph 431. (After a pause) I’m just keen to make sure we’re not misunderstanding anything that’s said there. I mean, you mention other discussions. Leave these aside. Let’s go on to the 6 air changes an hour. You say here:

“... people saying they wanted six air changes an hour in 2015 and 2016, when the board had accepted in [well, let’s say 2009] that it was going to have three plus chilled beams, was not an issue that the board was going to be addressing ... The guidance said up to six. The board had accepted a technical specification, approved by its technical advisors [and that was that].”

Essentially, your point there is, once you’ve got that far, there’s no changing the 6.

A My understanding of the technical issues were that the building in 2015/16 could not be re-engineered to achieve 6 in every clinical area outwith where a different ventilation strategy had been installed.

Q Looking at the matter more generally, first of all, can we go to 124 of the witness statement, where you’re asked:

“In terms of the ventilation system and its compliance with SHTM 03-01, I was of the opinion, having been advised by the team, that the ventilation system in the hospital was compliant with the regulations and was right for the patient mix ... This would have been by Helen Byrne ... Alan Seabourne and ... David Loudon.”

That suggests that that’s the stage at which you’re being told, “No, everything is compliant. There’s no

issue."

A Throughout the project, in relation to signing the contract and then the evolution of the detailed design, the role of project director transferred from Helen Byrne to Alan Seabourne, and then to David Loudon. They were the people who reported to me on a regular basis. The reference to those three people was just to say it was the project director's role to report, and at no time during their reporting did they not suggest that the building was acceptable.

Q Reflecting on it now, as a former Chief Executive, a senior administrator, does the fact that those arriving in the new hospital in 2015 were not aware of this indicate at least some kind of failure in administration to make sure that this is documented, reported, recorded?

A It would-- The answer to that question is it would depend on the people concerned. There were new people coming to the project, Dr Inkster being one of them, who sought to revisit the Infection Control input to the Project team and the conclusions reached. They would clearly, up to that point, not have had a role in the whole process. Therefore, in their new role with operational responsibilities, their challenges to those decisions needed to be looked at and responded to.

To the extent that the people who were involved in the project through 2009 to 2011-- they, coming into the hospital if they were still in our employ in 2015, should know what it was they had agreed to during the design and construction period. So I have to question the generality of the comment that the medical staff didn't know. Some new staff coming to the project taking on new responsibilities in an operational sense, which Dr Inkster was one of them, didn't know.

Q The Estates team would need to know, wouldn't they?

A Yes.

Q Because if they're looking after the systems, they need to know what they're supposed to be producing.

A Correct.

Q And if they didn't know----

A Well, the Estates team did know. Mr Powrie was on that project for a considerable period of time before it became operational.

Q And you're saying he would know about it?

A My understanding is that he was on the project for a period of time before the hospital went operational. Mr Loudon, the project director, became the director of Estates when the project opened, so he knew about it because he was the project director. He was the

commissioning officer who signed off the technical acceptance of the building. So at least, from my understanding, two senior members of the Estates department knew about it.

If you previously worked in the Western Infirmary or the Victoria Infirmary and were transferred into the Queen Elizabeth complex in the spring of 2015, you could claim you didn't know about it because you're now taking on new responsibilities and you then need to be briefed and brought up to speed in your new roles and responsibilities, but in the context of the scheme delegation, two principal officers were involved in the scheme for a period of time prior to assuming operational responsibilities.

Q I think----

THE CHAIR: That might make certain assumptions about the extent to which information was shared within the Project team. First of all, the Project team as it was in December 2009, and then going forward.

A Yes. There was a consistent-- I mean, the only-- From recollection, the only material change the Project team was in July 2013 when Mr Seabourne retired and Mr Loudon took on those responsibilities. There was, due to circumstances, only a month's handover, so Mr Loudon joined the team in June 2013 and worked alongside Alan

Seabourne for about a five-week period to effect the handover before he took on the responsibility of the project director. He was also director of Estates and Facilities designate. That's the substantive long-term post that he had been appointed to after the project completed. So, there was no break in the continuity of the Senior Management team from June '13 through to Mr Loudon leaving the Board at, I believe, the end of 2017.

THE CHAIR: You mentioned clinicians becoming aware of-- I think we're still talking about the decision to depart from 6 air changes and accept less and that decision being made in December 2009. How do you envisage clinicians becoming aware of that?

A Well, the generality of clinicians would not be aware of that. I suspect the generality of clinicians wouldn't know about 6 air changes. The Infection Control advice to the Project team evolved over the period of the years. In some of the documentation that the Inquiry has, you will see that, for specific areas during the detailed design, it was the Infection Control Doctor for that service in whatever site it was in coming across and advising the project. So, for example, in Ward 4B, the Infection Control doctor was Dr John Hood, who looked after the haemato-oncology

services on the south side of Glasgow. So, he oversaw and made input there.

There were permanent members of nursing staff, Infection Control Nurses, seconded to the team, starting with Annette Rankin and then changing when she moved on in the project, and there was an Infection Control Doctor input at different times. So, you would need to look at the specific working group, and that-- So the point I'm making is that, when the Project team took the decision before the contract was signed in December 2009, I have no recollection who the Infection Control doctor—the Infection Control Nurse, I think, would be Annette Rankin, but who the Infection Control Doctor was-- or Doctors, who gave advice to the Project team should be recorded in the notes of the Project team's discussions.

Thereafter, during the development, between 2010 and 2011, of the detailed design, then quite a lot of clinicians had input, you know, in the sense that they were shown the drawings and the environmental issues and asked to comment on them, and then the Project team would then respond with those comments back to Multiplex and their design partners through the evolution of the design. Again, I personally have no idea who the named Infection Control Doctors would be, but they would be

plural, coming from the existing clinical environment, talking about the new clinical environment that we were seeking to create.

THE CHAIR: Well, we've seen indication that Dr Hood's advice was sought, I think, if I've got my dates right, prior to December 2009, but as far as I recollect the evidence, I'm not aware of any clinical advice associated with the decision making in December 2009. Is there something I'm missing?

MR CONNAL: My recollection meets with my Lord's, but we should ask the witness if he can assist. Because the issue, I think, Mr Calderwood, is that you are assuming that on the basis of something-- And we know there's nothing in writing. I mean, the Board went looking for something in writing going through committees or approvals or whatever that would go beyond these original emails, and so on, in 2009, and couldn't find anything, nor could the Inquiry. You are assuming a degree of knowledge on the part of various people which isn't currently evident, and so we're just trying to get your assistance. Mr Powrie, I think, would say, "Well, I didn't know. I had to go and try and find out from the Project team. That's why I was doing this email to Teresa Inkster."

A Well, he was technically answering Teresa Inkster's inquiry with

detailed knowledge that he had. His email wasn't inquiring of somebody else, it was answering the question. The point I make is, if any evidence about who contributed to decisions taken up to the signing of the contract in 2009 and indeed beyond in 2010/11, that evidence chain, to the extent that it exists, would be in the Project team's paperwork. It wouldn't be in the Health Board-- on the Health Board's Committee.

