

# A

# Annex A Progress at UK airports

## Introduction

- 1 *The Future of Air Transport* White Paper invited 30 UK airports to prepare master plans where specific major developments were supported or where the airport is forecast to handle 20,000 or more flights annually by 2030. To support the information in the main body of this report, this annex describes in more detail the progress made since 2003 at the 30 master plan airports.

## The South East

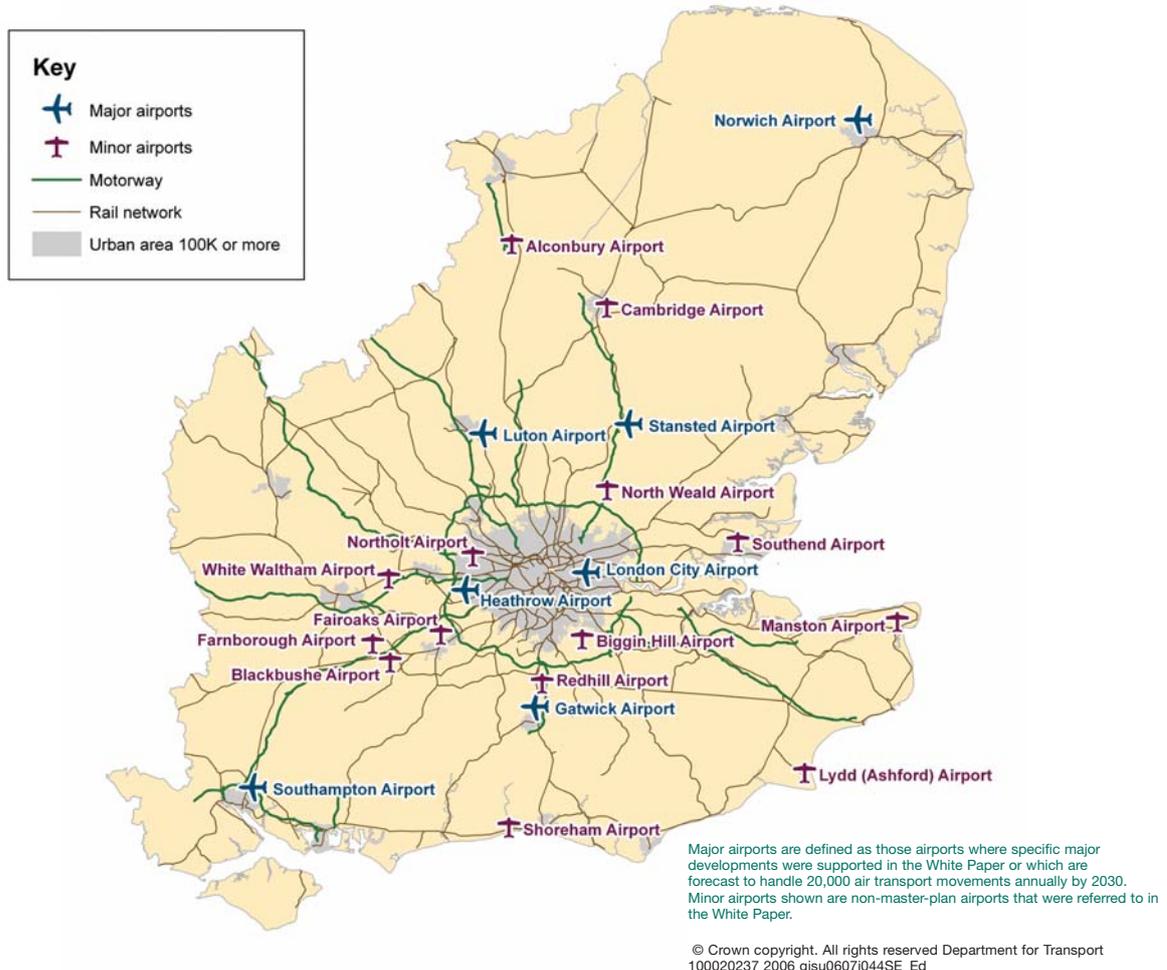


Figure A1: location of airports in the South East

- 2 Progress at **Heathrow** and **Stansted** airports is covered in the main report.
- 3 *The Future of Air Transport* White Paper recognised that **Luton Airport** provided a significant contribution to overall South East airport capacity, and the White Paper supported growth to the maximum use of a single runway in the period to 2030.
- 4 Early in 2005, TBI plc, the operator of Luton Airport, was acquired by Airport Concessions Development Ltd, a Spanish company owned by Abertis Infraestructuras (90 per cent) and Aena Internacional (10 per cent). In October 2005, the new airport owners demonstrated their commitment to the longer term development of Luton Airport by consulting on a draft master plan. This identified a number of potential development options for achieving growth on a single runway.
- 5 Luton Airport has continued to explore these options in conjunction with its freeholder, Luton Borough Council. In spring 2007, it intends to publish an interim master plan indicating development plans for the existing airport estate up to 2015. This is expected to be followed by a final master plan which will outline longer-term plans for growth beyond 2015.
- 6 The airport consulted on draft blight proposals in March 2006 and will give further consideration to its blight mitigation strategy in 2007.
- 7 The White Paper recognised **Gatwick Airport's** contribution to airport capacity in the South East and its potential role should the environmental conditions attached to a new runway at Heathrow not be met. It confirmed that the agreement not to develop the airport until 2019 should remain in place but concluded that the option of a wide-spaced runway after 2019 should be kept open.
- 8 In October 2006 BAA published its master plan for Gatwick, which outlined plans for maximising the use of the existing runway and identified the land needed for a possible new runway after 2019. In line with its master plan, BAA has also consulted on a blight scheme based on the additional landtake for a second runway. In May 2005 BAA opened the largest air passenger bridge in the world at Gatwick as part of its plans to enhance the current facilities. This spans the existing taxiway and is expected to be used by more than three million passengers a year. It will also help cut environmental impacts on the airport site by removing the need for around 50,000 coach journeys a year.
- 9 A key element of the Gatwick Airport master plan is the provision of good-quality surface access links and the plan incorporates a transport strategy which sets challenging targets for maximising the use of public transport. The maintenance of high-quality train services between Gatwick and Victoria is an important feature of this strategy. The future provision of these services will be influenced by the outcome of the Department's consultation on options for delivering the objectives of the Brighton Main Line Route Utilisation Strategy. The consultation closes on 22 December 2006.

