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Report by the
Comptroller and Auditor General

The Foreign and
Commonwealth Office

The New British Embassy in Berlin

HC 585 Session 1999-2000
30 June 2000

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John Bourn	National Audit Office
Comptroller and Auditor General	20 June 2000

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Executive summary

1 In June 1998 the Foreign and Commonwealth Office (FCO) signed a contract for the construction, operation and financing of a new Embassy in Berlin with a German supplier called Arteos which had been formed by a consortium comprising Bilfinger + Berger, one of the three biggest German construction companies, and Johnson Controls, a large American-based facilities management provider. Arteos is expected to complete the construction of the Embassy in June 2000.

2 The contract provides for the construction of a new Embassy building and its operation for 30 years and is extendable by re-tender for a further 30 years. Arteos will construct and fit out the new Embassy. The FCO will make a unitary payment (80 per cent of which is fixed in German marks in nominal terms) estimated at £4.5 million a year for 30 years, which amounts to a net present cost of £49.8 million at 1997-98 prices.

3 In 1993, the FCO identified the need to acquire a new Embassy on or as soon as possible after September 1999, as the seat of the German Government was due to move from Bonn to Berlin by the year 2000. The FCO chose a site at 70-71 Wilhelmstrasse within walking distance of the centre of German Government in the heart of Berlin. This was the site of the pre-World War II Embassy in Berlin; the site was enlarged by the purchase of an adjacent plot for £6.5 million. A design competition was held in 1994 which was won by the British architects, Michael Wilford and Partners.

4 This was the first and so far only PFI accommodation project undertaken by the FCO. The PFI process commenced in 1996, which was two years after the design competition. The project was therefore unlike other PFI construction deals where bidders employ their own architects to create their own design. The FCO faced difficulties, because they had to undertake a novel form of procurement abroad, at a time when all parties were learning about the complexities of the PFI.

5 The FCO developed three main objectives for the project:

- to move the Embassy operation to Berlin by September 1999;
- to ensure they would not pay for services unless they received them and that payments would be adjusted according to the availability of the building and the quality of the service provided; and

- to ensure that the contract agreement demonstrated value for money.

6 We examined:

- how effectively the FCO managed the competition; and

- whether the FCO are likely to obtain a fit-for-purpose new Embassy in Berlin, whether risks were allocated appropriately, and at a lower cost than if they had undertaken the project using conventional finance.

7 The scope and methodology of our examination are described in Appendix 1. We received advice on legal and contractual matters from DJ Freeman and Partners and on property and construction aspects of the project from King Sturge & Co.

Despite some difficulties the FCO managed the competition effectively

8 The project began as a conventional procurement in 1994. In the light of a reduction by a third in the FCO capital budget in 1995 the FCO faced having to complete a more difficult project through the choice of a PFI route.

9 The competitive process was generally handled very effectively. The FCO obtained an impressive amount of interest in the project and sustained this up to the selection of the preferred bidder. There were bids from quality consortia, and the FCO chose the best of the three final bidders in terms of both price and quality criteria.

10 There were delays in the negotiation of the deal. In particular, it took 11 months to move from the appointment of the preferred bidder to financial close in June 1998 against a planned timetable of three months. The difficulties of incorporating an existing design into the PFI process accounted for some of the delay. The FCO recognises in retrospect that the original timetable was overoptimistic. But the overall estimated cost of the deal did not change significantly between appointment of preferred bidder and financial close.

11 The German subsidiary of Johnson Controls, a facilities management provider, was involved as a subcontractor to the winning bidder and as the facilities management provider to a rival bidding consortium. Although the FCO took steps to ask bidders about the make-up of their consortia, this process did not identify that the same facilities management provider was involved in both bids.

The FCO did not know of Johnson Controls' involvement in the Arteos bid until well after the appointment of the preferred bidder and Johnson Controls told us that they were similarly unsighted. We have found no evidence that the competition had been weakened as a result of these circumstances.

The FCO will obtain a suitable building at a price comparable with a traditional procurement

12 The architect's original design was to a high specification. The building, which is likely to be fit for the FCO's purpose, is now due for delivery in June 2000, eight months later than originally intended – a major element of the overrun arose from changes to the Berlin building regulations.

13 The FCO has the right to occupy the building for 30 years with a possibility of renewing occupation for a further 30. The FCO may share occupation of the building with third parties and obtain income for doing this. In addition, the FCO may occupy the building after 30 years by negotiating new terms or terminating the operator's agreement.

14 The FCO allocated risks appropriately in most key areas achieving a notable success in ensuring that all of the unitary payment is at risk under the contract, and passed over those construction risks which are usually transferred to the private sector in PFI projects and instituted a performance payments regime which transfers a good deal of performance risk to the consortium. The risks relating to the development of the design were shared, the FCO transferring risks associated with completing the design to the supplier.

15 When letting the contract, the FCO estimated that there was a small price advantage in the PFI deal compared with the cost of a conventional procurement. This view was based on a broad judgement of the estimated total costs of the PFI and the conventional projects. The value for money comparison is sensitive to assumptions made about the level of operating costs, risks, and the future exchange rate between sterling and the German mark, and the FCO examined these sensitivities and reflected them in their calculations.

16 The requirements of an Embassy are complex and there were specific planning constraints on this historic site. Because bidders adopted the outline design which had already been developed by the architects, the scope for them proposing design innovations was further limited. And the need for the FCO to take account of security requirements meant possibilities for innovation in design were constrained. The FCO have managed to achieve some innovation in the construction phase.

17 The FCO were advised by Dibb Lupton Alsop solicitors and Greenwich NatWest as financial advisors, with Chesterton Consulting (Katalysis) and Schal Property Services (Carillion) as technical advisors. A Berlin-based law firm advised the FCO on German law aspects of the transaction.

Recommendations

1. **We recommend that departments look to include provisions in contracts which ensure that all of the unitary payment due to the consortium is at risk.** In the Berlin Embassy project, the FCO achieved a notable success in including such a provision in the contract.

2. **We recommend that departments should find out from bidders the identities of all the parties to their bids so that they can take an early view on whether conflicts of interest exist.** In the case of the Berlin Embassy, the FCO were not aware that a German subsidiary of Johnson Controls had played a part in two of the three short-listed bids, although there was no evidence in this case that the competition had been weakened as a result of this.

3. **We recommend that departments should recognise that where they want bidders to demonstrate greater innovation it is more likely this will be achieved by asking bidders to produce their own designs**. In the case of the Berlin Embassy there was less scope for bidders to make their own innovations, particularly because the design had to take account of a complex brief, local planning regulations and security requirements.

4. **We recommend that departments should put themselves in a position to identify the reasons for major differences between the bids and the Public Sector Comparator, both in overall terms and in different elements such as construction and operating costs.** The FCO followed this as far as they could in the case of the Berlin Embassy, and focussed mainly on total cost comparisons.

Part 1: Despite some difficulties the FCO managed the competition effectively

In June 1998 the Foreign and Commonwealth Office (FCO) let a contract to a German consortium, Arteos,[1] for the construction of a new Embassy in Berlin and the provision of serviced accommodation for 116 FCO staff for a period of 30 years beginning in March 2000. This part of the report examines the way the FCO managed the competition up to the letting of the contract in June 1998. The scope and methodology of our examination is described in Appendix 1.

The FCO decided to commence a PFI process two years after the decision to build a new Embassy was taken

The FCO decided to build a new Embassy in Berlin early in 1994

1.1 In October 1993, following the reunification of Germany, the German Cabinet decided to move the seat of government from Bonn to Berlin by the year 2000. The German Parliament moved to its permanent location in Berlin in September 1999, and most of the German ministries are now located there.

1.2 The FCO wanted offices of approximately 7,000 square metres in Berlin to accommodate an estimated 200 staff at this stage. The FCO also identified the need for a good-quality representational and functional building to serve and advertise Britain in the new capital of unified Germany.

