

## Financial projections

### Introduction

1. In this appendix, we set out our projections for Q5 which underlie our assessment of the value of the X factor and of the opening yield adjustment for Heathrow and Gatwick. We start by outlining the Q4 settlement, which came into effect on 31 March 2003. We look at the revenue profiling at Heathrow between Q4 and Q5 which advanced revenue into Q4 in order to smooth the upward path of prices caused, primarily, by the construction of Terminal 5.
2. We then examine BAA's financial performance at both airports during Q4 given its performance on operating and capital expenditure and retail and commercial revenues. We outline BAA's and the CAA's latest projections for Q5, and we explain the process that we have followed to derive our own financial projections. Finally, we explain the sensitivity analysis we have undertaken, and discuss the implications of this analysis for BAA's financial position in Q5.

### Aspects of the Q4 settlement relevant to Q5 financial projections

3. The projected revenue for Q4 was set by the CAA in its February 2003 decision document.<sup>1</sup> There were three aspects of this decision which are particularly relevant to our financial projections for the Q5 settlement:
  - the CAA set revenues for Heathrow on the basis of an initial price in 2003/04 of £6.48, and an X factor of 6.5 per cent a year;
  - it set revenues for Gatwick on the basis of an initial price in 2003/04 of £4.32, and an X factor of 0 per cent a year; and
  - in the Heathrow revenue allowance, £300 million in NPV terms in 2000/01 prices was advanced from Q5 to Q4. This has equated to an adjustment of around –£500 million in 2006/07 prices to revenues in Q5. No similar adjustment was made to Gatwick revenues.
4. The purpose of advancing revenue to Heathrow was to reduce the significant one-off increase in prices which would be required once Terminal 5 opened. The 2002 CC report into the Q4 review estimated that failing to make this adjustment would have required an 80 per cent increase in the price cap when Terminal 5 came into operation.<sup>2</sup> Terminal 5 would have caused a significant increase in regulatory depreciation, in addition to the ongoing increase in the return on the RAB, without enabling the airport to process a significantly higher number of passengers.

### BAA's Q4 performance

5. Table 1 compares Heathrow's Q4 performance with the CC's 2002 projections, adjusted as far as possible on a comparable basis. For the five years as a whole,

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<sup>1</sup>Economic Regulation of BAA London Airports (Heathrow, Gatwick and Stansted) 2003-2008: CAA decision (February 2003).

<sup>2</sup>Competition Commission Q4 report, p317.

BAA underperformed the financial projections by £350 million at Heathrow. Revenues from airport charges have been £92 million lower and operating costs have been £383 million higher. However, revenue from its retailing and property businesses has been £126 million higher than expected which has partly compensated for the above factors. The result of this performance is that BAA has not once met its projected operating profit as a percentage of the regulatory value, and the amount by which it has missed the projections has increased consistently throughout the quinquennium.

TABLE 1 Comparison of Heathrow's Q4 performance with the CC's 2002 projections

*£ million, nominal prices*

	2003/04	2004/05	2005/06	2006/07	2007/08 (forecast)	Total
<i>Actual performance</i>						
Passenger numbers (m)	64.3	67.7	67.4	67.3	68.2	334.9
Airport charges	414.9	479.0	532.2	579.6	639.5	2,645.2
Commercial and other revenues	563.2	589.2	608.9	616.3	637.6	3,015.1
Total revenue	978.1	1068.2	1,141.1	1,195.9	1,227.0	5,660.3
Operating expenditure	-457.9	-496.8	-554.1	-599.8	-716.1	-2,824.7
Depreciation	-162.2	-178.2	-184.7	-196.9	-215.8	-937.7
Adjusted operating profit	358.0	393.3	402.3	399.2	345.1	1,897.9
Average RAB	4,848.6	5,857.9	6,950.2	8,203.8	9,236.0	
Operating profit as % of regulatory value	7.4%	6.7%	5.8%	4.9%	3.7%	
<i>Projected performance</i>						
Passenger numbers (m)	67.1	69.0	69.9	70.3	70.7	347.0
Airport charges	435.9	491.7	543.6	603.1	663.4	2,737.7
Commercial and other revenues	548.4	558.4	569.6	595.7	617.1	2,889.2
Total revenue	984.3	1,050.1	1,113.2	1,198.8	1,280.5	5,626.9
Operating expenditure	-441.0	-462.8	-490.7	-511.9	-534.9	-2,441.3
Depreciation	-162.2	-178.2	-184.7	-196.9	-215.8	-937.7
Adjusted operating profit	381.1	409.1	437.8	490.0	529.8	2,247.8
Average RAB	4,705.8	5,552.0	6,514.1	7,575.4	8,618.2	
Operating profit as % of regulatory value	8.1%	7.4%	6.7%	6.5%	6.1%	
<i>Actual less projected performance</i>						
Passenger numbers (m)	-2.8	-1.3	-2.5	-3.0	-2.5	-12.2
Airport charges	-21.0	-12.7	-11.4	-23.6	-23.9	-92.5
Commercial and other revenues	14.7	30.8	39.4	20.5	20.5	125.9
Total revenue	-6.2	18.1	28.0	-3.0	-3.4	33.4
Operating expenditure	-16.9	-34.0	-63.4	-87.9	-181.2	-383.4
Depreciation	0	0	0	0	0	0
Adjusted operating profit	-23.0	-15.9	-35.5	-90.9	-184.6	-350.0
Average RAB	142.9	305.9	436.1	628.4	617.8	
Operating profit as % of regulatory value	-0.7	-0.7	-0.9	-1.6	-2.4	

