







ACCOMMODATION ARRANGEMENTS FOR THE NATIONAL ASSEMBLY FOR WALES

Report by the Auditor General for Wales



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EXECUTIVE SUMMARY

I This report examines the work undertaken by the Welsh Office and, since devolution, by the new Assembly to acquire and equip a building suitable to house the new National Assembly for Wales.

2 At the time of publication of this report, Assembly Members and support staff have office accommodation in Crickhowell House, a modern office block in Cardiff Bay. This building also provides a temporary Chamber and Committee rooms for the Assembly. The nearby Pierhead Building, a Victorian listed building, is being developed to provide a public information and education centre and some office accommodation for the Assembly. And work is underway to build a new building, to a design by architects Richard Rogers Partnership, which will provide a permanent home for the Chamber, Committee rooms, party offices and associated public functions.

3 This report sets out the results of the work by the National Audit Office Wales to:

- examine the decision to locate in Cardiff Bay, and to assess the appraisal procedures carried out to support this decision (Part 2);
- review and assess the adequacy of the contract strategy and project management systems (Part 3);
- review the increase in costs over the relevant budgets (Part 4); and
- review the design competition procedures for the new building and the current cost projections (Part 5).

4 The Welsh Office faced a difficult task to secure a fully operational building to house the new Assembly in time for the Assembly elections on 6 May 1999. Furthermore, it was not known how the Assembly might operate, or - in the absence of any end-users to consult - the facilities it might require. Despite these significant project constraints, the Welsh Office succeeded in delivering Crickhowell House ready for occupation by the due date. Completion of the new building is now expected to be in January 2003.

5 The one-off cost of acquiring and equipping a building to house the new Assembly was originally expected to be some £17 million. The total capital cost is now expected to be some £37.6 million (£41.1 million if the contingency provision of £3.5 million for the new building is included). As at the end of September 2000, a total of £14.8 million had been spent, mainly on the fitting out of Crickhowell House.

The decision to locate in Cardiff Bay

6 The final decision in favour of Cardiff Bay was the culmination of an exhaustive process of economic appraisal and negotiation with various landowners. We found that:

- the Welsh Office made good use of professional technical advice in appraising the various options;
- the economic appraisals were consistent and generally complied with Treasury guidance and provided a good basis on which to compare the sites;
- although the National Audit Office Wales found some discrepancies in the economic appraisals, these did not affect the ranking of the three favoured options (Bute Square, Capital Waterside and Cardiff City Hall); and
- the Secretary of State was provided with sound advice and information on which to base decisions on the location of the Assembly.

7 However, it would have been advisable for the Welsh Office to have undertaken sensitivity analysis of the options to assess the impact that the key risks might have had on the viability of the project. The value of such a technique is indicated by the increase in the cost of the new building (by 93 per cent) as well as the increase in the space

requirements for the Assembly (by 48 per cent). However, such an analysis would have favoured the Cardiff Bay sites. We recommend that sensitivity analysis be used for any investment appraisals undertaken in the future.

8 The deal negotiated by the Welsh Office with the landowners, Grosvenor Waterside, was to extend the lease on Crickhowell House by five years to 2023; purchase the adjacent plot of land (to construct the new building) for $\pounds 1$; and rent the Pierhead Building on a 15 year lease. We found that the true cost of the land purchased for $\pounds 1$ is the commercial value of the 200 parking spaces conceded by the Welsh Office as part of the agreement, which we estimate to be a net present cost of $\pounds 668,000$ over the 25 year term of the lease.

9 The Welsh Office's professional advisors considered that the deal offered broad value for money, but questioned the decision to rent rather than buy the Pierhead Building. We calculate that some £350,000 could be saved if the Assembly exercised the purchase option and bought the long leasehold on the property. We recommend that the Assembly should consider purchasing the long leasehold of the Pierhead Building, and that it should do so as early as possible in order to minimise the ongoing cost of the rental payments.

Project management and procurement

10 Sound project management arrangements are vital to ensure that a project is delivered to time and cost, and competitive procurement is essential in obtaining value for money. We found that the project team made effective use of external advice to provide professional services that are not available in-house, including the appointment of Symonds Group to manage the project, and the selection of the Property Advisors to the Civil Estate (PACE) to act as client advisor.

II In respect of the project management of the adaptation of Crickhowell House and the Pierhead Building, we found that:

- there was a clear timetable for the works, and the project team monitored progress closely such that the accommodation was ready in time for the opening of the Assembly; but that
- there was no formal project budget set for the adaptation works; nor was the total cost of the works monitored at a senior level within the Welsh Office. We recommend that for future projects, a specific project budget should be set and monitored by a steering group that includes senior staff that are not involved in the day to day management of the project.

12 We found that the arrangements have been strengthened for the project management of the new building in that:

- there has been extensive consultation with the users of the new building during the development of the outline design brief, which should reduce the need for changes to specified requirements and the consequent cost and time increases, or the risk of unsuitable accommodation; and
- there is a budget and effective high-level monitoring arrangements although the format of the financial reports is still being developed. We endorse the Project Board's plans to monitor the total capital costs, the whole life costs and the results of value engineering studies, consistently and regularly throughout the project.

13 We examined the six major contracts that were used for the project and found that:

- the contracts and sub-contracts were procured competitively, although the Welsh Office used existing contracts for three of the six contracts. There was some scope to test the market to obtain more competitive prices for the large volume of additional work that the project created; and
- there were significant deficiencies in the procurement of specialised IT applications for Assembly Members with consequent impacts on the value for money achieved and the loss of potentially valuable intellectual property rights. We recommend that the Assembly should ensure that it follows its internal procedures for all procurements in future projects, and ensures appropriate involvement of the Assembly's Central Procurement Unit.

14 The Welsh Office selected the management contracting procurement route for both the adaptation works and the construction of the new building. This decision reflected the client's wish to retain control over the design throughout the project and to achieve rapid completion.

Crickhowell House and the Pierhead Building

15 The Welsh Office met the deadline for completing the works to adapt and equip Crickhowell House, in spite of delays and variations to the requirements that occurred during the works. We examined the reasons for the capital cost overruns of these works for Crickhowell House and the Pierhead Building (from an initial estimate of £4.95 million to £13.1 million, an increase of 168 per cent) and found that:

- the estimate for adaptation costs (£0.5 million) was grossly understated as it was based on a basic standard for temporary accommodation, although much of the accommodation in Crickhowell House is permanent;
- a budgeted cost plan was established at £3.8 million in July 1998 to provide for an improved standard of accommodation and for the refurbishment of the Pierhead Building to an adequate standard;
- the additions and variations to the design requested by officials and Ministers as the works proceeded, for instance to provide additional or enhanced facilities in Crickhowell House, resulted in a cost increase of £2.1 million; and
- further changes, after the Assembly had been established, for instance the conversion of additional space for staff and the installation of air cooling, resulted in a cost increase of £3.1 million.

16 We also found that the annual running costs of Crickhowell House and the Pierhead Building have increased from the initial estimate of \pounds 4 million to \pounds 6.1 million (an increase of 53 per cent). This is mainly due to the increase in the Assembly's space requirement from 80,000 square feet to 118,600 square feet, with consequent increases in rental, maintenance and utilities costs.

The New Building

17 The competition to select a design for the new building resulted in the selection of the design of the Richard Rogers Partnership in October 1998. We reviewed the design competition and found that:

- the Welsh Office made good use of the Royal Institute of British Architects to run the competition and to provide expert advice to the Design Competition Assessment Panel; and of external professional advice on the cost and design implications of each of the six shortlisted designs. Although these technical advisors only had three days to in which to assess the concept designs, they found that five of the designs exceeded the site boundary, and that the cost of each design was understated; and
- the review of the costs of the six shortlisted designs did not consider the architects' fees, although these added substantially, by between 12.2 per cent and 20.5 per cent, to the total cost of each design. We recommend that fee bids are included in the assessment of entries to any design competitions, or similar exercises, held in the future.

18 The outline design of the building was approved in July 2000, and construction is due to begin in April 2001. We examined the arrangements for developing the design for the new building and found that:

- the development of the design is now over a year behind schedule and completion of the new building is expected in January 2003, 21 months after the date originally planned;
- this delay is due mainly to amendments to the design to reflect changes requested by the Assembly Members and other users, improvements to access for the disabled and a desire to reduce the size of the building. The project review which took place between March and June 2000 has also delayed work for three months;
- the expected cost of the project has risen from £12 million to £23.2 million (an increase of 93 per cent), with an additional contingency provision of £3.5 million, making a total of £26.7 million. The increase is due primarily to omission of key elements of the design from the original budget and design changes requested by the Assembly, together with associated fees; and
- the architect's fees are based on the construction cost and have increased from £1.98 million to £3.42 million (based on a 73 per cent increase in construction costs). There will also be additional fees paid to architects for other services. This fee structure provides no incentive for the architect to control costs, nor does the Assembly have independent advice from the quantity surveyor which is contracted to the architect and not to the Assembly.

19 We recommend that the Assembly endeavours to negotiate a fee structure for the architect that minimises the relationship between the base fee and the final construction cost. Furthermore, we recommend that the Assembly reconsiders its relationship with the quantity surveyor, either to contract directly with the quantity surveyor (at a modest additional cost) or to engage its own quantity surveyor to review the work of the design team. Moreover, fee structures should be agreed at an early stage in future negotiations with consultants, even if contracts have not yet been signed, and preferably before the consultant begins work. Such fee structures should contain incentives for the tight control of costs.

PART I

Introduction

1.1 The July 1997 White Paper 'A Voice for Wales', which set out the Government's proposals for a directly elected Assembly in Wales, proposed that the headquarters for the Assembly would be in Cardiff. It expected the one-off costs for acquiring and equipping a building for the new Assembly to be in the range £12 million to £17 million. This would provide accommodation for the 60 elected Assembly Members, their staff and the officials directly serving them.

The decision to locate the Assembly headquarters in Cardiff Bay

1.2 The then Welsh Office undertook work to consider the options available as a site for the Assembly, based on the detailed requirements set out in Appendix I. In April 1998, the then Secretary of State for Wales (the Right Hon. Ron Davies MP) announced that the Assembly building would be located at Capital Waterside in Cardiff Bay, two miles from the existing Welsh Office headquarters in the centre of Cardiff.

I.3 The Cardiff Bay site contains three main elements:

- Crickhowell House: a modern office block of 125,000 square feet that was already leased by the Secretary of State and was partially vacant. It was envisaged initially that the Assembly would occupy 80,000 square feet of this space. The building has been adapted to provide a temporary Chamber and Committee rooms for the Assembly. It provides permanent office accommodation for members and staff;
- Pierhead Building: a Victorian listed building and landmark in the area. This building was originally intended to house the Cabinet and other key Assembly post holders. It will now provide a public information and education centre and some office accommodation for the Assembly; and

a new building: designed by architects Richard Rogers Partnership, to be constructed on a plot of vacant land adjacent to Crickhowell House and the waterfront. This will house the Chamber, Committee rooms, party offices and associated public functions, all of which are currently located on a temporary basis in Crickhowell House. The office accommodation for Members, their staff and Assembly officials will continue to be in Crickhowell House after the new building has been completed.

1.4 The then Welsh Office faced a difficult task to secure a fully operational building to house the new Assembly. It had a very limited timeframe to complete the project as the building had to be available in time for the Assembly elections on 6 May 1999. Furthermore, it was not known how the Assembly might operate, or the facilities it would require. Nor were there - at that time - any users to consult as to their requirements for the new building. In the event, Crickhowell House was ready for occupation by the due date; the adaptation of the Pierhead Building is now near completion; and the new building project has reached the outline design stage, with completion expected in January 2003. A chronology of the project is provided in Figure 1.

1.5 Work on the new building was suspended for three months between March and June 2000 while a project review ordered by the First Secretary was completed. This review reassessed the likely costs of the new building and considered alternative options to meet the need, expressed by Assembly Members, for a more appropriate debating chamber. This review also considered a letter dated 19 April 2000 from the Auditor General for Wales to the Permanent Secretary providing an early indication of his findings, (as set out in Part 2) of the economic appraisals of the three key options in Cardiff for the location of the Assembly, namely Cardiff City Hall, Bute Square and Capital Waterside at Cardiff Bay. On 21 June 2000, the Assembly voted to proceed with the Richard Rogers Partnership design for the new building.

Figure I: Chronology of the project

May 1997	The Welsh Office begins to research suitable, available sites for the proposed Assembly.
September 1997	The Welsh Office completes its economic appraisal of the sites identified and, following further research on costs, favours City Hall. The Welsh Office negotiates with Cardiff County Council to purchase City Hall, but is unable to agree a price.
December 1997	The Welsh Office issues a consultation paper to invite proposals for the location of the Assembly. The responses are then appraised by the Welsh Office.
April 1998	Cardiff Bay is selected as the site for the Assembly.
	The then Secretary of State announces an Architectural Competition to select a design for the new building.
September 1998	Legal agreement concluded by the Welsh Office to extend the lease on Crickhowell House, to rent the Pierhead Building and to acquire the adjacent site to construct a new building.
	Contract signed by the Welsh Office with Tilbury Douglas Construction Ltd as the management contractor. Works begin on Crickhowell House and are completed in stages until May 1999.
October 1998	Design competition concluded. Richard Rogers Partnership design is selected by the Design Competition Assessment Panel.
May 1999	Elections for the National Assembly for Wales are held. Official opening of the Assembly in Crickhowell House on 26 May.
July 1999	The Assembly votes to continue with the new building. Members consulted about the design and request various changes.
January 2000	Officials submit a revised outline design to the Assembly, with a total estimated cost of \pounds 22.8 million. Assembly votes to continue with the project.
22 March 2000	First Secretary suspends work on the new building to review costs and options.
21 June 2000	The Assembly in Plenary session votes to continue with the Richard Rogers design.
Source: National Audit (Office analysis of Welsh Office and Assembly documents

The cost of the Assembly's accommodation

1.6 At the end of September 2000, the Assembly had incurred costs of some \pounds 14.8 million, mainly on adapting the accommodation in Crickhowell House, and projected additional expenditure of some \pounds 22.8 million. This will take the total capital cost of the Assembly's accommodation arrangements to \pounds 37.6 million (Figure 2). **1.7** In addition to the Assembly's forecast of £37.6 million for the total cost of the project, there is a contingency provision for the new building of £3.5 million. If this were fully utilised, the total cost of the project would rise to £41.1 million.

Figure 2: The rise i	n the costs o Budget (Feb 1998) (£m)	of the Assembly's ac Actual (at 30 Sept 2000) (£m)	ccommodation Current forecast of total spend (£m)	Increase over budget
Crickhowell House	4.95	11.25	11.50	132%
Pierhead Building	0.00	1.31	1.59	-
New building	12.00	0.85	23.18	93%
Other (consultancy, design competition and offices for Assembly Secretaries in Cathays F		1.37	1.37	-
Total	16.95	14.78	37.64	122%
Source: National Assembly	r for Wales			

The project management team

1.8 Responsibility for the day to day management of the project rests with a small team of civil servants in the Management Services Division of the Assembly. The team advises the First Secretary and co-ordinates the work of the various contractors involved in the project. The team does not include any staff who have experience of large construction projects; the relevant expertise is provided by a range of external advisors and consultants. Part 3 provides more detail on the arrangements for project management.

