



Response to the Department for Transport's Consultation Paper
'Developing a sustainable framework for UK aviation'; March 2011

The aviation sector

1. How does the aviation sector as a whole benefit the UK? Please consider the whole range of aviation activities including, for example, air freight, General Aviation and aerospace.

Civil Aviation makes a vital contribution to the UK economy through the activity of its airlines, airports, air traffic control services, aircraft manufacturers and the numerous suppliers who provide goods and services to it. It also serves the nation and economy through the journeys, commerce and tourism it facilitates and keeping the UK at the centre of the world stage.

The UK is at the forefront of international aviation. Its airports handle 230 million passengers a year. London Heathrow is the world's busiest international airport and the UK's largest single employment site. British airlines, ATC, aero-engine, aerospace systems, manufacturing and technology are world leaders in service, innovation, technology and product development.

The air transport industry directly employs 141,000 people in the UK, increasing to some 234,000 with indirect employment. The Aviation Sector contributes some £8.8 billion, or about 1% of the UK's annual GDP, excluding the less tangible economic benefits that aviation affords.

There are some 5.5 million Britons living abroad with a focus on France and Spain and key long haul destinations such as Australia, Canada, South Africa, the USA and India. Aviation plays a vital role in enabling them to stay in touch with friends and relatives in the UK.

Notwithstanding the current recession, DfT forecasts the industry will be carrying some 450 million passengers by 2030, a virtual doubling of demand. Having grown six fold since 1970, a number of our major airports have insufficient capacity to meet current demand let alone these future needs. Heathrow crucially needs another runway to regain its competitive hub network versus European airports. It currently links only six UK regional airports compared with 22 that are linked to Amsterdam. The development of the whole UK economy is inexorably linked with the provision of comprehensive air transport links whether by scheduled, charter, business or general aviation services.

The positive contribution of the industry and its further development must not be prejudiced by a lack of investment in vital infrastructure, particularly additional runways, or by Government increases in Air Passenger Duty, which is already contributing £3 billion a year to the Exchequer. The industry is responsible for under 3% of the nation's CO₂ output and is committed to meeting international

environmental targets. It has reduced fuel burn per passenger mile by 70% in the last 20 years with further reductions planned, and it has consistently reduced fares in real terms. The industry meets all its investment and operating costs.

The aviation industry is a UK success story that deserves positive policy support from Government.

2. What do you consider to be the aviation sector's most important contributions to economic growth and social well-being?

The aviation sector is itself a vital component of the UK's manufacturing industry, leading the world in both civil and military aircraft and component design. Through its ability to link the UK with all its global customers, the industry helps those other critical aspects of the British economy that seek to preserve the nation's standard of living, by providing rapid and frequent links for business travel, by carrying the high-value exports as air cargo, and by encouraging inbound tourism.

In terms of social well-being, there are two main benefits – primarily, the ability to offer low-cost travel for British travellers, whether on holiday or for visiting widely-spread friends and families. Secondly, it helps with the social (and political) cohesion of the United Kingdom, by offering air services linking the capital with all the regions of the nation, especially in the devolved administrations and those parts separated by water from the mainland.

3. Are some sub-sectors of aviation more important than others? If so, which and why?

The Air League believes that the most crucial sub-sectors are those that support international trade, particularly long-haul business flights to emerging markets in Asia and elsewhere that will help to determine the future strength of the British economy. Provision also needs to be made for business aviation, which provides senior decision-makers with additional levels of flexibility.

4. How do you think the global aviation sector will evolve in the medium and long term (twenty to fifty years)? What do you expect to be the most significant changes?

The focus of global aviation will move east from its current Western Europe – North American axis to a more Asian-dominated industry. Britain will have to fight harder to stay in the forefront of the aviation industry, and ensure that its aviation industries and infrastructure can cope with such a change.

The markets will not wait for nations to improve their aviation infrastructure, but will gravitate to places where capacity is provided and where aviation activity is welcomed.

As demand grows and more efficient mid-size jets (such as the B787 and A350) emerge, major hub airports will be side-lined by the growth of more point-to-point services.

5. How, and within what constraints, can aviation growth occur as technological developments and improved operating procedures reduce CO₂, pollutant emissions and noise impacts?

British industry and universities are in the forefront of efforts to reduce or improve the fuel utilisations, emission and noise outputs of aircraft. NATS and ATC equipment manufacturers are seeking to minimise unproductive flying and poor operating techniques; but a simple determination of a problem does not mean that there is an equally simple solution.

Alone amongst transport modes, aviation (consuming less than 3% of the UK's fossil fuel output) does not yet have any realistic options to reduce such consumption. The aviation industry worldwide will continue to seek innovative solutions to this problem, but they are not yet apparent.

If the consumption of fossil fuels is to be reduced, the Air League believes that this should be done on a global basis, not one where Britain leads, and many others (competitors) choose not to follow.

6. *How should decision-makers address trade-offs or competing interests, where these occur both (a) between different aviation objectives, e.g. CO₂ emissions versus local noise reduction, and (b) between aviation and other sectors, e.g. airspace use versus renewable energy objectives, or the use of land for maintaining a viable network of smaller airfields versus housing development?*

The Air League asks two questions of each competing interest – what does it do for the future wealth of the economy; and what does it do for the future health of the nation? These two elements would then have to be measured against each other, using the same comparators for aviation as for any other land use proposal, be it for housing, intensive agriculture, power stations or new rail infrastructure.

Proposed additional runways in the London area should receive the same disinterested comparison as a new rail link between London and Birmingham or a new nuclear power station – the same approach to whole-life carbon costs, the same approach to displaced housing and increased noise and pollutant levels, the same approach to the valuation of alternative land uses, and the same approach to wealth creation.

7. *Should some aspects of UK aviation be considered to be of strategic national interest (e.g. certain airports, air traffic control)? If so, based on what criteria?*

The Air League would argue that all aspects of UK aviation are of strategic national interest – airports used for business purposes, airports for leisure travel both overseas and local, military airports to safeguard national security, business and general aviation airports, peripheral and island airports. Every passenger and every shipper considers that their flight to be at least highly desirable. Moreover, these separate activities support a strong and growing industrial sector. General Aviation is also responsible for initial training of almost all the pilots required for commercial aircraft.

8. *How might the cost of regulation to the aviation sector be reduced, while achieving the Government's objectives of promoting sustainable aviation, improving the passenger experience at airports, and maintaining high standards of safety and security for passengers and freight?*

There are three key areas of regulation – safety; security; and economic.

Air safety is paramount and the CAA is a world leader in promoting the safe operation of aircraft, airports and airspace. The Air League would not want to see any diminution of the level of safety regulation – it is a primary duty of the Government, currently delegated to the CAA, and should not be a light touch regulation. However, if the Government is seeking to reduce its own expenditure, it is possible that it could choose to delegate its powers to EASA as an equally competent organisation, with the assurance that certain key individuals at the CAA could be transferred to this European body. At the moment there is a significant duplication of effort between the CAA and EASA, and certain disagreements between the two organisations which are unhelpful to the industry. There should be a consistent global approach.

It is not considered advisable to delegate security regulation to a pan-European body: the Air League strongly believes that the United Kingdom Government should retain its own regulation team. Every effort should be made to ensure that the necessary security can be achieved at minimum cost to the industry, and at minimum inconvenience to the travelling public.

