

Gatwick Airport Ltd response to the 'Developing a Sustainable Framework for UK Aviation: Scoping document' exercise

20th October 2011

Key points

The Aviation Sector

- Aviation is a critical pillar of Britain's island economy providing access to global markets and for millions of inbound visitors.
- The sector supports 234,000 jobs, equivalent to £18.4 billion GVA and also contributes to the economy via wider airport/airline activities and supply chain spending.
- Without sufficient capacity for international connectivity, the UK will not be able to compete in the changing global economy.
- Aviation contributes to economic and social well-being by acting as a facilitator for achieving the strategic objectives of several government departments.
- The Eddington transport review identified major international gateways as being of strategic national interest and key to future economic growth.

International connectivity & hub airports

- The UK does need a hub airport and the right place for it is London.
- The UK needs to focus on improving links to emerging BRIC economies.
- It is near impossible to predict what connectivity the UK will need fifty years ahead.
- Hub and Point-to-Point airports complement each other.
- A "virtual hub" would not resolve the shortage of capacity in the London airports system.

Regional connectivity & regional airports

- Most passengers want to fly to and from London and the South East, not the regions.
- High Speed Rail is no substitute for additional capacity in the London airports system.
- Aviation policy should not be a mechanism for correcting regional economic imbalances.

Making better use of existing capacity

- Full and open airport competition can meet the needs of passengers and airlines.
- Gatwick has capacity to grow from 32 million to 45 million passengers a year by 2030.
- Gatwick has demonstrated its successful resilience to severe weather.
- Transparent market mechanisms, including auctions, should be applied to slot allocation.
- More flexibility around airspace use near airports would help to boost capacity.

Climate change impacts

- For aviation to deliver greater reductions in climate change impacts, government support is needed. There is a support gap between the automotive and aviation sectors.
- Climate change is a global issue and as such solutions should mirror that. A global climate deal is the best way to ensure an affordable approach to decarbonisation.
- A balance needs to be struck between noise and carbon constraints, government needs to be much clearer on this when setting future policy.

Local impacts

- Consultative committees play a constructive role in ensuring a balanced consideration of issues of aviation interest and matters of community concern in a public forum.
- The DfT must have an active role in ensuring adequate and resilient integrated surface access to and from London's international air gateways.
- A noise envelope may not reduce noise for affected communities but there will be clarity and predictability about noise levels and where it will be experienced.

Other comments

- Safeguarding is matter of future national economic importance. Consideration must be given to reviewing and renewing the ATWP provisions for several airports.

Introduction

Gatwick Airport Limited (“Gatwick”) regarded the publication of the Scoping Document as a welcome opportunity to shape the future of UK aviation. The UK’s existing aviation policy framework, centred on the Future of Air Transport (2003) White Paper, has been the subject of debate since May 2010, when the new Coalition Government announced it was opposed to any new runways in the South East. That relatively recent *political announcement* has given rise to uncertainty around *actual longstanding policy*. Airports, as major private sector businesses and key catalysts for economic growth, need certainty to plan investment and development for the future.

Over the past year, Ministers have said the emerging Sustainable Aviation Policy (SAP) will recognise the need to “strike the right balance” between protecting the environment and facilitating the growth of the sector. Gatwick agrees. We believe sustainability considerations should be assessed along with the requirements necessary to sustain a competitive UK aviation sector. We are committed to paving the way for responsible growth at our airport, and we will work with others, at national government or local community level, to achieve that.

From an airport perspective, we recognise our operations may have an impact on the environment. Last year, we launched our “Decade of Change” environmental strategy, which outlines a number of challenging stretch targets. For example, we aim to reduce our carbon emissions by 50% by 2020 and our overall energy usage by 20%¹. We will use our participation in the scoping exercise, and in the formal consultation beginning next spring, to outline the work that we, and the wider UK aviation sector, are already doing to collectively move towards the decarbonisation of flying and increase the proportion of quieter aircraft.

We note that a significant number of the scoping document questions are environmentally focused and we have provided responses to each of the questions posed. We would be happy to discuss these with Ministers in more detail if clarity or further information is required.

However, the central focus of our response is the critical contribution that the aviation sector makes to the UK economy. To that end, alongside this document, we are also submitting a report authored by a leading independent team of economists². The Report, “*The importance of Aviation Infrastructure to Sustainable Economic Growth*”, draws from a literature review, desk research, qualitative interviews and analysis and notes that UK aviation supports 234,000 jobs, equivalent to £18.4billion GVA.

The report outlines the fundamental importance of aviation, with a focus on the international connectivity it facilitates. Britain’s island economy relies on air links that provide direct connections to the rest of world, enabling exports, inward investment and inbound tourism. Ready access to extensive international air links enables the UK to project and retain influence globally. With the gradual ascendancy of the BRICS³ economies, the UK will require direct air access in order to compete with EU states and other international interests.

The scoping document was designed to avoid protracted debate around the specific location of any new aviation infrastructure. For our part, Gatwick does not advocate new infrastructure at any one particular site. However, we do offer the view that the ‘London airports system’ will need additional capacity to meet future demand. This is a question that the Government must find a compelling answer to. This view is reinforced by the findings within the FTI report.

The FTI report is also very clear that business, industrial and commercial stakeholders believe that any additional capacity *must* be accommodated in the south east of England. The report notes that if foreign direct investment and inbound tourism are to make a real contribution to growth, access to additional airport infrastructure that is located in close proximity to London is paramount. The report challenges the proposition that regional airports should and could meet the future demand for UK air transport⁴.

¹ Compared to 1990 levels

² Vicki Pryce, Dan Corry, Alison Sprague, Mark Beatson – FTI Consulting UK, London

³ Brazil, Russia, India, China, South Africa

⁴ Page 7, 4. “*The importance of Aviation Infrastructure to Sustainable Economic Growth*” October 2011

There is a debate getting underway about future demand.

That debate will partly influence the shape of the UK economy for decades to come.

The debate is to be welcomed.

Questions Section: The Aviation Sector

5.1 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?

Aviation is of fundamental importance to the UK. Given that Britain is an island, aviation provides international connectivity to the rest of world, enabling exports, inward investment and inbound tourism. Ready access to extensive international air links enables the UK to project and retain influence globally.

The FTI report outlines that the UK aviation sector supports 234,000 jobs, equivalent to £18.4 billion GVA⁵. Other recent research places the contribution of the sector even higher, at £24 billion at year, with 247,000 jobs directly generated by airlines and airports. This does not take into account through the spending of employees of the sector and its supply chain. Additional economic gains are provided via 'catalytic' benefits through inbound tourism⁶. Gatwick accounts for over £2 billion of added value for economy of London and South East alone every year. Our contribution to the wider UK economy is even larger than that. Alongside that, the UK has the second largest aerospace manufacturing sector in the world.

Chapter 3 of the FTI report outlines the key benefits that the aviation sector affords the UK in further detail.

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

As our answer to 5.1 indicates, aviation is a critical pillar of the British economy providing access to global markets and carrying millions of visitors into the UK. Its unique attributes mean that the aviation sector is central to helping to deliver the Government's overall Growth Strategy.

Without sufficient capacity for international connectivity, the UK will not be able to compete in the rapidly changing global economy. In turn that would impact on economic growth and on employment.

In addition to its critical importance to the economy, aviation contributes to social well-being by acting as a facilitator for the delivery of a wide range of departmental objectives, as outlined in Departmental Business plans published in 2010 namely:

Department	Objective
Department for Local Government and Communities (DCLG)	<i>Reinvigorate local accountability democracy and participation</i> : Many airports are focal points for Local Enterprise Partnerships and Enterprise Zones
Department for International Development (DfID)	<i>Develop a long-term programme to enhance UK 'soft power'</i> : Aviation is crucial in helping to project the UK's presence abroad and in support the relief of humanitarian efforts
Department for Energy & Climate Change (DEC)	<i>Drive progress towards an ambitious global deal on reducing carbon emission</i> : Aviation is the only sector that has set a global target on carbon emission and is united around the need for a 'global deal'
Home Office	<i>Develop Smart Zones in border control</i> : Gatwick has led delivery of smart zone technology and partnership working with UKBA to ensure that border control is both secure and convenient

⁵ Page 7, ⁵ "The importance of Aviation Infrastructure to Sustainable Economic Growth" October 2011

⁶ Oxford Economics, *The Economic Benefits of Air Travel in the UK*, March 2011.

The opportunities that air travel facilitates in terms of strengthening relationships, stimulating educational exchanges and providing leisure activities, enriches individuals and society as a whole by serving as a vital means to initiate links and understanding between people inside and beyond the UK.

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

Collectively, all sectors play a valuable role in making British aviation a global leader in best practice. However, it is not for Government, airports or airlines to judge the importance of one sub-sector over another. This is for the market to determine in a competitive environment driven by consumer choice.

5.4 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?

It is impossible to predict what the global aviation sector will look like in 50 years time. Other than helping to ensure Britain's aviation sector retains flexibility and has sufficient capacity to react quickly to a changing market place in the long term, the Government should not try to build policy on the basis of predicting the future so far out. It should instead concentrate on the short to medium term, and in particular the next 20-30 years, where at least two issues are clear. First, the Government's own forecasts show that in the South East demand will far outstrip supply and second, led by China, India and the other BRICS, there will be a very substantial requirement for new air services to a wide range of new destinations from the UK not just for business but in key areas like tourism. The Government must face up to the reality of what this means and accept that neither a high speed railway nor regional airports can provide an answer, politically attractive as that may seem.

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

There is no doubt that the demand necessary for aviation in the UK to grow is there. The principal driver for growth will be the number of passengers that want to travel. It is noted that the most recent departmental passenger demand forecasts state there has been a reduction in the overall rate of growth of demand, of the order of 25%, compared to the projections that were published in 2009.

Assuming, as the question rightly does, that technology developments and operational procedures will reduce noise impacts and carbon emissions, and the growth in aviation infrastructure in the South East is permitted, the principle constraint on the growth of aviation is the uncertainty surrounding the economy.

Already, from a Gatwick perspective, this has led to us lengthening the 'stretch' targets we have for passenger growth at the airport. For example, under previous ownership, it had been projected (in 2006) the airport would reach a throughout of 40 million passengers per annum by 2017/18. Now we project this target will be reached by 2020. Likewise, we have not attached a specific year to *when* we will reach an overall throughput of 45 million passengers a year (our absolute capacity), although we do believe that this will happen *by* 2030.

In outlining these forecasts we have considered a wide range of different drivers for demand, but the fundamental economic indicators remain too uncertain for us to be any more specific than we have been. For example, GDP outlook for the UK and London remains highly volatile. Likewise, consumer disposable income is in many cases falling through rising inflation, with wage rises falling behind that. Other key drivers include the price of fuel (assuming current fuel technologies remain in mass use), rising aviation tax levels, the overall maturity of the inbound tourism market and the broader UK trade profile. These factors will vary in importance depending on what segment of passenger is investigated.