Q I'm trying to remember, but I don't think Mr Seabourne even says he told Mr Loudon during the handover about this particular issue. That's my recollection of his evidence. So, there's even a question-- Remember, you were sending Mr Loudon to find out why this had been decided. Now, if he knew, he'd be able to tell you immediately, he wouldn't need to go on a hunt.

A Again, the point I'm making is that the SBAR report that-- which I haven't seen, obviously raised issues which suggested that certain clinical areas that we had accepted as being reasonable, acceptable, or compliant were not. So, he had been sent to get the detailed information on those areas. To the extent that Mr Loudon didn't know what the ventilation strategy was-- I am confused, because as the project director who advised the Board that the building was acceptable to take over, how could-- how could he have done that role if he didn't know what he was signing?

To the extent that people reported to me that that information might not be dependable, I can't comment on it. In my experience of commissioning hospital buildings, there is a very complex but, basically, procedural manual that you follow, and when you get to the last page-- and I think I say in my statement, in my days it was a written log and you got to the last page you signed it. Nowadays it's all, you know, obviously a combination of email trails and CD-ROMs, etc., but for David to say to me in February 2015, "We can accept this building because it meets our specification for construction," you must know what the ventilation strategy is because you're signing off that the M&E plant is acceptable.

Capita, who signed off that the building had been built to our specification, must have known that the ventilation strategy-- Because how else could you say it's acceptable? And, as I say, with the exception of David changing for Alan, not another person on the Project team changed. So, how anybody on the Project team could say, "Oh, I've been involved in this since 2009 and I don't know what we did"-- I find, if I had been in any of those roles, surprising that you could say that.

THE CHAIR: It may be that Mr

Connal will come to this point, but as far as Capita's certification in January/ February 2015, what they would be certifying was contractual completion. In other words that the contract, as Capita understood it, had been completed.

A Correct, and should have been probably during the period-- certainly from 2014 onwards, certifying each area as completed, because once the services are above the ceiling or behind the walls, they can't-- they can't be looked at again. They're supposed to be looked at on a, kind of, almost daily basis as you reach practical completion of certain tasks in certain areas. So, there should have been a chain of Capita, as the Board's agents, confirming that each area was being constructed to the agreed specification, which is slightly distinct from the point we're making at the moment about whether the specification was absolutely correct.

THE CHAIR: What the specification was, because the point I think you're making is, if we take the example of the ventilation specification, and let's take air change rates as the example, in generic wards, Capita no doubt correctly certified that the general wards conformed to what was contracted for.

A That's my understanding, yes.

THE CHAIR: Yes.

A But the point I'm making in answer to counsel's question is that, for anybody to now say that they didn't know, I can't-- I can't comment on how they can arrive at that, because you can't not know if you've signed off that it's acceptable and you're the Board's agent.

THE CHAIR: Well, as I think we've agreed, that depends on the extent to which those who were directly involved-- again if we're taking the air change rate as our example, those who were directly involved in December 2009 shared that information or that information was evident in documentation which others looked at and understood and realised that they had an obligation to understand it.

A I can accept that point, but I have no reason to believe that the information wasn't widely shared and understood by the entirety of the Project team.

THE CHAIR: Yes. I think what counsel is putting to you is that we've heard certain evidence that might indicate that it was not shared as widely as it might have been. Mr Connal, I've interrupted.

MR CONNAL: No, I think my Lord has illustrated the point that topics tend to overlap one onto the other, and I'm going to come back to this precise point with you on the context of the word "validation" at handover, because I want

to ask you about that, but it does take me conveniently into another topic, which is the availability and deployment of technical assistance for the Board, because we know there was a decision made and implemented which changed the availability of technical assistance, and I may need to ask you about what you know about that.

Can we go, first of all, to page 13 of your witness statement? Because this touches on one of the topics. This is a sort of passing remark which reveals potentially quite a lot. You say in paragraph 36 there:

"The design of the water system and its approval sat with the Project team throughout the dialogue of the design, and then in that Project team, Capita, who were appointed by the Board as our assurance arm."

Now, what do you mean by "assurance arm"?

A Well, in-- As I understand it, particularly now having seen more paper, as we agreed to the contract under NEC3 conditions, you have to have an assurance arm appointed because that's the role of "the Board," and that changed as we went into 2010. It changed the composition of the Project team and that's when Capita were brought on board to be that assurance arm, to provide the technical and the manpower

that was required to do these tasks. That resulted in the composition of the external advisors supporting the Project team to evolve.

Q Now, as far as Capita are concerned, one possible role for them was to provide, to use the same word, "assurance" that what was being proposed in the design and then in the building met the Employer's Requirements. If we go back to that, if you remember?

A Yes.

Q The, "This is what we want," if you like, as a document. Now, in order to do that, Capita would of course have to be familiar with all the provisions in the Employer's Requirements, all the details, and consider them against what was being designed. Now, Capita's evidence is that they weren't asked to do that. Can you help us at all?

A No, I can't, because I have had no involvement in that. I find it difficult to see how you can perform an assurance function if you don't have all the relevant information to hand. I can't think of any other group other than the Project team and the project director that could supply that.

Q Yes. The reason I asked it, lots of witnesses volunteered in their witness statements, "Capita" and "assurance" in the same sentence, just as

you did. But when Capita came along, said, “We have a contract that says, ‘Yes, we’ll do that if asked.’ We weren’t asked.” Do you know anything about that?

A No, I don’t, but having seen some of the invoices, I don’t know what we were paying for then.

Q Well, the difference is, I think, explained this way, Mr Calderwood. If you create a drawing which shows where a wall, say, is going to be constructed and the contractor creates that drawing, Capita can come along and check that that wall has been constructed in accordance with the contractor’s drawing, and they can certify, “Yes, you’ve built what your drawing said you would build.”

A Yes.

Q That doesn’t tell you what the Employer’s Requirements provided for that wall, whether there was any specific requirements, and they’ve said they didn’t go back beyond the contractor’s drawings.

A I can’t comment on that.

Q You obviously were-- or maybe you weren’t, I won’t take anything from your earlier answer. Were you aware that there was a change to the provisions made for available technical advice to support the Project team as a consequence of the change of the contract?

A A paper went to the Performance Review Group seeking agreement to change the composition of the technical support to the project. I honestly can’t remember the date of the meeting, but it was a meeting where the Project team, the project director in particular, was challenged about what he was wishing to do and wishing to spend. So, yes, a paper came to the Board to say, “We want to change the role of consultants A to this and we want to appoint new consultants to carry out, you know, tasks B and C, and we want to retain other consultants to give us advice on D and E.” That did come to the Performance Review Group and, as I say, I can’t recall a date. I suspect it would have been late 2009, early 2010 to reflect the signing of the contract under NEC3.

Q Well, let’s see if we can move that forward. That’s very helpful. Can we go to page 55 of your statement where you touch on the different players in this particular piece of narrative? You say:

“Currie & Brown were originally appointed as cost accountants, going all the way back to when we were doing PFI. They came on board to help discussions around affordability and cost.”

I think their position is, ultimately, that’s where they ended up doing largely some project management and some

cost accounting. Were you aware of that?

A Ultimately, the role of Currie & Brown, yes.

