



# **Guidance Document 01:** Submitting evidence and proposals to the Airports Commission

February 2013

# 1. Introduction

- 1.1 The membership of the Airports Commission was announced on 2 November last year. We have been tasked with the production of two reports - an interim report by the end of 2013 and a final report in summer 2015. In carrying out our work, we are determined to follow a process which is comprehensive, rigorous, open and inclusive. This will enable us to develop the greatest possible degree of consensus around a way forward for the country's airports and to deliver recommendations that properly reflect the national interest.
- 1.2 We will also seek to take an integrated approach, making sure that our work reflects the full spectrum of relevant issues, whether they be economic, social, environmental or operational, and considering the wider effects of aviation connectivity and infrastructure at the local, regional, national and global levels. In reaching our recommendations, a careful balance between different interests and objectives will need to be struck.
- 1.3 Our ambition therefore is to propose a sustainable and integrated strategy, which considers not only how to meet the UK's aviation capacity and connectivity needs, but also looks at the broader consequences of our recommendations – for example on the well-being of local communities, the strength of the regional economy or the diversity of nearby ecosystems and habitats – and identifies measures to avoid, reduce or mitigate potential negative consequences and maximise the positive effects.
- 1.4 The UK is not the only country to find itself confronted with issues of airport capacity. While there are unique factors to the UK's situation, the questions we face are applicable to many nations, particularly those which are home to a world-city. We are eager to learn from the experience of other countries, both in assessing the need for capacity and in providing additional capacity where required.
- 1.5 The main purposes of this guidance note are to explain how we plan to put these principles into practice as we take forward the work programme which will inform our interim report, and to explain to those who have an interest in contributing specific proposals how they might best engage with the Commission.
- 1.6 Our terms of reference set out the following requirements for our interim report:
- The Commission should report no later than the end of 2013 on:*
- *its assessment of the evidence on the nature, scale and timing of the steps needed to maintain the UK's global hub status; and*

- *its recommendation(s) for immediate actions to improve the use of existing runway capacity in the next 5 years – consistent with credible long term options.*

1.7 We believe that to meet the requirements set out in the terms of reference for both the interim and final reports, we will need to produce an interim report that meets three key objectives:

- To examine the evidence on the nature, scale and timing of the UK's future aviation capacity and connectivity needs to maintain the UK's position as Europe's most important aviation hub.
- To make recommendations for any immediate actions to improve the use of existing runway capacity in the next five years and to consider other short and medium term measures for making the best use of existing capacity that might be further developed before the Commission's final report.
- To consider long-term options – including major infrastructure and any surface transport needs they may entail – and to identify a list of credible options, consistent with our conclusions on the assessment of need, to be further developed before the Commission's final report.

1.8 We have established the following loose definitions for short, medium and long term options:

- **Short term options** are those which could be delivered without the provision of additional runways or terminals, within 5 years of the publication of our interim report in December 2013.

- **Medium term options** are those which do not require the provision of additional runways or terminals, but which may need more than 5 years to deliver (for example, measures requiring significant planning approvals to be obtained or improvements in surface access infrastructure serving an existing airport).

- **Long term options** are those which involve the substantial development of a new or existing airport site. This includes the delivery of any surface access links or other infrastructure required to ensure that the new airport capacity can be utilised.

### **Assessing the need for capacity**

1.9 To help us to form our assessment of need, we will be publishing a series of papers summarising the evidence and seeking views on the most important background issues. The first of these will be on demand forecasting. It is clear that we need a baseline view of the likely demand for flights in the future, both on an unconstrained basis, and within the context of the Government's policies, including, in the context of the Climate Change Act, anything it might conclude or decide about climate change, before we can make sensible decisions on capacity.

1.10 We plan further papers on, for example, the arguments surrounding the concept of a hub airport, and on environmental issues, including noise and climate change. We will hold focused discussions around these papers, inviting written submissions and holding public evidence sessions, to inform our thinking further. Each paper will include information on how people and organisations interested in the topic can contribute to the debate, so those

issues are not covered further in this guidance document.