As for economic regulation, the Government needs to ensure that there is a minimal level of regulation to prevent consumer and pricing abuse by airports, each of which has a *de facto* local monopoly, often enhanced by a lack of competition due to Government restrictions on increasing capacity. The recent enforced sale of Gatwick by the BAA to a competitor has not, and cannot, lead to increased competition because each company has been prohibited from increasing capacity – the monopoly has been replaced by a duopoly, and recently both have greatly increased the price of their product for domestic flights.

It is not considered necessary for the Government to become involved in determining the standard of passenger experience at major airports, any more than it does at football stadia or shopping malls – consumers will continue to vote with their feet. Heavy handed regulation was one of the factors which persuaded the shipping industry to desert Tilbury and the London docks for the freer regulatory atmosphere of Rotterdam – the Government should heed this lesson when contemplating the future of the UK's airports and their customers.

International connectivity and hub airports

9. How important are air transport connections – both international and domestic – to the UK at both national and regional levels?

The Air League believes it is a fundamental necessity for the UK to have at least one hub airport that can offer the full range of international and domestic connections needed by British business to enable all parts of the nation to trade in today's – and tomorrow's – global market. Without links to all the major business destinations, particularly in the burgeoning markets of China, India, Brazil and Russia, the global city that is London will have difficulty in competing with its neighbours and competitors, either for trade or for foreign investors and tourists.

As for the British regions, unless they have good links with that hub airport, they may be left off the map for foreign investment. Companies in Scotland, Wales, Northern Ireland and the more peripheral parts of England are finding that they cannot achieve traction in the global market unless they re-locate their head

offices and – in some cases – their manufacturing facilities to the already crowded south-east.

10. As long as people and goods can easily reach their desired destination from the UK, does it matter if they use a foreign rather than a UK hub airport?

The Air League would answer this question by comparing the benefits to the national wealth as opposed to the national health. Some passengers choose to fly via a continental hub, even when it is possible to fly via Heathrow. However, for many that choice does not currently exist – the flight to Paris or Frankfurt will often be easier and cheaper than a long surface trek to Heathrow.

In terms of wealth creation, it makes more sense to support key routes from London than to hand over markets to competitors, who will then use this extra demand to build yet more runways. If they do not, and they themselves become constrained, then the peripheral regions of the UK will not have even that option available, as they will lose their slots as surely as they have already lost them at Heathrow. Development of a London hub that protects regional feeder flights would be the only real guarantee of global access for our regions.

The volume of long-haul flights at Heathrow is heavily supported by the wealth of interline connections made available at a hub, both international and domestic – cut the feeder flights, and the long-term future of the long-haul flights (and the hub) is put in needless jeopardy.

11. Are direct connections from the UK to some international destinations more important than others? If so, which and why?

Yes. The over-riding importance is for flights to major trading cities, both short-haul to Europe and long-haul.

12. How will the UK's connectivity needs change in the light of global developments in the medium and long term (twenty to fifty years)?

The current expectation is that the emerging economies of Asia and Latin America will become more important in the coming decades as business destinations, with slower growth to the established economies of North America and Western Europe. Demand for Middle East hubs such as Dubai and Abu Dhabi is expected to ease back once the ultra-long-range A350 and B787 become available from London, offering low-cost direct service from the UK to a much wider variety of destinations.

Because of the distances and time zone opportunities, flights to long haul destinations will be concentrated into two main waves – early morning and mid-evening – to benefit from night-flying over such long routes. This will put more pressure on peak-time flights from provincial airports into London.

From London, an increasing number of longer-haul flights are expected to be operated by the A380, while the smaller B787 and A350 will enable a few centres such as Manchester, Birmingham and Edinburgh to support a growing number of direct intercontinental flights.

13. What are the benefits of maintaining a hub airport in the UK?

For London to be a truly global city, with all the consequent benefits for the wider economy, it needs to be linked to every major long-haul (business) destination,

and preferably to more than its European competitors, Paris, Frankfurt and Amsterdam. But it is not just about the long-haul links. When a multi-national company is seeking to set up a single base in north-west Europe to serve the continent, it will want to be able to fly from its chosen local airport to a wide range of other regional destinations throughout Europe. If London cannot compete on this aspect, Frankfurt and Paris will begin to look more attractive.

Airlines catering for the business market also prefer to fly to a major hub, which they would define as the one with the best set of connecting flights covering all the areas of interest for any particular airline – this helps to guarantee loads for their flights.

There is also a major benefit for the peripheral areas of the UK, especially those that have insufficient traffic to justify flights to all or any of the other European hub airports – often London is their only option, and today that means flying to one of London's other airports and making a difficult transfer from one to the other. The more a community is denied access to a global hub such as Heathrow, the more difficulty it will have in competing on the world stage. Britain needs its regions to be competitive. Access to other hubs such as Frankfurt cannot be guaranteed for cities such as Belfast and Aberdeen, let alone the smaller communities.

Currently, under existing Airline Passenger Duty regulations, long-haul flights are significantly cheaper when taken via competing hubs such as Amsterdam.

14. How important are transfer and transit passengers to the UK economy?

Transit passengers are now few and far between – the trend in aviation is towards single-sector flights, with few if any flights now transiting London, and even fewer expected in the future with the advent of the ultra-long-haul aircraft.

On the other hand, transfer passengers on long-haul flights are vital in enabling these routes to operate profitably. Often, 30-40% of the passengers joining a long-haul flight in London have arrived by plane from elsewhere. Without those transfer passengers flying in from Europe or distant domestic points, long-haul flights would be less frequent or they would use smaller aircraft and become more expensive. Those passengers are needed to make the route and the larger aircraft economic.

15. What are the relative merits of a hub versus a point-to-point airport?

A hub airport attracts airlines far more than a point-to-point airport: it gives a much wider range of potential connecting markets, and makes each airline less dependent upon any one market.

Airlines are not unique among transport operators in seeking hub 'stations'. The design of Crossrail is such that it seeks to interline with other underground and Network Rail stations in order to improve the range of options for passengers. Point-to-point airports are airports such as Stornoway, Newquay or City of Derry that have failed to become a hub airport - they exist solely to serve the local markets and have no expectation of having a suitable location in which to attract other routes. London's location close to the heart of European demand has been a great factor in determining its success as a hub – even the largest peripheral cities in Europe, such as Glasgow, Lisbon and Helsinki will never truly develop as hub airports.

16. Would it be possible to establish a new 'virtual' hub airport in the UK with better connectivity between existing London and / or major regional

airports? Could another UK airport take on a limited hub role? What would be the benefits and other impacts?

This will never be possible while Heathrow remains operational. Were a major new four-runway airport to be constructed in South East England, it would become a successful hub airport if Heathrow, Gatwick, Stansted and Luton were closed.

Despite the attractions of transfer passengers, particularly for long-haul airlines, the key to any successful route will still be the size of the main market supporting that route – in this case the London region: short-haul airlines will seek to get as close to that market as they can. The success of London City bears out the importance of location versus transfer traffic for short-haul routes, even if the passengers desire to travel to a hub for onward flights.