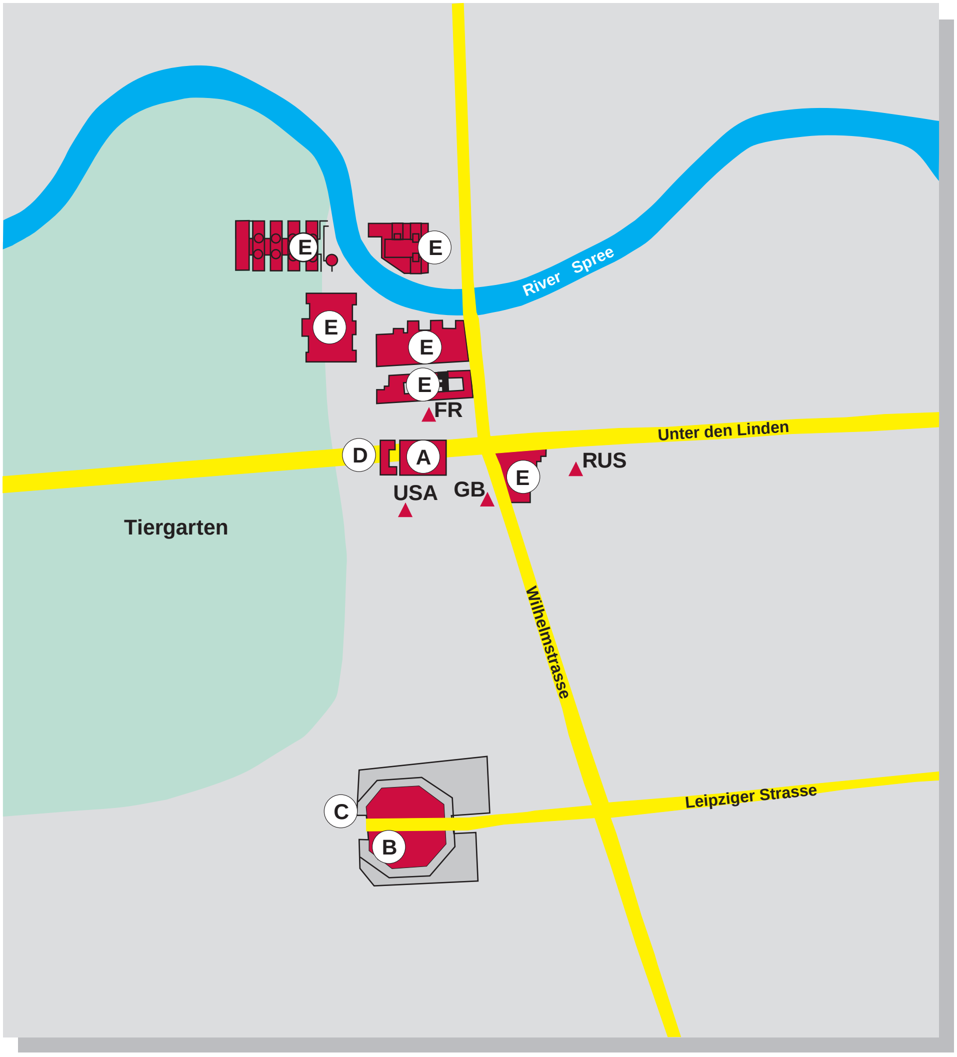
1.3 In February 1994, the Treasury gave approval to the FCO to proceed with the construction of a new British Embassy in Berlin on the site of the former pre-war Embassy in central Berlin, at a net present cost then estimated of £19 million (Figure 1).

1 The winning consortium was initially called Bebcon, and later changed its name to Arteos. For ease of understanding it is referred to as Arteos throughout the report.

Figure 1

The location of the New British Embassy in Berlin

The Embassy occupies a central position on the site of the pre-World War II Embassy



Scale1: 15,000

0 100 200 300 400 500 m

Key

A	Pariser Platz
B	Leipziger Platz
C	Potsdamer Platz
D	Brandenburg Gate
E	Bundestag
▲	Embassy

Source: The NAO

1.4 The project began as a conventional procurement. The FCO organised a design competition and in February 1995 appointed a team of architects, Michael Wilford and Partners, and consulting engineers, Whitby and Bird, to develop their winning scheme. Design work began in March 1995, and the FCO proceeded with the purchase for £6.5 million of that part of the site which they did not already own.

A reduction in the FCO's capital budget made a conventional procurement unattractive

1.5 In the 1995 public expenditure round the FCO's capital investment programme for the following three years was cut by approximately a third. The FCO concluded at the end of 1995 that it would be very difficult to fund the new Embassy from the capital budget and also leave resources for other estate requirements around the world. In deciding to pursue a PFI procurement, the FCO had reservations about whether the full potential benefits of PFI could be achieved on this project. This was because:

- the site had already been selected;
- a design acceptable to the local planners had already been developed;
- the site had been designated for diplomatic premises, so restricting the scope for commercial development; and
- inviting alternative and possibly innovative designs could prejudice achievement of their target completion date.

In February 1996 the FCO changed to a PFI approach

1.6 The FCO proceeded to test the market for a PFI scheme. At the same time, with a view to minimising overall delay, the existing design team continued to develop their design in close co-ordination with the FCO and the Berlin planning authorities.

1.7 In the latter half of 1995 and early 1996 the FCO clarified whether a PFI project was likely to be feasible, investigated options for proceeding with the PFI competition, and recruited advisors to the project. The FCO commissioned a feasibility study into PFI options which reported in September 1995. The report concluded that there were feasible PFI options for the development of the

Embassy. The FCO then proceeded to test potential interest with five suppliers on the basis of the Wilford design. Estimates of the net present cost were obtained and compared with the net present cost of the traditional procurement route (Figure 2). On the basis of this, they concluded in February 1996 that a PFI scheme was a viable proposition.

Figure 2

Estimated costs of procurement options

The market test showed a PFI procurement could offer value for money

	Operator 1	Operator 2	Operator 3	Operator 4	Operator 5	Conventional Procurement
Net Present Cost £million	49.6	51.1	50.6	49.6	49.6	64.2

Note: These estimates are not directly comparable with the later bids as they assume a 20-year rather than 30-year concession.

Source: Schal Property Services

The competition was launched in June 1996

1.8 The FCO advertised for bids in the Official Journal of the European Communities (OJEC) in June 1996. Before finalising the advertisement the FCO considered a number of design options:

- inviting bids on the basis of the Wilford design already under development and partly paid for. The FCO recognised, however, that the Wilford design brief did not make maximum use of the site;

- inviting bids for a scheme which developed the site at a higher density, still based on the development of the Wilford design, and using the additional space to accommodate other users. Commercial use was, as noted above, constrained by planning restrictions; and

- inviting bidders to develop new designs which maximised the development potential of the site.

1.9 The FCO recognised that following the principles of PFI would support adoption of the final option, but decided it would delay delivery of the Embassy unacceptably. They concluded that the best option was to retain the main elements of the Wilford design while allowing some commercial development of the site.

1.10 The OJEC advertisement therefore called for bids based on development of the Wilford design and retention of the existing design team (Figure 3). Bidders were asked to suggest additional activities consistent with diplomatic use and the planning regulations. In the event proposals received for commercial development were not pursued by the FCO because the benefits did not merit the additional risk including higher security risks and higher costs which would have been incurred .

OJEC Advertisement for Berlin Embassy

Figure 3

The advertisement called for bids based on the development of the Wilford design

Realization, construction and equipping of the development; facilities management, including the provision of all appropriate services; financing of the project. The awarding authority's requirements for the Embassy are complex and have been worked out in detail following a design competition. Drawings will be made available and potential operators will be expected to develop them and to retain the design team. The building will be occupied by the British Embassy. Prospective operators may suggest additional activities that would be consistent with diplomatic use and the planning regulations.

Source: The FCO

The FCO obtained wide interest in the project and selected the best bid

Twenty seven consortia expressed interest in the project and a shortlist of three were invited to bid

1.11 Following the publication of the OJEC notice in June 1996 the FCO received 27 expressions of interest. These bidders included companies from a wide variety of countries including the United Kingdom and Germany. From these 27 potential bidders, the FCO chose nine bidders who were invited to provide a submission supporting their proposal and to make presentations to the FCO and their advisors.

1.12 The presentations were made in October 1996 after which the FCO chose a shortlist of three bidders who were invited to make bids. These bidders were Arteos, Embassy Partnerships and NorWest Holst/Campenon Bernard SGE. All of these included well-known companies capable of meeting the FCO's requirements (Figure 4). The FCO emphasised that the fact that details of the Wilford scheme were included in the Invitation to Tender did not indicate a particular commitment to that scheme, as opposed to any other design. The Invitation to Tender did not stipulate that bidders would be expected to develop the Wilford design, as was stated in the OJEC advertisement.

The short-listed consortia

Figure 4

The FCO chose a shortlist of three consortia to prepare detailed proposals

	Construction company	Facilities management	Equity finance	Loan finance
NorWest Holst/Campenon Bernard SGE	SGE Hoch-und Ingenieurbau	Symonds Group Limited	Campenon Bernard/SGE NorWest Holst Charterhouse Bank Ltd	Bank of Scotland IKB Deutsche Industriebank
Embassy Partnerships	Kajima	Johnson Controls	Innisfree and Kajima	Bond issue underwritten by Sumitomo Bank or bank loan from Nord Deutsche Landesbank
Arteos	Bilfinger + Berger	Klüh, replaced by Johnson Controls after appointment of preferred bidder	Bilfinger + Berger K G Allgemeine Leasing BdW	Dresdner Bank

Source: Bidders' proposals

1.13 In April 1997, each bidder submitted a bid to the FCO containing their proposals as to how it would build the Embassy and provide services to the FCO over 30 years. All three bids met the FCO's basic requirements as expressed in the tender documentation supplied to bidders, though there were aspects, notably regarding security requirements, which were not developed as part of the bidding process but were priced after the submission of the bids. The FCO did not reveal the security requirements to the short-listed bidders at this stage because these requirements were sensitive.

Two of the short-listed bidders included the same facilities management company as a service provider

1.14 The facilities management services in the Arteos bid were to be provided by Josef Klüh, a German company with offices in Berlin, although the bid also made clear that some of these services were to be subcontracted to an unnamed strategic alliance partner. This subcontractor was the German subsidiary of Johnson Controls, a large American-based facilities management provider. The individual representing Klüh in the Arteos bid was on secondment from Johnson Controls.