Q Yes, and then you say they were involved in coming up with the exemplar design. Were you aware that they were employing originally, before early 2010, a raft of sub-consultants ranging from Wallace Whittle in M&E through to architects and so on?

A Yes, these would be the additional consultants required to come up with an exemplar model against which you would then, as I say, create the upper limit of affordability.

Q Yes, and you mentioned in paragraph 184 what you describe as the "great big book," which I think I'm right in saying it's called Spon's, S-P-O-Ns, which is the kind of Bible that the quantity surveyors used to use to look up prices and quantities.

A I couldn't have called it by name, but yes, that's what I was referring to, yes.

Q Yes. You say in 185:

"At one stage, Currie & Brown had a quality involvement."

Just what do you mean by that?

A I think that was a reference to the role that was in the paper to PRG that they were giving up under the terms of the NEC3 contract to create an assurance function.

Q So you say:

"… Capita was brought on board and, therefore, the Currie & Brown remit evolved, but I wasn't directly involved in any of that. I just knew that through discussion."

What discussion was that?

A Well, there was a combination of the PRG paper and subsequent discussions with the project director as the programme moved forward.

Q One of the suggestions was that what Currie & Brown had could be described as a shadow design time, and it was perhaps clear to people like Mr Seabourne that there would have been a reluctance to pay for a shadow design team to be retained after these changes. Can you help us at all on whether that's correct?

A My recollection of the PRG meeting in question was he was challenged in all aspects of expenditure he wanted to make. I think the-- I can't recall the detail of the discussion but, in essence, I think the Chair of the PRG at that time was questioning whether you would pay twice for the same advice, and that when the responsibility for design left the Board and sat with Multiplex and their agents, that paper said that we would discontinue this service, but we would have to appoint an assurance arm. That

was all debated at that Board meeting.

Q Why don't we just look briefly at a document – it's not mentioned in your witness statement and you may not have seen this before, but if you can't help, just tell us – which is bundle 17, page 2870.

A (After a pause) No, I've never seen this document before, no.

Q The reason I'm putting it to you is first of all, date, because it accords with the date that you were mentioning of early 2010, and then it sets out basically fee allocations, agreed budget, and so on for different processes. If we go on to the next page, there's a reference to project management support, cost management, and so on. Now, that appears to be a letter following, perhaps, the discussions you're talking about going to Currie & Brown and saying, "Well, going forward, this is what we want from you."

A Yes, that's what it reads, yes.

Q And that would be consistent, would it, with your understanding that once design went to Multiplex, the sub-consultants wouldn't be further required?

A That would be my understanding, just quickly scanning that letter. That would be, to my mind, the decision of the Performance Review Group paper from the project director being enacted.

Q Yes. The reference to not wanting to pay twice for the same advice, what does that refer to? Just so we're absolutely clear.

A I can't remember the actual detail of the meeting, but I do remember that the Board members, they were particularly challenging, that all of the costs that Mr Seabourne was seeking were justified and value for money.

THE CHAIR: My fault for perhaps not keeping up. The paper from Mr Seabourne, first of all, went to the Project Review Group?

A No, the Board's Performance Review Group, the Principal Sub-committee of the Board.

THE CHAIR: All right. Right. And went to that sub-committee, and then a sub-committee report would go to the Board?

A The minutes-- Under the scheme of delegation, the Performance Review Group would be able to take the decisions----

THE CHAIR: Right.

A -- on behalf of the Board. So the minute of that meeting, which would record the PRG's decision, would be seen by the balance of the Board members who are not on the PRG.

THE CHAIR: Right. So the membership of the Performance Review Group would be aware that, going forward, the only services available to the

Board from Currie & Brown were those set out in the letter?

A That would be my understanding, yes.

THE CHAIR: Mr Connal?

MR CONNAL: The reason I ask this is that one of the areas that has cropped up is design. Now, you happened to mention design shifting to Multiplex in one of your answers a minute or two ago.

A Yes.

Q So if you then have a period of time during which Multiplex – who have the primary responsibility for design; there's no dispute about that – are producing, for instance, designs for wards and M&E designs. Can you recollect from anything that you were told or heard or understood, who would be assessing, analysing, commenting on the M&E designs wearing a board hat?

A My understanding at that-- going into the detail design stage, we still retained the services of Wallace Whittle.

Q Right. Again, Wallace Whittle's position seemed to be that they were offered as a sort of call-off contract to be used if required, but didn't like the look of that and really did very little after 2010. Do you know anything about that?

A If you mean after the calendar year 2010----

Q Sorry, no, after the beginning of 2010. My fault.

A I can't comment on-- No, I-- No, I can't comment on that.

Q This may explain a later answer. If we go to page 103 of your witness statement-- Just bear with me a second. If we look at paragraph 372, where you're being asked about various inputs, and then you say, well:

"... during the detailed design ... design proposals [were going] to Project Team. There should be paper trail showing who from the Project Team sought to comment on Multiplex design."

You say there:

"I would have thought it would be the technical team and clinical team..."

Now, one of the challenges we've had as the Inquiry has progressed is that lots of people kept referring to the Technical team and when asked, "Oh, right, tell me who was in the Technical team," they go, "I don't really know. David Hall was around, but he was Currie & Brown. Beyond that, we don't know." Who do you mean by the Technical team?

A Well, going into 2010, based on my memory of that, we had, as was set out earlier in the discussion, retained the services of Currie & Brown for specific tasks, and you've shown me the letter. We had appointed Capita, and as I understood it, we had retained Wallace

Whittle for advice on M&E. My understanding of the detailed design phase was that Multiplex would bring forward their design proposal for a clinical area. That would go through the Project team and would then go down, as I understood it, two different lines.

It would go through the Chief Operating Officer into one of the detailed clinical teams, and I believe at the peak of the project in 2010 there were about 90 of these clinical groups who would provide the clinical service input to design, and the technical input design would be through the Project team. Those two views would then be pulled back together, and that information would be conveyed to Multiplex, that either the proposals were fine or that we – "we" being the Board – had concerns about A, B or C and asking Multiplex to address those or answer those concerns, address those concerns or answer them.

Q Okay. Can I try and split this into bite-sized chunks? I think the clinical gatherings that you mentioned we have probably heard talked about as User Groups.

A Yes.

Q User Groups for different particular areas, clinicians, nurses, so on and so forth, would be brought together, shown layouts, where the pipework was coming in, where the bed should go, did it

need a hoist, etc., and we've had quite a lot of evidence about that, and that matches your account. Can I just ask one thing? In your witness statement at the end of that paragraph, you say you thought that the Infection Control Nurse would be the conduit to get ICD input. Do you have any understanding as to-- Well first of all, what does that mean? Is that a sort of standing instruction to get input or is it just if needed?

A Well, the Infection Control Nurse was a permanent member of the Project team, so when a request for guidance on Infection Control matters was requested from the Project team, I would expect the Infection Control Nurse would seek to engage-- And I'm saying "her" because she was female, but the Infection Control Nurse would then engage with the wider Infection Control teams because they were looking to get evidence of the actual users in the clinical service. So you would be looking at services that were at Stobhill at that time, or at Glasgow Royal Infirmary or the Victoria or the Western, and seeking to get the expertise of the people there and then feed that back into the project director.

