



CONFIDENTIAL

Response for BAA Limited

Response to Working paper on the
potential for competition between BAA's
Scottish airports

BAA/CC2008/936

BAA Limited
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1. Summary

- 1.1 This paper is BAA's response to the Commission's working paper on the Potential for Competition between BAA's Scottish Airports. BAA has responded to many of the points raised in this Working Paper in its response to the Commission's Emerging Thinking (BAA/CC2008/800). The observations made in that response are not, for the most part, repeated here. This paper addresses the following points of evidence:
- a) The Commission's analysis of catchment overlaps in lowland Scotland and Birmingham/East Midlands, and
 - b) Some additional comments on the details of airlines' views on substitutability.
- 1.2 The main focus of this paper is the Commission's catchment overlap analysis. A more detailed review of the Commission's data analysis¹ confirms that the degree of overlap in lowland Scotland is well below that in Birmingham/East Midlands. To the extent that overlap comparisons of this sort are appropriate, the results support BAA's view that the scope for competition between Glasgow and Edinburgh is limited.
- 1.3 In summary:
- a) BAA reiterates its view that if the Commission wishes to rely on this sort of analysis, it is incumbent upon it to advance a detailed assessment of the methodological issues that arise. This is particularly true where the airports being compared are of significantly different size and stage of development (which is certainly the case for Birmingham and East Midlands). BAA will comment on this assessment when it is provided. However, in anticipation BAA notes the following points:
 - i. The available evidence that Birmingham and East Midlands strongly compete is weak. Further, the Commission does not demonstrate that East Midlands is a major constraint on Birmingham. Accordingly, if anything, the focus should be on East Midlands' catchment overlap, not Birmingham's (the Commission's benchmark);
 - ii. The comparisons should focus on the "restricted" (i.e. route choice) methodology, where only passengers that could reach their destination via more than one airport are taken into account. The resulting overlaps are not a "lower bound" to the degree of substitutability between the airports as suggested by the Commission, but rather offer the more reliable indication of passenger perspectives on substitutability;

¹ The analysis here remains somewhat preliminary in that BAA has only had a short time period over which to appraise the Commission's detailed data.

- iii. The metrics used for comparison by the Commission have not been considered in sufficient depth, and the metric previously advanced by BAA seems to have been disregarded without adequate explanation;
 - iv. There are two detailed but potentially significant issues in the mechanics of the comparisons. First, the larger size of the regions in central Scotland suggest that “overlaps” are being identified where most passengers may actually not view Edinburgh and Glasgow as good substitutes; and
 - v. Second, the Commission’s cleaning exercise seems to have had a significant impact on the figures for Edinburgh; a point that requires explanation.
- b) Looking at the Commission’s figures, it is clear that the degree of overlap between Edinburgh and Glasgow is substantially lower than that between Birmingham and East Midlands. In the case of the “unrestricted” (i.e. all routes) methodology, the figure for East Midlands is 66%, far higher than for Edinburgh (34%) and Glasgow (18%). When the “restricted” methodology, which is the conceptually more appropriate methodology for an assessment of passenger substitutability, is used, the figures for Edinburgh (3%-10%) and Glasgow (4%-12%) are substantially lower than both for Birmingham (16%-25%) and East Midlands (19%-27%). These figures support BAA’s view that Edinburgh and Glasgow do not have material scope to compete (by comparison with the situation in the Midlands).
- c) Using BAA’s methodology² to calculate overlaps, with the Commission’s dataset, confirms that the overlaps between Edinburgh and Glasgow are substantially lower than those between Birmingham and East Midlands.
- 1.4 In relation to Aberdeen, BAA’s views are set out in its response to Emerging Thinking at 4.50-4.53 on the Commission’s preliminary conclusion that there may be scope for competition between Aberdeen and Edinburgh and/or Glasgow. The evidence presented by the Commission provides no basis whatsoever for concluding that there is any scope for competition between these airports.

² As submitted to the Commission in BAA/CC2007/189

2. Methodological issues

General methodological approach

- 2.1 BAA questions the relevance of the overlaps between Birmingham/East Midlands as a valid benchmark for airport competition. Benchmarking of this kind is novel, and clearly calls for a detailed methodological assessment. BAA has already outlined its concerns with the Commission's approach in its response to Emerging Thinking at 4.25-4.27. In summary, BAA considers that the Commission failed to address the following issues in sufficient depth:
- The expected nature of competition between the airports considered and its comparability;
 - The connection between this mode of competition and catchment overlap indicators; and
 - The potential effect of differences in airport characteristics and regional factors.
- 2.2 Without a proper methodological appraisal covering these issues, the type of analysis undertaken by the Commission provides, at best, a very crude indication of competition on which little reliance can be placed. BAA therefore asks the Commission to spell out in far more detail its position on these matters.
- 2.3 In the following sections, BAA sets out some preliminary observations of its own on aspects of the comparisons with the aim of improving reliability, but this is merely by way of preliminary remarks. BAA awaits the Commission's full methodological appraisal for full comment.

