

Pensions

Introduction

1. This appendix considers the amount that should be allowed for pension costs within Stansted's price cap on the basis of a RAB-based approach.

Background

2. BAA's three London airports share the same pension arrangements. Therefore, much of the analysis that we carried out at the time of the Heathrow and Gatwick regulatory review was also relevant to this Stansted review. However, there have been substantial developments, which required us to re-examine the conclusions we reached last year. These included major changes in BAA's pension arrangements, in the financial position of its pension fund and in the cash contributions of comparable companies to their pension funds.
3. Our 2007 report on the Heathrow and Gatwick price control recommended that the price cap on airport charges should provide for pension costs on a cash contribution basis at a rate of up to 20 per cent of pensionable pay costs. After considering our proposals and further consultation, the CAA included provision for anticipated cash contributions to pensions at a rate of up to 25 per cent of pay costs.
4. In its April 2008 reference to us for this review, the CAA's indicative proposals allowed for BAA's projected pension costs on an uncapped cash cost basis. The CAA had not had to apply a cap of 25 per cent of pay costs, in line with the approach it had taken for Heathrow and Gatwick, as the latest revaluation of the pension fund then showed projected cash contributions below this level. However, the CAA commented that pension costs were an area where further analysis would be required before firm conclusions could be reached.
5. In its May 2008 projections, BAA's forecast opex for Stansted included an estimate of the service cost of pensions. BAA told us that, despite the conclusions reached by us and the CAA during the Heathrow and Gatwick price review, it still considered that the allowance for pensions should be based on the service cost, rather than cash contributions (see paragraph 31). However, BAA added that, following its discussions with banks over its refinancing, it seemed likely that it would need to attribute pension costs to the airport companies on an uncapped cash cost basis in the future.
6. After preparing its May 2008 projections, BAA reached an agreement with its pension fund trustees that provided for a substantial increase in cash contributions over the first three years of Q5 compared with the estimates previously submitted to the CAA and us.

Changes to BAA's pension arrangements

7. Until recently, all BAA employees at its London airports were members of the BAA Pension Scheme, the main defined benefit (DB) pension scheme covering BAA's UK employees. BAA told us that this scheme had now closed to new members. With effect from 16 June 2008, job offers to new staff had included membership of a new BAA Group defined contributions (DC) pension scheme. BAA told us that the reason for closing the DB scheme to new entrants was to reduce the volatility and un-

certainty associated with future pension fund contributions to a DB scheme. BAA added that it expected the closure of its DB pension scheme to new entrants to result in a reduction of 10 per cent a year in the active membership of the DB scheme over Q5.¹

8. BAA told us that, in calculating the annual service cost for the DB scheme included in its May 2008 projections, it had assumed that:
 - (a) pension payments would increase in line with forecast pension increases, plus 5 per cent a year (to allow for retirements); and
 - (b) its cash contributions would be the lower of the annual service cost and £70 million a year.

BAA added that these contributions were at that time under review by the pension fund trustees.

BAA's actual cash contribution rates to its pension funds

9. During the year ended 30 June 2006, BAA paid the normal employer's contribution to its DB benefit scheme of 17 per cent of pensionable pay.² From 1 July 2006³ the normal employer's contribution rate was changed to a flat rate of £70 million a year, which at that time was equivalent to approximately 25 per cent of salaries,⁴ as a result of an agreement reached between ADI and the pension trustees.
10. BAA told us that this agreement still applied. However, it added that a new agreement had been reached with the pension trustees on 8 July 2008. The new agreement provided that, when BAA's refinancing went ahead, cash contributions to the pension fund would be increased to £80 million for at least the three years from 1 January 2009 to 31 December 2011. In addition, BAA had agreed to fund any costs to the scheme in excess of £5 million that resulted from non-abatement costs of redundancies in the period from 30 September 2007 to 31 December 2008.⁵ BAA added that, from 1 January 2009, it would pay the full cost of redundancies.
11. BAA told us that it was now contributing to the new DC scheme at a rate of 10 per cent of pensionable pay. Although this was the default position, a new member might opt to make higher or lower than normal contributions. If a member of the scheme decided to make a higher or lower than normal contribution to the scheme, the employer's contribution might respectively be increased to 12 per cent or reduced to 8 per cent. The contributions to the DC scheme were expected to result in a net increase in BAA's total contributions to its pension schemes in Q5. BAA anticipated that the closure of the DB scheme to new entrants would reduce service costs but that cash contributions would remain at either £70 million or £80 million a year for the next few years.

¹This is in line with the latest reported staff turnover of 10.16 per cent for 2007/08 identified in IDS's assessment of employment costs at Stansted Airport.

²Pensionable pay is basic salary plus any pensionable allowance (eg skills pay) but excludes shift pay, overtime, bonuses, temporary staff, contract and agency staff, costs of leased cars, national insurance, terminal payments, share-based payments, travel and subsistence expenses, clothing costs and recruitment costs.

³That is the date on which ADI's offer for BAA plc became unconditional.

⁴BAA subsequently told us that, owing to a rising pensionable pay base, this percentage was declining: it would reach around 20 per cent for the years in Q5.

⁵The costs of the non-abatement of pensions taken by staff aged over 50 who retire early have historically been borne by the scheme.

Changes in the financial position of the BAA defined benefit pension fund

12. For our review, BAA estimated the necessary future target contribution rate for Q5 in accordance with the approach laid down by International Accounting Standard (IAS) 19.⁶
13. There have been substantial variations in the valuation of BAA's DB pension fund since our examination of BAA's pension costs for the regulatory review of Heathrow and Gatwick in 2007. In that review we found that the pension fund had a surplus of £218.4 million, as at 30 December 2006, using the valuation approach in use at the time. However, we also found that moving to the funding approach set out in IAS 19 would have changed this surplus to a deficit of £98.6 million. Annex 1 summarizes the latest assessment of BAA's DB pension scheme by its actuaries. It shows that, as at 30 September 2006, and using the present valuation approach based on IAS 19, the fund had a surplus of £161.5 million. The main reasons for this large change in the fund valuation were the strong investment performance of the fund assets, a reduction in fund liabilities caused by changes in the active fund membership, an increase in commutation levels,⁷ a realignment of the pensionable salary base and an increase in the discount rate used to value future retirement obligations.
14. BAA told us that its pension fund trustees were now undertaking a new valuation exercise. Although the outcome of this exercise was uncertain during our review, BAA told us that the trustees had indicated that they would apply more conservative assumptions and that the valuation could show a deficit of around £650 million, potentially requiring a further large increase in annual contributions to about £153 million. These increases were based on the trustees' preliminary assessment that BAA's employer covenant⁸ to the DB pension fund was 'negative to weak'. BAA told us that it had not accepted this preliminary indication but felt that the views of the trustees did suggest the likely future trend in contributions.