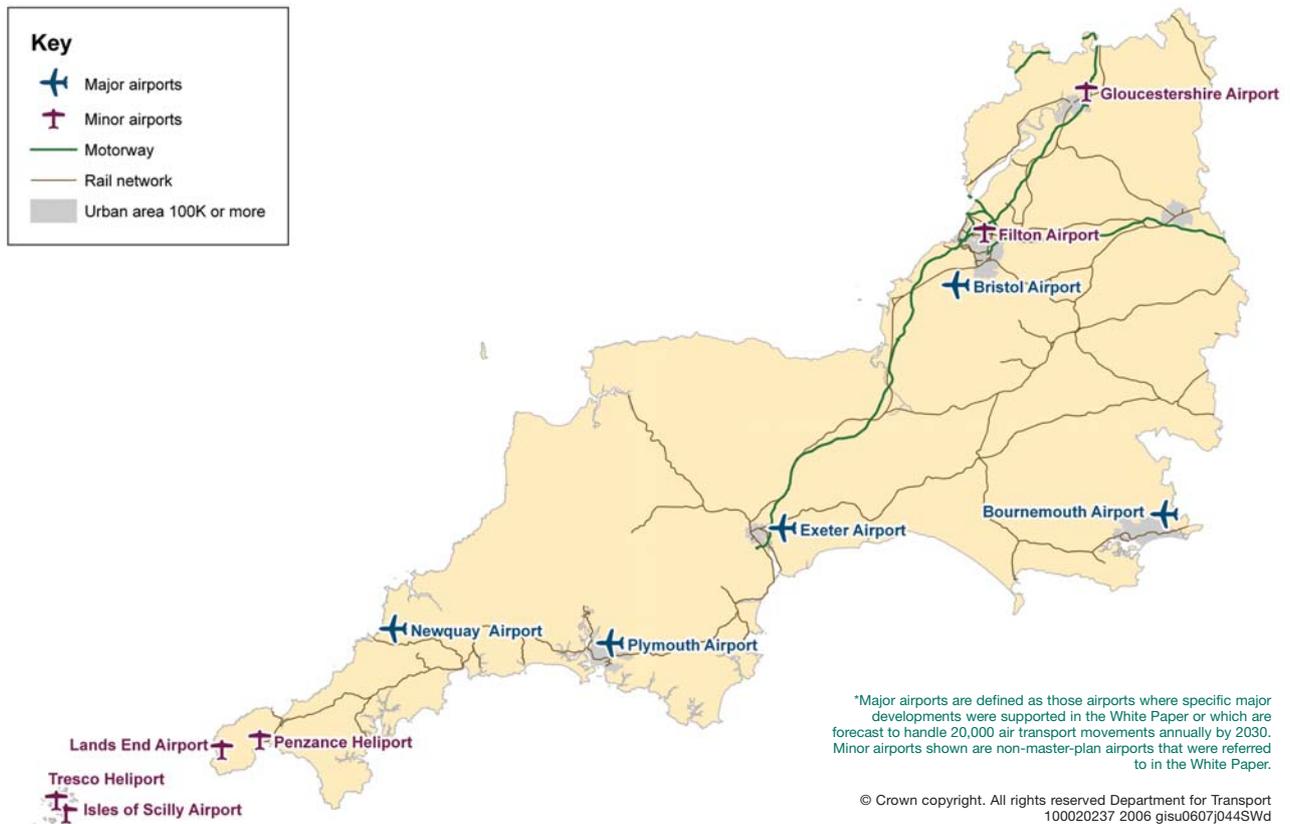
- 10** The White Paper stated that **London City Airport** was likely to demonstrate steady growth, serving a niche business market to domestic and European destinations. London City published its draft consultative master plan in March 2006 which included plans to handle 8mppa by 2030. The airport continues to be an important factor in local regeneration, business development, transport and tourism infrastructure.
- 11** **Southampton Airport's** draft master plan forecasts passenger throughput to reach around 6mppa by 2030. Further terminal capacity would be needed for this and the operator has proposed two alternative plans for terminal development.
- 12** Since the White Paper was published, **Norwich Airport** is considering the infrastructure requirements to meet its growth aspirations as part of its master plan development.

**Table A1: Major airports key facts<sup>1</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Heathrow	63.2m in 2003 67.7m in 2005	241	1.2m in 2003 1.3m in 2005
Gatwick	29.9m in 2003 32.7m in 2005	345	223,000 in 2003 223,000 in 2005
Stansted	18.7m in 2003 22m in 2005	269	199,000 in 2003 237,000 in 2005
Luton	6.8m in 2003 9.1m in 2005	204	23,000 in 2003 23,000 in 2005
London City	1.5m in 2003 2m in 2005	23	No significant freight operations
Southampton	1.2m in 2003 1.8m in 2005	49	322 in 2003 204 in 2005
Norwich	450,000 in 2003 550,000 in 2005	42	80 in 2003 76 in 2005

<sup>1</sup> All data from CAA Airport Statistics (2003 and 2005), [www.caa.co.uk](http://www.caa.co.uk)

## The South West



**Figure A2: location of airports in the South West**

- 1 *The Future of Air Transport* White Paper suggested that **Bristol Airport** could attract between 10 and 12 million passengers per year by 2030, with a second terminal and runway extension. The airport master plan includes plans for a new terminal and parallel taxiway to deal with the expected increase in passenger demand to 2030. However, the airport does not believe there is currently a case to pursue a runway extension, although the option will be kept under review.
- 2 The numbers of passengers using **Bournemouth Airport** have nearly doubled from 460,000 passengers in 2003 to 830,000 in 2005. The White Paper identified nature conservation, surface access improvements, noise and additional terminal capacity as the main issues for the airport. The airport is planning a phased redevelopment of the existing terminal by 2015, with plans to enhance the facilities for bus and coach access to the terminal.
- 3 **Exeter International Airport** has increased from 380,000 passengers in 2003 to 840,000 in 2005. The airport opened a new departure lounge in June 2003 and obtained outline planning permission for a new terminal in April 2004. In April 2006, the airport owner, Devon County Council, selected a consortium made up of Balfour Beatty and London City Airport as the preferred bidder for the sale of the airport.

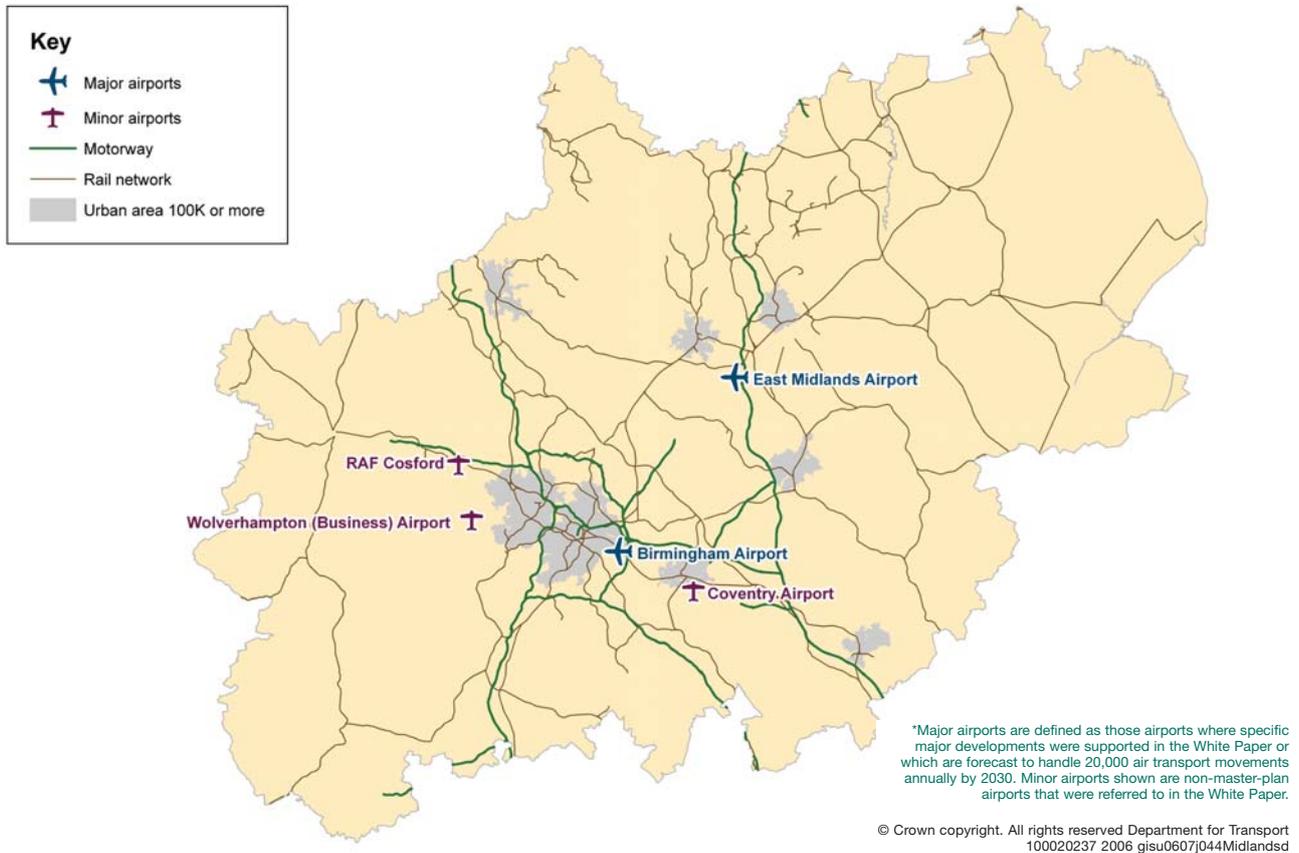
- 4** The White Paper identified a number of options to meet the air travel needs of Plymouth. A report commissioned by **Plymouth City Council** in April 2006 recommended development at Plymouth City Airport as the preferred option. The airport operator, Sutton Harbour Holdings Ltd, is not pursuing a runway extension at this time.
- 5** The White Paper recognised the benefits to the Cornish economy of growth at **Newquay Airport** and supported its continued development. The airport currently operates as a civilian enclave within RAF St Mawgan, but Cornwall County Council plans to acquire the site and secure a licence from the Civil Aviation Authority to operate it as a civilian airport.

