

Market definition

Summary

1. Our guidelines¹ state that the CC does not regard market definition as an end in itself, but rather as a framework within which to analyse the effects of market features; and that it is a useful tool for identifying the competitive constraints present in the market. Our guidelines also state that there are normally two dimensions to the definition of a market: a product dimension and a geographic dimension.

2. The demand for airport services is a derived demand—it is derived from the demand for air transport. This means that a change in price or quality of airport services can affect demand through either or both of two means:
 - (a) Directly, as a result of substitution by airlines. An increase in one airport's charges may induce one or more airlines to shift some or all of their flights (and/or future expansion plans) to other airports, which may in turn lead to a switch by some or all of the passengers previously using those flights.
 - (b) Indirectly, through downstream effects: by affecting airline fares and inducing substitution by airline customers (or their deciding not to travel at all). An increase in one airport's charges may cause the airlines operating from that airport to increase their prices which may induce passengers to shift to airlines operating from other airports. Where passengers are interlining, this may involve using a different hub or hubs but keeping the same origin and destination airports.

Both direct and indirect substitution are relevant to market definition and also to substitutability and the assessment of competition.

¹Market Investigation References: Competition Commission Guidelines, CC3, June 2003.

3. As regards product market definition, we have adopted a bundled product market definition for aeronautical services provided by airports to airlines and their ground-handling agents. We consider this is separate from the market(s) for airport commercial services. As regards the aeronautical services product market we have provisionally concluded:
- (a) Substitution of other methods of transport for air travel is too weak to justify extending the market for aeronautical services to include surface transport alternatives, such as rail.
 - (b) While there are differences between airport users, these are not systematic enough to justify defining separate markets for the aeronautical product according to user, or type of use. Issues associated with price differences between users, for example between LCCs and other airlines, are best considered as part of the analysis of competitive effects.
 - (c) Each airport has unique characteristics and the aeronautical product offered at each individual airport may therefore be different from that offered at other airports.² Differences in airport characteristics, such as runway length and facilities, are best considered as part of the analysis of competitive effects.
 - (d) While Heathrow differs from other UK airports in being a major hub and airlines at Heathrow compete for transfer passengers with airlines at other hubs, transfer passengers account for only about one-third of Heathrow's total passengers and it is not therefore appropriate to treat Heathrow as in a separate airport hub market.
4. One of the most important characteristics of an airport for passengers and hence for airlines is its location relative to other airports and passengers' starting and finishing points for their journeys. Because surface travel to and from airports is time-

²One of the most important characteristics of an airport is its location and we discuss below, under geographical market definition, the impact of airport location on market definition.

consuming and costly, the extent to which airlines can substitute between airports while retaining their passengers depends on the location of those airports. However, passengers and airlines do not just choose between neighbouring airports: when deciding on a location for a new route, airlines may choose between more distant routes; passengers may trade off frequency against distance to airport (choose between low frequency routes at closer small airports and high frequency routes at larger more distant airports); and, as already mentioned, passengers may choose between airlines operating through different hubs.

5. Although location is important and neighbouring airports are usually closer competitors than more distant ones, the most relevant airports depend on the issue under consideration. And an assessment of competitive effects, should ideally take into account all constraints on airports, including nearer and more distant airports. We therefore see no analytical advantage in defining rigid geographic markets for airports. A central concern in this inquiry is BAA's common ownership of neighbouring airports and, in considering this concern, we need to focus on the extent to which common ownership prevents competition between neighbouring airports.

6. To sum up, our approach to market definition is that it should set a framework within which to analyse the effects of market features. To that effect, we consider that the aviation market is separate from the wider transport market and we therefore define a market for aeronautical services provided by airports. We do not provisionally find it appropriate to sub-divide the market for aeronautical services by type of user or by airport characteristics. Nor do we provisionally find it appropriate to define rigid geographic markets for airports (though, in considering common ownership we need to focus on potential competition between neighbouring airports).

Introduction

7. Under the Enterprise Act 2002, the CC is required to decide whether any feature, or combination of features, of each relevant market prevents, restricts or distorts competition. A potentially important element in a market investigation is therefore to define the relevant markets. Our guidelines³ state that the CC does not regard market definition as an end in itself, but rather as a framework within which to analyse the effects of market features; and that it is a useful tool for identifying the competitive constraints present in the market. Our guidelines also state that, wherever feasible, we adopt the hypothetical monopolist test to define markets. This involves starting with a narrow market and widening it until a hypothetical monopolist could profitably impose a small but sustainable non-transitory increase in price (SSNIP). However, as also noted in our guidelines, it is rarely possible to apply the test in a direct sense and it is therefore usually necessary for us to infer, from whatever information is available, or can be collected, what the likely outcome of the test would be.
8. In considering airport market definition, it is relevant that demand for airport services is a derived demand—it is derived from the demand for air transport. This means that a change in price or quality of airport services can affect demand through either or both of two means:
- (a) Directly, as a result of substitution by airlines. An increase in one airport's charges may induce one or more airlines to shift some or all of their flights (and/or future expansion plans) to other airports, which may in turn lead to a switch by some or all of the passengers previously using those flights.
 - (b) Indirectly, through downstream effects: by affecting airline fares and inducing substitution by airline customers (or their deciding not to travel at all). An increase in one airport's charges may cause the airlines operating from that

³Market Investigation References: *Competition Commission Guidelines*, CC3, June 2003.

airport to increase its prices which may induce passengers to shift to airlines operating from other airports. Where passengers are interlining, this may involve using a different hub or hubs but keeping the same origin and destination airports. Both direct and indirect substitution are relevant to market definition.

9. Our terms of reference (see Appendix 1.1) refer to the market or markets in which airport services are supplied by BAA. However, the relevant market or markets for assessing AECs includes services provided by non-BAA airports that exercise a competitive constraint on BAA's airports, as well as services supplied at BAA's airports.
10. Our guidelines also state that there are normally two dimensions to the definition of a market: a product dimension and a geographic dimension. We start by discussing whether aviation, including airports, is a separate market or part of a wider transport market. Next we consider the products supplied by airports. We then discuss geographic market definition.