Comparative financial position of other pension funds

15. BAA's DB pension fund is not unusual in exhibiting some significant volatility over the last year. Lane Clark & Peacock's (LCP's) *Accounting for Pensions* report⁹ is a survey of the DB pension funds of FTSE 100 companies. In August 2008, LCP reported that, as at mid-July 2008, the aggregate deficit of FTSE 100 UK pension funds, assessed under IAS 19, was £41 billion, compared with an aggregate surplus of £12 billion in July 2007. It commented that the aggregate position had oscillated wildly throughout the year, reaching a high point with a surplus of £19 billion at the end of November 2007 before falling back. LCP added that the financial conditions driving these balances had been brutal. It estimated that, since January 2008, the funding position of the FTSE 100 pension schemes had suffered from equity market falls that reduced scheme assets by around £33 billion and severe market fears over

⁶IAS19: *Employee Benefits*. The requirements of IAS 19 are similar to those of the UK standard, Financial Reporting Standard 17, *Retirement Benefits*. The only major difference relates to the recognition of actuarial gains and losses. FRS 17 requires actuarial gains and losses to be recognized immediately they occur in the statement of total recognized gains and losses. IAS 19 requires actuarial gains and losses to be recognized in the profit and loss account to the extent that they exceed 10 per cent of the greater of the gross assets or gross liabilities of the scheme. Recognition of actuarial gains and losses exceeding the 10 per cent corridor may be spread forward over the expected average remaining working lives of the employees participating in the scheme.

⁷Commutation is a member opting to exchange part of their pension for a lump sum.

⁸To avoid personal liability, trustees are expected to obtain independent advice on the strength of the employer's covenant to the pensions scheme and, if necessary, to take corrective action. The strength of the employer's covenant depends on an assessment of the employer's financial position and its willingness to continue funding the scheme's benefits. 'Weak' and 'negative' are respectively the lowest and second lowest ratings given in assessing the strength of an employer's covenant to its pensions fund.

⁹*Accounting for Pensions 2008*, Lane Clark & Peacock LLP, August 2008.

rising inflation that added about £50 billion to scheme liabilities. These movements had been partially offset by a sharp rise in the yields on corporate bonds caused by the 'credit crunch'. LCP estimated that the rise in bond yields since January 2008 had reduced fund liabilities by around £40 billion.

16. The Pension Protection Fund's (PPF) July 2008 assessment of the funding position of 7,800 predominantly private sector DB pension funds¹⁰ also showed a strong adverse movement in overall fund balances since late 2007. The PPF commented on the volatility of pension fund deficits over the last five years, which had resulted from movements in financial markets and the negative effect of equity price movements on scheme assets in the preceding year.

Comments of IDS on BAA's pension arrangements

17. In its 2006 report to the CAA, IDS concluded that the BAA pension scheme could be seen as a good final salary scheme that remained open to new entrants. This placed new BAA employees in a more privileged position than new entrants to some of BAA's possible comparators. IDS also commented on the generosity of the BAA pension scheme's 1/54th accrual rate compared with the 1/60th rate found in most other final salary schemes.
18. As part of its review of BAA's employment costs for this review, we asked IDS to re-examine BAA's pension arrangements. IDS commented that, following the closure of the BAA DB scheme to new members, BAA's pension provision was now more closely in line with general market trends. In particular, the scheme had joined the 69 per cent of private sector DB pension schemes that had gone through a similar transition.

Comparison with other airports' pension schemes

19. IDS assembled data on the pension schemes operated by other airports. Table 1 summarizes key aspects of the pension schemes of airports and airport groups serving over 2 million passengers in 2007.

¹⁰PPF7800 Index, Pension Protection Fund, July 2008.

TABLE 1 Airport pension schemes

Type	Employer contribution %*	Closed to new entrants	
<i>Defined benefit schemes</i>			
BAA:			
(a) at £70mpa contribution	20†	Yes	
(b) at £80mpa contribution	23	Yes	
Bristol	17.4	Yes	
Birmingham	24.5	Yes	
Belfast International	25	Yes	
Luton	15	No	
Leeds Bradford	17	Yes	
Newcastle	11.5–13.8	No	
Cardiff	25.7	No	
Manchester	14	Yes	
<i>Defined contribution schemes</i>			
BAA	10	No	
East Midlands	5	No	
Belfast City	6–21	No	
Leeds Bradford	6‡	No	
Cardiff	6	No	
Manchester	5	No	
<i>Other schemes</i>			
Belfast International	GPP	6	No
Bristol	S	4–9	No
Birmingham	S	Up to 10	No
Prestwick	S	6	No

Source: Analysis in the IDS report based on *Airport Salary Survey Report, 2007*, Engineering Employers' Federation.

*Where there is a separate executive scheme, the rate for staff and manual grades is shown.

†Contribution rate falls from about 25 per cent in 2006 to about 20 per cent during Q5 as pensionable pay base rises.

‡Expected to be started soon with a 6 per cent employer contribution.

Notes:

1. S = Stakeholder.

2. GPP = Group personal pension.

20. Most of the comparator airports with DB pension schemes have closed them to new entrants. Employers' contribution rates by the large comparator airports to their DB pension schemes were between 11 and 26 per cent of pensionable pay, with an average of around 19 per cent.¹¹ Thus, BAA's employer's contribution of £70 million a year (or about 20 per cent of pensionable pay during Q5) to its DB pension scheme was above the average contribution rate for other airport DB schemes. A contribution of £80 million a year (or about 23 per cent of pensionable pay during Q5) would be towards the top of the range of contribution rates covered by the other schemes. However, the survey data was collected in 2007, since when there has been upward pressure on employers' contributions to DB pension funds that would also affect other airports.
21. Five of the comparator airports were now offering DC pension schemes to new entrants. The employers' contribution rates to these schemes were between 5 and 21 per cent, with an average of around 8 per cent. BAA's normal employer's contribution rate of 10 per cent of pay to its DC pension was thus above average considering the range of DC schemes at other large airports. If the Belfast City scheme, which offers an unusually generous upper limit to some employees, is ignored, BAA's normal employer contribution rate is at the top of the range of airport DC schemes. However, it is below the contribution rates for new members' pensions offered by

¹¹Some airports serving fewer than 2 million passengers a year have higher contribution rates than BAA, including Durham Tees Valley (22 per cent) and the Highlands and Islands airports (23 per cent).

three airports that still provide them with DB pensions and equal to Birmingham's maximum contribution rate to new stakeholder pensions.