1.9 During the period in which the work to provide the Assembly with accommodation was undertaken, many of the key people involved in the project changed. The Secretary of State for Wales, the Right Hon. Ron Davies MP, resigned on 27 October 1998 and was replaced by the Right Hon. Alun Michael MP. Mr Michael became First Secretary following the May 1999 elections. He resigned on 9 February 2000 and was succeeded by the Right Hon. Rhodri Morgan AM MP. The functions of the Welsh Office, including those of the Management Services Division, transferred to the Assembly on 1 July 1999.

Scope of the report

1.10 The Assembly's accommodation arrangements have been the subject of considerable public debate, and the Audit Committee of the National Assembly for Wales requested that the Auditor General for Wales examine the relevant issues. The terms of reference for the work by the National Audit Office Wales are to:

- examine the decision to locate in Cardiff Bay, and to assess the appraisal procedures carried out to support this decision (Part 2);
- review the contract strategy and project management systems and assess their adequacy (Part 3);
- identify the reason for the increase in costs over the relevant budget (Part 4); and
- review briefly the design competition procedures for the new building and the current cost projections (Part 5).

PART 2

The Decision to Locate in Cardiff Bay

2.1 A new Government took office on 2 May 1997 that was committed to devolving powers to a new elected Assembly. Officials in the Welsh Office immediately began to consider options for housing this new body within the challenging two-year timescale set by the Government, and established a review to identify potential sites. The aim was to appraise suitable options by early September 1997 so that the then Secretary of State could make a decision in the October of that year.

2.2 However, it was not until 28 April 1998 that the then Secretary of State announced that the Assembly was to be located at Capital Waterside in Cardiff Bay. The various stages of this process are set out in Figure 3.

Initial selection and appraisal of sites

2.3 The Welsh Office asked Symonds Facilities Management (later known as Symonds Group Ltd), its property management agents with responsibility for managing the whole Welsh Office estate, to organise a review of vacant office accommodation and potential new build sites in Cardiff. This review was carried out in June 1997 by Crown and Company, a national firm of chartered surveyors, sub consultants to Symonds Facilities Management. Twenty sites were identified, and the Welsh Office reduced these to a shortlist of five options using the following criteria:

- capacity to provide a debating chamber for 60 Assembly Members, eight committee rooms, six informal meeting rooms and office accommodation totalling 80,000 square feet;
- available by 28 February 1999 for completion of works, so that fitting out could be completed by May 1999;
- a building of appropriate stature, location and quality;
- good access for the disabled; and
- avoidance of disruption to existing staff.

Date	Procedure	, Outcome				
June - Sept 1997	Review of potential sites in Cardiff. Economic appraisal of five sites.	Decision to proceed with City Hall as the preferred site.				
Sept - Nov 1997	Negotiations with Cardiff County Council to purchase City Hall.	No agreement reached on price. City Hall is rejected.				
Dec 1997 - Feb 1998	Secretary of State issues consultation paper on location of Assembly. Responses are invited from across Wales and are reviewed.	Decision to locate the Assembly in Cardiff or Swansea.				
Feb - Mar 1998	Ten sites are appraised in detail.	Decision to locate the Assembly in Cardiff at either Bute Square or Capital Waterside, Cardiff Bay.				
Mar - Apr 1998	Negotiations about two sites.	Decision to locate the Assembly at Capital Waterside, Cardiff Bay.				
Apr - Sept 1998	Detailed negotiations with Grosvenor Waterside on final agreement.	Leases completed on I October 1998.				
Source: National Audit Office analysis of Welsh Office information						

Figure 3: The process of selecting a site for the new Assembly

2.4 The five options were appraised in detail by the Welsh Office, in conjunction with the Property Advisors to the Civil Estate (PACE), a government agency that provides independent professional advice to government departments on major property projects. In undertaking these economic appraisals, the Welsh Office used the methodology and discount factors prescribed by the Treasury as set out in its "Green Book", Appraisal and Evaluation in Central Government issued in 1997 (see Box I). The Welsh Office calculated the net present cost for each option to compare the estimated capital and running

costs of each option over a 17 year period (approximately 15 years from completion of work on any new building) less any residual value at the end of that period.

2.5 The National Audit Office Wales examined the economic appraisals undertaken by the Welsh Office. We found that the appraisal methodology was applied consistently to all of the options. The main reservation arising from our review was the absence of sensitivity analysis to assess the potential likelihood and scale of the risks involved in each option, an appraisal recommended in Treasury guidance to

Box I: Economic appraisal

Economic appraisal is a method of comparing the relative merits of investment options, and involves an assessment of the financial and non-financial criteria. The Welsh Office used the methodology prescribed by the Treasury, as set out in its "Green Book", *Appraisal and Evaluation in Central Government*, which was issued in 1997.

The financial analysis totals all expected costs and benefits for a given period and discounts them to present value at a rate of 6%. This means that future costs and benefits are worth 6% less per year than costs or benefits today. The result is a net present cost for each option, which includes:

- capital costs, such as the acquisition of land and buildings and construction costs;
- running costs, such as rent, rates, utility bills and maintenance;
- the estimated residual value of property, representing the benefit to the Assembly of owning rather than leasing; and
- opportunity costs. These are indirect costs that are incurred as a result of adopting one course of action rather than another. For example, it may cost nothing for the Assembly to occupy an empty building on which rent is already being paid, but the true cost is the rental income that would have been obtained if the building had been sublet. This is normally assumed to be the market rent. For property already owned by the Welsh Office, the opportunity cost is the market value of the building (on the basis that if it were not needed, it could be sold).

The costs and benefits for each option were assessed over 17 years, ie 15 years from the completion of any new building. This is the minimum recommended by the Treasury, which suggests a period of 15 - 25 years. (The National Audit Office Wales recalculated the net present costs over 25 years, and found that there was no difference in the ranking of the various options.)

The economic appraisals were prepared at an early stage and assumptions had to be made about costs and arrangements which, although the best available, could not be verified properly at the time. The estimates for residual property values and construction costs were particularly uncertain, and the wide differences in the nature and amount of work required at the site meant that it was impossible to compare costs and benefits on a completely like for like basis. Although the figures need to be treated with a degree of caution, the National Audit Office Wales considered that, in general, the assumptions made were reasonable.

The non-financial analysis assesses each option in a wider context against criteria such as timing, quality and compliance with specified requirements. For the Assembly, location and stature of the building were particularly important political considerations.

assess project risk. The technique assesses the key risks to a project to ensure that adverse changes to key assumptions would not eliminate the fundamental viability of the project. Key assumptions in this case were changes to the capital costs involved or to the amount of space required. In the event, the cost of the new building in Cardiff Bay is now estimated by Assembly officials to have increased by 93% from the original estimate of £12 million to the current forecast of £23.2 million; and the Assembly's space requirement has increased by 48 per cent from the original requirement of 80,000 square feet to some 118,600 square feet.

2.6 Sensitivity analysis would have been informative in assessing the impact of these risks on each option. In this case, however, such a sensitivity analysis would still have been likely to favour the Capital Waterside site in Cardiff Bay relative to the others, as the expected capital costs were relatively low and additional office space was readily available in Crickhowell House.

2.7 A summary of the results of the economic appraisal undertaken by the Welsh Office with support from PACE on the shortlist of five options is at Figure 4.

2.8 The Welsh Office concluded that, based on non-financial considerations as well as the calculated net present cost for each option, this exercise produced two clear front-runners - the existing Welsh Office buildings at Cathays Park and Cardiff City Hall. These options were favoured because of their central location in Cardiff's city centre, their stature and their proximity to administrative support. Although City Hall was the more expensive option, the Welsh Office considered that it had key advantages over Cathays Park:

 physical separation of the executive and legislative functions, as at Westminster;

- City Hall was a more prestigious building and enjoyed wider public recognition than the buildings on the Cathays Park site; and
- the selection of City Hall would have avoided disruptive moves for Welsh Office staff and employees of other government departments on the Cathays Park site.

2.9 The Welsh Office therefore considered whether City Hall remained a viable option if initial capital spending was reduced from £32.4 million to £17 million, the upper limit on the costs specified in the White Paper, 'A Voice for Wales'. It concluded that this was possible if only essential works were carried out immediately; the rest of the refurbishment work being deferred until the Assembly had been established; and provided that Cardiff County Council agreed to an acquisition cost of £5 million or less. Figure 5 shows the works that were considered necessary for City Hall to provide an appropriate standard of accommodation for the Assembly.

2.10 In September 1997, the Welsh Office concluded that City Hall would provide an adequate home for the Assembly at an initial capital cost that was sufficiently close to the upper limit in the White Paper. However, it was clear that substantial costs would need to be incurred later to overhaul ageing mechanical and electrical systems, undertake general internal refurbishment and carry out external landscaping. These improvements would be at the discretion of the Assembly itself and would have to be funded from its running costs budget.

Option Running Net Ranking Main considerations in economic appraisal Capital by NPC cost cost present (£m) (£m) cost (£m) I. Welsh Office buildings at Cathays Park 23.45 1.02 42 25 3 Meets all accommodation requirements, already owned by (89,800 square feet) the Welsh Office, favourable location, in good condition, Adaptation of the older (1930's) building into economies of scale (eg maintenance and security costs) Members' offices. Chamber to be constructed and convenience of using existing Welsh Office site, between the two buildings on the site, with relatively easy to adapt for Assembly, moderate overall cost. But some disruption to staff already in building. administrative support in the new building. 2. Coal Exchange (150,700 sq ft) Substantial capital investment required to repair and refurbish 24.82 1.47 43.30 4 Conversion and refurbishment of large building; which would not be completed by the opening date. Uncertainties about the condition and therefore the scope and Victorian building in Butetown, Cardiff. cost of the necessary work. Poor location. 3. Mid-Glamorgan County Hall 24.33 41.51 Good location. But usable space too small for the Assembly, 1.18 2 (96,000 sq ft) Conversion, refurbishment and an extension would be required. Difficult to convert and extension of Edwardian building in Chamber to specification. An older listed building which would mean compromises in the Assembly's accommodation Cardiff's civic centre. requirements. 4. Cardiff City Hall: acquisition option Very good location and building of stature. Sufficient size but 32.41 1.72 53.66 5 (162,900 sq ft but useable space estimated at inefficient due to large circulation and function areas - therefore 96,000 sq ft by the Welsh Office) high maintenance costs. Substantial capital investment needed Adaptation and refurbishment of major Edwardian to meet accommodation requirements. Poor public gallery and landmark building in Cardiff's civic centre. no scope for IT in chamber. This site is the most expensive option. 5. Cardiff City Hall: lease option 27.41 2.27 57.52 6 As above. No residual value for building. 6. Atlantic Wharf (80,000 sq ft) 21.17 1.16 38.55 Could be designed to meet all accommodation requirements. But the developer's budget does not include all requirements New build on site next to Cardiff County Hall in Atlantic Wharf, Cardiff Bay. and therefore liable to increase. Possible delays in completion. Poor location. Source: National Audit Office analysis of Welsh Office information

Figure 4: Results of the first economic appraisal of potential sites for the National Assembly (August 1997)

Figure 5: Schedule of works necessary to adapt to City Hall					
Requirement	Immediate (£000)	Deferred (£000)			
Provision of chamber	2,130				
Repairs to existing fabric of building	200	2,140			
External works and landscaping		2,525			
Renew/overhaul mechanical and electrical installations	2,680	6,015			
Upgrade toilets		715			
Decorations and joinery		3,205			
Protection and security installations	640				
Disabled facilities	115				
Library		240			
Public education area		640			
Restaurant and kitchen facilities		I,070			
Standby generation and works to existing service duct	265				
VAT	1,270				
Total for adaptation works	7,300	16,550			
Provision for acquisition cost	5,000				
Information technology	3,200				
Furniture and fittings	1,250				
Fees and preliminaries	1,219				
Total of immediate and deferred costs	17,969	16,550			
Total cost	34,5	519			

Note:

These costs are estimates and were developed for the Welsh Office by PACE in September 1997. They are based on the specified requirements in Appendix I, visual inspections of the building, and professional reports on the condition of City Hall. No detailed survey had been undertaken at this time so the estimates are not necessarily comprehensive.

Negotiations to purchase City Hall

2.11 The Welsh Office approached Cardiff County Council to discuss the possibility of purchasing City Hall. The Council was reluctant to sell the freehold of the property, but it did offer the possibility of a long leasehold of 125 years. This was considered an acceptable basis on which to begin negotiations.

2.12 However, the Welsh Office and the Council were unable to agree on a price for City Hall as they disagreed over the basis of valuation to be used. The Welsh Office favoured open market value;

the Council believed that the valuation should reflect the Secretary of State's special interest in the building, and the cost of replacing the facilities that would be lost at City Hall. The Council proposed building additional offices next to County Hall in the Cardiff Bay area to accommodate the 507 staff that would need to be relocated, and sought a large contribution towards the £22 million estimated cost of this project. In October 1997, both parties agreed to refer the matter to the District Valuer for an independent opinion on:

• the open market value of City Hall; and

the reasonable cost of reinstating the facilities at City Hall to an equivalent standard in another location.

2.13 The District Valuer reported that market value of City Hall was £3.5 million. He declined to give an opinion on reinstatement value because he had insufficient information on the facilities to be replaced or their standard. However, his observations on the costing assumptions provided by the Welsh Office and Cardiff County Council indicated an estimated replacement cost of $\pounds 12.36$ million (based on the Welsh Office's figures) and $\pounds 20.05$ million (on the Council's figures). This excluded the cost of land and professional fees.

2.14 The Welsh Office had grave doubts about the value for money of offering more than market value for City Hall. This view was based on the high cost of adapting the building for use by the Assembly. An opening bid of $\pounds 2.5$ million was made on 14 November 1997, which the Council rejected on 21 November. The Council did not accept market value as the proper basis for valuation and considered that it was constrained by its fiduciary duties from accepting this offer.

2.15 The Welsh Office's PACE advisors warned that the delay was becoming critical and that completion of the necessary works would be in "total jeopardy" unless a decision was made by 24 November 1997. Accordingly, a final offer of £3.5 million (the market value) was made on 24 November. This offer was rejected by Cardiff County Council the same evening, which was the deadline set by the Welsh Office for a response. The then Secretary of State announced his decision not to site the Assembly at City Hall because no agreement could be reached on the purchase price.

2.16 The lack of time was clearly a factor in the impasse that prevented agreement. Negotiations on reinstatement value would have been lengthy and difficult, and may have involved legal proceedings. However, it may not have been possible to agree a price, even if

more time was available for such negotiations. The Welsh Office was determined to pay no more than market value, both as a matter of principle and because the overall cost of City Hall would have been indefensibly high. Cardiff County Council sought a price based on the reinstatement value as otherwise it considered that it would be unfairly penalised if it had to make good the cost of relocation from its own resources.

Consultation Exercise

2.17 The Welsh Office decided that the decision on the location of the Assembly should be opened to public debate, and issued a consultation paper inviting proposals from across Wales. The consultation paper, issued in December 1997, set out the criteria by which these proposals would be assessed (paragraph 2.3) and the specifications for the accommodation (Appendix 1).

2.18 A total of 24 proposals was received; 14 from private developers and 10 from local authorities (Figure 6).

2.19 These options were reviewed by the Welsh Office, with support from its PACE advisors, who visited all the sites. The Welsh Office considered that many of the proposed sites should be rejected for reasons of poor location, inadequate or impractical accommodation and cost. A shortlist of ten sites was then appraised in detail using the same economic appraisal methodology that was used the previous year.