Evidence on competition between Birmingham and East Midlands

- 2.4 The starting premise of the Commission's analysis is that Birmingham and East Midlands airports compete. As BAA has previously explained (response to Emerging Thinking at 4.27-4.30), the evidence for that is weak at best. To the extent that competition does occur, in BAA's submission, the constraints appear to be asymmetric; the competitive impact of East Midlands on Birmingham appears to be very weak³. To that extent, the comparison of overlaps should focus on East Midlands' overlap figures, not Birmingham's (which the Commission relies on).

Use of the restricted methodology is conceptually more appropriate

- 2.5 The Commission's finding, that the degree of overlap in Scotland and the Midlands is comparable, relies entirely on overlaps that include passengers that did not have a choice of route. This type of comparison will not give a reliable indication of the extent to which passengers regard different airports as substitutes.

³ As noted in BAA's response to Emerging Thinking at 4.27 this view is supported by the OFT's conclusion in a recent merger case (Flybe / BA Connect, 02/2007).

- 2.6 The Commission does repeat this analysis for routes available at both airports, and suggests that its “restricted” analysis is a “lower bound” to the degree of substitutability between airports. However, BAA requests clarification on how focussing on instances where passengers had a choice, should yield a “lower bound” to the degree of substitutability. BAA submits that including passengers in the analysis that did not have a choice of airport (as in the “unrestricted” methodology) will exaggerate the degree of substitutability between the airports. Further, the figure for Birmingham is certainly not a lower bound at all, due to the additional reason that, as noted above, there is insufficient evidence to conclude that East Midlands is a major constraint on Birmingham.
- 2.7 In BAA's submission, therefore, it is clearly more appropriate to look at the restricted overlaps, with any analysis of the scope for airline substitution undertaken as a separate and self standing exercise.

Metrics used for comparison

- 2.8 The Commission calculates an estimate of marginal passengers looking at the number of (for example) Edinburgh passengers in those districts where Glasgow or other BAA airports have more than 20% (the “exposure” metric), even though Edinburgh may not have any real or meaningful exposure in all instances. It also presents figures based on the number of passengers in districts where Glasgow and Edinburgh *both* have more than 20% of passengers (the “overlap” metric). The appropriateness of using these metrics is not discussed. In relation to this, BAA questions whether the inclusion of Edinburgh passengers from districts where Edinburgh's share is below the 20% threshold is well justified, and invites the Commission to provide fuller reasoning for the reliance placed on this approach.
- 2.9 Further, BAA has previously submitted data that adopts a different metric. BAA's approach is to identify those districts where both Edinburgh and Glasgow are above a threshold and then to look at the number of passengers travelling from those districts as a percentage of the total passengers at both airports. BAA believes that this metric provides an equally plausible, alternative way of analysing overlaps that should be considered.

Larger catchment districts in Scotland than in the Midlands

- 2.10 The overlaps at Birmingham and East Midlands are distributed over a relatively large number of relatively small districts. In Scotland, however, a large proportion of the total overlap volume, tends to be concentrated in a small number of districts covering a large geographical area. This raises the possibility that part of the overlaps observed in Scotland exaggerate the numbers of travellers that view the airports as substitutes; they may partly reflect an amalgamation of one area that strongly prefers Glasgow and another area that strongly prefers Edinburgh. Adding two such areas together will give a misleading impression that passengers in the combined district view the two as good alternatives.

- 2.11 A map of the districts that are responsible for much of the observed ‘overlaps’ in Scotland is provided below (the highlighted districts are overlap districts in the Commission’s “restricted” analysis and account for 0.5% or more of at least one of the concerned airports’ passengers). A few large districts (Stirling, North Lanarkshire and Dumfries & Galloway) cause a large proportion of the perceived overlaps in Scotland. By comparison, the overlap districts between Birmingham and East Midlands (which account for 0.5% or more of at least one of the airports’ passengers) are geographically smaller: Cannock Chase, Daventry, Harborough, Hinckley & Bosworth, Leicester, Lichfield, Melton, North Kesteven, Northampton, Oadby and Wigston, South Derbyshire, Stafford, Staffordshire Moorlands and Tamworth.



