

Service quality

Introduction

1. This appendix assesses the SQR scheme taking into account the evidence and arguments that have been put to us by the parties.
2. The key drivers in the SQR scheme are:
 - (a) the targets against which BAA is measured;
 - (b) the forms of measurement used, both operational and as measured by the QSM; and
 - (c) the financial incentives provided by the rebates including the proportion of BAA's airport revenue 'at risk' and its weighting.
3. We now consider each of these in turn.

Targets for individual elements of the Service Quality Rebate scheme

Overview

4. Both the CAA and the airlines have pointed out to us that, for the majority of service quality performance indicators, BAA has to date exceeded its targets in Q4. The airlines have proposed higher standards for particular elements of the scheme which, they argue, BAA should be able to meet without increases in costs because it is already doing so. These levels of service are being discussed within the framework of Constructive Engagement, the final results of which are likely to emerge in autumn 2007. We do not consider each of these elements separately but consider that if BAA has been exceeding performance targets in Q4 it is reasonable that the standard should be raised somewhat in Q5, though not to the extent that BAA would be 'punished' through success. This would also be consistent with the views we expressed in our last report, prior to Q4, and with the fact that service targets were set at or near actual performance levels prior to Q4.¹
5. We now consider two areas where there have been significant periods when those standards have not been met: central security queuing² and pier service. We then go on to discuss a proposed new element: transfer security queues.

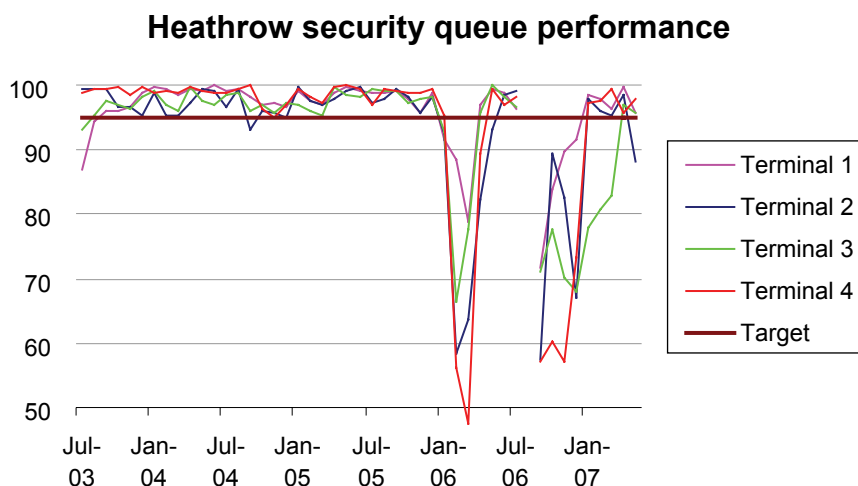
Central security queues

6. The current standard, that security queues should be less than 10 minutes long on 95 per cent of occasions when they are measured, was breached in the first quarter of 2006 and then again, significantly, following the DfT's new security directive implemented on 10 August 2006. As can be seen from the gap in Figures 1 and 2, BAA suspended the measurement of security queue times and the payment of rebates from 10 August and through September.

¹Paragraphs 2.475 and 2.477.

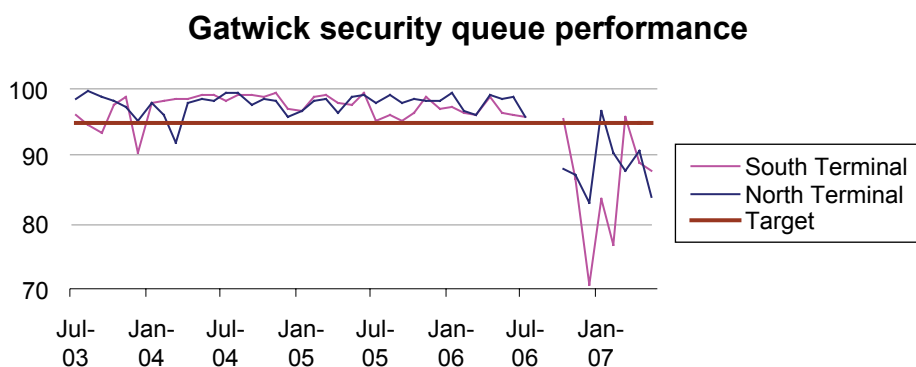
²We have separately commissioned a firm of consultants to assess BAA's passenger security costs—see Appendix G.

