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Committee of Public Accounts

Government Communications Headquarters (GCHQ): New Accommodation Programme

Twenty–third Report of Session 2003–04

Report, together with formal minutes, oral and written evidence

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The Committee of Public Accounts

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Introduction

GCHQ has occupied over 50 buildings at two sites in Cheltenham, at Oakley and Benhall, since the 1950s. The buildings were becoming difficult to maintain and unsuitable for the development of modern information technology systems. In the 1990s a planned rolling programme of building replacement under traditional public sector financing arrangements was frustrated through funding constraints. The advent of private sector participation in public procurement projects led to the decision in 1997 to relocate the whole of the accommodation on a single site within a ten mile radius of Cheltenham under a Private Finance Initiative (PFI) deal.

Following a competition, GCHQ chose a preferred bidder, IAS, in September 1998. Twenty-one months later GCHQ signed a contract with IAS at a price 21% higher. The deal was to provide new, fully serviced accommodation at Benhall at a cash cost of £1,247 million over 30 years, equivalent to £489 million net present cost. The building was completed early and was ready for occupation by GCHQ in September 2003.

Independently of the PFI deal, GCHQ retained responsibility for moving its technical capability into the new building, largely for security reasons. In 1997 GCHQ estimated the costs for this technical transition, that are additional to the PFI deal, at £41 million. By 1999 GCHQ's estimate had risen to £450 million. The Treasury would not fund such a large increase but contributed £216 million to a revised budget of £308 million over the first five years. To help contain costs to the revised budget, GCHQ is to stage technical transition and keep part of its existing site at Oakley open until 2012, incurring additional running costs of £43 million.

On the basis of a Report by the Comptroller and Auditor General[1] we took evidence from GCHQ and the Cabinet Office on 1 December 2003. We considered the increase in the costs of the PFI deal after the preferred bidder had been selected. We also questioned why GCHQ did not recognise the full scope and cost of technical transition earlier and did not initially manage the building project and technical transition as a coordinated programme. Overall, we explored the evidence as to whether expenditure on the programme represented good value for money.

1 C&AG's Report, *Government Communications Headquarters (GCHQ): New Accommodation Programme* (HC 955, Session 2002–03)

Conclusions and recommendations

1. **It is unwise to enter negotiations with a preferred bidder when key requirements have not been settled and priced.** In this case there was a 21 month period of exclusive negotiations before the contract was signed in June 2000 during which time the price increased by 21%, not wholly in a competitive environment. When a preferred bidder is selected before all key requirements have been negotiated, the contractor is inevitably at a price advantage in closing the deal.

2. **Major change programmes need to be managed as such from the outset.** Any move of headquarters is likely to require numerous projects in addition to the building itself and to changes in working practices. In this case, which obviously was bound to involve a major technological move, GCHQ continued to perceive it as a building project for far too long. It was nearly three years after a PFI solution for its accommodation was first explored that GCHQ recognised the move as a major programme and designated it as such.

3. **GCHQ experts failed to spot that development of IT networking during the 1990s would hugely complicate technical transition which effectively evolved into a major systems upgrade.** The GCHQ Board was principally concerned with the feasibility of testing the PFI market for a new building and lost track of the scope and cost of the technical transition.

4. **A further consequence of GCHQ's failure to see the programme as a whole is the staging of the technical transition for budgetary reasons.** GCHQ will be keeping one of its existing sites open for 7 years longer than planned and incurring extra costs of £43 million.

5. **GCHQ made a highly uncertain assumption that a conventionally procured building would have over-run its budget by 24%.** That alone accounted for the comparative cost saving that GCHQ estimated the PFI deal would offer, but was simply an average over past projects and hides the wide range of outcomes.

6. **Departments should not uncritically accept that PFI is the only way to improve on past construction performance.** The Treasury and the Office of Government Commerce have told us that they are seeking to modernise construction and that there are non-PFI approaches to construction procurement that offer potential advantages. The public sector could learn from the experience of the private sector and reduce the risks in construction projects to provide a better measure of competition with PFI bids and be a spur to securing improved value for money.

1 GCHQ's acquisition of a new headquarters building

1. In the 1990s GCHQ had a rolling programme of building replacement at its two sites in Cheltenham, at Oakley and Benhall, which it had occupied since 1952. By March 1996 funding constraints meant that this would take much longer to implement than planned. In 1996, with the advent of Government policy that all new capital expenditure should be tested for suitability as PFI projects, GCHQ first explored the possibility of acquiring new PFI buildings at Benhall and then, in 1997, decided to expand the project to cover the whole of its accommodation in Cheltenham.[2]

2. GCHQ embarked on a competitive tendering exercise to provide new serviced accommodation within a radius of ten miles of Cheltenham. It followed best practice based on guidance issued by the former Private Finance Panel Executive and Treasury Task Force and issued an invitation to tender that was generally output-specified with a strong emphasis on flexibility. A short list of four consortia who were invited to tender offered bids ranging from £328 million to £485 million at net present values.[3] GCHQ told us that these bids had not been good enough and had added an extra stage of competition with just two bidders, IAS and Oakley.[4]

3. In September 1998 GCHQ selected IAS as the preferred bidder on the basis of their Best and Final Offer of £404 million compared with Oakley's £493 million for delivery of accommodation and services over a thirty year period.[5] The contract was signed 21 months later, in June 2000, by which time IAS's bid had increased by 21% to £489 million without the benefit of full and open competition. The equivalent increase in the main annual Unitary Payment in this period was from £37.5 million to £45.6 million.[6]

2 C&AG's Report, para 1.15

3 *ibid*, para 2.15 and Figure 4

4 Q 2

5 C&AG's Report, para 2.24 and Figure 5

6 *ibid*, para 3.15 and Figure 7

Figure 1: Changes in Unitary Payments (UP) during the single bidder negotiation period

Bid	Date	UP 1	UP 2	UP 3
		(£ m/year)	(£ m/year)	(£ m/year)
Best & Final Offer	Sept 1998	16.6	29.5	26.2
Adjusted to meet scope	Sept 1998	16.6	*37.5	34.2
Revised bid	March 1999	16.6	44.3	39.3
Revised bid	June 1999	16.6	41.2	39.2
At Contract Signing	June 2000	**16.5	**45.6	**43.8

The figure shows that the Unitary Payments increased as a result of resolving non-compliances and meeting changes in scope following IAS's selection as preferred bidder.

*This is GCHQ's estimated increase over the Best and Final Offer to meet the full scope of its requirements. It is comparable in scope with all the subsequent figures up to and including contract signature.

**These payments are equivalent to a total of £489 million net present value or £1,247 million cash over thirty years.

Source: GCHQ

4. IAS's Best and Final Offer had been non-compliant in a number of ways and it needed quite a lot to bring it up to GCHQ's specification at contract signature. In particular, the cost of service level agreements had not been finalised and there was a need to settle on one of the two sites offered by the bidder.[7] As a result, the Benhall site was not chosen until May 1999.[8] About 9% out of the 21% increase was not priced through competition; the remainder was priced as a result of information already obtained during earlier stages of the competition.[9]

5. GCHQ told us that the increase beyond competition resulted from higher staff numbers, the consequent increases in services to the slightly bigger building, inflation and in increase in finance costs because of the way the bond market worked.[10] Asked whether it was prudent to accept the original bid from IAS so readily, GCHQ said that it was a judgement to draw competition to a halt at that stage. The other bidder was considered so far behind in terms of both quality and price that there was no realistic prospect of them getting to the point of being the winner. GCHQ also had to act responsibly in terms of how much effort it was requiring the private sector to put in at a point when it already knew who the winner was going to be.[11]

6. The cost of the PFI deal is £1,247 million cash over thirty years, equivalent to £489 million net present cost. The construction of the new building was finished early in June 2003. GCHQ told us that the new single building was a much tougher structure than the existing accommodation where the intelligence production operation was carried out and that it was more resilient to most forms of attack that could be foreseen.[12] There were a

7 C&AG's Report, paras 3.1–3.2

8 *ibid*, para 3.6

9 Q 1

10 Q 1

11 Q 2

12 Q 42

number of faults to be rectified before it could be accepted as complete and GCHQ required further work in the form of contract changes. GCHQ said that IAS were due to be paid a bonus of £2.2 million for early completion but this was reduced by about £100,000.[13] About 99.9% of the job had been completed by the middle of June and GCHQ could not force IAS to incorporate its contract changes without putting the achievement of IAS's bonus at risk.[14]

7. As to the size of the new building, GCHQ said that it would now have to cope with higher staff numbers than originally planned, mainly due to changes in customer requirements following the terrorist attacks on 11 September 2001. Some 200–250 staff would be accommodated at the retained Oakley site while new and more flexible ways of utilising the new building's space were explored.[15] GCHQ had made some small changes to the way the building was configured and used and was moving away from the concept of one person, one desk. On any particular day 20% to 30% of desks were likely to be empty because people were away for various reasons and currently there were 5% more staff than desks; it thought it could cope with a 10% margin and perhaps significantly beyond that. Staff were being encouraged to use green transport to counter a 15% reduction in parking spaces from current levels. Walking, cycling and car sharing were being promoted and GCHQ was working with the local authority to improve bus services.[16]

13 Ev 18–19 (GCHQ's update memorandum, paras 2–4)

14 Q 113

15 C&AG's Report, para 5.33

16 Qq 32–33

2 The cost of technical transition

8. Although technical transition was excluded from the scope of the PFI deal, the building design had to be integrated with the technical transition plans to ensure there would be no break in GCHQ's service to its customers. In 1997 GCHQ's best estimate for technical transition, based on a piece by piece move of its systems—the so called box move—was £41 million. However, this was reported to GCHQ's Board as only £20 million.[17] Because this figure was so small and could easily be absorbed within existing budgets, the GCHQ Board took its eye off technical transition at that time and focused only on assessing the commercial viability of a PFI deal for the building.[18]

9. GCHQ was unable to explain why the wrong figure of £20 million had been reported to the Board. However, we were told that its Directors knew it should have been £41 million because they had been working on it. But with either figure the project appeared to be all about building costs and, although there was a Director of Technology on the Board, it was not for a couple of years before the realistic, high costs of technical transition were articulated.[19]

10. In 1998 GCHQ had started to consider the impact that reaching year 2000 would have on the integrity of its computer systems. It diverted 150 man years effort to carry out this work.[20] It was only during this work that GCHQ first realised the complexity of the inter-relationships between its networks and equipment. In the light of this realisation GCHQ's new programme director reviewed the position and in 1999 it was estimated that technical transition would cost as much as £450 million over two years.[21]

11. GCHQ acknowledged the failure of its engineers to spot that a growing degree of networking of systems was going to complicate the process of doing the technical transition. The immediate predecessor plan to the new building had been for a new computer hall and that had been planned on the same simple box move. But that simple plan was carried into the new building and it was some time before anybody stood back and said this would not work because of the degree of networking.[22]

12. The cost of actually moving the equipment was broadly equivalent to the original costing of the box move. What had not been forecast was the cost of providing new information technology architecture, which was a very big undertaking. In that sense part of technical transition was an upgrade of existing systems. GCHQ considered that it was arguably easier and cheaper to do it in the new computer hall than it would have been on the old site. It was a very large sum of money but GCHQ considered it represented good

17 C&AG's Report, para 4.2

18 Qq 83–86

19 Qq 69–72

20 Qq 22–23

21 C&AG's Report, para 4.7

22 Q 3

value.[23] The additional costs had provided GCHQ with a 21st century system and proper management tools for the future development of that system.[24]

13. The Treasury would not fund the whole of the £450 million over two years but are contributing an extra £216 million to a revised budget of £308 million over the first five years. In order to keep within the revised budget GCHQ is having to keep part of one of its existing sites at Oakley open until 2012 with extra running costs of £43 million.[25] The first five years of technical transition would also require some 978 man years of GCHQ's own in-house staff effort at a cost of between £30 million and £40 million.[26] Retaining Oakley did not accord with GCHQ's original intention for all of GCHQ's Cheltenham staff to be on one site. The number of people left behind at Oakley to run the IT would be down to about 200 within a few years. The great majority, 90% of the 4,500 staff, would be working in the one new building which GCHQ considered would provide the desired opportunities for better teamwork.[27]

23 Qq 63–65

24 Q13

25 C&AG's Report, para 4.9

26 Q 4

27 Q 9

3 Management and value for money of the New Accommodation Programme

14. The estimated total cost of the new accommodation programme for the thirty years of the PFI deal is £1,623 million (cash) or £783 million at net present value.