Aviation and other methods of transport

11. In this section, we consider whether aviation, including airports, is a separate market or part of a wider transport market including other methods of transport, such as rail, which BAA said had recently become increasingly attractive as an alternative to flying, particularly on domestic routes. A recent paper by the CAA⁴ considered recent trends in air travel and found evidence of some demand being lost to other modes by shorter-haul international and, particularly, domestic air travel. The CAA noted that long-distance domestic rail travel had seen a recovery from the consequences of the Hatfield disaster in 2000, and also that improvements to major sections of rail track

⁴Recent trends in growth of UK air passenger demand, Civil Aviation Authority, January 2008.

had led to punctuality gains and reductions in rail travel times whereas security disruption at airports had increased overall air journey times.

12. Table 1 shows that domestic services account for a substantial proportion of passengers at BAA's Scottish airports and Southampton, but not at the London airports. (Table 2 also shows the figures for services to Paris and Brussels, which are served by direct rail service from London—although rail services to Paris and Brussels are more relevant as constraints on the south-east airports than on BAA's Scottish airports.)

TABLE 1 **Passengers to certain destinations as per cent of total passengers at BAA airports, 2007**

	<i>per cent</i>			
	<i>Domestic</i>	<i>Paris</i>	<i>Brussels*</i>	<i>Total</i>
Heathrow	8.5	2.6	1.0	12.1
Gatwick	11.4	0.0	0.2	11.6
Stansted	10.7	0.0	0.4	11.2
Edinburgh	62.1	2.7	0.5	65.3
Glasgow	52.2	0.2	0.0	52.4
Aberdeen†	66.9	3.7	0.1	70.7
Southampton	60.9	5.1	1.1	67.2

Source: CAA.

*Includes Charleroi.

†Total passengers excludes those on helicopter flights.

13. It would be appropriate to extend the market to include alternative methods of transport if passenger switching to such alternatives prevented airports from profitably increasing prices. Such switching would occur if an increase in airport charges was reflected in fares and the increase in fares caused passengers to switch to rail or road travel. Consequently, only indirect substitution by passengers, and not direct substitution by airlines, is relevant.

14. Our survey of three Scottish airports⁵ (Edinburgh, Glasgow and Prestwick) provides information on substitution from air travel to alternative transport. Table 2

⁵http://www.competition-commission.org.uk/inquiries/ref2007/airports/pdf/orc_survey_air_passengers_scot_report.pdf.

summarizes relevant results. We have shown results for Edinburgh alone as well as the aggregate for all three airports, since our survey results indicated that fewer passengers at Edinburgh than the other two airports regarded other airports as potential alternatives. (The difference between Edinburgh and the other airports is likely to reflect that a higher proportion of its traffic is to domestic destinations, in particular London, which are most likely to be accessible by other means of travel.)

TABLE 2 Evidence from CC survey on substitutability of alternative means of travel for passengers at Edinburgh, Glasgow and Prestwick

	<i>Per cent of passengers</i>	
	<i>All</i>	<i>Edinburgh</i>
<i>Whether respondents could realistically have used another means of travel</i>		
Yes	43	52
No	57	48
<i>What respondents would have done if the airport had no flights to their destination</i>		
Flown from a different airport	64	59
Not flown but travelled in some other way	18	24
Not travelled at all	17	16
Total	100	100
<i>Stated switching if price increased*</i>		
Not switch	71	72
Not travel	4	4
Switch to alternative mode of travel	8	12
Switch to alternative airport	17	12

Source: ORC survey, CC calculations (to weight responses for number of passengers travelling in same party as each respondent).

*Percentages stating they would switch for a price increase up to £25 on the full fare per person.

15. The table shows that just over 40 per cent of passengers, and 50 per cent for Edinburgh, could realistically have used another method of travel to make their journey (of these about 70 per cent could have used rail and 40 per cent car). However, a much smaller percentage (24 per cent for Edinburgh and 17 per cent for all three airports) said that, if there had been no flights to their destination, they would have used an alternative means of transport (in most cases rail), as compared with 60 to 70 per cent who said they would switch to a different airport.

16. In response to questions asking respondents what they would do if fares were increased, few said they would switch to alternative modes of transport although it is

also the case that responses suggested few passengers would switch to alternative airports and very few would not travel. Indeed, the survey results suggest that 70 per cent of passengers would not switch in response to a very large fare rise of £25 (representing over double the airport charges on a return trip). Interpreted literally, this implies that even such a very large price rise would be profitable for an airport (in carrying out the hypothetical monopolist test it is necessary to take into account the effect of loss of passengers on commercial income but this is unlikely to be large enough to offset the additional airport charge income from such a large price rise). Of course, airports have not been able to impose such price rises: this may reflect that they are constrained by other factors, such as direct substitution by airlines and airlines' bargaining power. However, we also consider that care needs to be taken in interpreting responses to the hypothetical questions regarding price increases as responses to hypothetical questions may not reveal accurately what respondents would do if prices were actually increased.

17. Taking the evidence as a whole, we consider that substitution of other methods of transport for air travel is too weak to justify extending the airport market to include surface transport, such as rail. Although our evidence mostly relates to BAA's Scottish airports we consider our conclusion is valid for the south-east airports as well as for Scotland, as flights to the relevant destinations are considerably less important in the South-East than in Scotland (see Table 1)⁶.

Airport services

18. In our terms of reference, airport services are defined to include:
 - (a) the provision of airport infrastructure;

⁶With the exception of Southampton, which has a similar percentage of passengers travelling to the relevant destinations as Edinburgh and Aberdeen.

- (b) the coordination and control of the activities performed on or in airport infrastructure and the provision of associated services including security; and
- (c) the provision of associated commercial services (including catering, retail, car rental, sale of advertising space, car parking and activities relating to commercial property).

In this paper, we refer to (a) and (b) as aeronautical services and (c) as commercial services.

19. Table 3 shows a breakdown of revenue for BAA's seven airports. In 2007/08, aeronautical services accounted for about 60 per cent of revenue at Gatwick, Southampton and Stansted, rising to almost 80 per cent of revenue at Aberdeen (which had the highest proportion of domestic passengers).