Economic appraisal of shortlisted options

2.20 A summary of the results of the economic appraisal undertaken by the Welsh Office with support from PACE on the shortlist of ten options is at Figure 7.

the consultation exercise in December 1997						
Developer/agent	Site Location					
Private Developers						
Grosvenor Waterside	Crickhowell House and adjacent site, Cardiff Bay					
Hampton Trust	City Hall, central Cardiff					
MEPC Grimley	City Hall, central Cardiff					
Tarmac Developments	Atlantic Wharf, Cardiff Bay					
Citylink Consortium	Bute Avenue, central Cardiff					
EJ Hales and Co	Prospect Drive, Cardiff Bay					
Cardiff Gate Business Park Ltd	Cardiff Gate, northern Cardiff					
Helical Bar	I Kingsway, central Cardiff					
HTV Group plc	HTV studios, Culverhouse Cross, western Cardiff					
Cardiff Bay Development Corporation	Coal Exchange, Butetown , Cardiff Bay					
Assembly Consortium	Crickhowell House and adjacent site					
Cardiff Airport	Cardiff Airport					
Fletcher Morgan	Marcol House, Churchill Way, central Cardiff					
Fletcher Morgan	Woodstock Business Park, Coryton, northern Cardiff					
Local authorities						
Swansea	Guildhall					
Cardiff	City Hall					
Wrexham	The Guildhall, Wrexham					
Flintshire	Council Offices, Ewloe					
Flintshire	County Hall, Mold					
Neath Port Talbot	Margam Castle					
Rhondda Cynon Taff	Abercynon - Navigation Park					
Powys County Council	Council offices, Llandrindod Wells					
Merthyr Tydfil	Cyfartha Castle					
Bridgend	Five possible sites around Bridgend					
Source: National Assembly for Wales						

Figure 6: Proposals received for the location of the National Assembly after the consultation exercise in December 1997

Option	Capital cost (£m)	Running cost (£m)	Net present cost (£m)	Ranking by NPC	Main considerations in economic appraisal
I. Swansea Guildhall (64,000 square feet) Grade I listed town hall in Swansea, built in the 1930s. 64,000 square feet of office space available on 25 year lease from Swansea City Council at rent of \pounds 236,000 per year (subject to independent valuation from District Valuer).	8.68	1.51	22.55	I	Lowest cost option with scope for satellite centres around Wales for an additional £3.57m net present cost. Building of stature in good condition and easy to adapt for Assembly. Efficient use of space, but option to take additional space in same building if needed. The only option that would provide a permanent home from Day I. Boost to local economy in Swansea. Good relationship with Council with heads of terms already drafted.
					Separation from bulk of Welsh Office staff in Cardiff. Travel from North Wales more difficult than to Cardiff.
2. Capital Waterside options (Cardiff Bay) (up to 167,000 square feet). Use of Crickhowell House (already leased from Grosvenor Waterside) to provide a temporary Chamber and Committee rooms as well as permanent offices for Members and support staff. Adjacent land would be used to construct new building for Chamber and Committee rooms.					Location outside central Cardiff but good site on waterside next to historic Pierhead Building. Most flexible new build option, as Crickhowell House provided suitable temporary accommodation and could be easily adapted for permanent offices. Made use of vacant space on Welsh Office estate which was already a cost to the exchequer. Full control over design of new building. Considerable space for expansion if required.
Option I: Rent Crickhowell House; buy land	17.88	2.26	38.72	3	
Option 2: Rent Crickhowell House, rent new building. External developer would fund new building and rent it to the Assembly.	4.98	4.06	45.21	12	
Option 3: Rent Crickhowell House, buy land and buy Pierhead Building (long lease)	19.55	2.45	40.85	8	Pierhead Building a historic landmark building but which would need substantial repairs, a significant proportion of the expected acquisition cost. Necessary remedial works would be costly and make it difficult to justify a short-term lease.
Option 4: Rent Crickhowell House, buy land and rent Pierhead Building on 15 year lease (OPTION SELECTED)	17.90	2.61	42.06	9	

Option	Capital cost (£m)	Running cost (£m)	Net present cost (£m)	Ranking by NPC	Main considerations in economic appraisal
3. City Hall: revised options (up to					Considerations as for original City Hall options.
162,000 sq ft but useable space estimated at 96,000 sq ft by the Welsh Office)					Actual acquisition price demanded is in all cases well above the upper limit of £3.5m set by the then Secretary of State.
					Difficult at this stage to complete even basic refurbishment in time for opening of Assembly.
Option I: City Hall: acquisition option. Revised proposal from Cardiff County Council. 125 year long lease available for	39.41	1.72	47.43	13	Considerations of equity in providing indirect financial assistance to Cardiff County Council that would not be provided to other local authorities in Wales.
\pounds 3.5m purchase price dependent on financial concessions valued by the Welsh Office at \pounds 7.5m.					Refurbishment costs split between £7m to be carried out immediately and £15.1m deferred until Year 7.
Option 2: City Hall: Hampton Trust lease option . Hampton Trust would take a 125 year lease on City Hall and sub-let the building to the Assembly for £1.55m per year plus VAT.	4.48	4.56	47.71	14	The Welsh Office considered the capital costs to be unsubstantiated and expected actual refurbishment costs to be much higher. An additional estimated charge of $\pounds 1.5m$ per year was included to account for this ($\pounds 14m$ of the net present cost in each case). If these costs had not been deferred over the period of the lease but treated as incurred in Year 1, as for Options 2.1
Option 3: City Hall: MEPC/Grimley lease option. MEPC/Grimley take a 125 year lease on City Hall and sub-let the building to the Assembly for £1.55m per year plus VAT.	4.48	4.24	44.99	11	and 2.4, the net present cost would have been $\pounds 1.9 - \pounds 3m$ less.
Option 4: City Hall: Crickhowell House property exchange option. Cardiff County Council would grant a 125 year lease on City Hall in return for free occupation of office space in Crickhowell House for 5 years. Welsh Office assumed that 67,000 square feet would be required for 500 staff.	28.26	3.90	49.61	15	Most straightforward option for City Hall. Made use of vacant space on Welsh Office estate. Potential difficulties re-letting space after departure of Cardiff County Council. The appraisal included one year's cost of vacant space (assumed re-letting period) and the cost of alternative accommodation for WHCSA. These should be excluded to ensure consistency with the other City Hall options. This would reduce net present cost by £2.01m to £47.60m.

Option	Capital cost (£m)	Running cost (£m)	Net present cost (£m)	Ranking by NPC	Main considerations in economic appraisal
4. Atlantic Wharf, Cardiff (80,000 square feet). New build on site next to Cardiff County Hall in Atlantic Wharf, Cardiff Bay.	30.15	1.52	39.95	6	Considerations as in Figure 4. Capital costs increased to reflect more prudent estimates of construction costs. Temporary home would be needed in Crickhowell House while construction was completed.
5. Bute Square, Cardiff (80,000 square feet). New build in square planned as part of Bute Avenue PFI development. Site would be provided free by Cardiff Bay Development Corporation.	50.48	1.44	58.82	16	Very high capital costs reflecting need for building of stature in middle of prestige office development, possible ground contamination and need to re-route sewers and mains. Long project requiring temporary home. Impetus to rest of Bute Avenue PFI project, but conversely failure or delay in the project would leave the building in a development area for many years. Project insufficiently developed to provide adequate certainty. Site would be surrounded by busy roads, creating access difficulties.
6. Prospect Place, Cardiff Bay (80,000 square ft). Reclamation of land to west of current Cardiff Bay development and construction of new building on waterfront site	27.67 e.	1.33	37.49	2	Need to reclaim land before construction would lead to long completion time and a higher risk of cost escalation and delay. Need for temporary home. Remote location to the west of existing Cardiff Bay development.
7. Cardiff Gate Business Park (80,000 square ft). Bespoke design of new building in out-of-town business park north-east of Cardiff. Building would be leased by developer but with purchase option available.	5.68	3.34	40.24	7	Bespoke design would allow accommodation requirements to be fully met. Peripheral location would hinder public access. Temporary home would probably be needed.
8. Kingsway, Cardiff . Office building in central Cardiff. Chamber would be constructed as an extension to the building, which would be leased from the developer.	13.60	2.97	39.84	5	Good central location. Modern office accommodation suitable for use by Assembly. Construction of chamber would be problematic on awkward site. Mixture of owned and leased property.
9. HTV Culverhouse Cross, Cardiff HTV studios and offices on western outskirts of Cardiff (up to 170,000 square feet).	33.18	1.14	43.99	10	Peripheral location would hinder public access. Large site but problem of surplus accommodation that might be difficult to sub- let. No temporary option would be needed.
10. Coal Exchange, Cardiff Bay (150,700 sq ft).	31.99	1.47	39.71	4	Considerations as in Figure 4.

2.21 As with the earlier economic appraisals (paragraphs 2.4 to 2.6 above) these appraisals were undertaken on a consistent basis and using methodology and discount factors prescribed by the Treasury. The Welsh Office's conclusions from this exercise were:

- Swansea Guildhall was by far the cheapest option. It had a net present cost of £22.6 million. Although Swansea was not as easily accessible to Wales as a whole (especially to North Wales) as Cardiff, this option included satellite centres around Wales (at an additional net present cost of £3.6 million) that could be delivered within the capital and running cost budgets set out in the White Paper;
- there were four options for City Hall, including two private-public partnerships whereby a private developer would carry out limited works and recover the cost as part of the rent payable under a 30 year lease. However, in the view of the Welsh Office, all of these options included indirect costs that meant that the true acquisition cost was well above the £3.5 million market value that the Welsh Office considered acceptable;
- City Hall and the Coal Exchange both would have involved very high adaptation costs to bring them up to the required standard for the Assembly. Although for City Hall much of the expenditure could have been phased in after the Assembly had been established, this would have been disruptive and could have resulted in extra costs;

- none of the new build options would have been ready in time for the opening of the Assembly. Only Swansea Guildhall, City Hall and Crickhowell House would have offered a permanent home from the beginning, although the works at City Hall were extensive and may have been incomplete when the Assembly opened. All the other options would have required a temporary home, probably in Crickhowell House as this would have been available and was the right size; and
- Culverhouse Cross, Cardiff Gate Business Park and Prospect Place were considered to be in awkward or peripheral locations in Cardiff.

2.22 Our audit observations on the economic appraisal of these options are set out in Box 2. While there were some discrepancies in the economic appraisals, these did not affect the ranking of the three favoured options (Bute Square, Capital Waterside and City Hall).

2.23 The Welsh Office concluded that, despite the strong advantages of Swansea Guildhall, the position of Cardiff as the capital of Wales would be undermined if the Assembly were not located there. On 13 March 1998, the Secretary of State announced that the Assembly would be located in a new building in Cardiff, at either Bute Square or at Cardiff Bay.

Box 2: Economic appraisal of options in February 1998

- Travel costs were included only for the Swansea option, and amounted to £500,000 per year (increasing the net present cost by £4.7million or 21%) for a frequent coach service equipped with IT so that officials could work on the journey. Travel costs were considered to be broadly the same for the other options and were therefore excluded. However, travel costs for Capital Waterside and City Hall were later found to add £2.9 million and £1.2 million to the net present cost of the respective sites, mainly for lost staff time.
- Temporary accommodation costs were included for all sites except Swansea Guildhall and Cardiff City Hall. In all cases, it was assumed that this would cost £500,000. The capital cost of IT equipment and furniture and fittings were also the same for each option, at £3.2 million and £1.25 million respectively.
- The Welsh Office assumed that the cost of adaptation works to City Hall would be at least £22 million at 1998 prices. However, Symonds, the Welsh Office's project management company, had estimated the cost at £25 million and it would have been more prudent to use this figure.
- The costing of the City Hall public private partnerships was particularly problematic. The Welsh Office was unhappy with the nature of the works proposed and did not believe that the estimated costs were sufficient to fund the works required. Accordingly it added a contingency of £14.2 million (net present cost) for additional works. Based on the evidence available, the principle of including these costs was reasonable (although the figures were difficult to quantify) and the net present cost of these options would have been unrealistically low without them.
- ▶ For options 3.1 (purchase of City Hall) and 3.4 (property exchange with Crickhowell House), it was assumed that only essential works would be carried out immediately and that most of the cost of adaptation work would be deferred until Year 7. This reflected a desire to contain the set-up costs within the £17 million estimate included in the White Paper on devolution. However, this deferral of work would have meant that the quality of accommodation and facilities would not have been on a par with the other options, which were based on a high standard of accommodation from the start.
- Option 3.4 (City Hall Crickhowell House property exchange) includes the cost of alternative accommodation for WHCSA. This is not consistent with the other Crickhowell House options and these costs should have been discounted, reducing the net present cost of this option by £2.0 million.

The net present cost of the City Hall options would be ± 1.9 million - ± 3 million higher if they had been treated consistently with other options.

Key points

The National Audit Office Wales examined the work undertaken by the then Welsh Office to identify and appraise options for the site of the new Assembly. We found that :

- the Welsh Office made good use of professional technical advice in appraising the various options;
- the economic appraisals were consistent and generally complied with Treasury guidance and provided a good basis on which to compare the sites;
- the costs included in the economic appraisals have to be treated with a degree of caution because they were based on assumptions on how the Assembly might operate and estimates of costs which were based on the best information available at the time;
- the National Audit Office Wales recalculated the economic appraisals and found some discrepancies (as set out in Box 2 above), but these did not affect the ranking of the three favoured options (Bute Square, Capital Waterside and City Hall);
- the Secretary of State was provided with sound advice and information on which to base decisions on the location of the Assembly; and
- it would have been advisable for the then Welsh Office to have undertaken sensitivity analysis of the options to assess the impact that the key risks might have had on the viability of the project. The value of such a technique is indicated by the increase in the costs for the selected option as well as the increase in the space requirements for the Assembly. However, such an analysis would have favoured the Cardiff Bay sites.

We recommend that:

sensitivity analysis be used for any investment appraisals undertaken in the future.

Assessment of Bute Square and Cardiff Bay options

2.24 Negotiations about the two sites had already begun when the then Secretary of State made his announcement. These continued until late April 1998 when the final decision for Capital Waterside was made.

Bute Square

2.25 Bute Square is part of the major Bute Avenue private finance initiative (PFI) development. The Square will be laid out at the northern end of the avenue, which will run from the southern side of Cardiff city centre to the planned Wales Millennium Centre at Cardiff Bay. The square will be located close to Cardiff Central railway station as the centre of a planned office development.

2.26 The Cardiff Bay Development Corporation offered the site for use by the Assembly so that a new building could be constructed in the centre of the square. Two options were considered:

- a large building of 80,000 square feet to meet all the accommodation requirements of the Assembly;
- a smaller building of 30,000 square feet, which would provide space for the Chamber, Committee rooms and meeting rooms only. Office accommodation for members and staff would be located elsewhere.

2.27 In March 1998, the Welsh Office engaged the AYH Partnership, a firm of chartered surveyors, to review each of these options. They concluded that both concept designs were feasible and that the buildings could be completed for £14 million (the smaller version) and £28 million (the larger version). These costs appeared favourable in comparison with the Capital Waterside and City Hall options.

2.28 However, PACE advised that the final cost of the building would be substantially higher than the construction costs estimated by AYH Partnership. The design ideas were unusual and would have been difficult to build; a sewer running underneath the site would need to have been re-routed; and costly underground parking and slip roads would have been required. Consequently a sum of \pounds 45 million for total construction costs was included in the economic appraisal.

