



Civil Aviation Authority

Submission to the Independent Transport Commission

Evidence to the ITC's Call for Evidence on Aviation
Strategy, October 2012

1. Introduction

- 1.1 The CAA welcomes the Independent Transport Commission's aviation study as a way of helping to generate independent and objective analysis to inform the development of the UK's future aviation strategy.
- 1.2 The UK has the benefit of addressing its aviation strategy from a strong position, having as it does one of the most developed and advanced aviation systems in the world. For example, the range of destinations available from London's airports make it the most globally connected city in the world, while over 70% of the UK population live within less than an hour's journey from an airport that offers connections to international destinations. The last two decades have seen sharp reductions in prices, particularly for short-haul flights, prompted by liberalisation which has driven competition and enabled the development of a successful "no-frills" sector that now accounts for four out of every ten passengers flying to or from the UK¹. The choice and value available to consumers have, in some ways, made recent years a golden age for UK passengers and for UK businesses that rely on aviation.
- 1.3 However, the aviation sector is already showing signs of stress and the UK faces significant challenges if it is to continue to ensure aviation meets the needs of its consumers and wider economy. In addition to the exposure to the weak world economy, it faces looming constraints from aviation infrastructure in the UK that, in some parts of the country, is operating at or close to capacity, as well as environmental constraints at the local and national level. In addition, there is evidence that the sector may not be meeting the needs of its consumers as effectively as it could. A successful aviation strategy needs to confront all of these challenges.
- 1.4 Government aviation strategy has a vitally important role to play in shaping the future of UK aviation by providing a robust framework that sends credible signals about the long-term direction of policy. However, Government's role is a supporting one, not as the main actor: the aviation sector is an overwhelmingly commercial industry, driven by private investment. Consumers benefit from the choice and value that have resulted from competition and innovation in the sector over recent decades. A successful strategy will need to provide a sufficiently stable regulatory environment to encourage investments that continue to deliver benefits for passengers and the wider economy, whilst targeting any interventions in ways that improve outcomes and minimise unintended consequences. Given the long lead times involved in delivering aviation infrastructure and in developing new technologies, policy stability is crucial. Consequently, an effective strategy will need to secure the support of successive Governments if it is to deliver successful change.
- 1.5 This submission summarises the views of the CAA, the UK's specialist aviation regulator, on the questions that have been posed by the Commission. Further information on a number of issues highlighted in this response can be found in the CAA's input to the Government's aviation policy

¹ Source: CAA airport statistics, 2011 figures

framework, which informs much of this submission and is available from the CAA website².

² www.caa.co.uk/SustainableAviationFramework

2. Is there a need for greater aviation connectivity and capacity in the UK, and of what type? Over what timescales do we need to solve our aviation needs, both in the short and the longer term?

- 2.1 As noted in the introduction, UK consumers currently enjoy very high levels of connectivity. For example, the range of destinations available from London's airports make it the most globally connected city in the world, while over 70% of the UK population live within less than an hour's journey from an airport that offers connections to international destinations.
- 2.2 According to figures published by the World Economic Forum, despite the UK's relatively small size, its aviation network, measured in Available Seat Kilometres, is the third largest in the world behind only the USA and China³.
- 2.3 Long-term demand forecasts are, by their nature, always subject to considerable uncertainty. This is especially true in the current economic climate. However, we recognise that the Government is looking to put in place a sustainable framework for aviation that takes a long-term view of the challenges facing UK aviation.
- 2.4 Current evidence suggests that the distribution of current airport capacity in the UK is poorly suited to meet the demands of the future. The latest demand forecasts, published by the Department for Transport in August 2011, show demand growth becoming restricted by capacity constraints at all airports in London and the South-East before 2030⁴. In addition, some of the larger airports outside the South-East are also forecast to become capacity constrained by 2030. At the same time, the CAA recognises that there is significant spare airport capacity in many parts of the country and that a number of the smaller regional airports face challenges in terms of commercial viability.
- 2.5 The CAA does not have a fixed view as to whether any additional capacity should be aimed at facilitating growth of point-to-point routes or providing hub connectivity. The CAA considers that this is an important question and intends to carry out further work in this area in order to understand the full implications of this choice.
- 2.6 However, as discussed in the following section, one impact of capacity constraints is to limit the ease with which airlines can establish new routes to the key emerging markets that are likely to have a growing role in driving future economic growth. Accordingly, there would appear to be some benefit in any additional capacity being fit-for-purpose for the hub operations that may help support the commercial viability of such routes.