Source: CAA Q4 decision, BAA.

Note: Actual performance above differs from figures shown in regulatory accounts, mainly due to the latter netting off inter-company revenue and costs.

6. Table 2 compares Gatwick's Q4 performance with the CC's 2002 projections, adjusted as far as possible on a comparable basis. For the five years as a whole, BAA underperformed the financial projections by £159 million at Gatwick. Revenues from airport charges have been £62 million lower and operating costs have been £91 million higher. Revenue from its retailing and property businesses has been £6 million lower than expected. The result of this performance is that BAA has not once met its projected operating profit as a percentage of the regulatory value, and the amount by which it has missed the projections has increased during the quinquennium.

TABLE 2 Comparison of Gatwick's Q4 performance with the CC's 2002 projections

*£ million except where otherwise indicated, nominal prices*

	2003/04	2004/05	2005/06	2006/07	2007/08 (forecast)	Total
<i>Actual performance</i>						
Passenger numbers (m)	30.1	32	32.8	34.4	35.6	164.9
Airport charges	129.8	143.5	153.4	163.8	176.7	767.2
Commercial and other revenues	188.9	198.7	201.7	213.0	224.0	1,026.3
Total revenue	318.7	342.2	355.1	376.8	400.6	1,793.4
Operating expenditure	-184.3	-193.7	-223.4	-225.4	-254.2	-1,081.0
Depreciation	-62.7	-65.3	-63.8	-70.4	-78.8	-341.0
Adjusted operating profit	71.7	83.2	67.9	81.0	67.6	371.4
Average RAB	1,262.0	1,335.8	1,390.0	1,465.3	1,542.0	
Operating profit as % of regulatory value	5.7%	6.2%	4.9%	5.5%	4.4%	
<i>Projected performance</i>						
Passenger numbers (m)	31.2	33.8	36.0	38.6	39.7	179.3
Airport charges	135.3	150.9	165.2	183.7	194.3	829.3
Commercial and other revenues	180.0	191.6	203.7	223.2	233.8	1,032.3
Total revenue	315.3	342.5	368.9	406.9	428.1	1,861.6
Operating expenditure	-174.6	-183	-195.8	-211.9	-224.9	-990.2
Depreciation	-62.7	-65.3	-63.8	-70.4	-78.8	-341.0
Adjusted operating profit	78.0	94.2	109.3	124.6	124.3	530.5
Average RAB	1,239.8	1,295.9	1,368.1	1,480.3	1,625.3	
Operating profit as % of regulatory value	6.3%	7.3%	8.0%	8.4%	7.6%	
<i>Actual less projected performance</i>						
Passenger numbers (m)	-1.1	-1.8	-3.2	-4.2	-4.1	-14.4
Airport charges	-5.5	-7.4	-11.7	-19.9	-17.6	-62.1
Commercial and other revenues	8.9	7.1	-2.1	-10.2	-9.8	-6.0
Total revenue	3.5	-0.3	-13.8	-30.1	-27.4	-68.2
Operating expenditure	-9.7	-10.7	-27.6	-13.5	-29.3	-90.8
Depreciation	0	0	0	0	0	0
Adjusted operating profit	-6.3	-11.0	-41.4	-43.6	-56.7	-159.0
Average RAB	22.1	39.9	21.9	-15.0	-83.3	
Operating profit as % of regulatory value	-0.6%	-1.0%	-3.1%	-2.9%	-3.3%	

Source: CAA Q4 decision, BAA.