**Table A2: Major airport key facts<sup>2</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Bristol International Airport	3.9m in 2003 5.2m in 2005	107	120 in 2003 16 in 2005
Bournemouth International Airport	460,000 in 2003 830,000 in 2005	95	5,200 in 2003 5,700 in 2005
Exeter International Airport	380,000 in 2003 840,000 in 2005	56	13 in 2003 71 in 2005
Plymouth City Airport	70,000 in 2003 109,000 in 2005	Domestic services only	68 in 2003
Newquay Airport	340,000 in 2005	7	No significant freight operations

<sup>2</sup> All data from CAA Airport Statistics (2003 and 2005), [www.caa.co.uk](http://www.caa.co.uk)

## The Midlands



**Figure A3: location of airports in the Midlands**

- 1 Progress at **Birmingham International Airport** is covered in the main report.
- 2 *The Future of Air Transport* White Paper identified **East Midlands Airport (EMA)** as the third largest freight airport in the UK and suggested it could handle more than 2.5m tonnes of freight by 2030. However, the increase in flights would require the airport to address night-time noise.
- 3 EMA published its draft master plan for consultation in February 2006. It was the first airport to achieve ISO 14001 accreditation for environmental management and is pursuing a number of detailed proposals to deal with environmental impacts, particularly in relation to noise. The airport operator plans to publish its final master plan in December 2006.

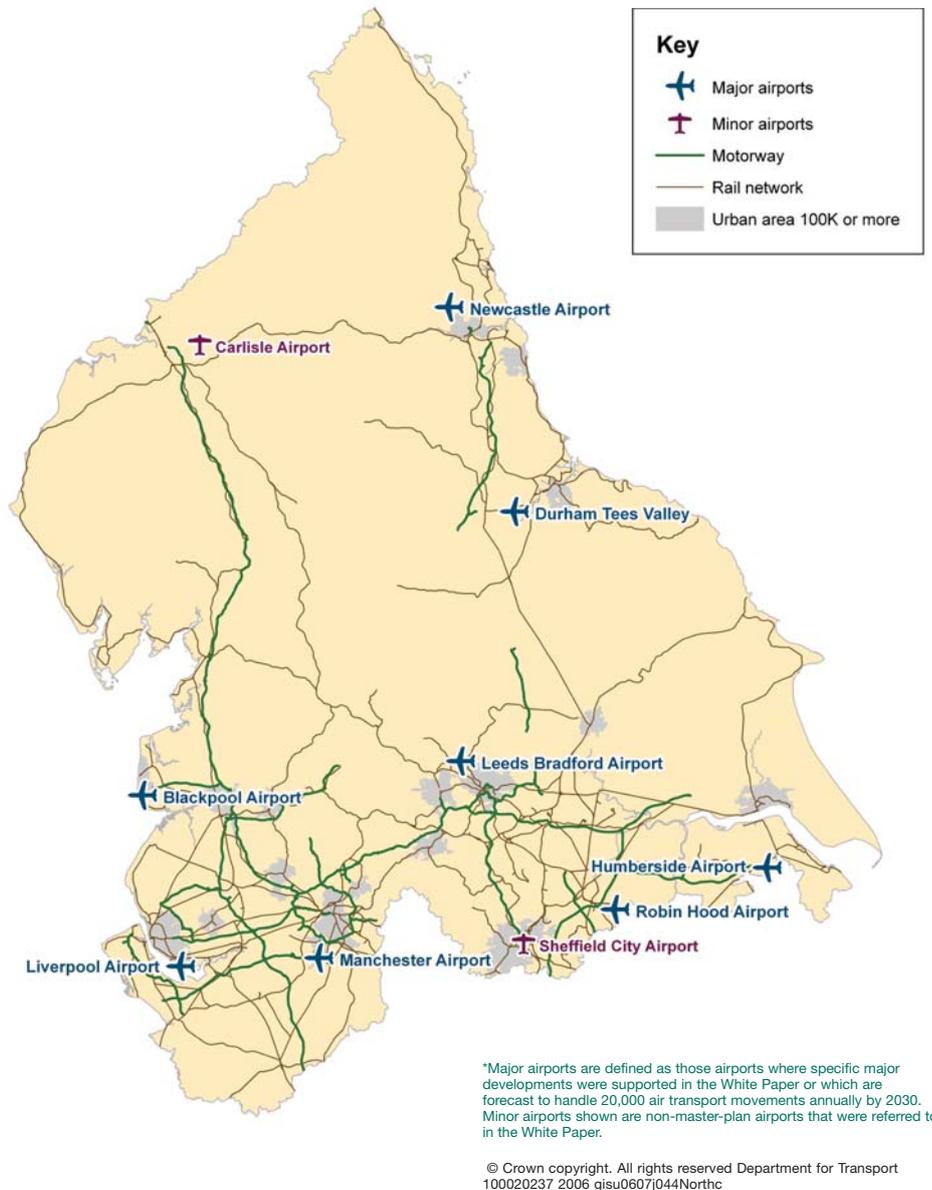
<sup>1</sup> ISO 14000 is a series of international standards on environmental management.

**Table A3: Major airports key facts<sup>2</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Birmingham International Airport	8.9m in 2003 9.3m in 2005	179	12,000 in 2003 13,000 in 2005
East Midlands Airport	4.3m in 2003 4.2m in 2005	106	227,000 in 2003 267,000 in 2005

<sup>2</sup> All data from CAA Airport Statistics (2003 and 2005), [www.caa.co.uk](http://www.caa.co.uk)

## The North of England



**Figure A4: location of airports in the North of England**

- 1 *The Future of Air Transport* White Paper recognised **Manchester Airport** with its two full-length runways as an important alternative to the congested airports in the South East. In 2004, Manchester was estimated to have contributed £1.7 billion to the national economy, supporting over 35,000 jobs in the North West. By 2015 it is estimated that 60,000 jobs in the North West will be directly or indirectly related to the operation of the airport.
- 2 Manchester is developing its terminal buildings, improving the taxiway system, reviewing operational procedures and making more efficient use of airspace.

