

**PLEASE CHECK AGAINST DELIVERY**

**Presentation by the Auditor General for Scotland, Robert Black to the Audit Committee of the Scottish Parliament, on his report, *Managing of the Holyrood building project***

**29 JUNE 2004**

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Thank you for this opportunity to introduce my latest report on the Management of the Holyrood Building Project, which has been laid in the Parliament this morning.

I will start by outlining the background to this report in the context of my previous reports, and I will explain the scope of this new report and my understanding of how it relates to the Inquiry by Lord Fraser of Carmyllie.

I will then describe the main events of the last four years and I will offer some general comments about the project as a whole.

I will go on to outline my views on the reasons for the late delivery of the project and the reasons for the increases in the costs.

I will also comment on some of the key features of project management and control, and I will conclude by mentioning some of the lessons that I think can be taken from the Holyrood project.

To start with the context for my report.

My first report to the Parliament was made in September 2000. It was partly in response to a request from Andrew Welsh who was then Convener of the Audit Committee, and it was partly a response to the general concern in the Parliament and the wider public about the state of the project in the Spring of 2000.

That was an unusual report for two reasons. In the first place, it was unusual for an auditor to examine a project which had not been completed - and in the Summer of 2000, the bulk of the spending on the project had yet to be committed. Secondly, my statutory remit only ran back to the day when the Scottish Parliament came into

being. I was grateful for the co-operation of the Scottish Executive in allowing me to inform myself about certain issues and events that occurred before devolution, but I only did so to the extent that was necessary for a proper understanding of the situation in the Spring of 2000. My 2000 report was not therefore a full audit examination of the pre-devolution management of the project.

After my report in 2000 the Audit Committee expected me to keep the project under review and make further reports should the need arise.

I reported for a second time in December 2002. That report concentrated on various contract management issues following the termination of a major contract with Flour City Architectural Metals (UK) Ltd. It made recommendations for urgent action by the project management team to tighten control of contracts.

In June of last year, I advised this Committee that I intended to examine and report again on the project, and I subsequently indicated that I would make my report in the summer of 2004.

Also in June of last year, the First Minister, after discussions with the Presiding Officer and me, announced that there would be an independent Inquiry by Lord Fraser of Carmyllie. It was agreed that Lord Fraser would build on my existing findings and would take account of my intention to examine the economy, efficiency and effectiveness with which resources have been used in the Holyrood project.

The report that has been laid today takes the story forward from my report of September 2000. I have not revisited the matters that I covered in 2000, nor have I altered my view on the conclusions and recommendations that I made in 2000. This latest audit examination relates to how the project was managed and controlled over the last four years. It describes the delays and escalating costs, and it contains my key findings on the reasons for the delays and cost increases.

In other words, my report concerns the management and control processes applied to the Holyrood project. I concentrate on the performance of what has been termed collectively, "project management". Project management consists of the Clerk and

Chief Executive of the Parliament who is the Principal Accountable Officer, and the project team, which is led by the project director.

In fact the legal client for the Holyrood Project is the Corporate Body with powers under the Scotland Act to provide the new Parliament building. The Corporate Body formally delegated the function of completing the Holyrood building project to the Clerk.

Project management is responsible for managing and delivering the project. Project management is advised and guided by the Holyrood Progress Group, which was set up by the Scottish Parliamentary Corporate Body to look after their interests as the client on behalf of the Scottish Parliament. The Corporate Body stated in 2000 that it expected the Clerk to act on the advice of the Progress Group and he has done so.

I emphasise that, through the Clerk, project management is accountable for the delivery of the project. The Holyrood Progress Group includes MSPs and independent experts. The Progress Group provides advice to project management and monitors progress on behalf of the Corporate Body. It has responsibilities for advice and monitoring but it is not accountable for the delivery of the project. For that reason, I have not looked in detail at how the Progress Group worked. I would imagine that Lord Fraser, with his wider remit, is likely to comment on how the Progress Group functioned on the basis of the extensive evidence he has taken from the members of the Group.