It might be possible for Gatwick to become a secondary hub for London. For a while in the 1980's it was close to success, as British Caledonian Airways was permitted to acquire a number of long-haul routes and provided them with a range of short-haul feeder services and a helicopter link to Heathrow. Now that Gatwick is full, mainly with low-cost operations, it has no hub potential while it is policy is to deny the airport a second runway.

Birmingham Airport may have the ambition to become a second hub airport for the south-east, especially if it becomes connected to the HS2; but again its lack of a parallel runway will make it very difficult to compete with Heathrow.

Regional connectivity and regional airports

17. Can regional airports absorb some of the demand pressures from constrained airports in the south-east? What conditions would facilitate this?

Regional airports are already partially fulfilling this role. Pre-recession regional airports, particularly those relatively close to south east England such as Birmingham, Bristol and Southampton, displayed growth rates significantly ahead of those in London as slots at south east airports became increasingly scarce and expensive.

The conditions needed to facilitate this are already in place – total congestion at Heathrow, relative congestion at Gatwick and London City, and also (until recently) at Stansted and Luton.

When the economy picks up, the early beneficiaries are likely to be Stansted and Luton, and also Southend with its new owner, a lengthened runway, a rail station and a low cost operator resident. Theoretically, Manston and Lydd could also pick up business turned away from London's preferred airports, as they are only some half the distance of Birmingham from London, but surface access is against them, as well as the almost total absence of strong local markets.

Short runways at Coventry and Southampton will not be attractive to many operators, while Norwich is poorly located. This leaves only Birmingham and Bristol possibly able to help the beleaguered London market. However, both the main railway lines to these cities are congested, and the eventual electrification to Bristol will still leave a seven-mile journey along congested, local roads. East Midlands and Doncaster-Sheffield airports may believe that they have the ability

to divert some London-bound business, but both distance and direction are against them.

Theoretically, more distant destinations such as Manchester, Newcastle, Glasgow and Edinburgh could operate additional direct services at the expense of feeder flights to Heathrow, but airlines are already operating every conceivably profitable route from those airports. The only way that these can be 'helped' is by the enforced closure of their routes to Heathrow, but this is not regarded as an optimum solution for the UK economy, and particularly for London, for the reasons given above.

It should be all about location and airline economics and the wider national economy, and not just about further reducing neighbourhood noise in West London, when it has already been substantially reduced by improved engine and airframe design.

18. What more can be done – and by whom – to encourage a switch from domestic air travel to rail?

The Air League does not encourage a switch from domestic air travel to rail, especially when it is not convinced that the whole-life carbon costs of constructing a new HS2 line plus the electricity used to power the trains (from coal and oil-fired power stations) will be more beneficial to the climate than the construction of just 3 kms of runway. The argument will be felt most keenly in places like Northern Ireland, the outer isles and Cornwall, where taxpayers will receive no benefit from the expenditure of some £30bn.

Of the first three destinations proposed for HS2 – Manchester, Leeds and Birmingham – only one has an air service to London today, with some 80% of its passengers taking connecting flights. The scope for switching is negligible when compared to the cost.

The whole point about aviation is that aircraft are more akin to buses than trains – they have an average load of some 80-100 passengers (except at over-heated London) and they are able to connect smaller cities at frequencies which meet the demand. Flights linking Cardiff and Edinburgh currently carry some 111,000 passengers a year, i.e.150 passengers a day in each direction. This is equivalent to an extra 20 passengers for each of the seven trains advertised daily between the two capitals, each taking a minimum of six and a quarter hours, and each requiring at least one change of train. There will be major costs involved in upgrading the track between the two cities, or of running seven fast trains a day with at most two carriages, in order to replace these well-supported air services.

The situation is even more difficult when one considers airports such as Belfast, City of Derry, Stornoway, Kirkwall and Lerwick – all of which would need extra investment in shipping services. By all means encourage car passengers to travel by rail, but the options and the cost of converting air passengers to rail are not sensible, and the carbon benefit not substantial.

19. How could the benefits from any future high speed rail network be maximised for aviation?

Unless any new rail investment includes a direct service to an airport, there is seen to be very little benefit to aviation, and no observable benefit to the railway.

The proposed link between Heathrow and Old Oak Common may ease the difficulty for the rail operator in attracting traffic to any new HS2. However, because there are only air services today from Manchester, the bulk of any passengers using such a new rail link to Heathrow are expected to have mode-shifted from car or other rail services rather than from aircraft, which is therefore of no benefit to aviation. A rail service to Heathrow might attract passengers who would otherwise have flown abroad directly from Birmingham, but again this would be of no net benefit to aviation as a whole.

The benefit is seen as being predominantly to the global climate from the replacement of a small number of Manchester-Heathrow flights by trains using (fossil-produced) electricity. The net effect on neighbourhood nuisance around Heathrow compared to the full-length of the HS2 network has yet to be demonstrated.

If a direct link is successfully constructed between Heathrow and other cities, the experience of successful airport train operators in Germany and Switzerland should be obtained regarding through-ticketing and remote baggage check-in.

20. How can regional airports and the aviation sector as a whole support the rebalancing of the economy across the UK?

The re-balancing of the British economy to take pressure off the over-heated south east and regenerate the more peripheral regions of the nation is to be desired. It is believed that aviation is already playing a significant part in that process.

First, it has to be recognised that there are sufficient airports in the remainder of the United Kingdom, with sufficient runway length and facilities, to meet almost all of the legitimate aviation needs of those regions.

Second, it is believed that the airlines (predominantly British, but also some foreign ones) are doing all in their power to increase the number of direct flights from each of these airports – it is in their own best interest. There is no constraint on airlines operating any scheduled or charter service it might desire, except to a few third-world nations where Government permissions might still need to be obtained.

Third, there is no shortage of airlines – any airline based in the thirty European states of the EEA may operate scheduled or charter flights within Britain or to any other EEA destination.

There are only two real limitations and one of these is the size of the local markets. There is little that can be done in the short term to significantly increase demand from these locations. The other limitation is the ability of the more peripheral regions to access London by air, and particularly global destinations via Heathrow or any other major European hub. The closer a region is to London, the more it can reasonably rely on surface access to keep the local economy competitive on a global scale – the more distant it is, the more vital it is to have air connections.

The Government needs to assist these peripheral regions – particularly those whose link with London is over water - to connect directly with major hub airports (either in London or on the continent) that will enable them to connect with the whole wealth of global cities. In this way, aviation will be able to assist these

peripheral regions, and also take some of the pressure off the over-heated south-east.

Ideally, these cities need links direct with Heathrow, as many of them once had in the past. To help these routes, the Government could use the Public Service Obligation route, used elsewhere in the EU, to obtain slots in Paris or Amsterdam for the remote regions. It would fund the difference between the costs of the operation and the resultant revenues, which would be less than for a London operation where slots would have to be purchased.

In the past year, both Durham Tees Valley and Leeds Bradford have lost their direct links to Heathrow, while the number of flights from Glasgow has been halved as airlines use the scarce slots for more valuable longer-haul services. There is no reason why the haemorrhaging should stop there – there is no security for the routes to Newcastle, Aberdeen or Belfast, or for all the frequencies remaining at Manchester, Glasgow and Edinburgh. Indeed, Heathrow has tightened the screw this year by substantially increasing the fees paid by domestic flights, and the inexorable increase in slot demand by foreign airlines.

