Introduction

Sir, before I start, I would like to say a couple of brief thank yous. Firstly, on behalf of HACAN and our many members who have had contact with the Inquiry Secretariat, Dr Cavalla and I would like to express our appreciation for the consistent helpfulness and efficiency we have been shown by Keith Thorpe and his Secretariat team at all levels. Although we are a voluntary group with limited resources, we have been enabled to play a full part in the Inquiry.

Secondly, notwithstanding the criticisms I will shortly make of the BAA case, I would like to thank Roger Pellman and his BAA Inquiry team for their helpfulness and responsiveness whenever we have had any requests for data or for guidance to references in parts of their evidence.

The essence of HACAN’s case against BAA’s Terminal 5 proposals remains as it was at the various times it has been presented to the Inquiry. The passage of time has served to confirm many of the central points we have been making. I will summarise these arguments in greater detail shortly, but to provide an outline here, they include:

- the huge extent of public opposition to the Terminal 5 proposals
- the importance of flight numbers as a determinant of the level of noise pollution from Heathrow
- the lack of credibility in BAA’s forecasts of flight numbers
- the lack of credibility in the DETR’s claims that community noise annoyance is declining in areas affected by Heathrow and will continue to decline or will not worsen with a fifth terminal
• the particular sensitivity of the community to aircraft noise at night, despite DETR claims that night flights cause negligible disturbance, and the consequent grounds for rejecting a proposal which its proponents admit will increase night flights during the period 6am to 7am

HACAN has also developed arguments about the regulatory system applied to BAA and its impact on the relative costs to airlines of operating at Heathrow and other airports.

There have been several new developments over the past four years which have a bearing on BAA’s application for a fifth terminal. The most important is the new Government’s White Paper “A New Deal for Transport”. This White Paper provides clear statements of the principles which now inform Government transport policy. Many of these principles have a direct application to the issues under consideration at this Inquiry. I give examples below. We know that there is a large gap in the White Paper, called “aviation policy”. The Paper itself, and subsequent ministerial statements, have made it clear that you, Sir, are being relied upon to help fill this empty space and map out certain sections, at any rate, of an Aviation Policy White Paper to be published some date several years hence following the announcement of the Terminal 5 decision. (CD 258, para 3.190)

While we can appreciate that from your perspective, Sir, this may be an unexpected, possibly unwanted, additional burden, we see benefits in this development. Rather than assessing the Terminal 5 proposals in relation to Government policy as it was in the 1980s, you are actually being asked to assess the proposals simultaneously with helping to define the aviation component of a new integrated transport policy for the next century. We do not believe this means that you have been abandoned in a policy vacuum. The principles of the new deal for transport are explicit. We think they logically carry over to questions of possible developments in aviation infrastructure and provide tests against which the Terminal 5 proposals can be assessed. Naturally, we believe that the Terminal 5 proposals fail those tests. A report giving reasons for the rejection of the proposals can illustrate how the new deal for transport principles apply in practice in the aviation context. This will give rise to wider conclusions about how Britain needs to think about and plan its aviation policy over the next few decades.

The second development which has a bearing on this Inquiry concerns recent statements by British Airways about a shift in business strategy from operating larger aircraft in favour of operating smaller aircraft. Associated with this is a shift
from a focus on transfer traffic, based on the hub airport model, towards point-to-point traffic. As I will argue shortly, these developments imply that the BAA model of a future where more passengers are carried on similar numbers of larger aircraft has already been proved to be out of date and mistaken.

Forecasts

HACAN played an active part in only two topics at the Inquiry: Topic 1 and Topic 5. Topic 1 was, however, a substantial exercise in its own right, covering many fundamental issues including forecasts of demand, passenger and flight numbers, economic consequences of rejection or approval and Government policy on these matters.

Following the topic order, I will summarise our position and give our final views on the issue of forecasts. It is, however, necessary to jump ahead to the noise topic to understand the crucial importance which HACAN gives to the question of the flight numbers which would realistically be associated with a fifth terminal. We believe that over the last ten to fifteen years community noise annoyance has become strongly correlated with the frequency of flights and that this will continue to be true in the foreseeable future. The strongest evidence for this claim has been the several hundred personal statements and several thousand letters to the Inquiry from residents living under the Heathrow flightpaths describing their increasing disturbance and distress as flight numbers have substantially increased in recent years.

We have therefore urged you, Sir, to pay particular attention to the differing forecasts presented to you by the different sides concerning the impact of building a 30 million passenger per year new terminal on flight numbers. It is clear that you are giving close attention to this issue.

We have consistently argued that the BAA forecasts of flight numbers, both with and without Terminal 5, cannot be relied upon. In our Statement of Case we illustrated the historical pattern whereby the air transport industry, whenever it is seeking to expand Heathrow, produces forecasts of flight numbers which turn out to be hopelessly inaccurate. (See chart 3.2 in HAC 1) This is not due to incompetence. The forecasts always turn out to under-estimate future flight numbers. The industry has the habit of significantly under-playing the environmental impact of expansion. (The British Airports Authority opposing a fifth terminal at the Eyre Inquiry was a partial exception to this pattern.) What has been of greater concern has been the habit of
previous Inquiry Inspectors to accept the inaccurate industry forecasts and reject the projections made by the representatives of affected communities, who subsequently turned out to be correct.

So, as the Inquiry closes, is there any new evidence to support HACAN’s argument that the BAA forecasts of flight numbers are unreliable? We believe the data on flight numbers over the past few years prove our case conclusively.

We believe it is relevant to consider the forecasts made by BAA in their Environmental Statement of 1993, although they were superseded in BAA’s 1994 Statement of Case. These forecasts provide evidence of BAA’s approach to assessing environmental impacts and we can now test their reliability.

I hope you will forgive me, Sir, for reproducing small sections of BAA’s evidence in the written version of this final submission. Given the vast quantity of evidence and figures submitted to the Inquiry, we felt this was the best way of highlighting these important numbers and arguments.

This extract from BAA’s Environmental Statement contains, as the heading states, the key features of the proposed development for 2016 as presented by BAA in 1993. The figures for passenger numbers, 50 million per year without Terminal 5 and 80 million with, still stand. The patm forecasts are 400,000 without Terminal 5 and 420,000 with. The rationale for the small difference is explained: “the greater numbers of larger aircraft in the with Terminal 5 case allow a similar number of movements to carry a significantly larger number of passengers”.

**Key Features of the Proposed Development**

**Overview**

2.48 The proposed development would increase the passenger handling capacity of Heathrow in 2016 from 50 mppa to 80 mppa. This would be achieved on the current pattern of use of the existing runways, and by a marginally greater number of passenger air transport movements (patms). The forecast annual number of patms with Terminal 5 is 420,000. This exceeds the 400,000 patms forecast without Terminal 5 by 5%. The greater numbers of larger aircraft in the with Terminal 5 case allow a similar number of movements to carry a significantly larger number of passengers. Details of the differences in the forecasts of aircraft size across the mix for with and without Terminal 5 are explained in paragraphs 2.94 and 2.95 and Table 2a.
I have reproduced a chart illustrating this forecast in the written version of this submission. The chart also shows the figures for actual flight numbers for the ten years prior to the Environmental Statement.

![BAA 1993 forecasts for 2016](chart.png)

You do not need to be an aviation expert to find this forecast rather odd. Imagine giving this chart on its own, without the labels and legend, to an intelligent lay person saying that it showed forecasts of two possible outcomes for flight numbers at Heathrow over the next twenty years and asking them what it implied to them about developments at the airport. They would be likely to reply that it described what German environmental ministers like to call an “Act of God” whereby someone in authority had slammed the brakes on the expansion of Heathrow. The variation in the two forecasts would be described as negligible.

But we know that this chart includes BAA’s forecast of flight numbers associated with a massive expansion of Heathrow, equivalent to building a new airport the same size as Gatwick or Charles de Gaulle in Paris. Without knowing anything more about the background it appears a highly questionable forecast. When you add some of the figures for changes in passenger numbers in the ten years before 1993, the forecast begins to appear absurd. I have always thought the photograph on the cover of the Environmental Statement to be rather appropriate. It shows empty skies, containing only a few clouds. The document itself describes a huge new airport which magically does not require any aircraft. Sadly, it is pure fantasy.

In 1988 there were 38 million passengers at Heathrow.
Five years later in 1993, there were 48 million, a convenient 10 million increase. In 1988 there were 320,000 patms. In 1993, there were 390,000 patms, a convenient 70,000 increase.

Therefore, the recent history of Heathrow, known intimately by the BAA forecasters, was that an increase of 10 million passengers per year was associated with an increase of 70,000 patms per year.

Armed with this knowledge, they published an Environmental Statement for Terminal 5 explaining that an increase of 30 million passengers per year would be associated with an increase of only 20,000 patms per year. Rather than multiplying the 70,000 by three, they divided it by three.

HACAN believes that, when presenting their Environmental Statement, BAA deliberately, knowingly and grossly misrepresented the likely impact of a fifth terminal on flight numbers in order to try to conceal the environmental damage the proposed terminal would cause. We believe BAA expected the Inquiry to begin sooner than it actually did and to finish sooner than it has. We believe BAA had expected that its forecast would not be tested against reality. If the Inquiry had occurred more quickly, HACAN would have had to rely on the argument from the history of poor forecasts and the implausibility of BAA’s figures in its case against Terminal 5.

However, we are now in a position to assess the quality and reliability of the 1993 BAA forecasts.
The evidence proves that the BAA forecast bore no connection to the realities of the operation of Heathrow airport. It took only one year for flight numbers to exceed the forecast for No Terminal 5. In 1994 patms were 405,000, above the 400,000 forecast for 2016. It took only another two years to exceed BAA’s forecast for 20 years ahead with 30 million more passengers. Patms reached 423,000 in 1996. By the end of 1998, they were 438,000.

Flight numbers have simply broadly followed the historical trend rate of increase. The five years between 1993 and 1998 saw an increase in passenger numbers of 12 million, while patms increased by 48,000. The rate of increase of patms pro rata with passengers has been lower in the most recent five years than in the five years 1988 to 1993. The earlier period was a notorious free for all at Heathrow following the ending of the traffic distribution rules, when, for example, there was a large shift by airlines from Gatwick to Heathrow. But, the experience of the past five years still implies a ratio of approximately 40,000 patms per additional 10 million passengers per year, nowhere near the 20,000 patms BAA allowed for 30 million passengers per year.

Turning to the BAA Statement of Case forecasts in 1994, I have again reproduced the relevant section. Here we get the revised patms forecasts of 417,000 patms without Terminal 5 in 2016 and 453,000 with Terminal 5. The rationale is similar to the Environmental Statement, although it acknowledges a small increase in flights: “greater numbers of larger aircraft with Terminal 5 allow a significantly larger number of passengers to be carried on a larger number of aircraft movements.
without any extensions of the current operating day or pressure otherwise to increase movements in the night hours or to abandon the present operating regime”.

10.6 The development which BAA proposes would increase the passenger handling capacity of Heathrow by 2016 from about 50 mppa to about 80 mppa. It would be provided in phases according to demand, and the first phase is expected to be available for 2002.

10.7 The additional capacity could be achieved on the current pattern of use of the existing runways, and by a somewhat greater number of passenger air transport movements (patms) than would be the case should Terminal 5 not proceed. The forecast annual number of patms at 80 mppa with Terminal 5 is 453,000, exceeding the forecast annual number of patms at 50 mppa without Terminal 5 by 36,000, or 8.6%. Greater numbers of larger aircraft with Terminal 5 allow a significantly larger number of passengers to be carried on a larger number of movements without any extension of the current operating day or pressure otherwise to increase movements in the night hours or to abandon the present operating regime.

The forecast is presented graphically below. Although, the total patm figure for 2016 has been increased by 33,000 patms a year, the forecast again implies a period of many years when passenger numbers increase significantly while flight numbers remain essentially static. Again, even a non-expert examination of the forecast must find it questionable in the light of the known relationship between increases in passenger numbers and flight numbers in the years before 1994.
BAA 1994 forecasts for 2016

Again, the extended duration of the Inquiry has allowed you, Sir, to apply a real life, real time test of the reliability of BAA’s Statement of Case forecast.