1.15 The facilities management element of the rival Embassy Partnerships bid was also to be provided directly by the same German subsidiary of Johnson Controls. Bilfinger + Berger have told us that they were not aware that Johnson Controls were involved in another bidding group. In January 1998, several months after the appointment of Arteos as preferred bidder, Johnson Controls with the FCO's approval assumed full responsibility for the provision of the winning consortium's facilities management services in place of Klüh, who had withdrawn.

1.16 Johnson Controls told us that, although the German subsidiary would have provided the services in either case, the two bids were handled by separate business units: an English subsidiary in the case of the Embassy Partnerships bid, and a German subsidiary in the case of the Arteos bid. As a result, Johnson Controls corporately was not aware that the company had participated in two bids until January 1998 when the German subsidiary became an official partner in the Arteos bid, and reported this fact to Johnson Controls' international management.

1.17 The FCO had taken steps to establish whether conflicts of interest existed by asking each bidder to provide full details of the legal entity making the bid including the building contractor and the facilities manager, but this did not reveal that Johnson Controls were a subcontractor in the Arteos bid. The FCO did not know of Johnson Controls' involvement in the Arteos bid until well after the appointment of the preferred bidder but there is no evidence that it in any way weakened the competition.

The FCO chose the best of the three final bidders

1.18 The FCO carried out a well-managed evaluation process which concluded that the winning bidder, Arteos, was not only the cheapest in price but also offered the best-quality bid in most other areas. The FCO scored the bids against accommodation, service and legal requirements (Figure 5). The legal evaluation was based on a scoring of each bidder's response to individual clauses in the draft agreement, combined with an overall assessment of the deliverability of the proposal. The financial evaluation was based on the estimated cost of the bids to the FCO. The FCO's evaluation of the costs at this stage did not represent the expected payment under the contract, as the bids were adjusted to allow comparison on a like-for-like basis, but there was a clear price advantage in the Arteos bid (Figure 6).

Figure 5

Evaluation of bids against accommodation, service and legal requirements

The bid from Arteos scored highest in two of the three evaluation areas

Requirement	Arteos	Embassy Partnerships	NorWest Holst/Campenon Bernard SGE
Accommodation	160	148	97
Services	1398	1162	1174
Legal[2]	129	105	184

Notes: 1. The scores are the total points awarded for various aspects of each requirement.

2. FCO did not update these interim scores.

Source: The FCO

1.19 The Arteos proposal was clearly ahead of the other two bids in the evaluation of accommodation and service requirements. Although the interim legal evaluation favoured the NorWest Holst/Campenon Bernard SGE consortium, partly because Arteos was considered to be risk averse, FCO decided that the benefits of Arteos's proposal in the other areas of evaluation outweighed this. Following further negotiation about the terms of the bid, Arteos was appointed as the preferred bidder at the end of July 1997.

Figure 6

Comparative costs of short-listed bids and public sector comparator

Arteos submitted the lowest bid and was significantly cheaper than the public sector comparator

Arteos Net Present Cost £ million	Embassy Partnerships Net Present Cost £ million	NorWest Holst/Campenon Bernard SGE Net Present Cost £ million	Public Sector Comparator Net Present Cost £ million
38	**51**	**52**	**48**

Source: FCO evaluation, June 1997

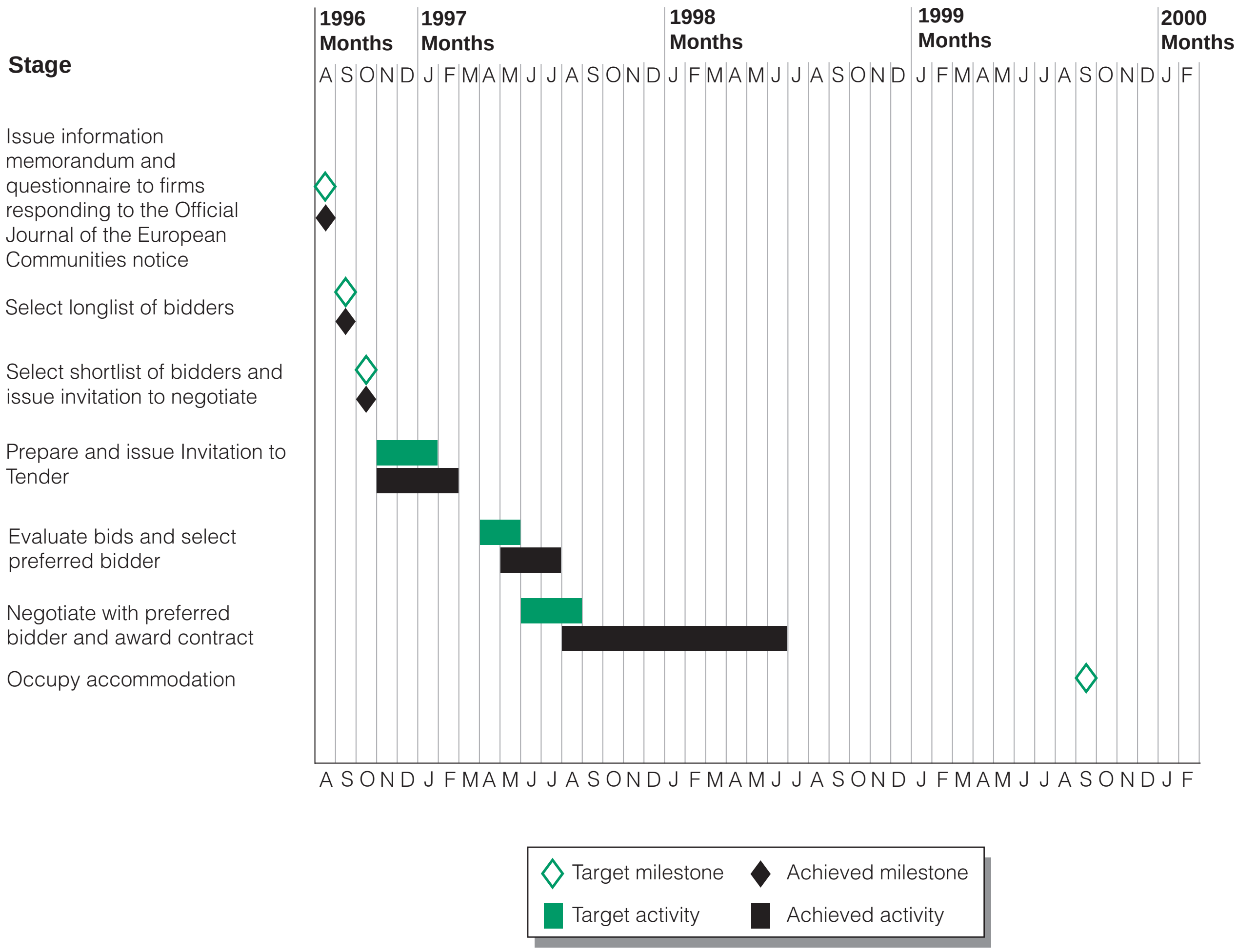
Negotiations with the preferred bidder took longer than expected

1.20 The shortlist of three bidders had been selected in October 1996. Because the FCO, its lawyers and other consultants had to finalise the tender documentation including the output specification which set out the detailed service requirements of the FCO, the Invitation to Tender could not be issued to the three short-listed bidders until February 1997. The Invitation to Tender set a target of selecting the preferred bidder in June 1997 and achieving contract award by

September 1997, leading to occupation of the Embassy by September 1999. As noted already, the preferred bidder was selected in July 1997. Up to this point the FCO had overrun its timetable by only one month.

Figure 7 **The Procurement Timetable**

The principal delays to the timetable occurred during negotiations following the selection of the preferred bidder



Source: National Audit Office

1.21 At the time of issue of the Invitation to Tender, the FCO's target for reaching financial close was September 1997 (Figure 7). In the event financial close and contract award were not achieved until June 1998 some nine months beyond the target date. The FCO expects to achieve handover of the Embassy in June 2000, eight months later than the target date in the Invitation to Tender.

Delays occurred whilst novation of the architect's and the engineer's agreements took place

1.22 Because the project had begun as a conventional procurement, the agreements between the FCO and the architect and the engineer made no provision for any third party to take over the FCO's client role. But given the eventual decision to retain the design under development by Michael Wilford and Partners, and for the requisite degree of risk transfer to the PFI to take place, the successful bidder would have to take on that role. To effect this a legal process known as novation was required. The FCO recognised that novation of the design development to Arteos would also act as a disincentive to the FCO to request changes to the Embassy design. Such changes had typically increased construction costs by a quarter on FCO projects managed in-house. This process was one factor in delaying the signing of the deal.

1.23 One of the FCO's conditions when appointing the supplier was that the supplier should achieve novation as soon as possible. They also stipulated that the supplier should employ the design team on the existing terms of their appointments. The supplier was in the event unwilling to accept the existing terms and wished to reduce the scope of the design team's services and, as a result, their fees. The design team resisted Arteos's revisions to the terms agreed under their contract with the FCO.

1.24 An agreement was reached that the FCO and Arteos would each pay the design team £50,000 for lost fee income and the design team would forgo a further £50,000. The FCO considers that this payment facilitated the novation of the architect's agreement at a difficult time and contributed to the achievement of novation in December 1997. In the FCO's view, the agreement of novation terms avoided later legal problems and achieved the right allocation of risk.