However, the operator will need to put stringent measures in place to minimise the environmental impacts of development, especially given the airport's location within and implications for the Green Belt.

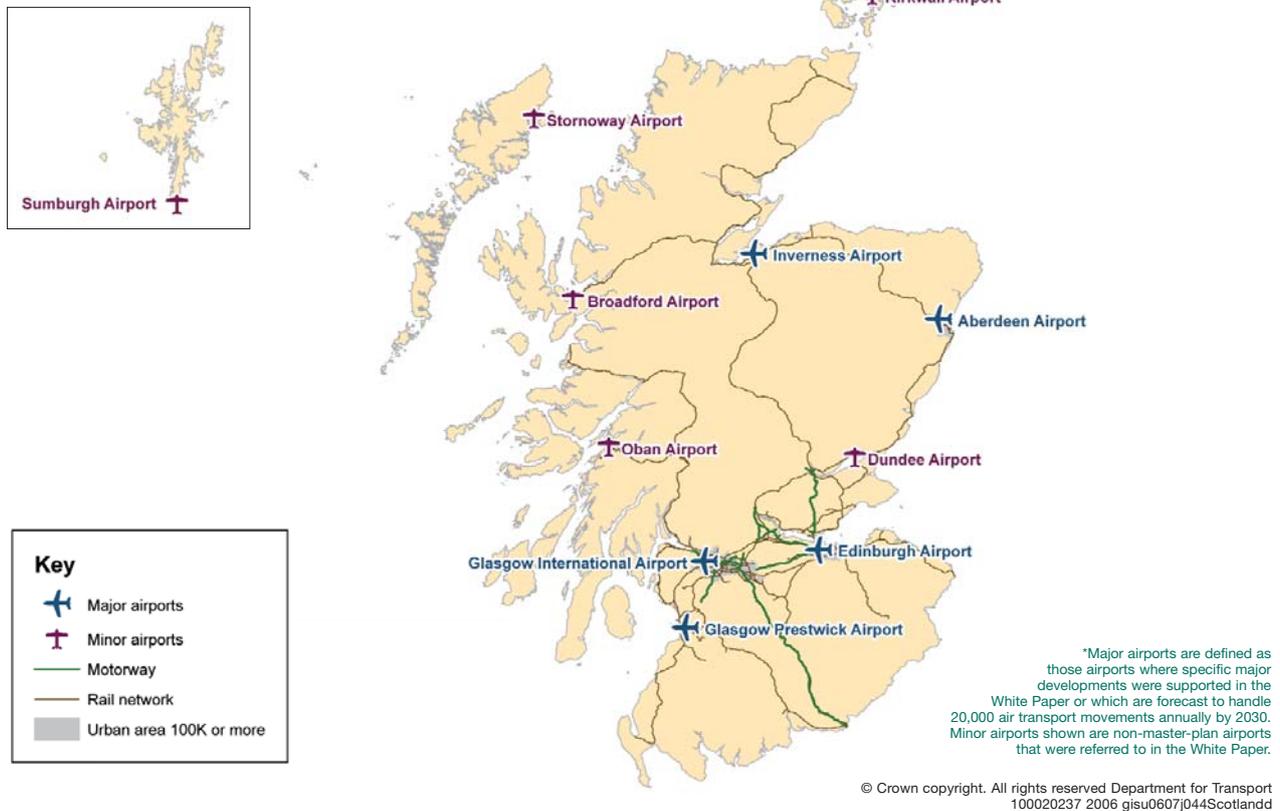
- 3 **Liverpool Airport** is a leading 'no-frills' airport in the North of England, handling 4m passengers in 2003 and operating to over 90 destinations. Liverpool proposes a runway extension in the early part of the next decade. Additional terminal capacity and improved surface access are also necessary to meet future demand. The airport also has plans to establish a world cargo centre.
- 4 At **Newcastle Airport** passenger numbers have risen from 3.9 million in 2003 to 5.2 million in 2005, primarily due to expansion in the low-cost carrier market. The size of the airport and the greater range of destinations directly served from Newcastle have reduced the need for passengers to use other major airports and helped boost the regional economy. There are indicative proposals to extend the runway, but this is unlikely to occur before 2011.
- 5 **Durham Tees Valley Airport** has also experienced growth in recent years in the North East region, primarily as a result of low-cost airline operations. Tees Valley Regeneration is supporting the development of a 200-acre site next to the airport for a business and distribution park aimed primarily at business linked to the airport.
- 6 **Leeds Bradford Airport** is the largest airport in the Yorkshire and Humber region. Its growth is largely due to the addition of no-frills services operating out of the airport. The White Paper supported a 300 metre runway extension, but there are no plans for this before 2016. Leeds and Bradford City Councils recently announced a joint decision to sell their combined 80 per cent stake in the airport.
- 7 **Robin Hood Airport** is the UK's newest full-service commercial airport and the first in the UK since Humberside in 1974, with civil operations commencing in April 2005. According to the airport operator, there are now flights to over 40 destinations and the Airport handled its 1 millionth passenger in June 2006.
- 8 **Humberside Airport** has an important role to play in providing freight and helicopter services to the North Sea oil and gas fields. It also provides scheduled and charter passenger services to a range of destinations. Humberside expects to see increased demand for both scheduled and charter operations over the years ahead, despite competition from Robin Hood Airport.
- 9 The White Paper concluded that future development proposals at **Blackpool Airport** should be determined locally. Over the past few years, no-frills services have begun to operate from the airport. It is now an established low-cost regional airport.

**Table A4: Major airport key facts<sup>4</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Manchester International Airport	19.5m in 2003 22.1m in 2005	239	123,000 in 2003 147,000 in 2005
Newcastle Airport	3.9m in 2003 5.2m in 2005	113	924 in 2003 199 in 2005
Liverpool Airport	3.2m in 2003 4.4m in 2005	90	11,600 in 2003 8,500 in 2005
Durham Tees Valley Airport	700,000 in 2003 900,000 in 2005	61	1,100 in 2003 363 in 2005
Leeds Bradford Airport	2m in 2003 2.6m in 2005	73	83 in 2003 92 in 2005
Robin Hood Airport	600,000 in 2005	32	31 in 2005
Humberside Airport	520,000 in 2003 460,000 in 2005	39	945 in 2003 114 in 2005
Blackpool Airport	190,000 in 2003 380,000 in 2005	25	57 in 2003 62 in 2005

<sup>4</sup> All data from CAA Airport Statistics (2003 and 2005), [www.caa.co.uk](http://www.caa.co.uk)

## Scotland



**Figure A5: location of airports in Scotland**

- 1 In late 2006, the Scottish Executive published a National Transport Strategy for Scotland. This document supports the principles of *The Future of Air Transport* White Paper, as well as setting out the Scottish Executive's policy on the interaction between rail connections and short-haul flights.
- 2 Progress at **Edinburgh Airport** is covered in the main report.
- 3 The White Paper supported better use of the existing runway at **Glasgow International Airport** and recommended that land should be reserved for potential longer-term development of other parts of the airport. The airport's revised master plan, published in October 2006, predicts that passenger numbers will increase to 20.2 million per year by 2030, and that cargo will increase to 11,000 tonnes by 2015 and to almost 13,000 tonnes by 2030. The master plan confirms BAA's intention to invest £290m in new terminal and airfield facilities over the next decade.
- 4 The airport aims to publish its surface access strategy to 2012 in March 2007. A blight scheme was introduced in August 2005 and a revised five-year noise strategy and annual action plan will be published shortly. Glasgow has also developed an air quality strategy to promote the use of alternative fuels and fuel-efficient vehicles at the airport. A Private Bill to promote the proposed Glasgow Airport Rail Link continues to make progress and agreement has now been reached on land use, design and construction for the project.