Added to this, the substantial increase in Airline Passenger Duty has hit regional passengers hard – it is now more sensible for passengers to make their own way from the regions to Amsterdam to save substantial sums on flights to Australia, while residents of Northern Ireland are increasingly driving to Dublin to benefit from a more reasonable approach to airline taxation. This problem may be eased in future if the devolved administrations are allowed to set their own APD policy to meet their own needs.

Making better use of existing capacity

21. a) To what extent do UK airports meet the needs of their customers?

b) How might those needs be more effectively met within existing capacity?

c) What is the right balance between competition and regulation?

a) The specific needs of cargo are not considered here. The need of passengers is for a speedy transit between their journey origin and their ultimate destination at least cost. There is no specific demand for ‘an airport’ or even an ‘air journey’ – these are derived demands, and the passengers require these aspects of their overall journey to be as hassle-free as possible, with the minimum of wasted time. The larger the airport, the less well it meets these needs, with the largest airports wasting the most time and causing the most hassle.

The most ‘successful’ airports – as far as passengers are concerned - are those where passengers can be processed (necessary customs and immigration) before leaving the aircraft, get into a taxi or their own car at the foot of the aircraft steps and be away in just a few minutes. It is not a dream – the reality occurs for business aviation passengers at Farnborough, Northolt, Battersea and elsewhere. This is impracticable for larger airports, but the objective should not be lost sight of. Instead, passengers feel they are on an obstacle course, with duty-free shops and other distractions lengthening the route between check-in and departure gate, and with unnecessarily long check-in times.

- b) Most UK airports try to minimise check-in time, provide adequate seating for the inevitable delays, together with refreshment facilities, and try to reduce hassle overall. The Air League is aware that the Government is seeking how best to improve the passenger experience at London's major airports and has faith that this will lead to easier journeys for passengers in future.
- c) The Air League favours open competition to regulation – it has proved beneficial in the manufacturing side of aviation and is likely to prove the best solution for airports. However, it is recognised that there is a strong element of monopoly concerning airports and the specific locations they occupy. Because of the regional location of industry, services and residences (particularly of those who can afford to fly) airports to the west of London will always fare better than those on the other three sides. Many companies and their employees have subsequently selected locations along the Thames Valley as a result of the location of these airports.

An absence of regulation has helped this situation to develop, with the owners of Heathrow not seeking to increase its capacity (until recently) with first Gatwick, then Stansted, taking on the roles of overspill airports. The most recent use of regulation has been the requirement for the BAA to sell Gatwick to a competitor, to be followed by the sale of Stansted. This has however been accompanied by strict regulation on the construction of new runways at all three airports so that the ability to compete is now extremely limited – the key slots at all three airports are 'regulated' under IATA and EU rules to favour incumbent airlines, leaving the airports hamstrung in their ability to compete with each other: regulation has affected their ability to compete through pricing mechanisms.

Regulation does not appear to have stimulated competition and has not produced additional capacity; nor has it protected the travelling public from substantial price rises at both Heathrow and Gatwick for domestic operations. Regulation seems merely to have replaced a monopoly with a duopoly. It might be preferable to have no economic regulation at all, leaving the airports to compete for air services in an open market. It is after all the airlines who are the main source of competition for passengers, rather than the airports.

22. a) Can we extract more capacity out of the UK's existing airport infrastructure?

b) Can we do this in a way which is environmentally acceptable?

c) To what extent might demand management measures help achieve this?

- a) Apart from Heathrow and Gatwick, UK airports are rarely operating at capacity and they can use the examples set by London's two congested airports to further increase their own capability. Both Heathrow and Gatwick are globally 'best in class' in extracting the maximum number of aircraft movements from two parallel runways, and from one runway. There is little more that can be achieved, but some expansion is still possible.

At Heathrow, there is potential to accept a further six to eight commercial movements an hour by the adoption of mixed mode - these slots may be used to increase resilience during times of stress, caused by either weather conditions or an incident on one of the runways. We would recommend that mixed mode slots be used to provide additional slots for additional domestic flights, under PSO protection.

The other alternative is to continue the inexorable increase in average aircraft size. This could be achieved by accepting the continuing loss of feeder flights from domestic points and near-European destinations as airlines cash in by transforming or selling their slots for long-haul flights. In theory, every flight at Heathrow could be operated by A380 type aircraft without any increase in runway capacity – but with a significant loss of short-haul interline feed.

At Gatwick, there does not seem to be any similar capability to increase hourly throughput – the only spare capacity available is during winter and a solution may be to price out seasonal flights such as summer holiday charters by charging airlines for an apron-space (i.e. a slot) year-round and levelling up year-round to the existing summer peak. This would cause the airport immense unpopularity amongst both airlines and passengers, as holiday flights would then be effectively banished from both of London's key airports.

- b) It should be environmentally acceptable for small aircraft to be replaced by larger aircraft, particularly as the more modern aircraft tend to be quieter and to use less fuel per seat kilometre – however, they will use more fuel per slot than the smaller aircraft they replace, and increase overall carbon output. The adoption of mixed mode at Heathrow has already been turned down solely on environmental grounds, following an earlier agreement by the BAA with the residents of Cranford. Any extra winter flights at Gatwick are likely to be accepted reluctantly by local environmentalists.
- c) It is not clear what further demand management tools are available. Historically, both Heathrow and Gatwick are bound by IATA (and EU) rules concerning the use of slots under 'grandfather' rights agreements. The USA considered taking back some or all slots from congested airports and then auctioning them, thus hastening the demise of short-haul feeder flights from domestic destinations – but for the moment is not following this through. The owners of both Heathrow and Gatwick have recently chosen to penalise domestic flights with extra charges, which is likely to lead to an increase in average aircraft size – and in complaints to Government from its regional taxpayers. The Government does have the option of increasing APD disproportionately on short-haul flights to price them out of operation.

For the record, the Air League is not in favour of ANY of these options, and believes that the Government target should be to try and meet legitimate demand, rather than penalise its own regional constituencies in an attempt to maximise airport profits in what is already an over-congested system.

23. a) How can we support Heathrow's hub status within the constraints of its existing capacity?

b) Can we do this in a way which is environmentally acceptable?

- a) The Air League has already forwarded its proposed solution on this to both the Department for Transport and to the Prime Minister's office, and is happy to repeat it here.

The Government should rapidly agree to the sale of the operational side of RAF Northolt to the private sector, and allow it to be developed once more into a civil airfield. Studies have shown that if the current runway is realigned such that it is parallel to Heathrow and extended to 2,400m, the airport can support up to 32 movements an hour, or almost 200,000 movements a year, based on a 17-hour day – 150,000 should be comfortably achieved.

A new airport terminal could be linked directly to South Ruislip station by an underground or overhead walkway (with travelators) of just one kilometre, with high frequency tube trains to Oxford Circus in 35 minutes, or heavy-rail link to Marylebone in 15 minutes. Electrification of the five miles of track between South Ruislip and Hanwell would enable a direct link with Heathrow to be offered in just 15 minutes, providing interline connections at least as convenient as between the existing terminals at Heathrow.