The FCO provided bidders with an output specification and a scheme design prepared by the architects

1.25 The OJEC notice stated that bidders would be expected to develop the Wilford design. The Invitation to Tender, however, expressed the FCO's requirements in output terms, without specifying a design solution. There was a general description of the criteria that the building should meet (Figure 8).

Invitation to Tender: Criteria for the building

Figure 8

i) the building must be fine in appearance and welcoming in its public aspects. It should represent the best in architecture and design. It should be identifiably British and project British interests;

ii) the building should be effective and efficient in operation and flexible in its internal layout;

iii) the building should provide a secure environment for the user, but the design should not be overbearing; and

iv) it should be economical to maintain and run and give good value for money.

Source: The FCO's Invitation to Tender

1.26 The requirement included, for example, details of minimum office sizes, general requirements such as the need for "suitable finishes appropriate to an Embassy type building" and some more specific security requirements. Requirements for services were expressed in output terms without reference to the Wilford design (Figure 9).

The FCO's service requirements

Figure 9

The FCO tendered for a full range of services

Type of service	Definition
Primary services	Capital expenditure on services relating to safety, security, environmental control and public health.
Secondary services	Capital expenditure on other building-related items – eg mechanical and electrical services, building fabric, communications, building management systems.
Tertiary services	Revenue expenditure on items such as cleaning, reprographics, mail and portering service.

Source: The FCO's Invitation to Tender

1.27 Short-listed bidders were also given full details of the Wilford scheme design which was under development, though this did not include all specifications for materials, finishes or services. The Invitation to Tender emphasised that bidders could offer alternatives to the Wilford design if they wished. These would, however, have to meet the FCO's output requirements and also meet the required occupation date of September 1999. Bidders were instructed that the output specification should take precedence over the Wilford design in the case of inconsistency. In the event, all three short-listed bidders used the Wilford design as the basis of their bids. Bidders told us that they would have incurred extra costs if they had designed a new Embassy from scratch and these costs would have been reflected in higher bids.

The architect and engineer had to do considerable work to develop the design

1.28 The FCO had instructed Michael Wilford and Partners and Whitby and Bird to stop work on the design development in May 1996. At this stage the main elements of the design had been agreed though not all the detailed design work had been done.

1.29 The FCO agreed with Arteos during the negotiations leading to the appointment of the preferred bidder that the FCO would take responsibility and pay for the design to be developed to the point where it was submitted for planning approval (Stage 4 in the design team's contract). When the preferred bidder was appointed in July 1997, there was considerable design work remaining in order to complete Stage 4. Bilfinger + Berger told us that they considered that the delays in the project timetable at this point were mainly caused by the delayed design process.

1.30 During the period July to December 1997 the design team were still contracted to the FCO, although in the FCO's view it was the supplier's responsibility to control design development to keep within the £17.1 million construction cost estimate they had included in their bid. In November 1997, the supplier asked the FCO to agree an increased construction cost estimate of £24 million. The increase in cost was partly due to changes in FCO requirements but also due to development of the design in a way that was not consistent with the supplier's bid.

1.31 The FCO refused to fund all the increased construction cost and the design was revised to remove or redesign some of the more costly elements while remaining within the output specification. The design team was given an extra two months to carry out the additional design work required which delayed the FCO reaching financial close. The supplier bears the risk that the stages of the design completed after novation do not conform to the FCO's output specification.

After selection of the preferred bidder the FCO's estimated total cost of the deal did not change

1.32 In recommending to Ministers the appointment of Arteos as preferred bidder in June 1997, the FCO ensured a like-for-like comparison of the short-listed bids by stripping out items not common to all three. The resulting £38.5 million was not the final cost of the project because some items had been stripped out and because the FCO knew that certain items, such as the cost of utilities, had not been finalised at that stage by any of the bidders.

1.33 During the course of our examination of this project, the FCO has estimated that the full cost of the deal, taking into account these other items, would have amounted to £50.1 million at the time the preferred bidder was appointed. The net present cost of the deal immediately prior to financial close in June 1998 was £51.0 million. This then fell to £49.8 million at financial close because Arteos was able to take advantage of a lower interest rate in the arrangements for hedging against interest rate changes over the concession period. This means that during a period of over 11 months exclusive negotiation with Arteos, there was no adverse movement in the price to be paid to Arteos for the deal.

1.34 The difference between the stripped down figure used to compare the three short-listed bids and appoint the preferred bidder (£38.5 million) and the full cost of the deal at the time of that comparison and appointment (£50.1 million) was mainly due to:

- obtaining more accurate cost estimates for utilities and tertiary services;
- changes in FCO assumptions and external economic conditions;
- the additional cost of risks transferred to the supplier; and
- the cost of security and additional items.

a) Cost of utilities and tertiary services

1.35 The FCO used a very broad estimate of the cost of utilities (power, heating, water and sewerage) of about £3 million when comparing the short-listed bids. The FCO later agreed to pay an extra £0.3 million over the life of the contract in return for the supplier accepting the risk of changing utilities consumption. The FCO benchmarked this estimate against a database of utilities cost information held by their technical advisers, Schal, who advised the FCO that the program used by the supplier to estimate utilities consumption and costs was internationally recognised and that the FCO could be confident in its validity. During negotiations the FCO transferred the “energy consumption risk” for the building to the operator so that the operator has underwritten the energy efficiency of the building design, in terms of anticipated energy consumption costs.

1.36 The FCO also included a broad estimate of the cost of tertiary services (such as portering, mail and reprographics) of £3.8 million at the bid stage. Detailed estimates were not sought from bidders at this stage because the FCO intended to put these services out to competitive tender later in the process. By June 1998 more precise estimates totalling £5.3 million were calculated following discussions with the supplier. The actual amount payable will be decided following competitive tendering for these services prior to the Embassy handover. The tendering process has not yet been finalised, but the FCO’s estimate of the likely cost of tertiary services has now fallen to £3.3 million.

b) Changing economic assumptions

1.37 The FCO also refined the methods used to evaluate aspects of the bid, such as the weighted risk of sterling devaluing or appreciating against the German mark, the refining of the FCO’s method of calculating FCO staff costs, and changes in FCO discounting assumptions. The changes were intended to improve previous estimates of the contract price and added a net £2.9 million to the FCO’s estimate of the cost of the deal.

c) Additional risks transferred

1.38 The supplier had agreed to accept liability for German trade tax (a tax on profits) up to a level of 14.5 per cent. During negotiations in July 1997 before the appointment of the preferred bidder the supplier agreed to accept all trade tax risk in return for an additional payment of £2.1 million.

1.39 At the time negotiations between the supplier and the FCO were proceeding about trade tax, the FCO did not make a quantified assessment of what the likely trade tax burden might be. The FCO considers that German trade tax might rise higher or faster or both than expected; if that happens, this risk has been transferred to the supplier and would represent an additional benefit to the FCO.

1.40 The supplier also agreed to accept costs which might be payable as a result of changes in health and safety legislation up to the end of the third year of the operating phase of the contract. Following negotiations in July 1997, the supplier also agreed to accept costs of up to £200,000 a year in Years 4 to 31 of the operating phase of the contract. In return, the supplier received an increased payment of £1.2 million. This arrangement was designed to encourage the supplier to take steps to minimise its liability for health and safety payments. The agreement reached also ensured that the supplier will meet all costs incurred in Years 4 to 30 of the operating phase of the contract where those costs resulted from changes in health and safety legislation up to the end of the third year of the operating phase of the contract.

1.41 The FCO did not carry out a quantified assessment of what they might have to pay by way of payments to the supplier for changes in health and safety legislation. The FCO considers, however, that the large-scale building work in Berlin is causing the Berlin authorities to take a much more rigorous approach to health and safety which is likely to increase the burden of this risk to the supplier.

d) Costs of security and additional items

1.42 There were a number of refinements which the FCO made to the cost estimates, which were chiefly required to price sensitive security requirements, which were known about but had not been finalised at the time the preferred bidder was selected. These adjusted the total cost estimates by £2.6 million.

The FCO appointed advisors after full competition

1.43 The FCO appointed all of their principal external advisors following fully competitive processes. They did not set budgets for the advisors at the outset of the project because they considered that the project was then at too early a stage to set meaningful overall budgets. They set budgets and monitored outturn on an annual basis. The FCO budgeted to spend £2.9 million over the period 1996-97 to 1999-2000, and the total spent was £1.7 million (Figure 10).

Advisors' Costs

Figure 10

The FCO spent £1.7 million on advisors to the Berlin Embassy project

	Actual Costs £000
Property and management advisors – Chesterton	302
Legal advisors – Dibb Lupton Alsop	842
Financial advisors – Greenwich Nat West	272
Project management advisors – Schal	218
Tax advisors – Ernst and Young	66
Others	40
Total	**1,740**

Source: The FCO

Note: These figures are inclusive of expenses.

Part 2 : The FCO will obtain a suitable building at a price comparable with a traditional procurement

This part of the report examines whether the project will deliver the FCO a suitable building which is fit for purpose as an Embassy. It analyses whether the PFI deal is more expensive than if the project had been undertaken as a conventional procurement, and whether the FCO have managed to allocate risks appropriately in key areas.