There is one final and important contextual point to make. Despite the slippage and extra costs that have affected the project a very great deal has been achieved in the course of the building operations. Several architectural observers have already reviewed the building favourably. It arguably satisfies the requirement for a high quality, landmark building reflecting the aspirations of Scotland as a nation. We should bear this in mind in assessing the slippage and the cost increases that have affected the project.

I shall turn now to a brief summary of what has happened to the project over the last four years. Part 2 of my report includes a detailed analysis. I would like to draw out a

few of the key events because this might assist your understanding of my main findings.

At the time of my September 2000 report, construction was at a very early stage. The frame of the MSP building was going up but the site of the main assembly building was, literally, a hole in the ground. However, I concluded there was a more sound basis for taking the project forward provided that my recommendations were followed through.

In particular a very important milestone passed was the approval of the stage D design in June 2000. My 2000 report had highlighted previous major changes in the requirements for the area and layout of parts of the building, with the client unable to freeze either its requirements or the design to meet them. Approval of the stage D design in June 2000 seemed to end this uncertainty and promised a firm anchorage for the project.

The key findings and recommendations of my 2000 report are summarised in Exhibit 1 on page 12 and Exhibit 37 on page 63.

In November 2000, three important things happened. A new project director started work, a cost plan was prepared, and a risk assessment was completed. In the early months of 2001 the cost pressures were building up and there were initiatives taken to find cost savings. Progress with construction continued. For example, construction work started on Queensberry House and the major contract for the Assembly building frame was approved.

By June 2001, however, significant difficulties had again come to the surface. The Corporate Body concluded that the previous target of £195 million was not achievable. The Parliament approved a motion that removed the overall budget constraint of £195 million.

Also in June 2001 the Progress Group was concerned about poor coordination, a misunderstanding of responsibilities with regard to cost control and other aspects of the project. There was a change of project director.

During the rest of 2001 leading into 2002, the difficulties of project monitoring and co-ordination continued and extra project management capacity was brought in. The target completion date of December 2002 looked increasingly unrealistic and in March 2002, the completion date was targeted for April 2003. Also in March 2002, the Finance Committee were advised that the project costs might reach £265 million, and by September 2002 the figure reported to the Finance Committee was £295 million, equivalent to £309 million including landscaping costs which were excluded from the reports to the Finance Committee.

In the Autumn of 2002 a new programme was issued that moved the completion to June 2003, although this programme was heavily qualified.

In December 2002 the Corporate Body discussed options that included stopping the project, instructing a further independent review, and putting a cap on the costs. They reported to the Finance Committee that the estimated cost excluding landscaping was now £311 million.

Problems continued during 2003, with various measures suggested or introduced to improve project management and the effectiveness of the design team.

In June 2003 the Corporate Body reported project costs excluding landscaping of £359 million to the Finance Committee.

In August 2003 another programme was issued. This gave a target date of April 2004 for completion of the debating chamber.

During those months, there was intense construction activity. In April 2003 there were 1,100 people working on the site. During the rest of the year there continued to be problems in resolving design issues, managing congestion on the site and managing the interdependencies between contracts. By December 2003, construction activity reached a peak, with 1,500 people on site every day. Also by December 2003, the MSP building and Queensberry House were substantially completed.

In February 2004, the final version of the programme was issued which included a target for completion of the debating chamber by August of this year. Also in

February, the Corporate Body reported a cost estimate of £431 million to the Finance Committee, and that estimate still applies today.

Let me turn to the reasons for the late delivery of the project. As I mentioned earlier, I intend to concentrate on what has happened since the events reported in my first report of September 2000.

In December 2000 the completion date was set for two years later – December 2002. This was based on what seemed then to be a settled design and a firm budget. As I have described there were successive delays until the current completion target of August of this year.

There is one very important point I wish to make here, and it is about the role of the Corporate Body as client. Media reporting over the past two or three years might have left people with the impression that the Corporate Body was changing its requirements. That is not true. The client did not significantly alter its user requirements once it approved the stage D design in June 2000. So changes by the client of its specification have not contributed to the delays. Neither have they contributed significantly to the costs. The construction costs of changes initiated by the client amount to £600,000. This is just 0.2% of the current construction cost estimate.