Ultimately demand for aviation (and therefore its growth) is a function of the cost of air travel relative to individual incomes and business revenue, and the appetite of travellers and business to spend a given proportion of that income or revenue on flying. All things being equal, a rise in incomes will increase demand, while a rise in costs will depress it.

There is a great deal of unpredictability around all these indicators, which has meant that Gatwick at least has taken a more conservative approach than we otherwise might have done to how passenger demand might evolve in future decades. However the fact is that demand at Gatwick is still growing even as other UK airports see substantial falls. If we can address the undoubted need for aviation to become more sustainable, the principle constraint on growth is the overall health of the national economy.

5.6 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?

In the UK as elsewhere, the local environment agenda is driven largely by noise and occasionally by local air quality impacts, whereas the national and international agenda is primarily focused on climate change and carbon emissions.

Addressing these often competing elements is a constant challenge. Achieving an improvement in one area may come at the expense of another. Understanding the implications involved in these inter-dependencies is crucial in the decision-making process, an example is the well documented relationship between noise performance and efficiency in terms of fuel consumption⁷. As performance in one area improves, it degrades in another.

Airport operators want to encourage their airlines to operate in a more sustainable way. Gatwick and others do this in various ways. For example, landing charges at Gatwick vary according how noisy an aircraft is, and if an aircraft breaks limits on departure, the airline is fined with the proceeds invested back into the local community.

However, the objectives that we have to work to must be clear. It is for Government to determine what the key environmental focus should be for airport operators; local (in terms of noise and air quality impacts) or national (in terms of helping airlines move towards reducing their carbon emissions). In many ways, this is a decision that is political in nature, and different stakeholders will have different views. But the question is clear: what environmental impact should the sector place the greatest emphasis on addressing? If airports are to achieve sustainable growth, further clarity on exactly what the objectives are in terms of sustainability are essential. Except in rare instances, it is difficult to design a system of incentives for airlines that drives them towards both meeting both sets of objectives.

Similarly, we are clear that in terms of the planning system and its substantial reform, every effort needs to be made by policy maker to reduce the amount of new development whose occupants could be adversely affected by airport related noise, and there is a need for the new National Planning Policy Framework to ensure this happens. We have made a range of proposals as part of our response to the Department for Communities and Local Government that outline how the Draft National Planning Policy Framework needs to be amended to ensure this happens. We would welcome the input of the Department for Transport on this issue, particularly to ensure that some of the detailed guidance on noise impacts that is contained in 'Planning Policy Guidance Note 24 on Noise' still has currency.

5.7 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 Eddington Transport Study, commissioned jointly by the Treasury and the DfT under the previous Government in 2006, identified major international gateways as being of strategic national interest. We see no reason why a change of Government should alter that

⁷ Sustainable Aviation, *Inter-dependencies between emissions of Carbon, NO₂ & Noise from aviation*

conclusion. Eddington went on to identify transport connectivity to the international gateways as key to the future growth of the UK economy.

Gatwick is one of the UK's major international gateways. Although we are making great strides under new ownership to develop the airport, the same cannot be said about our surface transport links. 30% of passengers using Gatwick travel by rail, more than any other UK airport. Yet the Gatwick Express continues to degrade as an airport service when it should be improving. It is no longer an exclusive airport service during the peak, its rolling stock is no longer dedicated but is just relivered commuter stock and Network Rail is now proposing it should no longer be non-stop in the peak. In part this is because, despite Eddington, the DfT does not seem to be prepared to employ an integrated approach to transport but instead seems to prefer to operate in modal boxes.

5.8 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?

In our view this issue is best addressed through a proposal that we understand the Airport Operators Association have made in their own submission, namely that a working group should be set up under the auspices of the DfT to focus on the regulatory burden in aviation. This will require a commitment of resource from both officials and the Government.

We concur with the AOA's view that the working group have two main areas of focus:

- a. Setting the regulatory burden in context. What proportion of airport finances are consumed by dealing with regulation? This should determine a national picture of the typical levels of regulatory burden (broken down into types and purpose of regulation), as a proportion of a typical airport cost-base. These figures could then in turn, be set in the context of financial accounting measures such as turnover and profit; and also the context of the competitive position of UK airports, compared with their competitors in Europe or globally. The purpose of this work would be to provide policy makers with more strategic information about the degree and costs of regulation in the sector. Additions to the regulatory burden of the sector are often justified (sometimes in a Regulatory Impact Assessment (RIA)) on the grounds that they only add a very small amount to the sector's overall cost base. The problem with this "silo" approach is that officials in charge of a particular regulatory change are often neither aware, nor interested, in the fact that there are many other officials engaged in similar activity across many Government Departments.
- b. Reducing and reframing regulation. Can recent general guidance on avoiding "gold – plating" of regulations be developed into specific guidance for the aviation sector? Tackling the regulatory burden will require a degree of lateral thinking that moves beyond the simplistic approach of listing regulations that should be abandoned (although it may be possible to identify some which fall into this category). A more fruitful area is likely to be exploring ways that regulatory compliance can be maintained, while allowing aviation businesses more flexibility in how to achieve that compliance. Both the DfT's ongoing work on OFBR security regulation and the CAA's continuing focus on moving towards regulating outcomes, rather than prescribing measures, are examples of this. The challenge is to understand whether this approach can be replicated in other areas of airport regulation.

We note that the question of regulatory burden has been considered as a key thread area work of the recent South East Airports Task Force (SEAT). We recommend that, when the SEAT reconvenes to look at progress, it continues to focus on the regulatory burden, broadening its work to the whole UK aviation sector.

A key area of focus for the DfT in addressing the regulator burden is its current work on Outcomes Focused Risk Based (OFBR) security.

Gatwick is fully supportive of the development of the Outcomes Focused Risk Based Concept and will continue to engage with the Government on its development.

Questions Section: International connectivity and hub airports

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

International and domestic air transport connections are critical to the UK at both national and regional levels. Britain is an island economy and as such there is an inherent need for air transport connections throughout the rest of the world. Not only do these contribute to economic growth by enabling exports, enabling inward investment and tourism, but they also help to retain and advance the UK's interests overseas and our international influence.

These points are amply demonstrated by the FTI report. They are also demonstrated by the 'Frontier Economics' report recently commissioned by BAA. The FTI report identifies a number of mechanisms whereby aviation contributes to economic growth and raises the long term productivity of the economy. These include:

- user benefits arising from cost and efficiency savings – reduced transport costs, time savings and inventory holding costs, leading to increased competition and productivity;
- greater connectivity – leading to lower transport costs, ease of access to global markets and hence efficiency;
- agglomeration benefits – spillovers that lead to the formation of clusters. Such co-location may lead to specialisation, knowledge spillovers and innovation;
- increased international trade (and tourism) – lower transport costs and connectivity may lead to increased trade;
- investment and innovation – inward and outward investment is facilitated which augments the UK's capital stock and may in turn lead to innovation; and
- greater labour market flexibility – the pool of potential labour supply may increase in line with reduced transport costs and greater connectivity.

5.10 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?

In some respects, it might not matter if the people and goods are originating in another part of the UK and hubbing, say through Heathrow and then going to their final destination. If these goods and services have to hub through an alternative such as Schiphol, Madrid or Dubai then the costs and travel times may not be significantly different.

However, in reality it does matter. The fact that there is a London hub ensures that London (and the UK) has greater direct connectivity to the rest of the world than it would if there were no hub. This matters because:

- it influences where multinational businesses and businesses that trade internationally locate their offices;
- It reduces travel times from the London area and promotes inward investment, including from new growth markets such as China, India, Russia and Brazil;
- It generates high-value employment in high-skilled industries; and
- It provides convenience to leisure travellers, both those leaving the UK to seek new experiences and importantly to those tourists from overseas, which are more likely to choose the UK as a destination if it has direct links to their country of origin.

These factors help to generate employment, income and growth critical to the ongoing well-being of the UK economy. In addition, such connectivity helps to ensure aviation revenues and related industries are retained within the UK rather than be transferred to other nations

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

It is widely recognised that there is an ongoing shift in the international balance of power in terms of geo-politics and economic growth. In particular, the BRIC countries are increasingly having greater influence and becoming a more significant source of international economic

activity. It is vital that the UK has frequent and direct links to these countries. This should not be limited to only their capital cities but to all of the major population and economic centres within them.

Only by having such comprehensive connectivity will UK businesses be able to compete with other European and international competitor nations, attracting direct inward investment and generating employment and growth. In addition, such connectivity will enable new tourist routes to these nations to emerge. The UK will then be able to capture the associated tourist income generated from the increasingly wealthy populations of these countries.

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

As we said in response to Q5.4 the Government should not attempt to predict the future 50 years but should instead concentrate on the next 20-30 years. Again as we said earlier the UK must be able to develop and sustain a wide range of new air services to China, India, the remaining BRICS and other key developing countries. The Government needs to recognise that, to take China as the obvious example, this is not about serving just traditional destinations like Beijing and Shanghai but about developing a whole new network to all the key manufacturing and service centres. At the same time the UK will still need to maintain traditional levels of service into Europe, over the North Atlantic, and to other strategic destination. None of this will be possible without additional airport capacity in the South East.

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

Only by having significant international connectivity will the UK be able to maintain its position as a world-leading nation state and avoid diminishing its international standing. A reduction in international connectivity would risk the UK status reducing and it falling to becoming a more peripheral nation on the world stage. Maintaining a hub airport will play a vital role in ensuring that the required level of connectivity is able to be sustained, although arguably the level of connectivity needs to grow in order to ensure adequate connections to BRIC countries.

A hub airport also plays a critical role in ensuring Britain's island economy is able to access export markets as well as ensuring suitable routes to attract inwards investment and access to traditional and emerging tourist markets.

It is also the case that long-haul passengers who are transiting or transferring through the UK often break their journey with a stop-over break for example to London. This provides additional tourist income to the UK economy, which would be lost if this traffic were using an alternative hub airport.

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

These passengers are central to enabling the economics of a hub airport. Without these passengers the hub function of the airport would be lost, together with the associated significant connectivity to long-haul destinations and growth, investment and tourism opportunities that such connectivity presents.

It is also the case that these passengers do present a source of revenue to the air industry and the airports that serve them. To the extent that these passengers are lost to competitor hubs then the associated revenue flows would be lost also.

5.15 What are the relative merits of a hub versus a point to point airport?

Hub and point-to-point airports are complimentary. It is not a question of which is higher value or provides a better service. In any major world city there needs to be mix of such airports and this is seen throughout the world. Point-to-point airports provide direct access for local passengers to world destinations, either directly or through transferring through other hub airports in other parts of the world. They also of course provide direct access to the local area (e.g. London, Manchester, Edinburgh) to inward tourism and business, bringing vital opportunities for growth, investment and tourism.

Hub airports also provide direct services from the area local to the airport to the rest of the world and from the rest of the world to the local area. However, as discussed in our response

to other questions in this section, hub airports additionally allow for greater connectivity as more routes can be supported (in particular long-haul routes) as the economics of flying the route do not rely solely on local demand.