The project is likely to deliver a suitable building

2.1 Sixty three architects responded to the design competition for the Embassy following which Michael Wilford and Partners were appointed in February 1995. When bidders were invited to tender for the PFI contract, the draft contract stipulated the quality of the building and services required so that it would be consistent with the design and fit for purpose. The Embassy will therefore have the full range of political, defence, registry, communications, commercial, economic, science and technology, information, consular and management and security functions contained in one purpose-built building.

2.2 The contract also provides for basic services such as electrical supply, furniture, heating, lighting, security, telephone systems and water. A key aspect of the building being fit for purpose is that the Embassy should be secure. The FCO's security experts have therefore been involved in the planning and the execution of the project and are satisfied that the building will be secure but will nevertheless present a welcoming appearance.

2.3 Under the contract, the operator is required to maintain a contingency fund of £307,000 for up to two years after the agreed occupation date. This fund may be used to finance changes requested by the FCO. The FCO changes agreed so far have all been funded from the contingency fund. Examples of these changes are:

- a revised layout in the Embassy secure zones;
- plumbing/wiring in secure zones;
- the supply of cupboards to office recesses; and

- provision of five pay telephones in public areas.

2.4 Initially only 12 per cent of the construction cost in the bid was allocated to finishes and fittings, somewhat below the average for a high-quality United Kingdom office building. However, between the bid and the contract signing, Arteos agreed to spend more money on the fit out and finishes in response to changes asked for by the FCO. In particular, more was spent in fitting out the secure zones in the Embassy and in improving the appearance of the ambassador's suite. The FCO told us the extra expenditure on the ambassador's suite was to ensure it was fit for the intended purpose of underpinning the FCO's activities in Germany, and for increasing the impact, and respect for, British foreign policy and values, by projecting an up-to-date image of modern Britain. The supplier told us that the building was designed to a high specification and fits in with the original requirement of the FCO for a landmark design. Both the supplier and our advisors King Sturge & Co agree that the building, as ultimately designed and finished, was designed to a high specification and achieved the requirement of the FCO for a landmark design.

2.5 As noted above, because of the sensitivities involved in Embassy security matters, bidders were not given details of the FCO's requirements for works in the secure zones in the Embassy. Instead, the FCO and Arteos discussed the security requests before Arteos was appointed as preferred bidder, and an estimate of £1.5 million was agreed for work required to fit out and furnish these areas. A further £1.1 million was later required to enable Arteos to comply fully with additional FCO security requirements. The FCO cross-checked these additional costs against their experience elsewhere of the cost of ensuring that buildings met security requirements.

2.6 Given that under local planning law the site was zoned for diplomatic purposes only, the Embassy was not designed with the opportunities for future flexibility of use as a key consideration. The FCO have obtained the right to share occupation and will also be able to generate income by granting a licence to third parties. The FCO's sponsorship advisors estimate that the FCO could generate up to £1.3 million in sponsorship revenue in the first two years of operation of the Embassy.

2.7 At the end of the 30-year operating concession, the FCO will be able to continue to occupy the Embassy. The FCO can carry out a market test at that time to decide which operator should be allowed to operate the concession for a further 30 years. The FCO can either negotiate continued occupation with Arteos or terminate the agreement prior to its expiry which would oblige Arteos to transfer the building rights back to the FCO or to a new operator. Arteos's position is protected in that if Arteos ceases to operate the concession to provide services to the FCO at the end of 30 years the FCO will pay an open market valuation of the building as compensation. This arrangement is intended to give an incentive to Arteos to maintain the building to a good standard in order to maximise the open market value.

The contract allocates risks appropriately in key areas

The supplier bears construction risks and those risks associated with the detailed development of the design

2.8 The contract provided that should Arteos fail to hand over the Embassy to the FCO by the end of February 2000, the FCO would not make any payments to Arteos until the Embassy was ready (unless delay was caused by the FCO or by *force majeure*). To achieve handover and thereby commence payments to the supplier, the FCO must first certify that construction has been completed and services are fully in place to their satisfaction. In the absence of this certification, the FCO can under most circumstances terminate the project agreement without payment of compensation. In the event of late delivery of the Embassy, the contract also provided for Arteos to pay the FCO liquidated damages at a rate of about 30,000 German marks a day for a maximum of 100 days. Capped liquidated damages are considered normal in Germany. Following handover, the FCO will fit out the secure zones in the Embassy which are required to enable the Embassy to function. It is expected this process will take from three to four months.

2.9 It is preferable that departments entering into PFI agreements review the main suppliers' arrangements for subcontracting work which is vital to the delivery of the overall project. The purpose of such a review is to ensure that the risks borne by key subcontractors and the incentives to manage those risks are consistent with the structure of risks and incentives in the main contract. If this is not the case, the subcontractor may not be properly incentivised to achieve the Department's objectives.

2.10 The FCO's advisors reviewed the supplier's main subcontracts for the construction and maintenance of the Embassy and the supply of facilities management services. They concluded that Arteos had transferred practically all the risks contained in the project agreement. The FCO considers that the more important protection, of FCO interests, arises through obliging the supplier to comply with the output specification.

2.11 As a result of the novation agreements with the architects and engineers (see paragraphs 1.22-1.24) the FCO transferred risk associated with completing the design after novation to the supplier. The FCO did, however, warrant to the supplier that to the best of its knowledge the architect and the engineer had met all of the FCO's requirements and that no statutory authority had objected to the FCO or to its agents in respect of the existing design of the project. The FCO recognised that the architect and the engineer were in a strong negotiating position and that making such a warranty was required if they were to make progress in novating the agreements which was a key step prior to securing the PFI deal.

2.12 The FCO obtained collateral warranties from the main subcontractors: Bilfinger + Berger as the building contractor and Johnson Controls as facility manager, and a bank guarantee from Bilfinger + Berger up to a maximum of £2.2 million during the construction phase.

The Embassy is expected to be delivered in June 2000

2.13 In November 1999, Arteos told the FCO that it expected there would be a nine-week delay (from 29 February to 2 May) to the completion of the Embassy resulting from a change to the Berlin building regulations. Arteos argued that the change constituted a change of law, thus constituting a risk largely retained by the FCO. The FCO argued that the issue was a health and safety matter and so was a risk retained by Arteos.

2.14 After negotiation, the FCO and Arteos negotiated an alteration to the original provisions for liquidated damages. Under these provisions Arteos would have paid the FCO 1.92 million German marks for a nine-week delay. Instead of paying liquidated damages, Arteos withdrew its claims that the issue was subject to change of law provisions and agreed to meet all the capital and financing costs of the building regulation changes. Arteos also agreed to absorb the full costs of all changes to the contract since signature; the FCO estimates this is worth 850,000 German marks.

2.15 In addition, if Arteos did not deliver the Embassy before 3 May, a lump sum of 420,000 German marks and 45,000 German marks per day liquidated damages (50 per cent higher than the original agreement) would be payable. And if Arteos failed to deliver the Embassy by 2 June Arteos would pay 60,000 German marks per day thereafter (i.e. double the original liquidated damages). The FCO obtained advice from its lawyers, its PFI advisers and the Treasury taskforce that the dispute had been settled "in a manner beneficial to the FCO, producing a good example of PFI working in practice". The FCO considers that these arrangements maintained its good relationship with Arteos, improved provision for any FCO changes; obviated the risk of these causing delays; and ensured that the later the supplier delivered the building, the greater the financial compensation which the FCO will receive.

2.16 The building was not handed over on 2 May 2000. Liquidated damages are therefore being applied under the terms of the "settlement agreement." It is expected that the building will be handed over in June, in advance of the official opening, by The Queen, on 18 July 2000.

Operational risks are borne by the supplier

2.17 The FCO's unitary payment to Arteos every month for the provision of accommodation and services will commence once handover has been completed. The payment comprises:

- an availability element related to availability of each room in the Embassy; and

- a service element relating to the provision of secondary and tertiary services.

2.18 If service faults occur which are serious enough to affect availability of the building, Arteos will forfeit the whole or part of the unitary payment for that period. The contract also stipulates that if 75 per cent or more of the building is unavailable for a month no payment is due, which should encourage the supplier to ensure the Embassy is kept open.