Figure 2: Estimated cost of the New Accommodation Programme

TYPE OF COST	Cost in cash £m	Net present Value £m
Unitary Payments to IAS for the PFI deal	1,247	489
Additional payments to IAS for contract variations	10	5
Payment to IAS for early completion	3	2
*Technical transition to 2004–05 (approved budget)	308	252
**Retention costs of Oakley Plot 2 — 2005–06 to 2011–12	43	26
Additional costs associated with GCHQ's New Accommodation	12	9
TOTAL COST OF PROGRAMME	**1,623**	**783**

This table shows the transition costs of moving GCHQ's business into the new building and the costs of providing accommodation and services for the thirty years of the PFI deal.

*This figure excludes the cost of in-house technical staff effort associated with transition estimated at 978 man-years and other GCHQ manpower and running costs.

**This figure includes provision for payment of £17 million to IAS in July 2007 in lieu of proceeds from the sale of that part of the Oakley site that GCHQ is retaining as part of its extended transition period. It also takes into account recovery of the £17 million in 2011–12 when the land is sold less demolition (£5 million) and other costs (£2 million).

Discount base date: January 1999.

Source: GCHQ

15. When the significant increase in the estimated cost of technical transition from £41 million to £450 million was identified in 1999, the Cabinet Secretary commissioned Lieutenant-General Sir Edmund Burton to report on the project's management. On the question of technical transition costs, his Report in May 2000 found that GCHQ's earlier management had focused solely on the PFI building and associated services and had not approached the project strategically as a move of GCHQ's whole business. It also identified high level planning and management weaknesses and concluded that the failure to co-ordinate the development of the PFI deal and the transition process at strategic level was a symptom of such weaknesses.[28]

16. The Cabinet Office accepted that the original scoping of the programme had not been well done and that the difficulties associated with moving a very complex networked, IT-based set of systems should have been brought out earlier.[29] The Burton Report covered 43 recommendations on the basis of a more strategic approach to be deployed across GCHQ and not just the management of the PFI project. As a result of the Report, GCHQ had

28 C&AG's Report, paras 4.16–4.17, 4.19

29 Q 11

completely redesigned its financial and operational planning with a range of initiatives, none of which existed before May 2000.[30]

17. GCHQ took the Office of Government Commerce guidance and developed it to fit the New Accommodation Programme by building into it various aspects of system engineering and risk management. The lessons learned were available to other government departments directly through the Office of Government Commerce and more directly through GCHQ's contacts with other departments.[31]

18. GCHQ accepted that the secrecy of its work had previously inhibited questioning of how it did things and that in many ways its management had suffered accordingly. But it claimed to have moved from that situation, seven or eight years previously, of an inward looking organisation content that it knew how to manage its business to one which actively sought best practice from the outside world.[32]

19. GCHQ believed that the new accommodation programme would deliver best value for money. It considered that high technical transition costs were inevitable and would have had a neutral effect on whatever accommodation solution was chosen, whether the PFI deal or a conventionally financed alternative represented by the Public Sector Comparator.[33] In the light of the extra costs of technical transition that emerged it had reviewed its accommodation options and concluded that there was no reason to believe that there was a better alternative to the PFI deal selected.[34] GCHQ considered that the benefits that would have come from using the Public Sector Comparator would have been miniscule compared to those with the PFI deal.[35]

20. In assessing value for money of capital projects competition is a key factor. In the case of GCHQ's new building, competition for the PFI deal ceased when the preferred bidder was chosen and the price subsequently increased by 21%. GCHQ made use of comparison of the PFI deal with the Public Sector Comparator figures as an indicator of value for money.[36] In this case the comparator was a return to modernisation of GCHQ's existing two sites and the comparison showed an advantage of £71 million in favour of the PFI deal.

30 Qq 96–99

31 Qq 43–44

32 Q 121

33 C&AG's Report, para 5.35

34 *ibid*, paras 5.37–5.40

35 Q 52

36 Q 45

Figure 3: The final comparison between the PFI bid and the Public Sector Comparator

	Net Present Value (£ millions)		
	IAS deal	**Public Sector Comparator**	
Building, refurbishment and services	489	Basic	605
		Risk Adjustment	151
Technical Transition	264		68
Total	**753**		**824**

The exercise also showed broadly similar services to be retained by GCHQ under each option of £99 million (PFI) and £94 million (comparator). These are not significant to the comparison made.

The table (which excludes retained services as described above) shows that the final IAS bid cost some £71 million less than the Public Sector Comparator, including estimates for technical transition.

The technical transition costs were much lower in the Public Sector Comparator at £68 million because GCHQ assumed it would remain on two sites and use some of the existing buildings if the PFI deal did not go ahead. Technical transition would, therefore be less complex and costly. The PSC technical transition would deliver significantly less benefit to GCHQ and result in later additional expenditure to modernise its infrastructure.

The technical transition costs for the PFI deal shown above cover the first five years only.

Source: GCHQ

21. The Comparator included £151 million for additional risk as a measure of the average cost overrun of 24% in public sector managed projects. This figure was the percentage given by the Treasury, who said that it was at the bottom of the range and it arose from a study carried out by a firm of consulting engineers.[37] This risk allowance in itself more than accounted for the difference between the PFI bid and the Comparator and had done so in other projects as well.[38]

22. Other PFI deals had used different, lower risk addition percentages; and with a range of other adjustments available from the use of different discount rates (and the way service costs were spread),[39] it seemed to us that the Public Sector Comparator figures could be used to demonstrate any result required.[40] Such uncertain figures risked clouding the issue of value for money and could cloak a predisposition to go in for PFI.[41]

23. PFI represented something like 10% to 15% of the government's capital projects, so there were also a large number of traditional procurement projects going on within government. The Office of Government Commerce had a number of initiatives in hand to try to improve the public sector performance in traditional procurement contracts.[42] The Treasury said that they would in due course update their analysis of the way in which government departments managed large projects.

37 Qq 46–47

38 Q 48

39 Q 56

40 Q 127

41 Qq 53, 59

42 Q 130

Formal minutes

Wednesday 5 May 2004

Members present:

Mr Edward Leigh, in the Chair

Mr Richard Allan	Jim Sheridan
Mrs Angela Browning	Mr Gerry Steinberg
Mr Ian Davidson	Jon Trickett
Mr Frank Field	Mr Alan Williams
Mr Brian Jenkins	

The Committee deliberated.

Draft Report (Government Communications Headquarters (GCHQ): New Accommodation Programme), proposed by the Chairman, brought up and read.

Ordered, That the Chairman's draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 23 read and agreed to.

Conclusions and recommendations read and agreed to.

Summary read and agreed to.

Resolved, That the Report be the Twenty-third Report of the Committee to the House.

Ordered, That the Chairman do make the Report to the House.

Ordered, That the provisions of Standing Order No. 134 (Select Committees (Reports)) be applied to the Report.

Adjourned until Monday 10 May at 4.30 pm

Witnesses

List of written evidence

List of Reports from the Committee of Public Accounts Session 2003–04

First Report	Tackling fraud against the Inland Revenue	HC 62	*(Cm 6130)*
Second Report	The new electricity trading arrangements in England and Wales	HC 63	*(Cm 6130)*
Third Report	The Sheep Annual Premium Scheme	HC 64	*(Cm 6136)*
Fourth Report	Improving service delivery: the Forensic Science Service	HC 137	*(Cm 6155)*
Fifth Report	Warm Front: helping to combat fuel poverty	HC 206	*(Cm 6175)*
Sixth Report	Department of Trade and Industry: Regional Grants in England	HC 207	*(Cm 6155)*
Seventh Report	Progress on 15 major capital projects funded by Arts Council England	HC 253	*(Cm 6155)*
Eighth Report	The English national stadium project at Wembley	HC 254	*(Cm 6155)*
Ninth Report	Review of grants made to the National Coalition of Anti-Deportation Campaigns	HC 305	*(Cm 6175)*
Tenth Report	Purchasing and managing software licences	HC 306	*(Cm 6175)*
Eleventh Report	Helping consumers benefit from competition in telecommunications	HC 405	
Twelfth Report	Getting it right, putting it right: Improving decision-making and appeals in social security benefits	HC 406	
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Fifteenth Report	Procurement of vaccines by the Department of Health	HC 429	
Sixteenth Report	Progress in improving the medical assessment of incapacity and disability benefits	HC 120	
Seventeenth Report	Hip replacements: an update	HC 40	
Eighteenth Report	PFI: The new headquarters for the Home Office	HC 501	
Nineteenth Report	Making a difference: Performance of maintained secondary schools in England	HC 104	
Twentieth Report	Improving service delivery: the Veterans Agency	HC 551	
Twenty-first Report	Housing the homeless	HC 559	
Twenty-second Report	Excess Votes (Northern Ireland) 2002–03	HC 560	
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The reference number of the Treasury Minute to each Report is printed in brackets after the HC printing number

Oral evidence

Taken before the Committee of Public Accounts

on Monday 1 December 2003

Members present:

Mr Edward Leigh, in the Chair

Mr Richard Allan
Mr Richard Bacon
Jon Cruddas
Mr Frank Field
Mr Brian Jenkins
Mr Nigel Jones
Jim Sheridan
Jon Trickett
Mr Alan Williams

Sir John Bourn, KCB, Comptroller and Auditor General, and **Mr Jeremy Colman,** National Audit Office, further examined.

Mr Brian Glicksman, Treasury Officer of Accounts, HM Treasury, further examined.

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL:

Government Communications Headquarters (GCHQ): new accommodation programme (HC 955)

Witnesses: **Sir David Omand KCB,** Permanent Secretary/Security and Intelligence Co-ordinator, Cabinet Office, and **Dr David Pepper,** Director, GCHQ, examined.

Q1 Chairman: Good afternoon and welcome to the Committee of Public Accounts. We are today discussing the Government Communications Headquarters (GCHQ) and their new accommodation programme. We are joined from the Cabinet Office by Sir David Omand who is the Permanent Secretary for Security and Intelligence, and from GCHQ by Dr David Pepper, who is the Director of GCHQ. Could I start with you, Dr Pepper? Could you turn to page 14 of the Comptroller & Auditor General's Report, paragraph 3.15? If you look at that paragraph you will see that the PFI deal increased by 21% after you had appointed the preferred bidder. Why could you not contain these costs?

Dr Pepper: Quite a lot of that increase was foreseen at the time that the bids were accepted. The bids as they were received, in what was called the BAFO, were identified as being non-compliant in a number of ways. The team recognised that they would need to do quite a lot to bring them up to spec. Once that had been done it was necessary to take account of the fact that our staff numbers had increased. In fact, all but about 9% of that increase was priced as a result of information obtained during the competition. The increase beyond the competition was only that which resulted from the increase in staff numbers, the consequent increases in services to the slightly bigger building, inflation as a result of the fact that the deal was taking slightly longer to bring to fruition and an increase in finance costs because of the way the bond market worked.

Q2 Chairman: Was it prudent then to accept the original bid from IAS so readily? Perhaps you should have allowed yourself more time to negotiate.

Dr Pepper: It is always a matter of judgment in these circumstances when you draw the competition to a close. We had the original four bids and because they were not good enough we added an extra stage of competition with just two bidders. The result of those two bids was still not bids that were absolutely complete, but we had reached a situation where we could clearly see that the IAS bid was going to be completable and the other bidder, Oakley, was so far behind in the competition in terms of both quality and price that there was no realistic prospect of their ever getting to the point of being the winner. Therefore, although in one sense it would have been nice to keep the competition going, we had to act responsibly in terms of how much effort we were requiring the private sector to put in at a point where we already knew who the winner was going to be. It was felt that we had reached the point where the right balance was to go for the single bidder but we were able to continue driving value for money out partly because we had a lot of information from what had been priced as options during the competition, and during the rest of the time we benchmarked further bid information and we used two private sector firms to provide assurance that the additional bids that we were getting were not extortionate and we were getting good value for money.

Q3 Chairman: Can you now please look at page 18, paragraph 4.7 of the Report where you will see that the original 1997 estimate for technical transition increased 10-fold to £450 million. Why did your technical people not realise earlier on the need to change so much of this equipment?

Dr Pepper: To put ourselves in the situation of what was happening at the time, if you were to go back to 1990 or thereabouts, our IT at that stage was essentially composed of a number of stand-alone systems, large systems but they were not interconnected and they were not networked because at that stage networking was not the way IT was organised. During the early 1990s we began gradually to introduce networking to our systems for two reasons: one, because that was the way technology was going, but also because we faced a change of circumstances in that we had an IT system which had evolved during the Cold War when we had very large, monolithic, essentially static targets and we were able to operate in effect with stove-piped IT systems. During the early 1990s the Cold War ended; we were faced with a much more volatile and varied set of targets and it became necessary to make our systems much more flexible and to make the way we used them more flexible. During the early 1990s we started to introduce networking. By the time we got to 1995–96 we had reached a stage where there were a lot of networking connections between the systems. For reasons that with hindsight are perhaps hard to understand, at the time the engineers who were doing the initial estimates of what it would cost to do the transition between the buildings simply did not spot the fact that the growing degree of networking was going to complicate enormously the process of doing the technical transition. You can see if you look back, as you will know from the Report, that the immediate predecessor plan to the new building was for a new computer hall. That move would have raised all the same problems as the move to the new building eventually proved to do, but again the planning for that was being done on a simple box-move basis, moving systems one by one. That planning was carried over into the new building and it took some time before anybody stood back (and this was only done during the planning for the millennium) and said, "Just a minute. It is not going to work like that because of the degree of networking". I do not attempt to excuse what happened; it clearly should not have done, but I think there is a rational explanation of why we got historically to where we were. We were in a period of transition of our IT systems and failed to spot the situation.