FIGURE 1



Source: BAA.

FIGURE 2



Source: BAA.

7. More recent data on security queue times, however, indicates that performance has improved. Average daily queues were less than 10 minutes for 95 per cent or more of the time at Heathrow in August 2007 though performance at Gatwick was less good, as is shown in the table below.

TABLE 1 Central security queuing performance in August 2007

Terminal	T1 (Domestic)	T1 (International)	T2	T3	T4	LGW North	LGW South
% of time queues <10 minutes	98.4	97.3	95.0	98.6	98.7	87.1	83.0
Number of days maximum queue time <10 minutes	17	14	2	24	25	4	1
Maximum queuing time (minutes)	28	38	24.6	15	25	50	51.9

Source: BAA.

8. Data on daily queuing times provided to us indicates that the average 95 per cent/10 minutes measures may conceal much longer queue times for some passengers. Queue lengths, when they exceed 10 minutes, may do so by a considerable margin, as can be seen from Table 1. Setting a higher standard as an average would tend to reduce the frequency of very long queues but may not eliminate them. We therefore

recommend a target for the maximum queue time that passengers may face in addition to setting a target for average queue times.

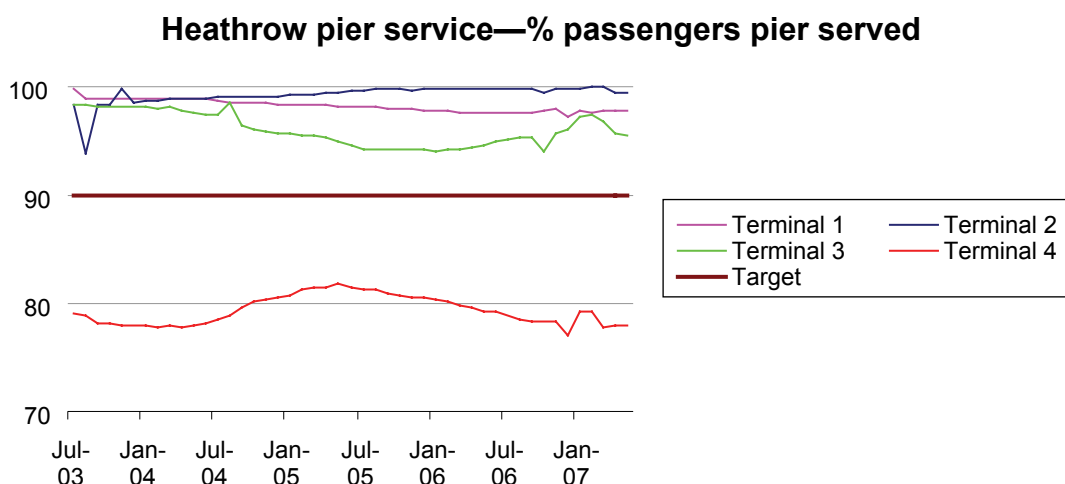
9. BAA has proposed an average queue length of 5 minutes. It has said that a 100 per cent target would not be achievable other than at a very high cost and that this cost would be disproportionate compared with the resulting benefit. Instead it has proposed an additional target that queues should be no longer than 15 minutes on 99 per cent of occasions and has indicated to the airlines the cost of achieving this.
10. We are not supportive of BAA's decision (without, as noted in paragraph 4.143(a) of the main report, consultation with airlines) to increase the current security queuing target from a queue length of no more than 10 minutes 95 per cent of the time to one of no more than 5 minutes, at least not until current performance standards and an additional standard relating to maximum queue lengths are achieved, and the airlines, the CAA and BAA agree the project costs involved and that they are justified.
11. As has been agreed between BAA and the airlines, central security queue performance attracts rebates in periods of the morning and afternoon which correspond broadly³ with peak passenger flows. Security queue performance outside these periods does not attract rebates though it is measured. We consider this may lessen the incentive for BAA to manage security queues effectively in periods outside those included in the SQR scheme. We recommend that central security queues be measured continuously for the whole of the operational day and that queue performance at all times is included in the rebate scheme. The current measure, because of the periods when below-target performance may attract rebates, is, in effect, weighted to the busiest times at the airports. However, this would not be the case if, as we recommend, the SQR were to apply to queue lengths for the whole of the operational day. We therefore recommend that the target is expressed in terms of the proportion of passengers receiving on-target service rather than in terms of the number of occasions on which on-target performance is achieved. We recommend too that the proportion of passengers in the standard should be as close to 100 per cent as practicable, subject to the costs and benefits involved. Which percentage is to be preferred, and the maximum queuing time to which it relates, should be resolved through the ongoing process of Constructive Engagement.
12. We note that the current methods of measuring security queue performance have raised concern. We discuss measurement issues more generally later in this appendix but consider it highly desirable that BAA adopt, so far as is practicable, a process of automatic queue length measurement.