THE CHAIR: And that would depend on the Infection Control Nurse understanding that something being discussed or something that was before

the User Group was an Infection Control issue, and that she didn't understand it well enough to come to a decision on her own part?

A That would be my understanding. I can't comment on the practicality of a day-to-day basis, but my personal experience with Infection Control staff is that they do tend to engage with the wider community before they offer an opinion.

THE CHAIR: Thank you.

MR CONNAL: So that's sort of one part. You have the User Groups, asked you a question about Infection Control. Did I understand your evidence then to be that so far as M&E stuff, the response would come from the Project team?

A It would be the Project team's responsibility to get advice and comment on technical, you know, M&E and other environmental issues. The User Group, if you refer to them-- I call them the clinical group, they would not necessarily have the expertise to comment on whether this solution provided the correct environment, and that was my understanding of the contractual arrangements we had to-- to use Wallace Whittle during 2010 to input into that section.

Q Thank you. Do you remember something called a Full Business Case, to move on?

A Yes.

Q Were you involved in its preparation?

A Not directly.

Q Tell me what you mean by "not directly".

A Well, the Full Business Case ultimately had to be approved by the Board before it was submitted to the Scottish Government Health Directorate, and therefore it had to be taken by me to the Board. Not necessarily directly by me, but it had to be approved and taken to the Board. The Full Business Case was a document that was laid out on a prescribed basis by the Scottish Government Health Directorate as to what information was contained in what detail, and it was linked to a whole series of prior approvals.

So you would bring forward or refer to previous submissions through the process; you would make reference to where the strategies were signed off at different times; you would make reference to the approval of the procurement strategy; and then you would provide the detailed financial and clinical information needed; and in particular for the Full Business Case, which went through the Finance Directorate in the Scottish Government, they were interested in the Board's affordability of being able to cover the

costs associated with the investment.

Q Now, as we understand the process – and please correct me if I say anything that doesn't match your understanding – the way this contract was set up was in two stages. Well, if you ignore the laboratory for the moment, which is separate, but it's not a topic that is within our remit. One was where you get the detailed design done and the contractors are instructed to do that.

A Yes.

Q And then before they go and build anything, they need basically an instruction to proceed from the Board.

A Yes.

Q Which the Board needs Full Business Case approval to get.

A Correct.

Q Now, one of the issues that has emerged is whether the departure from government guidance on ventilation was in the Full Business Case or should have been in the Full Business Case. First of all, do you know the detailed answer to that?

A No, I don't.

Q You were sort of asked this question – not very well, I suspect – in the preparation of your witness statement. If you go to page 81 at paragraph 277, again, am I right in thinking that the way the Board structures worked, although you didn't write it, you were responsible for it as Chief Executive?

A Yes, that would be fair.

Q Now, you say there:

"The three air changes and chilled beams, being the design solution, came up after the appointment of Multiplex which was several years later."

That's not correct, is it?

A Not in the context of where we are now, no. In relation to 277, I was certainly talking about the business case that was approved, which-- I can't remember the title they used for the prior stage approval. We had to do a business case to secure the capital and to be allowed to go to procurement. So the Board could not have started the process in what would be kind of early spring 2009 without getting agreement in principle from the government that the 842 million predicted cost of the investment was going to be made available.

We couldn't go to the industry and say, "We are hoping, depending on the price, we might be able to pay for it." So there was an interim stage, and my answer at that point was that I was talking about the Initial Business Case, which allowed us to secure the money the offer of the capital from the Scottish Government.

THE CHAIR: Would that be the

Outline Business Case?

A That would be the Outline Business Case. Sorry, I forgot the reference that you call it now. The Outline Business Case. That went through the process, and as I say, that document would not have contained anything about the air changes, etc. The Full Business Case which would go in-- I don't actually have the detailed timetable in front of me, but it would have been----

MR CONNAL: Late 2010, I think, the date for the Full Business Case.

A That was very much a financial business case driven on reference to what had previously in the Interim Business Case about the clinical case for change, and that would be much more about, "The firmed up scheme is now going to cost X"; the Board's ability to finance that, because the running cost of that would be we do Y; and what would the Board save in the closures of Stobhill, Victoria, Southern General and the Western Infirmary and the release of those funds which would give the government confidence that the Health Board could afford the capital charges and the running costs of the new complex at some point in the future.

So, it was a very detailed series of financial information and interrogation, and the bottom line in the Full Business Case was that the detailed design had

brought the project in within the indicative costs that were in the Outline Business Case, that the Board's financial position at the time of proposing to go forward was X and that the savings would be Y. Off the top of my head, the headline number was that the Board would release approximately £40 million per year running costs greater than was needed to finance the new building, so there would a net saving to the Board at the end of this project. Now, that evolved over the years going forward, but at the end of 2010 that was basically the headline numbers, that the investment would drive a cost of approximately 40-odd million a year in new costs, but the savings from closing the four other sites would save about 80 million a year.

Q Well, thank you for that. That's very helpful. I think I want to put another proposition to you, and you can tell me whether you agree or disagree. Because of the way the contract is structured, the contract between the Board and Multiplex, the Full Business Case is essentially the trigger for people putting shovels in the ground and getting the build going.

A Correct.

Q The Scottish Government is about to invest through the Board, through the funding structures, a lot of money to create this flagship, best in

class – whatever you want to call it – hospital. Therefore, while they're concerned with the money, they might also be concerned with the product that they're going to get for that money, because there's point saying, "We got it under budget. It's going to be pretty crummy but, hey, guys, it doesn't matter. We'll build it cheap." Would you agree with that general proposition?

A I would agree with the proposition that they would want value for money on the investment. I suppose the point I would seek to kind of point out is the Full Business Case is a prescribed document, right, that was set out by the Scottish Government Health Directorate. If it asked in that document framework that we had to submit the details of the technical solutions that we are proposing, then they must have been in the document to get it approved, because if they asked for it and we didn't provide it, the business case would not have been approved. And at that point we would have owed Multiplex an agreed set of costs for the work in the detailed design but not the construction.

My recollection-- and obviously the Full Business Case exists, the documentation exists-- the letter sending it to the government, and the Health Directorate's director of finances replied back to the Board along with the then director general of the Health Service in Scotland. The letter back to me sets out what was (a) submitted and (b) approved. I don't have a detailed recollection 16 years later of what was in the document, but I can only say if it wasn't-- if it was in it, did someone read it and agree with it or not? I don't know. I don't-- My remembrance of it is that that detail, i.e. design detail, was not asked for in the Full Business Case.

THE CHAIR: I'm sure you're right about that. We have heard evidence that, even absent a question, there would have been an expectation on the part of those receiving that Final Business Case to be informed if there had been a decision to depart from current government guidance on design. Would you share that expectation even in the absence of a question?

A If colleagues within Scottish Government Health Directorate asked questions following receipt of the Full Business Case along the lines of technical compliance with Scottish Health Technical Memoranda, then there should be a communication chain from them to the Project team/project director to answer the question, the enquiry. I'm not aware of document-- sorry, of any request for that detailed type of information. If it came back formally from the director general's office, then that

would routinely have been either sent directly to me or copied to me, and I don't recall receiving any communication from colleagues in the government.