Q4 Chairman: Thank you for that. Can you please turn to page 26 and look at paragraph 5.25 where we read that the technical transition over the first five years will also require some 978 man years of your own in-house staff effort. How much extra will this cost?
Dr Pepper: It is not extra. It is using the manpower we have got. The cost of 978 man years would be somewhere between £30 million and £40 million if you just costed it on the capitation rates, but that is not extra effort that we are bringing in. That is using the manpower we have got for this purpose.

Q5 Chairman: It is still nearly a 1,000 man years of your own in-house staff effort.
Dr Pepper: Indeed.

Q6 Chairman: And you are satisfied that that is a containable cost, are you? You have a foreseeable plan, do you?
Dr Pepper: We have contained it, we are containing it and we are living within it.

Q7 Chairman: And you have enough resources to accomplish this?
Dr Pepper: Yes.

Q8 Chairman: Will you go back please to page 18 and look at paragraph 4.9? You will see there that to keep some of the technical transition costs down some of the existing buildings at Oakley will be kept open until 2012. Is that right?
Dr Pepper: That is right.

Q9 Chairman: I thought the whole point of this was that you were supposed to move into one site. That is why we are paying this huge amount of money. Is this not a false economy, leaving Oakley open until 2012?
Dr Pepper: No, because the great benefit of being on one site is having all our people under one roof and working together. The number of people left behind on Oakley to run the IT will be very small. Certainly within a few years it will be down to about 200 and they are essentially the people who are running the IT. The great majority, 90%-odd of the 4,500 people, will be working in the one building which will provide us with all the opportunities to do the teamwork we want. Ideally we would like to close Oakley, and we will in due course close Oakley, but the reduction in benefit as a result of keeping Oakley open is very small.

Q10 Chairman: Okay. If you look at page 19, paragraphs 4.17–4.19, they make reference, do they not, to Lieutenant General Burton's report? Why did you not recognise earlier that this should have been managed as an integrated project?
Dr Pepper: When we started we were focusing very much on the feasibility, both practical and commercial, of building this new building and getting everybody under one roof. It would, I think, at that very early stage, have been too early to give any sensible amount of thought to the softer aspects of the move. Very clearly, we should have integrated the technical transition into the overall programme. Why did we not? Essentially because, if you think back to what I said a few minutes ago, we were operating under the belief that the technical transition was going to be relatively straightforward. We knew there would be a lot of moves but we saw no particular difficulty around doing them, so the board and the project team gave all their attention to what for us was completely novel territory, first, PFI and, secondly, moving everyone into one building. That was where all the difficulties were thought to lie, so that was where the attention was given. Clearly, with hindsight, that was a mistake but,

thinking back to the way we were at the time, that was where we felt the genuine management attention was needed.

Q11 Chairman: Okay, Sir David. Can I turn to you? The management of the programme has got off to a bad start, has it not?
Sir David Omand: No, I would not agree with that. I think the original scoping of the programme was not well done. As has been explained, the difficulties associated with moving a very complex networked, IT-based set of systems should have been brought out earlier, but the management of the programme I think has been exceptionally well handled, including the containment of cost as well as the negotiation phase which, as the NAO Report acknowledges, was well done.

Q12 Chairman: We have got a PFI here which increased by 21%, we have got the original estimate for technical transition increasing 10-fold to £450 million. You claim that the programme was well managed from the start. My question to you is, what would you do to ensure that it is better managed in the future?
Sir David Omand: My remarks were about the management of the programme once the programme was established, which I think is a model. The problems you have drawn attention to, which are very real problems, arose before the exercise was put on that managed programme basis. Part of it, as I say, was the difficulty in anticipating the technical transition and part was bringing the bids into compliance. The 21% includes the uprating which was required in the cost of the original bids as submitted. That, I would suggest, is not entirely a fair comparison.

Q13 Chairman: Some people might say that we are all filled with admiration for the work that GCHQ does. Clearly it is a vital national resource and we pay tribute to the work that they do and the work that Dr Pepper's staff does. It is clearly filled with people of the utmost brilliance and competence, but we find it difficult to understand why a project of this sort could not have been better managed from the start and why some of these technical transition costs, for instance, could not be foreseen. You must surely have worked out in the fast-moving world in which we live that you might have encountered some of these problems?
Sir David Omand: The most important point I would like to make to the Committee concerns the nature of the change in the technology in the period of the 1990s. We are dealing, at the beginning of this period when the original plans for the computer block were drawn up, with a world in which there were not servers, there were not intranets, there was not the set of management tools which exists today to enable complex networks to be managed. None of that existed. In the space of a few years that technology was applied by GCHQ in a pioneering way but in an organic way which meant that by the time that serious work had to be done on the transition the engineers at GCHQ did not have the tools available to support the transfer of the technology from one site to another without significant disruption. What the additional costs to which you refer have brought us is very substantial gain. We now have a 21st century system, we have proper management tools with a proper management basis for the future development of that system, all of which has cost a lot of money but I would submit is a very good investment.

Q14 Mr Williams: Sir David, once it was identified that this project was needed was there any urgency about getting the new facility? That is really a yes or no answer, is it not?
Sir David Omand: Yes, there was. If you are referring to the 1996 period, yes, significant difficulties were being experienced with the existing computer block and indeed emergency repairs and extra chilling systems had to be introduced.

Q15 Mr Williams: So in 1996 this was recognised as being urgent. In paragraph 1.14 on page 8 it says that the main GCHQ Board approved the PFI solution for the project. That was in April 1997, not long after they had identified it, but then, if you look at the next paragraph, it was two years and one month later that it was approved by a minister.[1] If there was urgency, if there was some service need in getting this facility, why did it take two years and one month to get from the GCHQ Board to a brand new incoming minister?
Sir David Omand: There are two parts to the answer to that. One is about the length of time that it takes to develop a PFI solution to the point at which there is a firm case to put to ministers. The other is about the necessity which GCHQ had in 1996 to go the PFI route to demonstrate whether or not that route would result in a value-for-money solution. The alternative, which was a publicly funded construction, was not available.

Q16 Mr Williams: Switching to the increase in costs, if we turn to page 19 this is where we spell out the increase in costs from £41 million to £450 million. That has been described as an increase of 10-fold but, of course, when it originally went to the GCHQ Board it was £20 million, was it not, so it is really a 22-fold increase?
Sir David Omand: Not entirely.

Q17 Mr Williams: Because of the cost of the technical transition.
Sir David Omand: The paper which went to the GCHQ board reported the transitional costs as £20 million. The underlying work that had been done and which was, of course, known to the directors had given a higher figure of £41 million.

Q18 Mr Williams: Although it was an increase of some magnitude, it did not set alarm bells ringing and it went up another 10-fold. Is this not somewhat surprising since the basic reasons here, as you well

[1] *Note by Member:* Mr Williams realised that he had misread the dates and that there had not been a two year delay as he suggested. He later said "I withdraw that point".

know, we were familiar with from a previous attempt at moving a command centre. You remember Operation Pindar, buried in the RAF and it went up another 10-fold. Is this not somewhat exposed it. There they were going to move the old command centre to an existing underground site and they ran into exactly the same problems. You would be with successive gaps in service if you did it piecemeal, and yet these lessons were not learned and so the costs escalated. How could you ignore what had gone on before?

Sir David Omand: I cannot excuse the failure to recognise these issues earlier. I take the responsibility for them. The situation in 1996 was based on the earlier plans for the new computer block. It was two years later, partly as a result of work done on the millennium transition, that really brought to light the difficulties and complexities associated with technical transition, so there was a significant period in which this problem was not picked up. Perhaps if the programme had been run on a more integrated basis earlier that might have triggered some alarm bells. I think the Pindar case is different.

Q19 Mr Williams: But when you go back to Pindar, because it is so parallel other than that you managed to increase it by a greater magnitude, there at the outset the problems with far simpler systems were not identified of moving to a new site and the costs escalated. Surely the Ministry of Defence—and I am not sure which of you should answer on this—should have been aware of the lessons of Pindar and should have made sure that you did not repeat them.

Sir David Omand: Let me take that. I wish I had been aware of those lessons at the time. Perhaps it would have sparked off some train of thought and led to deeper questioning, but I am afraid it did not.

Q20 Mr Williams: Before you go beyond that, I want to pause there. Do you remember, Sir John, that you produced a special report on Pindar in which you highlighted all these difficulties? From the NAO perspective is it not surprising, in view of the scale of failure that was revealed by Pindar, that the MoD had not even taken on board the most basic messages from that ultra expensive exercise?

Sir John Bourn: I think that the Pindar exercise did relate to the responsibilities other than GCHQ. Nonetheless, you are right, Mr Williams, in the sense that it was the question of transferring a changing range of technical equipment from one site to another and what at least in principle appeared to be the same sort of difficulties arose on a much larger scale here, of course, than in Pindar and in that sense lessons were not learned from it.

Q21 Mr Williams: They only started at about £60 million and went up to £120 million so they were modest by comparison with your failure. Treasury, surely you were alarmed that the bells had rung but apparently not across Whitehall as far as this was concerned?

Mr Glicksman: Certainly the Treasury was concerned about the increase in costs and did explore very carefully with GCHQ the reasons for it. I cannot comment on how similar the case was to Pindar because I do not know the details of Pindar, but certainly we did look very closely with GCHQ at the reasons for the increase in costs, and indeed, although, as the Report makes clear, we did reduce them with GCHQ down to just over—

Q22 Mr Williams: But no-one seems to have been alerted. Everyone was passing the buck here and no-one seems to have identified a problem that had existed previously and was about to be replicated. I switch now to page 17. From 1998, that is a year later, GCHQ started to consider the impact of the year 2000, and then it got a dose of the millennium bug. That is what happened. You had to divert 150 man years into trying to fend off the effects of the millennium bug?

Dr Pepper: That is right.

Q23 Mr Williams: Had you anticipated that?

Dr Pepper: Yes. Like all departments, we were working systematically through our IT systems and that is exactly what was going on in 1998. We had started before 1998.

Q24 Mr Williams: To go back to where we started, you needed this new facility urgently and yet for two years you effectively had to take nearly all the manpower that should have been working on the technical transfer to deal with the millennium bug.

Dr Pepper: I do not think we really had much choice. The millennium was going to come. We really had no choice but to put our engineers on to preparing for the millennium. I would suggest that it would have been quite irresponsible to do otherwise.

Sir David Omand: That period was also the period in which work on the PFI was going on, so, notwithstanding the fact that GCHQ was very anxious to press on with this, it just took a long time to get together a PFI.

Q25 Mr Williams: Yes, but different people would have been doing the work. You would not have the same technical team working to the same extent on the PFI, so that is not much of an excuse. The reality is that there has been a major mess-up here and everyone is trying to duck for cover and no-one is going to accept responsibility. Did anyone eventually get reprimanded for the failures of the early days when everything was grossly underestimated, got transferred or did not anything happen to anyone?

Sir David Omand: I can certainly assure you that my predecessor as Principal Accounting Officer made it very plain indeed to the then Director and his team that the increase in costs was unacceptable.

Q26 Mr Williams: He wrote him a strong letter, did he?

Sir David Omand: It was very clear indeed that this—

Mr Williams: It must have been the most expensive letter in history, one and a quarter billion.
Chairman: I will now call on Mr Nigel Jones, whom we welcome back to the Committee after a long illness and who is, of course, the local Member.

Q27 Mr Jones: Thank you, Chairman. Yes, this wonderful new building is in my constituency and I have been in it. Could I turn to Dr Pepper, although it was his predecessor, Sir Francis Richards, who was involved in most of this as Director? I want to concentrate on Part 3 of the Report where, in paragraph 3.2, you say that there were two possible locations for this building, the Benhall site and the greenfield option at Gloucester Business Park in Brockworth. In paragraph 3.5 you say that the initial financial analysis slightly favoured the Gloucester Business Park site. Could you talk us through what went on to change the balance in favour of Benhall?
Dr Pepper: The calculation that led to that initial comparison was based simply on the cost of doing the work, and there was, as you say, a very small, only a couple of million, difference. We then realised, however, that two things were missing from that. First, there was no account taken of the different environmental costs of the two sites. In particular, had we gone to Brockworth it would have involved many thousands of extra miles being driven every day by staff simply because most of our staff live in Cheltenham and Brockworth is considerably further away, so in terms of environmental impact that was a very significant factor which would weigh against Brockworth in favour of Benhall.