TABLE 3 Revenue of BAA airports, 2007/08

	LHR	LGW	STN	GLA	EDI	ABZ	SOU*	Total
<i>Aeronautical services</i>								
Airport charges	639	178	138	44	49	20	13	1,082
Other charges†	187	40	11	8	8	8	1	261
Terminal offices	78	24	7	5	4	4	1	122
Total	905	242	156	57	60	32	15	1,467
<i>Commercial services</i>								
Retail	220	106	46	16	12	4	3	407
Car rental	11	4	2	2	2	1	0	22
Car parks	68	49	40	8	11	3	6	186
Taxis, coaches	6	0	0	0	1	0	0	7
Advertising	26	5	2	2	2	1	0	37
Other property‡	27	11	6	0	0	0	0	44
Total	357	175	97	28	28	9	9	704
Rail	80							80
Total revenue	1,343	418	253	85	88	41	24	2,252
% aeronautical	67	58	62	67	69	78	62	67

Source: BAA (subject to change following BAA external auditors review).

*Southampton airport charges are net of the cost to BAA of purchasing from NATS air navigation services for Southampton. (Up to the end of 2007/08, NATS charged airlines directly for air navigation services at BAA's other airports.)

†See Annex B. The bulk of revenue from other charges is from charges to airlines and their ground-handling agents. However, a small proportion of this revenue may not be attributable to airlines, for example staff car parking by employees of retailers (BAA includes staff car parking revenue under charges not under car parks).

‡Includes cargo rents. The detailed figures show substantial declines in cargo rents, possibly reflecting transfer to elsewhere in BAA (for example Stansted cargo rents declined from £4.4 million in 2004/05 to nothing in 2005/06).

20. We discuss aeronautical services first.

Aeronautical services

Products offered

21. Airports provide a wide range of aeronautical services to airlines, the most important of which are mentioned in our terms of reference (see Appendix 1.1). BAA charges for the bulk of aeronautical services through airport charges, which are charges for landing and parking a plane and for handling its passengers (Annex A shows a breakdown of BAA's airport charges revenue: the bulk of its revenue comes from charges on departing passengers). There are significant interdependencies between demand for landing, parking and passenger handling: in particular, parking and passenger handling may be regarded as secondary products since any demand for aircraft parking and passenger handling only arises when an aircraft is landed at the airport.

22. The generally accepted approach to market definition for secondary products is to define markets more widely where the prices of the secondary product are constrained by the interaction with the primary product.⁷ We believe this is the case for airport charges: it seems plausible that airlines take account of parking and passenger charges, as well as landing charges, when deciding on the airports to use. No one argued the contrary to us and we have seen no evidence to doubt it. Hence, we consider there is a single product market for all services covered by airport charges.

23. BAA charges separately for some other aeronautical services, including rental of check-in desks and offices inside passenger terminals. Revenue from these services accounted in 2007/08 for between 12 per cent (Stansted) and 29 per cent (Heathrow) of aeronautical revenue (see Table 3, and Annex B for a detailed breakdown of other

⁷See http://www.competition-commission.org.uk/inquiries/ref2007/ppi/pdf/prov_find_app_3_7.pdf, in particular paragraphs 9 and 10.

charges). In some cases, charges are paid by airlines' ground-handling agents rather than airlines themselves,⁸ but in such cases the airport's charges would still affect the airlines through the ground-handlers' own charges. Therefore, as with airport charges, we consider that charges for other aeronautical services would affect airlines' demand for use of the airport, and hence that it is appropriate to extend the airport aeronautical product market to include all aeronautical services.

24. Accordingly, we think it is appropriate to define a single product market covering all aeronautical services.

Users

25. Aeronautical use of airports may be classified as follows:

- (a) between flights by fixed-wing aircraft and helicopters;
- (b) fixed-wing flights between commercial aviation (scheduled and charter airlines) and general aviation (business, private and agricultural aviation, flying clubs etc);
- (c) commercial aviation between passenger and freight flights (both of which can be further divided between scheduled and charter operations);

Passenger flights account for the bulk of aeronautical revenue at BAA airports (although at Aberdeen, which is the base for helicopter flights to the northern North Sea, helicopter flights account for about 15 per cent of airport charge revenue).

- (d) passenger flights can be further divided according to origin/destination—domestic, international short haul and long haul; and
- (e) passenger flights might also be divided according to type of airline: full service carrier, LCC or no frills carrier, charter. Requirements may differ between different airline types: LCCs may not, for example, require transfer facilities or

⁸Some large airlines act as their own ground-handlers. Most airlines use third-party ground-handlers. Ground-handling includes services to airlines not provided by the airport including loading/unloading of passengers, baggage, fuel, food to aircraft and passenger check-in (but not usually provision of check-in desks as these are provided by the airport). Ground-handlers require a licence from airports: at larger airports this is controlled by an EU Directive.

airbridges, but particularly important to them are quick turnaround times and low airport charges to compete with other airlines.

26. Where different prices are offered to different users, and differences are not cost-related, it may be appropriate to define separate markets, sometimes called price discrimination markets. For the most part, BAA airports do not charge different published prices to different users—the main exception is that BAA airports (apart from Southampton) vary the passenger charge according to destination, with a lower departing passenger charge for flights to domestic destinations.⁹ To the extent that lower charges for domestic passengers reflect lower costs due, for example, to smaller space requirements, shorter processing times, no need for immigration facilities, lower average baggage size and higher proportion of hand baggage only passengers, such charge differentiation does not represent price discrimination.
27. In principle, airports may negotiate terms individually with larger airlines (as part of multi-year contracts). This is common at non-BAA airlines but much less so at BAA airports: BAA does not offer any discounts at Heathrow and Gatwick where in recent years it has sought to charge up to the regulated price cap; at Stansted, negotiated discounts are now being used to incentivize airlines to fill off-peak gaps (BAA's long-term deals with the main Stansted airlines came to an end by April 2007); at BAA's other airports, discretionary discounts are offered for new routes according to a published schedule¹⁰ although BAA has also negotiated longer-term deals with some airlines which mostly relate to specific routes.