There is a chapter in my report about the reasons for the late delivery. I have concluded that the main cause of the 20 months delay to the project since September 2000 was the production of detailed design variations and the late supply of information during the construction process, and I will come to that shortly.

However there were other factors that contributed to the slippage.

One factor was the choice of construction management as the method of procuring the project. I described the features of construction management in my 2000 report and I have summarised these features again in this report.

In general, construction management is unsuited for most building projects in the public sector. But construction management was not necessarily the wrong choice in the Holyrood case.

The different forms of contracting are intended to transfer risk to those best able to manage it. Under construction management, design is incomplete and uncertain when construction starts, so the risks stay with the client. The client must manage design development and get a project team that has professionals who are experienced in this construction method.

Unfortunately in the Holyrood case project management did not implement construction management fully in accordance with usual practice. The experience and expertise in construction management was not present in the early stages of the Holyrood project and therefore the risks and challenges were not fully appreciated by the client and project management.

Another major factor to be recognised was quite simply the challenge of construction. There were major difficulties associated with constructing a very complex, unusual building, on a densely developed site, against very tight deadlines. Anyone who has visited the site and observed the extraordinary architecture can appreciate that. There are several images in my report showing the complexity of the design. The chamber roof shown on page 14, for example, was an extremely challenging assignment both in engineering design and construction terms.

A third factor explaining the slippage is that there was absolutely no room for slippage in the original timetable, which was very compressed and very challenging to deliver.

Reflecting all these factors the architect, and some trade contractors, found it difficult to deliver some critical elements of the work on time.

As I have mentioned, I consider that main cause of the 20 month delay to the project was detailed design variations and the late supply of information. So if the client did not change its requirement in any significant way what happened?

The Corporate Body estimate that there have been some 10,000 change orders issued over the course of the project. It would have been completely impractical to examine all of these changes as part of the audit.

However, in Exhibit 20 on page 41 you will see the cost consequences of changes in each of the 58 contracts that together comprise the main construction works. When tenders were approved for these contracts the estimated cost was £129 million. The current estimate of the final costs of these contracts is over £220 million, an increase of 71%.

The stage D design approved in June 2000 was the design team's firm proposal in response to what the Corporate Body as the client had specified. But it was by no means a fully developed design. The shape and area of all the main building elements were fixed but in June 2000 a great deal of the necessary detail was not present. The design changed as the architect translated the stage D design into the necessary more detailed design for procurement and construction. The client's needs stayed the same, but many changes were introduced to improve the design in terms of buildability, performance and aesthetics.

The foyer roof is a good example of what happened subsequent to June 2000. In Exhibit 21 on page 42 you will see computer generated images in 2000, 2001 and a photograph of the roof under construction in 2004. Not only has the design changed radically, but the estimated cost has risen from £1.8 million to £7.3 million.

In short, there was a very high level of design development in this project. In my view there was not a full appreciation of the complexity of the design early enough in the project. Thereafter I am not confident that project management controlled the process of design development effectively.

I must emphasise at this point that I did not seek to form any opinion on whether any individual contractor has been at fault. My emphasis has been entirely on the performance of the project management, in other words the officials responsible for the project. It is project management that is responsible for managing its consultants and contractors and assessing their performance.

Under the construction management approach for the Holyrood project, a great deal of the design development happened at the same time as – not before - construction. Combined with the time pressures and the emphasis on quality this made the process of design development much more difficult to control than normal



At the root of the project slippage was the production and release of design information later than at the time agreed in the construction manager's programme. The construction manager in consultation with the design team and contractors prepared the programmes. There was tacit agreement by those parties to the assumptions in the programme. However the programme was revisited and revised on several occasions.

There were eight programme reviews by the construction manager between December 2000 and February 2004. The client consistently maintained a drive for completion by the earliest possible date. However programmes were heavily qualified. New target dates for completion agreed with the design team and the contractors were subsequently not achieved.

Exhibit 23 on page 44 gives examples of programme qualifications. Exhibit 7 on page 9 summarises the six main programmes issued between 2000 and 2004 and the repeated slippage in construction across all areas of the site.