Q28 Mr Jones: Is it true that GCHQ would have had to pay mileage allowance to staff?
Dr Pepper: We would for some time but not indefinitely. Even without that, though, we felt it was still right, and ministers confirmed this, to take account of the impact on the Government's environmental policies of that difference. There was a second factor which was taking account of the impact on staff more widely—again because large numbers of staff would have had much longer journeys to work. We were then, and we are now, very keen to ensure that we have good policies on diversity to give very good opportunities, for example, for part-time working. The much longer journey to work would have made it much more difficult for many people to adopt a part-time mode of operation. That, together with the psychological impact, if you like, of staff moving from buildings which were on the margins of Cheltenham and hence close to the town to a site which was right out in the middle of nowhere very much between Gloucester and Cheltenham were all factors which were taken into account.

Q29 Mr Jones: Some of the old buildings on both sites are pretty old and have been described to me by some of the staff as squalid. This must have affected morale. What impact has the new building had on the morale of those staff who are now working there?
Dr Pepper: Wholly positive. It is a wonderful working environment and even before staff started working there, once we were able to start taking staff round, and a few months ago staff were able to take their families round, the impact on morale has been enormously positive and there is a great sense of excitement about the place.

Q30 Mr Jones: Were you happy with the way that the local authority dealt with your plans? Were they helpful or did they get in the way?
Dr Pepper: I do not think it would be right to comment in too much detail, but we had quite long and tense negotiations with the local authority to get to where we wanted to, but in the end it came out okay.

Q31 Mr Jones: September 11 happened after all of this had been agreed and it is my understanding that you are now increasing staff numbers?
Dr Pepper: That is right.

Q32 Mr Jones: Is the new building big enough? Do you have room for manoeuvre on the existing site?
Dr Pepper: No building can have unlimited room for manoeuvre but, because of some small changes we have made to the way the building is configured, but more particularly because of changes to the way we are using it, we are able to cope with the expansion that we have had, and possibly even with a further small expansion. What we are doing is moving away from the concept of one person, one desk. We are taking account of the fact that on any particular day 20% or 30% of desks are likely to be empty because people are on leave or travelling on business and we are at the moment operating at about a 5% margin; there are 5% more staff in the building than there are desks. We are confident that we could go certainly to 10% and I suspect significantly beyond that once people get used to the idea, so, yes, we have flexibility for the foreseeable future.

Q33 Mr Jones: One of the issues which I know was raised was the whole issue of parking and various schemes were put together for encouraging staff to use green transport. Is that working? Are there enough parking spaces?
Dr Pepper: It is too early to say. It is working now simply because we have only moved 1,000 people in so far, but we are confident that it is going to work. Once we get to what we are calling steady state, where all car parks are built, which will be another 15 months or so, we have a number of schemes for controlling the parking and, taken together with various moves to increase green transport, like encouraging walking, cycling, a lot of car sharing and working with the local authority to improve bus services, we are pretty confident that we shall cope with what will then be about a 15% reduction in parking spaces. We have got an awkward time between now and then because we cannot build all the car parks until we have knocked these buildings down and we are having to go in for park-and-ride arrangements over the next 12 months. Once we get to steady state we are pretty confident it will work.

Q34 Mr Jones: Another issue which I know has been talked about is access to the site because the stretch of the A40 outside the building is the heaviest used piece of road in Cheltenham. Did you have any discussions at all with other government agencies about the possibility of attempting to relieve that traffic by making junction 10 of the M5 two-way so that lorries trying to get to the Kingsditch industrial estate and the Cheltenham retail park would not get off at junction 11 and trundle past you?
Dr Pepper: I do not know the answer to that question, I am afraid. I can say that we worked at great length and in great detail with the local authority and with the transport authorities to make sure that the configuration of roads we have will support all the traffic that is expected. I do not know whether that particular question was asked but I could find out.[2]

Q35 Mr Jones: Are you intending to monitor the traffic situation and make representations if it does get worse?
Dr Pepper: Certainly, and I think the local authority will monitor traffic as well fairly closely.

Q36 Mr Jones: The building itself came in more or less on budget?
Dr Pepper: The building itself, of course, whether it was on budget, is a matter for the contractors. I understand it has come in on budget; and the technical transition programme has also come in on budget, which is what we are managing.

Q37 Mr Jones: It was also early.
Dr Pepper: The building was nine weeks early, yes.

Q38 Mr Jones: So in that respect it was very successful.
Dr Pepper: It has been very successful and we have made considerable use of that earliness to make our transition process rather easier. We have made a lot of use of the two and half months' extra time we had to de-risk the process, as a result of which we started moving people in on the date that was specified in the contract three years before.

Q39 Jim Sheridan: I would like to concentrate on the security aspects of the building given the sensitive nature of your business. If you feel uncomfortable about discussing that please feel free to refuse to answer. A significant amount of your staff were once described as the enemy within for deciding to join a trade union. Is that still the case, that that is still a concern at GCHQ?
Dr Pepper: No. The national trade unions are now back in GCHQ and our staff association is part of PCS and about half our staff belong to the national trade union.

Q40 Jim Sheridan: So it is no longer a concern, or was it ever a concern?
Dr Pepper: Obviously, there were concerns during the period immediately after the de-unionisation which caused a great deal of tension but those problems are behind us now.

Q41 Jim Sheridan: During the transition did you have any contingency plans should anything go wrong?
Dr Pepper: One of the benefits we have got from the approach we have taken is that we have very considerable contingency facilities of quite a wide range and if you will forgive me I will not specify what they are. We now have a degree of resilience that we have never approached in the past. It will certainly stand us in good stead during the transition and will last into the indefinite future so we are now much better able to withstand disruptions of all sorts to our operation.

Q42 Jim Sheridan: Just on the single building, against the background of September 11 and the fact that the armed forces take the view not to have all their eggs in one basket, do you have any major concerns about the single building in a single location given the security aspects, terrorism, etc?
Dr Pepper: No. We are actually better off than we were before for two reasons. One is that although until now we have been divided between two sites, in fact the guts of the intelligence production operation has been on one site. Within that site what we have is an awful lot of single points of failure. What we have in the new building is a much tougher structure which is much more resilient to most forms of attack and is much better able to withstand the sorts of things that we can foresee.

Q43 Jim Sheridan: Finally, it was mentioned in the Report that other government departments could learn lessons from this project. Could you give us some examples of what lessons could be learned?
Dr Pepper: The programme we have managed, the technical transition, despite its difficult start has been, I would suggest, and I think the NAO would endorse this, very well run in that we have a £300 million IT programme coming in on time and on budget. In order to do that we have taken the programme management guidance that the OGC have produced and developed it very considerably. I described it as an IT programme. It is not. It is actually a very complicated hybrid programme because it involves IT, it involves moving people and it involves changes in working practices. We have taken the OGC guidance and built into it various aspects of system engineering and risk management which we think have enabled us to put together a very good package of how to go about managing a complicated programme. A lot of that guidance has been built into the latest round of the OGC guidance and we think we have covered quite a lot of new ground.

Q44 Jim Sheridan: Have those lessons been passed on to other government departments?

[2] Ev 19

Dr Pepper: Indirectly through the OGC and more directly through contacts we have with other departments.

Q45 Jon Trickett: I want to put it like this first of all before I ask any questions. It strikes me that if money was spent more than was necessary on this building, it is less money available for the defence of the realm and I think that would be the common view of people I visit, certainly. I do not believe you can demonstrate value for money on this building. The only way that the public sector knows how to get value for money for a project is by competition, and it is not a bad device, but we ceased to have competition at a very early stage in relation to this, did we not, and then the price increased by 21%? What happened then was that we used the public sector comparator. This is a notional ideal by which to try to calculate what the public sector building costs would have been and as long as the private sector was less than that we think we can demonstrate value for money. This Report I think demonstrates the reverse, that the public sector comparator figure was fiddled in order that it became higher than the PFI deal. I want to go through one or two figures with you. Paragraph 5.16 indicates that we added £156 million to the public sector comparator figure for risk. How was this figure arrived at?
Dr Pepper: By taking the factor of 24%, which was the guidance that is usually given by the Treasury as a measure of the average cost overrun in public sector managed projects.

Q46 Jon Trickett: I have heard this figure before but I have never heard that the Treasury advised you to add 24% to the cost of the public sector comparator figure. I have heard 24% before. Can I ask the Treasury, did you instruct them to add 24% to the £156 million?
Mr Glicksman: It is the case that we do not instruct departments but we advise departments that they ought to allow for possible cost increases in traditionally procured contracts.

Q47 Jon Trickett: Did you say that they should add 24%?
Mr Glicksman: No. 24% is the bottom of the range that we advise and it comes in the study carried out for us by the firm of consulting engineers Mott MacDonald which is available on our website, and it is, as I said, the lower end of the range that we advise.

Q48 Jon Trickett: The rest of this paragraph goes on to make some other points but the final sentence says: “As in other PFI cases, the adjustment for risk on construction costs . . . more than accounts for the estimated cost difference between the comparator and the PFI deal”. Can I ask the C&AG, is there any case at all anywhere that you are aware of or you have reported to this committee where the public sector comparator was higher than the PFI before this fiddle factor, as I call it, was added? You would call it, no doubt, scientific risk.
Mr Colman: I am not immediately aware of one but I would not like it to be said that there are not any.

Q49 Jon Trickett: What does this sentence mean then? It says, “As in other PFI cases, the adjustment for risk on construction costs . . . more than accounts for the estimated cost difference between the comparator and the PFI deal”. The key clause is “as in other PFI cases”, is it not? Does that not imply that in other PFI cases of which we are aware the difference is—?
Mr Colman: Yes, you are quite right, but it may not be all cases.

Q50 Jon Trickett: That was £156 million but that is not the end of the adjustments which were made in relation to this. Paragraph 5.20 talks about the discount rate. This is something complicated which is hard to explain, but essentially the Treasury changed the figures which it was using subsequent to this calculation to a lower discount rate. This made a £51 million difference in financing, did it not, which would have brought the public sector comparator within £20 million even allowing for the risk factor?
Dr Pepper: That is right. This, of course, was after we had done this, though the paragraph does go on to point out that the comparison may not be entirely fair because the bidders would have known what the discount rate was and they would undoubtedly have shaped their financial model to ensure that other measures—

Q51 Jon Trickett: Maybe, but later in Appendix 4 you will find that that is not an accurate statement that you have just made. I just want to establish this. After you have added £156 million for the public sector comparator, if you had adopted the current discount rate, even with that £156 million added, we would then have been within £20 million of a PFI bid. It is a very narrow fraction of money.
Dr Pepper: That is true, but may I comment please? The model that you are comparing with there is what we concluded at the time was the most likely thing that the Government would have instructed us to do had we not been able to go in for PFI.

Q52 Jon Trickett: The Treasury seems to me to be a co-conspirator if they are saying you should add 24% to a bid and also to be arguing for 6% discount. Anybody knows that the market was operating at much less than 6% at that time.
Dr Pepper: There is a point which I need to make, which is that although this was adopted this time as the PSC in the sense that it was the most likely alternative had we not gone ahead, this model would simply have refurbished on a rolling basis over many years our existing accommodation. It would not have bought the new single building and it would not have delivered any of the benefits. Yes, it is possible, by pushing some of these factors to the margin, to produce a situation in which the PSC and the PFI cost more or less the same, but the benefits that would have come from the PSC would have been

minuscule compared to those with the PFI, so in value for money terms the case for proceeding with the PFI was absolutely overwhelming.

Q53 Jon Trickett: I think there is an ideological predisposition to go in for the PFI which often beggars statistics. I want to go to Appendix 4. Under the paragraph headed "Services", which goes on to a separate column, it argues that if the cost estimates had been stepped as the private sector, as I understand it, had stepped them, that would have saved a further £49 million to the public sector comparator figure. Am I understanding that sentence right?
Dr Pepper: What that paragraph is trying to say is that we had to build into the PSC some assumption about what the costs would have been to have replaced various plant and so on during the life of the building. There are various ways in which you could profile that. One approach is simply to put 7% uniform across the lifetime. Another is an attempt to model precisely how you would have done it. Clearly, different models come out with a range of answers. I think what that is trying to explain is that under different assumptions your PSC will go up or down by this sum of money.

Q54 Jon Trickett: Fifty million pounds is a huge amount of money to buy a lot of spooks. At a time of the war against terrorism we could do with a few more than we have got. I want to try to understand this a bit further. As I read the document, what I think were called UPs (unitary payments) were stepped up?
Dr Pepper: Yes.