⁹BAA's London airports also have an intermediate level of passenger charge for flights to destinations in the Irish Republic. BAA's Scottish airports offer a 50 per cent rebate on the domestic passenger charge to fixed-wing domestic flights of less than 100 miles and a 65 per cent rebate on the take-off charge to flights to Scottish destinations (with a 40 per cent rebate on the take-off charge to flights to destinations outside Scotland but within 250 miles).

¹⁰At BAA's Scottish airports, airport charges on services to new international destinations are reduced by 50 per cent in the first year, 30 per cent in the second and 10 per cent in the third; with airport charges reduced on services to new domestic destinations and for significantly increased frequency on services to existing destinations by 30 per cent, 20 per cent and

28. In general, the implications of negotiated prices for market definition are unclear: it is a *reductio ad absurdum* to define each individual user that negotiates prices as a separate market, and this is not likely to be a useful step for competition inquiries. In these circumstances it is usual to define a single product market unless segmentation between groups of users is suggested by clear differences in realized average prices (that are not related to costs). We have not seen sufficient evidence of this at BAA's airports to justify segmenting the market between user groups.
29. Accordingly, we see no reason to define separate markets for the aeronautical product according to user or type of use. To the extent necessary, we consider any issues associated with price discrimination as part of our analysis of competitive effects.

Characteristics of airports

30. Each airport has unique characteristics and the aeronautical product offered at each individual airport may therefore be different from that offered at other airports. One of the most important characteristics of an airport is its location and we discuss below, under geographical market definition, the impact of airport location on market definition. In some sectors where location is important, it is useful to define markets according to the characteristics of the business units.
31. In the airports sector, runway length and facilities (eg availability of instrument landing systems) and environmental concerns are factors relevant to how far an airport can constrain other airports. In particular, airports such as Biggin Hill, Cambridge and Lydd focus on air taxi services and general aviation and, according to CAA statistics, have negligible commercial flights by aircraft larger than 15 tonnes. Such airports are unlikely to constrain airports, like those of BAA, where commercial

10 per cent in years one to three respectively. In certain circumstance, such as where more than one international service is being considered, additional support is available at the discretion of the airport Managing Director.

aircraft account for the bulk of demand (although they might be relevant as entrants if facilities can be improved and/or environmental concerns overcome). Annex C shows that there are a large number of airports in the UK but relatively few of these are competitors in the market for commercial aviation, as reflected by, for example, significant numbers of passengers or volumes of freight; rather, they compete mainly for general aviation traffic.¹¹ However, as the CAA also pointed out, some of these airports might be entrants in future and therefore relevant to future competition.

32. Runway length is also relevant to the range of destinations an airport can serve. For example, BAA's Southampton airport and London City (not BAA owned) are restricted to smaller commercial aircraft with a limited range. Other airports' runway lengths vary: BAA's Scottish airports have shorter runways than its London airports and than (non-BAA) Glasgow Prestwick. There is consequently some limit on the type of aircraft that can take off and land fully laden at BAA's Scottish airports, particularly Aberdeen.¹² Similarly (non-BAA) London Luton has a shorter runway than BAA's London airports. Nevertheless, there is potential for all these airports to compete across a reasonable range of aircraft types and, given the comparatively small number of relevant airports, it seems appropriate to deal with such differences in airport characteristics in our competition analysis rather than by defining a number of overlapping markets.

Hub status

33. Another characteristic that may be relevant is hub status: the extent to which passengers use an airport to make journeys involving a change of aircrafts. This is closely related to the extent to which one or more airlines or airline alliances promote

¹¹Annex C includes only airports included in CAA statistics and/or with permission to levy charges at 1 June 2006. There are also other airfields (generally airports do not require permission to levy charges unless their turnover has exceeded £1 million in two of the last three financial years) and military airports but these are unlikely to compete in the market for commercial aviation.

¹²Aberdeen's runway is shorter than those of Edinburgh and Glasgow, although BAA plans to extend it.

through-tickets requiring passengers to change aircraft at the airport. Heathrow is the hub of BA's operation and is also a major hub for transfers between BA and other airlines in the **oneworld** alliance. Other airline alliances (Star and Skyteam) also have a Heathrow presence, although they also have hubs elsewhere.

34. We considered whether Heathrow was in a separate hub airport market. As already mentioned, there is competition between airlines at different hubs (including European hubs and those elsewhere in the world including for example Dubai and US airports with both international and domestic connections), and such competition may encompass both standard and highly profitable premium passengers. Hence, Heathrow could be in a separate hub market if its prices are constrained by competition from hub airports elsewhere in the world (which could occur through a Heathrow price rises causing airlines either to move services from Heathrow to other hubs, or to increase fares via Heathrow causing passengers to transfer at alternative hubs). However, transfer passengers represent only about one-third of Heathrow passengers: the remaining two-thirds of passengers are terminating at the airport, and it is unclear that alternative hub airports represent a more important constraint on Heathrow than alternative local airports. Heathrow's prices are subject to price control: we discuss the relevance of this to market definition below under geographic market definition. As both hub and non-hub airports potentially constrain Heathrow's prices, we do not currently consider it appropriate to define a separate market for aeronautical services at hub airports (however, we return to hub airports in paragraph 53(b)).

Commercial services

35. In general, there would appear to be three alternative product market definitions for commercial services at airports:

- (a) They could, together with aeronautical services, be part of a single bundled airport product, as suggested, for example, by the OFT in its market study that led to our inquiry.
- (b) They could represent one or more separate markets for commercial services.
- (c) They could be part of one or more wider market; for example airport retailing could be part of a wider retailing market.

Our principal concern in this inquiry is whether they are part of a bundled product market including both aeronautical and commercial services.