2.29 The Welsh Office considered that the risks were too great to proceed with the project, in particular that:

- the site would be in a development area for many years while the surrounding offices were built, and the Welsh Office would have little influence over the style and scale of this development;
- the site available was relatively small and the surrounding roads would give limited scope for expansion;
- the site would be surrounded by busy roads and access for traffic and pedestrians would have been difficult;
- the building would not be completed until summer 2001 at the earliest and a temporary home for the Assembly would be needed. Delays could arise from difficulties in obtaining planning permission (for both the building itself and the whole PFI project), the presence of contaminated land and delays in developing the infrastructure; and
- the PFI deal was the largest and most complex that had yet been proposed in Wales and was still in the process of being evaluated.

Capital Waterside

2.30 This site is owned by Grosvenor Waterside Investments Ltd, a property development company owned by Associated British Ports. Grosvenor Waterside's proposal included three distinct elements:

occupation of Crickhowell House, a modern office block that was already rented to the Secretary of State on a 25 year lease from September 1993;

- acquisition of the site between Crickhowell House and the Pierhead Building, facing the waterfront. A new building could be constructed on this site; and
- an option to occupy the Pierhead Building, on a long or short leasehold.

2.31 This option had the following benefits for the Welsh Office:

- Crickhowell House was already part of the Welsh Office estate but was becoming largely vacant following the decision to wind up the Welsh Health Common Services Authority (WHCSA) on 31 March 1999. WHCSA's functions were being split between various bodies and most of its staff were to be relocated around Cardiff. WHCSA had been actively marketing the building since 1996 but had not been able to find a suitable sub-tenant. This option meant that the building would be fully occupied;
- the vacant land next to Crickhowell House facing the waterfront (known as Site IE) was a prime location for a new landmark building for the Assembly. This building would only need to provide space for a Chamber and Committee rooms as office accommodation could be provided in Crickhowell House; and
- the Pierhead Building was a historic and prestigious landmark that would enhance the setting of the Assembly.

2.32 The Welsh Office considered that, overall, this option carried less risk and was less costly than the Bute Square proposal. The then Secretary of State announced his decision to locate the Assembly at Capital Waterside on 28 April 1998.

Detailed negotiations with Grosvenor Waterside

The terms of the deal

2.33 Four options were offered with an estimated net present cost over 15 years of between £38.7 million and £45.2 million (see Figure 7). These costs were competitive when compared with the Bute Square and City Hall options. The proposals were also attractive as the economic appraisals indicated that they could be contained within the £17 million budget for capital costs. The Welsh Office contracted AYH Partnership in March 1998 to provide an opinion on the likely costs of constructing a 30,000 square foot building on Site IE. They concluded that this could be done for £12.5 million, leaving £4.5 million for adaptation works to Crickhowell House, installation of information technology and furniture and fittings.

2.34 Grosvenor Waterside indicated initially that they were seeking a purchase price of £2 million for Site IE and the surrender of 200 of the 400 parking places allotted to Crickhowell House. After negotiations, heads of terms were agreed with the following main elements:

- extension of the lease on Crickhowell House by five years (from 2018 to 2023), with a new option for the Assembly to extend the term by 25 years;
- purchase of a 150 year lease on part of Site IE (1.06 acres) for £1;
- a 15 year lease on the Pierhead Building for an annual rent of £115,000 plus VAT. This included an option to purchase the building at any time in the first five years, and a break clause at the end of the fifth year upon 12 months prior notice; and
- the Welsh Office would cede 200 of the 400 parking spaces that it was entitled to use under the Crickhowell House lease. In return, Grosvenor Waterside would provide 200 spaces on vacant land

until that land was developed, and would provide an option to lease spaces once a multi-storey car park to the rear of Crickhowell House had been constructed.

2.35 Grosvenor Waterside had offered to sell the whole of Site IE (I.8 acres) for £760,000, or 1.06 acres for £1. The company was prepared to offer the reduced site for a nominal sum because it planned to build a separate office development on the remaining land. However, this nominal sum needs to be seen in the context of the whole agreement. The National Audit Office Wales has calculated the net present cost of the 200 spaces that were conceeded as £668,000 over the 25 year term of the lease (based on a six per cent discount rate). This represents the estimated rental value of the spaces less an estimated reduction in the rent of Crickhowell House after 2003. This reflects the potential rather than a committed cost to the Assembly, as it still remains a matter for the Assembly to decide whether it needs to acquire any replacement car parking. Nonetheless, the £668,000 value of the reduction in guaranteed parking provision should be regarded as part of the cost of the land and was correctly included in the economic appraisals of the Capital Waterside options.

Did the agreement provide value for money?

2.36 This question needs to be considered in two parts: the agreement covering Crickhowell House and the adjacent land and the separate agreement to lease the Pierhead Building.

Crickhowell House and the adjacent land

2.37 The Welsh Office commissioned Gooch and Wagstaff, a firm of chartered surveyors, to review the proposed terms of the agreement. They concluded that the proposed agreement was broadly value for money, and reflected the benefit that Grosvenor Waterside would receive from the impetus that the location of the Assembly would give to surrounding development.

2.38 However, this conclusion is based on the constraint of the existing lease. The terms of this agreement were commercially favourable for Grosvenor Waterside when the negotiations took place and offered little scope for the Welsh Office to negotiate a reduced rent or freehold purchase of the building. The Welsh Office in 1991 had agreed to rent Crickhowell House on a 25 year lease from September 1993 with the following principal terms:

- no break clause;
- five yearly rent reviews at which the rent would remain unchanged or would be increased to market value, but with no scope for rent reductions; and
- rent starting at £13.50 per square foot (£1.98 million including VAT) in 1993 and rising in annual increments to £16 per square foot (£2.34 million including VAT) in 1997.

2.39 The following concerns relating to this lease and the subsequent renegotiations in 1998 have been raised by Members of Parliament and Assembly Members:

- a view that the rental level exceeds the market rent for accommodation of the same quality in the area;
- the decision in 1991 to lease Crickhowell House was a political one designed to kick-start the development of Cardiff Bay, and could not be justified on cost grounds;
- the decision to locate the Assembly in Crickhowell House was an opportunist one, to utilise the vacant space following the departure of the Welsh Health Common Services Authority (WHCSA). This was necessary because the building could not be sub-let at the rent of £16 per square foot that was being paid, and

if the Welsh Office had not been constrained by the existing onerous lease it would not have contemplated entering into an agreement to lease Crickhowell House for a rent that exceeded market value.

2.40 The National Audit Office Wales examined the original decision to occupy Crickhowell House in response to a letter from a Member of Parliament in 1996. We found that:

- the Welsh Office wished to accommodate all WHCSA staff in one building in Cardiff and there were few available sites at the time. The choice was between Cardiff Bay and a site at Gabalfa in northern Cardiff;
- the terms of the lease were standard industry practice for speculative developments at that time;
- there was no evidence that the Welsh Office's estate agents at the time had been constrained in their negotiations with Grosvenor Waterside. Had they been unable to negotiate an acceptable lease with Grosvenor Waterside, they would have been able to resume negotiations for another site in Cardiff;
- the relocation of WHCSA in Crickhowell House was approved by the then Secretary of State for Wales and the Treasury;
- notwithstanding this, the lease was a significant boost to development in Cardiff Bay and the decision to locate there was a marginal one in both financial and non-cost terms. Although WHCSA's board had decided in favour of Crickhowell House, the group of officials and advisors who had assessed the options had recommended an alternative site at Gabalfa in northern Cardiff.

2.41 After the lease had been agreed, property values in the area fell sharply (as they did across much of Britain) and the rental, which had been anticipated to mirror market value, was in fact well above market value. This is indicated by the failure of attempts to sub-let vacant space in Crickhowell House between 1995 and 1998. This remained the case when the Welsh Office opened negotiations with Grosvenor Waterside to locate the Assembly in Cardiff Bay in early 1998. Grosvenor Waterside was unwilling to agree to any reduction in rental levels or any change in the terms of the lease. Initially the company wished to extend existing leases by 25 years but, in the event, a five year lease extension was agreed as part of the overall financial package for the adjacent land. The Welsh Office decided to agree to this request because:

- Grosvenor Waterside was in a strong negotiating position and it was unlikely that any concession would be obtained;
- office rents in the Cardiff Bay area were rising as the area became established commercially and the Welsh Office believed that the rent payable on Crickhowell House would soon be equal to market rent in the area and would be likely to remain equal to or less than market rent; and
- as this was the case, there was little risk attached to a five year extension to the lease when the Assembly was intended to be a permanent institution.

2.42 Good quality, newly built office space in the Cardiff Bay area is currently being let for about £17.50 per square foot. The Assembly's property advisors have informed us that the refurbishment of Crickhowell House means that the accommodation is now regarded as good quality, although the appearance of the building may depress the rental level slightly. However, they consider it likely that the current rental is at or slightly below market value.

2.43 We found no evidence that the existence of vacant space at Crickhowell House had an undue influence on the decision to locate the Assembly at Capital Waterside. Officials did consider it an advantage of this site, but within the context of several other advantages such as the flexibility of accommodation, overall cost and location. The economic appraisals included the full cost of renting the space in Crickhowell House, although Treasury guidance would have permitted a lower figure equating to expected market rent to be included. This would have reduced the net present cost over 15 years by £507,000 for each £1 per square foot reduction in rent.

The Pierhead Building

2.44 Two options were negotiated for occupation of the Pierhead Building:

- purchase the building on a long lease of 150 years, at a cost of £1.35 million payable at the start of the lease; and
- rent the building on a short 15 year lease at a rental of £135,000 per year. The proposed lease also included a purchase option which allowed the Assembly to buy the building at any time in the first five years of the lease, and a right to terminate the lease after five years. The purchase price would be fixed at £1.35 million initially but would rise at 6 per cent at successive 18 month intervals.

2.45 Gooch and Wagstaff advised against a short-term lease if complete repair and refurbishment were to be undertaken. A survey of the building indicated that this might cost \pounds 3 million.

2.46 The Welsh Office decided that the minimum amount of work should be done to bring the Pierhead Building up to an adequate standard (at an estimated cost of $\pounds I$ million), and that the building would be used to house the Cabinet and certain senior officials. The Welsh Office decided to rent the building, to allow the Assembly an exit route at any time in the first

five years if the building was not required, while keeping open the option to purchase. This option also kept the total estimated capital cost within the $\pounds 17$ million budget in the White Paper, as the rent would be an annual revenue cost.

2.47 The National Audit Office Wales calculated the net present cost of each option over 15 years (the period of the lease) at the standard six per cent discount rate. The net present cost of renting the building is $\pounds 1.31$ million, compared with $\pounds 787,000$ if the Welsh Office had bought the long leasehold at the outset. Assuming

that the value of the building does not decline, the long lease offers much better value for money. The Assembly will gain most value for this asset the earlier it chooses to exercise the purchase option. The purchase price rises in increments from £1.35 million (in the period I October 1998 to 31 May 2000) to £1.61 million (in the period I June to 31 August 2003). At that date the Assembly loses the right to purchase the Pierhead Building. If the Assembly now exercises the purchase option the potential saving would be £353,000 over the remainder of the lease.

Key points

- The Capital Waterside site was chosen because it offered extensive and flexible accommodation at a lower overall cost than Bute Square, whilst providing a prime location for a new landmark building.
- This option also enabled vacant space in Crickhowell House to be used fully, so avoiding abortive rental costs for office space which was held on a 25 year lease to 2018. However, we found no evidence that the decision had been unduly influenced by this or by the original decision to lease Crickhowell House.
- The Welsh Office negotiated with Grosvenor Waterside to extend the lease on Crickhowell House, purchase the adjacent plot of land for £1 and rent the Pierhead Building on a 15 year lease. However, the true cost of the land is the commercial value of the 200 parking spaces conceded by the Welsh Office as part of the agreement, for which the National Audit Office Wales estimates a net present value of £668,000 over 25 years.
- The Welsh Office's professional advisors considered that the deal offered broad value for money, but questioned the decision to rent rather than buy the Pierhead Building. The National Audit Office Wales has calculated that at least £350,000 could be saved if the Assembly exercises the purchase option and buys the long leasehold on the property.

We recommend that:

the Assembly should consider purchasing the long leasehold of the Pierhead Building, and that it should do so as early as possible in order to minimise the ongoing cost of the rental payments.

PART 3

Project Management and Procurement

3.1 Robust project management and procurement arrangements are crucial in obtaining value for money in major capital projects. This part of the report examines how the Assembly has managed both the adaptation and the new building phases of the project. It then goes on to consider the arrangements for procuring services and works for the project.

Project Management

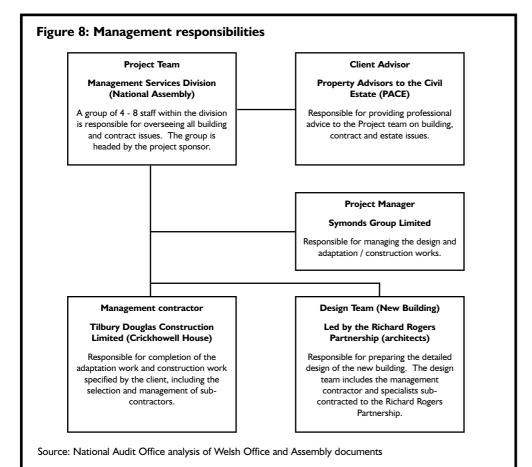
3.2 The National Assembly (and prior to devolution, the Welsh Office) is ultimately accountable for the delivery of the project. The project management structure for delivering the project is summarised in Figure 8. The National Audit Office Wales reviewed the project management arrangements and assessed them against the Treasury's Procurement

Guidance (Essential Requirements for Construction Procurement, issued in 1997, and subsequent papers in that series).

Management structures

3.3 The Treasury guidance emphasises the importance of the following posts:

- the project sponsor is the individual responsible for managing the Assembly's interest in the project. This involves preparation of the project brief, appraisal of options, controlling changes, managing the budget and providing a focal point for all client contact with the contractors and consultants working on the project. The project sponsor is the head of the accommodation services section within the Management Services Division of the National Assembly.
- The project manager is responsible to the client (the Assembly) for the day to day running of the project. The



project manager coordinates the work of the various contractors and consultants, and reports on progress to the client.

The project manager has also assessed potential sites for the Assembly, helped to select contractors and certified invoices for works from the main contractor. As the Assembly does not have the resources or expertise to perform this role, it has appointed Symonds Group Ltd, a national company of project management consultants.

the Project Steering Group: responsible for overall project control, for bringing together the various participants in the project, for receiving progress and cost reports, and for providing the conduit between the day to day project management team and senior management.

3.4 The administration of the project has been centralised in a small team in the Management Services Division of the Assembly, which has worked closely with the project manager, management contractor and PACE advisors. This has ensured that lines of accountability have been clear and short, which has facilitated effective project management.

3.5 For the first phase of the project, the adaptation of Crickhowell House and the Pierhead Building, there was a project board of senior officials that dealt with the whole devolution project, and focused mainly on the legislative issues involved. A separate accommodation and IT task group was established to take forward accommodation issues, and it established the basic requirements for the Assembly and monitored the economic appraisal process. However, it did not monitor developments once works had begun on Crickhowell House, and did not include any of the senior officials responsible for overseeing rather than managing the project. Consequently, the group did not fulfil its potential as a project steering group.