The new runway would be significantly longer than that at London City and could accept all turbo-prop and a number of jet aircraft up to the Airbus A321. This would not impact upon the necessary vital functions undertaken by the Ministry of Defence at Northolt, whose flights would always take precedence if necessary.

It is estimated that around 75,000 short-haul flights could be transferred from Heathrow, with a further 75,000 slots used to serve routes which have long since lost their direct links with that airport, predominantly domestic and near-Europe. Airlines and communities are already showing great interest in this proposition.

The 75,000 short-haul aircraft slots released at Heathrow could be used by A380 type aircraft, increasing Heathrow's throughput by up to 30 mppa over time, with no increase in flights.

- b) There will always be environmental objections to any increase in aviation activity. However, the increased use of A380s at Heathrow compared to smaller jets should not be too difficult to overcome environmentally. The greatly increased use of Northolt will cause problems for those living in Harrow and Ruislip, but the turbo-prop and small jet aircraft in use today are significantly quieter than the Viscount and other turbo-prop aircraft which were the mainstay of Northolt's operations in the 1950s. When compared with the Sipson option, there will be no increase in land required for aviation and no dwellings affected – all the necessary redevelopment would take place on the existing site. Instead it meets the current White Paper recommendation to 'make best use of existing infrastructure'. It is the most environmentally-friendly option for expansion of Heathrow and the provision of links between the capital and the peripheral British regions.

24. a) How important is increased resilience at the UK's major airports to reduce delays?

b) How best could resilience be improved with existing capacity, e.g. how might trade-offs between existing capacity and resilience play a role in this?

- a) A major consequence of the refusal over the past decade to accept any further runway construction in the London area has been increasing congestion in the air, on the runways, on the taxiways and apron, in the terminals and on the access roads. One of the side-effects of this has been that the advertised time for a 60 minute flight from Heathrow to Glasgow has had to be increased by some 30 minutes, even though the actual flight still takes the same time. This has forced the airlines to purchase additional aircraft and employ additional crews simply in order to operate the same pattern of flying, putting up the cost of the ticket substantially.

Both airlines and passengers will put up with these inconveniences in order to operate at and travel from the best-located airports in south-east England. Both airlines and passengers have the option of flying from Stansted or Luton, where there is still under-used capacity, or at a number of regional airports.

The current movement rates are approved by the airports, by NATS and by the airlines themselves, implicitly accepting the importance of increased output rather than increased resilience.

As a result, although the Air League would wish to see an improved travel experience at both Gatwick and Heathrow, it would not wish to see that at the expense of the current number of flights operated.

- b) The Department is believed to be looking favourably at the use of the mixed mode mechanism at Heathrow to help solve resilience problems when the airport is under extreme distress: the Air League would agree with this option. However, it would not be able to support any option which reduced the current number of flights per hour – it is more interested in increasing throughput by the use of reliever runways which have already been constructed and which are currently little-used.

25. a) Could resilience become an issue at regional airports?

b) If so, how might this be avoided?

- a) It is not considered to be an issue today, nor is likely to become one in the near future.
- b) If the Government wishes to avoid a repetition of the London experience at major regional airports, the simplest way would be to become involved in the runway utilisation discussions held between each airport operator, the airlines and NATS at an early stage; and to determine a maximum hourly rate which may be some 10% less than the industry wishes to see and believes to be feasible.

26. a) Could existing airport capacity be more efficiently used by changing the slot allocation process, for example, if the European Commission were to alter grandfather rights?

b) If so, what process of slot allocation should replace it?

- a) The Air League is concerned by how to measure 'efficiency'. From the foregoing questions, it would appear that 'efficiency' is defined solely as the maximum number of passengers per year, but this is unlikely to be the best definition. For a start, it would assume that the airport should handle no cargo flights. Secondly, it would appear that increasing the number of daily flights to New York from the current 30 flights a day to say 40 at the expense of domestic flights around the British Isles is 'more efficient' than providing peripheral communities with access to London and the world.

Abolition of 'grandfather rights' might meet the Department's own definition of 'efficiency', but that would damage the 'efficiency' of the whole aviation network including interline feed from short-haul destinations. It would give airlines a total lack of security of their operating capability at any given airport, and peripheral regions would never feel confident that this year's schedules and routes will be there in a year to come.

If this concept were to be adopted in aviation, the Air League would wait to see it applied to other transport modes where there is congestion – would commuter trains from Euston be replaced by long-haul trains to Scotland, and tolls applied to the M25 to 'discourage' car-users from only using short stretches. The right approach to the use of scarce resources is not to kill off demand but rather to meet it.

- b) We would not wish to see any substantive amendments to the present runway slot allocation methods – there is already enough flexibility in the system to allow 'inefficient' users to sell their slots to 'more efficient' airlines.

27. What provision, if any, should be made for regional access into congested airports?

The Air League recognises that the current free market approach will lead inexorably to a decline of domestic air services into Heathrow, to be followed in time by a similar reduction at Gatwick as that too becomes totally congested.

We strongly believe that the nation needs to recognise the global transport needs of the regions, particularly those for whom road and rail travel are too lengthy to be attractive to inward investors. Currently, each of the four Ministers in the Department for Transport represents a constituency in South East England, with the furthest north still being south of Luton. The Department needs to recognise that it retains international transport responsibilities for Scotland, Wales and – particularly - Northern Ireland, as well as for the Isle of Man and the Channel Isles.

The evidence of demand for direct services from the regions to Heathrow is substantial. The Government should use the EU-sanctioned PSO mechanism to protect regional flights into Heathrow and Gatwick.

28. What provision, if any, should be made for General and Business Aviation access into congested airports?

Currently, general and business aviation flights are allowed into Heathrow and Gatwick Airports, but only on *ad hoc* basis which, although unsatisfactory, is tolerated by these users – they recognise that commercial aviation is of far greater importance.

Because of the much shorter runways required by these aircraft, it would seem reasonable for the Government to continue to allow growth at other GA airports in south east England, where there are still significant levels of capacity. For example, Business Aviation should be encouraged to operate into Farnborough, Biggin Hill and other airfields close to London, including London City while it still has the capacity. For those business journeys that need to terminate at Heathrow or Gatwick in order to connect with an intercontinental flight, it is suggested that such journeys be made by helicopter (which do not require the use of a scarce slot), either for the whole journey, or to a nearby runway which can accept the business aviation aircraft.

The growing market for General Aviation in south east England needs to be accommodated and it is recommended that the Government give every encouragement to those lesser airfields that meet these requirements. It is very difficult to argue for any general aviation activity at Heathrow, Gatwick or London City. However, the GA industry is very important for the nation's manufacturing industry, and we will still need 'shop window' runways in the South East.