## Projections for Q5

### CAA projections

7. In its March 2007 reference to us, the CAA submitted financial projections for Q5 for Heathrow and Gatwick as summarized in Tables 3 and 4. The projections were based on a cost of capital of 6.2 per cent at Heathrow and 6.7 per cent at Gatwick.

TABLE 3 CAA's projection for Heathrow's revenue and costs

*£ million except where otherwise indicated, 2006/07 prices*

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Passenger numbers (m)	71.7	73.2	74.8	76.4	78.5	374.6
Airport charges	712	762	842	907	993	4,216
Commercial and other revenues	705	725	729	734	765	3,658
Q4/Q5 profiling adjustment	195	144	101	76	-13	503
Total revenue	1,612	1,630	1,673	1,717	1,745	8,377
Operating expenditure	698	684	686	685	683	3,436
Depreciation	391	388	399	427	462	2,067
Adjusted operating profit	523	558	588	605	600	2,874
Average RAB	8,703	9,273	9,791	10,053	9,979	
Operating profit as % of regulatory value excluding profiling adjustments	6.0	6.0	6.0	6.0	6.0	

Source: Adapted from Table 13-1 of the CAA's recommendations to the Competition Commission for Heathrow and Gatwick Airports, March 2007.

TABLE 4 CAA's projection for Gatwick's revenue and costs

*£ million except where otherwise indicated, 2006/07 prices*

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Passenger numbers (m)	34.6	35.1	35.5	36.0	36.5	177.7
Airport charges	181	185	185	182	182	915
Commercial and other revenues	204	204	204	206	205	1,023
Total revenue	385	389	389	387	388	1,938
Operating expenditure	215	214	213	212	211	1,065
Depreciation	73	77	78	78	78	383
Adjusted operating profit	97	98	98	98	99	490
Opening regulatory value	1,491	1,512	1,519	1,514	1,528	
Operating profit as % of regulatory value excluding profiling adjustments	6.5	6.5	6.5	6.5	6.5	

Source: Adapted from Table 13-2 of the CAA's recommendations to the Competition Commission for Heathrow and Gatwick Airports, March 2007.

## BAA projections

8. Following the interim report of the Constructive Engagement process BAA submitted to the CAA its financial projections for Heathrow and Gatwick for Q5, which are summarized in Tables 5 and 6. BAA used an assumed rate of return of 7.75 per cent. A small adjustment to the cost of capital estimated by using CAPM is necessary to achieve the accounting rate of return required in the modelling. The cost of capital is multiplied by  $1/(1+(\text{cost of capital}/200^3))$  to equal the accounting rate of return. This means that a cost of capital of 6.2 per cent equates to an accounting rate of return of 6.014 per cent, while a cost of capital of 7.75 per cent equates to an accounting rate of return of 7.46 per cent.<sup>4</sup>

TABLE 5 BAA's projections for Heathrow's revenue and costs

*£ million except where otherwise indicated, 2006/07 prices*

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Passenger numbers (m)	70.6	72.8	74.2	75.3	77.2	370.0
Airport charges	885	1,021	1,165	1,322	1,516	5,909
Commercial and other revenues	686	701	710	706	714	3,517
Q4/Q5 profiling adjustment	199	147	103	77	-13	513
Price smoothing adjustment	125	74	27	-75	-152	0
Total revenue	1,895	1,943	2,005	2,030	2,065	9,938
Operating expenditure	823	806	797	785	798	4,009
Depreciation	392	399	418	425	449	2,084
Adjusted operating profit	681	738	790	821	818	3,847
Average RAB	9,129	9,893	10,587	10,998	10,957	
Operating profit as % of regulatory value	7.5	7.5	7.5	7.5	7.5	

Source: Adapted from BAA/CC2007/350.

<sup>3</sup>Where the opening and closing weightings of the RAB are both 0.5, as in the financial model which the CC has used.

<sup>4</sup>Further discussion of this adjustment can be found at [www.imrsolutions.co.uk/resources/IMR\\_discounting.pdf](http://www.imrsolutions.co.uk/resources/IMR_discounting.pdf).