³ World Economic Forum (2011) Global Competitiveness Report

⁴ DfT, UK Aviation Forecasts 2011

3. What would be the implications of failing to provide additional capacity?

- 3.1 A number of the challenges faced by the aviation sector are forecast to have a considerable effect on the ability for aviation to serve the consumer, and by extension the wider UK economy.
- 3.2 Constraints on capacity are likely to limit consumer choice. For example, at Heathrow, which has been operating at or close to capacity for approximately 10 years, experience has shown that airlines have tended to enhance 'slot productivity' by allocating scarce capacity to the most profitable routes. These routes tend to be operated at a higher frequency than at other airports, but with the total number of destinations served from Heathrow declining over time. The opportunity cost of scarce slots mean that airlines at Heathrow are less able than those at other European airports to try out new routes to emerging markets. Furthermore, there is evidence that the lack of available capacity at Heathrow is already beginning to affect the UK's ability to negotiate more liberal air services agreements with foreign states, including a number of key emerging markets.
- 3.3 A further trend at Heathrow is the reduction in the number of domestic airports with connections to Heathrow. For example, the figures show that that between 2000 and 2010 the number of domestic airports served from Heathrow fell from ten to seven (though this has to some extent been reversed following the recent merger of British Airways and bmi).
- 3.4 A further effect is the likely increase in fares. The Department for Transport's forecasting model generates a 'premium' on fares to simulate the additional costs to passengers where capacity constraints become binding. The level of demand growth predicted by the 2011 forecasts suggests that the value of fare premiums resulting from capacity constraints at UK airports is predicted to total £1.7bn in 2030. Spreading this equally across the 330m terminal passengers predicted to use UK airports in 2030, this equates to £5 per terminal passenger or £10 per return journey. There is much variation in how this impact is distributed with significant increases at some airports and very little impact at others. The implied 'premium' per one-way trip at Heathrow would be £12 with the maximum predicted increase being £17 per terminal passenger at London City.
- 3.5 Finally, there are clear implications for the passenger experience. Analysis carried out for the CAA in 2008⁵, and updated in 2011 for the South-East Airports Taskforce, demonstrated the trade-off between throughput and delay as airport utilisation approaches capacity. This relationship becomes increasingly severe as congestion grows. The analysis suggested that the optimal level of capacity utilisation, beyond which the congestion cost of adding additional services outweighs the consumer benefits of the additional flights, can be significantly less than an airport's technical capacity.

⁵ Both reports can be accessed at www.caa.co.uk/apfg

4. What are the key criteria for determining environmental acceptability of any development?

- 4.1 It is increasingly clear that the UK's broader environmental objectives will be threatened - and the sector's development will be blocked - unless environmental sustainability can be demonstrated. Achieving such sustainability is not optional – the choices arise in the domain of 'how', not 'whether'.
- 4.2 Addressing the aviation sector's growing share of CO2 emissions and mitigating the impact of aircraft noise nuisance and the detrimental effect on air quality that affect local communities is central to the sector's future success. The challenge of addressing climate change is genuinely global in nature. In contrast, the impact of aircraft noise and local air pollution are highly localised and demand local solutions.

Local Impacts

- 4.3 Although there are significant local impacts from aviation elsewhere in the UK, Heathrow accounts for more than one quarter of people affected by aviation noise in Europe, based on the European standard measure of 55LDen. Additionally, in terms of people affected, Heathrow has the greatest impact on air quality of any UK airport. Both these issues relate to the size and scale of the airport's operations and to its geographical location with approach and departure routes that cross the UK's principal population centre.
- 4.4 The CAA's second insight note, Aviation Policy for the Environment⁶, noted that the development of the aviation policy framework presents an opportunity to develop a new, twin-track approach to noise policy focused on two high-level outcomes:
- seeking continued reductions in the number of people affected by noise; and
 - encouraging better engagement with communities in order to achieve greater consensus.
- 4.5 A further challenge at the local level is ensuring that aviation does not lead to damaging air quality impacts. Ensuring that emissions from aviation do not lead to exceedences in European air quality standards is another criterion in ensuring a sustainable growth path for aviation.

Climate Change and Carbon Emissions

- 4.6 The CAA supports the UK Government's long-standing view that an essential part of any policy on aviation and climate change is to make the sector - in common with other energy-intensive sectors of the economy - meet the costs of its carbon emissions.
- 4.7 The ideal approach would be to secure a global agreement to this end. However, to date this has not been forthcoming and, in the absence of a global alternative, we believe that inclusion of aviation in the EU's Emissions

⁶ www.caa.co.uk/SustainableAviationFramework

Trading Scheme is the best way forward. However, we find encouraging the news from the International Civil Aviation Organisation (ICAO) that they are progressing discussions amongst member states, including the UK, on a number of market based measures to tackle aviation's impact on global warming. Though the outcome of these discussions is as yet unclear, we are hopeful that this work might lead to a global scheme to tackle aviation's climate change impacts.

5. If more capacity is needed, what are the main options and the issues they raise?

- 5.1 The implications of inaction in this area are significant in terms of the impact on the consumer and - following on from that - the wider economy. The Government has recently announced the establishment of the Airports Commission to look into the question of whether new airport capacity is required and what kind of capacity would be most beneficial. The CAA welcomes the establishment of the Airports Commission as a positive development. This is a mid-term project and further detailed work is needed to establish the evidence base for any decisions on capacity, the nature of which will be driven partly by the Government's view of the objectives for aviation policy.
- 5.2 History suggests that any decisions in this area have the potential to be politically divisive, underlining the need for both a consensual, objective framework for guiding decisions and, perhaps more importantly, mechanisms for ensuring cross-party support.
- 5.3 To contribute to this end, the CAA is recommending four key decision criteria, that it considers the Commission should have regard to when considering options and potential solutions.
- **Demand-focused:** to ensure that any capacity solution is consistent with trends in demand and geared to deliver connectivity, choice and value for consumers.
 - **Financeable:** to ensure that any solution can be funded on the basis of airport charges at a level consistent with ensuring value for consumers;
 - **Safe:** to ensure that any solution is designed to further improve the safety of the UK aviation system and is consistent with effective airspace management;
 - **Sustainable:** to ensure that any growth in capacity is consistent with environmental objectives, including balancing the needs of consumers with those of local communities.
- 5.4 Though the CAA recognises that these criteria may not be exhaustive and there may be other considerations that the Airports Commission, or Government, feels are valid, they are considerations that are central to the debate and where the CAA is well placed to offer its view. Looking ahead, the CAA intends to shape much of its advice to the Commission around these key criteria.