22. For comparison, the *Watson Wyatt Plan Design Survey, 2008*, a survey of 134 large private sector pensions schemes published in July 2008, reported that employer contributions to DC schemes averaged 9.5 per cent of salaries, which is close to BAA's contribution rate.
23. Four of the comparator airports were offering stakeholder or personal pensions to new entrants. The employers' contributions to these schemes were between 4 and 10 per cent, with an average of around 7 per cent.

Issues raised by the CAA

24. At the time of the Heathrow and Gatwick regulatory review in 2007, the CAA highlighted four questions that needed to be considered when evaluating BAA's projected pension costs for the Q5 period. These were:
 - What was the appropriate measure of pension costs to use when calculating BAA's revenue requirement?
 - Should an adjustment be made to allow for changes in the pension fund investment strategy arising from the acquisition by ADI?
 - Should an adjustment be made to allow for the effects of BAA's pension holiday in Q3?
 - How should pension costs be treated at future reviews?
25. The remaining parts of this appendix provide background information relevant to these questions and offer a recommendation on the treatment of pension costs for Stansted in Q5.
26. The CAA also suggested that there might be merit in moving progressively away from the separate assessment of salary and pension costs towards a regulatory approach in which labour costs were treated holistically, leaving the airport with discretion to decide how best to remunerate staff.

Measures of pension costs

27. Under a DB pension scheme, the benefits to be received by employees are determined by the terms of the scheme. The employer is obliged to pay these benefits to current and former employees and thus carries both the actuarial and investment risks of the pension fund. These uncertain commitments give rise to the need for the elaborate accounting rules set out in IAS 19 (see paragraph 31) which produce a number of alternative measures of the cost of a scheme.
28. By contrast, as there is no employer guarantee, under a DC pension scheme the employees carry the actuarial and investment risks of their pension fund. The employer pays a fixed contribution to the pension fund and has no further legal obligation to pay any additional amount if the fund performs poorly. Accounting for employers' commitments to DC pension schemes is therefore simple: the cash contribution is the only measure of the cost of a scheme to the employer.
29. The three measurement options for DB pension costs are:

- (a) continuing service costs;
- (b) the charge to the profit and loss account; and
- (c) cash pension contributions.

The last two measures take into account investment gains on fund assets and interest costs on fund liabilities. The choice of which measure of DB pension costs to use can have a material impact on the total operating costs that need to be allowed for, and hence on the costs relevant to the determination of price caps at Stansted.

30. Table 2 shows the January 2008 actuarial forecast for the DB pension fund, the differences in value of the three alternative measures of pension costs over Q5 for the whole BAA group, and a reconciliation of the three values. The table takes account of the proposed closure of the DB scheme to new entrants and the introduction of the DC scheme for new employees. This forecast is sensitive to recent changes in the initial surplus. BAA told us that the surplus at 30 September 2006 was £161.5 million. At 31 March 2008, the surplus had increased to £305.7 million and, at 30 June 2008, it had fallen to £187.5 million.

TABLE 2 BAA pension scheme forecasts for Q5 made in January 2008

	<i>£ million</i>				
	2009/10	2010/11	2011/12	2012/13	2013/14
<i>Defined benefit scheme</i>					
Service costs (a)	-60.7	-56.8	-53.2	-49.8	-46.6
Interest costs on fund liabilities	-130.0	-135.0	-139.8	-144.3	-148.4
Return on fund assets	<u>153.3</u>	<u>161.6</u>	<u>169.8</u>	<u>178.0</u>	<u>186.0</u>
Profit and loss charge (b)	-37.4	-30.2	-23.2	-16.1	-9.0
Pension fund surplus—opening	194.2	248.6	309.4	378.0	454.5
Cash contribution (c)	70.0	70.0	70.0	70.0	70.0
Profit and loss	-37.4	-30.2	-23.2	-16.1	-9.0
Actuarial gains	<u>21.8</u>	<u>21.0</u>	<u>21.8</u>	<u>22.6</u>	<u>23.2</u>
Pension fund surplus—closing	248.6	309.4	378.0	454.5	538.7
<i>In addition:</i>					
Cash contribution to defined contribution scheme	1.0	3.1	5.1	7.1	9.0
Total cash contributions	71.0	73.1	75.1	77.1	79.0

Source: BAA submission, forecast by Mercer in January 2008.

Note: Based on the fund actuary's projection calculated in January 2008 and December 2007 closing surplus.

Components of the forecast

The service cost

31. At the start of each year, IAS 19 requires an employer to estimate the amount by which the discounted liabilities of its DB pension scheme will increase over the year by reason of the additional year's service of the members of the pension scheme. This is known as the service cost (see (a) in Table 2) and represents the expected cost of additional benefits earned by employees for their service in the relevant accounting period. This cost depends on variables such as salary levels projected to retirement, employee turnover and mortality. The service cost increases the pension liability in the employer's balance sheet and is expensed in its income statement. The ultimate cost is usually uncertain. In order to measure the present value of the post-employment benefit obligations and the related service costs, firms obtain regular actuarial valuations of their future pension obligations. They then attribute these

obligations to periods of service to derive an annual service cost. BAA told us that it estimated that applying the IAS 19 rules to the latest valuation of its DB pension fund resulted in a decrease in the pension service cost from the 33 per cent of pay costs which it had projected at the time of the Heathrow and Gatwick regulatory review to about 19 per cent of pay.

The interest cost

32. At the start of the year, the employer must also estimate the amount by which the NPV of DB pension scheme liabilities will increase during the year as a result of the benefits being one year closer to payment at the end of the year than at the beginning. This figure is called the interest cost and is computed using the average value of accrued liabilities during the year and an assumed discount rate. Under IAS 19, the discount rate to be used is set by reference to market yields, at the balance sheet date, on high quality, AA-rated corporate bonds of a similar term to the liabilities. The interest cost increases the fund obligations and is charged to the income statement.