- 36. Most commercial services at airports are associated with purchases by passengers that follow on from their purchase of tickets to fly from the airport. Full interdependence of demand between commercial services and aeronautical services might arise if passengers take account, directly or indirectly, of commercial services prices when they purchase airline tickets. This would require passengers either to be well informed about prices at all relevant airports at the time they purchase tickets, or to be influenced by reputation effects. If this is the case, a hypothetical commercial services monopolist would not be able to impose a price increase without an offsetting loss of profits on aeronautical services. It would then be appropriate to define a single bundled product market covering both aeronautical and retail products.
- 37. In these circumstances, airports would seek to control prices set by their retail concessionaires to prevent loss of profits on aeronautical services. The chain of logic would require that an increase in prices of commercial services at one airport causes passengers to choose alternative airports and hence reduces the profit-maximizing level of prices that can be charged to airlines for aeronautical services. If this was the case, airlines would be keenly concerned with the prices of airport commercial services because of the impact on their own demand. However, we have not seen

evidence of airline concern with the level of prices for commercial services at competitive airports; instead airlines seem mainly, if not exclusively, concerned with getting the best deal on aeronautical services. We therefore consider airport commercial services are in separate market(s) to aeronautical services, and that there is not a single bundled airport product market.

38. Table 1 shows that the most important sources of BAA's commercial revenue are retail and car parking. We now consider these further.

Retail

39. Retail includes airside and landside shops (including duty free), food and drink outlets and bureaux de change. BAA's revenue comes from concession arrangements whereby its retail concessionaires pay a percentage of revenue to BAA, subject in some cases to a minimum annual payment. BAA's concessionaires are World Duty Free Europe (WDFE),¹³ national chains of retailers, such as WH Smith and Boots, branded bureaux de change, restaurant, café and pub operators. Contractual arrangements at non-BAA airports tend to be similar.
40. Although BAA sets some constraints on pricing by its concessionaires,¹⁴ it is not clear that these are motivated by considerations of competition with other airports. Responses to our airport questionnaire suggested other airports mostly seem not to constrain their concessionaires' pricing. In commenting on our working paper, the CAA said that some other airports had indicated an active involvement in the retail offering, though we note this could be driven by issues associated with coordinating offerings of different concessionaires and/or by longer-run competitiveness against

¹³WDF is a subsidiary of BAA. On 10 March 2008, BAA announced that, subject to merger clearance from the European Commission, it had agreed to sell WDF (with a 12-year concession agreement) to Autogrill S.p.A. for £546.6 million, with the deal expected to complete towards the end of April 2008.

¹⁴BAA's retail pricing policy involves linking prices to average High Street prices. BAA's policy on airside pricing of products other than alcohol and tobacco is generally that they should be sold to both EU and non-EU passengers at the average High Street price less tax.

off-airport outlets, rather than by a need to compete with other airports. Overall, we do not think the evidence points towards a bundled product market including both aeronautical and airport retail.

41. Airport retailing might be part of a wider retailing market if passengers are sensitive to any difference between retailers' on-airport prices and off-airport prices. This is more likely if the purchase is not for immediate consumption or use when away from home. Airport retailing might also be part of a wider retailing market if concern for reputation or other factors causes retailers themselves to constrain their airport prices and other aspects of the retail offering to be similar to their off-airport shops. As the CAA pointed out, it may also be relevant for some retail activities that there is some degree of competition between origin and destination airports and between the airports offerings in the terminal and the airlines' onboard service (eg food and duty free shopping). However, even if existing airport retail prices are constrained by competition, it does not necessarily follow that they are constrained to the competitive price (although the nature of airports makes it difficult to define a competitive level of retail prices). In the current inquiry, it has not been necessary for us to reach a view on whether there is a retail market specific to each airport, or a wider retail market, but as noted already we do not consider it is part of a bundled product market together with aeronautical services.

Car parking

42. Airport car parking is divided between short-term parking (adjacent to the terminal); valet parking (also known as 'meet and greet' parking, where the driver and passengers are met at or near the terminal and their car driven away and parked off site) and long-term parking (a bus journey away from the terminal). At most of BAA's

airports, other operators compete with BAA's valet and long-term car parking by offering similar products.¹⁵

43. As with other commercial services, there are three alternative approaches to market definition for airport car parks:
- (a) They could be part of a single bundled airport product.
 - (b) They could represent one or more separate markets for airport car parking.
 - (c) They could be part of a broader market for transport to the airport.
44. Short-term car parks are used by passengers making very short trips and also by friends/colleagues/relatives collecting passengers from the airport or dropping them off. As short-term car parks must be located near to the terminal, there are no direct substitutes to BAA's short-term car parks. Possible direct constraints on short-term car park prices include public transport, taxis, valet parking, long-term car parking and pick-up/drop-off without (or with less) use of short-term car parks. Alternatively or additionally, short-term car parking prices might be constrained by their impact on aeronautical demand, either directly through passengers taking car parking prices into account when purchasing tickets or through reputational effects.
45. In contrast to airport retailing, BAA and most other airport operators set their own car park prices (although car parks are usually operated by third parties under a management contract). In principle, this suggests a degree of concern with the effect of car park prices on aeronautical demand, although BAA's car parking policy seems to show little evidence of this.¹⁶ It is also likely that the direct alternatives help to

¹⁵There are off-airport non-BAA car parks with planning permission at Heathrow, Gatwick, Glasgow and Edinburgh but not at Stansted and Southampton.

¹⁶BAA's price policy for both short- and long-term car parking states that car parking tariffs are assessed on an airport-by-airport basis, with each individual car park and prices being determined based on a number of criteria. These criteria are: current and historical price position; competitive situation of each car park product including benchmarking versus competition; capital investment undertaken or planned (capex recovery); benchmarking if appropriate versus other airports or other non-airport car parks; inflation or changes to RPI; prevailing demand for available space; overall parking strategy (eg to restrict usage of

constrain car park prices: BAA told us that its short stay car parks compete against the forecourt and public transport alternatives, and more recently against valet parking. A further consideration is that each airport has an actual monopoly of short-term car parking and existing prices could be above the competitive level (although the nature of airports makes it difficult to define a competitive level of car park prices). BAA told us that, in recent years, it had increased short-term car park prices above RPI to support the effort to drive higher levels of public transport utilization, although this had to be balanced against the effect of pushing car drivers on to the airport roads and forecourts for extended periods.¹⁷ It seems to us that these comments suggest that prices of short-term car parks are determined by public policy considerations rather than competition and that short-term car parking is not characterized by strong competitive constraints (BAA, however, told us that its comments merely implied the motivation behind raising car park charges presupposed a substitutability with public transport).