Actual flight numbers since 1994

The evidence is conclusive that BAA’s flight number forecasts are again serious and deliberate under-estimates. Taking the No Terminal 5 forecast first, its odd and erratic existence can now safely be terminated. BAA forecast an increase to a
maximum level of 428,000 patms in 2001/2002 followed by a dramatic lurch down to a low point of 385,000 patms in 2005 when the airlines start closing down their operations at Heathrow in a collective fit of pique in response to your hypothesised rejection of Terminal 5. Then the profit motive gradually reasserts itself and the airlines build up their operations to 400,000 patms again. Given that we are now at 438,000 patms, this whole story can be left in the fiction category.

But, what of the With Terminal 5 forecast? It must be remembered that BAA have now built some increases in patms in the early section of the forecast period, when they might be susceptible to test, while the near zero increase decade is pushed well into the future. But, flight numbers are increasing well ahead of BAA’s forecast even during this early period. I repeat, we were already at 438,000 patms in 1998 with 60 million passengers per year. As the chart clearly demonstrates the headroom left to accommodate the opening of a 30 million passenger per year terminal and still meet BAA’s forecast is extremely limited. There are only 15,000 patms left to accommodate its either 20 million additional passengers, if we accept 80 million maximum, or 30 million if we see the terminal as entirely additional. If we take 1998 itself as a yardstick, patms increased by 10,000 a year in one year. I remember making a comment to the effect that this was the going rate for annual changes in patms in my opening statement four years ago. I claim some vindication today. In the four years 1994 to 1998, patms increased by 33,000, just over 8,000 a year. We took the risk of making a prediction of our own in our Statement of Case that flight numbers would reach BAA’s With Terminal 5 level for 2013 of 453,000 by the year 2000. With the 1998 figure at 438,000 and an increase of 10,000 in the past twelve months, I think we demonstrate a better forecasting record by a long way. As you finish your report, Sir, you will be able to note whether flights reach this level during 2000.

Putting such point scoring to one side, it really does not look plausible to expect it to take fifteen years and a whole new terminal for flight numbers to increase by 15,000. We have always said the claim that 60% more passengers could be carried on 8% more flights had no credibility. Taking the past five years again, passenger numbers increased by 25% while flight numbers increased by 12%. This gives a ratio of flight numbers increasing at half the rate of passenger numbers, or a 60% increase in passengers requiring a 30% increase in flights.

Sir, given what we know today, we believe you have no alternative but to dismiss BAA forecasts of flight numbers as misleading and unhelpful. Like us, you will have to make your own estimate applying the evidence from recent years. I will discuss in greater detail shortly the evidence that BAA’s claims that airlines will significantly
increase the average size of aircraft have been contradicted by the ordering patterns and strategic statements of British Airways. Taking this into account I would propose the rule of thumb derived from the past five years that 10 million additional passengers per year translates into 40,000 additional patms per year. This is a conservative estimate given that each 10 million passengers at Heathrow today require over 70,000 patms per year (438,000 divided by 6). Taking an 80 mppa Heathrow with Terminal 5, this would imply 80,000 patms on top of the current 438,000 or approximately 520,000. This is of the same order as BAA’s own forecast should NGLAs not come into service and should stands not be removed of 510,000 patms a year (BAA 1737, paras 17 and 18). BAA states that this projection is notional because it requires more flights than the runways can provide. The validity of this assertion is, of course, a fundamental question on which the Inquiry needs to form its own view.

Using percentages rather than absolute numbers produces a similar result. 80 million mppa is a 33% increase on current passenger numbers. Assuming a rate of increase in patms at half this level applied to the current 438,000 generates 510,000 patms a year.

To remind ourselves briefly why these numbers are significant, HACAN believes that approval of a fifth terminal will inevitably generate far greater increases in flight numbers than BAA forecasts. (The allowance of only 12,000 additional flights in BAA’s preferred version of a no NGLA future is not convincing, particularly as it seems to negate the whole magical influence which the NGLA is supposed to have in allowing more passengers without more flights.) Those additional flights in themselves will intensify an already unacceptable noise burden. But, equally importantly, they will necessitate the abandonment of the limited but valuable environmental protections which currently apply at Heathrow: especially runway alternation, which provides important relief in itself and also effectively creates a limit on flight numbers during the day; together with a numerical limit during part of the night period. To paraphrase the relevant paragraph in BAA 1, if, Sir, you reject BAA’s forecast of 453,000 patms with Terminal 5, it is inevitable that there will be extensions of the current operating day and pressure otherwise to increase movements in the night hours and to abandon the present operating regime.

I hope my chart of flight numbers since 1994 referred to earlier is helpful in illustrating one key aspect of this point. I have added a line at 475,000 patms a year, which seems by common agreement to be accepted as the threshold at which runway alternation would need to be abandoned. It is clear to those living under the flightpaths that runway alternation is already beginning to break down during busy
daytime periods at the current figure of less than 450,000 patms. We are only 37,000 patms a year away from the 475,000 threshold. In my view, we will inevitably get close to this threshold in the next five or so years, without a fifth terminal. Remember that patms increased by 48,000 in the past five years. If you approve a 30 million passenger per year terminal, whatever conditions may be attached to such an approval, we consider it inevitable that the aviation industry will successfully demand an end to runway alternation on the grounds that they will be unable to make full use of the new terminal unless they are allowed additional flights. The groundwork for this argument has already been laid in the Runway Capacity Enhancement Study and will be dusted off as soon as an approval has been announced. Mrs Godfrey in her proof (HAC 60) stressed the importance of alternation and the way it is already being eroded.

Pulling some of the figures I have been quoting together, HACAN’s revised forecasts for passenger and flight numbers emerge as follows. As I stated in my Topic 1 proof of evidence, HAC 10, forecasts of flight numbers are in reality forecasts of political decisions. I therefore assume a No Terminal 5 scenario implies a positive Government decision, following a wise and persuasive Inquiry report, that Heathrow has already reached the limit of what the community can be expected to bear in terms of the range of pollution and other negative impacts which the airport generates. Therefore, I assume a positive decision to limit flight numbers and preserve runway alternation. Depending on where those limits are established in detail, I would expect flight numbers to be limited somewhere in the range 450,000 patms per year to 475,000. Given that we are at 60 mppa today, this implies a passenger capacity in the range 65 mppa to 70 mppa. I deliberately choose very round numbers. The apparent endless elasticity of Heathrow’s terminals make this a realistic passenger capacity projection. Predictably, I would advocate in the interests of both residents and passengers that the final equilibrium was settled at the lower level of these ranges.

These estimates accord reasonably well with those given by Mr Abrahams of the CAA in CA7. He went up to 474,000 patms in 2010, the capacity of the runways under existing operating conditions. His passenger figure went up to 75 mppa. We see it as more likely to be around 70 mppa. We think Mr Abrahams over-estimates increases in passengers per aircraft. We and Mr Abrahams, I suggest, are both talking about a four terminal airport.

For the With Terminal 5 scenario, the political implication is that the decision has been made that the aviation industry must be permitted to expand at its preferred
location without limit — any conditions imposed at the time of the decision being, in the Government’s view, devices to appease public opposition at the time, ready to be removed later as necessary. I do not consider it realistic to expect a new terminal with a capacity of at least 30 mppa added to a Heathrow at 60 mppa and rising to result in a 80 mppa airport. A realistic range would be 90 mppa to 100 mppa. Estimating the associated flight numbers is difficult, but, allowing some gentle increase in passenger per aircraft figures, and applying the rule of thumb outlined above leads to an estimate of the order of 550,000 patms and possibly higher. At this level we are clearly looking at a close parallel third runway having already ended runway alternation and increased night flights.

UK Aviation Strategy Consequences of No Terminal 5

When weighing up your final decision, Sir, you will rightly be assessing the arguments of the proponents that a decision against Terminal 5 will have harmful effects on the economy of London and the South East and the UK as a whole. As we know, British Airports Authority’s claims in 1979 that Terminal 4 was needed in the national interest were decisive in persuading the Inspector to approve a development which was strongly opposed by the community and their representatives. BAA claims that the economic effects of a decision against Terminal 5 are greater and wider than the undeniable negative impact on BAA plc itself of being prevented from substantially expanding its most profitable asset.

Little convincing evidence has been presented to the Inquiry to support this argument in rigorous economic terms. I will briefly summarise my comments on this issue in my Topic 1 Position Statement.

For BAA, Professor McKay’s evidence was nebulous, being based largely on a description of Heathrow as it is today. HACAN and the other responsible opponents of Terminal 5 are not arguing for a reduction in the scope of Heathrow’s activities, but against a massive expansion. Professor McKay’s conclusion was:

“I would conclude that if the decision were made not to proceed with Terminal 5 and this resulted in a significant deterioration in the quality of air services compared to Heathrow’s overseas competitors, there would be a substantial risk of serious adverse impacts on the UK economy.” (BAA 41, page 2, para 1.6)

Professor McKay’s statement begs the crucial question of whether a decision against Terminal 5 would result in a significant deterioration in the quality of air services
compared to Heathrow’s overseas competitors. We consider there is no reason to think that Heathrow remaining a four terminal airport will show a decline in quality of air services in absolute terms. In any event the difference between the with Terminal 5 and without Terminal 5 cases is marginal in terms of the frequency of services and routes and therefore BAA’s own figures appear to answer Professor McKay’s question in the negative: there will be no significant deterioration in the quality of air services and therefore there will be no significant deterioration compared to overseas competitors. Should overseas competitors dramatically increase the quality of their air services, which seems highly unlikely, Terminal 5 would have negligible impact in maintaining Heathrow’s relative position.

For British Airways, Miss Rosemary Radcliffe attempted to fill in the void left in Professor McKay’s evidence. However, the attempt was simplistic and exaggerated. Heroic assumptions were made about the possible negative impact of no Terminal 5 and then multiplied out in spreadsheets to produce losses of a billion pounds here and a billion pounds there. To take just one example, Ms Radcliffe suggested that no Terminal 5 might lead 5% of foreign businesses located in the South East to close their operations, with a fall in value added in excess or £1 billion. No compelling evidence was given for why the continuation of Heathrow as a four terminal airport should have such dramatic consequences. We could just as easily argue that a decision to build Terminal 5 would lead 5% of foreign business to close their operations on the grounds that the quality of daily life in London is an attraction to many businesses which would be harmed by the environmental effects of adding a 30 mppa terminal to the existing Heathrow.

The only realistic estimates of economic consequences of Terminal 5 have come from Mr Abrahams for the CAA and Mr Cockle for LAHT5. Mr Abrahams’ estimate of the direct economic benefits of Terminal are of the order of £300m a year, half of which accrues to foreigners. £150m a year is an entirely insignificant amount in relation to the economy of London, let alone the UK as a whole. A benefit of this scale is extremely small to set against the economic and environmental disbenefits of Terminal 5. Mr Abrahams is calculating the direct benefits to users of Heathrow. These would be expected to be greater than the lower level indirect benefits to the wider economy, supporting the notion that Miss Radcliffe’s indirect benefit calculations are significantly overstated.

However, despite the lack of any convincing evidence, BAA and other sections of the air transport industry have been successful in nurturing a perception among certain sections of both the business community and the political community (including
an MPs, ministers and officials) that continued expansion of Heathrow is intrinsically linked to UK growth, particularly in the context of comparisons with other European countries. The argument that we are bigger in some sector than what are regarded as foreign competitors and must make sacrifices (of the quality of life of ordinary residents) to continue to stay ahead stirs a powerful mix of emotional responses including nationalism, xenophobia and fear, which seem to imply that World War II has not yet ended. Rational assessment or discussion of these claims is difficult, although I am confident such an approach will be followed within this Inquiry.

The most resonant aspect of these claims is the assertion that Heathrow is in deadly competition with the other three main European airports (Gatwick being excluded) for transfer passenger traffic. Since there is the obvious problem with this argument that transfer passengers by definition have no wish to visit or do business in London or the South East, the Terminal 5 proponents have had to claim that transfer passengers provide some additional benefit to the South East beyond creating business in BAA’s shops and on BA’s aircraft. The claim is made that there are “thin” routes at Heathrow, struggling for viability, sustained only by the presence of these passengers choosing to pass through Heathrow.