29. What is the role of airspace design and air traffic management in making better use of existing capacity?

NATS and UK manufacturers of ATC equipment are at the very heart of concerted European efforts to improve the use of air-space, runways, taxiways and apron space through the Single European Sky programme. They have much to offer in the way of increasing the throughput of aircraft through all these aspects of an air journey and of reducing carbon outputs by:

- Seeking to operate the most direct route between any two airports
- Seeking to avoid the use of stacking by careful sequencing of flights
- Promoting minimum-fuel, minimum-noise continuous descents into airports
- Reducing aircraft diversions by improving airport reliability in poor visibility
- Providing aircraft with continuous locational data and preferred routes
- Minimising taxiing delays through improved gate departure sequencing

All of these improvements seek to maximise both safety and throughput, and to minimise costs, noise and particulate pollution, and diversions and 'go-rounds'. This will all feed into more reliable – and therefore improved – runway, taxiway, apron and terminal throughput by incorporating the fourth dimension – time – into the current air traffic control procedures. The Department should do all in its power to hasten the introduction of the Single Sky, to help airports, airlines, passengers and the UK aerospace industry.

Climate change impacts

30. What do you consider to be the most significant impacts of aviation, including its non-CO₂ emissions, on climate change? How can these impacts best be addressed?

The Air League is aware of all the arguments linking aviation with climate change, including the surface journeys by road and rail made by passengers, cargo and staff travelling to and from airports. It is not competent to determine the relative rankings of the various components alleged to be involved in heating the earth such as carbon dioxide, carbon monoxide, methane, nitric oxide, nitrous oxide, other particulates and water vapour, or the altitudes at which each are released; or of the relative outputs compared to other transport modes, other industries, agriculture, energy production, or population growth.

We are concerned at the use of the word 'consider' in the question. It supports our view that there is still not a consistent consensus on the importance of each of these alleged impacts, and yet far-reaching decisions concerning aviation and therefore global economies are still being taken.

31. What role should aviation play relative to other sectors of the economy in reducing greenhouse gas emissions in the medium and long term?

Aviation should play its part, but not more so. Demand pricing is a fair system understood by the world as a whole. Any attempt to fix allocations may be determined by an individual government but may not be followed by others.

32. How effective do you believe the EU ETS will be in addressing the climate impacts of aviation? Should the UK consider unilateral measures in addition to the EU ETS? If so, what?

The Emissions Trading Scheme is effectively a system which transfers oil use from industries that can most easily survive on less fuel to those, like aviation, that are fully dependent upon it, and are prepared to pay the surcharges. In that it puts up the price of oil for airlines and therefore reduces demand, it thus reduces airline demand for oil, and therefore its consumption, with the expectation that this will have a positive cooling impact on the world's climate. As with any price increase, it will hasten research into the more efficient use of fuel by aviation.

Ideally, any such scheme should be globally administered – as it is, the EU ETS penalises European airlines far more than non-European airlines, with the result that the non-European airlines increase their share of the market. The overall impact on global fuel use (and any impact on climate change) is therefore reduced.

Similarly, any further unilateral action taken by the UK will penalise British airlines (and the British economy) and hand over a further advantage to all other European airlines, without making any significant impact on climate. It is clear to us that the UK should not seek to take further unilateral action; indeed it should concentrate its efforts in seeking to obtain an agreed global emissions trading scheme.

33. What is the best way to define and quantify the UK's share of the CO₂ emissions generated from international aviation?

The Air League has no view on the best way to define and quantify this obscure fact. If the sole purpose of this calculation is to penalise aviation, why not simply refer to the amount of fuel used, for all flying. The relevance of international as opposed to domestic is not seen, nor the fact that it relates to the 'UK' share only. Does this mean UK airlines, or to nationals holding UK passports who fly on airlines of all nations?

34. What is the potential for increased use of sustainable biofuels in aviation and over what timeframe? What are the barriers to bringing this about?

Experiments with biofuels for aviation are now all about sustainable halophytes, jatropha plant, camelina, tallow, algae etc which can be developed without impact on food and water supply or deforestation.

Sustainable aviation biofuel is one of the most effective solutions to reducing carbon emissions. Studies suggest that sustainable aviation biofuel could provide 60-80% savings in life-cycle CO₂ emission compared to kerosene. Sustainable biofuels could constitute 1% of the aviation industry fuel supply chain by 2015 and an increasing proportion thereafter. However, the rate of commercialization of this technology is critically dependent upon the level of investment.

There are several potential barriers to the commercialisation and use of sustainable aviation biofuel:

- The need for a harmonised sustainability standard. As a global business, aviation needs a harmonised standard to ensure that sustainability criteria are enforceable and equally applied across the industry. A patchwork of standards would inhibit the development of a commercially viable market.

- Absence of appropriate accounting systems. The ELI ETS needs to be implemented in a way that is consistent with the way the aviation fuel supply systems operate.
- Lack of large scale investment in R&D and deployment Biofuel feedstock production is still in the early stages of development and production has yet to be established at scale.
- Competition with other modes of transportation.

35. a) What mechanisms could the Government use to increase the rate of uptake of sustainable biofuels in the aviation sector?

b) In particular, how can we accelerate the successful development of second generation biofuels?

- a) The simple answer is price – if the final cost per seat-kilometre is lower from using bio-fuels than the cost of using fossil fuels, then the airline industry – and presumably all industries – will convert as much of their use as possible. This could come about without any need for government intervention, or may need increased taxation of fossil fuels or the subsidisation of bio-fuels.
- b) In order to accelerate the successful development of second generation bio-fuels, the government should look to provide further financial support to UK companies to undertake such advanced research, thus benefiting the UK economy while seeking to solve a global problem.

36. Which technologies (e.g. for aircraft and air traffic management) have the most potential to help reduce aviation's CO₂ emissions (noting potential trade-offs with local environmental impacts)?

It is not clear why a reduction in CO₂ emissions may need a trade-off with local environmental impacts. It is quite possible that a reduction of fuel burn at cruise altitudes may have no impact on particulate output or engine noise while taxiing, but there is no obvious reason why any such reduction in fuel use should lead to an actual increase in these other emissions. If such a situation were to arise, industry would seek to solve that problem as well.

The two most important technological avenues to reduce aviation's carbon dioxide emissions are in engine and aircraft design, and in air traffic control procedures. Of these, it is currently expected that the reductions of airframe weight through the increasing use of plastic composites offers the greatest possibility of reducing fuel use, and therefore CO₂ emissions. Work continues to improve engine performance, but the remarkable breakthroughs of the past 30 years are proving difficult to reproduce – it would appear that engine design is approaching its optimum. Although there is scope for still larger aircraft than the A380, producing even better seat-kilometres per gallon, demand has yet to be proven. Instead, significant fuel-savings will come about from the increasing use of these new, larger aircraft.

Air Traffic Management systems continue to improve aircraft fuel performance by reducing unnecessary flying (notably around operational defence areas and in stacks), by assisting airlines to operate continuous descent approaches which use minimum fuel, and by reducing unnecessary holding and taxiing at airports. Improved GPS technology, such as through the EGNOS programme, will reduce the number of times aircraft have to divert from their intended airport due to poor visibility. These will never produce dramatic improvements in fuel utilisation, but each improvement helps.

37. What more could be done to encourage the aviation industry to adopt new technology to reduce its climate change impacts?

The price of oil has already been referred to – passengers and cargo will not take kindly to increasing travel costs, but it is the simplest way of reducing aviation's fuel use, if that is seen as the easiest way of influencing global climate.

Incentives towards research into fuel utilisation and the production of greenhouse gases would benefit British industry and academia.