The Holyrood Progress Group challenged both the construction manager and the architects regarding the slippage but no decisive improvement was achieved. New targets were set but the fundamental problems of non-performance were not overcome.

The audit examination looked at progress on 20 of the largest contracts. The average delay in awarding these contracts was 37 weeks. On page 47, you will see an exhibit describing the delays on eight large works contracts, and you will also find there another exhibit showing the number of design variations after contract award for five critical works contracts. As an example, the Assembly building concrete frame was originally programmed for November 2000 to December 2001. However, the period of variations ran from January 2001 right through to March 2003, and there were some 1,800 draft change orders.

Further delays were caused in some cases because there were design elements provided by trade contractors which had to be approved by the design team. Another factor was the very tight completion date required by the client. As a consequence, some work was out of sequence and not productive, and this added to the delays.

The challenges of delivering this programme were clearly enormous, but I am not clear that project management did enough to address the underlying causes of the problems. With each revision to the programme, all parties agreed that the new targets were achievable. However, the repeated programme slippage must raise questions about the performance of all parties, which no-one appears to have addressed effectively. I note in my report that although project management raised some significant questions about some aspects of some of its consultants' work, it has not systematically assessed their performance. In the face of repeated slippage project management should have managed performance by measuring what was being achieved against contractual obligations and enforcing those obligations strictly.

I would now like to turn to the reasons for the increased costs of the Holyrood project.

I would start by repeating a point that I made earlier. The Corporate Body as the client did not significantly alter its requirements after the middle of 2000. The size and layout of the building did not change. But the cost of realising this design escalated enormously. Including estimated landscaping costs, the £195 million target the Parliament set in 2000 actually totalled £209 million. Project costs have since more than doubled to £431 million.

There was a cost plan prepared in November 2000, and that plan underpinned the £195 million target. However, there is a question whether the basis of the £195 million target was adequate. The construction manager stated that there was insufficient design information to provide reliable cost estimates. In my view much of the information in the November 2000 cost plan could only be regarded as an indication of a cost target. It was not a reliable prediction of the cost.

A further weakness was that even before the cost plan was agreed it was apparent that the impact of inflation would consume the entire £11 million contingency that lay within the £195 million budget. As a consequence, there was no allowance at all for other risks, although all parties accepted that risks were very likely to occur. A risk workshop in November 2000 quantified additional costs for all risks including inflation at some £61 million. All these risks had to be eliminated to sustain the £195 million budget, but how this would be done was not clear.

In the event, the estimated final cost of most of the trade contracts now greatly exceeds the original cost plan allowance. Of the 58 trade contracts I mentioned previously, 41 have an estimated final cost that is 21% or more above the original cost plan allowance. Five contracts costing £28 million increased by between three and eight times the original tender value. In other words, all the risks of the project identified in 2000 subsequently crystallised, and the cost of these risks has proved to be significantly higher than first expected.

Some of the increased costs are due to the extended construction period. In any project, time slippage can mean additional costs arising from prolongation, delay and disruption. Prolongation costs are the extra costs of doing the same work over a longer period. On page 54, there are two examples of how time delay can result in extra costs. The examples are the Assembly windows package and the specialist glazing.

Much of the risk identified in November 2000 came from design decisions yet to be made. I have explained already the very high level of design development that affected the project. Because of the large number of novel and complex features, the realisation of the design of many packages pushed the costs well above those estimated in the stage D design and the November 2000 cost plan. The impact on the cost of the foyer roof and glazing contract, to return to an example which I mentioned earlier, is described on page 55. The stage D cost plan included £1.5 million for this part of the building, whereas the current estimated cost is about £7.4 million.

Another example touched on in the report is the impact of blast protection measures. My report recognises that an important feature for the Holyrood project was the need to develop the design to satisfy security and blast considerations.

Overall, I have concluded that the main reasons for cost increases since 2000 are design development and delay in the construction process. My reasoning for this conclusion is on pages 56 and 57 of the report, and is summarised in Exhibit 32.

In summary, construction cost increases fall into three main areas.

- Inflation £19 million
- Prolongation, disruption and delay £73 million
- Design development £68 million.