3.6 In contrast, the Assembly has established two steering groups to oversee the new building. The Policy Steering Group consists of the Finance Secretary, the Presiding Officer, the leaders of Plaid Cymru and the Liberal Democrats in the Assembly, and the Permanent Secretary of the Assembly. It receives progress reports and is consulted on major policy decisions. The Project Board comprises senior officials in the Assembly, the project manager and the client advisor. This group monitors the progress and cost of the project at a more detailed level than the Policy Steering Group. Both groups meet regularly, have defined terms of reference and an appropriate membership.

3.7 In addition to the accommodation and IT task group, the Welsh Office established a task group to develop proposals for the broadcasting of the Assembly's activities. This group successfully negotiated the allocation of costs and office space to the broadcasting companies, but did not follow through to ensure that agreement was reached quickly on the precise terms of the funding and contractual arrangements. A written framework agreement would have reduced the risk of the confusion and delays that occurred. The disadvantages of not having a framework agreement in place are illustrated by Case Study A.

Case Study A: Broadcasting issues

Broadcasting was a particularly complex issue in both technical and managerial terms, involving several bodies (including the then Welsh Office, project manager (Symonds Group Ltd), management contractor, host broadcaster, three radio and television broadcasters and several press groups). The Welsh Office recognised these difficulties and the importance of broadcasting by appointing an external consultant to advise on broadcasting matters, and establishing a task group to agree rules of coverage, allocation of costs and the implementation of the system. This group included representatives from the broadcasting companies and the written press.

The task group agreed arrangements for:

- rules of broadcast coverage;
- space allocation: free occupation for written press; other broadcasters to reimburse the Assembly for rent and service charges on space that they occupy in excess of 200 square metres;
- provision of signal feed: an independent "host broadcaster" to be appointed by open competition to film the proceedings of the Assembly and provide feed to the broadcasters (HTV, BBC and S4C);
- funding: TV and radio broadcasters to meet 50% of the operating costs of the host broadcaster; and
- a company to be established to administer the host broadcaster contract and consider any issues relating to broadcasting (for example, variation of requirements and rules of coverage).

The Welsh Office negotiated effectively to settle the contentious issues of space allocation and funding arrangements. The 50% contribution to the costs of the host broadcaster compares favourably with the 36% contribution by broadcasters in the Scottish Parliament.

However, after these arrangements were agreed in December 1998, confusion arose over several issues:

- who would commission the works. The Welsh Office assumed that its own management contractor would fit out the broadcasters' space but the broadcasters wanted their own contract and quantity surveyor;
- the overall cost of the works, which was higher than expected, and the extent to which the broadcasting companies would reimburse the Welsh Office for joint structural works; and
- the date from which payments under the host broadcaster contract should commence.

The confusion over costs and contracts caused substantial delay to the programme while heads of terms were negotiated, and work did not begin until the end of March 1999, only six weeks before the opening of the Assembly. However, terms were agreed and the necessary work was completed in time for the opening of the Assembly on 26 May 1999. These difficulties arose largely because oral agreements were not confirmed in writing. It would have been better to have agreed a framework document in December 1998, when the accommodation requirements were agreed. This document could have set out the key points of the agreement and set a timetable for completion of the works and for agreement of the leases. It would have been helpful also if the broadcasting task group had continued to meet after December 1998 in order to monitor progress. This would have reduced the risk of the confusion which subsequently caused delays to the project.

The value for money framework

3.8 The Treasury's procurement guidance emphasises the importance of:

- a clear project brief;
- an effective process for securing user involvement, but which is not too restrictive; and
- the use of techniques such as whole life costing and value engineering to minimise cost whilst maintaining the quality and functionality of the design.

3.9 There was no formal project brief for the adaptation of Crickhowell House and the Pierhead Building, although there was a clear understanding of the minimum requirements as set out in Appendix 1. The Welsh Office developed a more detailed specification in July 1998, but this was substantially amended as work progressed and new or different requirements became apparent; costs increased substantially as a result. The project team was constrained by the tight timescale, which left very little time for consultation with the various task groups (which acted as pseudo user groups, in the absence of the final end users, in informing the design process).

3.10 For the new building, a detailed design brief was developed for the design competition and has since been amended to reflect the outcome of an extensive consultation process with Assembly Members, staff and groups representing the disabled. This has led to an extended design process but should result in a high degree of certainty once the design is signed off by the Assembly.

3.11 Whole life costing involves design with the objective of minimising the cost of the building over its whole life, rather than simply minimising the costs of construction. This may involve, for example, selecting more expensive but more durable materials. Value engineering involves subjecting the design proposals to systematic review at each stage of the design process to ensure that the final design meets user requirements, without

over-specification, at the lowest possible cost. Neither of these techniques were used for the adaptation of Crickhowell House and the Pierhead Building, nor have these techniques yet been employed on the design for the new building. Experience on other capital projects has demonstrated that the use of these techniques can generate significant savings. The Welsh Office considered that these techniques would have been inappropriate for the adaptations to Crickhowell House given that this was substantially a temporary solution and had a finite life. The Assembly plan to use these techniques for the new building at an appropriate stage in the project.

Budgeting and monitoring of progress

3.12 The following practices are key to the delivery of the project to time and budget:

- clear targets for both time and cost;
- reports showing performance against these targets, which are considered at regular meetings between all those with key roles in the project. This would include the project sponsor, the project manager and the main contractor; and
- clear procedures for controlling changes to the design, so that none are authorised until the full cost and time implications are assessed. There must be a clear system of delegated authorities to maintain accountability for decisions.

3.13 The Welsh Office did not set a formal budget for the adaptation of the existing buildings. An estimate of \pm 500,000 for adaptation works was included in the economic appraisals. Once the site had been selected and a detailed specification developed, the cost estimate was increased to \pm 2.8 million. However, actual expenditure was \pm 4.9 million because additional requirements were included as the work progressed.

The project sponsor monitored these costs and ensured that there was adequate provision in the Welsh Office cash budget to cover them. However, none of the amounts were formally constituted as a budget and monitored at a senior level within the Welsh Office. Information technology capital costs were not monitored as part of the project and did not feature in the reports considered by the group. Consequently, the total cost of the adaptation phase of the project was not clear until after the works had been completed.

3.14 The Project Board for the new building receives regular financial reports showing actual expenditure against budget, although the format of these is still being developed. The Project Board plans to monitor total capital costs, whole life costs and the results of value engineering studies consistently and regularly throughout the project.

3.15 The Welsh Office set a clear timetable for the adaptation of Crickhowell House and the Pierhead Building, and established a working group that monitored progress closely against the target dates. The group included representatives of the Welsh Office project team, PACE, the project manager, and the main contractor and met regularly to consider the reports prepared by the project manager. The Assembly is currently finalising the project programme for the new building and plans to monitor progress in a similar way.

3.16 Changes to the specification for Crickhowell House and the Pierhead building were requested by Ministers and officials and were approved formally by the Secretary of State. The absence of an appropriate project steering group meant that the cumulative effect of the variations, especially the effect on cost, was not monitored formally at a senior level. Changes to the design of the new building have been extensive and have been approved by the First Secretary after consultation with the Policy Steering Group. The Project Board has monitored the effect of the changes in terms of cost and timing.

Differences in project management arrangements

3.17 Project management procedures have evolved to respond to the different pressures on the project following devolution. The emphasis has shifted from the overriding need for quick decision making to ensure that adequate accommodation was available in time for the opening of the Assembly, towards a much greater focus on the cost and quality of the design for the new building. The new building phase of the project is distinguished by much more collegiate decision-making and wider consultation than the previous phases. This should ensure that the building will meet the needs and aspirations of its users, but it has also resulted in much slower progress than expected, as the Assembly has consulted widely on the architect's initial proposals and there have been substantial revisions to the design. These differences are summarised in Figure 9.

Procurement

3.18 Competitive procurement is an essential tool in obtaining value for money from suppliers. The Assembly has in place detailed procurement guidelines and a central Procurement Unit to assist in major purchasing exercises and to advise other divisions of the Assembly on complex or high value procurement issues.

3.19 The National Audit Office Wales examined six of the contracts that have been let for the adaptation and fitting-out of Crickhowell House and the Pierhead Building (Figure 10). Although four of the six contracts were not let to the lowest tenderer we found that the Welsh Office had assessed the bids carefully and awarded the contract to the one that it considered offered the best deal in terms of quality and overall value for money.

Figure 9: Differences in project management before and after devolution

Adaptation works (before devolution)

- Time critical
- Individual decision-making (Secretary of State and officials)
- Little consultation (fast decisionmaking)
- Revision of design during construction (due to urgent need to complete works in time for deadline)
- No formal project board; monitoring by project sponsor and task groups (accommodation and IT; broadcasting)

Unclear budget; no formal financial

New building (mainly after devolution)

- Focus on cost and design of new building
- Collegiate decision-making (Policy Steering Group, project board)
- Extensive consultation (slower decisionmaking)
- Revision of design during initial stages (completion not time critical)
- Formal project board with wide-ranging monitoring function
- Clear budget and financial reporting

Source: National Audit Office analysis of Welsh Office and Assembly information

Key points

reporting

The National Audit Office Wales examined the project management arrangements against Treasury guidance. We found that this guidance was generally followed, and in particular that:

- the project team has made effective use of external advice to provide professional services that are not available in-house. This has included appointment of Symonds Group to manage the project, and the selection of the Property Advisors to the Civil Estate to act as client advisor;
- there has been extensive consultation with users of the new building during the development of the outline design brief. This should reduce the need for changes to specified requirements and the consequent cost and time overruns and the risk of unsuitable accommodation;
- the Assembly has established a complete budget and effective high-level monitoring and reporting arrangements for the new building; and
- the project team established a clear timetable for the adaptation of Crickhowell House and the Pierhead Building, monitored progress during the works and managed variations effectively so that the accommodation was ready in time for the opening of the Assembly.

However, we found some weaknesses in the project management arrangements, namely that:

- because there were no end-users to inform the development of Crickhowell House and the Pierhead Building, project members had to make judgements about requirements, which was an iterative process and contributed to design variations and consequent cost increases as the works progressed;
- there was no formal project budget or steering group for the adaptation works, so that the total cost of the accommodation was not monitored at a senior level within the Welsh Office; and
- the absence of a written framework agreement about the funding and contractual arrangements in relation to broadcasting led to considerable confusion and delay.

Recommendations:

For future projects, a specific project budget should be set and monitored by a steering group that includes senior staff that are not involved in the day to day management of the project

Figure 10: Procurement of major contracts for the adaptation and fitting out of Crickhowell House

Contract	Management contractor	Project manager	Office furniture	Host broadcaster	IT service provider	Specialist software
Name of contractor	Tilbury Douglas Construction Ltd	Symonds	RH Powell and Partners	Barcud Derwen Ltd	Siemens UK	ICL
Competitive procurement process specifically for this project?	Yes	No	No	Yes	No	Yes
Reason if competitive process not adopted	N/A	Let under existing 3-year contract, which had been subject to competition	Let under existing 3-year contract, which had been subject to competition	N/A	Extension of existing 6-year PFI contract, which had been subject to competition	N/A
Was lowest tender accepted?	No	Yes	No	No	Yes	No
Reason if lowest tender not accepted	More realistic estimate of time requirement	N/A	RH Powell considered to provide better quality products and service	Barcud Derwen considered to provide better quality products and service	N/A	Not known
Contract satisfactorily completed?	Yes: no claims and final account now settled	Yes	Yes	Ongoing: no significant problems to date	Ongoing: no significant problems to date	Yes: all necessary services provided
Note:						-

The contracts under which the management contractor, the project manager, office furniture and IT service provider were procured, were all subject to Official Journal of the European Communities (OJEC) competition.

Source: National Audit Office analysis of Welsh Office and Assembly information

Competitive procurement

3.20 The Welsh Office did not tender separately for three of the major contracts, but used the existing fixed-term contracts which covered the services required, as set out below:

project manager: the Welsh Office asked Symonds Group Ltd, which held the general property management contract for the three year period beginning on I April 1996, to manage this project. It further considered that the same company should implement the project and manage the building afterwards, thus enhancing accountability for the results. The Welsh Office considered that a re-tendering process would have been disruptive at a time when speed and efficient

use of limited staff resources was vital, and the project manager's services were needed immediately. However, these constraints do not apply to the same extent to the new building and the Assembly has decided to put out to tender the project management contract for this phase of the project;

office furniture: the Welsh Office used the call-off contract that had been awarded to RH Powell and Partners in September 1997. The Welsh Office considered that the existing contract provided good value for money, especially the provision of a space planning service in addition to the furniture itself, but did not test the market to see whether the large volume of additional business (some £2 million over the £1.5 million expected) would have resulted in an even cheaper price for the same work. The Welsh Office considered that it would have been a high-risk strategy to appoint another contractor with an unproven record given the time constraints on the project; and

IT Service Provider: in 1996 the Welsh Office had signed a six-year private finance initiative (PFI) agreement with Siemens UK for the provision all IT equipment, maintenance of the Department's OSIRIS information system network and all general servicing arrangements. The Welsh Office considered options for servicing the IT needs of the National Assembly and concluded that the only feasible option was to extend the agreement to cover the Assembly as well as its officials.

3.21 The sub-contracts let by the management contractor were let on the basis of competition, and the project manager and the Welsh Office reviewed the selection of contractors before bids were accepted.

IT contracts

3.22 The Welsh Office also required expertise to design specialist software for electronic voting and other applications. The Business Information Systems (BIS) division of the Welsh Office put the contract out to tender and awarded it to ICL, who developed the applications as requested. However, the unusual and uncertain nature of the services meant that a precise specification could not be provided at the time the contract was let in November 1998. As a consequence, the contract price escalated from £215,000 to £551,000 as additional requirements were added to the contract.

3.23 The Assembly's Procurement Unit carried out a review of this contract which identified the following weaknesses in procedures:

key stages of the procurement process were not documented. In particular, there was no explanation as to why the most expensive tender was selected;

- the Welsh Office Procurement Unit was not consulted at any stage, although it is Welsh Office and now Assembly policy for this Unit to be involved in all purchases costing more than £10,000;
- the Welsh Office accepted ICL's contract terms without amendment, although it had obtained legal advice to amend them so that intellectual property rights arising from the software applications belonged to the Welsh Office rather than ICL. This advice was not followed, and as a consequence potentially valuable intellectual property rights were lost; and
- the original contract did not provide for maintenance services, so that this had to be added later when the Welsh Office was in a relatively weak negotiating position.

As a result of this review, training in procurement procedures was provided to all staff responsible for strategic IT procurement, and a procurement officer was appointed to work as part of the team dealing with major IT related procurement.

Contract Strategy

3.24 The choice of contract strategy for the works is a key decision as it determines the nature of the relationship between the client, design team and suppliers. This in turn affects the quality and cost of the design and the timeliness of its delivery, and is therefore an important element in achieving overall value for money. The most common procurement strategies are:

Traditional: the client engages consultants to prepare designs and specifications for works that are then constructed by a contractor who is engaged separately.

The design is fully developed before the construction contract is let.

- Management contracting: the contractor is paid a fee to manage the construction with works being undertaken by specialist contractors sub-contracted to the management contractor. The design is undertaken by consultants contracted to the client.
- Design and build: a single contractor takes responsibility for both design and construction.

3.25 The choice of strategy will depend on the client's objectives for the project (Figure 11), in particular the relative importance of time and cost certainty. A traditional procurement route requires the detailed design to be completed before the construction contract is put out to tender. A management contract shortens the time to completion by joining together the construction and design stages, so that the contractor advises the design team on the "buildability" of the design, the sequencing of the works and the procurement of packages of work to sub-contractors. However, cost certainty is not achieved until the last sub-contract is let by which time construction will be well underway.