46. Turning to long-term car parks, we note that, in 2002, the CAA considered under section 41 of the Airports Act a complaint about unfair pricing by Birmingham airport by Airparks (an off-airport long-term car park operator). The CAA made its assessment¹⁸ under a competition policy framework taking into account guidance issued by the OFT under the 1998 Competition Act. The CAA staff analysis found that BIA, by virtue of its control of access to the airport, was the dominant supplier of an essential input required to operate in the market for car parking at Birmingham Airport, whether the market was defined as long-stay car parking alone, or extended to include short-term car parking. Thus the CAA's investigation at that time suggested the relevant market was not wider than car parking at that airport (including off-airport car parking), and in particular there was no suggestion that

congested areas and develop a range of products to meet the needs of individual customers and groups); physical location and nature of car park.

¹⁷Subsequently BAA told us that, whilst prices for short-term car parking had increased, the reason for the increase was partly driven by constrained space, limited access and many competing modes for this access in addition to providing an incentive towards greater use of public transport.

¹⁸<http://www.caa.co.uk/docs/5/ergdocs/apd11b.pdf>.

airport car parking was just part of a wider airport market including aeronautical services.

47. As in the CAA's 2002 analysis of Birmingham car parking, we consider that the market includes all car parks offering transfers to the airport concerned. In the current inquiry, it has not been necessary for us to reach a view on the precise definition of car parking markets—that is whether there are separate markets for one or all of short-term, long-term and valet car parks.

Conclusion on product market

48. We consider there is a bundled market for aeronautical services provided to airlines and their ground-handling agents, and that this is separate from the market or markets for commercial services at airports.

Geographic market

49. As noted above, one of the most important characteristics of an airport for passengers and hence for airlines is its location relative to other airports and passengers' starting and finishing points for their journeys. Because surface travel to and from airports is time-consuming and costly, the extent to which airlines can substitute between airports while retaining their passengers depends on the location of those airports. Geographic market definition is therefore important and, under this heading, we consider which airports are included in the market.
50. The hypothetical monopolist test starts from the narrowest possible market definition and asks whether a SSNIP would be profitable. In this inquiry, there are two major difficulties in applying the hypothetical monopolist test.
- (a) The narrowest possible market definition is that of an individual airport. A profit-maximizing airport would increase prices to the point where further increases are

no longer profitable, so the test at existing prices would automatically be failed and the market always widened (this problem is often referred to as the 'cellophane fallacy'). Consequently, in a market inquiry, our guidelines suggest the hypothetical monopolist test should be applied at competitive prices. However, it is difficult to assess what the competitive price of an individual airport would be.

(b) Heathrow, Gatwick and Stansted are subject to statutory price control. In recent years, BAA has priced to the maximum allowed under its price caps for Heathrow and Gatwick. At Stansted, BAA's tariffs were set below the maximum up to 2006/07, but in 2007/08 and 2008/09 BAA has set tariffs to the maximum before correcting for previous under-recovery. The existence of binding price caps implies that in the absence of price control, the airport could almost certainly price 5 per cent higher, so in these cases applying the test at existing prices would imply the test is automatically passed. But in these cases, environmental and site constraints may mean that the price control (based on average cost per passenger) caps prices below the level a competitive airport would charge (which would be related to long- or short-run marginal cost).

51. A further point relevant to this inquiry is that markets are not necessarily unique and depend on the competition issue being addressed.¹⁹ Even if we could carry out the hypothetical monopolist test at competitive prices, a narrow market definition may not be appropriate for assessing BAA's common ownership of adjoining airports—it may underestimate the adverse effects of common ownership. For example, individual owners of airports in two reasonably close cities (say Edinburgh and Glasgow) may be able profitably to increase prices by, for example, 5 per cent above the competitive level. Beyond this increase, further increases are not profitable for

¹⁹Bishop and Walker (*The Economics of EC Competition Law*, Sweet and Maxwell, 2002) state: 'A common misconception is that market definitions are independent of the particular competition issue at hand. This is not so.'

individual owners owing to losses of business to the other airport, these airports being each other's strongest competitors. However, a common owner of these two airports would be able to increase prices further above the level that individual owners would charge, since its profitability would not be affected by any loss of business from one airport to the other. Consequently, as well as the narrow markets, we would have a further wider market. Indeed, we may very well end up with a large number of overlapping markets relevant to the analysis of competitive effects.

52. It is also relevant to bear in mind that identification of the narrowest possible market is important mainly when market power (or, in a merger case, changes in market power) can be accurately approximated by market shares. The importance of geographical location for airport competition means that there is a continuum of substitution possibilities depending on distance and other airport characteristics. Hence any market definition beyond a single airport is, to an extent, arbitrary and assessment of market shares is unlikely to be a useful tool in itself for measuring market airport power. An assessment of an individual airport's market power (for example, through comparing actual loss from a price increase with critical loss) is independent of market definition as it takes account of all lost customers, including those switching to airports within the market, those switching to airports outside the market and also losses due to passengers switching to alternative modes of travel or deciding not to travel.
53. As already noted, our guidelines state that market definition is not an end in itself. In the light of the factors outlined above, at this stage we see no advantage in defining rigid geographic markets for airports. In our assessment of market power and competitive effects, all constraints on airports are potentially relevant. These include:
- (a) Constraints from neighbouring or more distant airports that can be a substitute for the flights that airlines currently operate and/or passengers currently take

from that airport. More distant airports may be relevant when passengers choose between low frequency routes at closer small airports and high frequency routes at larger more distant airports, and also when they choose between an indirect flight from a nearby airport and a direct flight from a more distant airport.