- 1.11 We should stress that the Commission has not yet reached a view on the need or otherwise for additional aviation capacity in the UK, and will only reach such a view following a comprehensive review of the evidence and having considered all submissions that are made. We will bring together our work on the assessment of need with that on options for the short, medium and long term prior to the publication of our interim report. By way of example, this will allow us to assess not only the specific impacts of any proposal on greenhouse gas emissions, but also to take a view on the overall level of such emissions from the aviation sector that is compatible with the UK's domestic and international commitments, in a world where aircraft technology, airspace design and surface access provision are continually evolving.

### **Short and medium term options**

- 1.12 Our interim report will include recommendations for how the use we make of our existing airports and runways might be optimised. The significance of this work goes beyond simply understanding how to make best use of our current capacity; if significant new capacity is needed it will take some years to be brought into operation and we will need to understand how the UK might cope with demand in the interim. We are keen to explore all the options of this kind, recognising that many may have only a modest impact, but also seeking any more ambitious opportunities that may be identified. We will take into account the fact that some of them – extended flying hours, mixed-mode runway operation – may generate significant effects upon local communities which will need to be carefully considered. Some may also have implications for the longer-term solutions.
- 1.13 To inform this work, we are inviting those with an interest to submit evidence and ideas, and to make their views known. This will help us to identify measures we might not otherwise have looked at, as well as shedding further light upon issues we are already considering. Section 2 of this document invites those contributions. It also outlines our initial thinking on some of the factors which we will take into account in assessing the short and medium term options.

### **Long term options**

- 1.14 Our interim report will also move our thinking forward on the longer term options, identifying those locations which seem to us to offer the best prospect of generating additional capacity at an affordable cost, should we reach a view that such capacity is required. This will focus on options which appear to have a strong possibility of being financeable and which could be achieved with environmental and other consequences which could be acceptable.
- 1.15 Getting to that point in 2013 will require drive and energy. Since the creation of the Commission was announced a number of new ideas for enhanced capacity, in the South-East and elsewhere, have been brought forward. Some of these are already well-developed; others are at the conceptual stage. Some have an obvious sponsor, such as an existing airport keen to expand capacity; but where this is not the case, the plans are bound to be less firmly based.

- 1.16 We see this process as a valuable step forward. The issue of the UK's airport capacity has perplexed governments and planners for decades. So creative thinking is welcome, whether it focuses on new ways of developing existing airports, or on brand new facilities. But there are also risks and dangers. The main risk is that a plethora of new proposals will create planning blight in the areas concerned, and anxiety among communities which might be affected if they go ahead. There is also the potential cost of nugatory work to consider.
- 1.17 In reaching our interim recommendations, part of the role of the Commission will be to ensure that appropriate consideration is given to all of the plausible options. This may involve carrying out work of our own on identifying options and, where we believe an option may be credible but may lack an appropriately resourced external sponsor, ensuring that the option in question is developed to an appropriate level to allow it to be judged fairly. The lack of an external sponsor will be a material concern, in light of our interest in ensuring that options might plausibly be financed and delivered, but is not by itself sufficient to exclude an option from consideration.
- 1.18 In section 3 of this document, we set out how those with an interest in putting forward proposals can participate in this process. This includes a list of potential areas of interest that we have currently identified and which we would encourage scheme promoters to consider as they identify and develop their proposals.

## Further work

- 1.19 A key part of our work over the coming months will also be to develop in more detail the specific criteria that we will employ in identifying those options which merit more detailed consideration. We will say more about how this initial assessment of options will be carried out in the spring, once we have had a chance to consider the Government's final Aviation Policy Framework, due for publication in March. We would welcome suggestions for criteria that might be used to identify the most plausible options ahead of the interim report and would ask that they be submitted to us by **15 March 2013**.
- 1.20 If our interim report reaches a view that a significant increase in aviation capacity is needed, in the second phase of the Commission's work the recommended options will be developed into more detailed schemes, on which further public engagement will be sought. These will be subject to a thorough assessment process, including the development of detailed business cases and appraisals of sustainability. We will look not only at individual proposals in isolation, but also at how they might be combined.
- 1.21 We will therefore need to develop a rigorous framework for assessing options during this second phase of our work. This framework will need to be consistent with European and national legal requirements, and to enable a comprehensive view to be taken, which considers the full range of economic, social, environmental and other factors, and looks at the potential impacts of schemes at the local, regional, national and global levels.