MR CONNAL: Well, let me see perhaps if I can follow that up for a moment, my Lord. The Inquiry has scrutinised the contents of the Full Business Case and can't find any trace of the ventilation derogation – whatever you want to call it – being mentioned. So, if you just take that from me as a premise of my question, that we've looked very hard. Remember that you have this thing called Employer's Requirements. The Employer's Requirements contain reference to Scottish Government guidance.

A Mm-hmm.

Q SHTM 03-01 is guidance which is in a list marked "compulsory", as opposed to not compulsory. So far as the Inquiry has been able to find, the message you would get from reading the business case is that what is being proposed meets the Employer's Requirements. Now, I'm paraphrasing slightly because it would become a very long question.

Now, if that's correct and that is the message that the government reader would get – "I can see the requirements. I can see they're met. No issues here" – would that then explain why we've had some evidence that if you were going to say, "Well, whatever impression you get, please bear in mind that we're going to build X hundred rooms which are not in accordance with your current guidance, Mr Government, and you may like that or may not. If you don't, come back and talk to us about it," and they would have expected that to have been flagged?

A I can't comment on what colleagues expected or interpreted from the business case. From-- As we've already discussed this morning, from the Board's perspective, the contractual derogation from mandatory to accepting a variation on the design was taken by the Project team pre-contract, pre-appointment. Therefore, I can't comment as to who knew because I didn't know, because it wasn't reported as being-- it wasn't reported as a variation.

To the extent that colleagues read the Full Business Case and made that assumption, I can't comment on that. Had they read it and sought information from the project director, then the answer they would have got would have been the truthful answer of, "No, we've accepted this, and here's the reason why."

Q I suppose the question is, if the general picture that I've painted of the Full Business Case is accepted for the purpose of my question, what would trigger anyone reading it wearing a

Scottish Government hat to go, “I know it says, ‘compliant with Employer’s Requirements,’ and all our guidance notes are in there, but I should probably go and ask if that’s true.” Is that not a bit far-fetched?

A Well, I’m not making the suggestion that colleagues in the Scottish Government-- what they-- I mean, a Full Business Case goes in. It is then circulated. It goes in through the finance director at the Scottish Government, the health secretary, finance secretary. It will then be circulated throughout various departments within the Scottish Government Health Directorate seeking comments, but I don’t know what the detail of that process is and I don’t know who-- which colleagues within the Scottish Government would get it and comment on it. If I was one of those and I just made this-- and I read it and said, “Well, he’s saying it’s-- you know, the Board’s saying it’s compliant, so that’s fine. I don’t need to ask any information,” I have no idea whether you would regard that as someone doing that job properly or not.

THE CHAIR: My recollection from reading the Full Business Case – and I’m sure it wasn’t a very detailed read – is that it does not go into really any detail of the design of the hospitals, but it does present a proposal by the Board that it would wish to build, to use your expression, flagship hospitals. Would you accept that as a characterisation of what is set out in the Full Business Case?

A Yes.

THE CHAIR: Yes.

MR CONNAL: I suppose it’s just a question of disclosure. You didn’t know about it, so it’s not that you haven’t disclosed something. It’s just that you are the person in the hot seat who was responsible for this document. If you’re going to say, “We’re going to build you a flagship hospital,” would you not have to disclose if you knew – and somebody knew, not you necessarily, but somebody in the system knew, maybe not very many people, but somebody knew – that you were not going to comply with Scottish Government guidance on air change rates, which at least on paper are there for the protection of patients?

A No, I accept the point you’re making. I can only say that the Full Business Case was prepared, in essence, by-- by a group of directors taking in their individual responsibilities. Financial selection was overseen by the Board’s directors of finance, particularly in relation to proving future affordability. The technical input was-- would be provided and drafted by the project director, and the clinical information would be-- would have been seen and

commented on by the Chief Operating Officer.

So all of these things would have been ticked off. It would come to the Board and then would be presented to the Board in a discussion, answering any of the Board members' questions, before it was formally submitted to the government, and then subsequently a letter coming back from the Scottish Government giving approval to proceed.

Q I think I'm proposing to move from the Full Business Case, unless my Lord has any further questions.

THE CHAIR: No.

MR CONNAL: Thank you. I've been trying to take these topics roughly in chronological order, and it doesn't quite work neatly like that, but we're in 2010. I'd just like to pick up some points that you've made about how things operated during largely the design but also the construction period in terms of management. Could we go to your witness statement again at page 14? Paragraph 43 there, you say:

"I don't think I've managed to get it across to you, but there was not a significant amount of reporting up to the Board. There is a disconnect between the Board and the project, and only..."

Now, is that meant to be "exception" or "exceptional" reports?

A No, exception.

Q "... exception reports went up."

So, tell us why you use the phrase "disconnect" between Board and project.

A I think-- I can't remember the detail of the questioning to which this was my response, but I think I was trying to convey that, in relation to the scheme of delegation, the project was delegated to the appropriate senior directors and the Board had nominated a couple of non-executive directors to liaise with the Project team, and what came back to the Board were basically progress reports. Were we on time? Were we within budget? Were there any changes to the report? And I suppose the point I was trying to get across was that-- That was the point I was trying to get about disconnect. There was not a routine. The new hospital was not a kind of standing item on the Board's agenda where every meeting we would discuss what was going on within the terms of the project.

Q Now, one of these non-executive directors, I think, would be Mr Winter.

A It was, yes.

Q Now, what Mr Winter told us, broadly along the lines of what you told us, that it was progress really that he was mainly concerned with. He didn't get sent to look at what the contract required or any of the contract details.

A No, no.

Q He wasn't given any of that material. He was just really going to see how things were progressing on site. Is that fair?

A Yes.

Q Well, if we go to page 18, paragraph 56, you were asked, "Well, was there a process for committees getting reports on decisions made by the Project team?" and you say:

"Groups of staff, clinicians, Project team and the acute services would receive updates on the go."

So, that's presumably informal updates?

A Yeah, the-- the point I was trying to make was that the-- the reporting on the operational aspects of the project between the project director and the Chief Operating Officer went through that mechanism, and they had a formal committee structure to receive these and to hold the discussions.

Q And then you say, "The programme board." Now, is that the right label?

A I can't remember the title. I think at one stage it was referred to as "on the move" or "on the go working groups", but there was a formal meeting structure between the Chief Operating Officer and directors and the project director.

Q And you say, so far as you're concerned, the decisions didn't come to you. You were aware of some of them from conversations, but not for decisions. So, no one came to you and said, "Well, you approved this"? That wasn't your role?

A No. It was only if-- As I've tried to explain, what would come to me would be exception reports. If they did not have the ability to take decisions, if it was outwith their scheme of delegation-- and that would be primarily around big financial variation or discussions about changing the original Employer's Requirements, as you referred to it.

Q Now, the characterisation that you've used to describe these conversations in that paragraph is, you say, they would say something like, "This is what we're doing," and they comply with all the appropriate regulations. It wasn't a sort of formal report, it was just a kind of update to you. How would you come to get an update of that kind?