There is no doubt that during the second half of the 1980s and early 1990s, following the ending of the Traffic Distribution Rules, the availability of a mobile pool of transfer passengers did support the rapid expansion of flight numbers during this period. The aviation industry was experiencing the double bonus of getting the additional capacity equivalent to the fifth terminal expansion BA had demanded at the Eyre Inquiry together with the creation of a new international terminal at Stansted. Mr Maiden explained how the airlines sought transfer passenger business to fill up the surplus capacity which Eyre had created through his notorious attack on the central condition which his predecessor Glidewell had built into his approval of a fourth terminal, opening the floodgates to unlimited increases in flight numbers:

“The conditions which have given rise to the increase in the transfer percentage in the last few years are conditions of surplus capacity over demand…” (Day 23, page 47, line 8)

By the late 1990s, however, capacity at Heathrow, and now also at Gatwick, is no longer such a cheap commodity. Heathrow slots are scarce and all airlines are beginning to get the message that the supply of additional slots may not be unlimited. We have a projection of increasing demand to fly by residents and workers in London and the South East. The best correlate for the rate of growth in
demand is probably the growth rate of the economy. There is also a projection of increasing demand by non-UK residents and workers to fly to visit London and the South East, using a London airport, probably best correlated with the growth in the global economy.

But we have a Heathrow which has absorbed such numbers of transfer passengers during the period of surplus capacity that they now account for approximately 30% or 20 million passengers per year. BAA proudly showed in its evidence that there are some routes to and from Heathrow where up to two thirds of passengers are transfer passengers (BAA 31, Table 8.4, page 40). What this means is that valuable Heathrow slots are being used for destinations which are a low priority for people travelling to and from London and the South East but which are being provided as a service for mainly foreign travellers who wish to leave the UK as soon as possible after arriving.

We are now reaching the point where some hard choices need to be made about how scarce Heathrow capacity is used, particularly when it is becoming clear that the residents of London and the South East who suffer the pollution generated by Heathrow’s operations will not tolerate their interests being completely ignored in these decisions.

If I may be allowed a brief moment of nationalism myself on behalf of HACAN, I would say that foreign transfer passengers are now crowding out residents of London and the South East from the available seats and routes which a necessarily constrained Heathrow can service. To allow a fifth terminal, while it may generate millions of additional customers for BAA’s Heathrow shops, would be to repeat the pattern of producing additional capacity which will substantially be used to service transfer passengers, meaning that the allocation of limited Heathrow slots will reflect their preferences in terms of destinations and flight frequencies rather than the needs of the UK business community in particular.

I am relieved that I am no longer alone in developing this analysis of the negative impact of transfer passengers on Heathrow’s operations. It has become clear in recent months that the senior management of the major Heathrow operator, British Airways, has been coming to similar conclusions, with profound implications for our expectations about the ways in which Heathrow capacity will be used over the coming decades.

You are well aware, Sir, I am sure both from your own observation and because parties to the Inquiry have drawn your attention to them, of a series of consistent
statements by the Chief Executive of British Airways, Robert Ayling that the airline sees its future success involving a shift in the balance away from larger aircraft, specifically the Boeing 747, towards smaller aircraft, specifically the twin-engine Boeing 777. The most widely reported example was a speech to the Institute of Economic Affairs, where Mr Ayling was quoted as saying:

“Jets are getting smaller…. Long haul jets are getting smaller not bigger.”

The report in the Observer (HAC 117) went on to describe how Mr Ayling explained that British Airways was shifting the balance of its fleet from the Boeing 747 towards the smaller Boeing 777 in its future ordering policy. Passengers, he said, wanted greater frequency rather than giant jets.

This assessment of future trends is in accordance with the views of many aviation observers. It is a translation to the rest of the world of developments already occurring within the US aviation market, which, as so often, sets trends which are then followed elsewhere.

This is an immensely significant change in strategy from the largest operator at Heathrow in terms of the most fiercely argued points of contention at this Inquiry. The Observer article was headlined “Plans for superjumbo fall to earth”. Sir, we cannot see that you can factor in any expectation of the NGLA into your own assessment of Heathrow’s medium term future. In exactly the same way as during the Eyre Inquiry, we have been given reports of the imminent birth of new large aircraft, which in reality recede ever further into the future. The safest assumption is that they will not exist within the relevant timescale for this Inquiry. It then follows, that the claims by BAA that they will destroy stands to accommodate imaginary new aircraft must also be rejected. In other words, we have to regard the 65 metre wingspan option in BAA 1737 as the most realistic.

Obviously, the new BA strategy completely undermines the BAA case that a large increase in passengers can be accommodated with a small increase in flights.

But there is another aspect to the new BA strategy which also has an important bearing on some central issues at this Inquiry. The new BA strategy is more subtle than simply shifting the balance towards smaller aircraft operating more frequently. The reduction in aircraft size, compared to the previous plans for the future fleet mix, is also part of a deliberate strategy of changing the mix of actual passengers carried by the airline.
Mr Ayling explained this in an interview with the Sunday Times (HAC 118):

“The jumbo jet is the aircraft for the regulated market. What customers want in a free market is frequency and a reliable service. And you cannot do that with jumbo jets without filling up with a lot of passengers who transfer across your network.”

BA regards the jumbo jet as a point-to-point plus transfer aircraft, while it regards the Boeing 777 as a point-to-point only aircraft. The strategy is clear: to eliminate or at least substantially reduce low fare, low margin transfer passengers from the airline’s aircraft, while focusing on the premium point-to-point business market. The strategy is described and praised in the Financial Times Lex column of 25th January this year (HAC 123). BA is refocusing its business in a manner which has become common among leading companies in many sectors. The company has given up chasing volume and is focusing on profitability. In doing so, it is also abandoning the low margin transfer passenger market.

I can understand Mr Ayling’s frustration with the approach BA has followed in the past. Whenever demand for air travel has risen, which other things being equal, would lead to an increase in prices and margins, as well as some additional capacity being provided, BA has responded by offering so much additional capacity that prices and margins have remained the same or even fallen.

This development, we submit, must influence the weight given to claims by BAA, and BA in its evidence of several years ago, that we must build in to our projections of a future competitive Heathrow large and increasing numbers of transfer passengers.

The new BA strategy states that to remain a successful and profitable airline, it will increasingly remove the additional seats typically occupied by transfer passengers on the largest aircraft by switching to smaller aircraft.

Sir, we see this as a convincing and realistic future strategy for our largest airline, which also contains the outline of a more positive and productive policy for the use of our largest airport. BA’s plans to focus on point-to-point business passengers accord exactly with our view that Heathrow should be used as a primarily business airport serving the needs of business passengers travelling to and from London and the South East.
BA’s new strategy means that the airline in practice no longer wants the additional passenger capacity, unmatched by additional flights we are told, which a fifth terminal would provide. BA’s new policy is in fact to restrict supply of seats, leading to higher revenue per seat overall. It is a classic example of the operation of the laws of supply and demand. To remain healthy and profitable BA needs to cater for those passengers who will pay well for a high quality service from Heathrow. Low margin transfer passengers, and to some extent low margin leisure passengers, reduce profitability and also reduce service standards for business passengers. BA finds that larger aircraft are more likely to generate problems with baggage handling and considers that operating smaller aircraft is more manageable for all concerned.

We believe that, in private at any rate, BA no longer feels a corporate commitment in favour of Terminal 5. The airline recognises that public pressure means that unlimited increases in slots at Heathrow are unlikely. Under the airline’s new strategy, it is not particularly interested in having substantial increases in passenger capacity, meaning in practice a requirement to fill large aircraft with low margin transfer passengers.

This analysis then supports the claims we have made throughout this Inquiry that transfer passengers in fact represent a valuable balancing item within the Heathrow passenger mix which can be adjusted as circumstances change. Transfer passengers currently account for very substantial volumes at Heathrow, approximately 20 million passengers per year. This is exactly the additional figure which BAA tell us we need to accommodate in a fifth terminal. Under the BA strategy, likely to be imitated in due course by other airlines, a large proportion of the 20 million transfer passengers can be reduced and converted to business passengers as business demand increases gradually over the next 20 years. Obviously, there will always be some residual of transfer passengers, but the broad model is realistic.

In fact, we can see the outlines of such a model of the future of Heathrow in BA evidence to the Inquiry, particularly in a table I have focused on previously, Table 3.7.1 in BA 13, page 11. Although I have applied additional analysis of this table in HAC 32, the basic points I wish to make are clear enough in the table itself, which I reproduce for ease of reference (the section relating to Heathrow only).
BA proposed two scenarios for the possible development of Heathrow without Terminal 5. In cross-examination, BA agreed that Scenario 1 represented the more probable end of the range. Taking the figures in the table as they stand, they show that the main impact of a decision against Terminal 5 would be that transfer passengers made up a significantly smaller share of passengers than would be the case if Terminal 5 was built. The difference in transfer passenger numbers is 12 million per year under both scenarios. But looking at business passenger numbers, in Scenario 1, the consequences of a decision against Terminal 5 are almost negligible: with Terminal 5 there are 27.3 million passengers while without Terminal 5 there are 26.1 million passengers. It should be noted that the numbers of business passengers show substantial increases compared to current levels under both scenarios.

HACAN argues that this model of a reallocation of Heathrow’s capacity is precisely what BA is currently planning: a growth in point-to-point business passenger numbers, simultaneously with a squeezing out of transfer passengers.

Under Scenario 2 in the table as it stands there would apparently be 6 million fewer business passengers if Terminal 5 did not appear. However, the table assumes a 54 million no Terminal 5 Heathrow. While BA rightly rejects the untenable BAA no Terminal 5 forecast of 50 mppa, it is now clear that Heathrow will handle at least the current 60 mppa, and possibly 65 mppa, well into the future if there is no Terminal 5. Therefore the without Terminal 5 business passenger figures in the table can be increased by between 10% and 20%. In the realistic estimate of a business share inclining towards the Scenario 1 outcome, there is no reason to anticipate any loss in point-to-point business passenger traffic.

### Table 3.7.1: London airport passengers "with T5" and "without T5" (mppa)

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&quot;Without T5&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scenario 1</td>
</tr>
<tr>
<td>Heathrow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>26.1</td>
<td>21.3</td>
</tr>
<tr>
<td>Leisure</td>
<td>22.5</td>
<td>27.3</td>
</tr>
<tr>
<td>Transfer</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>51.0</td>
<td>54.0</td>
</tr>
</tbody>
</table>
There are two important conclusions from this analysis. Firstly, a decision to recommend refusal of Terminal 5 will have no negative impact on Heathrow’s ability to provide a higher quality air service to the business community of London and the South East and their overseas business partners.

Such a decision would mean lower numbers of transfer passengers at Heathrow, in accordance with the declared strategy of BA. This would have positive benefits for the business community in that service standards would be higher and scarce Heathrow slots and seats would not be diverted to meet the route preferences of transient passengers who, by definition, wish to be anywhere in the world apart from London and the South East.

Secondly, we can now see that progressively Heathrow is going to withdraw from the highly competitive, low margin European transfer passenger market. A decision against Terminal 5 may mean this happens a little earlier than if Terminal 5 is approved. But BA is already implementing such a change in the balance of its activities at Heathrow. BAA states that there will be excess demand to use Heathrow even if Terminal 5 is approved. In such a situation, given that the new terminal would be full almost as soon as it had been constructed, transfer passengers would anyway again be squeezed out, as the lowest profit segment.

We see such a future for Heathrow in a positive light. It is right that Heathrow should focus on business passengers to and from London and the South East. Given the pollution generated by flying passengers over the centre of London and the Thames Valley it has never made sense in terms of a sustainable transport policy to cater for tens of millions of transfer passengers at Heathrow. Heathrow serves our capital city with a population of 8 million people and the rest of the South East region with many millions more. These areas are the economic powerhouse of the UK. Heathrow should be dedicated to their air transport needs.