1.22 We want to ensure that the outputs of this process are of sufficient depth and rigour to enable Government to make a swift decision on our recommendations and, if it accepts them, to move to implement them as quickly as possible. That is another reason, alongside managing the risks of blight, why it is necessary at the interim stage to identify a manageable number of credible options to take forward for further exploration.

1.23 The assessment process to be used in reaching our final recommendations in the second phase of our work is an issue in which many parties will have an interest and we will engage further in the course of this year on the options for how such a process might be structured, the potential methodologies of assessing the factors we have identified, and whether there are additional issues which should be taken into account. It is inevitable that our work will be based upon a dynamic set of criteria that will change and evolve in relation to the evidence submitted.

1.24 In considering options, in both the phases of our work, we will require the assistance of expert advisors from a broad range of disciplines and we have previously announced that we will establish an External Advisory Panel to provide such support. It is already clear that we will need specific advice focussed around issues such as economic and environmental assessment, the use of airspace and the estimation of project costs, as well as a range of other topics.

1.25 We are currently considering the composition of this Panel and potential appointments, and intend to publish details of its membership in the spring, alongside the information on how we shall carry out our initial assessment of options.

### **Next steps**

1.26 Sections 4 and 5 of this document set out our approach to the publication of any submissions that are made and the timetables and next steps in the process. Finally, section 6 sets out the Commission's contact details, to which submissions of evidence should be directed.



## **Guidance Document 02:** Long Term Capacity Options: Sift Criteria

May 2013

# 1. Introduction

1.1 The Airports Commission's terms of reference require us to:

- examine the scale and timing of any requirement for additional capacity to maintain the UK's position as Europe's most important aviation hub; and
- identify and evaluate how any need for additional capacity should be met in the short, medium and long term.

1.2 In relation to options for major new infrastructure, we intend to publish in our interim report, which is to be completed by the end of 2013, our assessment of the most credible options for providing any new capacity, in the light of our wider assessment of need. This means identifying those proposals which seem to us to offer the best prospect of generating additional long-term capacity at an affordable cost, should we reach a view that such capacity is required. These would then be taken forward for more detailed development in the second phase of our work from 2014.

1.3 Our first Guidance Document published on 1 February 2013<sup>1</sup> described how organisations and individuals can submit evidence and proposals to inform this process, and requests that those parties with an interest in developing long-term proposals submit them to us by 19 July

2013. We also stated in that document that we would publish more details of our sifting criteria in the spring to help inform those submissions.

1.4 The purpose of this second Guidance Document is to set out the sift criteria the Commission will use to assess submissions on long term options. These criteria are set out in Table 1.1 of this document.

1.5 The sift criteria reflect the Commission's desire to take an integrated approach which takes account of the full spectrum of relevant issues, whether they be economic, social, environmental or operational, and considers a broad range of potential effects of aviation connectivity and infrastructure at the local, regional, national and global levels. This will include looking at the wider urban and regional impacts of new infrastructure, for instance on jobs, on local economies and communities and on quality of life, alongside both more direct economic benefits for the aviation sector and its users, and noise, air quality and other environmental impacts.

1.6 We believe that the sift criteria will enable us to balance the different and potentially competing interests and objectives which will need to be borne in mind as we review the options and proposals which have been submitted to us.