Q55 Jon Trickett: And yet, whoever was calculating the public sector comparator, you and your fellow conspirators in the Treasury decided to calculate the public sector comparator financing figure in a way which was prejudicial to the public sector comparator. That is how I read this sentence because you were assuming a different way of paying for it than the private sector was using, and this has made £50 million worth of difference.
Dr Pepper: The use of the UPs as a stepped model, and I have been looking at them in the last few days, is an odd thing to have done. The point about stepping the UP is that after 10 years we will exercise an option to take out of the contract some of the services being delivered and buy them completely separately. It is not obvious that that is particularly closely connected to the lifecycle replacement cost. This was just one model that was adopted in testing the sensitivities.

Q56 Jon Trickett: I can only go on the sentences which you have put. You are the co-author, Dr Pepper. What it says is that if the lifecycle costs estimate were stepped to match the profile of the unitary payments, ie, if the public sector comparator—this is my interpretation now—had utilised the same mechanisms as the private sector, it would have saved £50 million on the public sector comparator. There is no other way of interpreting that sentence, is there, whatever gloss you want to put on it? That is what the sentence says.
Dr Pepper: It is saying that, in order to test the sensitivity, if you adopt a different model other than a flat lifecycle replacement, and this is one possible model you could adopt, you get that reduction.

Q57 Jon Trickett: I think you are agreeing with me but I want to look at it in another way. If there is £50 million there, a further £50 million under paragraph 5.20, and I have not referred to paragraph 5.19 which shows that even with the figures which were adopted to get the public sector comparator figure higher, the lower end of the public sector comparator was less than the private sector. We have already got over £100 million disregarding paragraph 5.19, and a further £156 million in 5.16. It strikes me that all round it is £250 million which was loaded on to the public sector comparator which was not added to the private sector comparator because it was constructed in a different way. Is it not reasonable to read this document to say that you cannot demonstrate that you have got value for money, whatever gloss you want to put on it?
Dr Pepper: No, I do not think it is reasonable to read it that way. If you take the risk factor I would suggest that it is absolutely sensible to include a risk factor because that 24% comes from the history of public sector—
Jon Trickett: That is because you as civil servants have lost confidence in the capacity of the public service to deliver.

Q58 Mr Allan: Could you repeat that last bit of your answer about the history of—?
Dr Pepper: Actual public sector constructions. That 24% is based upon the history of the way public sector constructions have tended to go. They normally come out with quite a wide range of cost overrun. To have ignored that I suggest would be to give a misleading impression of what a public sector comparator costs.

Q59 Jon Trickett: Time is up. I will certainly look at the Treasury website which I was not aware of. I do not wish to fight with you personally at all, but it does strike me that that sentence you just used illustrates precisely what I have been saying for some time, which is that the public sector has lost its self-confidence, at least in relation to these kinds of projects, in that there is an ideological predisposition now to go to PFI whether or not the figures stack up. I feel, and certainly it has been confirmed by the C&AG, that the risk factors added time and again to public sector comparators—well, every single time that the C&AG is aware of—have actually made the difference between the public sector winning and losing a PFI. I will leave my questioning there.
Sir David Omand: May I just add one comment, Chairman, so that the committee is in no doubt that the processes which were used throughout the assessment of the public sector comparator were done according to the best practice that could be found? There may well be different views as to

whether that is genuinely the best practice but it is the practice that was followed and was done with complete integrity, so there can be no question of anything being fiddled.
Jon Trickett: I am not suggesting that in any way. I am just suggesting that there is an ideological predisposition, probably in the Treasury, to PFI, for whatever reason, and the figures time and again, Chairman, as we have seen, have been used in a particular way which has produced a particular result. It is hardly surprising if you believe in PFI that the figures produce the kind of evidence which is coming out time and again.

Q60 Chairman: Do the Treasury want to comment on that before we end this questioning?
Mr Glicksman: I would simply say that the figures that we have produced are based, as Dr Pepper said, on a historical comparison of past projects.

Q61 Jon Trickett: Exactly.
Mr Glicksman: The figure here is at the lower end of the range of cost overruns that have been found in practice on public sector projects and the analysis was done by a firm of consulting engineers for the Treasury. I do not think these figures were plucked out of the air.
Chairman: We do not want another comment, Mr Trickett.
Jon Trickett: Capita seems to me to figure in a lot of these analyses and once again we hear that this remarkable firm Capita is back in here giving advice. People should manage to make up their own point of view as to whether they have competence or not.
Mr Allan: When you said "the figure" is at the lower end of the cost overruns, to which figure were you referring?
Mr Glicksman: The 24%.

Q62 Mr Allan: You were referring to the £156 million?
Mr Glicksman: To the 24%, yes.

Q63 Mr Allan: I want to pick up on points about the technical transition costs and in particular Sir David's comments, first that the project team and the board focused on the building and not the softer aspects of the move and, secondly, that things were not picked up until 1998; in 1996 things were not apparent, in 1997 they were not apparent and they were only apparent in 1998, but at the end the two elements were broadly speaking equal. We are talking of the order of £300 million to £400 million for the building and £300 to £400 million for the technical transition. I find that amazing. It is rather like IBM planning a move and finding out later in the day that the computer costs for a computer business were high rather than the building costs. Do you find that amazing now that that was not picked up?
Sir David Omand: Yes, I do, but I think we have to be careful how we describe it. The cost of moving, packing up the boxes and moving them and putting them back in operation is turning out to be broadly equivalent to what was forecast at the time. What was not forecast was the cost essentially of providing a new information technology architecture, for GCHQ, which is what it now has. Referring to Mr Williams' point about Pindar, although I am sure there are a lot of valuable lessons we should have learnt from that, this is one area that I think is different, that the larger expenditure which was authorised on technical transition has produced lasting value in terms of the new architecture and the ability to manage it and considerably more resilience. That would have been expenditure needed whether the project was a publicly funded project or a PFI. It is a very large sum of money but it does represent real value.

Q64 Mr Allan: In terms of the large sum of money, I would agree that with 308 million as opposed to, say, the NHS national IT programme over the next few years, which is two billion, we are talking about a very large chunk of public IT spend. In terms of what we are getting for that, I do not know what you are allowed to confirm or deny but the sort of systems that are publicly described under names like Echelon in the press, those kind of collection and processing systems, communication information, those are what we are talking about that you are having to upgrade here?
Sir David Omand: No. A better analogy in your mind might be just to think of the member of staff sitting at a desktop where now, given the range of business that GCHQ has to do to deal with terrorism, serious crime, and support of military forces, that requires access to information from a wide range of systems. They are on to the same desktop but that has to produce a far wider range of material than was ever the case in the past and the access to tools to manipulate that information. For an organisation of this size that is a very major undertaking which the technical transition has provided.
Dr Pepper: That is right. There is quite a lot that comes out of the 300 million but a very, very important part of it, as David has said, is an entirely new infrastructure which will set us in very good stead for the future, not building the sort of systems that you were talking about a moment ago but enabling us to operate and control and bring the right things to the desk in real time and with very great flexibility.

Q65 Mr Allan: So when we use the phrase "technical transition", we are probably talking about an upgrade. What you have done is upgraded your systems.
Dr Pepper: An element of it. We have reached a point where, as with all IT systems, every now and then you have to replace them. If what you are talking about is a single stand-alone system then you can bring in a new one and let the old one go, but the complication we face is that we have a very large number of systems which interact in a very complex way. The great advantage we get from moving to a new building, which is one of the reasons why the concept of a new building was so attractive in the first place, is that effectively it gives us the IT

equivalent of a greenfield site and rather than having to move lots of boxes or cram new boxes into an existing computer hall while the existing ones are there, we can actually build a new infrastructure in a new computer hall and then eventually turn the old stuff off and have the new stuff operating and properly networked. It is something that we would have had to have done. It is arguably easier and cheaper doing it this way into a new computer hall than it would have been if we stayed on the old site.

Q66 Mr Allan: Is not the net effect that you as a public organisation got a 300 million upgrade to your computer systems disguised as part of this move when otherwise you would have had to have gone and bid for 300 million quid's worth of money in the same way as the NHS or anyone else?
Sir David Omand: Part of it, if I can interrupt, as the Principal Accounting Officer, had to be found by GCHQ itself, so they had to dig into their own programme.

Q67 Mr Allan: 218 as a present from the Treasury, 218 million.
Dr Pepper: I would not call it a present from the Treasury; I would call it recognition of a step we had to make to move into the future.

Q68 Mr Allan: As budgeted unplanned expenditure.
Dr Pepper: Frankly, we would have faced the problem had we not gone with this project. We would have faced this problem at about this stage anyway. We realised that we had a major upgrade, to use that word in that sense, challenge facing us.

Q69 Mr Allan: Can I go to the role of the Board in this. You said earlier that the figure of 20 million was reported to the Board for these initial costs, it should have been 41 million and all the directors knew it really should have been 41 million because they had worked on it. Why was that not corrected at the time?
Sir David Omand: I am searching my memory because a lot has happened since those days. The figures were presented in a rather different way in the paper that was formally the submission to the Board but it would be wrong to assume from that that there was an escalation of cost between 20 and 41 because it always was 41.

Q70 Mr Allan: So the paper said 20 million but everyone who sat around the table knew it was 41 million and nobody corrected the paper?
Sir David Omand: We have looked back but we have been unable to explain why the figures were presented in a rather different way on that particular piece of paper. By the time the figures were then taken on further and worked on and put to ministers the proper figures were being—

Q71 Mr Allan: The Board, in a sense, was working on a false premise in that it was talking about a project that was all about building costs and there was this little element of peanuts for technical transition. Can I ask, was there an IT expert on the Board?
Sir David Omand: Yes, we had a Director of Technology.

Q72 Mr Allan: A Director of Technology at that point when you were doing this did not put his or her hand up and say "Actually, there is all this stuff coming down the track"? We are talking about 1998, it is not very far away, saying "This is going to cost maybe a little bit more", like 15 times as much.
Sir David Omand: As we have said, it was a couple of years before the problem was articulated in that way. It seems obvious to us now but it did not seem so obvious at the time. For those of you who might have invested in PCs for home use, which were just beginning to come into general usage, it was quite difficult to predict at that time where all of this was going to end up.

Q73 Mr Allan: We have now 50% internet usage, 10% then, we have got mobile phones, and I am assuming your new system has all of the functionality that you need to cope with all this extra traffic.
Sir David Omand: Yes.

Q74 Mr Allan: I do question why a Director of Technology sitting on a board, looking at a project that had funding going forward to 2003, was not sitting there with the Director of Technical Expertise and saying "Well, in 2003 we will need all of this".
Dr Pepper: The Director of Technology was in the same situation, the same mindset if you like, as the rest of the engineers back in 1996. We were in a period of very rapid transition and we—including the Director of Technology as much as the engineers—failed to recognise quite the extent and the full implications of the transition we were going through, the totally new IT world that we were moving into. None of them had made that shift of mindset to realise that the world was now a very different place.
Sir David Omand: The truth is that it was too easy to take the existing plans for the new computer hall and simply transfer the thinking on to the larger programme. It was too easy to do that and, if you like, it was sloppiness and we should have thought about it much harder than we did.

Q75 Mr Allan: We should not be suspicious that there was a mindset of "we want a new building so we will not raise all these awkward questions that are going to cost lots of government money now or we will not get our building"?
Dr Pepper: Certainly not. The NAO have looked at the paperwork, we have had Sir Edmund Burton look at the history of what happened. That was absolutely not what happened. Had there been any suggestion of that I would suggest the NAO would have drawn attention to that.

Q76 Mr Allan: You talked about direct contact with other agencies and I am interested in the move of the Health and Safety Laboratories who are moving a complex technical system from Sheffield to a single new greenfield PFI site somewhere near Buxton. Have you spoken to the HSL about this because clearly there are a lot of lessons from what you have done here and I would have thought maybe they would be applicable to an agency like that?
Dr Pepper: I have not. I do not know whether they have contacted us. My expectation is that they will be working through the OGC guidance, which we have contributed to. If they wish to come and talk to us we would be very happy to give them the benefit of our painful lessons learned.

Q77 Mr Jenkins: Coming so late in the order most of the questions have already been asked so I have to reform or reframe these questions. When you were doing the bidding there were four main contractors, two of them were very good quality bids but a bit high on price. The preferred bidder, because you made certain adjustments, increased their price by 21%. Would you have been able to negotiate with Turing, who had a good quality building, and got a similar level of price?
Dr Pepper: We could not have negotiated just with Turing, we would have had to treat all of the bidders the same obviously. There was no reason to believe at the stage we made the selection that there was any particular asymmetry in the amount of work that had to be done. There was no reason to believe that Turing were there and would have stayed where they were whereas everybody else would have moved. All the bids needed a lot of work. All the bids were deficient in various respects. The team were pretty confident that Turing would have risen perhaps not by the same amount but there was no reason at all to suppose that they would have changed their place in the rating.

Q78 Mr Jenkins: After you allocated this preferred bidder status I see your Project Director left.
Dr Pepper: Yes.