- (b) As noted above, airlines/alliances with a hub at one airport compete with airlines/alliances that have hubs elsewhere. Potentially, this might lead to a constraint on charges for transfer passengers at hub airports.
- (c) A further point is that air travel continues to grow, with most of the growth in short-haul passengers gained by LCCs which have large orders for new aircraft. A number of airports made the point that airlines negotiated for new services with airports throughout Europe (or further afield in the case of new long-haul routes). In the case of new services, airports might therefore be constrained to some extent by competition from other airports in a wide geographic area. Any constraint for existing services would be weaker since airlines would lose their existing passenger base.

As already noted, in principle, all these constraints are relevant to our assessment of market power and competitive effects. A central issue in this inquiry is BAA's common ownership of neighbouring airports and, in considering this issue, we need to focus on the extent to which common ownership prevents competition between neighbouring airports. Similarly, we consider capacity constraints and price caps at BAA's London airports are factors that it is most appropriate to deal with in our competition assessment (rather than in market definition).

- 54. BAA said that, in its opinion, our analysis should focus directly on the ultimate key questions in this market investigation, rather than getting diverted by considerations

over market definition.²⁰ We consider that BAA's view is consistent with our approach to market definition.

Conclusion

55. Our approach to market definition is that it should set a framework within which to analyse the effects of market features. To that effect, we consider the aviation market is separate from the wider transport market and we therefore define a market for aeronautical services provided by airports. We do not provisionally find it appropriate to sub-divide the market for aeronautical services by type of user or by airport characteristics. Nor do we provisionally find it appropriate to define rigid geographic markets for airports (though, in considering common ownership we need to focus on potential competition between neighbouring airports).

²⁰BAA also made the point that, if market definition were to be attempted seriously, it would have to depend on the competition issue being addressed and, as part of its June 2008 initial and preliminary observations about market definition, BAA suggested the SSNIP approach could be adapted to examine whether hypothetical separate owners (ie the reverse of a monopolist) would find it profitable to implement a 'small but significant non-transitory reduction in price'. We address this as part of our analysis of the competitive effects of common ownership rather than through market definition.

Breakdown of airport charges at BAA airports 2007/08

	LHR	LGW	STA	GLA	EDI	ABZ	SOU*	Total
<i>Airport charges (excluding helicopters) in £m</i>								
Landing†	121	28	20	8	10	5	7	199
Parking	70	19	22	1	3	1	0	115
Passenger‡	<u>449</u>	<u>132</u>	<u>97</u>	<u>34</u>	<u>37</u>	<u>15</u>	<u>6</u>	<u>768</u>
Total	639	178	138	44	49	20	13	1,082
<i>% of total airport charges (excluding helicopters)</i>								
Landing†	19	16	15	19	21	23	53	18
Parking	11	10	16	3	5	4	2	11
Passenger‡	<u>70</u>	<u>74</u>	<u>70</u>	<u>78</u>	<u>74</u>	<u>72</u>	<u>45</u>	<u>71</u>
Total	100	100	100	100	100	100	100	100
<i>Airport charges (helicopters) in £m</i>								
Landing†	0	0	0	0	0	1	0	1
Passenger‡	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>
Total	0	0	0	0	0	3	0	3

Source: BAA.

*Southampton airport charges are net of the cost to BAA of purchasing from NATS air navigation services for Southampton. (Up to the end of 2007/08, NATS charged airlines directly for air navigation services at BAA's other airports.)

†At BAA's Scottish airports, a charge is levied for take-off rather than landing.

‡Charges are levied on departing passengers only.

Breakdown of other charges at BAA airports 2007/08

	£'000						
	LHR	LGW	STA	GLA	EDI	ABZ	SOU
<i>Traffic charges (other than airport charges)</i>							
Fixed ground power	6,255	2,119	492	82	0	0	0
Apron services	71	0	0	0	2	5	0
Lost property	3	0	7	0	0	0	0
VIP charges	2,736	425	1	0	0	0	0
Baggage handling services	0	0	2	0	0	0	0
Transfer baggage charges	0	0	0	0	0	0	0
Transfer baggage system	0	0	0	0	0	0	0
Total other traffic charges	9,064	2,544	502	82	2	5	0
<i>Utilities income</i>							
Heating	807	336	0	118	82	50	0
Electricity—high voltage	9,980	0	1,198	0	0	0	108
Electricity—low voltage	9,285	6,998	3,293	1,692	1,074	1,062	0
Water and sewerage	1,099	498	356	382	247	209	3
Telecommunications	0	0	-1	-2	0	0	38
Waste and recycling	520	126	171	70	47	16	0
Gas	194	135	30	30	46	26	0
Total Utilities Income	21,624	7,386	4,595	2,213	1,266	1,259	145
<i>Other income (excluding coaches and taxis)</i>							
Aircraft cleaning	0	0	0	0	0	0	0
Apron passes	490	88	23	78	81	49	3
Aviation fuel supplies	0	0	0	0	0	0	0
Car park passes	19,373	3,609	1,057	730	543	208	0
Cleaning	0	0	0	2	7	0	4
Consultancy fees/facilities management	250	65	0	0	0	249	0
Fast track income	3,887	0	2	0	0	0	0
Identity cards	1,777	473	200	99	158	51	8
Insurance recharge to tenants	437	32	55	56	27	26	16
In-flight catering	0	0	0	562	263	101	0
Non-airport facilities management	0	0	0	0	0	0	0
Non-airport rents	0	0	461	0	0	0	0
Non-CTA petrol stations	1,244	0	0	0	0	0	0
Repayment work services	-6	725	0	164	18	61	0
Security services	93	0	1	0	7	149	421
Skycaps	37	0	0	0	0	0	0
Sundry hiring	6	0	113	0	0	0	0
Transport charges	-1	0	1	0	20	25	0
T/O rents—ground handling	0	0	0	437	420	20	0
T/O rents—property transit	0	0	0	0	0	0	0
Vehicle fuel and oil	0	2,082	0	0	345	192	0
Other income	6,267	120	491	414	37	1,815	82
Total other income	33,853	7,196	2,403	2,541	1,925	2,946	534
<i>Operational facilities income</i>							
Check-in/baggage income	77,308	20,270	3,421	1,996	2,433	460	53
Aviation fuel rents	16,715	6,537	4,433	1,096	853	355	263
Total operational facilities income	94,023	26,807	7,854	3,092	3,286	815	316
Grand total: other charges	158,825	44,641	15,806	8,007	6,709	5,129	999

Source: BAA.