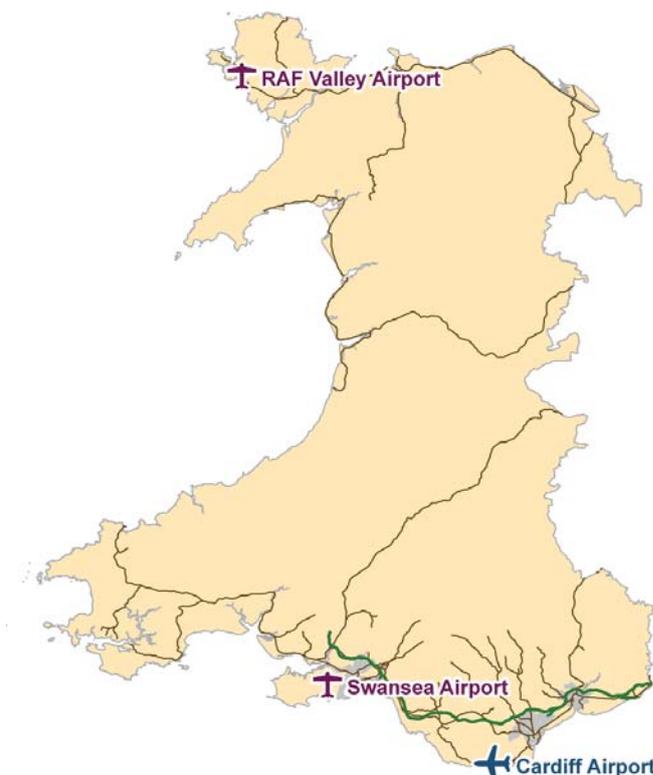
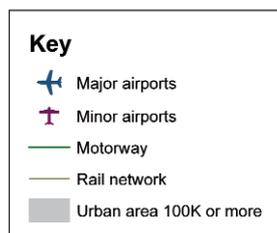
- 5** The White Paper estimated that **Glasgow Prestwick Airport** would handle up to 6 million passengers per year and over 200,000 tonnes of freight by 2030. The airport remains a centre of excellence for aircraft maintenance, repair and overhaul operations, which are expected to be a key area of growth. The airport's forecasts for growth will form part of its master plan, which it plans to publish in 2007. The airport remains committed to developing the terminal and associated infrastructure once existing facilities have reached capacity.
- 6** **Aberdeen Airport's** revised master plan is expected to be published imminently, with its surface access strategy to follow in March 2007. The airport expects up to 5.3 million passengers per year by 2030. A number of improvements have been made since 2003 or are in train, and planning approval has been sought for a 300m northern extension to the main runway. BAA is working with local authorities to address air quality issues and with key stakeholders to protect sites of ecological and heritage value.
- 7** At **Inverness Airport** the operator anticipates that passenger numbers will increase to 1 million per year by 2010. Several new air routes have opened since 2003. In January 2006, the Scottish Executive funded a buy-out of the terminal building (constructed under Private Finance Initiative), allowing airport revenues to be maximised to benefit local communities. A final airport master plan, including a surface access strategy, was published in December 2006.
- 8** The Scottish Executive introduced an EC-approved 'aid of a social character' scheme in May 2006, to promote social inclusion in peripheral areas of the **Highlands and Islands**. The scheme has had a positive start, with registration running at over 90 per cent in some areas. Subsidised Public Service Obligations also operate between Glasgow Airport and Campbeltown, Tiree and Barra, and on inter-island routes in the Western Isles, Orkney and Shetland and will be tendered shortly for four new routes from Oban to the Argyll Islands.

**Table A5: Major airport key facts<sup>5</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Edinburgh Airport	7.5m in 2003 8.4m in 2005	130	25,000 in 2003 30,000 in 2005
Glasgow International Airport	8.1m in 2003 8.8m in 2005	145	4,900 in 2003 8,700 in 2005
Glasgow Prestwick Airport	1.9m in 2003 2.4m in 2005	43	40,000 in 2003 29,000 in 2005
Aberdeen Airport	2.5m in 2003 2.9m in 2005	45	3,500 in 2003 4,100 in 2005
Inverness Airport	435,000 in 2003 590,000 in 2005	28	967 in 2003 894 in 2005

<sup>5</sup> All data from CAA Airport Statistics (2003 and 2005), [www.caa.co.uk](http://www.caa.co.uk)

## Wales



\*Major airports are defined as those airports where specific major developments were supported in the White Paper or which are forecast to handle 20,000 air transport movements annually by 2030. Minor airports shown are non-master-plan airports that were referred to in the White Paper.

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**Figure A6: location of airports in Wales**

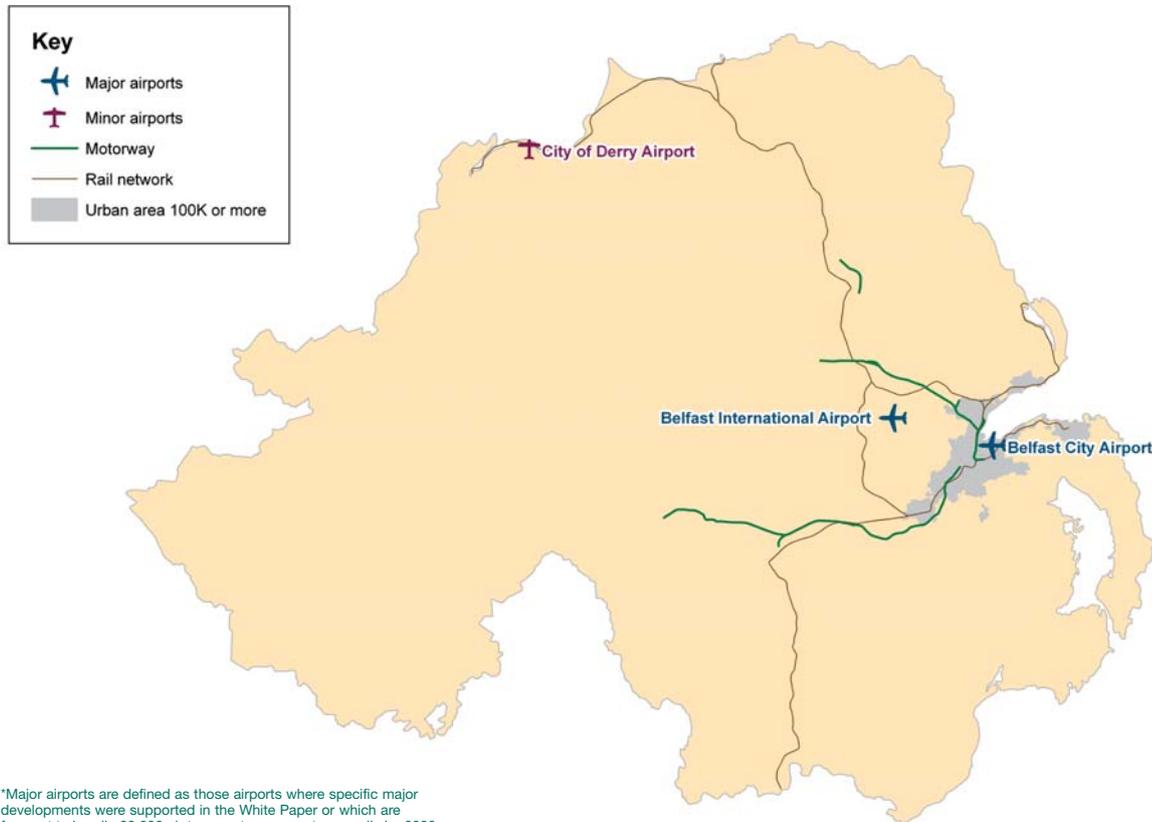
- 1** **Cardiff International Airport** published its draft master plan for consultation in March 2006. There are currently no plans to extend the existing runway. Additional pier capacity has been provided and improvements to taxiways and terminal facilities are planned to cater for the forecast increase in passenger demand. While the draft airport master plan identified no significant environmental or noise concerns, measures are being taken to address noise impacts on nearby properties.
- 2** The Vale of Glamorgan Line opened in spring 2005, providing an hourly service with bus connections to the airport. A public inquiry was held in May 2006 into the trunking of the existing A48/A4226 route to Cardiff Airport and a decision is expected by the end of 2006.
- 3** Another development in Wales has been the Welsh Assembly's decision to impose a Public Service Obligation (PSO) for the route between Cardiff International Airport and **RAF Valley Airport** on Anglesey. The service is due to start in spring 2007.