<sup>1</sup> <https://www.gov.uk/government/publications/submitting-evidence-and-proposals-to-the-airports-commission>



- 1.7 The sift criteria have been informed by the Commission's consideration of the key factors underpinning this process. They have also been developed by the Commission to be broadly compatible with HM Treasury's Green Book<sup>2</sup> and the Department for Transport's WebTAG<sup>3</sup> approach to the initial stages of option development and assessment. In line with WebTAG, we expect to carry out more detailed appraisals of the most credible options identified as part of the second phase of our work from 2014, should our assessment of need conclude that additional capacity is required. The sift criteria also take account of DEFRA's proposed Sustainable Development Indicators, on which it has recently consulted and the UK's legal commitments in the Climate Change Act 2008.
- 1.8 The sift criteria have also been informed by suggestions and submissions provided by stakeholders, as requested in our first Guidance Document. This is described in more detail in Chapter 2.
- 1.9 The sift criteria outline the information required by the Commission to enable us to reach informed recommendations on the most credible long term proposals to be taken forward for more detailed development and appraisal. A fuller discussion of each of the criteria is provided in Chapter 3 of this guidance document.
- 1.10 In conjunction with our work on long-term options, we are developing our approach to the assessment of short and medium term options for making best use of current infrastructure. This approach will, by necessity, vary in some respects from the long term sifting approach; in particular because the short and medium term options are less centred on the delivery of new infrastructure. However, our intention is to ensure consistency at the level of principle between the assessment approaches applied to short, medium and long term options. We are also conscious that the short term options, on which we will provide firm recommendations in our interim report, may in some cases require a more detailed assessment during 2013 than long-term options, for which we are undertaking a higher-level sifting process this year.
- 1.11 Our next milestone in relation to options for making best use of existing capacity in the short and medium term is for submissions and proposals to be sent to us by 17 May 2013. More details are provided in Chapter 2 of our first Guidance Document.

---

2 [www.hm-treasury.gov.uk/greenbook](http://www.hm-treasury.gov.uk/greenbook)

3 WebTag is the Department for Transport's appraisal guidance which can be found at <http://www.dft.gov.uk/webtag/index.php>

## **Discussion Paper 01:** Aviation Demand Forecasting

February 2013

# 1. Introduction

- 1.1 The Airports Commission was launched on 2 November 2012 to examine the nature, scale and timing of any requirement for additional capacity to maintain the UK's global hub status.
- 1.2 To make its assessment of the need for new capacity, and any options to meet that need, the Commission will require credible forecasts of demand for aviation in the UK and the international markets that UK airports serve. A number of organisations already have well-established aviation forecasts, of which those produced by the Department for Transport (DfT) are the most detailed and frequently-updated forecasts produced at a national level. The most recent version of the DfT forecasts was published on 29 January 2013.<sup>1</sup> and is discussed in more detail later in this document.
- 1.3 However, whilst the DfT forecasts might offer a reasonable starting point for our work, we are keen to explore how this approach might be enhanced and supplemented to ensure that it is as effective as possible in supporting our analysis. There are also some specific questions we will need to address which
- the current DfT model is not equipped to answer fully.
- 1.4 The Commission is particularly interested in:
- **Patterns of domestic and international demand for air travel, how these might change over time, and the implications for UK airports.** We will need to analyse carefully how demand for air travel may change in the future. Changes may stem from factors such as developments in the UK or global economy; policy changes such as carbon targets implemented on a national and/or international scale or changes in the cost of travel, for instance from increases in fuel prices. Understanding these will help us to understand what the implications are for airport capacity and whether there is a need for additional infrastructure.
  - **The competitive landscape for air travel both within the UK and internationally and how this may develop in future.** For example, we will need to understand the impact that capacity constraints, and options to alleviate them, could have on the UK's share of the international transfer market and the range of destinations served by UK airports. This is central to the debate around the economics of hub airports, and the nature as well as the scale of any future capacity needs.

<sup>1</sup> The Department for Transport's UK Aviation Forecasts (2013) can be found at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69925/uk-aviation-forecasts.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69925/uk-aviation-forecasts.pdf)

The data annexes that support the forecasts can be found at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69858/data-annexes.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69858/data-annexes.xls)

- **How to deal with uncertainty.**  
Many changes have been seen since the last detailed consideration was given to airport capacity, in the preparation of the previous Government's 2003 White Paper. Demand for aviation has not grown as rapidly as was then forecast, partly attributable to the recession. This underlines the need for any forecasting approach to be able to deal effectively with uncertainty.