- 2.12 Stirling and North Lanarkshire are important overlap districts that account for 90% or more both of Glasgow’s overlaps with Edinburgh and Edinburgh’s overlaps with Glasgow in the Commission’s “restricted” analysis. It is also immediately observable that these districts cover relatively large geographic areas. In some parts of these districts passengers will have a strong preference for Edinburgh and in others for Glasgow.
- 2.13 The finding that these regions have a large overlap between Edinburgh and Glasgow passengers is likely to be misleading. The substantial shares of both airports in such regions will in part be explained by the likelihood that most passengers from the western part of a

district prefer (and choose) Glasgow while Edinburgh is significantly more accessible for (and therefore preferred by) those in the eastern part – if this was indeed the case, a district-based approach to overlaps in Scotland could be expected to lead to an overstatement of the potential volume of marginal passengers.

- 2.14 The Commission's view is that undertaking an overlap analysis based on postcode districts, could give rise to serious robustness concerns due to sample size problems. However, inspection of the levels of overlap in some postcode areas provides some indication that the large geographic areas used in Scotland may mask significant sub-regional variations. For example, in post code district G63 in the west of the Stirling area, Glasgow accounts for 93% of passengers (passengers on all scheduled routes are taken into account in this calculation to minimise potential sample size issues) and Edinburgh for 7%. In post code district FK9, which lies in the east of Stirling, the proportions are reversed: Glasgow accounts for only 13% whereas Edinburgh has a share of 87%. These percentages are far more skewed than those for the Stirling district as a whole (where Edinburgh accounts for 63% and Glasgow 37%).

Data cleaning process

- 2.15 Given that most of the data used by the Commission in its analysis of catchment areas was not provided to BAA until some time after publication of the working paper, BAA has not fully replicated the cleaning process undertaken by the Commission. The cleaning exercise appears in practice to have had a significant effect on the figures for Edinburgh.
- 2.16 Table 1 provides BAA's analysis (based on the original CAA dataset and the Commission's cleaned data set), showing this effect.

Table 1: Summary of Cleaning Analysis

	GLA exposure to EDI	EDI exposure to GLA	BHX exposure to EMA	EMA exposure to BHX
Original Dataset ⁴	16%	27%	25%	66%
Cleaned Dataset	18%	34%	23%	66%
Variance	+2%	+7%	-2%	0%

- 2.17 On this basis the 'cleaning' appears to have had a sizeable effect on Edinburgh. There are of course a number of possible reasons for this, but if the Commission is to rely on the 'cleaned' dataset for its analysis, then it needs to be convinced that none of the cleaning steps may have the potential to distort the results for a particular airport due to its specific characteristics and/or environment. BAA suggests that the Commission undertake further analysis of the sizeable (and disproportionate) effect on Edinburgh.

⁴ i.e. all passengers that did not report their origin district are excluded from the analysis and the districts as reported in the CAA survey are used to calculate overlaps without any further cleaning steps.

3. The Commission's Use of Catchment Benchmarking

- 3.1 Even if the Commission's use of catchment benchmarking was methodologically justified, and even if it is accepted that Birmingham and East Midlands strongly compete, the Commission's comparisons support BAA's view of the scope for competition in Scotland.
- 3.2 Taking the "unrestricted" methodology first, based on the Commission's figures, the "unrestricted" catchment overlap (based on the "exposure" metric) is 66% in the case of East Midlands and 23% in the case of Birmingham. The Commission suggests that it is appropriate to use the lower of the two figures, 23% (although it gives no justification for this), which it then compares to the figures for Edinburgh (34%) and Glasgow (18%). But as discussed above, there is a stronger case for using East Midlands as the candidate benchmark. The overlaps between Glasgow and Edinburgh clearly fall short of the East Midlands benchmark (66%) required to expect material scope for competition.
- 3.3 Moving on to the conceptually correct methodology for passenger substitutability – the "restricted" approach – the Commission's catchment comparisons makes clear that Edinburgh and Glasgow have far lower overlaps than both Birmingham and East Midlands. The Commission's estimates based on the "overlap" metric⁵ give figures that are substantially lower for the Scottish airports (Edinburgh 6%, Glasgow 9%) than those for the Midlands (Birmingham 16%, East Midlands 19%).
- 3.4 If attention is restricted to leisure passengers – which is a line of comparison that the Commission highlights in its Working Paper⁶ - the degree of overlap between Glasgow and Edinburgh dwindles to virtually nothing if the "overlap" metric is used. On that metric only 4% of Glasgow's passengers and only 3% of Edinburgh's passengers are in districts where both airports account for more than the 20% threshold share of passengers. By comparison, the corresponding figures for the Midlands' airports are substantially higher: 20% in the case of Birmingham and 21% in the case of East Midlands.
- 3.5 If the Commission's "exposure" metric is used, the overlaps are 21% (Birmingham) and 26% (East Midlands); much higher than the 10% (Edinburgh) and 12% (Glasgow) observed in Scotland. Again, focussing only on leisure passengers the figures are lower for Edinburgh (7%) and Glasgow (9%) than for the Midlands' airports (25% (Birmingham) and 27% (East Midlands)).⁷