In the same way as BA is abandoning transfer passengers, UK aviation thinking must accept that Heathrow will inevitably abandon transfer traffic. Therefore Heathrow will choose to exit from the game of competing with the other European hubs. This is a contest in which Heathrow cannot be an equal competitor. The volume of air travel required by London is simply too great. The nearest competitor to Heathrow is Frankfurt, which currently handles 40 million passengers per year. The population of Frankfurt is 650,000 people. Frankfurt is primarily a transfer airport because the local needs are so low. Germany is a federal and decentralised nation with five or six large cities of similar size. In the same way Schiphol is explicitly a transfer airport. The
entire population of Holland is less than 20 million people and the population of Amsterdam is little more than a million. Charles de Gaulle in Paris is the only major European airport with some resemblances to Heathrow. Given that the French government has imposed a passenger limit of 55 mppa, it is likely that in due course Charles de Gaulle will also see a shift away from transfer passengers towards a focus on the business travel needs of Paris and the Parisian region.

In our view, the South East of the UK will not sustain substantial transfer passenger numbers over the next decades, certainly if we do not go for an offshore option. The South East is simply too densely populated to allow its precious airport and environmental capacity to be used for so little benefit. We see Gatwick as supporting substantial business and premium leisure traffic. It is now clear that Stansted is not going to become a transfer passenger airport, but will cater for the growing low fare point-to-point leisure and business market. This currently focuses on short haul, but may in due course expand into longer haul sectors. The Financial Times article already referred to describes this segmentation of BA’s operations by type of passenger and, in parallel, by airport as follows:

“The boldest bit of BA’s strategy is to come. By 2002, nearly half of its long-haul fleet will be Boeing 777s. These are smaller than the current 747s, with fewer economy seats but the same number of business seats. Chopping off rows filled through last-minute discounting will boost yields. Longer term, this could even point to a two-tier airline: the flagship would increasingly focus on business class (culling less profitable European routes), while Go! – its no-frills airline – picks up the backpackers.” (HAC 123)

Of course, an important component of transfer passengers currently using Heathrow are, for one leg of their journeys, internal domestic passengers. Again we see positive consequences from a shift away from transfer passengers at Heathrow towards point-to-point services. This will be a more general trend applying at regional airports. Therefore, such a move will support the growth of point-to-point services at our regional airports serving the overseas locations where there is demand for travel directly, rather than via Heathrow.

Therefore, Sir, if you do decide to recommend rejection of Terminal 5, we believe that it can be demonstrated that this will not condemn the UK aviation industry to losing out in a contest against foreign competitors. This is a bloody and unprofitable contest from which the aviation industry has decided it prefers to disentangle itself. The
result will be higher quality, more convenient air services for the South East and the nation as a whole.

Another element in the new strategic thinking from British Airways, although still at a tentative and uncertain stage, concerns the company’s wishes to develop rail links at Heathrow. BA has decided it is in the transport business rather than the narrow airline business. One of the company’s competitors, Virgin, got to this position some time ago, although Richard Branson does not restrict himself to any particular business sector. BA is currently in discussions about bringing the Eurostar rail service to Heathrow, providing a direct rail link to Paris, Brussels and other locations on the continent. The logic is very much in tune with the New Deal for Transport. A proportion of the high numbers of precious Heathrow slots filled by short-haul flights to Paris and Brussels could be released for more profitable long-haul operations. Such a development would allow Heathrow to cater for additional long-haul traffic growth without the environmental costs of additional flights.

There are approximately 64 flights daily between Heathrow and Paris and 46 to and from Brussels. (BAA 52, Annex 2) This represents 40,000 patms a year, or 10% of Heathrow’s capacity, and is approximately the number BAA claim will be the increase in flight numbers with a fifth terminal over 15 years. Although not all these flights would end, the figures indicate the scope for substitution.

If rail links could also be created between Heathrow and the north of the UK, for example to Manchester, this would allow domestic transfer passengers to access Heathrow long-haul services while making the domestic leg of their journey by rail. The relevant terminal capacity for this half of the journeys would be in a new rail terminal, thus relieving pressure on Heathrow’s air terminals.

This creative new thinking from BA under its new Chief Executive, has provided many of the elements which can be put together in a realistic development plan for Heathrow over the coming decades which allows growth where this is genuinely required but keeps Heathrow’s air traffic activities within the limits of the existing four terminal airport. In other words, a sustainable, integrated transport policy.

It will inevitably be argued that BA is present at this Inquiry arguing for a fifth terminal. I would reply that BA first adopted a fifth terminal as a corporate objective in 1980. This objective was confirmed in the early 1990s. But after 20 years, it is clear the new Chief Executive, Robert Ayling, has significantly changed the company’s strategy for achieving its inevitable fundamental objective of profitable growth. At
the very least, I believe it is arguable that New British Airways will thrive and do a
good job at helping to meet the transport needs of London and the South East with a
four terminal Heathrow.

BA kindly sent me their recent submission BA 2114, which by strange coincidence
addresses some of these questions concerning BA strategy. The document appears to
imply that this Inquiry, Sir, is in some way to blame for BA’s deciding to shift its fleet
ordering plans towards smaller aircraft. While, we must give due attention to BA
submissions to the Inquiry, I believe it is also legitimate to consider public statements
by the airline’s Chief Executive. These do support the analysis I have given, seeing
smaller aircraft as a positive element in the airline’s strategy, and, therefore, Sir, I
would argue that you should be excused from blame. As far as fleet mix projections
are concerned, all I can say is look at the fleet mix projection in BAA’s Environmental
Statement, showing how 80 million passengers would be carried on a range of
different types of aircraft, with 420,000 patms per year. It is a work of mathematical
fiction.

A New Deal for Transport — The Integrated Transport Policy

As I indicated in my opening, HACAN believes that the new transport White Paper
lays down a coherent set of principles to guide transport policy, which have direct
relevance to the Terminal 5 question and aviation policy in particular. You, Sir,
appear to have been given the additional task of helping to translate the general
principles to the thorny questions which need to be decided in relation to UK air
transport policy.

I will now outline our view on what guidance the White Paper gives us on the issues
before this Inquiry. In the spirit of integrated thinking, I am going to include in this
section my final comments relating to the arguments we advanced during Topic 1 on
the relevance of price and landing charges to an assessment of the Terminal 5
application. We believe the new White Paper provides strong support for our
arguments that the current system for determining the price to airlines to use
Heathrow is generating negative and ultimately dangerous outcomes.

There are two obvious but extremely important aspects to the New Deal for
Transport, which are both indicated on the front cover of the White Paper — which
actually looks encouragingly green to my eyes. Firstly, that it is new. Secondly, that
the new transport policy is integrated.
The significance of the fact that the New Deal for Transport is new is that it is a clear statement of the Government’s belief that the transport policies adopted by the UK during the past 20 years or so, which happen to correspond with an administration of a different political colour, are no longer the right policies for the UK to follow over the next 20 years or so.

In the context of this Inquiry, the implication is that when arguments are advanced that Terminal 5 should be approved because it is in conformity with, say for example, the 1986 Airport Policy White Paper, these arguments in fact have little weight in the context of the New Deal, and possibly carry the suggestion that Terminal 5 is unlikely to be in conformity with the New Deal. Obviously, establishing the exact position necessitates a more detailed understanding of the philosophy expressed in the New Deal.

Secondly, the fact that the current Government gives high priority to the fact that its transport policy is integrated means that the principles outlined in relation to, say, road traffic, which is discussed in detail, will also apply in the case of aviation policy. An integrated transport policy means more than the physical connection between different transport modes. It also means a coherent and unified overall approach to the difficult questions and decisions relating to transport policy. Therefore when trying to flesh out the aviation policy component of the New Deal, we can take as a helpful guide the principles expressed in relation to other transport modes.

We can find valuable indicators of these unifying principles early in the White Paper. For example, in paragraph 1.4 there is the following statement:

“Simply building more and more roads is not the answer to traffic growth. ‘Predict and provide’ didn’t work…. This is why we promised an integrated transport policy to fight congestion and pollution."

The principles stated here translate directly to the key issues for this Inquiry and aviation policy in general. The Government rejects the notion that new transport infrastructure should be created simply because forecasters predict future growth in demand. BAA has followed precisely this discredited approach in its justification for Terminal 5. We also understand from this paragraph that the new Government has a commitment to fighting congestion and pollution. It is clear that the Terminal 5 proposals would significantly increase congestion in the flightpaths over London and the Thames Valley and on the surrounding roads generating substantial additional pollution in the process. Therefore the Terminal 5 proposals are contrary
to Government policy under the New Deal for Transport to fight congestion and pollution.

Paragraphs 1.20 to paragraph 1.23 define the New Deal in greater detail. We read about the challenge to deliver the Government’s “vision of a transport system that supports sustainable development. We need a new approach.” The significance of the emphasis on an integrated transport policy is spelt out.

As I have already indicated, HACAN believes that the proposals by BA to create an international rail terminal at Heathrow could represent a constructive development in terms of making an integrated transport policy a reality at Heathrow. We already have a possible nucleus of a rail interchange for a new rail terminal at Heathrow. The public has already paid for the construction of the Piccadilly Line loop to run along the eastern edge of the Perry Oaks site where it was expected in the 1980s that a fifth terminal would be constructed. It is rumoured that we have already paid for the shell of an underground station to be constructed. The truth or otherwise of this rumour is no doubt an official secret. But there is clearly a valuable opportunity to create a rail interchange between the existing Piccadilly Line and a new international rail terminal using a smaller portion of the Perry Oaks site than a fifth terminal would require. This would utilise the existing Piccadilly Line route and save the construction of a new extension. It would also be easy to create a link to the new rail terminal with a new stop on the existing loop for the Heathrow express between the Central Terminal Area and Terminal 4. The plan reproduced here is from the summary statement to BAA 1552.
In addition to integration between different modes, transport policy means “integration with the environment — so that our transport choices support a better environment”. Any objective assessment of the consequences of building a 30 million passenger per year terminal at Heathrow must conclude that such a transport choice would not support a better environment. The only decision on Terminal 5 which is in accordance with the new Government’s policy to support a better environment is the decision not to build such a terminal.

In paragraph 1.44 we read about the emphasis the New Deal puts on local democracy in deciding transport priorities. The Government says it will “bring power closer to people”. This Public Inquiry has been a thorough exercise in local democracy and the people have expressed their choice overwhelmingly and unequivocally: they believe the Terminal 5 proposals should be rejected.

The first paragraph in Chapter 2 defines what the Government is seeking in its commitment to sustainable transport:
“We need a transport system which supports our policies for more jobs and a
strong economy, which helps increase prosperity and tackles social exclusion.
We also need a transport system which doesn’t damage our health and
provides a better quality of life now — for everyone — without passing onto
future generations a poorer world.”

This paragraph may appear to support contrary positions in relation to the issues at
this Inquiry. The advocates of Terminal 5 give as part of its justification their claim
that it will create additional jobs and protect existing jobs. The opponents argue that
Heathrow is already damaging health and quality of life. HACAN has not ventured
into the detailed arguments about employment. However, we would argue that the
best interpretation of this paragraph in the overall context of the integrated transport
policy is that while the Government wishes to encourage job creation, its
commitment to health, quality of life and environmental priorities means that it
would not support transport developments where jobs were created specifically at
the price of harming health and quality of life. In other words we must have healthy
new jobs. We believe that it is undeniable that a fifth terminal would be contrary to
the commitment to provide a better quality of life now.

This chapter also contains statements about the Government’s concerns about
transport noise which “make many people’s lives a misery”. Literally thousands of
submissions to this Inquiry describe the misery inflicted on ordinary people by a four
terminal Heathrow. We even see acknowledgements that transport noise disturbs
sleep and is an important issue for people living close to airports and under flight
paths (by implication not necessarily close to airports). The Government’s conclusion
to this section includes the policy objective to:

“reduce noise and vibration from transport” (para 2.12).

We appeal to common sense, as well as our more technical arguments during the
noise topic to state that to choose to permit a 30 million passenger per year terminal
to be constructed at the Heathrow site in the western suburbs of London would be
contrary to the new Government’s policy to reduce transport noise.