Pier service

13. The current standard is that 90 per cent of passengers should receive pier service. While BAA has significantly over-achieved this target at Terminals 1, 2 and 3 at Heathrow, performance at Terminal 4 has only been around 80 per cent. Pier service performance at Heathrow is shown in Figure 3.

³Domestic departure security queues at Heathrow Terminal 1 are only monitored for rebate scheme purposes from 7.30am on weekdays. Given that passengers are required to report over an hour before departure this would exclude queue performance received by passengers departing before 8.30am, for example. Thirteen domestic flights depart from Heathrow before 8.30am.

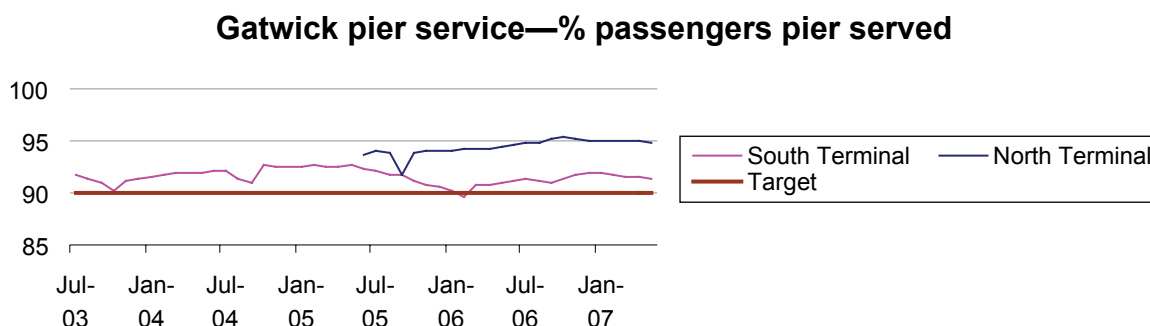
FIGURE 3



Source: BAA.

14. BAA has argued that rectifying the situation at Terminal 4 can only be achieved through the Heathrow CIP and that the measure should be removed from the SQR scheme.
15. Pier service at Gatwick has generally been above target.

FIGURE 4



Source: BAA.

16. Clearly, pier service cannot be separated from BAA's CIPs and the CAA's view is that performance targets for Q5 should be set in this context. We consider that targets should be set in line with the principle that, if BAA has been consistently over-performing at individual terminals, then it is reasonable for the standard to be raised at those terminals. However, we note that the opening of Terminal 5 and the consequent multiple airline moves may impact upon the proportion of passengers receiving pier service.
17. We were also told, by BAA, that pier service was an important element for customers: it is almost taken for granted that it will be provided and, if it is not, customers express strong disapproval. We take the view, therefore, that the pier service measure should remain within the SQR but that targets should be put in place for each terminal consistent with BAA's CIPs.