There is another £4 million, which is project management's estimate of the extra costs incurred as a result of the demise of Flour City in 2001.

My work included a review of 20 of the main construction contracts that represent over half of the estimated construction costs. In my report I show that works packages were often let when there was uncertainty about what work was involved. This affected the project in several important ways.

In the first place, it was often difficult to achieve good competition and deliver value for money.

Secondly, where contracts were awarded with uncertain scope and design, project management was not well placed to resist extra time-related costs from contractors.

Thirdly - and importantly – there was the ripple affect of uncertainty in one contract creating difficulties in other contracts.

There are some 58 separate main construction contracts for this project. For construction to work efficiently the common boundaries between these trade contracts and how they will integrate with each other must be carefully defined.

However the drive for early completion on the Holyrood project has often resulted in contracts being placed before all design work has been completed. With the benefit of hindsight I believe that has not provided value for money. If work had been fully designed before contracts were placed the boundaries between contracts would have been much easier to integrate.

Another consequence of letting contracts before the design had been fully developed is a risk that true competitiveness is not achieved. If the scope and design of the work had remained unchanged it would have been easier to ensure contractors complied

with their programme obligations. The changes meant contractors were reluctant to accept responsibility for delay.

All building projects are subject to change and design development and this was a very large, demanding and complex project. But the degree of uncertainty within many of the Holyrood contracts was very high. On page 60 of my report I identify 11 contracts out of a sample of 20 reviewed where the evidence suggests the design was insufficiently detailed at tender stage. I also give examples of the uncertainty involved in each case.

I shall now turn to issues relating to project management and control, which are examined in Part 5 of my report.

In any construction project there must be a balance between time, quality and cost. For example, a tighter deadline for a project can be achieved if quality standards are lowered or more money is made available.

In 1998 the client required that the building should be completed by Summer 2001. Time was a priority and quality has been equally important throughout the project. Construction management was seen as the only method of delivering high quality within the very tight deadlines.

The client also set a budget at the outset. But, having carried out this examination, it is not clear to me how important cost was compared with time and quality.

Construction management is not a method that works well on any project with a fixed cost constraint, but this method was nevertheless chosen for this project.

Parliament did set a fixed budget of £195 million in 2000, but by 2001 this was considered to be unachievable. The client thereafter reported successive cost increases to the Parliament but a new budget limit was never established.

For any project, there should be an approved budget limit. If it looks likely that the budget is going to be exceeded, then project management must take action to reduce the costs or obtain extra funding. The decision on which course of action to

take should be based upon a re-assessment of value for money at the new project cost level.

A very important point was reached in June 2001. Parliament approved a lengthy motion which I interpret as removing the previous cost constraint of £195 million. This motion has been included as Exhibit 11 on page 25 of my report. During the debate it was said that while a firm figure for the final outturn cost could not be set at that time there was no question of giving out a blank cheque. But I question the wisdom of project management not seeking to establish a new budget or approved cost ceiling after the June 2001 debate.

The absence of an approved budget contributed, in my opinion, to weaknesses in cost reporting and financial control. I describe these weaknesses on pages 71 and 72 of my report.

Although I recommended in my 2000 report that project management should report project costs on a monthly basis it was not until July 2003 that regular reporting started to the Finance Committee of the total estimated costs of the project. Until July 2003 the reports were provided only quarterly or less often. None of the reports before July 2003 provided information about landscaping costs and only four of the eight reports provided between June 2001 and June 2003 reported all the other main cost items. There was no other regular reporting of total project cost until the Corporate Body started routine monthly reporting to the Finance Committee on total project costs in July 2003.

I make an important distinction in my report between budgets and forecasts. A budget is an approved sum allocated for a project. It can be viewed as a cash limit. Only the authority that approves a budget can vary it once set. A budget is not the same as a forecast. A forecast may vary through the life of the project as circumstances unfold.