Q79 Mr Jenkins: Was there any reason why he left at that critical stage?
Dr Pepper: He chose to go off and pursue a career in the private sector, as people do.

Q80 Mr Jenkins: Rather a strange decision for a Project Director to make just after you have got the preferred bidder.
Dr Pepper: Not necessarily. I think if you look at it from his point of view, and I have not spoken to him, I have not seen him for a long time, by that stage he had acquired a considerable expertise in managing a PFI project, there was a lot of PFI going on in the marketplace and he probably thought that it was a good opportunity to go and sell his skills to other bidders.

Q81 Mr Jenkins: And the new Programme Director undertook further consultation with the technicians in 1999 and then found out that considerable changes were identified and they had to rejig the programme. Why did he not talk to the technicians earlier on.

Dr Pepper: The key word, I suggest, is "further". The engineers had all been involved in the earlier specification but that was probably two years before. The new Programme Director, very properly, before moving into the final stage did a complete review of the requirements. It is worth saying—because this is a very important part of what followed—the new Programme Director is a very experienced director of large programmes. He works on the basis of a very rigorous approach to very thoroughly documented requirements. He wanted to be sure that he had documented in the proper systems engineering fashion all the requirements in great detail, both to get them locked into the proper methodology, the programme methodology, but also to make sure that they were refreshed. Two years is quite a long time in our business, so he did a complete refresh on all the requirements and, not surprisingly, some of them had changed, that is the nature of our business.

Q82 Mr Jenkins: I would like to ask, following from Mr Allan's question, I was interested, Sir David, when you said that the directors knew that it was 41 million although the paper told us it was 20 million. When you said the "directors", did you mean all the directors or just some of the directors?
Sir David Omand: I am not able to say. I am afraid I cannot remember the exact nature of the discussions we had. I do know that clearly I was well briefed because I was taking the subject at the Board and at that stage the team were indeed drawing on their underlying work and that would have been available to other directors. Whether every director had cottoned on to that, I do not know. In a sense, if I might just add, that was not the critical figure. At this stage what we were looking to see was did we have a *prima facie* case which would justify beginning a process of testing the PFI market. This was a situation in which it had become clear that a publicly financed rebuild was not going to be possible unless we had first demonstrated that the PFI solution was not available. That was the position that the Board was faced with. We had done some work on the Benhall site, so we had some basis for looking at PFI, and we had, of course, the plans which had been drawn up for the new computer block. The question was would it not be better to have a look at a total PFI solution, and that was really what the Board was looking at, it was not about the details of exactly how much all this was likely to cost because at that stage we had no real metric for whether any private sector bidder would be able to come in with a bid which would be value for money.
Dr Pepper: If I may add, it is also the case that whether it was 20 or 40 million, that was a sum that we were perfectly comfortable we could absorb within our normal technical programme. It was not a figure to focus on; the big focus was on the commercial feasibility.

Q83 Mr Jenkins: All I am trying to establish is how we got to the end through the particular steps. My feeling is that if you had told me as a member of the Board that it was only going to cost £20 million to transfer this equipment over I would have been interested, we should have managed that quite easily, and I would have taken my eye off it.
Dr Pepper: And we did.

Q84 Mr Jenkins: I would have been more interested in the PFI construction of the building itself.
Sir David Omand: That was exactly the reason for the 40 million.

Q85 Mr Jenkins: You admit by giving the Board that information they took their eye off the ball?
Sir David Omand: Absolutely.

Q86 Mr Jenkins: Fine. You got this equipment in place, you got the structure in place, why did you not realise that it was going to cost you more to move it? Did you go down and talk to the technicians? They would have quickly realised that it was not possible to move this equipment for this amount of money.
Dr Pepper: The figure had come from our technicians. It was nobody else who dreamt it up, the figure came from the small technical team.

Q87 Mr Jenkins: I have just got this feeling at the back of my mind, being a suspicious individual reading this Report, that when you said, Dr Pepper, we would have had to have these systems anyway, that we would not have built this anywhere but on a PFI project, what we got was the government, or the minister, they started to reel him in and the project went up 20%, we had a big building and it started to grow and somebody must have known that these new systems going in would have been an expensive addition to this price, but once you got so far in you could not get off the hook and bit by bit you dragged him in and the price went up and up and up and no-one was big enough to call a halt to it.
Dr Pepper: When I said that we would have had to face up to this anyway I was speaking with hindsight. It was not remotely apparent or even dreamed of at the time, and certainly we were not in a position of, in effect, deceiving ministers, which I think is the implication. We most certainly were not doing that.

Q88 Mr Jenkins: I am reminded that in the London area you have got builders who walk in and say "Yes, I can do that for £500", and you say "£500? The last bloke quoted £1,500" and as soon as they walk in the first thing they do is lift the carpet and say, "I did not know that was there, that is going to be a bit more expensive" but you are locked, the builders are in, and it is going to cost you £2,000. Where do we get the break point? As we heard, the minister was not informed until late 1999 that the technical transition costs were £415 million, late 1999. That was a bit late to make another decision.
Dr Pepper: It was during the course of the second half of 1999 that we realised the size of the problem that we had. The figure, if I may say, of 40 million, perhaps slightly more, even with hindsight was a perfectly sensible figure if all that had been needed was to pick up a series of self-standing systems and move them. Even now, it is a perfectly valid figure. The complication came in simply because of the network complexity that we had not understood. It was a perfectly good answer to a question, it was just that the engineers were asking themselves the wrong question.
Sir David Omand: If I can just return to a point we made in answer to another question. Overall, this programme still represents very considerable value for money. Had this programme not proceeded then the department would have faced a very, very difficult situation in which the rebuilding programme would have stretched out beyond the lifetime of a large number of the buildings. To get round that the technical transition costs would have been of the same order of magnitude and it would all have been done in a very painful way and we would not have had the benefits that we can now see ahead of us in terms of the flexibility of having our engineers and our intelligence staffs on the same site able to cope with the challenges of the 21st century.

Q89 Mr Jenkins: I do not disagree for one moment that you got value for money. I do not disagree with what you are saying about the requirements that we needed, etc., but all I am asking is given the government's responsibility to allocate funding on priority to the government, do you believe if you had gone in front of the minister and said, "This is going to be the total cost, we are not talking about 400 million, we are talking about 800 million", that the government would have come down and said, "Yes, of course, we will have that, it is very good value for money"?
Sir David Omand: My fear is that if we had known that, which we did not, if we had known that and the government of the day had said that amount of capital is not going to be available, I am afraid they would have left us now in a disastrous position of having a decaying system and we would now be faced with an emergency programme which would be more expensive than this to try and rectify the situation. The right decision was taken but the route by which this programme was launched at the beginning was not at all satisfactory and we make no excuses for that, but the right decision was reached.

Q90 Mr Jenkins: We got there in the end. Thank you, that is all I wanted to know, that we got there in the end. How we got there is left to our own conclusions. I am under no illusion that the ministers did not understand the full implications when they okayed that project.
Dr Pepper: I am sorry, can I just make clear that at the time we were authorised to sign the contract the ministers absolutely knew the full story. When we were first told we could explore it, they did not, but the contract was signed and the final go-ahead was given on the basis of absolutely full and final and complete information.

Q91 Mr Jenkins: How do you know that because you did not know what you were wiring into the building? Do not tell me that the minister had the full story because he did not.
Sir David Omand: That was March 2000. The contract was not signed until—
Dr Pepper: The contract was signed in June 2000. The cost of technical transition at that point was set by the minister at £308.6 million. That was precisely what we are in the process of delivering.
Sir David Omand: It was only after Sir Edmund Burton's work, and after my predecessor in this role had gone through the figures with a fine toothcomb and had presented his advice to ministers, only at that point was the go-ahead given to sign the contract.
Dr Pepper: There has been no cost escalation since that point.

Q92 Chairman: What would have happened if the minister had said no at that stage?
Dr Pepper: Then we would almost certainly have had to pay compensation to the contractor.

Q93 Chairman: How much?
Dr Pepper: I have no idea.[3]

Q94 Chairman: It was not going to happen, the minister was not going to say no, was he?
Dr Pepper: Had the comparison that we have put forward between the PFI and the PSC come out very differently, if the PSC costs had come out to be very much cheaper then one assumes the minister would have gone in that direction.

Q95 Jon Cruddas: I will reserve going into some of that and take a more charitable take on some of this. The arguments to date are ones of technical complexity and the imminence of the Millennium in terms of the technical changes. Was that the conclusion of the Burton report itself? I have not read the Burton report; I have just read the way it has been commented on in the NAO Report. They covered some 43 management recommendations on the basis of a more strategic approach to be deployed across GCHQ and not just the management of this PFI project. Is that right?
Dr Pepper: That is right.

Q96 Jon Cruddas: Could you give us a flavour of that because I am slightly blind on that?
Dr Pepper: Yes. You would not have read the Burton report because it has not been made available to you.

Q97 Jon Cruddas: I assumed that.
Dr Pepper: The main thrust of the Burton report was that one of the key failings in the way we had gone about all of this was a lack of strategic approach to our overall planning and management systems. As a result of that, we have done a range of things. We have completely redesigned our financial and operational planning. We now have five and 10 year horizons that we work to, so we are not falling into the trap of only looking two or three years ahead. We have built what we call a blueprint, a description of the model of the organisation five years hence, which is completely all-embracing. We have adopted the formal programme methodology, the OGC methodology, for all our change programmes. We are using OGC gateway reviews with external reviewers for all big programmes. Again, we are bringing in outside expertise to look at the planning of what we are doing to make sure that we are doing it properly. We now have three external non-executive directors on the Board. One of them is Sir Edmund Burton, the other two are from industry, so they are able to bring industrial best practice to make sure that, firstly, we have decent systems and, secondly, they are able to cast a sceptical look at particular projects and say, "Have you thought of this?"

Q98 Jon Cruddas: None of this existed before May 2000?
Dr Pepper: Correct.

Q99 Jon Cruddas: The changes in the estimates occurred 1989–90?
Dr Pepper: Late 1999.

Q100 Jon Cruddas: Late 1999, okay. Can I just ask a question on this three year horizon for strategic planning. Does that mean that in 1996 you would not have had the Millennium on your three year strategic horizon?
Dr Pepper: In 1996, although it was not built into the financial modelling, we were already starting to say "It is coming".

Q101 Jon Cruddas: "And we should begin to act accordingly"?
Dr Pepper: Yes.

Q102 Jon Cruddas: I have only read the NAO commentary on the Burton report but it says here—
Dr Pepper: Can you just give me a paragraph number?

Q103 Jon Cruddas: 4.19. It talks about the management arrangements to achieve the successful implementation of the project, recognised the changes in GCHQ's management procedures, which you began to talk about, and proposed some more, "However, it identified high level planning and management weaknesses and made recommendations to address these". The next sentence is the one I want to focus on: "The failure to co-ordinate the development of the PFI deal and the transition process at strategic level was a symptom of such weaknesses". So the actual PFI problems that we have been discussing today were symptomatic of a failure of strategic direction across the whole organisation. That is what it says, is it not?

[3] Ev 19

Dr Pepper: That is what it says.

Q104 Jon Cruddas: Your emphasis on the technical problems, given this revolution in information communications, global technologies and the like that was occurring throughout the 1990s, and the imminence of the Millennium, the two issues that we have talked for the last hour and a half on, were not the real issues according to this Cabinet Secretary's commissioned report, the real issues were symptomatic of the failures of the organisation as a whole, namely its whole approach to strategic management?
Dr Pepper: Can I link the two in what Sir Edmund was saying. We have talked about the initial failure to recognise the true cost. What compounded that is what Sir Edmund was talking about which was having started the project the way we did, having a project team that was focusing on the building which concluded, wrongly as it turned out, that the technical transition was going to be relatively straightforward, they then carried on focusing on the building project. What we did not have in the organisation was a programmatic approach which would have forced them to look at the whole job, both the building and the technical transition, and keep making sure that they were being managed properly together. Had they done that, and had the people who were doing that also been talking in the appropriate way to the rest of the technical organisation, I think it likely that the problem would have come to light sooner.

Q105 Jon Cruddas: So, therefore, it is symptomatic of a systemic problem within GCHQ?
Dr Pepper: Absolutely.

Q106 Jon Cruddas: Only reversed from May 2000 onwards.
Dr Pepper: Absolutely.

Q107 Jon Cruddas: I make my point that that rests uncomfortably with the arguments you have been putting forward about the technical problems associated with it and the imminence of 2000 as the primary reasons for the cost overruns. Again, I have not read the report but this seems to take a different route to it which sees these cost overruns as symptomatic of a deep malaise within the organisation.
Sir David Omand: If I can add a comment there. I think what it is saying is that a large part of the explanation why we did not pick up on this earlier was because of the way the project was run and was symptomatic of an older way of running an organisation which had grown up, as Dr Pepper said, facing the old Soviet target and where individual parts of the organisation could largely run as separate components. The concept of the total enterprise, which is what we are talking about here, had to come in at this period.