Transfer security queues

18. Security queues for transfer passengers are not currently included in the SQR scheme but it has been proposed that in Q5 they should be included.⁴ Queue lengths for transfer passengers are generally much longer than central security queues. In March 2007, for example, the average queue length in the Terminal 1 Flight Connection Centre was just under 20 minutes and the longest queue reported was 48 minutes. Queue lengths were only less than 10 minutes on 7 occasions out of 62 in the month compared with 36 times in Terminal 1.
19. BAA told us that improving performance at transfer security required passenger information from the airlines, forecasting how many transfer passengers were scheduled to arrive at the airport and when. It told us that this may be highly variable for the same flights on different days or periods of the year. It also told us that it had reached agreement with most of the airlines on the provision of this information.
20. There appears to be no reason, in principle, why transfer passengers should enjoy a lower level of service than other customers, although raising standards to those applying in central security queuing may, given current performance, be difficult in the short term. The airlines are discussing these issues with BAA in the Constructive Engagement process. Even if a 5-minute average queue time objective were not capable of being achieved other than at a disproportionate cost and a compromise of 10 minutes were arrived at, we recommend including a maximum queue time of, for example 15 minutes, in the standard.

Measures of performance

21. On several occasions, concerns have been raised with us over the way BAA measures its performance. Airlines have told us that in some cases their own day-to-day experience of the quality of service at the airport bears little resemblance to the results of SQR/QSM monitoring. Virgin, for example, contrasted its experience of the 'gridlock' at the new Terminal 3 car park with its ranking as the best-rated Heathrow car park by customers in the QSM survey.
22. Similarly, it was suggested to us that the method of measuring performance standards for lifts, escalators and travelators was flawed and failed to provide an accurate picture of service availability. It was argued that the measure made no distinction between situations where the particular equipment was crucial to the customer, for example where a lift was the only alternative to stairs as a means of travelling between two levels, and situations where there were alternatives—an escalator, for example. It was also suggested that this may be a significant issue for Terminal 5.
23. This issue is being discussed in Constructive Engagement. The airlines have proposed that specific lifts, escalators and travelators be nominated as very important to the customer experience and that these should be the focus of performance measurement. BAA has agreed in principle to this.
24. It is clearly important for the measures of service quality used by BAA to have credibility with its airline customers and with consumers as regards what is measured, when it is measured and how it is measured. In line with a recommendation that measurement of security queues be automated, the same principle should apply to as many of the other measures of operational performance

⁴It has also been proposed that control post and staff security queuing are added.

that are not currently measured automatically as practicable. This would be a more credible measure of the quality of service experienced by consumers and could apply even during periods of service degradation when the use of interviewers or observers would not be appropriate.

25. In addition, whilst it seems reasonable for BAA to collect performance data itself through the QSM survey, it would be desirable to introduce a degree of independent oversight of the process. In our 2002 report⁵ we recommended a regular review of the QSM methodology and its application. Such a review was commissioned in 2005 and itself recommended periodic independent audits. An audit of the QSM survey could be undertaken annually to ensure its validity, reliability and credibility. Such an audit, extended beyond the QSM to include the methodology and its application to all the SQR measures, would represent a focal point for discussions between BAA and other stakeholders in the SQR scheme on the operation of and results derived from the scheme.
26. On a separate but related issue, the use of the five-point scale in the QSM warrants further attention as part of any audit. While we understand that five-point scales are widely used for international airport comparison studies and allow valuable comparisons over time, they are a relatively blunt instrument for generating information on which business performance is judged. They could usefully be supplemented with more sensitive measures.
27. Finally, we consider exclusions. As noted earlier, BAA ceased measuring security queue times and suspended the rebate in August and September 2006.
28. It is reasonable to exclude facilities from the SQR when, for example, repairs, maintenance or building works expected to lead to significant impairment of service quality levels have been agreed with the airlines and the CAA. However, it would be unreasonable to exclude quality service measures on the grounds of forecast or actual under-performance alone, as happened with central security measures in 2006. If this reasoning is accepted, decisions on exclusions from the SQR should not be made by BAA without prior consultation with the airlines, and exclusions should continue to be kept to the bare minimum.