The expected return on fund assets

33. The expected return on fund assets is the assumed long-term rate of return forecast to be earned on the assets in the fund during the year. It is based on market expectations of the likely return on the pension scheme's assets. The expected return also reflects projected changes in the fair value of fund assets held during each period as a result of contributions expected to be paid into the fund and benefits expected to be paid out of the fund. The expected return on fund assets is added to the scheme's assets and credited to the income statement.

Actuarial gains and losses

34. Actuarial gains and losses may result from increases or decreases in either the present value of a DB obligation or the fair value of any related plan assets. They may arise, for example, from an unexpectedly high or low rate of employee turnover, unexpected changes in pensioner mortality, changes in the discount rate, or differences between the actual and expected return on fund assets.¹²

The charge to the profit and loss account

35. The pension cost charge to the profit and loss account (see (b) in Table 2) is the sum of the service and interest costs, the return on fund assets and any actuarial gains exceeding 10 per cent of the greater of the gross assets or gross liabilities of the scheme.

The level of cash contributions

36. The level of cash contributions (see (c) in Table 2) required by a DB pension fund depends on the expected profit and loss charge and the level of the pension surplus or deficit. The higher the return assumption (and thus the lower the profit and loss charge), the lower the level of cash contributions required to provide the same pension benefit to employees. Subject to any need to reduce a pension deficit (which

¹²Discounted pension scheme liabilities as at the end of the year are likely to be different from the figure used to calculate the service costs, owing to a more up-to-date actuarial valuation becoming available and/or a change in the financial or demographic assumptions underlying the liabilities.

did not exist at the time of the estimates made in Table 1), the profit and loss charge and the cash contribution should be more or less equal over time.

Advice of the Government Actuary's Department

37. We consulted the Government Actuary's Department (GAD) about BAA's pension arrangements (see paragraph 7272). The GAD explained the reasons for the relative movements in the accounting measures of BAA's contributions to its DB pension scheme (see paragraph 1313). The GAD commented that at the time of its 2007 report to us, the IAS 19 service cost of the BAA pension scheme was, at 33 per cent of pay, considerably higher than the cash contribution rate of 23.5 per cent (both based on effective dates of 31 December 2006). It considered that the reason for this was that, on the 31 December 2006 valuation date, corporate bond yields were less than the rate of return assumed for funding purposes. In other words, the IAS 19 valuation allowed for a lower rate of future investment return on the scheme's assets than that assumed in the funding valuation, resulting in a higher contribution rate. Since December 2006, the margin between long-dated, AA-rated corporate bond yields and long-dated gilt yields had increased significantly, from around 0.5 per cent in December 2006 to 2.25 per cent at 31 March 2008. As a result, IAS 19 valuations now assumed a much higher return on the scheme assets. Service costs had consequently fallen significantly, leading to BAA reporting a reduction from 33 per cent of pay to about 19 per cent of pay. The GAD added that this effect did not automatically result in reduced cash contributions as pension schemes' funding bases (which determine cash contributions) did not necessarily reflect AA-rated corporate bond yields.

BAA's estimated pension costs for Stansted

38. The figures in Table 2 include BAA's pension costs for unregulated businesses, including its Scottish airports and Southampton Airport. Annual service costs for the DB scheme across the group are projected to fall from £61 million to £47 million over the Q5 period, reflecting the closure of the scheme to new members. The pension charge to the profit and loss account for the DB scheme is projected to fall from £37 million a year to £9 million a year, owing to the decline in the service costs and increasing returns on pension fund assets.
39. BAA has allocated a proportion of the above projected service costs of the DB scheme to Stansted. In BAA's May 2008 price control opex projections for Stansted, these pension costs are included within staff costs and not shown separately. However, BAA has provided an estimate of the total pension service costs contained within staff costs projected for Stansted, which is shown in Table 3.

TABLE 3 **BAA's estimate of the pension costs included in its May 2008 Q5 projections**

	<i>£ million (2007/08 prices)</i>				
	2009/10	2010/11	2011/12	2012/13	2013/14
Stansted	6.0	5.5	5.0	4.6	4.2

Source: BAA submission.

Previous practice

40. In previous quinquennial reviews, we and the CAA have used the cash contribution measure of pension costs when determining airport charges. Both we and the CAA considered that it would be appropriate to continue with this approach for the Q5 Heathrow and Gatwick price controls in 2007. The CAA cited the following reasons for forming this view:
- It results in a consistent approach over successive quinquennia, given that this measure was used in previous price reviews.
 - Cash payments to the pension fund represent the best measure of the economic cost borne by shareholders each year.
 - Setting airport prices based on cash contributions enables airport users and BAA to share the risk of unforeseeable and uncontrollable movements in financial markets on a timely basis, as cash contributions will be lower when markets are performing well and higher when returns are low.
41. By contrast, using service costs would require the CAA to follow the relatively conservative IAS 19 rules for discounting future pension liabilities. This would create a risk that users would systematically overcompensate BAA for providing benefits to its staff.
42. However, the CAA acknowledged that the cash measure could be volatile, as cash contributions to the pension fund could fluctuate as a result of changes in the investment strategy and the performance of pension assets.
43. For this reason, BAA has consistently argued that service costs would be the most appropriate basis for setting the amount to be allowed for in operating costs. It considered that they represented a smoother reflection of the cost of the pension obligations, unlike the more volatile cash contributions, which could be affected by a number of events outside the control of BAA.

Other regulatory decisions

44. Several recent price control reviews have prominently featured the issue of whether regulated prices should reflect pension costs through their effect on the profit and loss account or through cash contributions to a pension fund. The CAA pointed out in its March 2007 proposals for the Heathrow and Gatwick regulatory review that other regulators had tended to use the cash measure when setting price caps, as both the CAA and others had considered that the cash contribution was a more tangible measure of the economic cost to the regulated entity.
45. Ofgem's established policy on pensions was first set out in *Developing network monopoly price controls, Initial conclusions* in June 2003. It was further developed in various distribution price control review documents in 2003 and 2004 and also applied in the transmission and gas distribution price control reviews. Ofgem's policy is to make explicit allowance for expected actual cash contributions, both for ongoing contributions and deficit repair contributions, and to make retrospective adjustments for variances between expected and out-turn cash contribution rates, including the effect of investment returns.