We also, of course, have the explicit commitment in relation to air noise at Heathrow
from the new Government at this Inquiry, after much examination of the point, “to
do everything practicable to improve the noise climate over time” (DOT 239, column
813). Building a fifth terminal simply cannot be regarded as being in accordance with
Government policy.
Paragraph 2.19 of the White Paper contains one of the few explicit detailed policy objectives under the New Deal in relation to aviation policy:

“Aviation has been growing dramatically. But we haven’t made the best use of the airports in our regions.”

This is a commitment to ensuring that future growth in UK air transport is focused on regional airports, rather than the London airports as in recent years. The DETR is actively consulting on this commitment. To permit construction of a 30 million passenger per year new terminal at London’s largest airport, which would be twice the size of our largest regional airport and five times the size of our remaining large regional airports would be contrary to Government policy since the balance of capacity would dramatically shift towards London. A chart in our leaflet submitted to the Inquiry as HAC 121 illustrates the point.

Paragraph 2.24 states that “we all know about noise pollution and road congestion around airports”, a statement with which we would hardly disagree, but the important question has always been when will anyone do anything about these issues. One of the bullet-points in paragraph 2.25 supplies part of the Government’s answer. It will:

“ensure that environmental impacts are taken fully into account in investment decisions and in the price of transport.”

The policy is emphasised and expanded in a bullet-point in paragraph 2.35, which says that the Government will:

“make increasing use of economic instruments such as pricing and taxation to send clear signals about the wider social and environmental impacts of travel decisions.”
As you know, Sir, HACAN has consistently argued at this Inquiry that the current system for determining the prices to airlines for using Heathrow and other UK airports is directly responsible for generating the excess demand which BAA states exists for access to Heathrow and which it gives as justification for constructing a fifth terminal.

The detail of our argument on this is contained in our major submissions to the Inquiry and I will not repeat them now, except to confirm that we still hold this position and consider it important.

As I have already said, a key feature of the New Deal for Transport is that it is new. It is not surprising that the existing mechanisms for determining the prices paid by Heathrow’s customers, the airlines, for the use of the airport do not follow the principles of the New Deal. However, we submit that the current mechanisms are diametrically opposed to the policy objectives of the New Deal and that, Sir, you need to make your assessment of these issues in the light of the new policy rather than the negative outcomes created by the existing system.

Naturally, HACAN, in common with many parties to this Inquiry, believes the exemption of aviation fuel from tax is a fiscal incentive which artificially stimulates demand for air travel compared to other modes of transport, for necessary trips, and other leisure options, in relation to discretionary spending.

However, this is a general phenomenon affecting air transport on a global basis. The issue we have emphasised is the impact of the current pricing system on the demand from airlines for access to Heathrow compared to other airports, both in the UK and abroad.

The point is easily described. Heathrow slots have substantial commercial value. Heathrow is a highly desirable airport for airlines to use. The range and frequency of services mean that high volumes of passengers use the airport, despite many practical disadvantages in terms of access. Airlines which are already established derive economies of scale from expanding their operations at Heathrow rather than at other UK airports. Airlines value Heathrow slots so highly that they willingly pay millions of pounds to gain additional slots. A recent article in the Financial Times suggests that KLM recently sold four pairs of daily takeoff and landing slots to British Airways for approximately £16 million or £4 million per daily slot pair. My interpretation of how this translates into pats at Heathrow is that a daily slot pair equals 730 pats per year, although I stand ready to be corrected.
Last year, the Government gave the world’s airlines 10,000 additional slots at Heathrow for nothing. These slots were worth approximately £50 million if these assumptions are remotely accurate. It is a fairly cast iron law of human nature, let alone economics, that if someone is giving assets worth millions of pounds away for nothing the queue to get hold of those assets will be long. Also, of course, it can never be satisfied. At some point, and it appears to take a remarkably long time, someone will point out that this is a rather stupid activity for the Government to undertake.

We argue that a decision in favour of Terminal 5 will inevitably mean a significant increase in flight numbers. We believe this outcome is one of the real objectives of those parties seeking approval for Terminal 5, despite their protestations to the contrary. We see the existing pricing mechanism as a direct cause of the demands from airlines for additional capacity at Heathrow.

We also believe that this situation is one which has been precisely desired by the aviation policy division of the DETR. We believe that the DETR has considered the continued expansion of Heathrow to be one of its highest priorities. We believe that the DETR had a particular view of the national interest in relation to Heathrow, namely that the nation must ensure that Heathrow remains Europe’s largest airport by a clear margin at all costs. In this case, all costs includes stimulating demand by giving slots away for nothing while having no policy for limiting the number which are available. I need hardly add that costs in terms of harm to the quality of life of several hundred thousand citizens living and working under the Heathrow flightpaths barely register in the calculation.

The true perversity of the situation can be seen in the way the Government permits black market trading by airlines of the rights to fly into Heathrow. In most areas of economic activity, the Government is keen to ensure that transactions are openly accounted for. However, the Inland Revenue and Her Majesty’s Customs and Excise display no interest in ensuring that the nation derives its customary share of any profits from slot trading. As so often, the rules which apply to the rest of us do not apply to the aviation industry.

The system of giving away slots ties in with the method of setting those charges airlines do actually pay to use Heathrow, that is landing charges. The Government over time has devised a system which ensures Heathrow is one of the cheapest airports for airlines, not only compared to other countries, but also compared to our
far smaller regional airports. Again, the objective is to stimulate demand from airlines for Heathrow rather than alternatives.

The net effect is that the UK is transferring substantial wealth to the world’s airlines, a large proportion of which are foreign and owned by foreign governments. We consider this transfer to be entirely unnecessary, since we do not share the DETR’s belief that any price is worth paying to ensure that Heathrow continues to expand without limit.

The operation of the single till principle at Heathrow is the final piece of the jigsaw in the DETR’s system for generating additional demand from airlines to use Heathrow. The more passengers there are, the more BAA makes in profits from retailing, the lower the landing charges are set, generating more passengers. The distinguished commentator on aviation economics, Professor David Starkie described how this process could lead to BAA paying airlines to fly into Heathrow:

“As Christopher Chataway has pointed out, in the extreme this may lead to negative charges for runway and terminal use. Now, in certain circumstances, where capacity can only be added in large amounts and this leads initially to low utilisation, the effects of the one-till approach are not altogether adverse in terms of economic efficiency. But where capacity is well used and where it cannot be easily adjusted, the combination of an RPI-X formula and a single till philosophy can lead to ludicrous results - the pressure is to reduce charges in spite of growing airside congestion. This is precisely the situation with respect to landing charges at Heathrow and Gatwick.” (HAC 5: Regulating the Utilities: The Way Forward page 45)

Professor Starkie also describes how current policy involves a Government subsidy to the airlines, most of which are foreign:

“This makes it more difficult to manage the limited capacity available, it reinforces the incumbents’ so-called ‘grandfather rights’ to landing slots and it has the effect of passing the rents associated with airports of superior location to the airlines, most of which are established outside the UK and the EC. (Regulating the Utilities: The Way Forward page 45)

Our assertion that it has been deliberate Government policy to subsidise airlines to use Heathrow in order to encourage the airport’s expansion is supported by the fact that one of the most thorough analyses of the issues of supply and demand at
Heathrow, the RUCATSE Report, explained that there will be pressure to expand without limit for as long as prices to use Heathrow do not reflect the wider impacts of such use:

“One abiding feature of the South East airport market is likely to be chronic pressure on Heathrow and to a much lesser extent Gatwick (unless either of these airports has a new runway, in which case the pressures at either airport would be postponed by a decade or so). This is because from the viewpoint of the aviation industry and their customers this is where investment is needed and would bring great benefits, while other considerations such as local and regional land use impacts argue strongly against such sites. So long as charges for use of such airports are set at levels which do not reflect these impacts, airlines will want to use them much more heavily than capacity will allow, and there will be growing excess demand at these sites. These pressures will be little affected by new runway capacity at any other sites. This implies that consideration should be given to seeing if use could be made of the price mechanism to reflect better the wider costs of airport development. This in turn would influence the level of demand and provision of airport capacity, although we recognise that to have a significant effect on demand, very high charges would be required. An alternative to this could be the introduction of market mechanisms to allocate airport slots, although we did not discuss this.”

(CD 23, p. 44)

But, Sir, I have been describing the old deal for transport. To refer back to the sections from the new Government’s White Paper, transport policy now is to use economic instruments such as pricing and taxation to send clear signals about the wider social and environmental impacts of travel. HACAN argues that in applying this policy in the case of Heathrow and the Terminal 5 decision it is necessary to work on assumptions of prices to airlines reflecting environmental costs. There is no doubt that operating aircraft at Heathrow, given its location, imposes massively greater environmental costs than any other UK airport. It is an unavoidable conclusion that charges to use Heathrow should be the highest of any UK airport.

The application of New Deal principles therefore entails a pricing structure the exact opposite of that which has applied over the years since privatisation and which currently apply, pending the publication of the new Aviation Policy White Paper, taking into account your recommendations. Sir, we therefore argue that you cannot accept claims about excess demand to use Heathrow as justifying expansion when
that excess demand is the inevitable outcome of a discredited transport policy which is about to be superseded.

We have argued that at the very least charges to use Heathrow, whether landing charges or slot charges or a combination, should be set to match the level which airlines will willingly pay for them through open competition. This is the normal approach to charging for scarce assets and resources, whether they are licences for broadcasting or mobile communications or concessions to explore for oil or to operate train services on the railway infrastructure.

Market pricing would automatically end excess demand to use Heathrow — this is a fundamental law of economics. It would mean charges far higher than apply at present. There are inevitably some important issues of the best procedures to introduce market pricing and to allocate the additional revenue generated. An alternative approach to the same issue, with the same result, could be to impose substantial environmental levies on the current usage charges at Heathrow reflecting the high environmental costs of using the airport. These environmental levies could be set at a level which generated overall prices which effectively matched the market level. In this case it would be clear that the community should be the beneficiary of the additional revenues. This was exactly the conclusion of the Civil Aviation Authority in its 1986 paper on air traffic distribution in the London area:

“Given that the under supply of airports in the London area is a consequence of social policy, it follows that if demand were matched to supply by pricing there is no reason why the benefits of this policy should accrue to those fortunate enough to own the assets which are given a scarcity value for non-industrial reasons by the Government. It would therefore seem right if demand were controlled by price that the additional revenue thus obtained should be taken directly into the public purse or taken there indirectly by special taxation. This holds true whether the gains are to the airport owner or the airline which, by historical accident, happens to have possession of a valuable slot to which it has at present no property right.” (CAP 522, page 10, para 3.30)

The CAA favours Government retaining property rights in slots, which would appear to be in accordance with the Brussels view that trading of slots by airlines is illegal because they do not own them in the first place.

However, the CAA has not repeated this balanced assessment of the issues since 1986. It appears likely that the 1986 paper was written at a time when the CAA
continued in the habit of believing that it had a responsibility to consider the public interest in relation to the regulation of airports. The CAA at this time may not have fully appreciated its new responsibilities following the 1985 Airports Policy White Paper. Now, the CAA by statute must ignore the public interest in the regulation of BAA and consider the interests of the world’s airlines. Hence the CAA’s support for substantial subsidies to airlines, which in effect represent a transfer from UK citizens to the world’s airlines. This was explained in the evidence of Thomas Bass:

“the CAA has no duty in respect of the ‘national interest’ and no duty to consider those living near airports (indeed, quite the contrary, Section 39(2)(c) [of the Airports Act 1986] makes it clear that the CAA’s obligations are to satisfy anticipated demands by users of airports).” (CA 9 para 4.2)

But, again, Sir, this is old transport policy. Such a blatant bias in the policy of regulation of BAA against the public interest and in favour of commercial interests cannot accord with the New Deal for transport, with its commitment to environmentally sustainable transport policies. There is evidence that the Government has understood these issues in its consultation proposals for reforming utility regulation. The Government has followed up its consultation paper “A Fair Deal for Consumers — Modernising the Framework for Utility Regulation” (CM 3898) with a letter outlining further issues for consultation which envisages that statute guidance to the CAA is appropriate in order to require it to consider environmental and social impacts in its role as economic regulator:

“The Government recognises that airports have significant social and environmental impacts, and therefore considers specific guidance would be appropriate. Limited provision for considering environmental leaders is already allowed by the system for economic regulation. For example, airports are currently able to charge airlines higher charges for using noisier aircraft. However, there is little scope for the CAA to take into account social factors or to consider environmental ones more widely. The Government therefore intends to introduce legislation under which Ministers will issue statutory guidance to the CAA, and the CAA will be under a new duty to have regard to that guidance.” (HAC 127, para 2)

This consultation was issued in October 1998. It is recent and is an indication of the distinctively new policies and priorities the new Government intends to follow in its transport policy. HACAN argues that the introduction of a regulatory and pricing regime which accurately reflects environmental costs to use Heathrow represents a
fundamental change from the system under which the airport has been operating for past thirteen or fourteen years. When airlines pay the full environmental costs of using Heathrow, it is inevitable that charges will increase significantly and demand will reduce. The assumptions on which BAA’s case for Terminal 5 has been produced have been superseded in very fundamental respects.