5.16 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?

A “virtual” hub makes no sense for at least two reasons. The airside to airside transfer times, and the difficulties with baggage, will make it deeply unattractive to travellers. Why transfer through such a hub when it can be done so much more easily at a number of airports in Europe? Secondly, no “virtual” hub deals with the fundamental problem that there is insufficient capacity in the London airports system.

Questions Section: Regional connectivity and regional airports

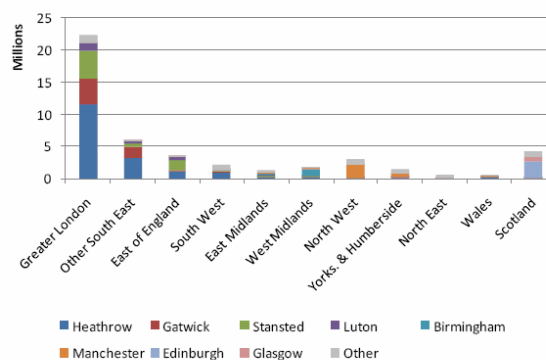
5.17 Can regional airports absorb some of the demand pressures from constrained airports in the south-east? What conditions would facilitate this?

The first point that must be accepted is that not all the main south east airports are congested or ‘constrained’ . Stansted is apparently operating at 53% capacity. Gatwick operates generally at around 78% capacity. Last year we handled 31.6 million passengers. By 2020, we believe that we will be supporting 40 million passengers every year, with an additional 43,000 ATMs. Beyond that, we estimate we can cater for up to 45 million passengers a year through our single runway, two terminal configuration assuming the projected change of aircraft fleet at Gatwick occurs, and assuming that we reach our target of supporting a declared maximum capacity of 55 ATMs in a given hour.

Secondly, we believe that the fundamental issue surrounding whether regional airports can in fact support some of the demand for air travel to and from the south east lies in whether passengers actually want to fly to and from airports outside that region. The underlying assumption around the concept that ‘regional airports can absorb demand from the South East’ is that passengers actually want to fly to and from there, and that those airports have a sufficient catchments area of people who want to fly to support the growth their current capacity admittedly allows.

Figures 1 and 2 below clearly show they do not. Figure 1 outlines that passengers from outside the UK want to fly to London, over and above regional airports. The only condition that would change this would be some form of policy lever that changes passenger preference. As we have highlighted in a range of submissions to HM Treasury, which have been shared with the Department, price mechanisms would not achieve this goal. We are sceptical that any other policy lever could either. Figure 2 demonstrates the overall dynamics of the UK aviation market, and particularly the areas of the UK where propensity to fly is highest. The simple fact is that airlines locate at airports in areas where propensity to fly, and therefore passenger demand, is highest. To attempt to channel demand elsewhere even if there is the capacity to support it, is to deny this basic fundamental of airline economics.

Figure 20 Regional distribution of foreign resident passengers



Source: CAA Passenger Survey (several years weighted to 2010 levels)

Figure 1

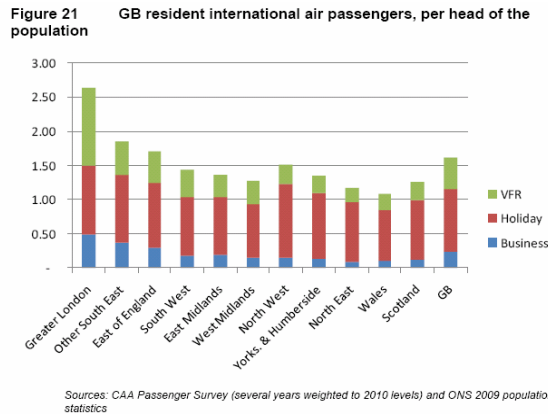


Figure 2

If that fundamental issue is cast aside, there still remain (in our view) a range of issues that effectively prevent regional airports supporting demand for access to air travel to and from the South East. Namely:

1. **Infrastructure:** Do existing regional airports have the necessary facilities to cater for more and larger aircraft and potentially millions of extra passengers? It is by no means clear that they do.
2. **Environment:** If future demand was pushed to regional airports in the context of no new runways in the south east, that could potentially mean millions of people from the South east, the most populated region of Britain, travelling by private car up the M1 to reach a regional airport. Surely that defeats one of the principal drivers of the new SAP framework to 'make aviation greener'.

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

We believe that it is for the passenger to determine what the most appropriate form of transport is for their needs. Certainly, there are a range of variables that influence that choice. The relative costs of domestic air travel as opposed to a rail travel will be foremost in their minds. Likewise, the rail timetable needs to offer an opportunity to travel that is convenient for the passenger. Finally, duration is important. Rail travel is always going to be of a longer duration than travelling by air.

Beyond this basic overview, we believe it is for rail operators to demonstrate how they can effectively meet passenger needs around these key areas, whilst noting that the evolution of traffic at Gatwick Airport, which offers the largest range of domestic air routes of any UK airport, shows clearly that demand for domestic air travel is already falling, and has been for some time.

If Gatwick is taken as a case study, the overall proportion of domestic flights to and from are already falling. We have no data to suggest whether those passengers are instead switching to rail though. The question is whether the Government should take steps to accelerate this trend. In our view, the rail operator and the market should determine how this trend evolves.

5.19 How could the benefits from any future high speed rail network be maximized for aviation?

The benefits to aviation from a high speed rail network will be limited and are certainly no substitute for additional capacity as the published reports from HS2 amply demonstrate. Moreover any benefits are a considerable way off. On the Government's own timetable it will not be until the 2030s that any airports other than Birmingham are connected to the network

From a Gatwick perspective, we believe that there is clear potential to ensure that both the UK's largest and second largest airports are effectively integrated into any future HS2 link. This could be achieved by ensuring that the existing route plan for HS2 remains in place, and that a station that interconnects HS2 with Cross rail is built at Old Oak Common. There is an existing line between Old Oak Common and Gatwick, which could be used to provide a

shuttle service to and from Gatwick, although the line would have to be upgraded to facilitate that, and the design of the station at Old Oak Common amended to facilitate the necessary platform space. Connecting Gatwick to HS2, even if that connection is indirect, would help to maximise the economic value of HS2 should it be built, and also promote high quality sustainable surface access to the airport from across the UK. This kind of link would help to establish the integrated transport system that we believe Government wants to see.

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

There is a role for aviation in promoting growth. However, we are sceptical of whether that role is around correcting perceived imbalances between different parts of the UK. To suggest that a restriction on developing aviation infrastructure in London and the South east in favour of promoting it in other regions of England would lead to a rebalancing of the economy would appear to have no basis in fact.

As we stress throughout, in a generic sense, international connectivity has a role to play in promoting growth in a state or a region of state. However, it is in the market and the nature and make-up of the local population that dictates whether air links to facilitate that connectivity emerge. If demand for an air link is demonstrably shown within a region, airlines will fly from an airport within that region. If it is not, they will not. Demand for air travel cannot be created artificially in the way this question implies.

Questions Section: Making better use of existing capacity

5.21 To what extent do UK airports meet the needs of their customers? How might those needs be more effectively met within existing capacity? What is the right balance between competition and regulation?

Since December 2009, Gatwick has been in competition with London's other major airports. To attract customers from our competitors, as well as to attract the new airlines that will allow new links to be established to the UK's key export markets, we need to provide the best service possible. In the past eighteen months, Gatwick has become a truly dedicated service business, as well as a critical element of the UK's national infrastructure.

We have recognised that airlines should be seen as partners in how we operate the airport in all aspects, whether in terms of how those airlines prepare their aircraft for take-off once they have landed (known as 'turnaround time') or how we work with them to optimise the usage of our runway. It is this kind of approach that is leading, and will continue to lead, to Gatwick effectively meeting the needs of our customers within the constraints that existing capacity places on us.

For example, we have formed a joint performance team to facilitate regular, productive engagement between us and our airlines around the way the airfield is used. Using the Lean 'Six Sigma' process commonly applied to the manufacturing sector, we have jointly developed a clear path to driving better airfield performance over the long term. For the first time in Gatwick's history, efforts are centred not just on compliance with airfield health & safety, but on how to make operations more efficient. Performance is now scrutinised on a daily, rather than monthly basis which creates a sense of urgency over issues that arise, enabling the airport and its partners to identify recurring problems and encourage faster response times to rectify issues slowing down turnaround performance.

A second key feature of the manner in which we work with our airlines has revolved around competition and incentives to perform better. We have sought to incentivise individual customer performance and collaboration through collecting and publishing data on key elements of their performance. For example, we are now actively measuring the on-time performance of each individual airline, and publishing information for our airline community around which airlines are departing on-time. Similarly, we have collated and published information on the performance of the baggage handling agents. As far as we are aware, this is first time that any UK airport has attempted to do this.

Our overall target is to move toward 85% of flights departing and leaving on time. This will deliver a range of benefits, in addition to improving the predictability of our operations even further. Passengers impressions of the airlines will improve. Delays also cause aircraft to use more fuel than they otherwise would through circling while waiting to land. Incentivising customers airlines through a transparent approach, based on clear and concise information sharing means that the collective needs of all our customers can be met more effectively.

Similarly, we have recognised the need to integrate airlines into our planning and responses to contingencies. Airlines now work with us to determine how we will respond to severe weather, industrial action or other unexpected events as part of a revised crisis management structure. This allows them to manage the expectations and needs of their own customer- the passenger. The positive reactions to our approach to managing the severe weather at the end of 2010 demonstrate that involvement of airlines in key decisions around crisis management leads to a range of benefits.

We firmly believe that competition between the UKs largest airports, and the incentive to meet the customer need that it provides, is playing a key role in transforming the relationship between airport and airline at Gatwick. It is clear to us that the more competition that is allowed to develop in the London airports market, the more benefits that airlines, and airline passengers will see.

There is clear evidence that competition is already having an effect in terms of the range of service offered by airports. Since becoming an independent airport, we have seen evidence that our competitors are starting to adopt innovations to improve the passenger experience that we have developed. Services such as family assistance lanes at security, which had previously not been seen at any UK airport, are provided at both Heathrow and Gatwick, having originated at Gatwick.

In our view, full and open competition offers the best path towards an environment where airports can best meet the needs of passengers. All private businesses are subject to general regulation around issues such health and safety, employment practices and financial procedures. However, unlike economically regulated airports, they are also able to work directly with customers to agree the price, and therefore market value, of their service without regulatory oversight. Given that the UKs largest airports are soon likely to be entirely separate ownership, we see no reason why Gatwick should be regulated any differently.

More broadly, the system of economic regulation that Gatwick is subject to was established by the Airports Act (1986). This regime was appropriate for a newly-privatised airports and airline industry as it was 25 years ago. Since then, aviation and requirements placed on airports have changed considerably. The process through which our pricing structure is agreed involves both the Competition Commission and the CAA, which often have different views, and is simply not reflective of the competitive market situation as it is today.