46. In its NATS price control review,¹³ the CAA said that it would continue to allow pension costs to be recovered on a cash payment basis, rather than by reference to a particular accounting measure. It argued that it was desirable to maintain a consistent approach to regulatory policies across price control periods, unless there were good arguments to the contrary.

Implications of the ADI acquisition

47. As part of the negotiations prior to the acquisition of BAA by ADI, agreement was reached between ADI and the BAA pension scheme trustees on certain changes. These affected the DB scheme's future funding basis, its level of investment risk and the amount of cash contributions BAA would make to it each year. It was agreed that:
- the target basis for funding should be set according to IAS 19;
 - from 1 July 2006, the employer's contribution would be increased from £46 million to £70 million a year, which was then broadly equal to a 25 per cent contribution rate; and
 - the scheme's new lower-risk investment strategy would give a higher weight to investment in bonds and less weight to equities.

These arrangements came into effect when ADI's acquisition of BAA was completed.

48. BAA told us that the agreed cash contributions of £70 million a year had been set in order to fund its ongoing pension obligations and to eliminate the pension scheme's deficit which at that time was forecast to be £98 million by the start of Q5, as calculated according to IAS 19.
49. A further agreement with the pension trustees was reached in July 2008 (see paragraph 10). This agreement provided that, when BAA's refinancing proceeded, cash contributions to the DB scheme would be increased to £80 million for at least the three calendar years from 2009 to 2011.
50. We asked BAA to explain why it had agreed in July 2008 to increase its cash contributions to £80 million a year for the next three calendar years. It told us that negotiations with the pension fund trustees had taken place during the ongoing formal revaluation of the pension fund, and added that the amount initially required by the trustees was significantly higher than £80 million a year. BAA commented that, although the service cost had recently fallen below £70 million a year, the potential increases likely to be requested following the ongoing valuation had to be borne in mind. However, in the long term it expected contributions to fall.
51. The impact of these new arrangements on the amount allowed for pension costs in Q5 depends on whether that allowance is based on BAA's service cost or on cash contributions. Only the latter will be affected by the increase in contributions or the change in investment strategy. The CAA argued, on principle, that it would only be appropriate for BAA to pass any costs that ADI incurred in making its acquisition through to airport users if these charges would also have been incurred by BAA without the acquisition. Accordingly, we need to consider whether the new arrangements are either in line with good pension fund management practice or an unreasonable cost being passed through to airport users.

¹³NATS Price Control Review 2006-2010 CAA Decision, CAA, December 2005.

52. BAA argued that, were the CAA to use the cash measurement approach, it should be based on the post-acquisition investment strategy. It considered that to do otherwise would mean that, at future reviews, pension allowances would need to be based on a set of subjective and hypothetical circumstances as, when calculating the cost allowance, the regulator would first have to determine the appropriate investment strategy. BAA felt that this would result in regulatory uncertainty between reviews. It added that the investment strategy was a matter for the pension fund trustees, who were independent from BAA, and not for the CAA.
53. During the Heathrow and Gatwick regulatory review, one airline argued that ADI should not be reimbursed the costs of acquiring BAA. However, it did not comment directly on the pension fund's investment strategy. During that review, another airline said that it considered it inappropriate for a change in investment strategy to trigger an automatic increase in airport charges. It therefore argued that costs related to de-risking the scheme should not be passed through to airport users. This airline noted that there would be an additional cost of £25 million a year to the airlines at Heathrow and Gatwick if BAA was allowed to de-risk its scheme's investment policy without putting into place more conservative employee benefits, which were consistent with market reality. The airline also considered that setting such a precedent might encourage the trustees of BAA's pension scheme to de-risk its investment policy further in the expectation that the costs of such a strategy would be underwritten by the airline community. The airline did not consider that this would be equitable.
54. In its March 2007 reference for our Heathrow and Gatwick review, the CAA proposed that the price caps should not be adjusted to remove the effect of the new investment strategy, but recognized that more conservative approaches to pension liability management had become market practice. The CAA added that basing the pension allowance on BAA's former investment strategy was likely to face practical constraints, as it would require the CAA to calculate a 'shadow' cash charge based on an investment strategy no longer used by the company.

Q3 pensions holiday and recovery in Q4

55. The treatment of pension costs was a major issue in the 2002 price review for Heathrow, Gatwick and Stansted. Q3 charges had been set assuming that projected pension costs would be paid at 14 per cent of eligible payroll costs. Subsequently, BAA suspended contributions because it wanted to eliminate a pension fund surplus, which, at 1 April 1997, was running at 50 per cent of fund liabilities. Accordingly, in July 1996, BAA reduced its group funding rate from 14 to 8 per cent and contributions ceased from 1 April 1997, with a pension holiday being applied throughout Q3. This meant that during Q3, airport users paid charges based on pension expenditure that did not occur.

Treatment in 2002 regulatory inquiry

56. In the Q4 review, BAA told us that falls in the stock market had reduced the fund surplus to about 3 per cent of fund liabilities by the end of 2002. BAA told us that it had therefore needed to resume contributions. It added that the required long-term contribution rate was estimated to be 22 per cent of eligible payroll costs and its projected Q4 contribution rate, taking account of the reduced surplus of the scheme, would be 19.3 per cent. This rate was assumed in the Q4 opex projections made by BAA.
57. We made a downward adjustment to these opex projections to reflect the pension holiday from which BAA had benefited during Q3. We argued that airport users had

already paid BAA during Q3 for contributions that were not made and that to ask them to pay for the 19.3 per cent funding rate in BAA's Q4 opex projections would effectively have forced users to pay twice. We calculated that the benefit equated to 3.9 per cent of eligible payroll costs a year. In setting charges for Q4, we recommended that only two-thirds of this benefit should be passed through to airport users and that BAA should keep one-third. This was consistent with the modelling of other aspects of opex, where we chose cost estimates above the lowest estimate.