Financial incentives

29. In this section we first discuss and assess various proposals for increasing the proportion of BAA's airport charges that should be 'at risk', and second, the relative weight assigned to different elements of service quality contained in those proposals.

Revenue at risk

30. The CAA has proposed that the proportion of BAA's revenue at risk should be increased from 3 to 4.45 per cent, including a reduction in the weighting attached to the airport congestion term. The airlines have proposed that the proportion of BAA's revenue at risk under the SQR should be increased to 7 or even 10 per cent and that the maximum amount at risk should be reached after twelve months of service failure rather than six months. The airlines stressed to us that the increase they sought was not financially motivated and was not intended to compensate them for costs they might incur as a result of any BAA service failure. It was, rather, designed to provide a greater incentive for BAA to meet its service quality targets. Regarding the time

⁵Paragraph 2.474.

period, they argued that, if the maximum rebate were to be paid after six months of failure, BAA would have no incentive to meet its SQR targets in the following six months.

31. BAA has said that, if the proportion of revenue at risk is increased beyond 3 per cent, it would expect that a bonus element should be built into the scheme to reward it for above-target performance: it describes this as a 'symmetrical' scheme. It has also, separately, suggested that airlines commit themselves to achieving certain quality standards as regards those elements of service quality for which they are responsible.

Bonuses and airline commitment

32. The airlines have told us that the charges they pay are in exchange for a contracted level of service. They would object in principle to paying higher charges, by way of bonuses, for higher levels of service for which they have not contracted. They also objected to BAA's suggestions on airline commitment, pointing out that airlines operate in a highly competitive commercial environment and offer different levels of service at prices designed to attract their target customers. Applying standards analogous to those applied to a regulated, monopoly airport services provider would, they argued, be inappropriate.