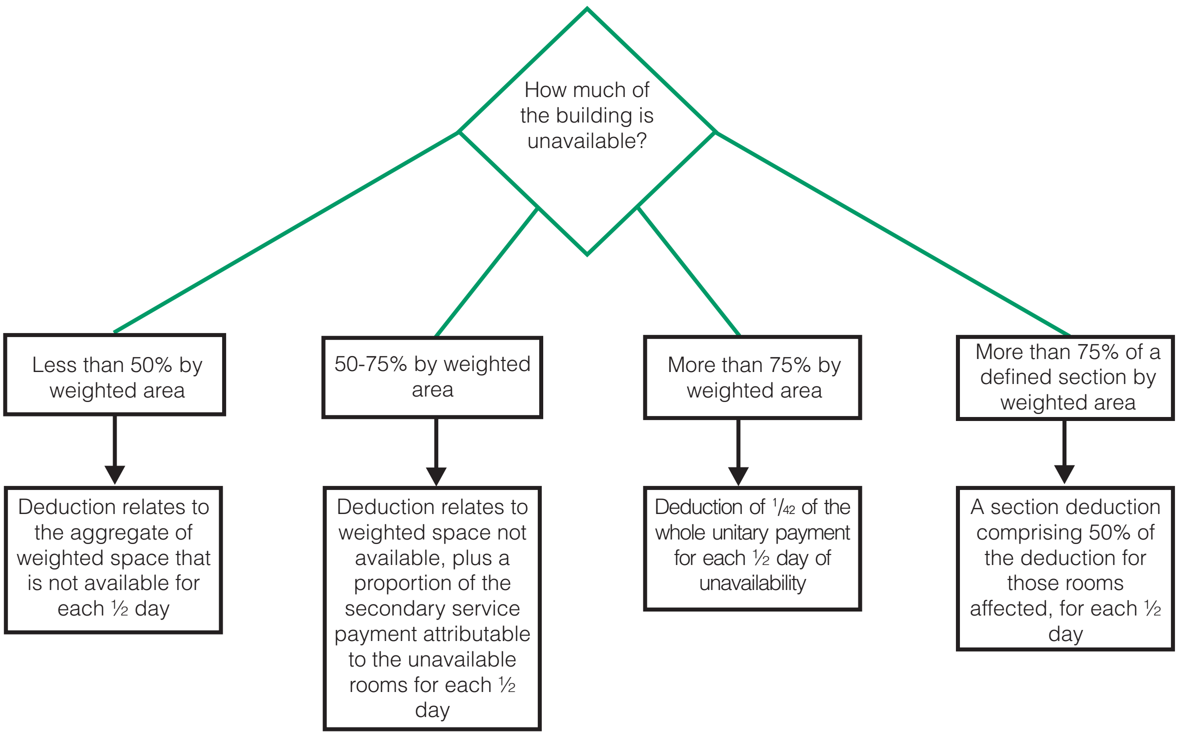
2.19 The Embassy is notionally divided into sections for the purpose of defining the criticality of areas of the building, with key areas such as the Ambassador's suite being the most critical. This weighting is then used in determining the unavailability of the building and therefore the level of deductions from the availability payment which should be incurred. This should ensure key parts of the Embassy form the supplier's highest priority for maintenance.

2.20 The payments regime is designed to incentivise the operator to remedy any defects which occur to avoid paying financial penalties. The mechanism for reducing the monthly unitary payment when parts of the building become unavailable is shown in Figure 11.

Figure 11

Availability deduction regime

The amount of the deduction depends on the floorspace unavailable and how critical it is to the FCO



Source: The FCO

2.21 If, during the period that a room is unavailable, the FCO uses it for any reason, the deductions cease for the period of such reoccupation. The FCO cannot claim unavailability for a room and make deductions while, at the same time, using that room and possibly hindering the supplier in his attempts to remedy the problem. The FCO has access to such an "unavailable room" in order to retrieve material such as equipment or papers.

2.22 The FCO has achieved a reasonable position in concluding this agreement in the context of a building with offices. Under the contract the supplier may suffer a deduction from the service payment because a room has a defect even though the FCO continues to occupy it. As is recommended by Treasury guidance, the supplier should only receive a full unitary charge to the extent that the service is available to the required standard. Deductions should either be made from the performance payment (the approach taken by the FCO) or from the availability charge.

2.23 The FCO's payments system which relates to the operator's standards of performance incentivises the operator to remedy poor performance. Figure 12 explains the mechanism for reducing the service-related element of the unitary payment when failures in service occur. Arteos can avoid payment reductions even if it provides poor service for one month if it is able to remedy the problem so that there is a good service provided for the following three months.

2.24 The FCO has ensured that it will only pay for consumption of utilities up to the levels agreed with Arteos regardless of actual consumption, although the FCO will bear the risk of utility prices increasing, or achieve savings if utility prices fall.

Inflation risk relating to about 80 per cent of the payment is borne by the supplier

2.25 Just under 80 per cent of the unitary payment is fixed in German marks in nominal terms, subject to satisfactory performance over the 30 years of the contract, if the Embassy is made available to the FCO to use. The remaining portion of the payment is subject to amendment each year depending upon the change in a German price index and can also vary according to Arteos's performance.

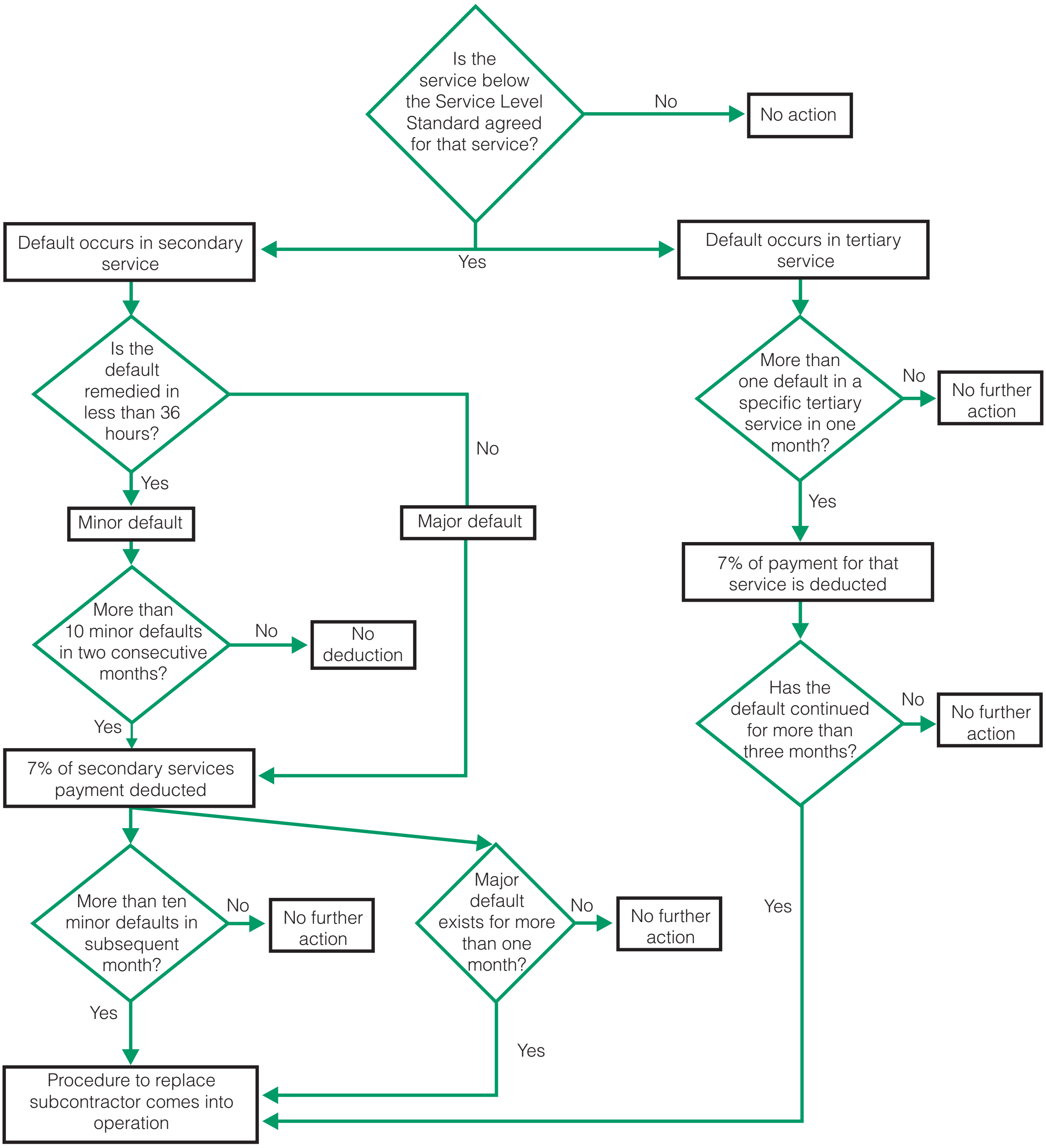
2.26 The FCO has therefore transferred inflation risk to Arteos with regard to the availability element of the payment. In addition to the portion of the payment subject to indexation, a number of facilities management services such as cleaning, porterage, mail, stores and reprographics are subject to market-testing every three years.

The supplier bears several key business risks

2.27 We examined the financial model produced by Arteos and found that the business appears to be able to survive significant reductions in income or increases in cost without requiring additional financing according to key cover ratios. These ratios, which are used in the financial appraisal of projects, measure the extent to which current and future liabilities to lenders are covered by available cash flows. Arteos expects to obtain an internal rate of return on equity of close to 15.5 per cent, which is comparable with the return sought on similar projects in the United Kingdom, although the more mature PFI market in the United Kingdom tends to produce lower cover ratios. It is difficult to compare with other projects in Germany given the lack of PFI projects.

Figure 12 **Service deduction regime**

If service defaults are not remedied within a specified period, the contractor responsible can be replaced



Note: 7% is the percentage profit of the consortium on service provision.

Source: The FCO

2.28 The FCO has retained the risk that the cost of tertiary services will change over the course of the contract. These services are subject to competitive tendering every three years with the result that the cost of these services will be passed through to the FCO so this risk will not be borne by the supplier.