58. The CAA accepted these recommendations and adjusted the allowance for BAA's pension forecasts in the Q4 price caps accordingly. Annex 2 shows the calculation of the pension holiday benefit to BAA in Q3, and the amount recovered in Q4.¹⁴

Treatment in Q5 Heathrow and Gatwick regulatory inquiry

59. The effect of the Q3 pension holiday on the pension allowance for Q5 depends on which measure of pension cost is chosen. If the service costs measure is adopted, the Q3 holiday becomes irrelevant because service cost estimates should not (theoretically) include any allowance for underpayments into the scheme in previous periods. However, if the cash contribution measure is adopted then there is a possibility that airport users might be asked to pay again for contributions that had been expected to be paid in Q3. This is because the cash contribution may include an allowance for reducing any current pension deficit.
60. At the time of the Heathrow and Gatwick price review, BAA told the CAA that the assets held by its pension scheme would be about £175 million higher at 2006/07 prices if contributions in Q3 had been made as originally anticipated. Subsequently, BAA reduced its estimate of the shortfall in scheme assets arising from the Q3 pension holiday to about £151 million. This can be seen as the amount airport users 'overpaid' BAA in Q3, and an adjustment may therefore be required to BAA's proposed future estimates of cash contributions to reflect this. The CAA suggested that, to achieve the same effect and avoid the need for further adjustments in the future, the RAB at Heathrow and Gatwick should be adjusted to offset the shortfall in BAA's pension fund assets and ensure that airport users were no better or worse off as a result of the cash underpayment in Q3.
61. However, BAA argued that, instead of calculating the impact of the Q3 holiday on the current scheme position, we should calculate the difference between the airport charges received in Q3 and the charges revenue that would have been received in Q3 if the contributions holiday had been anticipated when the revenue requirement was calculated. This latter approach was likely to produce a smaller figure, given that it would exclude any subsequent returns achieved by investing the contributions allowed for in Q3 but not subsequently made.
62. For Heathrow and Gatwick, we recommended to the CAA in 2007 that, in order to deal with the Q3 underpayment issue once and for all, a proportionate share of the resulting shortfall in pension fund assets should be deducted from the Heathrow and Gatwick RABs in setting their price caps. On the basis that the overall shortfall amounted to £151 million, we assessed that the proportionate reductions in the RABs for Heathrow and Gatwick should be £91 million and £44 million, respectively, in 2006/07 prices.

¹⁴These calculations were made at the Q4 review. BAA argued that this was not the only way the 'benefit' of the pensions holiday could be calculated.

Treatment in the current regulatory inquiry

63. In this review, we considered adjusting the RAB for Stansted in a similar way. We asked BAA whether its previous estimate of the shortfall in scheme assets arising from the Q3 pension holiday was still appropriate. BAA told us that the latest estimate of the return on pension fund assets for the year ending 31 March 2008 suggested a slight reduction in the 2006/07 figure of £151 million. However, it did not provide us with an alternative figure. If the overall effect of the pensions holiday is taken to be £151 million (in 2006/07 prices), the appropriate share of this to be removed from the Stansted RAB would be £16 million (in 2006/07 prices), which is equivalent to £16.9 million in 2007/08 prices.

How should pension costs be treated for Q5 and beyond?

Alternative allowances for pension costs

64. Table 4 shows the alternative pension allowances put forward by BAA and the CAA. All these projections include cash contributions to the DC pension scheme.

TABLE 4 Calculation of Stansted allowance for pension costs

	<i>£ million (2007/08 prices)</i>				
	2009/10	2010/11	2011/12	2012/13	2013/14
<i>BAA proposed charge to opex allowance</i>					
Service cost of DB scheme	5.9	5.2	4.5	3.9	3.3
Percentage of pensionable DB pay costs	17.4%	15.8%	14.0%	12.2%	10.3%
Contribution to DC scheme	0.1	0.3	0.5	0.7	0.9
Total pension costs	6.0	5.5	5.0	4.6	4.2
<i>Allowance in CAA interim projections</i>					
Cash contribution to DB scheme in BAA submission to CAA	6.0	5.5	5.0	4.5	4.1
Percentage of pensionable DB pay costs	17.7%	16.7%	15.5%	14.0%	12.8%
Contribution to DC scheme	0.1	0.3	0.5	0.7	0.9
Total pension costs	6.1	5.8	5.5	5.3	5.0
<i>BAA £70 million nominal overall cash contribution to DB scheme</i>					
Cash contribution to DB scheme equivalent to overall £70 million nominal contribution	6.9	6.8	6.6	6.5	6.3
Percentage of pensionable DB pay costs	20.4%	20.6%	20.5%	20.3%	19.7%
Contribution to DC scheme	0.1	0.3	0.5	0.7	0.9
Total pension costs	7.0	7.1	7.1	7.2	7.2
<i>BAA £80 million nominal overall cash contribution to DB scheme for 3 years</i>					
Cash contribution to DB scheme equivalent to overall £80 million nominal contribution for 3 calendar years	7.9	7.8	7.3	6.5	6.3
Percentage of pensionable DB pay costs	23.4%	23.6%	22.7%	20.3%	19.7%
Contribution to DC scheme	0.1	0.3	0.5	0.7	0.9
Total pension costs	8.0	8.1	7.8	7.2	7.2

Source: CC calculations from BAA and CAA data.

Notes:

1. The CAA's indicative projections were based on BAA's March 2008 projections. The BAA projections were taken from its May 2008 projections and two subsequent revisions of the projected cash contributions to allow for the results of negotiations with the pension fund trustees.
2. Subject to rounding differences.

65. Setting the pension allowance for Stansted in Q5 and beyond involves making decisions on the issues discussed above, ie:
- (a) what pension measure to allow for in charges and what adjustments (if any) are required;
 - (b) how to address the new investment strategy implemented by ADI; and

(c) how to deal with the underpayment of contributions in Q3.

Choice of pension cost measure

66. We first considered the appropriate pension measure to allow for in charges. Table 2 shows that the difference between the projected service cost and the projected cash contributions is smaller than at the time of the Heathrow and Gatwick price review and that the projected cash contributions have become larger than the projected service charge for the reasons discussed in paragraph 370. The difference is related to the projected investment returns on scheme assets (net of interest on pension liabilities) and projected actuarial gains.

Assessment

67. We recognized BAA's argument that the use of service costs would result in a less volatile measure which would not be affected by changes in investment returns on pension assets that are outside BAA's control. The volatility of cash contributions is confirmed by the changes that have occurred since the Heathrow and Gatwick regulatory review.
68. However, we believed we needed to take account of the service charge projections shown in Table 2 being affected by the adoption of IAS 19 and thus the discounting of future pension obligations by the yield on highly-rated corporate bonds. Also, airport users have effectively paid for past pension contributions and thereby have contributed to the build up of pension assets. Therefore, we believed that it is reasonable that users should benefit from the projected returns on these assets. Additionally, it is standard practice for companies offering final salary schemes to offset the investment returns on pension assets against the gross cost of providing this benefit. Accordingly, we believed that there is a strong argument for adopting the cash contribution measure rather than the service costs measure, which reflects the amount that the airport operator is more likely to 'pay' over the long term.
69. We concluded that Stansted's price cap should include an allowance for DB pension costs based on the employer's cash contribution measure, just as we had for the price caps for Heathrow and Gatwick in 2007.