To conclude this section of my closing submission, HACAN considers that the move to internalising the environmental costs of using Heathrow within the prices faced by airlines is in keeping with the transformation of the airport which we have already outlined into a premium airport serving the business needs of London and the South East. Currently airlines using Manchester pay charges per passenger which are approximately 60% higher than at Heathrow. Glasgow and Birmingham are about 50% higher. Newcastle and East Midlands are almost 100% higher (CD 198, MMC 4, Table 5.9, page 101). Under the New Deal, charges which incorporate environmental costs will mean that Heathrow charges become the highest, possibly by similar margins above the rates at other airports. I have submitted extracts from the first UK Environmental Accounts which show that at least part of the Government is beginning the difficult task of assessing environmental disbenefits systematically. The full document makes dense reading. (HAC 125)

The pricing issue has generally been discussed in terms of bringing environmental disbenefits into the prices, that is assessing costs properly. However, current charging arrangements at Heathrow are a rare but important example where economic benefits are currently kept out of the market. Slots are allocated administratively and any revenue is created in the black market. If we reformed this system to bring the value of access to Heathrow fully into the market, this would generate a substantial increase in economic activity for London and the South East. Heathrow slots are worth billions of pounds. This would be an economic boost far larger than the small economic effects of allowing a fifth terminal.
Such a reform of the pricing and regulatory system will also be in accordance with Government policy on encouraging the development of regional airports. The point HACAN has been making over the past four years on airport charges was well expressed by the Corporate Strategy Director of Manchester Airport, Rowena Burns, as reported in the Observer last November:

“There is a lot that regional airports can do and a lot that a government with a positive attitude to us can do to provide the tools for this....” BAA’s pricing formula must change, she says so that, “a premium airport like Heathrow charges premium prices.” (HAC 117)

The report quotes BAA’s response: the familiar threat from the nasty foreigners. However, we believe that in reality BAA does see regional airports which it does not own, as more serious competitors than the company chooses to admit.

We also have little doubt that if BAA was permitted to set higher market prices for access to Heathrow it would willingly do so, in exactly the same way as BA is now targeting premium passengers. We would respect the company more if it chose to point out the absurdity of a situation where it gives away valuable access to Heathrow for a fraction of its true value and can only increase its revenues by taking a few pounds more off each passenger in its shops. There is an opportunity for BAA to negotiate with Government a fair distribution of the additional revenue which would be generated by market pricing and environmental cost pricing at Heathrow. A crude model, just as an example, would be to suggest a Private Finance Initiative approach, where additional revenues compared to the current level were divided as follows: one third for investment in transport infrastructure at Heathrow; one third contribution to Government as an environmental levy; one third to be retained by BAA as an incentive. Positive new infrastructure investments at Heathrow could include the international rail terminal I have already mentioned, and a suggestion I made in Topic 1, the construction of a people mover linking Terminal 4 with the Central Terminal Area. This integrated development would remove one of BA’s main complaints about Terminal 4, the ridiculous requirement for transfer passengers to take a coach tour of Heathrow.

We understand that BAA may also shortly have a change of Chief Executive. It is possible, that in the same way as has happened with British Airways, a new Chief Executive may choose to follow new strategies.
Aircraft Noise

I turn now to the topic of aircraft noise. HACAN is a single issue group and aircraft noise is the reason why we are present at this Inquiry. Our amateur grappling with issues of forecasts, economics and aviation strategy have had the sole purpose of trying to strengthen the case for a rejection of Terminal 5 because of our fears of the noise impacts of further expansion. We focused on the question of forecasts of flight numbers in Topic 1 because those forecasts are then input into Topic 5 as part of the assessment of noise impacts. To jump ahead a little, in practice, having, we hope, demonstrated that the BAA flight number forecasts are significant under-estimates, we then discover in Topic 5 that BAA and the DETR claim that large increases in flight numbers don’t make any difference to community noise annoyance anyway.

I do not intend to spend much time describing the experiences of hundreds of thousands of ordinary people who find aircraft noise from a four Terminal Heathrow seriously harming their quality of life today. We asserted at the beginning of the Inquiry that this was an issue of intense concern to very large numbers of people. Sir, the overflowing files of carefully considered letters the Inquiry has received on the topic of noise and the several hundred, often moving, personal statements made to you at the open sessions speak for themselves. Our own witnesses giving evidence of direct effects on noise on them and their families (HAC 66 to 75) spoke eloquently of the distress caused by noise across wide areas of London and the South East. All I will say is that the incessant noise of 1200 aircraft using Heathrow from 4 o’clock in the morning until 11 o’clock at night every day is an oppressive burden which is depriving large numbers of people of their basic human need for some peace and rest. For many this burden is annoying and distressing; for some it is intolerable. Professor Holland summarised the medical and scientific evidence showing the harmful impacts of noise on health (HAC 61).

One of our key aims in this topic was to persuade you, Sir, that you cannot place any reliability on claims by the DETR that the noise climate around Heathrow is improving and claims by BAA, using DETR evidence, that the addition of a fifth terminal would make little difference. We questioned the reliability of the 16 hour 57 dB(A) Leq contour as an indicator of community noise annoyance today and in the future. We also raised the issue of the impact of night flights, for three reasons. Firstly, because the Terminal 5 proposals explicitly entail increases in night flights during the period 6am to 7am. Secondly, because we wished to demonstrate that night flights at current levels cause severe and unacceptable distress to large numbers of people and that this is reason in itself to reject proposals which would
increase night flights and increase the burden of noise during the day on people already debilitated by night flights. Thirdly, because we believe the conflict between the actual experience of people and persistent claims by the DETR that night flights cause negligible disturbance must add to your doubts about the reliability of DETR statements on community noise annoyance.

I will briefly summarise some of the detailed issues we raised with you in support of our case on noise.

Regrettably, our case entailed serious and fundamental criticism of the DETR in its role as providing a public service to protect the environment and quality of life of citizens of London and the Thames Valley in relation to aircraft noise. I must stress that at no point has HACAN questioned the personal integrity of any individuals within the DETR. We have no doubt that all DETR ministers and officials are honourably carrying out what they regard as their public duties. However, we argue that there is an inherent irreconcilable contradiction in the demands placed upon the DETR which will inevitably lead that organisation to fail in its duty to the public. The position is analogous to that of the Ministry of Agriculture Fisheries and Foods in relation to its duty to protect the public from possible harm arising from unsafe practices within the agriculture and food industries. It has been widely recognised, following the BSE scandal, that it is impossible for the same department to both promote a powerful industry and protect the public from the possible harm the industry may generate. This is a system failure and will always occur irrespective of the individuals placed in senior positions within the department. The only solution, as the Government has accepted in this case, is to create a separate and independent body charged with the duty of protecting the public, here the Food Standards Agency.

In the same way, HACAN believes that the aviation environment division and the aviation policy division of the DETR will inevitably promote the interests of the air transport industry and fail to protect the interests of the public who suffer the harmful effects of the operation of these industries. During Topic 5, we pointed to several examples where the DETR attempted to defend positions which were sympathetic to BAA’s case and which belittled the statements of large numbers of honest witnesses, on the basis of transparently illogical and unjustifiable interpretations of the evidence before the Inquiry.
Indeed, Sir, the evidence of the DETR during the noise topic seems to us to indicate that the department believes it must defend pro-aviation assessments of the impact of aircraft noise on the community to the point of exhibiting non-rational behaviour.

I will give as an example an issue which appears to me of relatively minor importance in the context of this Inquiry as a whole, but which the DETR has chosen to raise on a number of occasions. This is the assertion by the DETR that HACAN has in its evidence to you to date called on you to impose a ban on night flights, possibly as a condition for approval of a fifth Terminal. The evidence Mr Randle points to for this assertion is contained in the DETR Topic 5 position statement and its final submission in similar terms. Mr Randle quotes from my evidence as follows:

“The Inspector does not have the power to change the night time regulations in relation to Heathrow. (HAC 65, page 37, 6.2.2)

This appears to me to be an explicit recognition by HACAN that, at the time this evidence was given at any rate, you did not have the power to institute a night ban at Heathrow. Mr Randle says he agrees with this. But he then argues that my evidence contradicts itself in the next sentence:

“If the Inspector accepts that there are high levels of noise disturbance at night as well as by day, this would be additional grounds for recommending against expansion of Heathrow.”

To Mr Randle and the DETR, this sentence implies that HACAN is “suggesting a reduction or an end to night flights”. In further support of this interpretation, Mr Randle quotes the title of my proof: “The Implications of the Policy of Operating Night Flights at Heathrow for the Terminal 5 Inquiry”.

I submit, Sir, that there is no ambiguity in HACAN’s position as expressed in my proof. Following the sentence Mr Randle quoted where I said the Inspector does not have the power to change the night time regulations, I then went on to say:

“However, he does have a major decision to make in relation to Heathrow’s daytime activities... If the inspector accepts that there are high levels of noise disturbance at night as well as by day, this would be additional grounds for recommending against expansion of Heathrow.” (HAC 65, page 37, 6.2.2)
I considered the title of my proof long enough as it was, but perhaps I should have added a subtitle for the benefit of the DETR as follows: “The Implications of the Policy of Operating Night Flights at Heathrow for the Terminal 5 Inquiry which is not an Inquiry into Night Flights but an Inquiry into Terminal 5.”

As I have already indicated, there were in fact two important conclusions we wished to persuade you of in relation to night flights. One was that if night flights are causing very high levels of disturbance already, we ask you not to add to the overall noise burden disturbance by approving Terminal 5 and increasing daytime disturbance. The second, of course, was that if you accepted that night flights are a very serious quality of life issue, you would inevitably have to conclude that the DETR statements that night flights cause negligible disturbance were questionable. Given that the DETR assessment of night noise was largely carried out by Dr Ollerhead this issue is particularly relevant since Dr Ollerhead is also responsible for the use of the Leq system for assessing daytime noise.

I go into this example partly because it has been repeated several times by the DETR, and partly as an example of the widespread difficulties we believe there are in conducting any rational or constructive dialogue with the DETR over aircraft noise questions. The DETR pays negligible attention to any of the statements HACAN or its members do actually make about aircraft noise, but appears rather obsessed with statements we did not make but they choose to imagine we made.

As Mr Randle mentions in his discussion of the issue, in cross-examination, I confirm that HACAN has as one of its objectives the achievement of a ban on night flights. I am relieved that this message at least has got through accurately. I think it would be a matter of some surprise if HACAN did not seek to end night flights. But we have certainly not suggested that such a ban should be a condition for an approval of Terminal 5. We have made it clear, to most parties at least, that we are not proposing conditions in relation to this application. We believe that there is overwhelming evidence that a limited curfew on night flights is justified. We would not remotely regard it as acceptable that such a limited curfew should carry the heavy price of the imposition of a fifth terminal.