A Well, they would come from kind of two principal sources: one, the kind of regular bi-monthly meeting with the project director and the team; and secondly, in my performance management meetings with the individual postholders, which were twice a year. On a day-to-day basis, I'd be talking to most of these people about some aspect of the

Board's business.

Q So far as the actual Project team is concerned, can we look at page 21, paragraph 70? You say there:

"There were no formal mechanisms for reporting decisions by the Project team to the Board. There was no formal report."

Should there have been some kind of formal report for this huge project?

A Again, I can't just remember the detail of the question I was asked. There-- There was reports to the Performance Review Group at a high level of the project at regular intervals where the project director would come along to talk to a paper that they had produced submitted to the Board, and the Board members would get to ask questions. The point I was making there was, within the scheme of delegation, the day-to-day workings of the Project team in their interaction with Multiplex to arrive at the final agreed design, and therefore the commencement of construction, didn't require detailed reporting.

Q I think you make the point at paragraph 71 that if you'd come to the Board, the way the Board was set up, you didn't have the technical expertise to judge anything.

A No, what would-- what would happen at the Board would be, depending on what was being presented in front of them, the Board members and/or-- you know, of which I was one-- We-- We would have the ability to quiz the project director, but if you-- if the Board rejected his recommendation, if there was a recommendation in the paper to do something, that results in the project director taking the paper away, not in the Board designing or contributing to an alternative proposal there and then, you know. So, the Board receives the paper and in it he asks, "Can I do X?" The Board says, "No." The Board-- The project director then goes away to look at it again. The Board don't say, "You can't do that, but you can do this." The Board don't, in the discussion, you know, come up with an alternative solution on the day.

Q So, fairly limited links. That goes back to your disconnect point from earlier.

A Well, it's reference to-- The point I was making is that, had the detailed design come up to the Board, there were limited – if any – abilities for those who were sitting round the Board to say, "I don't like the outcome of that, it should be something else." What would happen if you got into that level of detail would only be the Board saying, "Well, I'm not happy that that's right. Can you go back to the clinical, the technical, or Multiplex and ask X or Y?"

Q Yes. So I think you express

this. If you go to page 26 in paragraph 92, you say, “Well, what the Board drove were public meetings, parliamentary processes, getting through Scottish Government guidance and regulation, but when you get to delivery, the Board gets the money and basically hands it over to the Project team to do the work.” Is that right?

A Yes, except-- except I’ve never worked with a group of financial experts who would ever let money go to anybody. They-- There would be a process of having to earn it, but, yes, what effectively happens is that the Board, having done all the heavy lifting up to that point, hands the heavy lifting over to a more competent group to take the next stage forward.

Q That’s essentially the Project team?

A Correct, and as you’ve seen from your evidence and my comments-- and other people and papers that were sent to me, that broke down into two. There was the procurement strategy and then the procurement process resulting in Multiplex in December 2009. Then the Project team evolved. Helen moved on to a new role down South because her area of expertise was kind of moving away from where she was, it was moving into a very technical role, and then in the period 2010/11 was the signing off of the detailed design and then the start of the construction. So, yes, the Board really kind of stepped back, and what came to them then was project director papers.

So, there’s a number of papers came from Helen setting out at different stages what the procurement strategy was, how we were going about it, then the procurement strategy, then the recommendation about who the successful bidder should be-- or really the term “preferred bidder”, and then the outline, and then Final Business Case. By the time of the Final Business Case, Helen has moved on, and that was put together by a group of directors on the Board, inputting into the various sections.

Q If we just look briefly at page 41, please, at paragraph 143. Well, you’re saying here:

“Choice of contract model, funding changing and preferred bidders were discussed at the Acute Services Strategy Board, but the day-to-day work underpinning them was led by Helen’s team.”

Now, “Helen’s team”, is that is that the Project team you’re talking about there?

A Yes. I mean, the key-- the key personnel were the same, you know. Alan Seabourne was the project manager till he became the project director, Helen, as I say, was the project director. At that

stage, people like Peter Moir, etc., were on the team.

Q Then you've answered at the end of that paragraph – unfortunately for you – in a way that's prompted yet another question, where you say:

"The Project Team would take these operational and technical decisions, and they would be formally reported to the Board, where necessary."

Which inevitably is going to prompt somebody to come back and say, "Well, where can we go and look up how we find the definition of 'where necessary'?" And I think your answer in 144 is it was not written down.

A No, it was in the kind of inferred schemes of delegation, etc. I mean, I've tried to generalise there. The big issues that would go back to the Board automatically – i.e., they would never be delegated to directors, including myself – were (inaudible 15:50:33) finance, clinical specification, and by that I mean the services going in and the scale of the project that we had agreed to buy for that amount of money. The project director and the Chief Operating Officer could not have agreed to take only a thousand beds, "but we'll keep it within the budget and we don't need to tell the Board". That fundamentally is not-- You know, that would have to be reported to the Board.

Likewise, if you decided that we were just not going to have a particular department because we didn't have space, that again would need to be reported to the Board, but outwith that, the detailed design of the ward, the detailed design of theatres, the discussions that were had about whether you have clean and dirty corridors within the theatres, all of these kind of operational issues, that was delegated.

Q I think you indicate that you really can't remember anything of note coming up the way from these discussions, it was all just dealt with at the lower level.

A Yes, I can't remember in any of the regular reports that came to the Board that it was anything other than a generality of, "What stage was the construction at? Were we within the time frame of the critical path? Were the finances going out in line with the cashflow expectation?" Because we had a-- As I referred to in the report, one of the things we had to monitor was the cashflow, because although the government could sign off that we could 842 million, in each of the financial years there was a cap in the amount we could spend. So, in other words, Brookfield Multiplex couldn't get too far ahead, because we wouldn't be able to pay, because the government had allocated a

certain amount of capital to be spent in that year.

Likewise, they couldn't get too far behind, because we would then have to broker the capital between fiscal years. Health boards don't have the authority to hold on to cash. So, at the end of each financial year, our numbers need to come back to zero, which is quite a feat when you're dealing with 3.1 billion, to bring it back to zero at the end of each financial year, but basically, unlike councils, boards can't bank surpluses from one year into the next, and likewise, they can't broker capital. So, there's a very kind of strict fiscal management of the cashflow. That would be included in the reports, were we're on time, etc.

Q Well, I think I just have one final question on your-- and I'm now sort of moving from talking about the Board and so on to talking about you as Chief Executive. If we go to page 75, just a couple of questions from that page. You say, second sentence in 252:

"I was not working with the project team in 2009…"

Then you set out what you were doing 2000 to 2006, and then you say:

"At that point my hands-on leadership role stopped and the responsibility for the actual procurement, the actual design, the actual schedule of accommodation and the employer requirements all passed down to chief operating officer and the director of the project, Helen Byrne…"

A Yes.

Q So, you kind of took a step back at that stage?

A Well, the actual question I was asked was, given my experience in my role with the Acute Services Strategy and as Chief Operating Officer-- I think the question I was asked was, "Surely you couldn't have stepped back and just let it go, because you'd been involved with it so intimately from the beginning?" and the answer was, when I was appointed Chief Executive of the Board, the Chairman and the Board members made it very clear that I wasn't the Chief Operating Officer, I was the Chief Executive, and I had to deal with the wider responsibilities and not stay within the acute sector.