3.26 For the adaptation of Crickhowell House and the Pierhead Building, the Welsh Office judged that a management contract was the only feasible option because of the tight timescale and the need to retain client control over the design as the works proceeded. Its expectation was that the co-ordinating role of the management contractor would ensure a close relationship with the project manager and client and facilitate the delivery of a rapidly changing project to a tight timetable.

Figure 11: The appropriateness of contract strategies in meeting project objectives

Aspect	Objectives	Traditional	Management contracting	Design and build
Timing	Early completion	×	1	1
Cost	Price certainty before start of construction	1	*	1
Quality	Prestige of design and construction	1	1	×
Complexity	Technically advanced or highly complex building	1	1	×
Responsibility	Single contractual link for design and construction	×	×	1
Design development	Client control over design development	1	1	×
Risk avoidance	Desire to transfer comple financial risk	te 🗙	×	1
Damage recovery	Ability to recover construction cost direct from a main contractor	1	1	1
Buildability	Contractor input to design in order to achieve best value from constructi		1	×
✓ - generally appr	ropriate		🗙 - generally ina	ppropriate
This figure is for ge	neral guidance only. In practice	e, the appropriat	teness of each contract	strategy is not s

This figure is for general guidance only. In practice, the appropriateness of each contract strategy is not so clear cut and will depend on the circumstances of each project.

Source: National Audit Office

3.27 For the new building, the Assembly considered that the "design and build" route was inappropriate because of the novelty and complexity of the design, and the need to retain client control over the design of a highly sensitive project.

3.28 On the advice of its client advisor, PACE, and project manager, Symonds Group Ltd, the Assembly decided on a hybrid management contract where the main contractor assists the Architect with buildability and constructional issues, and lets the works to sub-contractors. The Assembly considers that this approach will be particularly advantageous in several respects:

- the new building should be completed a year earlier, in January 2003, than would be the case with a traditional procurement route;
- the contractor's construction expertise will be used during the detailed design stage when it will be of most value. This is especially important for a complex and novel design such as that for the new building; and

the Assembly will retain control of design development and quality, so that changes can be accommodated if necessary.

3.29 The Assembly plans to mitigate the potential disadvantages of the management contracting route by retaining the services of PACE to advise on project management, and by requiring a formal statement of the estimated final cost when 80 per cent of the works packages have been let. However, the Assembly has decided not to require a guaranteed maximum price from the management contractor, as was intended originally. The Assembly considers that this would be impractical for such a novel and complex project and is unlikely to be acceptable to contractors in the currently buoyant construction market.

Key points

The National Audit Office Wales reviewed six major contracts that were used for the project. We found that the Welsh Office had followed good practice in that:

- all contracts and sub-contracts were procured competitively, and in most cases bids were evaluated carefully and legitimate reasons provided where the lowest bid was not selected; and
- the management contracting procurement route has been selected for both the adaptation works and the construction of the new building. This was an appropriate contract strategy based on the client's wish to retain control over the design throughout the project and to achieve rapid completion.

However:

- there were significant deficiencies in the procurement of specialised IT applications for Assembly Members with consequent impacts on the value for money achieved and the loss of potentially valuable intellectual property rights; and
- the Welsh Office used existing contracts for project management, furniture and IT services. These contracts had been procured competitively through OJEC, but there was some scope to test the market to obtain more competitive prices for the large volume of additional work that the project created.

We recommend that:

the Assembly should ensure that it follows its internal procedures for all procurements in future projects and ensures appropriate involvement of the Assembly's central Procurement Unit.

PART 4

Crickhowell House and the Pierhead Building

4.1 The adaptation of the existing buildings on the Capital Waterside site has provided all of the accommodation currently occupied by the Assembly. Sufficient accommodation was provided in time for the opening of the Assembly, and additional works have since taken place to extend and improve the accommodation provided in Crickhowell House. This part of the report considers the work done to provide accommodation, and whether it was delivered to time, cost and quality standards.

Adaptation works

4.2 By the time a decision was finally made on the location of the Assembly, the timetable for the enabling works required was very tight. The Welsh Office had only twelve months to plan the adaptations, engage contractors, carry out the structural works and commission its own fitting out works. The timetable for the project and the dates achieved are outlined in Figure 12.

4.3 Although delays occurred during the works, these were managed effectively so that the whole project was completed in time for the opening of the Assembly on 26 May. The main causes of these delays were:

- the contract with the host broadcaster was not signed until 26 November 1998, (two months late) due to the need to rewrite the tender specification. This meant that key information on the requirements for broadcasting facilities was delayed;
- confusion and uncertainty about several aspects of the broadcasting contract. There was no clear agreement about which costs would be funded by the Welsh Office and which by the broadcasters, and about the arrangements for commissioning the works. As a result important structural works were delayed and the provision of broadcasting facilities for the opening of the Assembly was put in jeopardy (see paragraph 3.7 and case study A);
- changes and additions to the works' specification requested by Ministers and officials, notably the decision to convert the fifth floor of Crickhowell House for the Cabinet instead of using the Pierhead Building. Additional fire safety and general security features were also installed. This expanded greatly the scope of the works (see Figure 14); and
- unforeseen structural restrictions and the complexity of fitting out the chamber, for example the need to install structural support beams in the debating chamber.

Figure 12: Timetable for adaptation works	Figure 12: Timetable for adaptation works in Crickhowell House					
	Target date	Date achieved				
Completion of design and approval by Secretary of State for Wales		July 1998				
Sign lease agreements for Crickhowell House, adjacent land and Pierhead Building		l October 1998				
Appoint management contractor	August 1998	August 1998				
Commence works on site	September 1998	September 1998				
Completion of works by management contractor	28 February 1999	Phased				
Completion of fitting out works by Welsh Office	1 May 1999	occupation from 18 January to mid- May 1999				
Severe Netional Audit Office each size of Malah Office inform						

Source: National Audit Office analysis of Welsh Office information

4.4 There have been no disputes with the management contractor and the final account has now been agreed, 12 months after practical completion of the final stage of the works. The Assembly considers that it was a major achievement that there have been no claims from the management contractor on a project which had such tight time constraints and substantial variations to design during the course of the works.

Costs

4.5 The original project budget of $\pounds 17$ million included $\pounds 4.95$ million for equipping Crickhowell House as the Assembly building (Figure 13). There was a provision of only $\pounds 0.5$ million for adaptation works, based on the view that only a basic standard of accommodation should be provided for the Assembly's

temporary home. The same figure had been included in the economic appraisals of all options requiring a temporary home for the Assembly. This budget soon proved to be completely inadequate to provide the standard of accommodation that officials and ministers decided would be necessary for the Assembly, even on a temporary basis. In any case it became apparent that the budget needed to be increased to reflect the fact that Crickhowell House would provide much of the Assembly's permanent accommodation (for example most of the offices, the library and the restaurant) and to provide for the refurbishment of the Pierhead Building to an adequate standard. In July 1998, the then Secretary of State approved specific design proposals with an estimated cost of £2.8 million for Crickhowell House and £1 million for the Pierhead Building.

Description	Estimate I (February 1998)	Estimate 2 (July 1998)	Actual Expenditure		e between d Estimate 2
	£m	£m	£m	£m	%
Adaptations to Crickhowell House	0.50	2.80	4.90	2.10	75.0
Adaptations to Pierhead Building	-	1.00	0.82	(0.18)	(18.0)
Total adaptation works	0.50	3.80	5.72	1.92	50.5
Project management fee	s -	-	0.79	0.79	-
Furniture and fittings	1.25	1.25	2.03	0.78	62.4
Information technology: capital spending	3.20	2.25	1.49	(0.76)	(33.8)
Total expenditure authorised before devolution	4.95	7.30	10.03	2.73	37.4
Subsequent works	-	-	3.05	3.05	-
Total expenditure	4.95	7.30	13.08	5.78	79.3

Figure 13: Expenditure on Crickhowell House and the Pierhead Building

Source: National Assembly for Wales

Estimate I:

based on broad assumptions made before Capital Waterside was selected as the site for the Assembly

Estimate 2:

based on firm costings of specific design proposals in July 1998

4.6 Additions and variations to the design requested by officials and Ministers resulted in a cost increase of £2.1 million to £4.9 million for Crickhowell House. The main variations are shown in Figure 14. About £1.1 million of the increase is due to additional or enhanced facilities in Crickhowell House. A further factor is the decision by the then Secretary of State to house the Cabinet in Crickhowell House

rather than the Pierhead Building, as had been envisaged originally. This avoided physical separation of the Cabinet from other Assembly Members and made more efficient use of accommodation, but resulted in additional cost.

Figure 14: Main reasons for the increase in capital costs	
Adaptations	£000
Relocation of Cabinet from Pierhead Building to Crickhowell House and consequential costs	536
Additional features recommended by professional advisors and officials to provide safe and adequate accommodation:	
 Additional infrastructure and rooftop plant 	245
 Additional safety and security features 	383
 Improvements for disabled people 	91
Sub Total	719
Enhanced facilities required by officials and Ministers:	
• Redecoration, carpeting and fitting out of milling area and tea room	112
• Refurbishment of staff restaurant, coffee shop and Members' tea room	146
 Library and Members' briefing service 	68
Public address and division bell system	59
Sub Total	385
Omission from cost estimates of facilities for the media and host broadcaster	247
Other factors (mainly increase in cost of existing specifications)	211
Total adaptations	2,098
Project management fees (not included in estimates)	786
Furniture and fittings	782
• Increase in number of Assembly officials in Crickhowell House from 70 t	to 274
 High quality furniture for milling areas and Members' dining rooms 	
 Higher than expected cost of meeting the specialised requirements of the Chamber. 	
Accommodation improvements approved after the Assembly was establish	hed:
 Conversion of additional office space in Crickhowell House 	1,389
Air cooling in Crickhowell House	1,169
• Public information and education centre in the Pierhead Building	500
Total	3,058
Source: National Audit Office analysis of Welsh Office documents and project manager's rep	orts

ACCOMMODATION ARRANGEMENTS FOR THE NATIONAL ASSEMBLY FOR WALES

Figure 15: Annual running costs						
Description	Cost estimate	Actual cost	Diffe	erence		
	£000	£000	£000	%		
Crickhowell House						
Rent	1,273	2,232	959	75.3		
Maintenance and service charges	340	549	209	61.4		
Utilities and cleaning	204	248	44	21.6		
Business rates	425	506	81	19.1		
IT running costs	I,469	1,846	377	25.7		
Broadcasting	0	378	378			
Security	0	187	187			
Pierhead Building						
Rent	164	135	(29)	(17.7)		
Maintenance and service charges	60	33	(27)	(45.0)		
Utilities and cleaning	15	13	(2)	(13.3)		
Business rates	63	14	(49)	(77.8)		
Total	4,013	6,141	2,128	53.0		
Actual costs are based on the followir	og.					

Actual costs are based on the following:

I. Rent for Crickhowell House: Assembly Members and related staff occupying 118,600 square feet.

Maintenance and service charges, utilities and business rates: actual expenditure in 1999-2000.
 IT running costs: user charge for relevant staff under the IT Service Agreement with Siemens Business

Services, telephone costs and IT maintenance.

Source: National Assembly for Wales

Running costs

4.7 Running costs have a greater effect on the whole life cost of the building than the initial capital costs. The annual running costs of Crickhowell House and the Pierhead Building are 53 per cent higher than the estimates included in the economic appraisals (Figure 15).

4.8 Except for IT costs, the estimates in Figure 15 are those used in the economic appraisals. These were best estimates at the time the appraisals were prepared, and excluded an estimate for security and broadcasting costs, which were considered to be the same for all sites. Nevertheless, there are two major reasons why actual running costs have exceeded expected figures:

• The increase in the space occupied by the Assembly in Crickhowell House

The original schedule of requirements estimated that 80,000 square feet would be needed. In fact, the total amount of space required is now 118,600 square feet, an increase of 48 per cent. This is due to the increased number of people working in the building (an additional 22,000 square feet) and the need to provide space for the host broadcaster and the media (8,000 square feet - which was omitted from the original schedule of requirements). Since rent, business rates, maintenance and utilities costs tend to be proportionate to the amount of

space occupied, this is likely to account for about $\pounds 1.1$ million of the $\pounds 1.3$ million increase in these costs.

• An increase in the cost of the IT service provider

At the time that the economic appraisals were prepared, the specific needs for the Assembly in relation to IT were unknown and it was difficult to predict costs with any degree of accuracy. Once a detailed IT strategy had been prepared, it was estimated that revenue costs would average £1.47 million per year. The subsequent increase of £380,000 to £1.85 million reflects an increase in the number of staff (and hence in the user charge levied by Siemens Business Services under the PFI service agreement with the

Assembly) and some enhancement of the services provided.

4.9 These reasons for the increase in running costs would have applied irrespective of the Assembly's location. Figure 16 shows the change in staff numbers and the impact on the utilisation of space in Crickhowell House.

Further changes requested by Assembly Members and Staff

4.10 The Assembly's House Committee, which includes representatives of Assembly Members and staff, provides a forum for the discussion of accommodation and IT matters. There is general satisfaction with the facilities but certain improvements have been requested (Figure 17).

Figure 16: increase in staff numbers at Crickhowell House						
	Plan	ned	Actu	ıal		
	Number of staff	Space p/person	Number of staff	Space p/person		
Members and their staff	180	133 sq ft	200	154 sq ft		
Cabinet Secretariat and Press Office			70			
Office of the Presiding Officer (OPO)	70	120 sq ft	175	► 115 sq ft		
Corporate Support	J		19			
Assembly members and staff	250		464			
Office of the Secretary of State for Wales (OSSW)	0	N/A	14	106 sq ft		
Media	0	N/A	39	206 sq ft		
Catering	0	N/A	16			
Total	250		533			
Source: National Audit Office analysis of Welsh Office and Assembly information						

Figure 17: Further changes requested by Assembly Members and staff

Improvement requested

Chamber: larger, higher chamber with better acoustics and visibility (pillars obstruct view of some members) and larger public / press galleries. Construction of larger Chamber in new building. Public and press galleries will seat 130 instead of 50 currently.

Committee rooms: need for some larger rooms to accommodate larger public and press presence and to facilitate formal presentations.

Very cramped office space for administrative staff in Office of the Presiding Officer and Cabinet Secretariat due to increase in the number of staff. Additional 17,100 square feet of Crickhowell House will be converted for use by the Assembly (cost: $\pounds 1.4m$).

Office accommodation is very hot in summer Provision of air cooling system (cost: £1.2m).

Management Responses

Construction of larger chamber in new building. Public and press galleries will seat 130 instead of 50 currently.

New building will have three Committee rooms, of which one will be at least 100 square metres.

Additional 22,600 square feet of Crickhowell House has been converted for use by the Assembly (cost: $\pm 1.4m$).

Provision of air cooling system (cost: £1.2m).

Key points

The Welsh Office faced a challenging task to deliver the specified accommodation in time for the opening of the Assembly in May 1999. The Welsh Office met the final deadline in spite of delays and variations to the specification that occurred during the works.

The capital cost of the project has risen from an initial estimate of £4.95 million to £13.1 million, of which £3.1 million is due to decisions made after the establishment of the Assembly. The main reasons for this are:

- the estimate for adaptation costs (£0.5 million) was grossly understated as it was based on a basic standard for temporary accommodation. In fact much of the accommodation in Crickhowell House is permanent, and the budget was subsequently increased to £3.8 million to provide for an improved standard of accommodation and for the refurbishment of the Pierhead Building to an adequate standard;
- enhancements requested by ministers and officials as the works proceeded; and
- after the Assembly had been established, conversion of the additional space for staff and installation of air cooling.