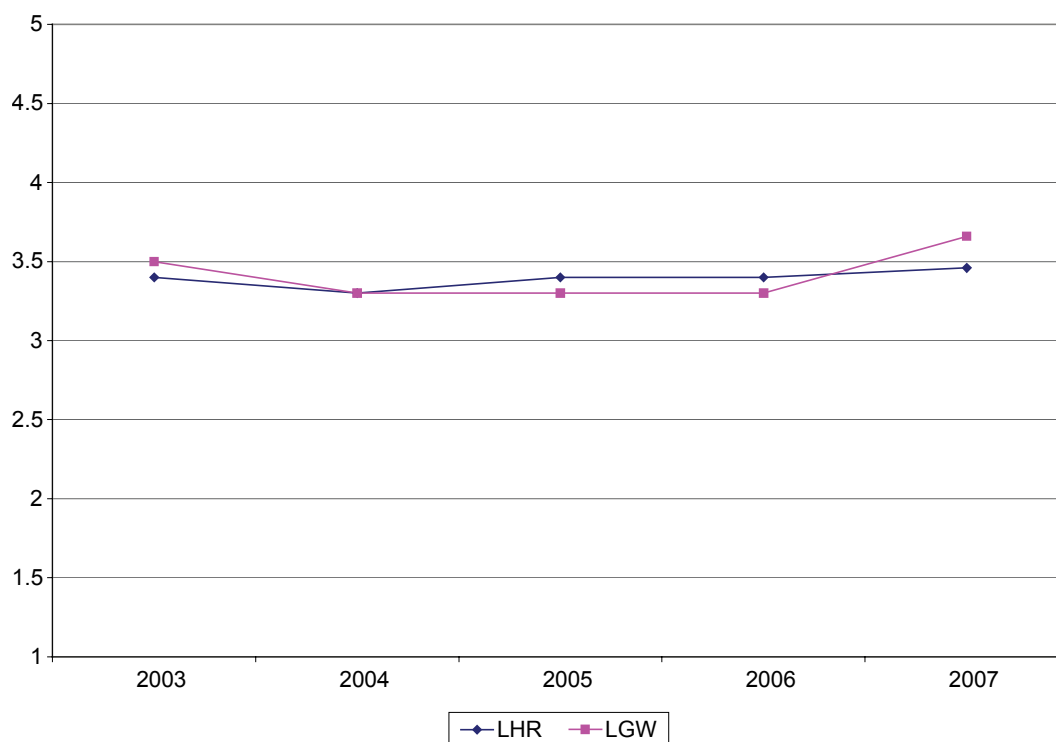
Performance against the SQR

33. We are clear that the SQR scheme is an incentive scheme and that the rebates are therefore part of the incentive on BAA to maintain and preserve service standards for the benefit of airlines and passengers.
34. There is general agreement that the SQR scheme has provided BAA with a greater incentive to match the quality of its services to the prices it receives for them. However, customers' overall assessment of BAA's service quality has not improved over time.
35. As can be seen from Figure 5, overall customer appreciation of BAA's airport service quality at Gatwick and Heathrow has remained much the same over the last five years. The QSM scores responses as follows: excellent 5, good 4, satisfactory 3, poor 2 and extremely poor 1. At the time of the last review, BAA told us that it gave particular consideration to any areas with QSM scores below 3.5.⁶
36. However, these figures extend only to the first quarter of 2007. More recent data might also be looked at in greater detail, using a three-month rolling average, for example, from January 2006 to July/August 2007, a period when security issues have been prevalent but where, more recently, service recovery may also have occurred. The 2007 first quarter Gatwick score provides some evidence of an upturn.

⁶Paragraph 6.158.

FIGURE 5

QSM overall ratings of service quality



Source: BAA.

37. Not only has satisfaction not increased over time, but Heathrow and Gatwick rank relatively low in studies which benchmark airports internationally. In the Airports Service Quality (ASQ) survey for the first quarter of 2007, for example, Gatwick was rated 68th and Heathrow 80th out of 93 airports in terms of overall quality. Within a subset of ten larger European airports, Heathrow was ranked 7th and Gatwick 4th. As with the overall QSM measures, more recent ASQ data should be examined to see to what extent BAA's attempts at service recovery, particularly in respect of security queues, have impacted the overall rankings of its airports.
38. However, we note also that BAA has generally met its SQR targets during Q4 and, as a consequence, has paid out a relatively small proportion of the amount of revenue potentially at risk. In 2006/07, the total amount of revenue at risk was around £17.8 million at Heathrow and £4.9 million at Gatwick. Table 2 shows rebates made and the proportion of the potential revenue at risk that they represented.

TABLE 2 **BAA rebates paid**

Year	Gatwick £'000	% of revenue at risk	Heathrow '000)	% of revenue at risk	Total £'000
2004/05	204	7.04	652	6.96	856.7
2005/06	241.3	4.96	1,803	11.06	2,044
2006/07	590	12.0	1,142	6.5	1,732.7

Source: BAA, CC calculations.

39. It is difficult to reconcile BAA's overall performance ratings with results against the SQR targets. We now consider this in the context of various proposals for amending the scheme.