1.5 This paper is structured around these three key themes.

1.6 **Chapter 2** considers the different approaches to forecasting, its use in facilitating decision making in the aviation industry and the role forecasting tools can play in helping us to address the range of issues that will play a part in our assessment of the evidence on the nature, scale and timing of the UK's future aviation capacity and connectivity needs.

1.7 **Chapter 3** focuses on the Department for Transport's approach to forecasting UK aviation demand. It sets out its assessments of the key drivers of demand and how these might change over time and describes its projections for future demand for air travel in the UK. The chapter also briefly reviews three other aviation demand forecasts produced by Eurocontrol, ICAO and Boeing.

1.8 **Chapter 4** examines the international aviation market and whether capacity constraints could have an impact on the UK's share of international transfer traffic. It explores the strengths and weakness of DfT's forecasting approach in relation to this issue.

1.9 **Chapter 5** considers the way in which we can approach uncertainty in our forecasting approach to ensure that any decisions we make are credible and can withstand a range of different future outcomes.

1.10 **Chapter 6** sets out a range of questions on which we would welcome evidence both in relation to the outputs of the recent DfT forecasts and to help us to ensure our forecasting approach is as effective as possible.

## **Discussion Paper 02:** Aviation Connectivity and the Economy

March 2013



# 1. Introduction

- 1.1 As people and goods travel to more and more distant places, and with the increasing globalisation of our economy and society, aviation connectivity – which can be broadly defined as the ability and ease with which passengers and/or freight can reach a given destination by air – has taken centre stage in the debate on the UK’s future global transportation needs.
- 1.2 In this paper, we explore how the aviation connectivity of the UK may contribute to the economy of the country as a whole. As such, the paper is structured around three main themes, each of which constitutes a separate chapter.
- 1.3 **Chapter 2** explores key drivers of connectivity and provides an overview of how well connected the UK is to different regions of the world, and how it has performed in comparison to other European countries over time.
- 1.4 **Chapter 3** considers evidence for the argument that aviation connectivity supports the UK’s economic growth through facilitating the following channels: trade in goods and services, tourism, business investment and innovation, and productivity. The chapter also sheds light on what kind of connectivity seems to be most relevant for each of these channels and how it may be improved to serve each of them to a greater extent in the future.
- 1.5 **Chapter 4** discusses a range of options for measuring connectivity and assessing the importance of different routes. Developing appropriate measurements of connectivity will help inform the Commission’s assessments of the UK’s current and future requirements for aviation capacity, and the potential effects of capacity constraints on access to the most important destinations.
- 1.6 **Chapter 5** sets out a range of questions on which we would welcome evidence and views, and provides guidance on how to make submissions.
- 1.7 **Chapter 6** provides a list of references.

## **Discussion Paper 03:** Aviation and Climate Change

April 2013

# 1. Introduction

- 1.1 Aviation has a significant impact on the Earth's atmosphere, most visibly the familiar contrails (condensation trails) that we are all used to seeing when planes pass overhead. Less visible, but probably more important, are the other emissions from aircraft, such as carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and soot, all of which contribute in various ways to climate change.
- 1.2 Globally, aviation accounts for around 1–2% of greenhouse gas (GHG) emissions. At a UK level, domestic and international aviation is responsible for around 6% of national GHG emissions.<sup>1</sup> Whilst this is currently smaller than for road transport or shipping, it is likely to make up an increasing proportion of total emissions over time. Aviation is one of the most challenging sectors to decarbonise, because aircraft are longer lived than, for example, road vehicles, and so far there are few realistic alternatives to kerosene.
- 1.3 Since the Intergovernmental Panel on Climate Change's (IPCC) landmark 1999 report *Aviation and the Global Atmosphere*, the science around aviation and climate change has continued to develop.<sup>2</sup> So too has the policy landscape. At a European level there is now the EU Emissions Trading System (ETS) which, notwithstanding the current measure to 'stop the clock',<sup>3</sup> is intended to cover aviation emissions. And at a national level the UK has enacted the Climate Change Act 2008 which includes a legally binding target to reduce the UK's emissions.
- 1.4 In making its assessment of the UK's future aviation capacity and connectivity needs, the Airports Commission will need to take account of the evolving climate science and policy. It is clear that, in respect of climate change, the world has moved on significantly since the UK Government last considered airport capacity in its 2003 aviation White Paper.<sup>4</sup> Analysis undertaken as part of that process would not necessarily support a robust decision today.
- 1.5 This paper, one of a series of discussion papers on the costs and benefits of