Annual running costs have increased from an initial estimate of \pounds 4.013 million to \pounds 6.141 million (an increase of 53 per cent). This is mainly due to:

- the increase in the Assembly's space requirement from 80,000 square feet to 118,600 square feet, with consequent increases in rental, maintenance and utilities costs; and
- the annual cost of the Siemens PFI contract being higher than estimated, mainly because of an increase in number of users.

Source: National Assembly for Wales

PART 5

The New Building

5.1 The National Assembly voted on 21 June 2000 to continue with the design of the Richard Rogers Partnership for a new building on the vacant land between the waterfront and Crickhowell House. This part of the report considers how the design was selected, the development of the design and the reasons for the delay in the completion date, and the cost of the building. It also considers the results of the project review ordered by the First Secretary in March 2000, which led to a suspension of all work on the new building for three months.

The design competition

5.2 The then Secretary of State for Wales announced on 13 March 1998 that a new building would be constructed for the Assembly at either Bute Square or Cardiff Bay, and that a competition would be held to select the design. Two types of competition were considered: a competitive interview to select an architect who would then develop a design, and a full design competition in which a shortlist of architects would each submit a concept design according to a project brief. The Secretary of State decided that the Royal Institute of British Architects (RIBA) should manage a full design competition, as this would attract international talent and ensure the confidence of the profession. The competition was expected to cost in the range of £60,000 - £70,000 (the final cost was £119,000).

5.3 The task of running the competition and assessing the entries was entrusted to a design competition assessment panel of seven members, chaired by Lord Callaghan. The chairman and four members were appointed by the Secretary of State for their skills; the other two members were experienced architects appointed by RIBA to provide expert advice to the committee (Figure 18).

5.4 The Welsh Office also appointed a technical panel to provide advice on specific aspects of each design (Figure 19). These advisors were only engaged for the design competition and were not paid. They were not, therefore, subject to the normal procedures for public appointments. The technical sub-panel provided important advice, but this could not be definitive because the concept designs did not contain sufficient detail for an in-depth analysis and the advisors had only three days to prepare their reports. This limitation is inherent in concept designs and is an accepted part of the design competition process. Architectural design is an evolutionary process which requires detailed client involvement before costs become clear.

5.5 The competition was formally advertised in the Official Journal of the European Communities (a requirement of the public procurement regulations) on 13 June 1998. 55 responses were received from 9 countries, which were sifted by the Welsh Office and the RIBA panel members. The assessment panel selected 12 architects for interview in August 1998, of which six were invited to submit concept designs. These decisions were based on the experience, technical ability and technical and financial capacity to undertake the project. The six shortlisted architects were:

- Benson and Forsyth;
- Eric Parry Associates;
- Neils Torp with Stride Treglown Davies;
- Richard Rogers Partnership;
- Hasuko Hasegawa Atelier and Kajima Design Europe; and
- MacCormac Jamieson Pritchard.

Figure 18: Members of the Design Competition Advisory Panel

Member	Public position / basis of selection
Lord Callaghan of Cardiff	Former Prime Minister and MP for Cardiff East
Elinor Bennett	Harpist, member of the boards of HTV and the Arts Council of Wales
Angela Gidden	Businesswoman and designer; Welsh Woman of the Year 1998
Mike Reilly OBE	Managing Director of Calsonics Llanelli and member of the Welsh Industrial Development Advisory Board
Professor Robin Williams FRS	Professor of Physics and Vice Chancellor of the University of Swansea
Robin Nicholson	Architect, RIBA representative
Ian Ritchie	Architect, RIBA representative
Source: National Assembly for Wales	

Figure 19: Technical Advisors to the Design Competition Assessment Panel

Advisor	Advice provided
Professor P Jones (School of Architecture, University of Wales College of Cardiff)	Environmental issues associated with each design
Property Advisors to the Civil Estate (PACE)	Merit of each design in the context of government property development
Disability Wales	Access issues for people with a range of disabilities
Mr T George (broadcasting consultant)	Whether each design would enable the media to operate effectively
Grosvenor Waterside Ltd	Whether each design met the aspirations of the major landowner in the area
Professor R Silverman (School of Architecture, University of Wales College of Cardiff)	Whether each design was broadly in line with the policy of the Cardiff Bay Development Corporation
Symonds Group Ltd (project manager)	Whether each cost submission was broadly acceptable
Source: National Assembly for Wales	

5.6 The project brief prepared for the architects required a building to provide a Chamber, Committee rooms and offices (see Figure 22) within a gross internal area of 27,000 square feet, at a cost of no more than $\pounds 11.5$ million including fees and VAT (but excluding estates and legal fees, for which $\pounds 0.5$ million was set aside). Detailed appendices specified standards for security, access for the disabled, environmental performance, durability etc.

5.7 The design submissions were received on 5 October 1998 and examined by the technical advisors, who provided their comments to the assessment panel on 9 October. The panel met on 15 October and unanimously recommended that the design of the Richard Rogers Partnership be selected. The then Secretary of State accepted the recommendation and announced his decision on 16 October.

5.8 The technical advisors raised a number of important issues in their reports:

- five of the six designs (including the selected design) had features that exceeded the site boundary;
- most of the designs exceeded the gross floor area specified in the project brief; and
- Symonds Group Ltd (project manager) considered that most of the cost submissions underestimated the cost of the substructure and had inadequate provisions for contingency and preliminaries. They adjusted the cost of each design by between £136,000 and £1,257,000. Although the construction cost of all but one of the designs was below the £11.5 million budget, Symonds Group Ltd considered that the balance was insufficient in some cases to meet the likely cost of architectural and related fees.

5.9 However, the Design Competition Assessment Panel did not consider the architects' fee bids; nor did they form part of Symonds' cost review. This is surprising as the fees are a significant element of the overall cost, representing an average of 17.9 per cent of the construction cost. The Assessment Panel should have been able to consider the total adjusted cost (Figure 20). The National Audit Office Wales recalculated the cost for each option using the fee rates proposed by the architects, and found that the Richard Rogers Partnership's design was the cheapest for both construction and total costs. Nonetheless, it is good practice to consider all costs in assessing investment options.

5.10 The panel based its decision mainly on the broad quality of each design rather than the cost, size or extent of the proposed building. It considered that specific difficulties, such as the extension of the building over the site boundary, were not fundamental to the decision and could be resolved at a later stage of the design.

5.11 Overall, the design competition ran smoothly and it clearly achieved the objectives of attracting an internationally renowned architect to design a landmark building, and of securing the approval of the architectural profession for the way in which the competition was run. The assessment panel received comprehensive professional advice, although information on costs was incomplete because the architects' fees were not considered in the cost review.

Figure 20: Cost of designs submitted for the New Building Design Competition				
	Range of costs / rates			
Cost estimates submitted by the architects:				
Construction costs	£9.5m - £14.0m			
Total costs (including fees)	£11.2m - £16.4m			
Fee rate (as a percentage of construction costs)	12.15% - 20.48%			
Adjustment by Symonds Group Ltd following review of cos	sts:			
Construction cost	£9.8 m - £15.2m			
Adjustment by National Audit Office Wales:				
Total adjusted cost (including fees based on fee rate applied to adjusted construction cost)	£11.8m - £17.8m			
Source: National Audit Office analysis of Assembly information				

Key points

The National Audit Office Wales examined the design competition and found that:

- the Welsh Office made good use of the Royal Institute of British Architects to run the architectural competition and to provide expert advice to the Design Competition Assessment Panel;
- the Welsh Office also obtained external professional advice on the cost and design implications of each of the six shortlisted architect's submissions. Although these technical advisors only had three days in which to assess the concept designs, they found that five of the designs exceeded the site boundary, and that the cost of each design was understated; and
- the Design Competition Advisory Panel did not consider the architects' fees in its review of the costs of the six shortlisted architects. The fees added substantially, by between 12.2 per cent and 20.5 per cent, to the total cost of each design. Although including this cost did not affect the relative position of each option in terms of total cost, it is nonetheless good practice to include all costs when assessing potential investments.

We recommend that:

fee bids are included in the assessment of entries to any design competitions, or similar exercises, held in the future.

Development of the design

5.12 Figure 21 shows the development of the design following the conclusion of the design competition in October 1998. The initial timetable was for completion of the outline design in June 1999, completion of the detailed design in February 2000, commencement of construction in November 2000 and completion of the building in April 2001. The Policy Steering Group approved the outline design scheme at its meeting on 13 July 2000, a year behind schedule. The process has been protracted in order to:

- allow time for consulting Assembly Members and other users on the functionality of the building;
- incorporate the Assembly's changed requirements for the facilities in the building (Figure 22); and
- enhance public access, especially for disabled people. This has required major changes to the design, especially to the front of the building.

5.13 A potential cause for delay has been the need to negotiate with Grosvenor Waterside to acquire additional land. The building's footprint slightly exceeds the site boundary while the roof and external features (for example, the steps down to the dock wall) cover an extensive area outside the boundary. Grosvenor Waterside has agreed in principle to make available an acre of land at a peppercorn rent, in addition to the current plot of 1.06 acres. The Assembly will be liable for maintenance costs for the additional land, which are expected to be about £50,000 per year. However, no legal agreement to acquire the land has yet been reached. The substantial amount of additional land required indicates that the size of the site as originally purchased was not adequate for the planned building.

Figure 21: Develop	Figure 21: Development of the Building Design	Design	
Planned (Oct 98)	Forecast (Jun 2000)	Process	Outcome
Oct 98	Oct 98	Competition design	Richard Rogers design selected
		Concept Design	
Nov 98	Nov 98 – Mar 99	Delays due to: Part of building and external works not within site boundary.	Negotiations with Grosvenor Waterside, which has agreed in principle to lease approximately 4,000 square metres of land at a peppercorn rent.
		Uncertainty about treatment of dock wall. Assembly wishes to contain costs by leaving dock wall in place	Three options developed, costing between \pounds 0.6m and \pounds 1.4m. Decision to adopt cheapest option and leave dock wall in place.
		Decision to consult members on design	Initial design ready in March 1999 but further development was delayed until party leaders could be consulted in July.
	July 99	Outline design submitted to party leaders. Requested to: enhance mublic and disabled access: and	Revised proposals prepared with removal of all steps and fewer ramps inside the building.
		 alter facilities included in the design brief to reduce area from 4,043 m² 	Reduction in Committee rooms from six to three, offices for Business Managers removed to Crickhowell House
	Oct 99	First Secretary rejects revised design: need for better disabled and public access arrangements and more functional Committee rooms. This decision endorsed by the Policy Steering Group in December 1999.	 Richard Rogers Partnership prepare revised proposals: Harbour Drive raised to reduce gradient of access road to plinth Cut in steps to allow direct level access to entrance lobby Larger, wider chamber to accommodate 130 in public and press galleries Building reconfigured so that public access is on a single level above
	Jan 2000	Assembly issues statement of estimated cost: £22.8m $+$ contingency provision of £3.4m	
	Mar 2000	Revised design submitted to the Policy Steering Group for approval. Work suspended on project for review of costs.	
Mar 99 – Jun 99	Jun 00 – Nov 00	Outline scheme design	These forecast dates incorporate a six-month extension to allow for the delay caused by the project review (three months) and consequent
Jun 99 – Feb 00	Nov 00 – July 01	Detailed design	remobilisation time. Before the review was announced, the Assembly had agreed a programme with the project manager and architect which envisaged the completion of construction by May 2002, and occupation in
Nov 00 – Jan 01	Apr 01 – Oct 02	Construction	September 2002.
Feb – Mar 0I April 0I	Nov – Dec 02 Jan 03	Fitting out Occupation	
Source: National Audit	Office analysis of Welsh Offi	Source: National Audit Office analysis of Welsh Office and Assembly information	

Figure 22: Summary of changes between the competition design and the outline design

Zone	Competition design brief	sq. ft	Current outline design	sq. ft			
Debating Zone	Chamber for 60 Members (with capacity to expand to 80). Public and press galleries for 100	5,382	Chamber for 60 Members (with capacity to expand to 80). Public and press galleries for 130	5,963			
	6 Committee rooms	4,306	3 Committee rooms	4,446			
	4 - 6 meeting rooms	1,292	2 meeting rooms	291			
	Presiding Officer Dep Presiding Officer 8 Committee chairpersons	N/S	3 offices for Presiding Officer and Members 4 Business Managers Information point	667 947 1076			
Support Zone	Table/vote office Office for 6 other senior figures	N/S	Table/vote office Officials' briefing rooms	205 710			
			Members' tea room	1,313			
	Video-conferencing facilities	N/S	Video-conferencing facilities	248			
			Media briefing room	840			
			Equipment rooms, archives, storage areas, toilets	1,389			
Public	Reception and public area	N/S	Reception area	1,076			
Zone			Exhibition/education	1,076			
			Coffee bar	538			
			Cloakrooms, first aid, parent/child suite	979			
Other Ar	eas	N/S	Building services, main plant, storage and cleaner's room	5,780			
Total net internal area (square feet)26,91127,54							
External Steps leading from the front of the building to the water. No access road to entrance. Removal of Harbour Drive to front of building.			Dock wall retained with boardw outside. Steps down to Harbour in front of building.				
Note: Figu	Note: Figures are net internal area in square feet. N/S - not specified						
Source: Nat	Source: National Assembly for Wales						

5.14 In March 2000, as part of the project review ordered by the First Secretary (covered in paragraphs 5.28 - 5.33), the Assembly commissioned independent advice on the project programme from Turner and Townsend, a national firm of chartered surveyors. Turner and Townsend advised that the timetable was achievable, although there was very little leeway in it and the design

and procurement phases were particularly tight. The firm suggested extending the programme by 31 weeks to reduce the risk of an overrun occurring. The Assembly consulted its project manager and professional advisors and decided not to include such a contingency in the timetable; it will amend the programme only for the delay caused by the project review with some allowance for remobilisation of the project. Any delays in detailed design will be accommodated by rescheduling work or, if this is not possible, by extending the completion date. The Assembly aims to complete the building as quickly as possible to avoid additional costs, arising mainly from inflation but also from the opportunity cost of occupying space in Crickhowell House that could otherwise be freed for alternative use. Consequently, it wishes to maintain a tight schedule while acknowledging that the completion date can be extended if absolutely necessary.

5.15 The delays demonstrate the need for a clear timetable which includes sufficient time for consultation and revision of the design. The absence of any user involvement when the design brief was prepared was one of the reasons behind the subsequent delays in completing the outline design. There was no provision in the original programme for consultation with Assembly Members and other future users of the building.

Costs

5.16 The Welsh Office, on advice from PACE and from Symonds Group Ltd, set aside £12 million for a new building to house the Assembly and this was the figure included in the economic appraisal. This figure was based on average construction costs for a high specification building of 27,000 square feet, using cost rates published in surveyor's manuals. The Welsh Office asked the AYH Partnership, a firm of chartered surveyors, to consider the robustness of this estimate. They advised that $\pounds 12.5$ million would be a more prudent figure. The design competition was subsequently advertised on the basis of £11.5 million for works, including the architect's fees, related fees and VAT; £0.5 million was set aside for other professional management fees. The additional £0.5 million cost anticipated by the AYH Partnership was treated as an "undisclosed contingency" for the purposes of the design competition.