Q108 Jon Cruddas: Are you entirely confident, given the Burton report and its 43 identified changes and the problems he has identified in terms of anticipation of information and communications revolutions, etc., that despite all of these problems you have somehow got the perfect building?
Dr Pepper: Perfection is a hard concept to grasp. What we have is an exceptionally good building.

Q109 Jon Cruddas: Despite, or rather because of, the management process? Maybe that is too harsh.
Dr Pepper: The building design itself was never a problem. The problem was linking the building to the technical transition. The building itself as a working environment, and as an environment to install our IT, is excellent I think.
Sir David Omand: The rigorous implementation of Edmund Burton's recommendations has rebalanced the whole thing and means, as has been pointed out, the programme has been delivered on time and cost.

Q110 Jon Cruddas: Can I just ask one final question on that because I have just read your update memorandum to the PAC and a couple of sentences jumped out at me and I wondered what lay behind them. In terms of detail, paragraph two: "IAS delivered the originally-contracted construction and fit-out work in late June, but the Independent Engineer required that a number of faults be rectified before the work could be accepted as complete." A bit lower down: "GHCQ required further work in the form of contract variations to be completed by IAS before the decant could begin." At the bottom: "IAS completed almost all the work required by 17 September . . ." I do not know what lies behind those sentences but it could be interpreted as reflecting still some concerns about the actual management of this project.
Sir David Omand: No.

Q111 Jon Cruddas: Minor marginal issues.
Dr Pepper: Would you like me to explain a bit more?

Q112 Jon Cruddas: Yes.
Dr Pepper: The problems in June were not much more than the normal snags that you get with a new building. They had been rushing to finish it by the middle of June, they had done a 99.9% job but there were inevitably still things to be done before we could move in. The variations reflect the fact that we are in a volatile business. The specification for the building had been finalised three years ago and a lot has happened in the world in those three years, including 9/11, and we have necessarily had to make quite a lot of changes to our organisational configuration. Consequently, before we could move our people in there were changes that had to be made from the way it was originally specified to the way we wanted it. We could not force IAS to incorporate those changes in the building process because that would have put the achievement of their bonus at risk and so on, so they would not take it on. What we wanted to do, therefore, what we had to do, was to get those changes made at the last minute. What we worked towards in the methods as we describe in this update memo was a way of getting those done but still getting in on time on 17 September.

Q113 Mr Bacon: Dr Pepper, how many directors have there been of GCHQ since January 1998?
Dr Pepper: Since January 1998, Francis Richards and myself.

Q114 Mr Bacon: I have the CV of Sir Kevin Tebbit here, from when he appeared before us last, which says that he became Director of GCHQ in January 1998.
Dr Pepper: For six months, that is right.

Q115 Mr Bacon: Then he left in July 1998.
Dr Pepper: That is right.

Q116 Mr Bacon: Since then there has just been Francis Richards and yourself. You have been there since April.
Dr Pepper: Yes.

Q117 Mr Bacon: You are not expecting to go anywhere in a hurry?
Dr Pepper: I am not expecting to go anywhere in a hurry.

Q118 Mr Bacon: I would just like to continue the point Mr Cruddas was making. If you continue down on page 19, paragraph 4.21, it is talking about the recommendations of the Burton report and it says: "The remaining recommendations addressed issues of leadership and management; communications between different types and levels of staff . . .". That probably covers a multitude of things. ". . . capture of information for planning; investment in people and staff training; project management; and the oversight and control of programmes of work". That paragraph covers just about everything one way or another. It is written in that exquisitely understated NAO style. It sounds very much as if the management of your organisation has been very poor, as Mr Cruddas was saying. Do you think that is fair?
Dr Pepper: No, I do not think it is fair. Although the Burton report—

Q119 Mr Bacon: I do not mean that it is now.
Dr Pepper: No, no, even then. The Burton report did indeed address all those but it did not address them by saying "all these aspects are a complete disaster, GCHQ is a shambles, you need to put something in place". He made recommendations to improve all of those things. Some of them were worse than others. As I have said, the planning mechanism was too stove piped and not far enough looking ahead and that was seriously flawed. On the others he was making points that existing systems could be improved.

Q120 Mr Bacon: For obvious reasons there is a secrecy surrounding the work that you do but do you think that for too long people have assumed culturally do not touch, do not ask about that? It is rather like the Royal Family and when they did ask about royal travel when Sir Michael Peat moved in they cut costs from 17 million to five million and increased the amount of travel and scrutiny is improving in the Royal Family in many ways. Do you think that in a Cold War sense there is a throwback that you do not ask about this and management has suffered because of that?
Dr Pepper: In many ways, yes. If you go back to about 1995 there was a report written on various aspects of the UK intelligence community but there was a recommendation in that report that was written by a retired Permanent Secretary saying much of what you have just said and recommending that it would be a good idea if some outside expertise was brought in to look at GCHQ's management. As a result of that, a senior industrialist came and spent three months looking at the way we manage the place and he made a whole series of recommendations. That was the beginning of a major period of change. We then had Sir David's appointment as Director, the first ever director from outside the organisation. Since then we have had a couple of other directors from outside. As I mentioned earlier, we now have three non-executive directors on the Board who are from outside the organisation. We have moved from a situation seven or eight years ago when we were really very inward looking and entirely content that we knew how to manage the business to one where we are very actively seeking the best possible practice from the outside world.

Q121 Mr Bacon: We are all familiar with 15 year olds hacking into the National Security Agency computer in America, have you had problems with hacking?
Dr Pepper: No.
Chairman: I think we should not get into any close detail on this point, I do not think it is particularly relevant.

Q122 Mr Bacon: In that case, could I ask about the PFI and public sector comparator. When you said 24% for the risk factor, I was surprised because the Home Office, which we looked at only a week or two ago, was 9% and MoD was 16% from memory. The NAO tell me that the Treasury has done a study, or rather it got Mott MacDonald to do a study, on a wide range of procurements and, indeed, 24% is the accurate figure. Is it possible that you can let us have a copy of the Mott MacDonald report?[4]
Mr Glicksman: It is actually on our website. I have offered Mr Trickett that.[5]

Q123 Mr Bacon: I would like it as part of the evidence, if we could. The second thing is on page 25, this risk adjustment of 156 million, basic 600, 24%, could we have a breakdown of that? Is it possible that if you study page 24 of the NAO Report on the MoD building, which gives a quite easy to follow guide to the way the risk adjustment process is calculated rather than just a bald figure, we could have it shown in more detail?

[4] http://www.hm-treasury.gov.uk/mediastore/otherfiles/greenbk_mottsrep02.pdf; Ev 18
[5] Qq 59–61

Dr Pepper: Yes. I have to say it will not have as many lines on it as the MoD page you are talking about because that analysis was about the refurbishment of an existing building, so there were quite a lot of individual risks that did not arise in this case. I do not know whether we did the risk adjustment at a detailed level, I suspect we did it simply by applying the 24% factor to the total cost. I am very happy to go away and see what we can provide.[6]

Q124 Mr Bacon: You raise an interesting point because when I talked to a local builder about the cost of doing up a barn as opposed to building a new house, he told me 60 quid per square foot to build a new house and 80 quid to do up a barn. You have got the barn, it is there, but it is actually more expensive to adjust something, and, therefore, although you would expect that big project to cost more, it is a higher risk than, say, to use your words, a new greenfield site. Why is your risk factor eight or nine percentage points higher than the MoD?
Dr Pepper: I cannot comment on a comparison with the MoD, all I can say is the risk factor that we used was taken from Treasury guidance on construction costs for new buildings.

Q125 Mr Bacon: Do you agree with the National Audit Office that the public sector comparator is pseudo-scientific mumbo-jumbo?
Sir David Omand: I think the way I would put it is there are two tests that have to be passed when you look at a project like this and when you are talking of a public sector comparator. One is that if you are trying to do approximately the same thing, one by the PFI route, the other by the publicly financed route, can you demonstrate the PFI route represents better value for money. The second test which applied here, and after 1999 was really the crucial test, was if you take into account the cost of technical transition and you compare, on the one hand, PFI with full technical transition costs and, on the other, what would have been the alternative to the public sector had the PFI not gone ahead, can you still demonstrate that the PFI route represents value for money. This project passed both of those tests.

Q126 Mr Bacon: In paragraph 5.19 this range of 221 million enables you to demonstrate anything you like, that is the point. In 5.20 it talks about the discount rate which, again, reduced the difference to 20 million. What I am interested in is this: you have got this risk factor of 24%, which I must admit is the highest I have seen, but I take it that the Mott MacDonald report is correct, and if that is right why do you assume the public sector is not capable of improvement? Classically the reason these public sector projects go wrong is because the client cannot decide what it wants and gets taken to the cleaners by the contractors, but in a PFI the contractor is in control of the design and once it is set in stone, that is that. Why can the public sector not learn from experience and why can it not replicate that model? Why can it not hire a few extra chartered quantity surveyors and start reducing those costs? Why do you not run some building procurements like this in parallel, run the projects in parallel, so you can see down the road which is proving to be better value for money?
Sir David Omand: I have no doubt that the Treasury will be doing comparisons between those projects that are publicly run and other PFIs so that these figures can be updated. Like you, I would hope that the public sector is capable of rather better performance than the historic figures show. The reason for doing sensitivity analysis is to try and bring out which of these factors are likely to swing the figures one way or the other. If you take into account the full range of factors, including technical transition, you come out with a range where at one end perhaps you can get figures, as we discussed earlier, which are about the same between the PSC and the PFI, but at the other end are at least £200 million more.

Q127 Mr Bacon: Can you just clarify something. This £221 million gap in the PSC, does that include that technical transition?
Dr Pepper: Yes, it does.
Sir David Omand: An assumption was made about technical transition in the two cases and, of course, the amounts of technical transition are different in the two cases.

Q128 Mr Bacon: They were wildly out in any case, 40 to 400, were they not?
Dr Pepper: This was long past the 400.
Sir David Omand: This was long past the 308 million.

Q129 Mr Bacon: My original question was why can the public sector not learn from experience? Why does it have to be 24%? Why can the public sector not reduce those risks by managing the process better, by learning what it is the private sector does, namely sort the design and stick with it? Why do the public sector not try and do that?
Mr Glicksman: Chairman, would it be more appropriate if I answered that question, which I think is more one for the Treasury than for Sir David Omand. The Committee will know from hearings with Mr Gershon that the Office of Government Commerce does have a variety of initiatives in hand to try and improve the public sector's performance in traditional procurement contracts. Simply because the Committee has a series of PFI reports coming before it, it should not get the impression that PFI is the only route by which the government procures capital projects. PFI, to my recollection, represents something like 10 to 15% of the government's capital procurement programme. There are a large number of traditional procurement projects going on within government. It may be that we will, in due course, update our analysis of the way in which government departments manage these large projects. Meanwhile, I think it would be irresponsible of a department to go into a traditional procurement project and assume that they could

[6] Ev 19–20

overturn the history of many, many years of cost and time overruns on traditional procurement projects, I think we have to be realistic about that.

Q130 Mr Bacon: It is not exactly ambitious, is it, assuming that you are going to fail before you start so you do not even try?
Mr Glicksman: It is simply looking at the historical record. I think we have to be realistic. It would be unrealistic to assume that they were not going to suffer similar problems in the future. As I say, 24% is actually the lower end of the range. Even assuming 24% is assuming a better outcome than has been achieved for the majority of public sector procurements.

Q131 Mr Bacon: Is GCHQ off the balance sheet?
Dr Pepper: It is on balance sheet.

Q132 Mr Bacon: On the government's balance sheet?
Dr Pepper: Yes.

Q133 Mr Jenkins: If at any time in the future IAS refinance additional funding for a deal, have we got a clause in the contract that says we get a percentage back?
Dr Pepper: We have. They cannot refinance without our agreement. If they choose to refinance they have to negotiate a clawback deal with us. We would not give agreement unless we had a good return.

Q134 Mr Bacon: You are aware of the guidelines laid down?
Dr Pepper: The Treasury guidelines of at least 50/50; we would not settle for anything worse than that.

Q135 Chairman: Finally, Sir, David, GCHQ is spending £1,247 million cash over 30 years. Your case this afternoon is that if at the outset you had known the full cost of this programme you would still have given permission for it to proceed, would you?
Sir David Omand: Yes.
Chairman: We will leave it there then. Thank you, gentlemen, for appearing before us. I think it has been a very well ordered inquiry. There are, of course, sensitivities surrounding this subject. I think the Committee was somewhat surprised to learn that when the original decisions were taken, apparently more people did not foresee the uniquely changing environment that you face in universal mobile phones and the internet, but there we are. We recognise that you are in a uniquely challenging environment and this Committee, and the House as a whole, is very grateful to you and your staff for what you do to protect our freedom in a very dangerous world. I am sure that other Members of the Committee would want me to pass on their thanks to you and to your staff for the work that you do. I hope that you feel that we have conducted ourselves this afternoon in an orderly fashion, that while we can probe you on the cost of the PFI deal, we have not in any way embarrassed you or the very sensitive field that you work in. Thank you.