As I have stated, we believe that the night flights issue is not only important in itself, but also provides useful information to help assess what credibility can be given to DETR pronouncements on the seriousness of the noise problem at Heathrow. The DETR in our view has a very distorted understanding of the scientific method. The department claims a false dichotomy between supposedly objective and reliable
“scientific” data and supposedly untrustworthy evidence based on the descriptions of people of their experiences of noise. Mr Randle tells you, Sir, in no uncertain terms in the DETR final submission, that it is no business of yours to assess the reliability or credibility of the mechanisms the DETR currently uses to measure community noise annoyance. Also, by implication, you must ignore all the evidence on noise disturbance submitted to you by members of the public where they recount their personal experiences of disturbance from aircraft noise:

“What these Inquiries need to know is the basis of Government’s approach to noise and the means by which the Government has decided it should be measured, assessed and, where necessary, controlled. Government has decided in determining policy that it should be guided by scientific research.” (DOT 299, para 256)

Sir, if you are to be circumscribed by these instructions, we might as well go home now, and we should not have bothered to come along in the first place four years ago. We are confident that you will use your own discretion in deciding the relevant issues to be weighed up at this Inquiry.

The night noise case illustrates what we regard as the abuse of science by the DETR to fulfil its objective of supporting the aviation industry and opposing any protections for the affected population. Miss Duthie in her proof states:

“With noise levels in the range of 80-95 dB(A) the likelihood of the average person being awakened is 1 in 75 and that the number of disturbances caused by aircraft noise is so small that it has a negligible effect on overall normal disturbance rates.”

In my proof, HAC 65, I demonstrated the many limitations in the Ollerhead methodology for assessing sleep disturbance at Heathrow. Much of the research was carried out at other airports, including Stansted, where there are few night flights. The wrist actimeter technology was incapable of measuring one of the most common experiences of sleep disturbance, “premature awakening” and the phenomenon of being woken successively by additional aircraft after returning to sleep.

But, in addition to this, in cross-examination, I questioned Dr Ollerhead about the implications of his finding that 1 in 75 noisy aircraft would wake people in the context of Heathrow. I estimated 40 noisy aircraft during the average night and pointed out that this represented high levels of sleep disturbance around Heathrow.
Dr Ollerhead actually agreed with me, saying that although this needed to be seen in the context of the total number of awakenings, “I would not argue with your analysis”. He agreed that these high levels of sleep disturbance were in accordance with the social survey data I had shown him reporting significant percentages of the population under the flightpaths saying night flights disturbed them. (Day 335, pp 156-7)

The DETR is not scientific. It actually misrepresents the meaning of the research it commissions, always to favour the aviation industry. The latest second stage consultation confirms the familiar pattern of doing nothing to reduce the volume of night flights, even though it supplies data proving that between 50% and 60% of people under the flightpaths are likely to be woken every night. The mathematical analysis has been presented to the Inquiry in HAC 114.

The one response to public pressure is the familiar one of commissioning yet more scientific research — the response the Government made to Eyre’s recommendation for a night ban.

Therefore, Sir, we believe you must decide for yourself the reliability of the scientific research the DETR uses to measure community noise annoyance.

The issue is, of course, of fundamental importance to this Inquiry in relation to the use made by the DETR, and then BAA, of noise contours to assess daytime community noise annoyance.

Mr Randle’s final submission quotes Dr Ollerhead’s description of Leq as the “best and most appropriate measure to use”. Sir, HACAN argued forcefully that, even if there is a role in principle for Leq as a component of a system for measuring community noise annoyance, the way the Government has applied the Leq system in relation to Heathrow means that it has forfeit any reliability as far as you are concerned as a guide to the extent of the noise problem at Heathrow today and in the future should a fifth terminal be approved.

I am sure you are familiar with the key elements in the argument. To be meaningful at all Leq contours of noise energy need to be calibrated against the subjective experience of people. This can only be done through carrying out social surveys in noise affected areas. It must be understood that the human subject is a central figure in assessing the effects of noise pollution, much as the DETR would prefer to eliminate human beings from the picture. As you know, the last time the noise
energy contours for Heathrow were calibrated through a social survey was in 1982 in the ANIS study. This was when Heathrow was still a three terminal airport. Flight numbers were approximately 235,000. Dr Ollerhead accepts in principle that it is desirable to recalibrate the contours periodically. The DETR, so eager to conduct more scientific research into sleep disturbance, refuses to carry out up-to-date social surveys into noise disturbance under the Heathrow flightpaths.

Flight numbers have increased by 85% since the 1982 social survey. Thousands of people have told you, and therefore simultaneously the DETR, that they experience this substantial growth in flight numbers as a continual and unacceptable worsening of the noise pollution they have to endure. As Dr Cavalla’s proof emphasises, the volume and frequency of flights for those living under the approach paths in particular has become intolerably intense (HAC 63). It is a fact that as Heathrow’s runways become increasingly congested the growth in flight numbers now occurs at the most anti-social times of the day. It is a fact that the 16 hour Leq ignores the substantial growth in flights in the sensitive period 6am to 7am. It is a fact that the increasing volume of flights means that the approach paths have had to be extended many miles further out from Heathrow in order to handle them safely, generating concentrated levels of noise pollution in areas which experienced no problems in 1990, let alone 1982.

Yet the DETR will defend to the hilt that the only guide to community noise annoyance which is reliable and the only guide you are committed to use, Sir, is the 57 Leq contour as defined in 1982.

Dr Jones in his proof, HAC 62, showed how the DETR misrepresents the so-called “energy principle” as a fundamental truth. At one level it is the tautology that if different combinations of numbers of aircraft and noise produce the same volume of energy, they produce the same volume of energy. To assert that people respond to the different combinations identically is a hypothesis which needs to be tested empirically. This has not happened and all the evidence we do have is that a test would refute the hypothesis.

HACAN has argued that all the evidence supports the notion that community noise annoyance would now correlate with a slightly lower value contour, suggesting, as an example only, the 54 dB(A) Leq contour. Mr Rolls (HAC 64) in one of the most creative contributions to the noise topic reported the results of his, admittedly amateur, but carefully conducted research into the true extent of community noise disturbance. This supported an estimate of a million people disturbed by noise. Of
course, we would prefer a professional social survey, but the DETR refuses to provide one, while criticising Mr Rolls.

In fact the DETR has provided strong support for our estimate of the numbers of people affected by noise in its Second Stage Consultation on Night Regulations. As we argue in HAC 130, the DETR goes to some length to show that approximately two thirds of a million people live under the landing paths in areas where noise generates disturbance. Adding on the population under the take-off paths leads to an estimate of 1 million.

What is the scientific basis for the DETR’s rigid adherence to the 57 dB(A) Leq contour? This was revealingly demonstrated when the Minister for Transport in London made a statement on the issue to Parliament on 28th October 1997, during the course of this topic. Ms Jackson claimed that the noise climate around Heathrow has been improving and said:

“This noise contour [the 57 dB(A) Leq noise contour] is the one widely accepted as being closely correlated with the onset of community annoyance from aircraft noise during the day.” (DOT 239, column 815)

But, as Dr Ollerhead’s carefully considered conclusion to his discussion of methods of assessing community noise annoyance makes clear, the minister is totally misinformed on this important point. Dr Ollerhead states:

“What the many noise index studies have demonstrated most clearly is that the relationships between noise exposure variables and annoyance are statistically weak.” (DOT 2010, para 6.40, page 67)

When cross-examined on this point, Ms Duthie said the Minister was right and Dr Ollerhead was right (Day 342, page 159, lines 15 to 16). Sir, the adherence to the 57 Leq contour is not scientific. It is an article of religious dogma. Any rational challenges, as you observed yourself, are simply ignored.

Sir, you are being asked to approve the construction of an airport equivalent in capacity to Gatwick at the existing Heathrow site in the face of intense community opposition related to noise concerns on the basis of social survey data from 1982, which even in 1982 had a statistically weak correlation with community noise annoyance. Sir, we believe you have no alternative but to dismiss the evidence from the DETR and BAA based on the 57 dB(A) Leq contour as not only unreliable but likely to be dangerously misleading.
British Airways provides a good example of the ludicrous consequences of relying on DETR noise statistics in its map of the Heathrow noise footprint in its booklet “High time for five” (HAC 120). As the reproduction here indicates, there is currently no problem of aircraft noise in Twickenham, Richmond or Putney, let alone Ealing, Fulham, Chelsea, Battersea or places further east. This plan neglects to point out that the official BAA noise footprint in fact moves further to the east in 2016 and also wrongly indicates that it contracts to the north west (compare Figure 10 in BAA 66).
The best that Dr Ollerhead could do to support BAA’s application was to argue that while the absolute level of the contour representing the onset of community noise annoyance currently used may be inaccurate, it will still provide a useful comparison between two different scenarios in the future. However, if it is conceded that the Leq contours may need to be recalibrated after seventeen years during which the nature of Heathrow’s operations have changed significantly, it is not defensible to argue that the same contour would be appropriate to measure community noise annoyance at the same date in the future for two very different scales of operation at Heathrow.

The reason for the need to recalibrate Leq contours has been made perfectly clear at the Inquiry: namely, the almost total insensitivity of noise energy contours to the frequency of flights. As I established in my cross-examination of Dr Ollerhead, if the assumption is made that there is no need to adjust the labels attached to the Leq contours, then I as someone living on the boundary of low noise annoyance in Kew would barely notice a doubling of flight numbers, if average noise per aircraft remains the same. To move up the 6 dB(A) required to go from low to only medium annoyance would require flight numbers to quadruple to over 1.6 million a year. Sir, we believe you cannot take this pseudo science seriously.

The true scientific method involves having an open mind to all possible sources of illumination on the issue under consideration. However, the habit of Government departments of displaying an obsessive fixation on a particular concrete number is fairly widespread. I found some comments in a recent Radio 4 “Analysis” programme on the use of numbers in relation to issues of public debate pertinent. I have submitted the relevant transcript (HAC 124), but repeat a couple of comments here:

Andrew Dilnot of the Institute for Fiscal Studies was interviewing Lord Lawson, the past Chancellor of the Exchequer. He asked:

“But surely in Nigel Lawson’s experience senior civil servants and ministers — the people who make policy and really need to understand all these numbers and their context — do understand them?”

Lawson replied:

“I don’t think they do, no. I think that they don’t realise sufficiently in my experience, how uncertain it all is. And they attach far too much credence to the numbers that they are given. In a sense that is deliberate because of course they
are looking very understandably, they start by having principles and ideas and beliefs and wishes, and they look for numbers which will support their arguments. Then they start to believe these numbers — you know then they repeat them and repeat them and they start to depend on the numbers, and the numbers in this way are given far more importance in their minds, let alone anybody else’s, than they should.”

Sir, I cannot imagine a better description of the process we believe has been going on within the DETR. The department has found numbers which appear to support their underlying objective of justifying expansion of Heathrow without limit in the face of growing community protest. The 57 Leq will be defended even though the DETR’s own experts regard it as unreliable.

Sir, you asked during my position statement at the end of Topic 5, whether HACAN was encouraging you to assess the extent of the problem of aircraft noise pollution from Heathrow solely in terms of changes in the raw numbers of people who can be considered to suffer disturbance. My answer is clear: no, the noise problem has many different manifestations for different people according to where they live, their pattern of life and work or education and their personal responses. The local authorities have presented much useful information on the wider picture. Our objective was to try to persuade you that the 57 Leq was not helpful to you — and I believe that the tenacity displayed by the DETR in clinging to this number in the face of the many irrefutable indications of its inadequacy and unreliability have proved the importance of the issue, certainly from the DETR’s point of view.

Clearly we believe that if you are persuaded to abandon the Leq system as applied in practice at Heathrow by the DETR, you then need to turn to the evidence from the large volume of representations made to the Inquiry by affected individuals and their democratic representatives about the worsening noise problem generated by a four terminal airport. In support of this approach, which I regard as merely common sense, despite the DETR position, I will make a final quotation from the radio programme I have already referred to. Here, the Deputy Governor of the Bank of England, Mervyn King, describes how he and his colleagues test the reliability of one of their key numerical indicators, the Retail Price Index:

“Now what is the solution to the problem? Well the solution is to diversify the sources of information, and what we in the Bank of England do is to look at the surveys which business organisations and others produce and indeed we have our own network of regional agents who go out and talk to business people on
the ground and ask questions. ‘Do you think that what you see agrees with the
pattern of official statistics? Does the picture painted by these statistics coincide
with your view of what is happening?’ And that enables us to judge whether
the picture painted by those statistics is accurate or not.”