The Airports Economic Regulation Bill (expected in the next session of parliament) will introduce a number of changes to the economic regulation of Gatwick and its competitors. We fully support its provisions. However, we question whether, given the fact that we are now competing to become London's airport of choice, such stringent price regulation continues to be justified. There may be a case to remove all economic regulation from Gatwick in future.

De-regulation would allow airports and airlines to come to bespoke commercial arrangements around the level of service that an airline could expect to receive. It is this kind of approach that, in our view, would allow us to effectively meet the needs of our customers. At the very least, we would urge the Government to establish a framework that ensures proportionate and targeted economic regulation, and allows Gatwick to effectively compete. We believe it is the market- not the regulator- that is best placed to determine which airport delivers the best service for airlines.

As we highlight above, the fact that we are subject to stringent economic regulation leads to a number of restraints in the way that we can plan, and some cases deliver, new and improved airport infrastructure. On a five yearly basis (the current cycle has just been extended and is referred to within the sector as Q5+1) a maximum price cap is set per passenger. This per passenger charge is meant to cover Gatwick's provision of the runway and lighting, taxiways

and aprons, stands and terminals, security and baggage systems, and well as the costs of any new infrastructure for our airlines and passengers.

The fact that it is our regulator that has the final determination over what the appropriate income stream will be for us to cover these costs, rather than ourselves, obviously means that our own cycle for determining what new infrastructure needs to be delivered to meet the needs of our customers reflects the regulatory cycle. Within our regulatory constraints, we deliver high quality infrastructure on-time our customers to use. Our £1.2 billion investment programme is an example of what we can achieve even within this environment.

We believe that there is a great deal of scope for establishing direct commercial relationships with our key customers, rather than conducting those kinds of discussions through a regulator. The price we charge per passenger could be agreed within the context of those discussions. With prices for our service set in a more dynamic way, we would be in a far better position to flexibly plan for, fund and deliver the infrastructure that our airlines need.

5.22 Can we extract more capacity out of the UK's existing airport infrastructure? Can we do this in a way which is environmentally acceptable? To what extent might demand management measures help achieve this?

We believe that there are range of opportunities to increase the current declared capacity of Gatwick, which as the second largest airport in the UK is key part of the UK's existing airport infrastructure. As we have stressed throughout, Gatwick is not 'full', neither are we 'congested' to the extent that some stakeholders have sought to suggest.

Likewise, in the short to medium term, we can support growth at Gatwick, and our capacity to support it is growing. There are in fact a range of opportunities to grow both the annual number of passengers and Air Transport Movements that Gatwick can support with a high degree of resilience to disruption.

However, it should be understood the steps we are taking to maximise the capacity of our runway are finite. By the end of the 2020s, demand will outstrip the ability of our current two terminal, one runway configuration to support additional passengers. Currently, we believe there is scope for substantive growth at Gatwick using this configuration. But there is a limit to that growth. Public policy needs to make provision for additional capacity in the London airports system should it become necessary, in order to support future air transport needs.

For the summer season 2011, Gatwick declared an average capacity of 50 ATMs an hour during a full operational day (0500-2200). Currently, the maximum that we have declared is 53 ATMs in a given hour. This number has risen successively for the past three years from 2008, when Gatwick declared 50 ATMs an hour, and from 48 in 1998. Since Gatwick came under new ownership, we have achieved up to 60 hourly ATMs in ideal conditions. In winter, the declared capacity is slightly lower, at a maximum of 50 ATMs in a given hour. This is because NATS prefer to keep slightly wider separation times between aircraft taking off and landing in anticipation of severe weather conditions.

Figure 3 below outlines the total number of slots that were available to be allocated at Gatwick in a given month over the course 2009, 2010 and April-May 2011. It shows that the total number of slots available for allocation is rising year-on-year. Likewise, the overall proportion of slots used at Gatwick fell in every month in 2010 compared to 2009. There are signs that the proportion of available of slots used will rise in 2011, but the total used is still, to date, down on 2009. In 2010, Gatwick's runway became less 'congested', not more. More slots were made available, but less were actually used.

Figure 3 also demonstrates the seasonal nature of the way that Gatwick's runway is used. Demand for use of the runway is at its peak during the summer months, particularly in August. This reflects the fact that 67% of Gatwick's passengers are travelling for leisure purposes- and that people tend to go on holiday in the summer months, particularly in August.

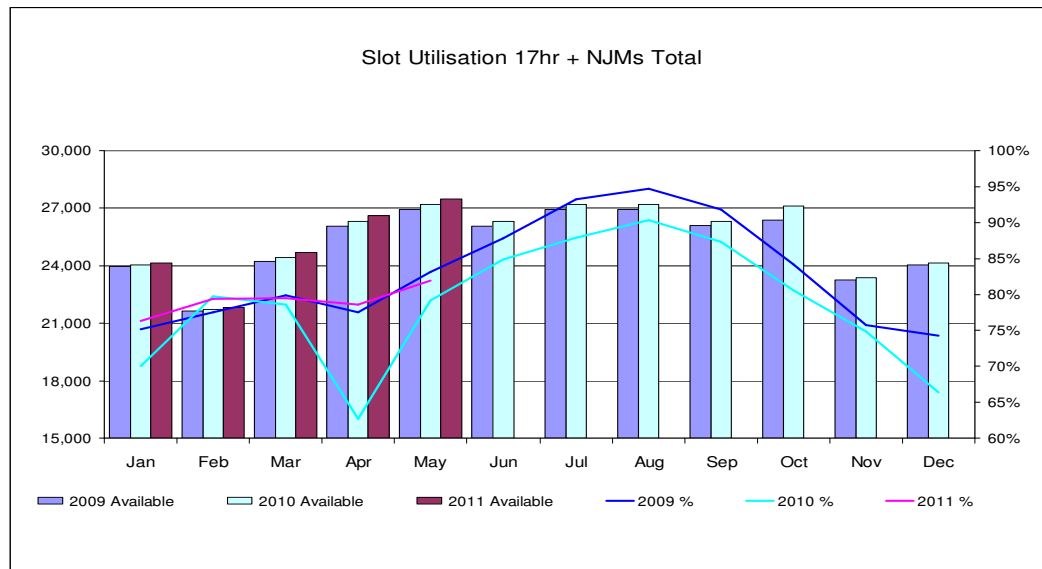


Figure 3 Runway Slot Utilisation at Gatwick Airport

Gatwick is also permitted to operate a regulated number of flights between 2300-0500. These are known as 'night flights'. Taking these into account, and averaging runway usage out over the year, 80% of the total number of slots available Gatwick are allocated. In the peak months this can increase to between 95-100% during some hours of the day. In the winter season our capacity declarations are lower, but slot utilisation (i.e. the number of take-offs and landings) still falls to around 70-75% on average, and can be as low as 54%.

It is fair to say, that at certain times of the day and year, Gatwick's runway is operating at near capacity, but there are substantial periods of the day and year where we still have capacity, and a significant number of unused slots. This creates potential for growth.

Our forecasts also take the way in which the capacity of passenger aircraft that use Gatwick are likely to evolve over this period into account, as well as the routes we are likely to serve in future. By the end of the decade, we expect to attract an increasing number of new long-haul services. Some of these will transfer from other London airports, including Heathrow, to Gatwick. Others will be entirely new, and will provide connectivity to some of the world's fastest growing economies.

In 2010/11, 8.1% of all passenger ATMs at Gatwick were destined for long-haul markets. By 2020/21, we expect long-haul destinations to account for 10% of passenger ATMs. Long-haul routes are commonly served by aircraft with more seats. The total number of seats on long haul aircraft is growing. Likewise, we expect the total number of slots used by aircraft flying domestic routes to fall. These aircraft are smaller and carry significantly less passengers per slot than aircraft that fly long haul routes.

By 2020 the A380, the largest commercial passenger aircraft in the world, is expected to operate regularly at Gatwick. Likewise, next generation long-haul aircraft such as the B787 will operate at Gatwick by 2013. The introduction of larger aircraft, serving more long haul routes, will allow the total number of passengers we can carry to grow, while not stimulating the same amount of demand for take-off and landing slots than would be the case if current fleet mix and route make-ups remained constant.

We believe that the way in which the size and age of aircraft at Gatwick may evolve will mean that the overall growth in our capacity will be achieved in an environmentally sustainable way. New aircraft are more fuel efficient, and generate less noise impacts, than many in current generation fleets.

As well as a change in fleet mix and route make-up that will generate comparatively less demand for slots we are also taking a range of steps to increase their overall supply. In

particular, following our change of ownership, we have conducted a radical reassessment of the way in which we manage the use of our runway, are implementing a range of innovative approaches to maximising the efficiency of how it is used.

We are unique in implementing many of these processes, and we believe they will allow us to reach a maximum declared capacity of 55 ATMs in a given hour, meaning that at least 6% more slots will be made available for use at peak times of the day, at times airlines most want to use them. We believe we can deliver this target by 2013/14. These measures, combined with the way we project the nature of the aircraft using the airport will change will in turn mean that by 2020, Gatwick will be in a position to accommodate 282,647 ATMs annually, an increase of 16% from today's number.

One key innovation has been the introduction of a far more comprehensive system for ensuring the pilots of aircraft use the right exits and speeds from the runway. For the first time, we have measured their performance, collated it and provided data on an airline-by-airline basis around how they are performing. We have also provided comprehensive feedback on what they could do to improve. This enables us to reduce the average separation times between each aircraft landing and taking off, which in turn means that we can extract more capacity from the runway and generate more slots over the course of the day. Under new ownership, we have introduced a far more comprehensive approach to liaising with NATS, the air traffic controllers in order to optimize aircraft movement on the ground and in the air. Historically, major airports have tended to take a 'hands-off' approach towards how aircraft move around on the runway. Gatwick is taking the opposite approach, and working in partnership with NATS to boost efficiency.

We have designed and presented to NATS a new tool for this purpose. We will be replacing Hermes (a 20 year old runway capacity planning tool, with a three week turnaround) and instead using our own tool. Planning and analysis that previously took weeks will be conducted in real time. In future, we will have a far more accurate and efficient approach for determining what our declared capacity might be, which will assist us in being able to declare a higher number of ATMs per hour.

We are calling this initiative 'ACDM 55'. This is an enhanced version of the 'Airport Collaborative Decision Making (ACDM)' that other major UK airports, including Heathrow, are introducing. It will be unique to Gatwick and focused on enhancing the overall capacity we can extract. ACDM is a system that is already used by a number of European airports to minimise delays while aircraft wait to land. We are building on it to actively enhance its potential to minimise disruption and maximise how many movements our runway can support. These are innovations that are only Gatwick is employing in the UK.

There is a role for demand management measures in the course of extracting the maximum amount of capacity from an airports runway. One such measure is to price access to the runway in way that incentivises airlines to use it at times when demand is low, which in Gatwick's case is the winter season. We are currently employing the approach.

Gatwick's 2011/12 airport charges, or the charges we make to airlines for using the airport, are split between charges for landing of aircraft (28%), parking of aircraft (7%) and departing passenger charges (68%).