**Table A6: Major airport key facts<sup>6</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Cardiff International Airport	1.9m in 2003 1.8m in 2005	90	2,200 tonnes in 2003 2,600 tonnes in 2005

<sup>6</sup> All data from CAA Airport Statistics (2003 and 2005), www.caa.co.uk

## Northern Ireland



\*Major airports are defined as those airports where specific major developments were supported in the White Paper or which are forecast to handle 20,000 air transport movements annually by 2030. Minor airports shown are non-master-plan airports that were referred to in the White Paper.

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**Figure A7: location of airports in Northern Ireland**

- 1 An Examination in Public was held in summer 2006 on **Belfast City Airport's** request to review its existing planning agreement, to remove the annual restriction on the number of seats on sale, and a decision is expected shortly. The airport published its final master plan in March 2006, which forecasts an increase to 3.2 million passengers per year by 2030, mainly from its core domestic scheduled business but with some development in the charter market.
- 2 The airport is considering a number of options to accommodate the predicted passenger growth, including a terminal extension and the possible reconfiguration of the runway. The airport operator has reduced noise around the airport by a programme of airline fleet replacement and has gone further than its existing planning agreement by instigating a series of operating restrictions to tackle noise.
- 3 **Belfast International Airport** published its draft master plan for consultation in August 2006, which forecasts an increase in passengers to 10.4 million per year by 2030. Most of the forecast growth is anticipated to be from short-haul scheduled traffic, supported by long-haul traffic growth.

- 4 The airport operator plans a progressive expansion, within the current boundary, of its terminal facilities and apron parking, with a new terminal due to be completed by 2030. It commissioned an environmental report on how the impacts of its development could be mitigated and has recently instigated an environmental policy covering all aspects of environmental protection.

**Table A7: Major airports key facts<sup>7</sup>**

	<b>Passenger numbers</b>	<b>International destinations served (2005)</b>	<b>Air freight (tonnes)</b>
Belfast International Airport	4m in 2003 4.8m in 2005	85	30,000 in 2003 38,000 in 2005
Belfast City Airport	2m in 2003 2.2m in 2005	10	1,200 in 2003 516 in 2005

<sup>7</sup> All data from CAA Airport Statistics (2003 and 2005), [www.caa.co.uk](http://www.caa.co.uk)

# B

## Annex B Summary of progress

Table B1 summarises progress made since 2003 on the main policies and issues covered in *The Future of Air Transport White Paper*.

**Table B1: Summary of progress against key issues**

White Paper policy issue	Progress made since 2003
<b>Climate change</b>	
October 2004	<ul style="list-style-type: none"><li>• ICAO agreed a revised Resolution on environment policy. This contained a goal to limit the impact of aviation greenhouse gas emissions on the global climate, and underlined support for open emissions trading for international aviation</li></ul>
June 2005	<ul style="list-style-type: none"><li>• UK aviation industry published its own <i>Sustainable Aviation</i> strategy in response to Government White Paper</li></ul>
July 2005	<ul style="list-style-type: none"><li>• European Commission published a feasibility study on how aviation might participate in emissions trading<sup>1</sup>, to which UK experts contributed</li></ul>
December 2005	<ul style="list-style-type: none"><li>• Under UK Presidency, EU Environment Council reached agreement in principle on emissions trading as the preferred approach to tackling climate change and called on the Commission to bring forward legislative proposals by end 2006</li></ul>
November 2005 – April 2006	<ul style="list-style-type: none"><li>• European Commission Aviation Working Group considered the design options for aviation's inclusion in the EU Emissions Trading Scheme</li></ul>
April 2006	<ul style="list-style-type: none"><li>• UK Government launched offset scheme for central government air travel, with funds invested in renewable energy</li></ul>
June 2006	<ul style="list-style-type: none"><li>• International Transport Atmosphere and Climate Conference (with DfT sponsorship)</li></ul>

<sup>1</sup> *Giving Wings to Emission Trading*, CE Delft, 2005.

<b>White Paper policy issue</b>	<b>Progress made since 2003</b>
<b>Noise</b>	
June 2006	<ul style="list-style-type: none"> <li>• Night flying restrictions for Heathrow, Gatwick and Stansted for 2006 to 2012 announced following two-stage consultation process</li> </ul>
September 2006	<ul style="list-style-type: none"> <li>• EU environmental noise directive implemented in UK law, requiring noise mapping and action planning at larger airports</li> </ul>
November 2006	<ul style="list-style-type: none"> <li>• Revised code of practice on noise from arriving aircraft published, giving guidance on use of continuous descent approach to reduce noise</li> <li>• Civil Aviation Act 2006 received Royal Assent, giving non-designated airports powers to make noise control schemes and giving all airports powers to charge polluters for breach of noise controls</li> </ul>
<b>Air quality</b>	
July 2006	<ul style="list-style-type: none"> <li>• A best practice methodology for assessing air quality at Heathrow with consequential benefits for modelling of air quality impacts at other UK airports</li> </ul>
February 2004	<ul style="list-style-type: none"> <li>• International agreement achieved to increase stringency of NOx standards for aircraft by 12 per cent, to come into force during 2008</li> </ul>
November 2006	<ul style="list-style-type: none"> <li>• Civil Aviation Act 2006 received Royal Assent, giving Secretary of State for Transport powers to require airports to put in place local emissions charges for aircraft</li> </ul>
2006	<ul style="list-style-type: none"> <li>• Working with the European Commission on revisions to the EC framework Directive on air quality standards to protect public health</li> </ul>
2006	<ul style="list-style-type: none"> <li>• ICAO Environmental Committee makes progress on guidance for action on local air quality. The intention is to issue finalised guidance in 2007.</li> </ul>
<b>Airport master plans</b>	
November 2006	<ul style="list-style-type: none"> <li>• 22 airports have consulted on master plans</li> <li>• 6 airports have prepared high-level statements of intent to publish master plans</li> </ul>
<b>Blight</b>	
July 2006	<ul style="list-style-type: none"> <li>• Voluntary blight schemes published for Heathrow, Stansted, Gatwick, Edinburgh and Glasgow</li> <li>• Schemes consulted upon for Birmingham and Luton</li> </ul>
<b>Sustainable surface access</b>	
July 2006	<ul style="list-style-type: none"> <li>• Surface access forum held with key industry, regional and local stakeholders. Agreement reached to develop performance indicators and share best practice nationally on sustainable surface access improvements</li> </ul>