Andrew Dilnot summed up:

“So a mature understanding and use of numbers recognises the scope for error,
is clear about what is being measured, seeks to enrich summary numbers with
data from other sources, and recognises the need to check that the numbers
seem consistent with real experience.”

We can perhaps, be grateful, that those responsible for managing our overall
economy display some wisdom and humility. However, Sir, HACAN concludes,
regrettably, that the DETR fails on every count to display a mature understanding
and use of numbers in its treatment of the problem of aircraft noise pollution.
However, we have little doubt that you will recognise the scope for errors in the
numbers submitted to you, from all sources of course, and will give due weight to
data from other sources, including, most importantly the real experience of the real
people who have made the effort to contribute those experiences to this Inquiry.

Conditions

Sir, I will not repeat in detail HACAN’s position on conditions. Our members
continue to feel a deep sense of betrayal that the conditions on which Terminal 4 was
approved count for so little that a fifth terminal can even be considered. As we have
said, to approve a fifth terminal on conditions would be entirely valueless since to do
so would involve breaking the conditions on which Terminal 4 was approved.

Glidewell approved Terminal 4 in the belief that this would increase Heathrow’s
passenger capacity to 38 million a year. If the limit of 275,000 patms (or is it atms)
had not been abandoned, at today’s passenger per patm figure of 138, we would
have precisely 38 million passengers at Heathrow. The reality is we have 22 million
additional passengers, entirely because flight numbers have been allowed to grow
without limit to a level 60% above the condition set for Heathrow following the
construction of Terminal 4.

If Heathrow had developed according to the agreement reached following the
Glidewell Inquiry, the airport would already have made the shift in focus I have
described towards catering principally for business travellers to and from London and the South East. British Airways would have begun operations at Stansted ten years earlier than has actually been the case and Stansted would now be a thriving, modern international airport. Our regional airports would have become larger, having established more direct international services.

We have gained very little for the additional 20 million passengers at Heathrow. We would get very little from another 20 or 30 million passengers. But our capital City has been and continues to be deeply harmed by the pollution and congestion from this unplanned growth. Residents are paying the price for this increased business for BAA and the airlines and are threatened with having to pay an even higher price. Over the last four years HACAN members and other opponents have also had to pay the substantial price of fighting to protect the environment for our families and the wider community through our attendance at this Inquiry and the associated campaign.

BAA and the airlines have had an extremely sweet deal out of the 20 million, going on 30 million, more passengers they have managed to push through Heathrow. They should be satisfied with what they have got, rather than greedily demanding yet more in a head-on confrontation with the community and its democratic representatives.

Experience tells us that it is simply not realistic to approve a massive expansion of terminal capacity at Heathrow in conjunction with some environmentally based patm limit, for example. It would not be long after the new terminal had come into operation before we would see applications from BAA and its DETR allies calling for an increase in the patm limit using the following type of argument:

“BAA proposes a new higher patm limit which would reflect the outline planning consent that BAA holds for the phased development of Terminal 5 and associated infrastructure at Heathrow with a capacity of about 30 mppa.”

I paraphrase only slightly from the introduction to BAA’s application to increase the patm limit at Stansted (DOT 283a). It will only require small changes on the word processor to generate the Heathrow application for more flights. Apparently, for very good reasons, no doubt, the average number of passengers per aircraft did not increase at the expected rate. Therefore, the only option to use the planned terminal capacity has been and is to allow more flights than expected:
'Stansted was experiencing a growth in scheduled services using smaller aircraft than originally predicted with, consequently, a lower average passenger occupancy per aircraft.” (DOT 283a, para 6)

Cumulative effects

Sir, we have not played a part in the many other topics at the Inquiry apart from aircraft noise examining the possible harmful impacts of permitting the construction of a fifth terminal. However, we have observed the main issues being discussed. It appears to us that most of these other important areas, surface access, air quality, ground noise, public safety and construction each independently represent strong grounds for rejecting the Terminal 5 proposals. When they are all put together, with the air noise evidence, they make an overwhelming case that the harmful impacts of Terminal 5 are of such a scale as to be simply unacceptable.

I will make some small non-technical observations on three of these issues.

Firstly, on surface access, while the Government may have approved a 12 lane section of the M25 adjacent to Heathrow, for anyone actually wishing to travel to and from London, the elevated section of the M4 remains as a narrow constriction with its four lanes and no hard shoulder. Also, I personally at any rate find it fairly incredible that the DETR appears to be deliberately planning a sudden narrowing of the M25 itself at Junction 15 from twelve lanes to eight, which seems to be an inevitable recipe for congestion and likely to increase the risk of accidents. It appears obvious that the twelve lanes next to Heathrow have been approved simply in order to facilitate the Terminal 5 slip roads with no regard for wider traffic issues.

Secondly, on safety, HACAN considers it extremely worrying that the DETR appears to regard the only limit on patms at Heathrow as the increasing risk of an air crash. Apparently flight numbers will increase until we reach the point at which aircraft start flying into each other. Surely, the Government has a duty to set a safe level of flight numbers which allows a clear margin before safety risks increase to dangerous levels. It is the view of many of our members, and many others simply watching the volumes of aircraft passing over London and the Thames Valley that we must be packing as many aircraft as is prudent into the skies over our heads already.

Thirdly, the majority of HACAN members live some distance from Heathrow. They suffer its effects through the long flightpaths spreading out from the airport. But when we see the huge scale of the disruption, dirt and noise which residents living in
the vicinity of airport would be forced to endure for ten years to build this new terminal we feel for them. We cannot believe such an onslaught can be justified to build a terminal which will be full as soon as it is completed, leaving us with exactly the same difficult airport policy questions as we have today.

Conclusion

In conclusion, Sir, we believe that the accumulated evidence presented to you proves that Heathrow as it is today is seriously harming the quality of life of hundreds of thousands of people living across a large swathe of London and the Thames Valley. For a smaller number, generally living closer to the airport, Heathrow is harming their health. In the face of this weight of evidence, Sir, we believe you can only draw one conclusion in your final decision: to reject unequivocally BAA’s application for a massive expansion of Heathrow.

We believe that decision will be made easier by the exposure in the course of this Inquiry of the fundamental flaws in the case BAA has put to you and, in relation to noise, the evidence they have relied upon from the DETR. BAA’s case has boiled down to the claim that it is possible to build a new terminal at Heathrow which would effectively be a new airport equivalent in capacity to Gatwick without anybody noticing it is there. The claim was transparently an attempt to misrepresent the scale of the impacts of the development. We have pointed to the implausibility of their case on the central issue of flight numbers and argued that you must discount the DETR evidence on community noise annoyance and rely instead on other sources, including the direct experience of people. This pattern has been repeated in several other topics.

“Because of the potential environmental impacts of major new construction, it is important that alternatives to new construction are considered at the earliest stages of planning. Alternatives include making better use of existing infrastructure and managing demand for it and the use of other forms of transport.” (CD 258 4.199)

Sir, I do not claim credit for this cogent expression of the principles to be followed when assessing potential new transport infrastructure proposals in an environmentally responsible manner. This is Government transport policy, directly from the New Deal. At Heathrow, we must follow alternatives to new construction. This means managing demand. In this final submission, I have tried to present to you a convincing positive vision of a Heathrow which remains a four terminal airport but
which will continue to adapt and evolve in order that this existing infrastructure is used most productively to meet the travel needs of London and the South East.

The question has regularly been raised during the Inquiry of when and by what process will the expansion of Heathrow finally be ended. There is no disagreement that Heathrow will need to limited in size at some point. The question is merely when that point should be. At that moment, the arguments about continued growth of Heathrow being essential to the health of the London and UK economy will have been put to one side. The final limit on Heathrow’s growth will occur before the airport has reached its theoretical maximum capacity, before there is continued night flying for example and before potential new runways are constructed. London will continue to thrive after the point at which Heathrow stops growing. London is a dynamic world City whose growth is not dependent on the expansion without limit of any one of its numerous transport gateways. Towards the end of Topic 1 BAA explained its view on the mechanism by which Heathrow would be limited. I apologise that I do not have the reference, but my memory suggests that BAA stated that Heathrow will stop growing when the public outcry over its environmental impacts has reached such a level that further expansion is politically unacceptable.

We argue, Sir, that this Inquiry has demonstrated that the public outcry over Heathrow’s negative impacts on the community has already reached the point where there is an overwhelming demand that further growth shall not occur. The question still remains of the exact mechanism within our political and administrative system which can actually decree this limit on growth. Sir, we regard this Inquiry as a wholly appropriate procedure by which this decision can be made. The Inquiry has examined the issues exhaustively and been a major exercise in democratic consultation. You, Sir, and your fellow Inspectors have ensured that members of the public have had access to the Inquiry and have convinced people that their contributions will be carefully considered. For many people this has been a surprising and refreshing change from their normal attempts to discuss their concerns about Heathrow with officials who in theory have a duty to serve the public.

The result has been that public has made good use of this opportunity to make their wishes about BAA’s proposals abundantly clear to this Inquiry. The public do not want Terminal 5. The raw numbers of submissions show that 95% of 20,000 people bothering to make their views known are opposed. I understand that hundreds of additional objectors are registering in the final weeks of the Inquiry, partly as a result of our own efforts. But, of course, the proponents of Terminal 5 have used their
immense resources to try to encourage members of the public to register support. They have failed — and they have failed for the simple reason that there is negligible support for Terminal 5 outside of those who have a direct economic dependency on the airport and certain organisations claiming to represent business views, of which the proponents are themselves members. At many of the public sessions, 20 to 30 people spoke against Terminal 5 with either no supporters or only one or two. Large numbers of the written and personal representations are of extremely high quality, showing a balanced consideration of the issues involved in this question. The democratic representatives of communities across London and the Thames Valley have been here throughout, or almost throughout, accurately representing the views of their constituents. The majority of MPs making representations have opposed. It would require far more convincing arguments in the proposal’s favour than BAA and British Airways have made to justify proceeding with Terminal 5 in the face of such a strong public demand that it should be rejected. It is relevant to note at this point the strong contrast between the views expressed by the public and their representatives at this Inquiry compared to the most recent previous airport inquiry, at Manchester, where the decision was to approve a second runway. The Manchester report states that approximately 15,000 written representations were submitted of which three-quarters supported the proposals, while the majority of MPs and local councils also supported. (CD 243a, paras 26.1.3-4) At Heathrow, the position is the reverse.

Sir, we believe that, if you are minded to reject the Terminal 5 proposals, it is essential that you do so in strong terms which present the Government with no option to propose some compromise of, possibly, limited expansion. We consider it scandalous that the Government has pre-approved Terminal 5, via BAA’s regulator, to the extent that the company will have received over £400 million to build the terminal from third parties by the year 2000, before your report is likely to be published. We consider it scandalous that BAA’s Inquiry expenses of £60 million are being paid by third parties, while the local authorities receive no contribution. (See HAC 113) We have no doubt that the Government has always considered that your role, Sir, is to approve Terminal 5. It will therefore be necessary to make any rejection watertight if it is not to be overturned in practice — an outcome of Heathrow inquiries with which we are all too familiar.

The detailed elements which we urge you to include in a rejection are much as outlined in our statement of case. For environmental and safety reasons there must be a limit on flight numbers. We still propose the figure of 450,000, which is likely to be reached as you write your report. Runway alternation must be confirmed as a
fundamental aspect of Heathrow’s operations, throughout the operating day, without exceptions dressed up as tactical measures.

Given your wider remit in helping determine Government aviation policy, we do now also call upon you to recommend strongly a night curfew at Heathrow, at least during the period 11.30pm to 6am. We believe we have presented unarguable evidence that night flights cause misery on a completely unacceptable scale. I apologise for the unavoidable confusion that this statement will cause to Mr Randle and the DETR.

I hope our wider comments on our positive vision for a four terminal Heathrow are of some help in your consideration of what a sustainable, integrated transport policy might mean for Heathrow.

Sir, you have frequently explained to members of the public both here and at local public sessions that you will make your decision on Terminal 5 on the evidence presented to you. We ask for no more than this. We are happy to trust to the outcome of your careful consideration of the evidence.