TABLE 6 BAA's projections for Gatwick's revenue and costs

*£ million except where otherwise indicated, 2006/07 prices*

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Passenger numbers (m)	36.2	36.6	36.8	37.3	37.7	184.5
Airport charges	233	242	259	276	298	1,308
Commercial and other revenues	208	206	208	210	212	1,045
Total revenue	441	448	467	486	510	2,352
Operating expenditure	252	255	258	262	265	1,292
Depreciation	71	73	76	79	92	391
Adjusted operating profit	116	124	137	146	148	671
Average RAB	1,547	1,668	1,834	1,954	1,985	
Operating profit as % of regulatory value	7.5	7.5	7.5	7.5	7.5	

Source: Adapted from BAA/CC2007/350.

9. Both BAA and the CAA based their estimates of the revenue required during Q5 on BAA's GSM, developed by IBM Business Consulting Services. This model was adapted to calculate outputs using an extension commissioned and approved by the CAA. We have used this model to derive its own Q5 projections, and has added a facility to estimate the hypothetical financial ratios implied by the revenue and cost estimates which it has evolved during the course of this regulatory review.

### **CC projections**

10. Our high-level financial projections for the financial performances of Heathrow and Gatwick airports given its revenue, traffic and cost assumptions, are contained in Tables 7 and 8.

TABLE 7 The CC's projections for Heathrow<sup>5</sup>'s revenue and costs

£ million except where otherwise indicated, 2006/07 prices

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Opening RAB	8,616	9,280	9,967	10,548	10,765	
Capital expenditure	822	920	879	592	314	3,527
Depreciation	-392	-399	-417	-423	-446	-2,078
Q4/Q5 profiling adjustment	199	147	103	77	-13	513
Price smoothing adjustment	35	19	16	-29	-41	0
Closing RAB	<u>9,280</u>	<u>9,967</u>	<u>10,548</u>	<u>10,765</u>	<u>10,579</u>	
Operating costs	742	744	748	751	758	3,743
Depreciation	392	399	417	423	446	2,078
Q4/Q5 profiling adjustment	-199	-147	-103	-77	13	-513
Price smoothing adjustment	-35	-19	-16	29	41	0
Cost of capital	<u>538</u>	<u>579</u>	<u>617</u>	<u>641</u>	<u>642</u>	<u>3,016</u>
Total revenue requirement	<u>1,438</u>	<u>1,557</u>	<u>1,662</u>	<u>1,767</u>	<u>1,899</u>	<u>8,324</u>
Commercial revenues	-378	-408	-431	-455	-483	-2,154
Non-regulated revenues	-166	-163	-165	-165	-168	-828
Other revenues	<u>-142</u>	<u>-145</u>	<u>-144</u>	<u>-140</u>	<u>-141</u>	<u>-713</u>
Net revenue	<u>752</u>	<u>841</u>	<u>922</u>	<u>1,007</u>	<u>1,108</u>	<u>4,630</u>
Passenger numbers (m)	70.6	73.6	75.1	76.4	78.3	374.0
Profiled yield per passenger	10.7	11.4	12.3	13.2	14.1	
Operating profit	304	413	498	593	695	2,503
Operating profit (excluding Q4/Q5 profiling adjustment)	503	560	601	670	683	3,016
Average RAB	8,948.3	9,623.6	10,257.4	10,656.4	10,672.1	
Return on average RAB (%)	3.4	4.3	4.9	5.6	6.5	
Return on RAB (excluding Q4/Q5 profiling adjustment) (%)	5.6	5.8	5.9	6.3	6.4	

Source: CC.

<sup>5</sup>Includes Heathrow Express.