The defined benefit pension fund's new investment strategy

70. We next considered the change in investment strategy. This change has the effect of increasing the required cash contributions, as the projected investment returns would on average be lower if a greater proportion of investment assets were to be diverted to bonds. Allowing for the extra contribution arising from the change in strategy has the merit of not requiring us to make judgements on the appropriate investment strategy for BAA's pension assets. However, it could be unreasonable to pass on all the extra costs of 'de-risking' the pension scheme to airport users.
71. BAA argued that any cap on pension costs would effectively penalize BAA's pension trustees for their excellent management of the scheme, and introduce an element of asymmetry.

Review by the Government Actuary's Department in 2007

72. For the regulatory review for Heathrow and Gatwick in 2007, we commissioned the GAD to review the BAA pension scheme, including the current funding position,

investment strategy and the then proposed cash contribution rate of 25 per cent over Q5. Specifically, we asked the GAD to consider what would be an appropriate cash contribution rate for BAA assuming that the pension scheme was in balance, the fund achieved the average investment return assumed by private sector pension schemes, and the scheme offered pension benefits that were in line with average private sector DB schemes.

73. The GAD carried out some illustrative calculations based on the following assumptions:
- (a) members of the open section¹⁵ of the pension scheme would derive benefits at a more typical accrual rate of 1/60th, rather than at BAA's actual accrual rate of 1/54th;
 - (b) unreduced benefits would be payable from age 65 (as for a more typical scheme) instead of age 60 (as in BAA's scheme); and
 - (c) the DB pension scheme would continue to be open to new members.

The GAD adjusted the results of the interim funding assessment of the BAA scheme as at 31 December 2006 to reflect the average level of benefits. The GAD's calculations implied that an employer's cash contribution rate of between 16 to 20 per cent would be needed.

74. The GAD stressed that the results were approximations, as it did not have full membership information which would be necessary for more accurate calculations. The GAD added that there was a wide range of potentially reasonable cash contribution rates, given the sensitivity of the results to the assumed rate of return. Nonetheless, survey information from the Office for National Statistics (ONS) suggested that the above range was within the typical range of employer contributions in the private sector.
75. Accordingly, in determining prices at Heathrow and Gatwick we treated the upper end of the range of the GAD calculations (20 per cent) as a cap on the amount of BAA's pension cash contribution costs which should be allowed in the calculations of the recommended price caps. In that review, we concluded that it would reflect better the likely pension costs of a company facing greater commercial and competitive constraints than BAA's projected contributions.

Updated review by the GAD

76. We asked the GAD to review these findings for this review. The GAD commented that changes in the market and regulatory environment had resulted in upward pressure on pension scheme contribution rates. The Pensions Regulator had issued a consultation document in February 2008, which had indicated that funding valuations that made insufficient allowance for increasing longevity would receive greater scrutiny. Therefore, the GAD considered it likely that longer lifespan expectations would be assumed in future fund valuations. The Pensions Act 2004 had introduced a new funding regime that was likely to increase the degree of prudence incorporated into other valuation assumptions. The GAD also noted that yields on long-dated gilts had fallen since its last report. However, it considered that the reductions in yield had not been sufficient to imply a material increase in

¹⁵The BAA Pension Scheme was formed by merging two schemes and is therefore divided into two sections.

contribution rates. Information published by the ONS¹⁶ suggested that contributions to private sector DB pension schemes had increased by around 0.75 per cent of pay between 2006 and 2007. However, some of this increase had been met through increased member contributions.

77. Taking account of the above changes, and adopting the same method as in 2007, the GAD estimated that a typical employers' cash contribution rate required to provide members of the open section of the BAA pension scheme with the level of benefits provided by average private sector DB schemes would now be around 18 to 20 per cent of pay. It said that this estimate should be compared with the GAD's estimate of 16 per cent of pay made in 2007. The GAD estimated that, very broadly, greater assumed longevity might cause a further increase of around 2 per cent of pay and other more prudent assumptions up to a further 2 per cent of pay. If BAA continued to meet the cost of providing the current level of benefits to members of the closed section of its pension scheme, its total employer's contribution might need to be around 22.5 to 25 per cent of pay, rather than the estimate of 20 per cent made by the GAD in 2007.

BAA's contributions to its DC pension scheme

78. BAA's contribution rate to its DC pension scheme of 10 per cent of the relevant pensionable pay is towards the top of the range of the other airport companies' contribution rates shown in Table 1. However, we noted that it is broadly consistent with a survey of other large employers' contribution rates by Watson Wyatt (see paragraph 22).

Assessment

79. The GAD calculations suggested to us that, to reflect the effect of market developments on pension schemes, the caps applied by us and the CAA to the Heathrow and Gatwick cash contributions to the DB scheme would need to be increased by around 4 per cent for Stansted in this review. On that basis, our cap would become 24 per cent.
80. A contribution rate of 24 per cent would also be close to the top of the range shown in Table 2 for the past employers' contribution rates made by other airports, though we recognized that the other airports' contributions might be expected to increase in response to the pressures described by the GAD.
81. We noted that BAA's most recent total projected cash contributions to its DB pension scheme were below 24 per cent of the related pensionable pay throughout Q5. Therefore, we did not need to apply the cap of 24 per cent to the amount allowed for Stansted's projected cash contributions to the BAA DB pension scheme.
82. As BAA's contribution rate to its DC pension scheme is broadly consistent with that of other employers, we did not propose that any cap should be applied to the amount allowed for these contributions.

Treatment of the Q3 pensions holiday

83. The third issue we considered was the treatment of the underpayment of pension contributions in Q3. BAA argued that revisiting such past decisions would undermine

¹⁶First release: *Occupational pension schemes survey, 2007*, ONS, July 2008.

any incentive for airports to strive for efficiency and outperformance. However, had BAA contributed according to the pension costs included in the Q3 regulatory projections, the assets of the BAA pension scheme would have been greater. Subsequent projected investment returns would thus also have been greater, reducing the required cash contributions. Because we proposed to adopt the cash contribution measure, the shortfall in investment assets was a relevant matter.