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## White Paper policy issue

## Progress made since 2003

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### Heathrow Airport

- June 2005 • BAA consulted on interim airport master plan
- July 2006 • Technical report on airport air quality published, confirming NO<sub>2</sub> as key concern
- October 2006 • BAA submitted planning application for Heathrow East to replace existing Terminals 1 and 2
- November 2006 • BAA announced support to develop AirTrack scheme

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### Stansted Airport

- June 2004 • Control over passenger movement limits handed to local authority
- April 2006 • BAA submitted planning application to make better use of existing runway
- November 2006 • BAA appeals against Uttlesford District Council's decision to refuse planning permission for making better use of existing runway

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### Other airports

- April 2005 • UK's newest full-service commercial airport opened at Robin Hood Airport Doncaster Sheffield
- October 2005 • Luton Airport consulted on options for a replacement runway in its draft master plan
- 2005 • East Midlands Airport submitted planning application for runway extension
- 2005-6 • Edinburgh Airport opened, new control tower, new parallel taxiway and expanded existing terminal

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### Managing airspace

- April 2004 • Single European Sky Regulation entered into force

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### Slot allocation

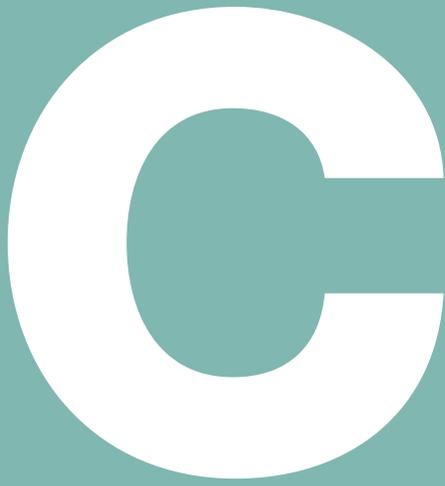
- December 2004 • UK position on reform of slot allocation agreed and set out to the European Commission
- October 2006 • Publication of independent study to inform UK approach to slot allocation for new capacity

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### Regional air services

- December 2005 • DfT published guidance on applications to protect regional access to London through the use of public service obligations (PSOs)
- June 2006 • DfT published UK Route Development Fund (RDF) protocol to encourage establishment of new regional services. The North East RDF is now supporting three routes, and the Welsh Assembly fund supports one route to date. The Northern Ireland RDF has assisted nine new regional services to North America, Europe and other regions of the UK

<b>White Paper policy issue</b>	<b>Progress made since 2003</b>
<b>Land protection</b>	
2004 – 2006	<ul style="list-style-type: none"> <li>• Master plans have aided the safeguarding process in helping to clarify areas of land likely to be needed for future airport development</li> </ul>
<b>Safety</b>	
October 2004	<ul style="list-style-type: none"> <li>• ICAO adopted extension of checks into all main safety areas in line with UK policy</li> </ul>
December 2005	<ul style="list-style-type: none"> <li>• EU agreement reached under UK Presidency on new procedures for taking joint action on unsafe airlines, including publication of list of banned carriers</li> </ul>
<b>Security</b>	
May 2004	<ul style="list-style-type: none"> <li>• Membership of National Aviation Security Committee revised to include Secretary of State for Transport as the Chair and to ensure more strategic stakeholder dialogue</li> </ul>
January 2005	<ul style="list-style-type: none"> <li>• Multi-Agency Threat and Risk Assessment process established at UK airports to encourage joint working by all stakeholders to consider both criminal and security threats to airports</li> </ul>
July 2006	<ul style="list-style-type: none"> <li>• Review of policing at UK airports completed</li> </ul>
<b>Consumer protection</b>	
July 2006	<ul style="list-style-type: none"> <li>• EU regulation to strengthen rights of disabled persons travelling by air entered force following agreement secured under UK Presidency</li> </ul>
November 2006	<ul style="list-style-type: none"> <li>• Civil Aviation Act introduced new powers to ensure future solvency of the Air Travel Trust Fund, and a duty to safeguard health of those on board aircraft</li> </ul>
<b>Aircraft maintenance</b>	
2003-2006	<ul style="list-style-type: none"> <li>• Centres of excellence developed at Prestwick, Cardiff, Newcastle and Southend</li> </ul>
<b>General aviation</b>	
July 2006	<ul style="list-style-type: none"> <li>• Publication of Strategic Review of General Aviation. Government is considering how to take forward recommendations on setting up a strategic network of airfields</li> </ul>



# Annex C

## 2006 UK air travel forecasts

### Introduction

- 1 *The Future of Air Transport* White Paper included the Government's forecasts of the future demand for passenger air travel at UK airports up to 2030. As explained in Chapter 4 of the main report, in calculating these forecasts the Government took account of the climate change costs of air travel. The forecasts factored in the introduction of some form of economic measure or charge to ensure that air travellers pay the costs of their climate change emissions.
- 2 The forecasts have been updated for this progress report to take account of the latest data on actual passenger numbers and the impact that economic and social factors have on people's inclination to fly. In light of the Eddington recommendations<sup>1</sup> we also show how the forecasts change with alternative assumptions about future costs of carbon emissions, oil prices, economic growth and radiative forcing factor.
- 3 The forecasts are generated by:
  - a. projecting national air travel demand, unconstrained by airport capacity limits (i.e. how much people would be likely to fly if there was no limit on the supply of flights); and,
  - b. having derived the national demand figures, we then work out how airport and airspace constraints on the number of flights available affect demand, using the DfT National Airport Allocation Model.

### Key results

- The forecasts produced for the White Paper have so far proved to be accurate. Actual passenger numbers in 2005 were 228 million, very close to the White Paper forecast of 229 million.
- The updated forecasts remain in line with the forecasts produced for the White Paper: it is expected that demand for air travel would grow to 490 million passengers per annum (mppa) by 2030 if growth were not constrained by capacity (assuming that after 2010 passengers begin to pay their climate change costs).

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<sup>1</sup> *The Eddington Transport Study, The case for action: Sir Rod Eddington's advice to Government*, December 2006, [www.dft.gov.uk](http://www.dft.gov.uk) or [www.hm-treasury.gov.uk](http://www.hm-treasury.gov.uk)

- After accounting for future UK airport capacity constraints (with developments supported in the White Paper), demand for air travel is expected to grow to 465 mppa in 2030 (again, assuming that after 2010 passengers begin to pay their climate change costs).
- We have also tested the forecasts with higher costs of carbon, and the results show that air travel demand growth remains strong.

## National demand forecasts

- 4 The long-term factors driving growth in the demand for air travel (such as economic growth, trade, air fares and exchange rates) were estimated using econometric techniques (statistical estimation of the driving factors using historical data) similar to those used for *The Future of Air Transport White Paper* forecasts.
- 5 Demand forecasts (assuming no capacity constraints) are produced using the relationship between passenger demand and the long term factors that drive it. Adjustments are then made to reflect that, over time, demand for air travel will be affected less strongly by incomes than in the past.
- 6 Demand for air travel has temporary (cyclical) and longer-term (trend growth) elements. The national forecasts project the trend element, but not temporary impacts on demand separate from the driving factors, such as international conflicts, terrorist incidents or pandemics.