A minor improvement could be achieved if the UK CAA would allow British airlines to use globally-successful Single Engined Aircraft in Instrument Meteorological Conditions (SE-IMC), as practiced throughout most of the developed world. It would enable airlines to replace slow, petrol-driven twin-prop aircraft such as the Islander with faster, safer turbo-prop aircraft (such as the Cessna Caravan) using less fuel.

A similar improvement could come about through British enthusiasm for the EGNOS programme which would reduce the number of missed approaches, while providing greater safety for all aircraft.

38. What more can the UK aviation industry do to reduce the climate change impact of its ground operations and surface access to and from the airport (which can also help reduce local environmental impacts)?

The UK airport industry is already pioneering attempts to reduce carbon emissions, both through airport design and by the use of electric vehicles. This is driven as much by the increasing cost of energy as by any intention to cut carbon use. The government could encourage best practice amongst British airports by sharing such best practice with all airports.

The airport industry also has a good record at trying to improve the proportions of its staff and passengers who access the airports by public transport. Major airports have detailed surface access plans, often including new rail links and bus routes.

39. What scope is there to influence people and industry to make choices aimed at reducing aviation's climate change impacts, e.g. modal shift, alternatives to travel, better information for passengers, fuller planes, airspace management (which can also help reduce local environmental impacts)?

Not much. There is no incentive for airlines or airports to increase public transport use by staff or passengers; it is done out of concern for the neighbourhood, not for financial reasons, and often costs an airport significant sums. As for passengers, carbon offset schemes are available for those who are concerned about the environment.

Airlines are already motivated to provide the best information for passengers and to operate their aircraft as fully as possible, bearing in mind that if seats are not left available for last minute purchase, business travellers may not be able to obtain a seat at short notice and be forced to cancel vital trips.

Airports, airlines, air traffic control authorities, passengers and shippers all seek to minimise cost, and that will normally mean – with current fuel costs – minimising fuel use. Some passengers will subsequently find that the cost of travel exceeds the marginal benefit from the journey, and either cancel the trip or seek alternative solutions such as video-conferencing, or marketing via the internet, or taking a holiday in their own garden.

And yet the Government is spending significant sums to attract people from all over the world to fly to London to watch two weeks of games, when they could be televised to all without the expense of new stadia. If influencing people to fly less is a government ambition, it may need to set an example.

Local impacts

40. a) What do you consider to be the most significant impacts – positive and negative - of aviation for local communities?

b) Can more be done to enhance and / or mitigate those impacts? If so, what and by whom?

- a) The most significant positive impact upon local communities around airports is considered to be the ability it affords local residents and companies to make flights to business and leisure destinations, and to provide rapid transport for valuable and perishable commodities. It provides businesses in these communities with significant advantages over competitors not similarly located. This can be evidenced by the magnetism exerted by major airports such as Heathrow in attracting global and national companies to the western side of London, mirrored to the south by the smaller concentration of high-tech companies in the Crawley area seeking locations close to Gatwick. Those new towns such as Stevenage and Milton Keynes that are located far from a major airport have far less success in attracting multi-national companies with high levels of international travel.

The second obvious advantage that an airport brings to its local community is the scale and variety of additional job opportunities it brings – the general assumption is one job for every 3 passengers a day, or 1,000 jobs per million passengers a year.

The negatives are generally assumed to be measured in terms of noise disturbance, and to a lesser extent air quality. There are also problems caused for local public and private transport impacted by the additional demands made upon it by the existence of an airport.

House prices can be said to reflect the balance between advantages and disadvantages as seen by residents, and in general, house prices appear to be slightly higher for properties close to an airport compared with identical properties in similar locations but much further from an airport.

- b) Noise impacts can be mitigated by investing in R and D to develop quieter engines, more noise-efficient fuselages and wings, and more continuous descents by aircraft producing less noise on arrivals. In addition, the authorities can choose to penalise or tax airlines that use the noisier aircraft, impose absolute noise limits on individual aircraft, or introduce curfew periods with no, or fewer, jet aircraft. Aircraft approach and departure routes may be modified to avoid certain built-up areas, subject to no impact on safety. Higher rates of descent can be imposed on aircraft operators so as to minimise the

number of people affected some distance from the airport. Additional double-glazing and other acoustic deadening may be provided for noise-critical facilities such as schools and hospitals.

Air quality can be improved by reducing fuel burn on aircraft movements (this in turn will benefit from improved engine efficiencies), and reduced fuel burn can also be achieved by improved gate-to-take-off and arrival-to-gate procedures reducing taxiing times and unnecessary ground running of engines. The air quality issue is compounded by the level of road traffic in and around an airport, but not necessarily resulting solely from the very existence of the airport – much of the air quality problems around Heathrow are caused by road traffic passing the airport on the M4 and M25 and by the nearby diesel-powered railway. The airport can be encouraged to use electric vehicles on site, and public transport can be promoted to reduce the carbon output per passenger. Rail electrification will also help.

As to increasing the positive aspects of travel accessibility, employment and house prices, it is generally considered that increased freedom for airlines and airports to grow will naturally lead to these aspects improving further. This would include the ability of airports to increase capacity to meet demand, subject to the minimisation of negative impacts.

41. a) Do you think that current arrangements for local engagement on aviation issues, e.g. through airport consultative committees and the development of airport master plans, are effective?

b) Could more be done to improve community engagement on issues such as noise and air quality? If so, what and by whom?

- a) The Air League believes that the production and distribution of Master Plans is the most effective way of allowing local residents to understand the ambitions of an airport, the proposed timings and the likely impacts upon local areas. It is important to ensure that all affected communities are alerted to any proposed changes, and not just those who attend consultative committee meetings.

It is also necessary to have a formal structure to allow the general public to be able to respond to such plans, and to seek further information, and that Consultative Committees are the accepted way of receiving information back from the community. However, the Air League is aware that many of these committees appear to be self-selecting and have a tendency to obstruct all change. This is true of almost all local committees, who tend to oppose all change. They tend to be comprised of retirees who can afford to spend the time on such committees, but who do not necessarily reflect the views of the wider local community, particularly those whose livelihoods are affected by the existence of an airport. Those whose views are anti-aviation often strive to be committee members, while those who are in favour are generally less active – a fact applicable to all aspects of local democracy.

- b) This is an unbalanced question. Community engagement should also be sought on how the airport can be helped to produce even more positive impacts, such as employment and accessibility. It is not just noise and air quality that concerns residents.

A broader range of views needs to be determined than just those of a self-selecting Consultative Committee. Surveys of all residents should be held to

ensure that the Committee fairly represents the views of all local residents and cover positive impacts as well as the undoubted negative impacts, as outlined in Question 40.

42. Do you think that current arrangements for ensuring sustainable surface access to and from airports, e.g. Airport Transport Forums and airport surface access strategies, are effective? Could more be done to improve surface access and reduce its environmental impacts? If so, what and by whom?

The Air League is not closely involved with the current arrangements for ensuring sustainable access to and from airports, and is not aware whether anything more could be done to promote the use of public transport, cycling and walking by either passengers or staff. It is aware however that the levels of staff and passengers at the vast majority of UK airports are insufficient to justify regular public transport facilities: annually, an hourly bus service with just 30 seats produces a quarter of a million seats over a 12 hour day, and therefore needs some 100,000 bus passengers, or 20% of a total half-million airport throughput, to make economic sense. Rail halts may just make sense if lines already run close to the airport (as at Southend and Inverness) but rail halts at Teesside and potentially Doncaster-Sheffield would still need bus services to connect to the terminals.