Every fortnight for four years, the cost consultant reported estimated construction costs to the client. But these projections were not a budget. Yet project management seemed to regard the costs reports as setting a construction budget. Contractors' invoices were not checked against an approved budget. They were checked against

the total estimated costs for the package reported by the cost consultant. The danger of confusing forecasts with budget limits is that the forecasts will become self-fulfilling if effective action is not taken to contain costs within an approved budget. Exhibit 47 on page 73 shows how cost estimates by the cost consultant marched in step with the rising cost figures reported to the Finance Committee between 2001 and 2004.

I will briefly mention consultants' fees. The Corporate Body limited its exposure to increases in consultants' fees in 2003, but in my opinion project management could have taken more action at an earlier stage. For example, there was an opportunity under the construction manager's contract for project management to convert part of its fee to a fixed lump sum from 2000, but project management did not secure this until August 2003. It is possible, therefore, that the client may have paid more on fees than was necessary over the life of the project. Even more significantly, in my opinion, has been the absence of financial incentives to help bring the project in on time and within budget.

My final main point relates to the overall leadership and control of the client organisation.

In my view the organisation of the Holyrood project did not provide the necessary clear direction and leadership. The responsibility for management and leadership was divided between several parties and there was no single point of leadership and control.

Normally leadership and control should reside with the project director. The client should give the project director the responsibility for making the project happen within specified boundaries and performance targets. In the Holyrood project and leadership and control of the project was not clearly established in this way.

On pages 66 and 67 you will find two diagrams that I would invite you to look at.

Exhibit 41 on page 67 shows the Holyrood project organisation from June 2000 onwards. It was at that time that the Holyrood Progress Group was established. I concluded in 2000 that this organisation was appropriate and that is still my view.

You will see that the organisation has all the key features of the Treasury's model. This is shown in Exhibit 40 on the previous page. But these diagrams do not show where the major risks lie. In a conventional contract, run on the Treasury model, construction risk should be placed with the main contractor, in the central box on the bottom line. The main contractor would contract with, and pass some risk to, the suppliers of goods and services. Neither the project manager nor anyone in the higher boxes which represent the client interests, carries any significant construction risk.

In the Holyrood project it was quite different, because the construction management method was used. Construction risk moved right to the top of the tree and has rested with the client, advised and supported by project management, the construction manager and the cost consultant. In my view this point is fundamental to understanding the problems that occurred in ensuring clear leadership and control on the part of the client organisation. The client could not, if you like, stand back from the contractor who was carrying the main risk and let the contractor sort out the delivery problems. There was no main contractor in Holyrood. Therefore the client carried most of the risk and project management, advised by the Holyrood Progress Group on behalf of the client, had to manage that risk.

I said a few moments ago that normally the single point of accountability for and control of a project should reside with the project director. The need for absolute clarity about who was taking the decisions, and the need for that person to have a clear budget limit to work with, was even more important for Holyrood than for a normal construction project, because the client was carrying the construction risk. This was one of the main reasons why, in my 2000 report, I emphasised the importance of having a senior, very experienced construction professional in at least one of the three senior posts of project owner, project director, or project manager.

The project owner, who is the Clerk and Chief Executive of the Parliament is not a construction professional and neither is the current project director who was appointed in June 2001, before the main intense period of construction activity started. The senior project manager/project manager is a construction professional



but is less senior in the hierarchy and he is not a single authoritative point of command.

I have said in my latest report that in practice, the project director has acted as the senior project administrator co-ordinating the interests of the various parties and the high level communication and reporting. This is not a pejorative comment, nor is it a criticism of her. She did what she was qualified to do and by all accounts, she did it very well.

The Holyrood Progress Group is an advisory and monitoring group created by the Corporate Body. It has no executive power. Therefore it is not accountable for the delivery of the project. That accountability lies with the Clerk and Chief Executive, the project director and the project team. Although it was not accountable for delivery, in practice the Holyrood Project Group evolved quickly into an executive decision-making body, and I give examples of their decision-making role in Exhibit 42 on page 68.

I do not criticise them for this. They had professionally qualified and experienced people as advisers on the Group and it is right that their expertise was used to the full. It is also perfectly understandable that, because the big financial risks were being carried by the Corporate Body as the client rather than by a contractor, the Holyrood Progress Group did everything it could to support the project team in managing the risks. However, my conclusion is that there was not a clear single point of leadership and control for this very complex and challenging project. This has been a weakness in the system and is not a criticism of the many individuals who were doing their best to manage the project.