Following a period of multi-lateral consultation with our airlines, as well as open discussion through a new airline consultative group that we have established, Gatwick has increased airport fees by an average of 6% for 2011/12 financial year.

In taking our decision, we focused on how best to use our charges regime to incentivise airlines to use our runway at times of the year when demand for slots is lower, rather than when it is at its peak. Accordingly, we have only increased aircraft landing charges during Gatwick's busy summer period. In parallel with that, we have removed landing fees altogether in the winter months, as a means of encouraging greater all year round use of the runway.

We are confident that this will assist our efforts to even out usage of available slots across the year, and effectively manage the demand that we face, by providing clear economic signals to airlines to use slots that are currently vacant. We are committed to using the price mechanisms already available to us to manage demand for use of our runway.

5.23 How can we support Heathrow's hub status within the constraints of its existing capacity? Can we do this in a way which is environmentally acceptable?

We believe that BAA, the operators of Heathrow, are best placed to answer this question.

5.24 How important is increased resilience at the UK's major airports to reduce delays? 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?

Resilience is an issue that Gatwick has done a great deal to address since coming under new ownership. Gatwick has faced a number of substantial challenges to its operations in that time. These have included severe weather at both the beginning and end of 2010, as well as the eruption of the Icelandic volcano.

These measures have included an enhanced process for crisis management and response, which places liaison with airlines and responses to their needs at its core. Through a three stage process, we have been able to manage incidents and severe weather in a way that successfully minimises potential for disruption.

The Resilience, Punctuality and Delay subgroup of the South East Airport Taskforce explored a number of ways in which resilience could be promoted at the UK's airports within the constraints of existing capacity. We supported the work of this subgroup.

Operational Freedoms were one such technique, and we support the view that operational freedoms could enable airports to respond more effectively to disruption through flexible deployment of measures which temporarily increase the number of take offs and/or landings in a given period of time.

We note the taskforce's conclusion that there is some potential for operational freedoms to be developed not just at Heathrow, but at Gatwick as well, in order to ensure that the impact on unanticipated disruption particularly at times of peak demand can be managed. We have made proposals around how airspace could be managed around Gatwick to improve the resilience of our operations. We would encourage Ministers to take forward their commitment to look at the potential for operational freedoms at other airports apart from Heathrow.

Likewise, we would encourage the Government to review the direct impact that the grant of tactical operational freedoms to Heathrow would have on other airports in the London area at times of severe disruption. There is certainly potential for operations at Gatwick to be subject to disruption as a result of operational freedoms at Heathrow being permitted. Affording one airport in the London area the ability to relieve the effects of disruption, whilst at the same time potentially disrupting the operations of others would appear to be counterproductive to Government's aim to promote resilience at London's key airports at times of disruption.

We also note the taskforce's recommendation that performance charters should be introduced at UK airports in order to promote better collaboration between on-airport partners during times of disruption. We do see potential in performance charters. However, as the taskforce noted, we have already (of our own volition) introduced processes to ensure this kind of collaboration happens. We are using these to shape our co-ordination of these new charters, a project we are leading at the invitation of the CAA.

We also note the taskforce's report conclusion that there is likely to be some relation between matters covered by these charters and the forthcoming Airports Economic Regulation Bill. It is our firm view that any measures to promote resilience at airports should focus on airlines and other airport-partners, as well as the airport itself. Performance charters, as opposed to statutory requirements around performance, are more likely to result in this form of collaborative approach.

Finally, we have some concerns around the Governments view that there may be a need for the operational capacity and schedules at airports other than Heathrow may need to be reviewed in order to achieve an “acceptable” of performance. In our view, we have demonstrated that Gatwick, especially during the winter, simply is not subject to the same capacity constraints as Heathrow.

We believe it will be possible to increase the capacity of Gatwick’ runway at peak time whilst still maintaining the gaps in use, or “firebreaks”, that are necessary to provide sufficient resilience. Any measures that seek to build greater resilience into flight schedules should be proportionate, and should recognise the individual circumstances of each airport and their past success in managing disruption.

5.25 Could resilience become an issue at regional airports? If so, how might this be avoided?

As we suggested in our answer to 5.17, if future demand was distorted to direct to regional airports an immediate issue that has to be considered is whether the airports have the necessary infrastructure, facilities and supporting mechanisms to cater for more and larger aircraft and potentially millions of extra passengers. That is in normal situations. In extreme or crisis situations that issue will be greatly intensified.

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

Gatwick is supportive of a revision of the slot allocation process, as outlined in *Council Regulation (EEC) No 95/93 of 18 January 1993* on common rules for the allocation of slots at Community airports. The key issue we see with this regulatory regime is the lack of efficient economic signals around the actual value of slots themselves. While a secondary system of transferring of slots between one airline and another does exist at Gatwick, we believe that its efficiency is very likely to be enhanced if complemented by the transparent primary auctioning of slots. It is apparent that the current administrative mechanism for allocating slots, which includes ‘grandfather rights’, does not lead to their economically efficient use.

The introduction of secondary trading of slots, as well as the introduction of the EU Open-Skies agreement in 2006, has in fact led to the average number of seats per aircraft that use Gatwick to fall by 9.7%, or 0.3% when US carriers are excluded⁸. In effect secondary trading, whilst assisting with the transfer of slots between one airline and another, is not assisting Gatwick in using our runway efficiently in the way it is assisting Heathrow. More slots are used by smaller aircraft than was previously the case prior to 2006. We project that market forces will partially address this issue, but there will be a role for the appropriate regulatory framework in shaping how effective they will be in achieving this.

The European Commission is currently considering a revision of the EU Directive on which the current UK regulations around slot allocation are based. A recent report to the Commission highlighted that the potential for complementing administrative and secondary trading mechanisms use to allocate and transfer slots in the UK with an auction system⁹. We are supportive of this kind of system, which would lead to far more efficient use of the slots we are already have available. Likewise, the previous Government commissions a range of research on the potential for auctioning of slots that highlighted the potential advantages

It is this kind of market based mechanism that will assist Gatwick in addressing capacity constraints that we and other busy EU airports face. In our view, if price mechanisms are to be used to address the demand for slots at airports, it should be the airlines that use the runway that should be subject to those mechanisms, not the passengers that fly on board the aircraft. Airlines need to be incentivised to release slots they do not use, so that those airlines who do want and need them can make use of them.

⁸ Steer Davies Gleave, Presentation to the *Fight or Flight Aviation Conference* (July 2011)

⁹ European Commission, *Impact Assessment of Revisions to Directive 95/93*, (March 2011)

This would be most appropriate way to encourage efficient runway use, and is likely to unlock runway capacity that is currently latent, particularly at Gatwick. Airlines could be required to release slots if they do not use them for 90% of the time, rather than the current 80%.

It is also clear that the introduction of auctioning of rights to use slots that are in high demand could lead to a substantial increase in revenue for the Treasury. We see no reason why a transparent value should not be attached to that access as a means of incentivising efficient use. The exchequer should be able to benefit from a proportion of the revenue such a process could generate and correspondingly, be in a position invest in the publicly funded surface transport infrastructure that airports depend on order to function.

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

We do not believe that specific provision should be made to ensure regional access into any airport. In any event, access to the UK's busiest runways is allocated on an administrative basis according to binding European Regulation, with some notable exceptions where those location are inaccessible other than by air. In our view, as we outline, we believe that access into busy airports should be determined through market based mechanisms, and that relevant European Law should be revised accordingly. There is no role for state intervention to 'ring fence' access to such airports.

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

Our views on this are similar to those expressed in section 5.27.

We do not believe that specific provision should be made, and that access to busy airports should be afforded according to market based mechanisms.

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

Gatwick believes that there is a substantial amount of potential for the way airspace use is designed, and the way air traffic is managed to be reformed in order to enhance the capacity of our current single runway to support additional traffic. There is also scope to alter a range of key elements of the manner in which regulated elements of the departure and arrival process by aircraft at Gatwick is managed.

In essence, airspace design and air traffic management can be used to effectively reduce the amount of time a given aircraft is on approach to, or an ascent from, a runway. The less time these phases of the flight take, the more time is available for more number of aircraft to make use of that existing runway capacity.

One of the key ways that we see potential for airspace design and management playing a role in enhancing capacity is through altering the way aircraft are routed, thereby reducing the amount of 'track miles', or total distance' that aircraft might fly on approach or departure from the airport. The shorter the distance that aircraft fly on approach or on departure from the airport, the more scope there is more other aircraft to begin their descent, or ascent from the runway, within the same time period. This would have a corresponding impact on the amount of fuel burned by those aircraft, again leading to lower carbon emissions from those aircraft.

Another approach to reducing the number of track miles revolves around greater scope for change of what are known as 'Noise Preferential Routes' or preferred flight paths for aircraft on departure from an airport. These routes are defined by the CAA, in accordance with regulatory guidelines laid down by Department for Transport. Adherence to NPRs can mean that the number of track miles that an aircraft will be subject to are greater than they otherwise would be. In Gatwick's case, NPRs are more than forty years old.

Whilst we support all practical measures that will help to mitigate the impact of airport-related noise on local communities, including the use of NPRs, it is clear that a more flexible approach towards their design would assist in extracting greater capacity from our existing

runway. There would of course be a trade-off between the areas that might experience over flights on departure from an airport, and those that do not. Allowing some form of flexibility in how NPRs are designed, and ensuring there is a formal and an ongoing channel for discussion of their design with an airport operators, would assist in extracting greater capacity from existing runways and also ensure that there is scope to give periodic respite to areas that are consistently overflowed by departing aircraft, should that be judged to be necessary by appropriate noise governance groups and NATS.

Likewise, more widespread use of new technology is also a key factor in ensuring that the design and use of airspace, especially airspace in the area of an airport, is as efficient as possible. One such technology is P-RNAV, a method that uses satellite navigation, ground-based aids, and on-board electronic systems to allow aircraft to self- navigate on any desired path.

Amongst other benefits, P-RNAV allows the separation distances of aircraft in the air to be reduced. Effectively this means that more aircraft can take-off from a runway within a given time than is case with older navigation technology. This effectively boosts the capacity of that runway to handle a greater number of aircraft. Technology that can enable P-RNAV to be used by aircraft on approach to an airport is currently in development. Some form of regulatory requirement for aircraft using UK airports to be equipped with P-RNAV would enhance the capacity of those airports to support additional flights.

Questions Section: Climate Change impacts

5.30 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?

In our view, the significance of impacts must be assessed on the basis of how widespread their effects are, and how many people they directly or indirectly affect. On this basis, carbon emitted from aircraft and airports is the most significant impact of aviation, due to the fact that those emissions can contribute towards climate change- a phenomenon that could affect the entire world population.

Despite the scope of this impact, it is important to put aviation's role in climate change phenomena into perspective. The sector makes up around 2% of total global CO₂ emissions and around 6% of the total UK emissions. Emissions from cars and road transport are more than double this amount. In 2050 under "business as usual" projections aviation's effects, including radiative forcing, could account for around five per cent of the total warming effect. There is no doubt that aviation has a role to play in reducing carbon emissions, but it is important for Government to understand the context of our contribution to climate change in developing policy both around aviation, and around aviation infrastructure.