⁵ i.e. where only passengers travelling from those areas where both Edinburgh and Glasgow have more passengers than the 20% threshold are taken into account.

⁶ See for example paragraph 4.

⁷ The leisure figures for Birmingham and East Midlands were not reported by the Commission. BAA has calculated these figures from the Commission's cleaned dataset and using the Commission's catchment analysis methodology.

3.6 These various comparisons are summarized in the table below.

Table 2 – Overview of overlap figures

	Scotland		Midlands	
	GLA	EDI	BHX	EMA
All routes (“unrestricted” methodology) – all passengers				
“Exposure” metric	18%	34%	23%	66%
Overlap routes (“restricted” methodology) – all passengers				
“Exposure” metric	12%	10%	21%	26%
“Overlap” metric	9%	6%	16%	19%
Overlap routes (“restricted” methodology) – leisure passengers				
“Exposure” metric	9%	7%	25%	27%
“Overlap” metric	4%	3%	20%	21%

- 3.7 Combined with the doubts about how closely Birmingham and East Midlands actually compete, and the greater reliability of using the figures for East Midlands as the benchmark (not Birmingham) these figures are suggestive that Edinburgh and Glasgow’s catchment overlaps are well below the levels that have been associated by the Commission with “competition” between airports.
- 3.8 Accordingly, the data presented by the Commission is entirely consistent with BAA’s view that there is no scope for material competition in Scotland.

4. Comparison with BAA’s catchment overlap metric

- 4.1 BAA has calculated overlaps for Scotland and Birmingham/East Midlands according to the methodology used in its response to the Commission’s market questionnaire (BAA/CC/2007/189). Under this methodology, regions are assigned to airport catchments by applying a threshold passenger share as in the CC’s approach. Then *all* passengers flying via Edinburgh or Glasgow are summed by catchment type and divided by the total passengers at Edinburgh and Glasgow to generate a single overlap figure for the airports considered.

Table 3: BAA methodology catchment overlaps

	GLA/EDI	Benchmark: BHX/EMA
All routes (“unrestricted” methodology)		
All passengers	21%	32%
Business	7%	26%
Leisure	28%	34%
Overlap routes (“restricted” methodology)⁸		
All passengers	8%	17%
Business	7%	12%
Leisure	10%	20%

- 4.2 On this metric even the “unrestricted” methodology shows substantially higher overlaps between Birmingham and East Midlands than between Edinburgh and Glasgow. And, analogous to the Commission’s own calculations, the overlaps under the “restricted” approach are substantially lower between Edinburgh and Glasgow.
- 4.3 Using BAA’s metric for catchment analysis therefore corroborates the Commission’s results in respect of the “restricted” approach, and raises questions as to how much weight should be placed on the Commission’s conclusion that the “unrestricted” overlaps at Birmingham are comparable to those at Edinburgh and Glasgow.

5. Evidence from the ORC Passenger Survey

- 5.1 The ORC passenger survey indicates that there would be very low levels of passenger switching in response to movements in relative airfares at Edinburgh and Glasgow, and therefore strongly supports BAA’s view that Edinburgh and Glasgow serve separate markets and do not have the potential to compete with each other to a significant extent.
- 5.2 BAA has set out its concerns with the Commission’s interpretation of the survey results in its response to Emerging Thinking at 4.35-4.45. In summary, BAA considers that:
- In reaching its preliminary views, the Commission has relied on responses to survey questions that, due to their formulation, cannot provide an indication of the scope for competition and whether airports are considered good or close substitutes by passengers; and
 - The Commission has not given adequate weight to survey responses that are valid indicators of substitutability (i.e. the price sensitivity questions).