Assessment

84. In the Heathrow and Gatwick regulatory review in 2007, BAA estimated that the shortfall in scheme assets arising from the Q3 pension holiday was about £151 million in 2006/07 prices (see paragraph 600). To deal with the Q3 underpayment issue once and for all, we recommended that a proportionate share of the shortfall in pension fund assets should be deducted from the RABs of Heathrow and Gatwick.
85. We concluded that a similar approach should now be adopted at Stansted. Allocating a proportionate share of the estimated £151 million shortfall to Stansted would result in a reduction of £16 million in 2006/07 prices (equivalent to £16.9 million in 2007/08 prices) to the opening Q5 RAB (see Appendix D).

Summary of our assessment

86. In our view, pension costs should continue to be allowed for in the Stansted price cap on the basis of the projected employer's cash contributions. We concluded that the allowance for cash contributions to BAA's DB pension scheme should be subject to a cap of 24 per cent of the relevant pensionable pay costs but noted that BAA's most recent projections of its cash contributions were below this level throughout Q5.
87. We also concluded that an adjustment should be made to the Stansted RAB to allow for the effect of BAA having failed to make its forecast pension contributions in Q3. To be consistent with the adjustments made to the RABs for Heathrow and Gatwick, the Stansted opening Q5 RAB should be reduced by £16.9 million, in 2007/08 prices.

Actuarial assessment of BAA's defined benefit pension scheme

1. This annex sets out the views of the BAA pension scheme's actuary on the likely outcome of the latest actuarial assessment of the BAA DB pension scheme. Under the scheme's rules, the actuary is required to undertake a full evaluation and report on the financial condition of the scheme once every three years. The last such completed assessment was of the position as at 30 September 2004. In the intervening period, the trustees of the scheme require the actuary to produce annual interim assessments in order to monitor developments within the fund. Such an assessment was undertaken as at 30 September 2006 and the outcome is summarized in paragraph 2 below. A formal actuarial valuation of the scheme as at 30 September 2007 is in progress, and the preliminary results of the actuary's investigation are summarized in paragraph 5 below.
2. As at 30 September 2006, the scheme's past service position (in terms of funding level) had improved since the full evaluation in 2004, when the scheme's surplus was £78.2 million (equating to a funding level of 105.2 per cent). The 30 September 2006 position was a surplus of £161.5 million (a funding level of 108.4 per cent).
3. From 1 July 2006, the company's cash contribution was increased to a flat rate of £70 million a year, in line with an agreement between ADI and the trustees. This then broadly equated to a contribution rate of 25 per cent of pensionable pay.
4. The formal valuation of the scheme as at 30 September 2007, which is in progress, is the first valuation of the scheme under the statutory funding objective (SFO), as defined in the Pensions Act 2004. The SFO requires the trustees to set the assumptions for the valuation of the scheme with advice from the actuary, while taking into account the ability and willingness of the company to support any future funding requirements. The trustees also have to negotiate with the company both the future funding of the scheme and how the company would correct any shortfall revealed in the scheme.
5. The trustees have received preliminary results of the actuarial valuation as at 30 September 2007 from the scheme's actuary. The required contributions from BAA were estimated to be approximately £80 million a year.
6. In July 2008 the trustees agreed a funding offer with BAA. In summary, BAA committed itself to annual contributions not exceeding £80 million a year from 1 January 2009 to 31 December 2011. The exact amount of the contributions would be finalized when the formal results of the actuarial valuation as at 30 September 2007 become available.

Calculation of benefit of BAA pension holiday

Staff costs (statutory accounts)

	<i>£ million</i>				
	1997/98	1998/99	1999/2000	2000/01	2001/02
HAL	104.0	106.6	100.3	101.2	101.7
GAL	49.6	51.2	50.3	50.2	48.5
STAL	15.4	17.4	18.8	20.0	20.5
HEOC	<u>2.5</u>	<u>5.5</u>	<u>6.3</u>	<u>7.9</u>	<u>8.0</u>
Total	<u>171.5</u>	<u>180.7</u>	<u>175.7</u>	<u>179.3</u>	<u>178.7</u>

Pension cost 2001/02 (statutory accounts)

	HAL	GAL	STAL	HEOC	Total
Charge for pensions in accounts (£m)	19.0	8.7	3.3	0.4	31.4
Charge as percentage of staff costs in year (%)	18.7	17.9	16.1	5.0	17.6

If the actual charge for the year is based on the full 22 per cent funding rate, then the funding rate of 14 per cent projected in 1996 for Q3 would represent $14/22 \times$ actual sum charged of 17.6 per cent: this is approximately 11.2 per cent. The effect of the pension holiday would then be 11.2 per cent of the staff costs in each year.

Assumptions on returns

Assume the additional contribution was invested halfway through each year. Assume a return in line with the annual averages shown in the UBS Pension Fund Indicators 2002. In the absence of fiscal year data, apply the return in calendar year 1997 to fiscal year 1997/98.

	<i>per cent</i>				
	1997/98	1998/99	1999/2000	2000/01	2001/02
Average return on pension funds:					
UBS pension fund indicators 2001/02	16.8	14.9	20.4	-2.7	-8.8
Accumulation of additional investment					
Accumulated fund b/f	-	20.8	45.7	76.7	94.4
Invested in year—11.2% x total staff cost	19.2	20.2	19.7	20.1	20.0
Return at average level:					
New investment—6 months	1.6	1.5	2.0	-0.3	-0.9
Accumulated fund b/f—full year	<u>-</u>	<u>3.1</u>	<u>9.3</u>	<u>-2.1</u>	<u>-8.3</u>
Accumulated fund c/f	20.8	45.7	76.7	94.4	105.2

A surplus of £40 million generated a reduction in the contribution rate of 1.5 per cent in BAA/377, so a notional surplus £105 million, if applied pro rata, would be equivalent to a reduction of 3.9 per cent in the projected funding rate required.

	%
Projected future funding rate	
Projected future funding rate per BAA/377	19.0
Uplift for fire service members (additional 2%)	0.3
Abatement for accumulated additional investment	<u>-3.9</u>
Amended projected future funding rate	15.4

Source: CC 2002 report.

Note: The calculation has been made for the years from 1997/98 to 2001/02, but without reflecting the position in 2002/03, which now forms part of Q3.