On page 8 of my report, I have listed the lessons from the Holyrood project that I believe are relevant for managing big public sector projects.

Briefly, I say that

- The form of contracting must be chosen with care, with a sound understanding of where the risks lie and how they will be managed

- The construction management method is unsuited for most public sector building projects
- The gateway review process which allows scrutiny of a project at different stages should be followed
- There should be performance payment incentives for contractors
- There should be a single point of leadership and control
- Performance should be measured as the project unrolls
- There should be adequate time for planning before the project starts

Let me summarise my conclusions regarding the management of the Holyrood project.

I would remind you that I did not seek to form opinions about the performance of organisations involved in the project. It is for the client and project management to consider and address the performance of contractors.

Despite the slippage and extra costs that have affected the project a very great deal has been achieved. The building is now almost ready and in my opinion it is likely to satisfy the requirement for a high quality, landmark building reflecting the aspirations of Scotland as a nation. We are reaching the point where everyone in Scotland will be able to make the aesthetic judgement which must be part of the final assessment of the project.

There were a number of factors that caused the slippages in the project, but the main cause of delay since September 2000 was the production of very large numbers of design variations and the late supply of information during the construction process. Delays to the project have been a major reason for the increases in costs, which I have quantified in my report. The other main reason for the cost increases is that the cost of realising the design approved by the Corporate Body in 2000, increased enormously. I have also quantified this in my report.

There were enormous challenges in this project, but I am not clear that project management did enough to address the underlying causes of the problems of slippage and increasing costs. The absence of an approved budget contributed, in my opinion, to weaknesses in cost reporting and financial control. The construction management procurement method left most of the construction risks with the client. It was therefore essential to have clear direction and leadership and to manage the performance of the contractors. However, the responsibility for direction and leadership was divided between several parties. There was no single point of leadership and control. This has been a weakness in the system and is not a criticism of the many individuals who were doing their best to manage this challenging and complex project.

Convener, that brings me to the end of my comments on the context of my report and the opinions that I have formed as a result of the audit examination.

Before I conclude, I wish to inform the Committee about the status of the report with regard to clearance of the matters of fact that are in it. I normally give Accountable Officers a three week period in which to comment on the facts contained in my draft reports. In the case of the Holyrood report, that period expired on 14 June. This arrangement is a convention which I adopt to assist the Committee – there is no statutory, or other requirement upon me to do so. Prior to that date, there were discussions and exchanges of information between officials of the Corporate Body and the Audit Scotland team. All the concerns and representations made to us were considered and, where appropriate, amendments were made to the draft report.

On the 16<sup>th</sup> of June the Principal Accountable Officer wrote to me indicating that he was not able to agree my report in the time available and that this would not happen until 16 July at the earliest. This would have delayed the publication of my report until some time in August.

As the Committee is aware, I have agreed to make my report available in time for Lord Fraser to use it in his report, but if I moved my publication date back to August, it would be impossible for Lord Fraser to report in September.

The Principal Accountable Officer has indicated his disagreement with my interpretation and conclusions on the management of the project. He is entitled to do this because the interpretation and conclusions are my own.

It is not my practice to offer only conclusions that have the agreement of an accountable officer. The essence of my role as Auditor General is to offer an independent opinion based on my audit examination. However it is unusual to present a report where the accountable officer has not indicated what are the matters of fact that are of continuing concern.

For this reason I would be pleased to receive further comments from Paul and his team over the summer. If necessary, after the summer recess, a note could be presented to you describing any matters of fact that are disputed.

In the meantime, I am personally satisfied that the audit examination has been rigorous and that my conclusions are soundly based on the analysis. It would be surprising if, in a project as challenging and complex as this one, there were not some differences in emphasis and interpretation. However, the audit examination has been thorough and therefore I have fulfilled the commitment that I gave the First Minister and the Presiding Officer that I would assist Lord Fraser's inquiry to the best of my ability, and I have done this by making my report to Parliament today.