This impact can be addressed via many different channels, many of which are outlined in the most recent version of Sustainable Aviation's 'Carbon Roadmap'. Those with the greatest potential are, in our view:

- **The Snowball Effect:** The lighter an aircraft is, the less fuel it burns, and the less fuel it needs to carry. Engines are also becoming more efficient, again leading to less fuel burnt. This creates what we term the 'snowball effect'. We believe that the latest airframe technology, coupled with engines that could deliver 20% improvements in fuel efficiency, could mean a 28% reduction in the amount of fuel burnt on a transatlantic flight¹⁰.
- **Aircraft Design:** Some aircraft currently fly shorter routes than they were designed for. Savings in fuel could be achieved if more aircraft flew routes that matched their actual range. The commercial practicality of doing so needs further investigation. Aircraft could also be designed to fly at a lower cruising speed. Again, the cost of fuel influences how economic this is for a given airline.
- **Operational Efficiency:** Getting an aircraft into the air quickly and efficiently, and ensuring that it can land without circling for too long are key. These are both issues that air traffic control providers are making significant progress on, but are also related to the runway capacity of some busy airports being constrained.
- **Sustainable Alternative Fuels:** Wider use of sustainable biofuels would facilitate a significant reduction in CO₂ emissions, whilst still creating an environment where the total number of flights to and from the UK could grow with a commensurate fall in the carbon emissions that the sector generates. As our answers to section one of this response, as well the FTI Report, show this demonstrably in the interests of the UK economy as a whole.

We also note the Governments assessment that the promotion of greater use of biofuels in aviation would deliver the most overall carbon savings whilst at the same time being the most cost-effective 'policy lever' in terms of overall cost to economy vs. tonnes of carbon emissions saved¹¹. In our view, greater use of sustainable alternative fuels offers the best available opportunity to reduce aviation's carbon emissions, whilst maintaining its potential to boost growth.

As well as carbon impacts, we note the growing debate around the environmental impact of aircraft contrails, although further research is required to accurately assess its extent. It is thought that water vapour emitted by aircraft engines at high altitude combined with small particles in the atmosphere lead to the formation of cloud cover and hence create a warming effect on the earth. Further work will need to be done to confirm this concept and then a technological solution to engine design and fuel chemistry may be needed.

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

In our view, the aviation sectors role in reducing carbon emissions should reflect its contribution. Domestic and international aviation emissions account for roughly 6% of the UK's carbon emissions. This equates to 21% of the UK's transport sectors GHG emissions and compares to 43% from cars.

Moving forward, we note the Governments view that UK aviations growth rates to 2050 will average around 2% per annum¹². However, its also the case that due to the relative lack of economic growth in the UK when compared to emerging markets in Asia and elsewhere, the UK's contribution to aviations overall global emissions is likely to fall in proportion to that of our international competitors. Figure 4 shows that, despite this, the aviation sectors carbon emissions relative to 2002, as well as carbon emissions per terminal passenger relative to 2000 have not fallen as fast as the industry projected they would as part of Sustainable Aviation's first carbon roadmap published in 2006.

¹⁰ Rolls Royce

¹¹ Government Response to the Committee on Climate Change Report on Aviation (August 2011)

¹² Dft Passenger Demand Forecasts (August 2011)

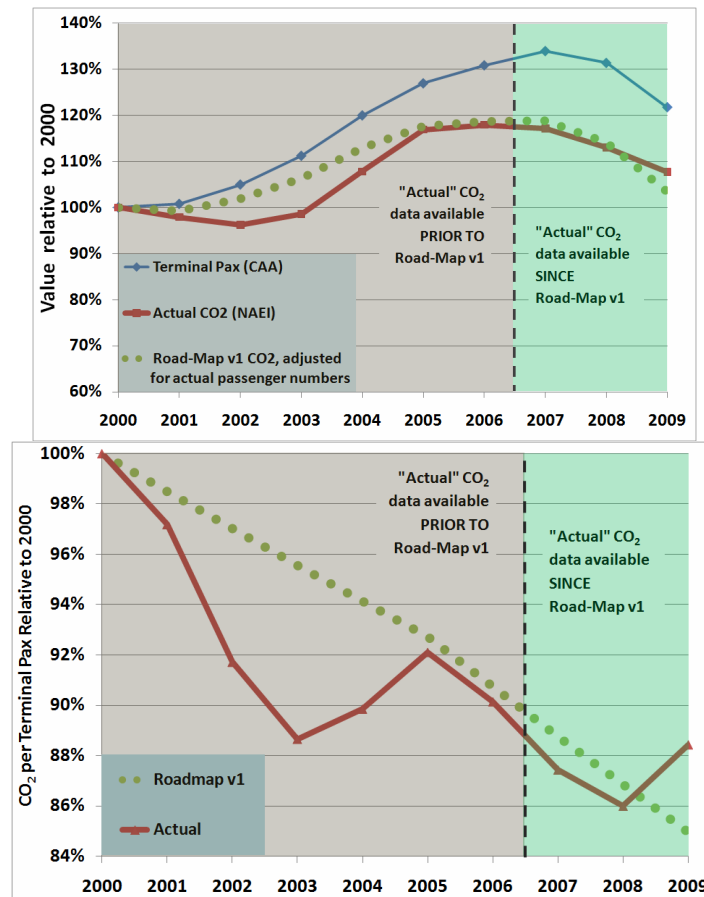


Figure 1 – Comparison of actual CO2 vs. the first SA CO₂ Roadmap.
 Data sources [CAA, 2010], [NAEI, 2011], [SA, 2008a].

The fact that other sectors appear to be on course to continue reducing their emissions against the relatively slow progress being made by aviation is itself a clear sign that our sector needs support in its efforts to move towards operating on a more sustainable basis. As our response has demonstrated throughout, the fact that aviation is vital to the future of the UK economy, given the specific nature of that economy, that support is especially warranted.

The sector has already achieved a great deal through carbon reduction programmes and the immanent inclusion of aviation into EU ETS. There are plans to do more but in order to deliver the step change in carbon emissions that is needed, Government support will be required.

5.32 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 ETS? If so, what?

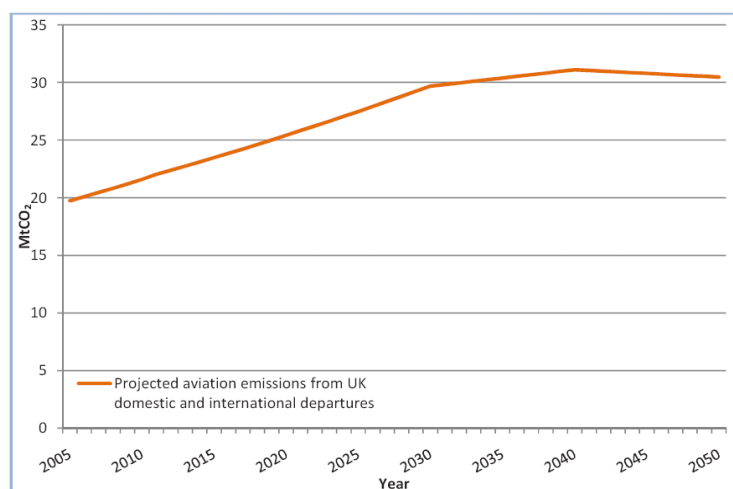
At an EU level, from 1st January 2012 all domestic and international flights arriving at, or departing from EU airports will be included in the 3rd Phase of the EU ETS. During the initial period of inclusion (1st January 2012 – 31st December 2012), the total quantity of permits allocated to aircraft operators will be equivalent to 97% of historic aviation emissions, defined as average emissions from between 2004 and 2006. From 2013 until 2020, the cap will be stabilised at 95% of historic emissions.

We concur that the inclusion of aviation into the EU ETS in 2012 will deliver some carbon emissions reductions in UK, and for that reason we support the inclusion of aviation as a substantial step forward in efforts to promote the overall sustainability of the sector

At the same time, we should be clear that EU ETS on its own will not be enough alone to bring emissions down to 2005 levels by 2050. This is outlined in the recent governments response to the CCC report on aviation CO₂ emissions. In fact, some projections around UK

emissions attributed to departing and arriving flights, such as that shown in Figure 2 indicate that CO₂ emissions are not likely to fall until between 2030-2050, even after the inclusion of aviation within the scope of EU ETS.

Figure 2. Projected aviation emissions from UK domestic and international departures²⁵



Source: The Tyndall Centre for Climate Change

It is clear that the aviation sector itself has an important role to play in reducing carbon emissions, but given the fact that EU ETS will not on its own deliver the carbon savings that the previous Government aimed for, and that the current Government appears to aspire to, there needs to be other policy levers available to drive delivery towards a truly low-carbon aviation sector.

The Government have outlined several possible options in their response to the Committee on Climate Change Report on aviation. Our preferred option, as we outline above, is for the Government to use a range of policy levers to accelerate the deployment of sustainable alternative fuels. The EU expects that bringing aviation emissions into the EU ETS will save 183 million tonnes of CO₂ per year by 2020, a 46 per cent reduction on a 'business as usual' scenario. But the sector can be more ambitious than that.

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

We believe that there is significant potential to increase the uptake of sustainable biofuels in aviation and strongly support their development. Some airlines are already using a blend of 50% of conventional fuel and HEFA, which is produced using triglycerides and fatty acids that can originate from plant oils, algae and microbial oils. However, the base material costs account for some 75% of the overall production costs of HEFA based fuels currently being used. Therefore, the overall fuel cost is directly linked to the cost of the base material.

We are also clear that if biofuel is to be developed as the long term approach to reducing aviation's carbon emissions, it needs to be produced sustainably. Gatwick, and the wider sector, are conscious that any life-cycle carbon emission assessments must take into account indirect land use changes that result from bio fuel base material production. The cultivation of plants should not displace other crops, leading to higher overall emissions than would be case if fossil fuels continued to be used on a large scale. Many biofuel solutions, particularly those using vegetable oils, have just such potential.

It follows that, in order to be truly sustainable, the overall life-cycle carbon emissions of a given biofuel solution must be substantively lower than fossil fuels, and the base material must be able to be produced in the volumes required to sustain demand. In our view, the development of algal oils, which could replace vegetable oil in the HEFA process, should be prioritised in efforts to move towards a truly sustainable biofuels solution. Algal oil production would not be subject to the same land issues. However, because they would have to be produced at sea, the infrastructure costs would be particularly high. Other alternatives include

HEFA that is developed is developed through high temperature biomass gasification. Some UK airlines are in advanced stages of implementing such solutions.

It remains the case that the vast majority of the development work in this area is aimed at the automotive sector and not at aviation. This is somewhat misplaced as there are already several solutions in place or being developed for automotive use. There are no other 'needle moving' viable options for aircraft other than biofuels. The government needs to consider this mechanism very seriously if aviation is to have a good chance of delivering against a 2050 target, stated as achievable by the CCC, if it determined that such a target should be adopted, and also if it determined that aviation emissions should be included within the annual carbon budgets that the UK is obliged to compile under the Climate Change Act (2008).