Current assessment

40. As far as concerns the financial incentives provided by the rebates, the total amount of revenue at risk needs to be sufficiently large to incentivize BAA to maintain the agreed standards. We have not seen an appraisal of the effect of different levels of rebate from BAA, the CAA or the airlines. Currently the rate is 3 per cent of airport charges and we note that, in practice, only a small proportion of this has been paid out, albeit against lower quality standards than are currently being proposed and with fewer quality elements being measured. The CAA has suggested that the proportion should be increased to 4.45 per cent. The airlines have suggested that it should be increased to 7 or even 10 per cent and that the maximum amount of revenue at risk should be reached after twelve months of service failure rather than six months. We note that, in many anti-trust regimes, penalties for infringement may be equal to 10 per cent of an enterprise's revenue and that this is considered an appropriate incentive to compliance. In BAA's case this would represent over £70 million in 2006/07. Given the inclusion of new measures in the SQR and the higher standards proposed, a level of more than 4.45 per cent proposed by the CAA would be appropriate. We consider that a reasonable amount of BAA's revenue to put at risk would be greater than 5 per cent but less than 10 per cent. However, the analysis required to make a better-informed decision is not available.
41. On bonuses for exceeding targets, their inclusion in the scheme would have a number of practical disadvantages. A bonus scheme is likely to be difficult to administer; and it would add a further layer of complexity to an already complex scheme. It would also be likely, if linked to payments by the airlines, to give rise to disputes between the airlines and BAA as to whether or not a particular target had been exceeded in the period concerned. The airlines are still somewhat sceptical about the validity of both the measures of operational service and the QSM. If payments from them to BAA were to be triggered by these measures, their concerns would be likely to be increased. Further, as the airlines have put to us, a bonus scheme may have distorting effects: BAA may seek to concentrate on elements of service quality where it could earn bonuses, neglecting areas where it finds it more difficult to reach the standards set under the scheme. Finally, we note the airlines' argument that the charges they pay are in exchange for a contracted level of service.
42. In this context we also considered incentives on individual BAA executives linked to performance against the SQR scheme. At the time of the last review, BAA told us that QSM scores were built into the incentive schemes of senior and middle management. In principle, it is appropriate that incentives to BAA executives through their benefits and compensation schemes should be aligned with the incentives to BAA corporately, both under the QSM and the SQR scheme generally. This suggests that such schemes should reflect the proportion of BAA's revenue at risk and the weighting of individual elements within it, ie if a larger proportion of BAA's airport revenue is placed at risk a larger proportion of relevant executives' remuneration should depend on the achievement of SQR targets.
43. Finally, we considered BAA's argument that, as the airlines' service quality contributed to the passenger's overall airport experience,⁷ it was appropriate that performance standards should be established or that performance indicators should be published for certain aspects of service delivery for which the airlines have responsibility. We considered whether particular elements of service quality, for which the airlines, rather than BAA, were responsible, would be likely to make a significant contribution to customers' overall view of the airport experience. In

⁷We note that other contributors to the passengers overall airport experience would include, for example, immigration queues.

practice, the two main elements of service quality to which this argument applies are check-in queues and waiting periods for baggage collection at arrivals. We have seen evidence that there is a significant difference in performance in, for example, the time it takes airlines to deliver luggage to the reclaim area on arrival. In July 2007, the best-performing airline at Heathrow delivered 97 per cent of bags to the reclaim area within 25 minutes whereas the worst delivered none.

44. Even if the airlines' position is accepted—that is, that the level of service they provide is determined by their competitive strategy—there is merit in a degree of transparency regarding their performance, particularly given the significant variation in performance between airlines. BAA already collects data on check-in queues and arrivals baggage times. Consideration should be given to the publication of this data by the CAA.
45. Regarding the time period for the payment of rebates, it is not clear that the potential problem referred to by the airlines (the lack of incentives after six months of failure) has ever occurred in practice or, therefore, that there is any particular need to change this element of the scheme.

The weighting of the elements within the scheme

46. Both the CAA and the airlines have proposed a reweighting of the various elements of service quality in the scheme,⁸ resulting in increases in the proportion of BAA's airport charges revenue exposed to risk and altering the relative importance of the various elements to each other, within each proposed scheme. These proposed schemes are summarized in Table 3 and explained in the following paragraphs. Weightings are shown in both absolute and relative terms, ie the relative importance of each factor within each scheme.

TABLE 3 Proposed SQR weightings

Measure	Airlines		BAA		CAA		Current	
	%	Weight	%	Weight	%	Weight	%	Weight
Operational measures	4	57	} 2.5	83	2.95	66	1.5	50
QSM	1	14			1.00	22	0.5	16
ACT	2	28	0.5	17	0.50	11	1.0	33
Total	7	100	3.0	100	4.45	100	3.0	100

Source: BAA, CAA, airlines, CC calculations.