⁸ As BAA has only taken into account passengers from Glasgow and Edinburgh in the calculation of these overlaps, it has also extended the set of routes considered in the “restricted” analysis to all scheduled routes that were available from these airports in 2005.

- 5.3 BAA does not accept the Commission's related concerns as to the reliability of responses to hypothetical questions and the impact of airline bargaining power as sufficient reasons to reject this evidence: (i) although BAA accepts that responses to hypothetical questions may not perfectly reflect what would happen if the hypothesised situation were to be realised, such survey evidence is routinely used in a wide variety of contexts; (ii) the Commission provides no evidence for the applicability of and the strength of the expected effect related to its bargaining power theory.
- 5.4 In relation to the Commission's final concern – the alleged inconsistency of the survey responses with profit maximisation at the Scottish airports – BAA has already explained that prices at its Scottish airports are not determined by what the market might bear but by arrangements that amount to informal price regulation (see BAA's response to Emerging Thinking, 4.41-4.44 and Annex 1).

6. Airline Views & Competitor Analysis

- 6.1 The Commission's analysis of "closest competitors" to airlines clearly supports BAA's view that Edinburgh and Glasgow are separate markets. Airlines identified their closest competitors overwhelmingly at their own airport, which is fully consistent with BAA's view that there is no material scope for competition between Edinburgh and Glasgow.
- 6.2 The assertion of some airlines that there was an "*element of competitive interaction*" between the airports, is difficult to understand since the airports do not currently compete and is in any event, as the Commission recognises, countered by the views of other airlines that denied any such competitive interaction. The nature of this evidence appears to be general "views" rather than specific answers based on more detailed or quantitative analysis.
- 6.3 BAA notes that the Commission has not provided a substantive evaluation or analysis of these airline views and their potential implications for the scope for competition. Below BAA summarises some additional observations from its review of the airline responses published by the Commission:
- Three of the surveyed airlines consider that Glasgow and Edinburgh are not or only to a very limited extent substitutable (easyJet: "*we do not consider these airports as substitutes*", Emirates: "*we do see Edinburgh as potentially complimentary to Glasgow in terms of offering Emirates the ability to serve the eastern side of Scotland*", Thomson: "*the only sensible substitute for GLA is PIK [...]*").
 - Three of the airlines that suggested that Glasgow and Edinburgh are substitutable to a significant extent have substantial operations at both airports, in many cases serving the same destinations (BA, bmi, Flybe). BAA considers that these airlines'

views are inconsistent with cost minimisation – if Glasgow and Edinburgh were indeed close substitutes and served the same market, a single base at one of the airports should be sufficient to attract most of this market's passengers while incurring lower costs.

- Out of ten published airline responses to the Commission's airport charge reduction question (Q18; reductions of 10% and 50% are considered), nine do not even mention switching between Glasgow and Edinburgh as a potential option (it is mentioned by Thomson; this airline, however, does not come to a clear view as to whether a 50% reduction in airport charges would induce switching). BAA submits that the fact that the vast majority of airlines did not consider this option when faced with a hypothetical 50% decrease in charges implies that they actually do not view Glasgow and Edinburgh as close substitutes.

7. Conclusions

7.1 Based on the evidence presented by the Commission in this working paper, and the further analysis undertaken by BAA, it is clear that the Commission's view that there is material scope for competition between Glasgow and Edinburgh as stated in Emerging Thinking and, consequently, that common ownership of these airports, may have an adverse effect on competition is not supported. In summary:

- The reliability of the Commission's catchment benchmarking methodology has not been verified and, even if it was found to be valid, the relevant overlaps between Glasgow and Edinburgh are significantly lower than the benchmark from the Midlands.
- ORC passenger survey responses suggest that passenger switching in response to changes in relative airfares would be limited and that separate owners would not have an incentive to decrease airport charges (or to increase service quality) from current levels.
- The Commission's closest competitor analysis indicates a lack of potential for competition between Glasgow and Edinburgh and survey responses suggest that airlines apparently do not view switching routes between the airports as a realistic option, even in the face of substantial reductions in airport charges at one of the airports.

7.2 In Emerging Thinking the Commission has advanced an econometric yield analysis as further evidence that it believes supports its position that there is material scope for competition between Glasgow and Edinburgh. BAA will comment on this analysis separately in its response to the corresponding working paper.

- 7.3 The Commission also indicated in Emerging Thinking that it is undertaking further work in this area, in particular that it is extending its analysis to other airports such as Manchester and Liverpool. BAA asks that this analysis is made available to BAA, and expects to comment further on these issues at that time.