Despite the obvious potential of biofuels, and the fact that the technology deliver them effectively is now broadly fully developed, the sector currently suffers from a chronic lack of supply, this means that the overall price of bio-jet fuel is still too high to allow a mass transition to take place, and not fundamentally affect the sustainability of the business model of a given airline. Considerable work remains to be done to remove this barrier.

5.35 What mechanisms could the Government use to increase the rate of uptake of sustainable biofuels in the aviation sector? In particular, how can we accelerate the successful development of second generation biofuels?

The Government needs to expect and understand that significant support and funding is required in order for the sector to make progress in bringing sustainable alternative fuel technology to market in sufficient quantities and at the right price to promote a whole-sale transition by airlines. New and existing fuel suppliers need to be incentivised to develop infrastructure to deliver and produce these fuels. In essence, the production and use of alternative aviation fuel is financially prohibitive.

There is a clear opportunity, with the inclusion of aviation into ETS in 2012, to exempt alternative fuels from the scheme via a easy to use and clear mechanism. This would send a clear signal to the industry that there are viable long term alternatives. It is a long debated issue, but the hypothecation of tax revenue from aviation, particularly that from Air Passenger Duty (APD) would show a clear commitment from Government that it was committed to a transition to sustainable alternatives to jet fuel and would help to accelerate uptake. Whilst the automotive sector does not benefit from hypothecation it does receive several hundred million pounds per year in subsidies and research grants to develop alternative fuels and drive trains.

We also fully support the views of other industry stakeholders around the need for aviation biofuels to be included in the scope of the implementation of the EU Renewable Energy Directive in the UK. The directive allows for a subsidy worth up to £200 a tonne to encourage the development and use of biofuels. We understand that Ministers are minded only allow the subsidy for road based vehicles via support for biodiesel. This is contrary to the steps that both the Netherlands and Germany are taking to ensure that aviation biojet fuel is also eligible. Clearly, if the scope of the directive extended to bio-jet fuel, uptake would be promoted.

In terms of how Government could look to increase the rate of uptake of second generation biofuels, we are clear that the critical issue is shortage of supply, which leads to prohibitively high prices, which in turn prevents a wholesale transition. Simple economics would dictate that if supply is increased, costs would reduce, making the use of alternative fuels economic for users. Therefore, it would appear that the role for Government in supporting uptake lies in using appropriate pricing mechanisms to stimulate supply. On a highly generic level, the Government could consider using the following fiscal 'policy levers' which have been applied to encouraging supply of sustainable energy, which receives £1.4 billion of incentives and subsidy in the UK every year in the context of promoting supply of sustainable biofuels for aviation. The fact that the proportion of energy being produced sustainably has risen considerably in recent years is attributable to these kinds of incentives, which have also been applied in different contexts in different parts of the world:

- **Direct subsidy of production:** The Government could actually support the overall production of biofuels financially, cutting the cost risk of production.
- **Government intervention to reduce project specific risks** (e.g. partially underwrite contingencies and provide insurance for new projects to produce biofuels) Reduces uncertainty around unknown or unquantifiable risks, hence helps lower cost of capital. It could encourage more producers and suppliers.
- **Soft loans/credit guarantees/ Government participation in projects.** These could assist new entrants and smaller developers, would lower the cost of capital required for the project and be useful for new UK-based manufacturers to assist in funding initial pilot project.
- **Fast-track planning or special ‘economic zones’** and rent-free holidays for new manufacturing capacity. There have been cases of industry stakeholders wanting to build plants that can produce alternative aviation fuels but being halted by the planning system.
- **Investment / production tax credits and tax depreciation**, as has been done in the US with Wind power and CHP plants.

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

There are several technology options available to deliver additional CO₂ savings. Many of them have corresponding environmental impacts in other areas.

Airport Collaborative Decision Making (ACDM): this is an airfield management tool for ensuring the airfield operates as efficiently as possible with minimal aircraft queuing and taxi times. It also allows airports across Europe to be connected in real time, which realise greater efficiency gains. This ultimately delivers greater fuel efficiency, and through that a CO₂ saving. Gatwick is deploying this management tool in an enhanced form that is unique to us (See question).

Continuous Climb Departures (CCD): This procedure would allow departing aircraft to leave the airfield as quickly as possible gaining maximum altitude to climb away from the airport. This is a benefit over existing departure procedures as aircraft would reach cruising altitude in a shorter time reducing fuel burn and CO₂ emissions. There is potential for noise impacts to increase as a result of using this technique, and its use must be carefully considered.

Introduction of advanced Preferred Route Navigation (PRNAV): this would enable departing and arriving aircraft to follow very precise routes in and out of the airport. This would avoid deviation and thus reduce track miles flown and CO₂ emitted. It would also provide certainty for local communities around exactly where noise could manifest itself.

Amended Standard Instrument Departures (SIDs) and Noise Preferential Routes (NPRs) both of these are relevant to departing aircraft and have been in their current format for many years now. Aviation and technology have moved on and there could be some significant benefits to be achieved for CO₂ reductions in reviewing them, through reducing the overall ‘track miles’ that an aircraft has to fly on ascent.

Supporting all these initiatives is the current programme of European work, Single European Sky ATM Research Programme (SESAR). SESAR aims to remove the fragmented approach to air traffic movement, transform the ATM system and synchronise the plans and actions of the different partners.

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

We refer to points and comments we make within paragraphs 5.32 through to 5.36.

5.38 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)?

We are active members of Sustainable Aviations “Low CO₂ on the Ground” scheme. This is a voluntary scheme aimed at reducing airfield CO₂ emissions through the sharing of best practice and ideas across the industry. This group is looking at initiatives such as wide spread single engine taxiing and reduced use of aircraft auxiliary power units (APUs). We are also committed to improving our passenger public transport modal share.

As part of our Section 106 planning agreement with local authorities we agreed a target of achieving 40% mode share by 40 million passengers per annum. We are currently handling around 32mppa and have just reached our 40% target. There are also other initiatives that we are employing to reduce environmental impact of surface access such as electric vehicle charging points in passenger car parks and the integration of staff car share schemes. Incentives for low carbon vehicle fleets are also being developed for airside vehicles as part of our Decade of Change environmental strategy.

5.39 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)?

All of the mentioned options above will deliver steps towards reducing aviations climate change impacts. However we believe that the key to reducing this impact is partly delivered by passenger travel methods and lifestyle choices, but also a significant step will be in delivering a sustainable aviation solution.

The future demand for air travel is certain and the benefit for the wider economy and employment is clear. The key is in providing a sustainable low carbon technical solution that will allow air travel at current levels and even beyond but at a reduced level of environmental impact. Improving aircraft load factors is one way of unlocking capacity and in reducing impact per passenger. This is something we are working hard on with our airlines and other business partners.

National Air Traffic Services (NATS), are also engaged in the SESAR programme aimed at delivering greater efficiency and capacity in air space design and use. Although this is predominantly dealing with the broader European airspace, there are some real benefits to be realised on a more local terminal control basis around Gatwick through the reduction of track miles flown in and out of the airport.

Questions Section: Local impacts

5.40 What do you consider to be the most significant impacts – positive and negative - of aviation for local communities? Can more be done to enhance and / or mitigate those impacts? If so, what and by whom?

Gatwick Airport generates a significant positive benefit for the local economy both in terms of Gross Value Added (GVA), currently around £2 billion per annum, and the jobs that we create and sustain. The airport directly employees some 2,500 people as part of a total of 23,000 on site and has around 70 airlines operating to over 200 destinations. As the world’s busiest single runway airport it is inevitable that there may be some environmental impacts on the local community. We take noise and air quality very seriously and, and believe that it is these impacts that are most significant.

Community engagement is key to mitigating and enhancing an airport’s noise management reputation. Key to delivering this is the proactive communication by airport noise management

teams with noise affected communities. We also believe that there needs to be a stronger engagement from the DfT and NATS around current airspace utilization procedures and around planned future technology advances. This is often the information local communities want to hear in order to allay their fears that the industry is inactive on noise mitigation and that things are just going to get worse.

In fact the opposite is true, 57dBA is accepted as the level at which noise becomes a nuisance by Government. We have seen no intention on the part of Government to change this threshold. Nor do we believe there is any need to do so. Over the last 5 years the 57dBA noise contour at Gatwick has reduced significantly in size and in the number of people covered. Since 2005 the 57 dBA Km² area has reduced by 20% and the number of people within the 57dBA contour has reduced by 60%.

Gatwick Airport also borders an air quality management area in Horley. We have been working very closely with Reigate and Bansted Borough Council to model the future predicted air quality impacts and to develop action plans to manage and reduce emissions from the airport. Since the classification of the AQMA here have been no annual breaches of the 40ug/m² NO₂ limit, in fact latest actual emissions and modelled emissions show a steady decline in NO_x emissions.

It is worth stressing there is an interdependency between these two impacts. We are striving to achieve a balance that will deliver the best result for affected communities.

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

We have a strong working relationship with our statutory consultative committee, GATCOM, which is often cited by observers as a model consultative committee. The officers of GATCOM, through ongoing liaison and consultation, ensure that an adequate balance of issues of interest to aviation and matters of concern to the community are tabled for consideration at quarterly meetings. With a broad membership of local decision-takers, policy makers and opinion leaders (including representatives of several local authorities) the quarterly meetings of GATCOM are a valuable forum for discussion and debate – often resulting in papers of substance being prepared for government consultations, parliamentary inquiries or regulatory reviews.

We are aware the government is closely monitoring how airports interact with their surrounding communities. Gatwick has a very constructive partner in GATCOM, but we acknowledge the situation may be different for other airports. It is for the DfT to offer clarification and direction on what it may regard as an ideal level of “community engagement”.

Gatwick launched a three month public consultation on our draft master plan on 13th October 2011. This will include a number of exhibitions and workshops in key locations around the greater Gatwick area, and we have outlined the details of our long term development aspirations at both a general and a more detailed level. We also have integrated an interactive online element to the consultation process allowing the public to make comments at anytime at their own pace. We have sought to follow national and local government guidance on best practice on consultation in our activities.

5.42 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?

Gatwick is clear that a fundamental reassessment of the way in which public policy caters for effective surface access airports needs to take place. Airport Transport Forums and Surface Access strategies provide a valuable starting point for determining what the surface access to airports is required. However, they should be seen as just that- a starting point. Airports can outline the views of their local stakeholders, and outline their priorities. However, provision of effective surface access is not within their gift. We look to Government to put in place a

specific policy around the proper integration of airports with other transport modes, and, in particular, the UK rail network. Only through a clear policy can truly improved surface access, and the environmental benefits that could deliver, begin to manifest themselves.