43. What are your views on the idea of setting a 'noise envelope' within which aviation growth would be possible, as technology and operations reduce noise impacts per plane? What do you consider to be the advantages and disadvantages of such an approach?

The Air League regards this as a 'minimum' situation, rather than a 'maximum' situation. When people have chosen to locate their residences close to an existing airport, they should accept that the value of their property already reflects the balance of positive and negative aspects that being close to an airport brings. Although they will no doubt wish to see the negative aspects reduced, we believe it is essential for the national economy that further punitive action against an airport should not be taken. We believe that – at the very least – an airport may be allowed to continue growing (through improved technology and operations) provided it does not exceed the existing (or an earlier) noise envelope.

We also believe that allowance has to be made – in the national interest – for some airports to continue to grow even though the noise envelope will be expanded. This is particularly so for rural airports where noise may increase but still have minimal impact (for example Belfast International), for certain other airports to grow as their local economy expands (such as Bristol), for a new airport (such as Doncaster-Sheffield) as it increases to its regional potential, or as a potential reliever to Heathrow takes on additional growth (Birmingham or Southampton).

On a technical point, it is not clear how measurement of a noise envelope will be made. For example, if in the future approaches to Heathrow from the east were to be made at a higher angle, say 5 degrees, large areas of west central London would benefit significantly from reduced noise. Would this mean that those living closer to the runway end would be able to be exposed to an increased level of noise, while keeping the total amount of noise per square kilometre unchanged?

Getting general agreement to any specific measurement of the noise envelope might become the most contentious aspect as different communities could find themselves arguing against each other.

There is also the aspect of timing. Would there be different noise envelopes by time of day and especially of night?

44. Is it better to minimise the total number of people affected by aircraft noise (e.g. through noise preferential routes) or to share the burden more evenly (e.g. through wider flight path dispersion) so that a greater number of people are affected by noise less frequently?

Given that the airport and the airlines will be doing all in their power to minimise total noise output, the local distribution of this noise is really for local communities to agree for each individual airport, provided that wider flight dispersion does not adversely impact upon aircraft safety. The Air League is content to rely on any academic work which proves that either one way or another is preferable.

45. What is the best way to encourage aircraft manufacturers and airlines to continue to strive to achieve further reductions in noise and air pollutant emissions (notably particulate matter and NO_x) through the implementation of new technology?

Aircraft manufacturers and airlines will always react to pricing mechanisms – the rapid growth in the cost of oil has already promoted manufacturers to seek more fuel-efficient aircraft, which will normally have the beneficial by-product of reduced particulates, nitric oxide and nitrous oxide. There is little more that could be achieved by further taxation of particulate emissions.

There is no such cost benefit to airlines from reducing noise and therefore this is best controlled by regulatory actions which outlaw noise-levels above a certain level, or at certain times of the day, and penalising through airport pricing the use of the noisier aircraft – and at the same time rewarding the use of quiet aircraft with lower charges, as with car taxation. This will then provide manufacturers with the incentive to develop even quieter engines and airframes if at all possible.

In addition there is always the route of the British government providing tax incentives to British research and development on fuel and noise reduction programmes so as to gain a lead on the global market for such improvements.

**46. a) What are the economic benefits of night flights?
b) How should the economic benefits be assessed against social and environmental costs?**

a) It is now a 24/7 world where all manner of activities occur around the clock. Large numbers of people work at night in all manner of industries and service functions and (try to) sleep by day, but are not accorded similar noise protection.

The Department will be aware of the need for many intercontinental flights to seek to arrive in the UK at around 6am in order to provide the best overall schedule into Central London by 8am, and to depart shortly before midnight if flying east or south. Airlines have great difficulty scheduling aircraft on inter-

continental routes, especially if there are night curfews at both ends of a route.

The charter airlines and low cost airlines that provide air travel at such low costs for the whole community are able to do so partly because of their ability to fly through the night, often involving departures around 2am.

However, the most critical aspect relates to cargo flights, particularly of mail, newspapers and express parcels that are such a feature of modern-day trade and commerce. Flying express cargo from around the world to Ostend or Dublin and then relying on one rail track or road and shipping to effect the final delivery is not conducive to the UK behaving as a global leader, or to have the first mail and parcels delivery in Central London by around 11am if flights have to wait for curfews to end.

- b) As for comparing the economic benefits, we would argue again that a standard wealth versus health calculation be used, which would be a standard applying across all manner of industries and applications, and not designed solely for aviation or for aviation at night.

47. How can the night flying regime be improved to deliver better outcomes for residents living close to airports and other stakeholders, including businesses that use night flights?

The Air League believes that three separate approaches should be taken to meeting the needs of night flights while minimising the impact on local residents.

One is to allow certain airports to have unfettered access at night where the impact on local residents is minimal, with at least one of them serving the London market, either Luton or (preferably, with its longer runway) Stansted; and one in each major region of the nation, such as East Midlands, Bristol or Cardiff, Manchester or Liverpool, Newcastle or Doncaster-Sheffield, Edinburgh or Glasgow, and Belfast International.

Secondly, quieter aircraft should be allowed to access a number of other airports in line with the current noise quota system, by local agreement. It may be possible to further reduce noise levels by operating with displaced runway thresholds at night for landings, especially on longer runways such as at Heathrow.

Thirdly, wherever possible, certain airports should remain closed at night, provided that businesses can have access to another airport within about one hour's travel.

48. Should extended periods of respite from night noise be considered, even if this resulted in increased frequency of flights before or after those respite periods?

No. We believe that the actions recommended in the previous section will be sufficient to protect residents without unduly penalising aircraft operators, who may not be able to schedule their aircraft earlier or would achieve lower utilisations from their existing fleets, leading to an increase in prices.

Any other comments

49. If you have comments on any strategic issues not covered in this scoping document, which you consider to be relevant to the

development of the aviation policy framework, please include them in your response.

There is real concern that the DfT has only asked for comments on short-term issues. The vital problem of a long-term solution to the problem of aviation capacity in the south east has been left untouched, yet it is the elephant in the room.

We have commented on what can be done to help Heathrow and other south east airports through the next few years, and we have put forward our proposal to augment Heathrow operations by the opening up once more of Northolt for turbo-prop and small jet operations, releasing important slots at Heathrow for extra long-haul services; but this in itself is unlikely to buy the south east as a whole more than about five to seven years of growth.

As a nation we ought to be seriously considering where we are going to find additional capacity for the next 10-20 years if we are to be restricted to no new runways anywhere – it will take at least ten years to justify and build new runways at existing airports, or indeed new airports.

The aviation industry will continue to take seriously its need to make air transport acceptable in terms of local environment and in minimising any impact it has on global climate; but the Government needs to take a much broader view of what a modern trading economy and society needs from air transport and seek to provide it. We are firm in our belief that, in order to maximise our ability to create wealth, the nation needs new airport capacity in the south east to continue to link the world with London for the next 20-30 years and, through London, to the rest of the United Kingdom.