So, that was the point I was trying to make, is that I played a significant role through the strategy formation, through the procurement in the context of getting political approval for the funding, and then handed the project over to take it from that stage through. So, my responsibilities for the project, which is what the question was at the time, was similar to the Board's that we were handling all that kind of external political and policy issues.

Then from 2007 onwards-- well, sorry, 2007 to 2009, I still had an involvement as chief operating officer with the decisions taken about procurement strategy that was linked to getting the funding, and then on being appointed to the Board, I kind of stepped back.

Q So you go on to finish that narrative in 253, in these terms, you say:

"So, I never knew what was in the building, never asked in detail what was in the building because, as I've explained, the building specification was all made up by the individual clinical team saying what they needed, what they wanted."

And then there's a discussion about the bed model, which is the numbers.

A Yes.

Q Which I know you come back to when we come to talk about the infectious diseases unit because that impacted on your bed numbers. But, otherwise, you're not really on top of any detail as to what's in the building at all, other than anything you pick up incidentally from casual discussion?

A Correct, and as I explained during conversations, in the period 2007 through to 2010, there was a series of capital schemes that were what we referred to as "the first phase" of creating the acute services configuration. We built the Regional Neonatal unit at the Queen-- sorry, at the Southern General Hospital, as it was then, to create the capacity to handle, firstly, the transfer of the Queen Mothers, and then in more detail, the transfer of the Children's Hospital. We then built the ambulatory care hospitals, and we built the new cancer centre at Gartnavel.

All four of those projects were ongoing, led by individual project directors. And to this day, I think I can say that I have been in less than 10 per cent of all of those buildings, and mostly recently as a patient rather than as the Chief Executive of the Board. So that was the kind of norm for the projects. You establish a project director to lead it, you establish a Project team, and you procure.

Q My Lord, I was going to go on to another topic, but I'm conscious we're sort of almost at four o'clock.

THE CHAIR: Well, I'll be guided by you, Mr Connal, if you want to take a break now, we'll take a break now.

MR CONNAL: Well, no, I mean, maybe I should take one more topic and then----

THE CHAIR: Very well.

MR CONNAL: -- try and finish. I want to ask you about some of the things you've said about haemato-oncology in your witness statement.

A Yes.

Q In particular, the Haemato-oncology cohort, to use that word, that was originally intended to be in Ward 4B before the proposal for the bone marrow transplant move.

A Yes.

Q Because you tell us quite a lot about it and I just want to ask you about that. In your witness statement at page 22, and I'm just going to refer you to the places in which you mentioned this, you say:

"When the hospital was designed, when the decisions on the ventilation were taken ... the only area that was going to house immunosuppressed patients for which there was specific design guidance, was the Schiehallion Ward in the children's hospital. There were to be no immunosuppressed patients in the adults hospital."

Can you see you've said that there?

A Yes.

Q Then if we go to paragraph 213, which is on page 64, you say:

"I have been asked about the guidance specifically regarding immunosuppressed patients. It is my view that this was not relevant as there were no immunosuppressed patients at the design stage who were to be accommodated within the adult hospital."

Then you say near the end of paragraph 214, because 214 also deals with the 4B-- the other later issues:

"It was never designed to take immune suppressed patients. I do not consider the haemato-oncology patients initially intended for Ward 4B to be immunocompromised; they were primarily community patients getting follow up treatment closer to home, [just] as at Monklands."

Do you see that?

A Yes.

Q Then if we go to-- let me just get the right numbers, 222, I think. Yes. Let's go to page 67, paragraph 223, "What was going into 4B," you say:

"Was what they call district general haemato-oncology. District general haemato-oncology was what you call low-grade oncology, that is low-grade drugs administered to patients by a combination of either overnight stay or short stay..."

These units existed in various places. You say:

"The idea was patients would not travel unnecessarily to the Beatson for low-level, in clinical terms, no risk chemo."

Now, I was going to ask you, first of all, where did you get the information you've set out in these paragraphs, because it doesn't appear anywhere else in the materials we have. So I just wanted to ask where this all came from.

A Well, that's because I was part

of the group that debated and agreed the Western Scotland Cancer Strategy. The Beatson Oncology Centre is the centre of excellence for the West of Scotland. There was a big push in 2007/8 to decentralise elements of the Beatson because of patients having to travel significant distances, that the administration of oncology drugs had evolved and that there were a group of consultants, particularly haematologists, who had the skill sets to oversee patients who had been through the regional centre and, therefore, could be discharged back to the community.

The West Scotland Health Board agreed a strategy which was that each board would set up a local service where the oncologists at the Beatson could discharge these patients back to these units to complete their treatment, making it easier for the patients to get access to local services.

So within the West of Scotland, those hospitals where Monklands was picked by Lanarkshire Health Board, Forth Valley is a single site acute service, and in Ayrshire they picked Crosshouse Hospital, and each of the boards in Glasgow, because at that time we had a thing called the Clyde that went through Glasgow, there was a kind of north/south debate in Glasgow and it was agreed that in the south of the river, which didn't have access, would get the Glasgow version of the outreach service. So each of these boards took forward development on that. So I was involved in that so I know the background to that.

Those patients that were in the Southern General, which was the south side outreach of the Beatson, were in an open Nightingale ward in the central medical block, as it was referred to at that time, and they were managed by the consultant haematologist in liaison with the oncologist at the Beatson.

Therefore, in the clinical specification for the Queen Elizabeth, it was the service that was in the old Southern General Hospital that was planned to move into the new hospital. In the detailed specification for 4B which was signed off by John Hood and Infection Control and the other consultants, that was the patient group that they were looking at in setting out their advice and how these patients should be managed.

I don't recognise those as immunocompromised patients in the context of the way I would recognise the Beatson patients as being, particularly in adult bone marrow transplant and in children's bone marrow transplant, as being immunocompromised.

Q The process that was followed to create the Employer's Requirements,

Mr Calderwood, included the creation of things called clinical output specifications.

A Yes.

Q And for our purposes, there was one, for instance, for the Schiehallion, which wasn't very successful, and there was one for what was originally intended to be Ward 4B's, because this is before the Beatson proposal comes in.

A Yes.

Q Now, if we could look at bundle 16 at page 1595, what we find here is what this Inquiry, at least, has been told and seemed to have been accepted to be the clinical output specification for the original version of Ward 4B.

A Yes.

Q That this was recognised by----

THE CHAIR: Is this the same thing as you've previously described as Dr John Hood's?

A Well, Dr John Hood was the infection control-- he's named in the introduction to the paper.

THE CHAIR: Yes.

A Yes, he was the-- one of-- well, he is consultant microbiologist, he had the infection control role. I think it was the Dr Anne Morrison was the consultant haematologist who is managing those patients at the time within the Southern General, who I suspect would have been party to the drafting of this clinical output specification.

THE CHAIR: Right, that answer suggests-- sorry, Mr Connal, that suggests to me that when you made a reference to Dr Hood's paper, you were thinking of something different than that.