47. BAA has said that it would support a reweighting as long as the revised scheme maintained a strong focus on the elements of the scheme which measure aspects of service which impact directly on the consumer. In this context it said that it would be happy to reduce the amount allocated to the congestion term from 1 to 0.5 per cent.
48. The CAA's proposals focus on security queuing measures and the elements measured by the QSM. The QSM elements would be assigned greater emphasis: the weightings of the QSM elements would be increased both in absolute and relative terms.
49. The airlines' focus is on operational measures, which are likely to impact on punctuality and operational efficiency which, they argue, should expose 4 per cent of BAA's airport charges revenue to risk rather than the current 1.5 per cent. These

⁸The operational measures, the QSM and the Aerodrome Congestion Term (ACT).

elements are: stand availability; jetty availability; pier services; Fixed Electrical Ground Power; escalator etc availability; security queuing; and arrivals reclaim availability. The airlines have also proposed an increase in the weighting of the QSM measures to 1 per cent (from 0.5 per cent) and that the weight attached to the aerodrome congestion term (a measure of airfield disruption leading to lost or deferred aircraft movements which may be attributed to BAA or its subcontractors) be increased from 1 to 2 per cent. This would have the effect of reducing the *relative* importance of the QSM elements in the scheme and increasing the relative importance of the operational elements.

Current assessment

50. We considered whether such reweighting would be appropriate in the context of the relative importance attached to the various service elements by customers, rather than by the airlines or BAA. The limited evidence that we have, derived from BAA's correlations between individual aspects of service quality and passengers' overall quality ratings, indicates that wayfinding, for example, is particularly important to airport customers yet is given a relatively low weight in the scheme. Time spent queuing at security checks, on the other hand, appears to explain less of the variance in customers' overall satisfaction rating. However, the data we have seen on this may not fully reflect passenger experience following the disruption of August 2006 or it might perhaps indicate that they have recalibrated their expectations since then. Alternatively, it may be that some passenger types, say regular, business travellers, rate the issue of security queues very highly whereas occasional travellers may consider wayfinding more important and that the data reflects the average view.
51. The weighting proposed by the CAA, with its emphasis on customers' ratings of quality and security queues, may be a closer approximation to consumer priorities than that proposed by the airlines which focus on punctuality and operational efficiency. Account needs taking of any additional consumer research that either BAA or the airlines can provide indicating the relative contribution that individual facets of service quality make to overall measures of customer satisfaction. We consider that the weighting assigned to the congestion term, which has only been in place since April 2006, should not be changed until it had been in operation for sufficient time to gain an understanding of the way it is working. We also consider that the aerodrome congestion term could become of greater significance as work gets under way on HET.

Summary

52. BAA has exceeded its SQR targets in most cases during Q4. We consider that it would therefore be reasonable to raise the targets for individual facets of service quality somewhat.
53. We consider that it would be reasonable to set higher standards for security queue lengths and also to establish a maximum queuing time target. In establishing where these standards should be set, it will be important to take account of BAA's more recent performance, particularly in the second quarter of 2007 when it has been seeking to recover service quality. We also recommend that measurement of queue lengths should be continuous throughout the operational day, that failure to achieve performance targets should attract rebates throughout the operational day and that targets should be expressed as a proportion of passengers receiving on-target service.

54. We note the scepticism of the airlines about the validity and reliability of the QSM and the SQR operational measures. We previously recommended periodic, independent audits of the methodologies employed in the QSM scheme and the way in which they were applied. An annual audit of the SQR scheme as a whole would provide a focal point for discussions of the scheme between BAA and its airport stakeholders.
55. From the evidence and analysis that we have seen, we find it difficult to reach a precise conclusion as to the proportion of BAA's airport charges revenue that it would be appropriate to expose to risk, but in our view it should be greater than 5 per cent and less than 10 per cent. Establishing the weighting to be attached to the various elements in the scheme adopted should, most appropriately, be done on the basis of the importance that consumers attach to those elements. Further consumer research would assist in this task.
56. While we accept the airlines' view that it would be unreasonable to set targets for their performance within the SQR, we also acknowledge that certain aspects of the customer's experience, for example check-in queues and arrivals baggage waiting times, are primarily the responsibility of the airlines. Publishing data on their performance in these two areas would introduce a degree of transparency that may enable consumers to make more informed choices.