2.29 The FCO also retained the risk that German value added tax may change. During negotiation it was agreed that if the rate of value added tax changed during the period of the contract, the FCO would reimburse any value added tax which is not recoverable from the German authorities, whilst any reduction in the rate of value added tax would benefit the FCO.

2.30 The FCO should obtain the Embassy even if Arteos goes into liquidation because the banks financing the project will wish to ensure their loan is repaid and the best way to ensure that happens is by finding another operator to complete the project. A structure is provided for this in the Direct Agreement between the FCO and the banks, giving the banks rights to propose a substitute operator. In the event that the banks did not wish to exercise their step-in rights for any reason, the FCO would have to arrange completion of the project, although the FCO would benefit from the expenditure incurred by Bilfinger + Berger up to their withdrawal from the project. In these circumstances it is uncertain whether the target handover date would be achieved because of the need to find a new supplier.

2.31 If Arteos was to go into liquidation the banks' claims for repayment of their loans would be better secured than any possible FCO claims for damages in case of a breach by the supplier of the project agreement. This is a common provision in a PFI agreement, but the provisions on Arteos's financial standing are also satisfactory in providing the FCO with some security, as Arteos is obliged to hold certain levels of cash reserves and equity holdings. In addition, the agreement with the banks provides for bank security to fall away on termination of the agreement, which means that it is in the interest of the banks to ensure that Arteos performs or if necessary to replace Arteos.

The FCO should obtain the Embassy at a price comparable with a conventional procurement

The FCO's analysis showed that the overall costs of a conventional procurement and the preferred bid were very close

2.32 The FCO drew up a public sector comparator to test whether the PFI option represented value for money compared with the cost of a conventional public sector procurement over the duration of the agreement. The comparator was intended to show the cost, including an allowance for risk, of constructing the Embassy using a conventional construction contract and running the Embassy over 30 years. When the decision was taken to award the contract to Arteos in June 1998 the FCO's analysis showed that the PFI route had a small price advantage of £1.2 million (£51.0 million for the PFI bid compared with £52.2 million for the comparator). This would imply that the higher costs of using private finance in place of Government borrowing were just outweighed by the cost savings offered by Arteos's bid. The FCO proceeded with the PFI option on that basis.

2.33 The FCO concluded at the time the project was submitted to Ministers for approval in June 1998 that a decision to proceed would involve having to find an extra £4.3 million in the first year of operation. They considered that taking into account the overriding need to have a functioning Embassy in Berlin that the project should proceed and that they would have to ensure that the costs were accommodated within their existing budget.

The comparison was limited by lack of cost data from the bidder

2.34 The prime purpose of a public sector comparator is to aid the procuring department, in this case the FCO, form a judgement about the relative value for money of a proposed PFI deal and a conventionally financed alternative option. A secondary but important purpose is to enable the department to understand the economics of the PFI bid. A comparison of broad cost and revenue headings can show where the PFI bid seeks to outperform the conventional alternative. In the light of that information, the department can consider whether there are lessons from the bid which might be applied elsewhere, and, in the event of gross discrepancies between the comparator and the PFI bid, may have a basis for questioning the deliverability of the PFI bid or the reasonableness of the public sector comparator.

2.35 For the quantified comparison between the PFI deal and the public sector comparator to form a sound basis for a judgement on which alternative offers better value, the comparison needs to satisfy a number of criteria:

- the calculations must be internally consistent and sufficiently accurate for the purpose;
- the assumptions on which the public sector comparator are based should be consistent with those underlying the PFI proposal which is under consideration;
- the cost assumptions underlying the public sector comparator should be reasonable, should include allowance for risk, and should reflect a reasonable estimate of the likely outturn were the public sector option actually to be implemented; and
- the sensitivity of the comparison to changes in key assumptions should be examined.

2.36 In this case, the FCO's calculations were both accurate and internally consistent. As regards the consistency between the public sector comparator and the PFI bid, the FCO was not in a position to compare the level of construction and operating costs or their make-up under the two procurement options. Arteos declined to provide its cost model to the FCO during negotiations so the FCO did not have the full detail of Arteos's costs. The FCO obtained the cost model during the course of our study and are of the view that meaningful comparisons of the cost model and the comparator were not possible because the two were not constructed in the same way and could not have been reconciled.

2.37 Lacking details of Arteos's costs, the FCO could only undertake a limited comparison between the Arteos bid and their conventionally financed alternative option to test the reasonableness of its own and of Arteos's cost assumptions. Given the unique character of its posts, the FCO found it difficult to obtain comparable information on the likely costs of operating and providing services for the new Embassy. As a result, most of the operational costs included are the best judgements FCO professional staff could produce at the time.

The main uncertainties are the risks and operating costs of the public sector option

2.38 As regards allowance for risk in the public sector comparator, the FCO assumed that the most significant risks would be FCO changes to the design before and during construction (which would add to the construction cost), claims for normal insurance risks, changes in the Embassy staff complement and therefore space requirements, and changes to security and service requirements in the operating period (which would add to the operating costs).

2.39 The quantification of risks inevitably involves a degree of judgement. For the risks associated with the construction of the Embassy, the FCO was able to draw on data on cost overruns on FCO conventionally procured construction projects. But in valuing operational risks, a number of judgements had been made. The initial valuation of risk, at £25 million net present cost, appeared too high, and was reduced in later versions of the comparator. The final valuations which the FCO placed on construction risk (£4.1 million) and operating risk (£10.6 million) are shown in Figure 13.

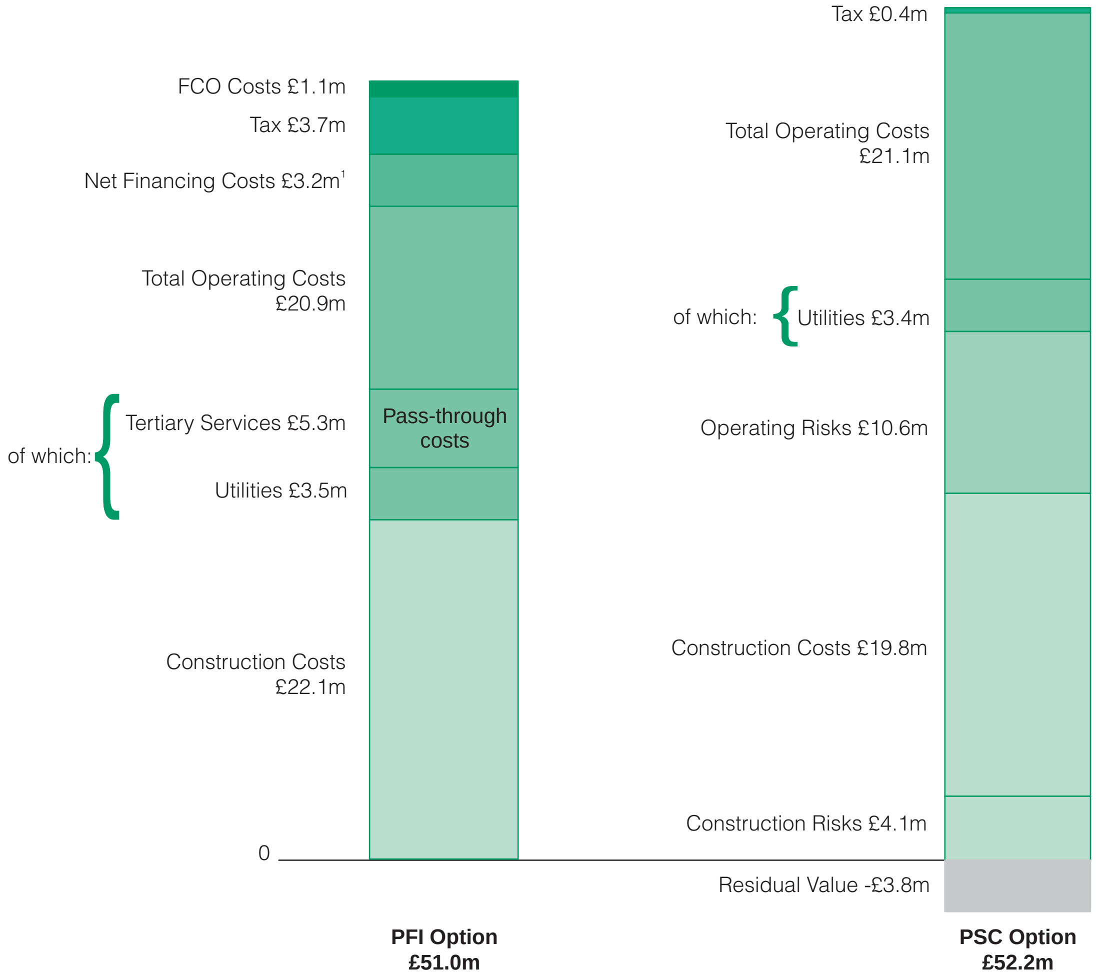
2.40 Finally, as regards the sensitivity to changing assumptions of the conclusion that the PFI deal and the public sector comparator offered very similar costs, the FCO examined in detail a number of exchange rate scenarios. These scenarios were based on assuming a variety of stable exchange rates from various dates. This analysis showed that the cost of the preferred bid could vary between £45.7 million and £53.6 million, depending on exchange rates in the short term. Similar analysis was applied to the public sector comparator, resulting in a range from £49.3 to £56.6 million. Since the contract was let, sterling has appreciated against the German mark, making the PFI option relatively better value for money.