1 Department for Transport (2013) *Aviation Policy Framework*, p. 40, available at <https://www.gov.uk/government/publications/aviation-policy-framework>. There is currently no internationally agreed method for allocating international emissions to individual countries. The percentage shares are based on the percentage of bunker fuel sales to the aviation sector from the UK.

2 IPCC (1999) *Special Report: Aviation and the Global Atmosphere: summary for policymakers*, available at <http://www.ipcc.ch/pdf/special-reports/spm/av-en.pdf>.

3 See Chapter 3 of this document.

4 Department for Transport (2003) *The Future of Air Transport*, available at <http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/about/strategy/whitepapers/air/utureofairtransportwhite5694.pdf>.



aviation for the UK,<sup>5</sup> is intended to begin a dialogue with stakeholders around climate change issues. It provides an overview of climate science and policy as it relates to aviation, and discusses some approaches to forecasting aviation emissions. It also considers the implications of airport capacity constraints for emissions, and concludes with a discussion of the climate change adaptation challenges facing the aviation sector.

- 1.6 The aim of this paper is to open up discussion around these issues, rather than to reach firm conclusions. To support this debate, the paper presents some new analysis of the potential emissions implications of airport capacity constraints. This is something that has not previously been a focus for analysis, so we are keen to hear views on the methodology and assumptions used, as well as suggestions of other approaches and evidence that the Commission could consider.
- 1.7 Evidence submitted by stakeholders will inform the Commission's assessment of the nature, scale and timing of the UK's aviation capacity and connectivity needs, as part of its interim report at the end of 2013.
- 1.8 The paper is structured as follows: **Chapter 2** provides a high-level overview of the latest science around aviation and climate change. It surveys some of the potential technological and operational developments that might affect the carbon intensity of future air travel, and considers some of the

limitations and tradeoffs around their use. It also discusses potential alternatives to air travel, such as high-speed rail and videoconferencing, and their scope for reducing aviation emissions.

- 1.9 **Chapter 3** sets out the national and multinational policy frameworks that will have a bearing on the Commission's work, and highlights some examples of voluntary action already being undertaken by the aviation industry.
- 1.10 **Chapter 4** discusses approaches to forecasting aviation emissions, drawing in particular on forecasts by the Department for Transport (DfT) and the UK Committee on Climate Change (CCC). It examines some of the complexities and uncertainties around emissions forecasts, including the treatment of non-CO<sub>2</sub> emissions and sensitivity to future changes in the carbon price.
- 1.11 **Chapter 5** builds on the discussion of modelling approaches, and sets out some new analysis of the emissions implications of airport capacity constraints, drawn from the DfT aviation model. It seeks to quantify the potential for emissions 'leakage' from capacity-constrained UK airports to overseas airports, and considers the impact of constraints on airport capacity relative to other levers for curbing emissions.
- 1.12 Finally, **Chapter 6** discusses the climate change adaptation challenges for the aviation sector, and how the Commission might take account of these in carrying out its work.

<sup>5</sup> Previous papers in this series are *Aviation Demand Forecasting* and *Aviation Connectivity and the Economy*. Forthcoming papers will cover subjects including the economics of airport operating models. For the full series see <https://www.gov.uk/government/organisations/department-for-transport/series/airports-commission-discussion-papers>.