TABLE 8 The CC's projections for Gatwick's revenue and costs

*£ million except where otherwise indicated, 2006/07 prices*

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Opening RAB	1,462	1,522	1,630	1,743	1,799	
Capital expenditure	137	187	188	131	144	788
Depreciation	-71	-73	-75	-79	-85	-384
Price smoothing adjustment	-6	-6	-0	4	8	0
Closing RAB	<u>1,522</u>	<u>1,630</u>	<u>1,743</u>	<u>1,799</u>	<u>1,866</u>	
Operating costs	231	230	230	232	232	1,153
Depreciation	71	73	75	79	85	384
Price smoothing adjustment	6	6	0	-4	-8	0
Cost of capital	<u>94</u>	<u>99</u>	<u>106</u>	<u>111</u>	<u>115</u>	<u>526</u>
Total revenue requirement	<u>402</u>	<u>407</u>	<u>412</u>	<u>418</u>	<u>424</u>	<u>2,063</u>
Commercial revenues	-171	-175	-179	-183	-188	-897
Non-regulated revenues	-34	-34	-34	-35	-35	-173
Other revenues	<u>-4</u>	<u>-4</u>	<u>-4</u>	<u>-4</u>	<u>-4</u>	<u>-19</u>
Net revenue	<u>193</u>	<u>194</u>	<u>194</u>	<u>196</u>	<u>197</u>	<u>974</u>
Passenger numbers (m)	36.2	36.6	36.8	37.3	37.7	184.5
Profiled yield per passenger	5.3	5.3	5.3	5.3	5.2	
Operating profit	100	105	106	107	107	526
Average RAB	1,491.8	1,576.0	1,686.6	1,770.9	1,832.4	
Return on average RAB	6.7%	6.7%	6.3%	6.1%	5.8%	

Source: CC.

11. The main differences between the CC's projections and the CAA's over Q5 are:

- operating expenditure is projected to be £307 million higher at Heathrow and £90 million higher at Gatwick;
- traffic forecasts are 0.6 million higher at Heathrow and 6.9 million higher at Gatwick;
- commercial and other revenues are £37 million higher at Heathrow and £67 million higher at Gatwick;
- the regulatory asset base is projected to be around £700 million higher at Heathrow and around £300 million higher at Gatwick by the end of Q5; and
- depreciation is projected to be £10 million higher at Heathrow.

### **Financeability**

12. The CC has modified the joint BAA/CAA financial model to estimate the financial position of the regulated airports as stand-alone companies given its revenue, cost and traffic forecasts. The gearing assumption is derived from the assumption we made in estimating BAA's cost of capital. The model as thus modified calculates the following financial ratios:

- interest cover ratio;
- FFO interest cover ratio;
- post-maintenance interest cover ratio;

- adjusted interest cover ratio;
- FFO/net debt ratio; and
- regulatory asset ratio.

13. For its modelling, the CC assumed 60 per cent gearing, a nominal cost of debt of 6.3 per cent, 25 per cent index-linked debt and a cash cost of index-linked debt of 3.4 per cent.<sup>6</sup> The CC's calculations indicate that, under its assumptions, these ratios will be as in Table 9 in Q5 for Heathrow and Table 10 in Q5 for Gatwick. These ratios include the Q4/Q5 profiling adjustment at Heathrow.

TABLE 9 The CC's projections for Heathrow<sup>7</sup>'s financial ratios over Q5

	2008/09	2009/10	2010/11	2011/12	2012/13	5-year average
<i>Key financial ratios</i>						
ICR (EBITDA – tax paid – 2% RAB (x))	1.8	1.9	2.0	2.1	2.4	2.0
FFO interest coverage (x)	2.1	2.3	2.3	2.4	2.7	2.4
PMICR (x)	1.0	1.3	1.3	1.4	1.6	1.4
Adjusted ICR (x)	1.5	1.6	1.6	1.7	1.8	1.7
FFO to net debt (%)	7.2	8.1	8.4	8.9	10.4	8.7
RAR (%) – (net debt/RAB)	60.0	60.0	60.0	60.0	60.0	60.0

Source: CC.

TABLE 10 The CC's projections for Gatwick's financial ratios over Q5

	2008/09	2009/10	2010/11	2011/12	2012/13	5 year average
<i>Key financial ratios</i>						
ICR (EBITDA – tax paid – 2% RAB (x))	2.8	2.5	2.3	2.2	2.2	2.4
FFO interest coverage (x)	3.0	2.8	2.6	2.5	2.5	2.7
PMICR (x)	1.9	1.7	1.5	1.4	1.3	1.6
Adjusted ICR (x)	1.8	1.9	1.8	1.7	1.5	1.7
FFO to net debt (%)	12.4	10.7	9.8	9.5	9.4	10.3
RAR (%) – (net debt/RAB)	60.0	60.0	60.0	60.0	60.0	60.0

Source: CC.

<sup>6</sup>There is also a deferred interest cost of 2.9 per cent.

<sup>7</sup>Includes Heathrow Express.