Excerpt from *Review of large public procurement in the UK*, Report by Mott McDonald

The optimism bias values in the Table below represent the average optimism bias levels for each of the project types studied.

RECORDED OPTIMISM BIAS

	Project Type	*Optimism Bias (%)*				
		Works Duration	*CAPEX*	*Unitary Payments*	*OPEX*	*Benefits Shortfall*
Traditional*	Non-standard Buildings	39	51	N/A	No info	1
	Standard Buildings	4	24	N/A	No info	No info
	Non-standard Civil Engineering	15	66	N/A	No info	5
	Standard Civil Engineering	34	44	N/A	No info	No info
	Equipment/Development	54	214	N/A	No info	No info
	Outsourcing	N/A	N/A	N/A	41	No info
	All Traditional	**17**	**47**	**N/A**	**41**	**2**
PFI/PPP**	Standard Buildings	−16	2	1	N/A	0
	Standard Civil Engineering	No info	0	0	N/A	0
	Equipment/Development	28	No info	19	N/A	10
	Outsourcing	N/A	N/A	8	N/A	5
	All PFI/PPP	**−1**	**1**	**5**	**N/A**	**2**

* The optimism bias is measured from strategic outline case or outline business case.

** The optimism bias is measured from full business case. The capital expenditure optimism bias is measured as a percentage of the contract price.

Note: Do not use this Table for calculating the optimism bias levels for current projects. Guidance for calculating optimism bias levels for current projects is provided in Section 4 [of the Mott McDonald Report].

The optimism bias levels for PFI/PPP projects were measured at the full business case stage whereas the optimism bias levels for traditionally procured projects have been recorded at the strategic outline case and the outline business case stages.

Memorandum submitted by the Government Communications Headquarters (GCHQ)

UPDATE MEMORANDUM

Key Points

- The decant of GCHQ staff into the New Accommodation began as scheduled on 17 September 2003.
- Technical Transition has been delivered successfully so far: it is on schedule and still forecast to be within its agreed budget of £308.6 million.

Detail

1. This memorandum is provided to update the Committee on progress with the GCHQ New Accommodation Programme since the National Audit Office Report was published.

2. The PFI contract signed in June 2000 required the completion of the bulk of the construction works by 3 September and provided a bonus for earlier completion. IAS delivered the originally-contracted construction and fit-out work in late June, but the Independent Engineer required that a number of faults be rectified before the work could be accepted as complete. The delay in formal hand-over would have restricted GCHQ's ability to progress the technical fit-out necessary before the move of staff could begin. In addition, GCHQ required further work in the form of contract variations to be completed by IAS before the decant could begin. This further work was essential for the success of GCHQ's transition plans which could not have been foreseen when the PFI contract was signed.

3. GCHQ appraised the options available in these circumstances. The best value option was found to be to re-negotiate the early completion bonus with IAS to incentivise both rectification of the faults in a significantly shorter timescale than stipulated in the Project Agreement and completion by mid September of the critical contract variations raised by GCHQ. This option was negotiated successfully with IAS: they accepted an amendment to the project agreement under which they would receive a bonus payment appropriate to a late June completion date conditional on the completion of the remaining work by 17 September 2003. Completion was to be measured by a set of pre-defined milestones, independently verified by the Independent Engineer, with clear pre-agreed abatements in the event of unsuccessful or partial results.

4. The revised early-completion scheme was successful. IAS completed almost all the work required by 17 September and just over £100K was abated from the early-completion payment of £2.2 million for the outstanding work. As a result, the decant began as scheduled on 17 September.

5. In parallel with IAS completing the building, significant progress has been made on Technical Transition and moving staff. The IT in the new building was operational and connected to the Oakley Plot 2 infrastructure in advance of the first day of the decant. Roll-out of IT is keeping pace with the influx of staff at the rate of about 100 per week. The most challenging moves to the new building—the Sigint production areas—do not start until Spring 2004. Overall, Technical Transition is being delivered on schedule and remains forecast to be completed within its agreed budget of £308.6 million. There is still a great deal to do, but the early success is a testament to the thoroughness of the work done by the Programme team.

November 2003

Supplementary memorandum submitted by the Government Communications Headquarters (GCHQ)

Question 34 (Mr Jones): Traffic management

The Committee asked whether any improvements to Junction 10 on the M5 were contemplated as part of the package of road improvements in connection with the new building. A number of road improvements were mandated when planning permission for the building was granted by Cheltenham Borough Council, but no discussions took place regarding Junction 10 and none of the improvements relate to it. IAS have completed all the work that was mandated.

Question 93 (Chairman): Cancellation cost

The Committee asked what cancellation costs would have been incurred had Ministers decided not to proceed with the PFI project in March 2000. IAS have told us that, in their opinion, this information falls under commercial sensitivity, and so they are not willing to disclose it. They also make the point that the figure would depend significantly on the date at which the decision not to proceed was made.

Question 123 (Mr Bacon): Public Sector Comparator

The Committee asked for a fuller presentation of the cost of the Public Sector Comparator as at June 2000, enlarging on the appropriate column of Figure 12 on page 25 of the NAO Report. I attach an expansion of that figure setting out the details of our PSC, based on that used in the NAO Report on the MOD Main Building. We have worked from the original spreadsheet provided to the NAO to do this. The Committee will appreciate that many of the headings used in the MOD related report are not applicable in our case.

The Committee will note that, although the overall total (and thus the PSC) remains the same, the further work has revealed that the original Figure 12 contained an error which overstated the risk adjustment by some £5 million. This occurred in the summarisation by the NAO of the GCHQ spreadsheet provided to them; the process of extracting the extra detail required exposed this error. I apologise that we did not notice this at the time.

GCHQ: NEW ACCOMMODATION PROGRAMME: PUBLIC SECTOR COMPARATOR

Public Sector Comparator—Net Present Value (£ millions)

	Base costs	*Risk*	*Risk as % of base costs*
New build	174	42	24
Refurbishment	57	14	24
Site works	7	0	
Fees	28	7	24
Lifecycle costs	368	89	24
Non-technical transition	2	0	
Land sales	(31)	0	
Total: (Building, refurbishment and services)	**605**	**151**	
Technical transition	68	0	
Total	**673**	**151**	
Total PSC	**824**		

Note: An allowance of 24% for the risk of cost overrun in major publicly funded construction projects was included in the figures for the new buildings and refurbishments. Fees and lifecycle costs were estimated as a percentage of these costs, and so the same allowance automatically applies to them. Other elements included no allowance for risk—variabilities in many of them were explored as part of the sensitivity analysis (see Appendix 4 to the NAO Report).

19 December 2003

Supplementary memorandum submitted by the HM Treasury

I am sorry that it has taken so long for me to reply to the questions raised by Mr Bacon. We have been looking back to see what material we can find. In the event, I am sorry that we are not able to provide the information requested by Mr Bacon. We agreed with Mott MacDonald that they should collect the information from the project owners, analyse it and provide advice on the basis of their analysis. Project owners were given assurances about confidentiality on the part of Mott MacDonald in order to encourage them to participate in the survey in an open and frank fashion and we did not seek to obtain the underlying project data. We have some data on a small number of major transportation projects but nothing else.

Mr Bacon asked about the selection of projects. Unfortunately, the exact process for selecting the final 50 projects that formed the basis of the Mott MacDonald sample has not been documented but I am advised that the main determining factor was the availability of suitable evidence. Nevertheless, the adjustment factors that Mott MacDonald recommended (derived from the sample) were well within their range of expectations and experience.

We do not consider that the underlying data for each project would provide added benefit to managers seeking to allow for optimism bias. As the Treasury's guidance on investment appraisal (the Green Book) points out:

> "5.61 There is a demonstrated, systematic, tendency for project appraisers to be overly optimistic. This is a worldwide phenomenon that affects both the private and public sectors (Flyvbjerg, *Underestimating Costs in Public Works Projects—Error or Lie,* APA Journal, 2002). Many project parameters are affected by optimism—appraisers tend to overstate benefits, and understate timings and costs, both capital and operational.
>
> 5.62 To redress this tendency, appraisers should make explicit adjustments for this bias. These will take the form of increasing estimates of the costs and decreasing, and delaying the receipt of, estimated benefits. Sensitivity analysis should be used to test assumptions about operating costs and expected benefits."

Broadly, there are two main aspects of optimism bias—poor scope definition during the appraisal, and poor project management during implementation. However, while it is generally possible to predict in advance that cost and time overruns are likely to take place, it is not possible to predict precisely why. The detailed guidance based on the Mott MacDonald survey is an attempt to ensure that at least the common reasons for overruns are addressed; but it can never be a perfect science.

Like any other project parameter, there is of course uncertainty over optimism bias adjustments, especially early on in a project's lifecycle, and this should be reflected in sensitivity testing but the evidence from an even wider variety of projects (Megaprojects: *Anatomy of ambition*, Flyvbjerg et al) indicates that such adjustments could vary from around −20% to +200%, which is hardly useful in practice. Instead we have preferred to recommend that an average adjustment must be made early on, to encourage better costing and treatment of risk later on.

The Green Book points out that there will always be a need for judgment in carrying out this kind of analysis, rather than the application of a purely mechanistic approach:

> "5.63 Adjustments should be empirically based (eg using data from past projects or similar projects elsewhere) and adjusted for the unique characteristics of the project in hand. Cross-departmental guidance for generic project categories is available, and should be used in the absence of more specific evidence (*Review of Large Public Procurement in the UK*, published July 2002). But if departments or agencies have a more robust evidence base for cost overruns and other instances of bias, this evidence should be used in preference. When such information is not available, departments are encouraged to collect data to inform their estimates of optimism, and in the meantime use the available data that best fits the case in hand.
>
> 5.64 Adjusting for optimism should provide a better estimate, earlier on, of key project parameters. Enforcing these adjustments for optimism bias is designed to complement and encourage, rather than replace, existing good practice, in terms of calculating project specific risk adjustments. They are also designed to encourage more accurate costing. Accordingly, adjustments for optimism may be reduced as more reliable estimates of relevant costs are built up, and project specific risk work is undertaken. Both cost estimates and adjustments for optimism should be independently reviewed before decisions are taken."

The Green Book contains the following example (page 30):

> The capital costs of a non-standard civil engineering project are estimated to be £50 million in a strategic outline business case (SOBC). No detailed risk analysis work has taken place at this stage, although significant costing work has been undertaken. The project team reports to the project board and applies an optimism bias adjustment of 70%, showing that, for the scope of work required, the total cost may increase by £35 million to £85 million in total. This is based on consultants' evidence, and experience from comparable civil engineering projects at a similar stage in the appraisal process.
>
> As this potential cost is unaffordable, the chief executive requests reductions in the overall scope of the project, and more detailed work for the outline business case stage (OBC). As the project progresses, more costs and specific risks are identified explicitly, despite the reduced scope. For the final business case, the optimism bias adjustment is reduced until there remains only a general contingency of 5% for unspecified risks.
>
> Without applying optimism bias adjustments, a false expectation would have been created that a larger project could be delivered, and at a lower cost.

As the example shows, the expectation is that project appraisers will use evidence and experience to derive appropriate adjustments at different stages in the appraisal process. In assessing PFI, for instance, suitable adjustments should be made to both PFI and PSC options, as the Treasury's new draft guidance states (the draft can be viewed on the Treasury's website at http://www.hm-treasury.gov.uk/documents/public_private_partnerships/key_documents/ppp_keydocs_vfm.cfm). The size of the adjustments will depend on, among other factors, the level of risk transferred, and the stage the procurement has reached. By contract close, there will be little or no adjustment for optimism bias for the PFI option; the evidence from Mott MacDonald suggests this is reasonable. More generally, departments and agencies should be gathering evidence of cost overruns and other instances of bias to inform future appraisals.

The figures taken from the Mott MacDonald work exist to ensure that some adjustment is always made, which should help to ensure that costings are more accurate and risk work is undertaken.

Mr Bacon referred to GCHQ apparently having used the study results directly for their assessment of optimism bias, contrary to Mott MacDonald's advice. I have been in touch with GCHQ who have informed me that their contract predated the Mott MacDonald report and that the figure they used for optimism bias was based on earlier Treasury guidance from the then Treasury Taskforce on PFI. I am sorry that, at the hearing, my reference to the Mott MacDonald Report may have misled members as to the origin of the adjustment carried out by GCHQ.

Brian Glicksman
Treasury Officer of Accounts

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