A No. No, this was the one I was referring to.

THE CHAIR: Very well. My apologies, Mr Connal.

MR CONNAL: The reason I'm putting it to you is that we asked Mr Gary Jenkins about this document in the course of evidence he was giving us focusing on the Beatson move, and he was able to tell us that this-- he recognised this as relating to a ward in the Southern General that was moving into the new hospital, because he had a similar ward in the Beatson which was not going anywhere and was staying where it was, and he recognised the type of things that they did.

I mean, he asserted that this was what he would describe as a neutropenic ward under the special provisions of SHTM 03-01 for protection of immunocompromised patients. Now, your narrative in your witness statement proceeds on the assumption that there are no immunocompromised patients in the adult hospital. But this clinical output specification, if we look at it now, says in terms, paragraph 1:

"A high proportion of the patients receive chemotherapy and are immuno-compromised, making them vulnerable to infection. Advice was requested from Dr John Hood..."

And then down under, "Special room requirements," "Rooms suitable for isolation of immunocompromised patients," and there's this pentamidine room, which is a room that you'd find in this context. Ventilation:

"The haemato-oncology ward has a very specific function and a considerably higher than average requirement for additional engineering support/infrastructure. There should be no opening windows, no chilled beams. Space sealed and ventilated. Positive pressure ... highly filtered air ... probably best HEPA ... side rooms for neutropenic patients as in the Beatson... "

And then something similar is repeated on page 1597 near the end. Now, this is the material the Inquiry has been given and hitherto has been, as I understand it, accepted to be the specification which was proposed for Ward 4B, because it raises a different question about what happened to this group when the Beatson came in. Now, that does appear to suggest the need for protection of immunocompromised patients in that ward.

A Yes, I think we're-- I am using my view of the cancer strategy which differentiated the patients between those that could be managed in a local district general setting versus the special services at the Beatson. The accommodation that they were in at Southern General had none of this. This was the opportunity to build a state-of-the-art facility for these patients in the new hospital and it's my understanding that this was what was included in the Employer's Requirements for 4B?

THE CHAIR: Which became 4C?

A I couldn't comment on that.

THE CHAIR: Oh, well-- I apologise for the way of putting it. Can I just make absolutely certain? Do you recognise that as a specification for the provision within the Queen Elizabeth of the service which had previously been provided in a possibly----

A Old-fashioned Nightingale Ward built in the 1850s

THE CHAIR: -- B7 of the Southern General?

A Yes.

THE CHAIR: Yes. Right.

MR CONNAL: So when you said that there were not going to be immunocompromised patients in the adult hospital----

A Yes. These are my words and my understanding of the cancer strategy and the service that existed at that time in

the Southern General Hospital.

Q But if you take this document at face value, there were going to be immunocompromised patients needing particular protections according to the writer of this document.

A Yes, but-- I'm not sure the point we're trying to make here. The point I'm trying to make is that in 2007, the service that existed in Southern General Hospital was moving into the new hospital because the whole of Southern General was being knocked down. This document is a perfect opportunity to create significant betterment to those patients in the new environment compared to what they had.

However, as we might go on to talk about later, services-- clinical services evolved. So by 2009 when John Hood was doing this, the group of patients who might be susceptible to be able to be transferred from the Beatson to local district general hospitals would evolve in exactly the same way as when we go on to talk about the adult bone marrow transplant. Those services evolved between the Board taking a decision in 2008 not to move them to then taking a decision in 2013 of the need to move them because the clinical development had moved on and other issues became relevant and the Board had to revisit this decision.

So this, to me, is a perfectly good upgrade of the service to make it fit for the patients that probably existed in 2009 and could be expected to be in this outreach service by 2015. So yes, that's what the Board expected to get in 4B.

Q Okay. Just to follow my Lord's question a moment or two ago, we're going to come shortly to talk about the issues that arose from 2013 onwards in relation to the BMT unit.

A Yes.

Q But in broad terms, what we've got on the screen at the moment was what was originally proposed for Ward 4B, then the BMT unit was to come in and the Ward 4B cohort was to move to Ward 4C. Is that correct?

A I don't know that, no. My understanding was that the inpatient beds were to be expanded to accommodate the greater number of patients predicted if we moved the adult bone marrow transplant across. So yes, that would probably refer to 4C, the clinical adjacency. But if you look at the specification, all of the debates about 4B's acceptability to take the next level up of compromised patients was where the whole debate starts about the betterment. This was deemed not good enough to go to the adult bone marrow transplant, and we've debated, and in my statement I comment, that the board

provided capital funds in 2013 to enhance the specification to a higher specification which still didn't meet the views of the infection control team as being acceptable.

We then spent another sum of money in late 2015 to try and improve it again, and as I said my statement, subsequently couldn't improve it to the level that was deemed required by infection control; and then I've endeavoured to explain the very difficult situation I found (a) myself and (b) the Board in, which is you had two groups of clinicians who had different views. So the cancer clinicians considered the risk of patients being compromised, being on the Gartnavel site with no access to acute medicine and critical care, versus the view of the infection control doctors, that the environment was such that the patient could be at risk of being infected.

THE CHAIR: I rather suspect that Mr Connal will suggest that we take what you've just explained to us in a more step-by-step basis, but just to make sure that I'm clear about this, the document we have in front of us, which was either drafted by Dr Hood or with his advice, was not describing the bone marrow transfer service because as at the date of that, that service was to remain in the Beatson.

A Correct.

THE CHAIR: Right. Well, Mr Connal, subject to any further question you have, maybe we've reached a point to break.

MR CONNAL: Well, I'm just really going to ask one follow-up, just because my Lord has raised it. I don't want to ask you about what you tried to do to suit 4B to take BMT patients, because we can do that separately and probably tomorrow.

What I do want to ask you is a sort of follow-up to the answer you gave and then went off to talk about 4B a minute or two ago. This clinical output specification, which has been regarded by some commentators that we've heard from as quite a good one-- It's got a lot of detail in it about the environment and so on. It hasn't got everything, but it talks about what Mr Jenkins said was a neutropaenic ward under SHTM 03-01; it talks about a ward which, if you looked up that guidance, you would find reference to 10 air changes an hour, 10 pascals of positive pressure and other requirements.

If this is describing correctly the cohort of patients that were anticipated to go into 4B, and they were then being-- let's just use the word displaced. Not a pejorative word, but moved because a late decision was being made to bring in the bone marrow transplant unit after the hospital was half-built, the indications the Inquiry has had is that they were going

into, in effect, Ward 4C. Would that not indicate that this same group of patients described in this specification would require the same kind of protections in wherever they were moved to?

A Yes.

Q That, my Lord, I think would be an appropriate point to break for this evening. I will be returning to the tail of the bone marrow transplant unit and the different issues that arose with it subsequently.

THE CHAIR: Well, we'll convene again, Mr Calderwood, all being well, tomorrow morning, so could I ask you to return for a ten o'clock start?

THE WITNESS: Thank you, my Lord.

THE CHAIR: Thank you. Well, we'll reconvene tomorrow at 10, and until then I wish everyone a good afternoon.

(Session ends)

(16:18)