2.41 In the light of information about Arteos's forecast costs which was made available to us during this examination, we examined further sensitivity tests, as shown in Figure 13. This analysis led to the following conclusions:

- some of the costs which would fall to Arteos in the first instance could be passed on to the FCO, but there would need to be very unfavourable movements in these costs to render the PFI deal significantly worse value than the public sector comparator; and

- the public sector operating costs are not fully comparable with the operating costs in Arteos's model.

Figure 13 **Comparison of the PFI Option and the Public Sector Comparator**



These columns show the overall net present cost of the PFI deal and the Public Sector Comparator are similar. There are three main areas where elements of these totals could vary.

1. PFI Operating Costs capable of being passed-through to the FCO.
   - ❖Tertiary services and utilities currently account for £8.8 million. The outturn of these costs could be higher or lower.
   - ❖20 per cent of the total payment to be made by the FCO is subject to indexation

2. PSC Operating Costs of £31.7 million.
   - ❖PSC Operating Costs are not directly comparable with PFI Operating Costs of £20.9 million.
   - ❖This in turn means the PSC's operating costs cannot be substantiated by reference to the PFI figures.
   - ❖Robustness of PSC is dependent on the FCO's judgement of likely level of operating costs and risks.
   - ❖The FCO have assumed they will not market-test support services over the 30 years of the Embassy operation.

Note: 1. The financing costs under the PFI option are net of the residual value to Arteos of the building lease, estimated at £4.6 million.

Source: National Audit Office

The qualitative benefits of this project compared with those provided under traditional procurement are likely to be small

2.42 Since the financial comparison between the PFI deal and the public sector comparator is so close, we examined whether there are qualitative differences between the two which might indicate which option would be the better choice. In this case the chief difference would arise through the scope for innovation.

The scope for innovation in design was limited

2.43 In most PFI construction projects bidders are asked to employ their own architect to design a building which conforms to the Invitation to Tender produced by the commissioning authority. The FCO made clear to bidders that they were at liberty to submit their own design for the Embassy and were not bound to use the design produced by Michael Wilford and Partners. Nevertheless none of the final bidders chose to submit an original design. Bidders told us that it was not practical to use their own architect given the time constraints requiring the Embassy to be completed by September 1999.

2.44 In most PFI construction projects much of the opportunity to innovate in design is based on the design proposals of the bidders. Because bidders adopted the design which had already been developed, the scope for them proposing design innovations was limited. Embassy Partnerships did propose variations on the Wilford design which involved placing apartments on the roof of the Embassy which might be let out to third parties. The FCO considered this proposal did not conform with FCO's security requirements and the potential income from the third party revenue stream did not merit the additional risk and higher unitary charge.

2.45 The Wilford design adopted for the Embassy assumed a conventional procurement. The design therefore provided accommodation for directly-employed FCO staff who would deliver the secondary and tertiary services for the Embassy. Under the PFI procurement these secondary and tertiary services were to be provided by the supplier's staff.

2.46 The FCO considered how to reflect in the output requirement the accommodation for the staff providing services to the Embassy. The FCO decided not to specify the number of staff to provide these services, as service provision could be the supplier's responsibility. But to allow for the eventuality that FCO might have to take over the running of these services during or at the end of the concession, the FCO asked bidders to make proposals to provide necessary accommodation for 169 staff.

There is some scope for limited innovation in the design and construction phase

2.47 The FCO considers that Arteos has managed to deliver innovation in the provision of the heating/cooling system using six rather than seven air-handling units which will result in a lower price to the FCO. In addition, the nature of the 30-year PFI contract gives the bidder incentives to introduce innovations at a later stage which could reduce costs for the operator.

Appendix 1

Scope and methodology of our examination

Scope

1 We examined how effectively the FCO managed the competition to choose a preferred bidder and whether the FCO are likely to obtain a new Embassy in Berlin at a lower cost than if they had undertaken the project using conventional finance.

Methodology

2 We applied, with appropriate modifications where necessary, the standard methodology described in our report *"Examining the Value for Money of deals under the Private Finance Initiative"*. This methodology develops detailed points for examination from high-level audit issues. In this case, the high-level audit issues and the subsidiary questions we addressed were as follows:

a) **Did the FCO manage the competition to choose a preferred bidder effectively?**

- We examined the impact on the project of the FCO's decision to commence the PFI process two years after the decision to build a new Embassy was taken.
- We analysed the issues which the FCO had to address in planning the procurement, testing the market, seeking and evaluating bids and negotiating with the prospective supplier.
- We investigated why the original timetable for the procurement had slipped by nine months and the difficulties surrounding the novation of the architect's and the engineer's agreements.
- We investigated the reasons for the increase in the estimate of net present costs between evaluation of the short-listed bids and financial close.

b) What are the costs to the FCO of building a new Embassy using the PFI?

- We examined whether the project is likely to provide the FCO with a suitable building which they could occupy as an Embassy for a period of up to 60 years.

- We evaluated the contractual documentation to examine whether risks had been allocated appropriately and with the party best placed to manage those risks.

- We analysed the Public Sector Comparator compiled by the FCO to form a view on whether the FCO could have achieved a lower price if they had undertaken a procurement using conventional public sector finance. In particular we compared the operating costs of the supplier and the operating cost estimates made by the FCO.

- We examined what qualitative benefits this project might deliver because of its nature as a PFI project. This involved examining the scope to which innovation in construction was possible given that the project was taken forward as a publicly financed project before the commencement of the PFI competition.

The evidence comprised documentary evidence from the papers of the FCO, and discussions of the project with staff at the FCO, their advisers, British Embassy personnel in Berlin, the supplier, unsuccessful bidders, and other interested parties.

The use of external technical experts

3 Following competitive tendering processes, we engaged the following organisations to provide specialist advice:

- King Sturge & Co, property consultants, who were engaged to advise chiefly on the property market and the construction industry, the construction contract, whether the construction and design represent value for money, and assumptions in the financial model.

- DJ Freeman, solicitors, who advised on aspects of the contractual arrangements and how the risks were allocated between the parties.

Appendix 2

Chronology of key events

February 1994	FCO obtained Treasury approval to fund construction of new Embassy in Berlin using conventional procurement route.
February 1995	Architects and engineers appointed to design the new Embassy.
September 1995	Report commissioned by FCO concluded that PFI was feasible option.
December 1995	Site at 71 Wilhelmstrasse purchased by FCO from German Government for £6.5 million (70 Wilhelmstrasse already owned by FCO).
December 1995/June 1996	FCO internal discussions on right approach to a PFI procurement.
June 1996	Advertisement for PFI procurement placed in Official Journal of the European Communities.
August 1996	Information and questionnaire issued to firms.
September 1996	Longlist of nine potential bidders was produced by team of FCO and their advisors.
October 1996	Interviews with nine firms on the longlist produced a shortlist of three bidders.
December 1996	Invitation to Negotiate issued to bidders.
February 1997	Invitation to Tender issued to three short-listed bidders.
April 1997	Bids received.
May/June 1997	Evaluation of bids.
July 1997	FCO wrote to Arteos saying it wished to appoint Arteos as preferred bidder under certain conditions. Negotiations followed over the conditions of appointment, and Arteos was appointed as preferred bidder at the end of July.
August/December 1997	Discussions continued before novation of architect's and engineer's agreements took place in December.
7 May 1998	Planning Approval issued for Embassy building.
23 June 1998	Deal signed.

29 February 2000	Anticipated handover date.
March 2000	Deed of settlement agreed between Arteos and FCO concerning delayed handover.
2 May 2000	Revised handover date under settlement agreement.
June 2000	Current handover date.

Glossary of Terms

Availability payment	The portion of the unitary payment which is related to availability of the Embassy.
Conventional/traditional procurement	A contract in which the Department, using Government finance, pay the supplier for construction of an asset. Such projects are paid for in full by completion of construction. The provision of services is dealt with separately.
Cover ratios	Cover ratios are standard tools used in the financial appraisal of projects. The ratios measure the extent to which current and future liabilities to lenders are covered by available cash flows.
Facilities management services	Provision of a full range of building-related services.
Liquidated damages	Financial compensation payable by a supplier in the event of delays during a construction project.
Net Present Cost	The net present cost of the contract price represents the amount that would have to be invested at the start of the contract to fund the expected future cash payments which the FCO will be required to make.
Novation agreement	The agreement covering the transfer of the Department's existing contracts with the architect and consulting engineers to the supplier.
Output specification	The specification of the Department's requirements in terms of the desired outputs rather than inputs.
Private Finance Initiative	A policy introduced by the Government in 1992 to harness private sector management and expertise in the delivery of services.
Preferred bidder	A bidder selected from the shortlist to carry out exclusive negotiations with the Department.
Public Sector Comparator	An estimate of what the project would cost if conventional procurement methods were used as an alternative to a private finance contract. This helps in assessing whether the private finance contract offers better value for money.
Risk transfer	The passing of risk normally borne by the Department to the supplier.
Unitary payment	A single payment for the provision of accommodation and associated services.