We believe there is a clear rationale for a clear policy around surface access to airports to be developed. The Eddington Transport Study (2006) established that any modern integrated transport system should seek to ensure the greatest possible level of connectivity between the various modes of transport that it connects if the potential for all modes to promote growth is to be maximised. In practice, this means business passengers should be able to interchange seamlessly between the air link that they have just made use of, and the rail link that might take them to their final destination. Whilst Gatwick is one of the best connected airports by rail in the UK, we are not convinced that London's rail links currently achieve this to level that they might, or that other countries achieve. There is still much for Government to do if Eddington's vision is to be realised.

In recent years, we have seen the level of rail connectivity afforded to and from the airport with London, and indeed the rest of the UK, degrade rather than improve. Locally, rail access to the east and west of Gatwick is a challenge. The loss of a direct link to Kent is of particular concern both to passengers and the local community, for whom our station is a regional rail hub.

On a national level, links between Gatwick and the UK's major cities and conurbations have reduced significantly in recent years. Gatwick has lost its direct routes to Oxford, Birmingham, Manchester, Watford and Kent. Gatwick and other London airports need direct rail services in the context of increasing access to London's key international gateways and reducing the carbon impact of surface access to and from the airport.

As demand for rail services grows, limited rail infrastructure capacity on routes that do continue to run can prevent additional services being introduced to support demand on the part of air passengers. This is a major barrier to the effective provision of rail services to a major airport. Some carriers may downgrade dedicated air-rail links as a result. Limited services result in the end-to-end air passenger experience being directly affected.

The London to Brighton main line is a prime example. Due to limited capacity, the dedicated Gatwick Express service has effectively been removed in peak hours and turned into a commuter service to Brighton. This has obvious implications in terms of the quality of rail provision to and from the airport. As a key priority, and especially given its status of a strategic national corridor, the capacity of rail links between Gatwick and London must be expanded and remain dedicated.

As part of the South East Airports Taskforce, (SEAT) we outlined a new number of key issues that urgently needed to be addressed if these objectives are to be achieved. Foremost amongst these was the fact that a number of vital rail links were under threat because of recommendations made about their future in Route Utilisation Strategies (RUS) produced by Network Rail. This is a particular issue for Gatwick, given that over a third of our passengers come to and from the airport by rail- the highest proportion of any UK airport.

The Government, in its response to our proposal that Ministers take a direct role in formulation of recommendations around rail access to airports in future, stated that "The onus is on airport operators to make representations and provide evidence on the importance of airport surface access and the need for enhanced services during the course of relevant consultations". Gatwick have provided that evidence. Network Rail have determined that our concerns are not relevant for their long term strategy for Rail in the London and South East region. In raising our concerns with Ministers, we have been advised that we must "engage with Network Rail" or the "relevant train operators". Those same train operators and Network Rail advise us to look to Government. There is a clear policy disconnect in this area which must be addressed.

While RUSs are not binding on the Government of the day, we continue to be concerned around the role they play in outlining the terms of future rail franchises particularly given that Network Rail, an unelected body that is nominally in the interest of Government, are effectively

given a huge amount of authority over the degree and quality of rail access to a major international airport moving forward.

Our view on ministerial involvement in RUSs extends to the detail of future franchises. We believe that future public policy must make provision for Government to ensure that the quality and frequency of airport rail services to and from airport are not compromised as a result of limited line capacity. RUSs effectively take a view that the needs of the everyday commuters from the South of England to London are paramount in any determination around how this capacity is used in future.

In our view there is a role for Ministers in determining how future rail franchises are specified to train operators and the services that any franchisee should seek to provide, with particular reference to the 2015 South Central and Thameslink Franchises. These should make provision for the need to ensure high quality, high reliability services to and from Gatwick Airport from who-ever is awarded them- with a focus on retaining a non-stop express service. The retention of a non-stop Gatwick express services is a fundamental requirement for the future growth of Gatwick airport, and the wider UK economy as a whole.

We do note the Government's view that it should be for rail industry take the lead on timetabling decisions, rather than Whitehall. In our response to the Government's recent consultation around rail franchising, we supported many of the proposed changes. In this instance however, we do see a need for Ministers to take a more sophisticated approach towards their involvement in the basic components of franchises, where there is clear need for the services concerned to promote improved integration between rail and another mode of transport, particularly airports. Not all train services are the same in nature. Government policy should not seek to classify them as such.

5.43 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?

In principle this is a interesting option, but exactly how an envelope would be developed and on what basis aviation growth would be possible will need to be carefully defined.

Firstly, it should be made be clear that a form of noise envelope is already in place at Gatwick in the form of annual noise contours produced by ERCD and the restrictions placed on us for operating night flights. These are not currently linked directly to restricting aviation growth, but instead provide a limit for noise exposure at night and for annual noise foot print performance tracking. Linking and allowing aviation growth within a fixed noise envelope would provide significant benefits for Gatwick and our growth plans. We recognise noise as a key issue for our local communities and effective engagement with them on how we aim to mitigate and reduce noise is an important element in enabling us to grow.

Having a noise envelope may not reduce noise for affected communities but the advantage is that there will be clarity and predictability of noise levels and where it will be experienced. It would also be important to agree the basis on which the envelope boundary would be set. This could be done by noise level, number of people affected, number of households or even Km² area. We believe that there is merit in agreeing the boundary of a noise envelope based on an agreed decibel level linked to a Km² area. Agreement between both parties to allow the airport to grow in line with our plans but without an increase in Km² of the set level of noise would be very beneficial. We would certainly be interested in discussing the detail around a noise envelope and how it might work at Gatwick.

We would also suggest that any Sustainable Framework for UK Aviation must address the issue of noise affected communities and people that live out side the conventional noise contours, people who live underneath approach and departure routes. Over the last few years we have experienced a significant increase in concerns from people living in these areas. They feel aggrieved because much of the focus around noise management and the international basis for defining noise affected communities does not include them. In recognition of this trend, we are now proactively engaging with these communities to understand in more detail the concerns they hold and to explore opportunities to extend the

scope of our current mitigation and reduction measures. Clearly, in some circumstances there is a need for us to go beyond what we are required to do by statute. We are prepared to do this, within the overall structure of our airport consultative committee.

5.44 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?

In addressing this issue, a clear distinction between arrivals noise and departures noise must be made. Noise preferential routes have been critical to providing certainty to people on the ground as to where departing aircraft will be and where noise will be experienced. The NPR's at Gatwick have not changed since their original positioning in 1960s. There may well be an argument for repositioning these in light of how conurbations have changed on the ground, and to ensure that the efficient use of our current runway capacity can be maximised in a way that does not cause unacceptable noise impacts. We would be happy to work with the Department in reviewing these NPRs. Departing aircraft are also subject to specific noise controls. Again, there is a need to ensure that as technology advances, these controls are reviewed to ensure the incentive for airlines to reduce noise impacts remains. We would welcome a dialogue with the Department on this issue.

Arriving aircraft present a completely different challenge, as there are no noise limits in place. There are also no existing arrivals routes or channels that aircraft have to follow other than those that exist due to airspace restrictions and over flight constraints. At Gatwick, the runway is operated on average 70% in a westerly direction. This means that the majority of arriving aircraft approach the airport from the south in a large spread to join the runway navigation beacon (known as the ILS) for final approach. When the flight paths of aircraft are viewed over a 24 hour period, there does appear to be a large spread of aircraft, however those people affected on the ground have the perception of a concentration of over flights due the increase in frequency experienced over the last few years. We have made some progress in reducing this impact with very strong performance from airlines on Continuous Descent Approach (CDA). This ensures aircraft fly higher for longer and therefore noise impact on the ground is reduced. Gatwick performance currently stands at around 90% compliance with this voluntary airline agreement.

When trying to establish a view on whether concentration or dispersal is the best option there will always be winners and losers in terms of the way different communities experience impact. The key to providing a fair outcome for everybody is in providing certainty of where the noise will be experienced and making provision, with responsible organisations like NATS and CAA, for those communities to have a degree of respite, should that be technically possible. We feel that as the demand for air travel grows and the frequency of air traffic movements, increases noise will be the most important externality that it would be necessary to address. We have been working on solutions that fit these principles and are hopeful of a successful outcome for all concerned.

5.45 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 NOx) through the implementation of new technology?

The model to follow here is the one adopted by the automotive industry. There needs to be a balance between, legislation, tax and incentive/grants. The automotive sector have made huge strides in terms of the technology available to them over the last 10 years and that has not been achieved by the companies alone. They have received significant financial support alongside considered legislation and tax applications. The aviation sector is receiving no support of this kind and is simply being taxed via several different mechanisms all under the guise of the environment. There are advances in new technology being developed by aircraft manufacturers but the time frames are currently long and this is not helped by the operational lifespan of today's aircraft. In order for this new technology to be brought into play sooner Government needs to provide support for our sector in line with that it provides to automotive.

5.46 What are the economic benefits of night flights? How should the economic benefits be assessed against social and environmental costs?

Gatwick Airport is given annual night flight limits by the DfT, the number of arrivals and departures at Gatwick are controlled during the night period by a system which includes a movement limit and a quota count (QC). Quota counts are a number of noise classification bands ranging from 0.25 to 16 points applied to types of aircraft. We are currently operating very close to our summer and winter limits of 11200 and 3250 movements respectively.

We have commissioned some independent research that outlines the economic benefits that allow us to operate these night flights.

Night flights are an essential part of our strategy for growth, and our ability to support the additional passengers that we are able depends on the current quota remaining in place. Nevertheless, we do accept that the impact that night flights can have on the daily lives of affected communities. For that reason, our future plans for growth assume that there will no increase in the overall movement limit/quota count applied to Gatwick. We will not be seeking any increase in the Government's forthcoming consultation on the future night flights regime.

5.47 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?

We are currently investigating opportunities to reduce night noise impact through operational solutions. As we note in our answer to 5.47, we are aiming to grow the airport to 40mppa by 2020. These plans do not include any increase in our current night flight allowance in terms of number of movements or quota count.

5.48 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?

Respite is certainly an option to consider but would need careful consideration as increasing flights before and after these periods may be counter productive. Also trying to move these flights just before and just after the night period would face difficulties as these times are already very busy. To help provide some reduction in night noise we are looking at possible operational measures to alleviate aircraft noise at night, whilst this is not respite in the true sense it may provide some improvements.

Any Other Issues

Land Safeguarding

When Gatwick passed into new ownership we made it immediately clear that we would respect the agreement reached between the previous owner and our local authorities not to build a second main runway before 2019 and that continues to be the case.

We continue, however, to safeguard land against the eventuality that a further runway might be required at some point in the future in accordance with the requirements of the Air Transport White Paper 2003. As recently as February this year, the Secretary of State for Communities and Local Government noted in a letter of determination on a local planning matter that the safeguarding aspects of the 2003 White Paper remain "extant".

We believe that this aspect of policy should be maintained by the present Government so that land may continue to be safeguarded at Gatwick

We have no current plans to build a second runway, but like any business our plans need to cater for all eventualities and we must be able therefore to safeguard land for the future.

ENDS.