5.17 The Richard Rogers Partnership, which won the design competition, stated that their costs would be $\pounds 11.6$ million, comprising $\pounds 8.4$ million construction costs, VAT $\pounds 1.6$ million and fees $\pounds 1.7$ million.

5.18 Following substantial changes to the design of the building, the quantity surveyors employed by the architects (Hanscomb) prepared revised cost estimates which were presented to the Assembly in January 2000. These envisaged a likely final outturn cost of £22.8 million including fees and VAT (an increase of nearly double the estimate at the concept design stage). Hanscomb also recommended a contingency of £3.4 million (15 per cent of the total cost), accessible only with the consent of the Finance Secretary.

5.19 As part of the First Secretary's project review in March 2000, the Assembly commissioned independent advice on the cost estimates from Turner and Townsend. Their report estimates the likely outturn cost at £25.2 million, 10.5 per cent higher than the Assembly's estimate of £22.8 million. Turner and Townsend proposed a reallocation of the contingency fund, so that about half of it formed part of the likely outturn cost. With the inclusion of the contingency fund, Turner and Townsend's estimate of £26.5 million is close to the surveyor's (Hanscomb's) estimate of £26.2 million. However, the Assembly decided to retain the arrangement whereby none of the reserve may be used without the express permission of the Finance Secretary, in order to maintain a tight level of client control over costs. It has revised the likely outturn cost estimate by an additional £380,000 to reflect the cost of the three month project review. Of this, £210,000 is due to expected inflation over the longer period to completion, £120,000 to higher professional fees and £50,000 to additional VAT. However, if Turner and Townsend's judgement is sound, the prospect is that much of the contingency will be required.

5.20 Turner and Townsend also suggested that the contingency or risk allowance element should be expressed as

a range of possible outcomes, using a mathematical risk assessment methodology. For each risk, a value is estimated for average risk (a 50 per cent probability that the value will not be exceeded) and maximum likely risk (a 90 per cent probability that the value will not be exceeded). Turner and Townsend estimated a total contingency figure of £3.25 million for average risk and £8.4 million for maximum likely risk. The maximum likely risk would lead to a total project cost of £32.1 million, which is considered highly unlikely by the Assembly and its advisors. The Assembly's own contingency estimate totals £4.12 million, of which £700,000 is a five per cent design contingency that is incorporated into the construction cost and forms part of the £23.18 million budget. This is somewhat higher than the average risk assessed by Turner and Townsend.

5.21 The increase in costs from the \pounds 12.5 million estimated at concept design stage to the current estimate of \pounds 23.18 million falls into five main categories:

- a) corrections to the original estimates by the Richard Rogers Partnership, totalling £1.53 million (construction cost of £1.29 million and additional fees of £0.24 million);
- b) changes to the design instigated by the First Secretary, user groups (Assembly Members and staff) and advisory bodies such as Disability Wales. Substantial changes were made to the design (Figure 22) which resulted in additional costs of £2.23 million (construction cost of £1.88 million and additional fees of £0.35 million);
- c) omission of external landscaping from the original estimates (£1.65 million). None of the concept designs included external landscaping costs outside the site boundary, although each architect was invited to submit proposals for the treatment of external areas;

- d) cost of fitting out the building with computers, furniture etc (£1.89 million);
- e) professional fees specifically excluded from the original estimates (£1.54 million); and
- f) inflation of £1.8 million.

5.22 A significant factor in the overall increase in costs is the rise in the architect's fees. For the design competition, architects were asked to submit fee bids based on the management contracting procurement route, showing an indicative fee rate as a percentage of the gross construction cost (the base fee). This fee bid would form the basis of contractual negotiations with the successful architect and could be used to set a fixed fee. The Richard Rogers Partnership's bid was £1.98 million, based on 20.48 per cent of the construction cost (including VAT). Since then, the gross construction cost has risen to £16.7 million (an increase of 73 per cent), which would result in a base fee of £3.42 million. However, the final fee is expected to be substantially higher due to additional charges for a permanent presence on the site, additional specialist studies, and separate time-charged work that relates mainly to re-design work undertaken by the Richard Rogers Partnership at the request of the Assembly.

5.23 The Assembly is seeking to reduce these costs by requesting the architect to:

- reduce the base fee percentage to reflect the higher construction cost or, alternatively, to cap the level of fees paid;
- review the additional fees for redesign to remove any cost relating to work that was subsequently carried forward into the outline scheme design; and
- absorb smaller specialist services and expenses into the base fee, and to reduce the amount relating to expenses.

5.24 No contract has yet been signed between the Assembly and the Richard Rogers Partnership, although it is two years since the firm won the design competition and substantial work has already been undertaken. Negotiations are nearing completion but have faltered over the basis of the fee. The Richard Rogers Partnership is keen to maintain the fee as a percentage of the actual final cost, although this is likely to be at least 73 per cent more than envisaged at competition stage. This fee structure is standard for design competitions run by the Royal Institute of British Architects, but provides no financial incentive for the architect to identify savings or contain costs within the original budget. Consequently, it is important that the Assembly has a strictly impartial quantity surveyor to monitor costs who is independent of the architects. However, the quantity surveyor, Hanscombs, has been appointed by the Richard Rogers Partnership. In their independent report on the project, Turner and Townsend recommended that the quantity surveyor should be appointed directly by the Assembly. However, the Assembly considers that any risk is effectively neutralised by three factors:

- the contractual duty of the project manager to satisfy itself on the quality of the design team's work;
- procedures for the quantity surveyor to report directly to the project manager rather than to the architect first; and
- the quantity surveyor's professional duty of care and Hanscomb's national reputation.

5.25 It is good project management practice to include mechanisms in the fee structure of consultants that encourage savings, and to ensure that contractual relationships avoid potential conflicts of interest. The Assembly would have been in a stronger negotiating position if it had established the fee structure much earlier in the design process, even if the contract were not formally completed.

5.26 The Assembly has also made efforts to mitigate the cost of design changes by identifying savings elsewhere. Figure 22 shows that the number of committee rooms, meeting rooms and offices was reduced to partly offset the increase in space for media areas and additional facilities requested by Assembly Members. The Assembly has also kept down the cost of the external works by retaining the dock wall. Richard Rogers Partnership proposed that the steps should run down to the water's edge, which would have required the removal of the dock wall. This would have been expensive and would have resulted in high recurrent maintenance costs. The decision to retain the dock wall and Harbour Drive, with a boardwalk outside the wall, has saved the Assembly an estimated £900,000 and unquantified annual maintenance costs.

5.27 As well as these savings in capital costs, the new building is being designed to minimise maintenance costs and maximise energy efficiency. Accommodation running costs are expected to be about £300,000 per year. The Assembly plans to use value engineering techniques to assess the cost of different materials and aspects of design, so that best value for money is achieved over the whole life of the building.

Key points

The National Audit Office Wales examined the arrangements for developing the design for the new building and found that:

- the development of the design is now over a year behind schedule and completion of the new building is expected in January 2003, 21 months after the date originally planned;
- this delay is due mainly to amendments to the design to reflect changes requested by the Assembly Members and other users, improvements to access for the disabled and a desire to reduce the size of the building. The project review which took place between March and June 2000 has also delayed work for three months;
- the expected cost of the project has risen from £12 million to £23.2 million, with an additional contingency provision of £3.5 million, making a total of £26.7 million. The increase is due primarily to omission of key elements of the design from the original budget and design changes requested by the Assembly, together with associated fees; and
- one significant factor in the overall cost increase is the rise in architect's fees from £2 million to at least £3.4 million plus substantial charges for a permanent presence on the site, additional specialist studies and separate time-based charges mainly for re-design work. The fee is based on construction cost, which has increased significantly. The Assembly could have established a fee structure much earlier in the design process which would have strengthened its position when negotiating a reduction in the fee rate for the increased construction cost. The current fee structure provides no incentive to reduce cost, especially as the quantity surveyor is contracted to the architect and not to the Assembly.

We recommend that:

- the Assembly endeavours to negotiate a fee structure for the architect that minimises the relationship between the base fee and the final construction cost. The percentage fee should ideally be based on the original construction cost, with any additional fee based on time charges or lump sums for work done. If this is not possible, the percentage should become lower as the cost rises (ie a tapering fee);
- the Assembly considers either contracting directly with the quantity surveyor (at a modest additional cost) or engaging its own quantity surveyors to review the work of the design team; and
- fee structures are agreed at an early stage in future negotiations with consultants, even if contracts have not yet been signed, and preferably before the consultant begins work. Fee structures should include incentives to control costs tightly.

Review of the project

5.28 The First Secretary announced on 22 March 2000 that he was suspending all work on the new building in order to undertake a complete review of the project. This decision was endorsed by the Assembly on 6 April. The review included:

- an independent review of the costs and construction risks of the new building;
- the achievability of the timetable for its completion; and

 a consideration of possible alternatives to the new building.

5.29 The review of the building project was carried out by Turner and Townsend, a London-based firm of chartered surveyors, at a cost of £27,000. Their report generally confirmed the cost estimates for the new building (see paragraph 5.19) and suggested an extended programme to allow more time for design and procurement (paragraph 5.14). However, the Assembly decided to retain a tight

Figure 23: Economic appraisal of options considered as part of the project review

Option	Net present cost £m	Abortive costs £m	Capital cost £m	Completion date
A: Do nothing - cancel new building project and use existing accommodation in Crickhowell House	57.6	1.7	1.7	Immediate
B: Existing Richard Rogers Partnership design for new building	76.9	0	26.9	Jan 2003
C: Smaller new building on the vacant land	71.7	1.7	18.2	Jan 2004
D: Improve existing chamber in Crickhowell House by removing columns and increasing height	84.0	1.7	21.2	Sept 2003
E: Construct chamber on stilts above the car park in the courtyard of Crickhowell House	72.1	1.7	13.5	Jan 2003
F: Relocate to Cardiff City Hall	85.5	10.7	32.0	2003

Source: National Assembly for Wales.

The net present costs were estimated using the same methodology as for the previous economic appraisals in 1998, over a 15-year period from 1998. They include costs already incurred and abortive costs, which ought to be excluded when reaching an investment decision as only future costs are relevant. However, there is no effect on the relative position of each option if these costs are excluded.

The estimates for capital expenditure for options C - E are based on preliminary costings by the project manager and are inherently uncertain as no detailed project planning could be undertaken in the time available. Abortive costs for the Capital Waterside options comprise ± 1.05 m for costs already incurred on the new building, and an estimate of $\pm 600,000$ for damages payable to the architect on termination.

budget and timetable, amended only to take account of the £380,000 for the direct effect of the project review.

5.30 The review of alternative sites was led by the Assembly's Management Services Division with assistance from its technical advisors, PACE, and the project manager, Symonds Group Ltd. This review considered but rejected most of the sites that were previously considered in 1998 because of their unavailability or because of deficiencies in terms of location, cost and condition. Figure 23 shows the options that were appraised.

5.31 Cardiff City Hall was rejected because the building was unavailable for occupation, and had the same drawbacks as when it was considered previously. It was the most expensive option and

abortive costs in particular would have been very high, as much of the expenditure on Crickhowell House and the Pierhead Building would have been nugatory. All the other options involved the existing Capital Waterside site. Figure 24 shows the potential benefits of the various options.

5.32 The Cabinet recommended to the Assembly that the new building should be cancelled and a new debating chamber constructed in the courtyard of Crickhowell House. The Cabinet considered that this option was the most cost-effective way of meeting the Assembly's needs in a comparable timeframe and with only modest disruption and loss of office accommodation. The estimated capital cost would be only about

Figure 24: Comparison of the benefits of each option							
Benefit		Option					
	Α	В	С	D	E		
Avoids abortive expenditure	✓	1	×	×	×		
Robust cost estimates	✓	1	×	×	×		
No additional costs	✓	×	×	×	×		
Cost saving on Richard Rogers design	✓	-	1	×	1		
Provides a visible landmark building	×	1	×	×	×		
Avoids disruptive structural alterations to Crickhowell House	1	1	1	×	1		
Avoids loss of office space in Crickhowell House	✓	1	1	×	×		
No need for landlord's consent for alterations	✓	1	×	×	×		
Avoids risk of legal action by Grosvenor Waterside for breach of contract	1	1	1	×	×		
	✓ - (✓ - Option provides benefit					
Source: National Audit Office analysis of Assembly documents	★ - Option does not provide benefit						

half that of the Richard Rogers design for the new building, although the net present cost (over 15 years) would be only some six per cent less.

5.33 There was a risk of legal action by Grosvenor Waterside if the Assembly chose not to proceed with the construction of a new building on the vacant land next to Crickhowell House. The Welsh Office had signed an agreement with Grosvenor Waterside (the owner of the land and the landlord of Crickhowell House) that it would build a debating Chamber on the land within a reasonable time. This was part of the overarching agreement that included the extension of the lease on Crickhowell House.

The company stated shortly after the project was suspended that it would seek financial redress from the Assembly for the loss of rental income and value of its surrounding estate that it believed would result from the building not being completed. These potential costs are very difficult to estimate but might have been highly significant if any legal action by Grosvenor Waterside were successful and abortive costs could have far exceeded the $\pounds 1.7$ million included in the economic appraisals.

Key points

We found that:

- a comprehensive project review was undertaken between March and June 2000, which generally confirmed the cost estimates and resulted in a renewed commitment by the Assembly to the project; and
- there were significant legal risks if the Assembly decided not to proceed with the construction of a new building on the vacant site.

APPENDIX I

Accommodation requirements of the National Assembly for Wales

Requirement	Space pro	Space provision (square feet)			
	Estimated July 1997	Actual May 1999	Actual Oct 2000		
Chamber for 60 Members with press and public galleries, electronic voting and video screens for each member, and simultaneous translation facilities	5,000	5,825	5,825		
8 Committee rooms (now 5) with facilities for translation, broadcasting and public access	3,200	4,455	4,455		
6 informal meeting rooms (now 11)	1,200	2,343	4,894		
Offices for 60 Members and 120 researchers and secretaries. Planned: separate offices for members and their directly employed staff. Actual: each member shares office	24,000	26,202	30,770		
Individual offices for senior politicians and staff	1,200	3,727	3,727		
Open plan office space for 70 administrative staff (now 281)	8,400	14,416	30,418		
Reception and atrium	5,000	4,060	4,060		
Car parking for all members. Some car parking for visitors and staff, to be limited to what is available on the site.					
Secure entrance, closed circuit television and controlled access in the building	N/A	445	445		
Restaurant and catering facilities	5,000	7,650	7,650		
Library, making use of existing Welsh Office library in Cathays Park as much as possible	١,500	1,839	1,839		
Information technology network as operates in the Welsh Office. Modern telecommunications system.	I,200	3,578	3,578		
Host broadcaster and media areas	0	8,015	8,015		
Office of the Secretary of State for Wales (Cardiff branch)	0	I,484	I,484		
Usual facilities management systems for a large government office	5,000	4,755	4,755		
Add circulation space (estimated at 20% for July 1997)	12,140				
Total useable space	72,840	88,794	111,915		
Other space		7,175	6,678		
Contingency	7,160				
Total space requirement (net internal area)	80,000	95,969	118,593		
Note I - For the July 1997 estimate, a general allowance space. A further contingency allowance was added giving a total of 80,000 square feet.					

giving a total of output square rest. 2 - For the actual figures, most circulation space is included within the figure for each category. The "other space" includes certain common areas and space that is not currently used (of which some 4,000 square feet will probably be allocated to the Secretary of State for Wales).

Source: National Assembly for Wales

Accommodation arrangements for the national assembly for wales