Note: Totals do not necessarily agree with Table 1, which is prepared on the basis of profit reporting centres.

UK airports with permission to levy airport charges and/ or reporting statistics to CAA

	<i>Passengers (‘000s)* 2007</i>	<i>Cargo (‘000 tonnes) 2007</i>	<i>ATMs excl Air Taxi (‘000s)† 2007</i>	<i>Total traffic movements (‘000s)‡ 2007</i>	<i>Longest runway (metres)</i>
<i>London, south-east and East Anglia</i>					
Heathrow	67,852	1,393.2	475.8	481.5	3,901
Gatwick	35,165	176.7	258.9	266.6	3,316
Stansted	23,759	225.3	191.5	208.5	3,048
Luton	9,919	38.1	83.3	120.2	2,160
London City	2,912	0.0	77.3	91.2	1,508
Southampton	1,965	0.3	47.0	54.2	1,723
Bournemouth§	1,083	10.6	12.2	71.7	2,271
Norwich	699	0.2	22.6	54.1	1,841
Southend	49	0.1	0.9	39.9	1,605
Manston (NE Kent)	16	28.4	0.6	21.5	2,752
Shoreham	8	0.0	2.2	70.4	1,036
Lydd (SE Kent)	3	0.0	0.4	24.7	1,505
Cambridge	2	0.2	0.1	39.0	1,965
Biggin Hill	0	0.0	0.0	69.2	1,802
Blackbushe (Camberley)	N/A	N/A	N/A	N/A	1,335
Denham (Gerrards Cross)	N/A	N/A	N/A	N/A	775
Elstree (Watford)	N/A	N/A	N/A	N/A	651
Fairoaks (Woking)	N/A	N/A	N/A	N/A	813
Farnborough	N/A	N/A	N/A	N/A	2,440
Lasham (Basingstoke)	N/A	N/A	N/A	N/A	1,797
Oxford	N/A	N/A	N/A	N/A	1,319
White Waltham (Maidenhead)¶	N/A	N/A	N/A	N/A	1,015
Wycombe Air Park	N/A	N/A	N/A	N/A	735
<i>North and Midlands of England</i>					
Manchester	21,892	166.1	206.5	222.7	3,048
Birmingham	9,134	13.6	104.5	114.7	2,605
Newcastle	5,624	9.3	58.4	79.2	2,329
Liverpool	5,463	3.7	45.8	86.7	2,286
East Midlands	5,407	302.7	61.5	94.0	2,893
Leeds Bradford	2,860	0.1	39.6	65.2	2,250
Doncaster Sheffield	1,074	1.6	8.8	12.7	2,291
Durham Tees Valley	734	0.8	11.3	57.5	2,893
Coventry	599	9.2	7.5	54.9	2,007
Blackpool	558	0.0	12.7	58.8	1,869
Humberside	466	0.1	13.5	38.8	2,196
Carlisle	0	0.0	0.0	23.4	1,837
Retford	N/A	N/A	N/A	N/A	1,683
Sywell (Northampton)¶¶	N/A	N/A	N/A	N/A	909
Wolverhampton	N/A	N/A	N/A	N/A	1,182
<i>Wales and West of England</i>					
Bristol	5,884	2.9	58.7	76.4	2,011
Cardiff Wales	2,094	2.4	23.0	44.0	2,392
Exeter	1,012	5.1	16.8	50.1	2,083
Newquay	353	0.0	10.3	11.2	2,745
Plymouth	78	0.0	4.7	18.4	1,161
Lands End (St Just)¶¶	28	0.1	5.1	14.7	792
Gloucestershire	5	0.0	0.5	78.7	1,419
Swansea	0	0.0	0.0	26.7	1,350
Filton (Bristol)	N/A	N/A	N/A	N/A	2,467
Kemble (Cirencester)	N/A	N/A	N/A	N/A	2,009
Thrupton (Andover)	N/A	N/A	N/A	N/A	770
<i>Scottish mainland</i>					
Edinburgh	9,037	45.9	115.2	128.2	9,037
Glasgow	8,726	4.3	93.7	108.3	8,726
Aberdeen	3,411	3.6	102.8	121.9	3,411
Prestwick	2,421	31.5	20.3	47.9	2,421
Inverness	697	0.6	15.1	39.1	697
Dundee	65	0.0	3.2	37.3	65
Wick	21	0.0	2.3	6.3	21
Campbeltown	9	0.0	1.0	3.7	9

	<i>Passengers (‘000s)* 2007</i>	<i>Cargo (‘000 tonnes) 2007</i>	<i>ATMs excl Air Taxi (‘000s)† 2007</i>	<i>Total traffic movements (‘000s)‡ 2007</i>	<i>Longest runway (metres)</i>
<i>Northern Ireland</i>					
Belfast International	5,236	49.9	51.8	77.4	5,236
Belfast City	2,187	1.1	1.2	1.3	2,187
City of Derry	428	0.0	5.7	11.6	428

Source: CC calculations for airports with permission to levy airport charges at 1 May 2008 and any other airports shown in CA/ summary of activity at all UK airports (Table 2.2 of CAA’s UK airport statistics 2007), excluding heliports and airports on Scottish Islands, Channel Islands, Isle of Man and Scilly Isles. Lydd, Carlisle, Lands End and Swansea are shown in the CAA summary of activity but not listed as airports holding a permission to levy airport charges, while the 15 airports for which traffic information is ‘not available’ are those holding a permission to levy airport charges but not shown in CAA summary of activity.

*Arriving and departing terminal passengers on ATMs excluding air taxi movements.

†ATMs excluding air taxi movements.

‡Total traffic movements include air taxi movements, positioning and local movements, test and training flights, and general aviation (business, military and official aviation, private and club flights).

§Bournemouth airport is in Dorset but has been included in this table as a south-east, rather than south-west, airport since it is quite close to Southampton.

¶Grass runway.

Note: N/A = not available.