### Key assumptions behind the national forecasts

- a. The economy: Real UK and foreign GDP growth assumptions are based on DfT WebTAG guidance, the HMT Comparison of Forecasts and the IMF World Economic Outlook.
- b. Air fares: are assumed to be driven by airline operating costs, themselves determined by aircraft technology, oil prices and competition.
- c. Climate change costs: It is assumed that after 2010 passengers will face an additional cost linked to their climate change emissions (both carbon, and the warming effects of non-carbon emissions). The central forecast assumes that a charge based on the Defra central value for the cost of carbon is phased in over ten years after 2010. The Defra central value for the cost of carbon rises from £70/tC in 2000 by £1/tC per annum in real terms.

### Results, and effect of alternative assumptions

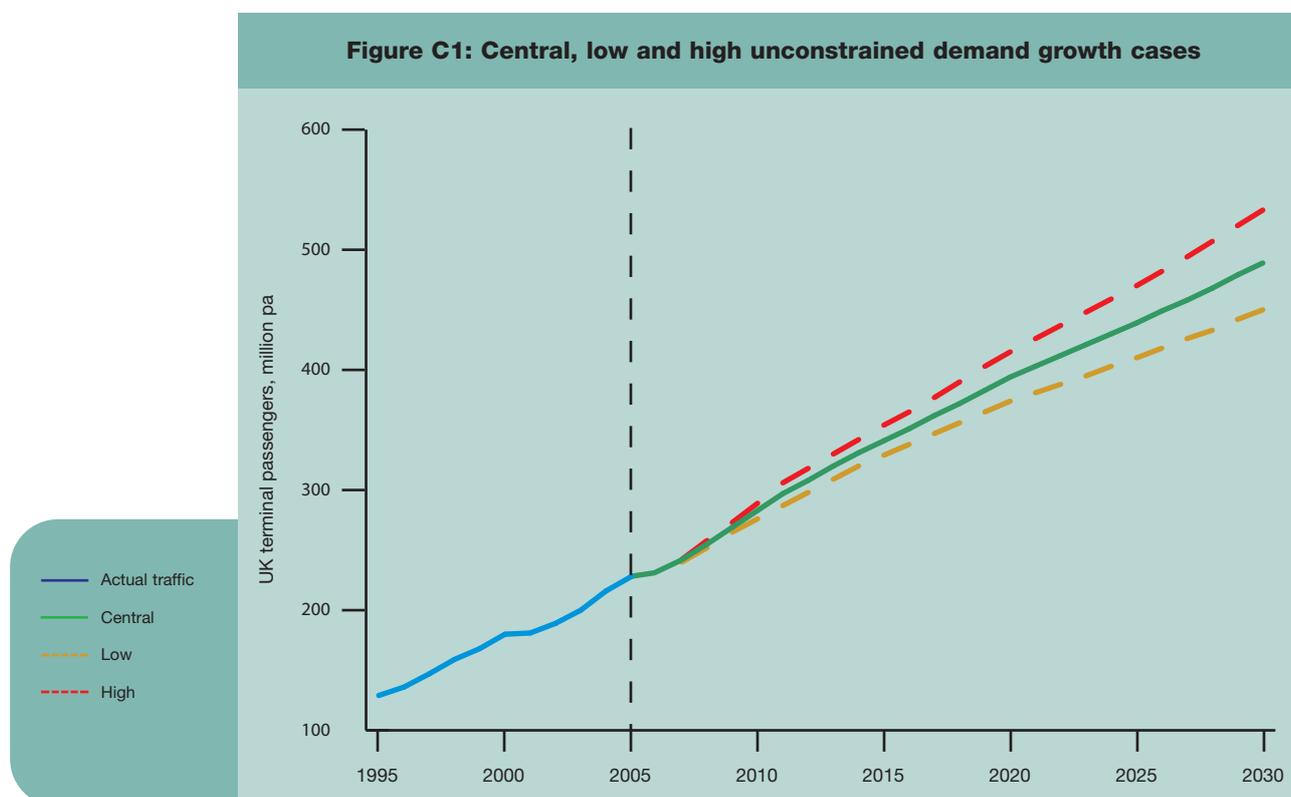
- 7 Under the central case, unconstrained air travel demand at UK airports is forecast to grow from 228 mppa in 2005 to 490 mppa in 2030.

- 8** The Eddington Study recommended that we examined the effect of alternative assumptions about the cost of carbon on our forecasts. We have therefore tested the impact of the full Defra range of carbon costs (£35/tC to £140/tC in 2000), as well as different assumptions about GDP growth, oil prices and radiative forcing factor. Table C1 shows that, while demand is affected by each of these factors, changing the assumptions within reasonable bounds does not alter the conclusion that air travel demand is forecast to grow strongly.

**Table C1: Effect of alternative assumptions on unconstrained 2030 demand forecast**

Scenario	Difference from central case assumptions	2030 demand (mppa)	Difference from central case (mppa)	Difference from central case (%)
Central case	–	490	–	–
Higher carbon	2000 carbon cost raised from £70/tC to £140/tC	475	-15	-3
Lower carbon	2000 carbon cost reduced from £70/tC to £35/tC	495	5	1
Higher GDP growth	GDP grows ¼% pa faster	530	40	8
Lower GDP growth	GDP grows ¼% pa slower	450	-40	-8
Higher oil price	2030 oil price raised from \$45/barrel to \$72/barrel	475	-15	-3
Lower oil price	2030 oil price reduced from \$45/barrel to \$20/barrel	505	15	3
Higher radiative forcing factor	Radiative forcing factor raised from 2.5 to 4	475	-15	-3
Lower radiative forcing factor	Radiative forcing factor reduced from 2.5 to 2	495	5	1

- 9 The range around the central forecast is formed by taking the outer limits of the sensitivity tests in each year. Figure C1 shows the central unconstrained demand forecast and range.



## Accounting for airport capacity constraints

- 10 The DfT National Airport Allocation model is used to account for the likely impact of future UK airport capacity constraints on air travel. This estimates how passengers will choose between the different airports, by looking at variables like: where in the country demand for flights arises; location of airports; options and travel time for getting to and from airports; destinations available from airports; and air fares.

### Results, and effect of alternative assumptions

- 11 The additional airport development supported in the White Paper does not provide enough capacity to support all of the unconstrained demand forecast. After accounting for future UK airport capacity constraints outlined in the White Paper, national air travel demand is forecast to grow under the central case from 228 mppa in 2005 to 465 mppa in 2030. Table C2 shows how the constrained forecasts are affected by changes to carbon costs, GDP growth, oil price and radiative forcing factor assumptions.

**Table C2: Effect of alternative assumptions on constrained 2030 demand forecast**

Scenario	Difference from central case assumptions	2030 demand (mppa)	Difference from central case (mppa)	Difference from central case (%)
Central case	–	465	–	–
Higher carbon	2000 carbon cost raised from £70/tC to £140/tC	455	-10	-2
Lower carbon	2000 carbon cost reduced from £70/tC to £35/tC	470	5	1
Higher GDP growth	GDP grows ¼% pa faster	490	25	5
Lower GDP growth	GDP grows ¼% pa slower	435	-30	-6
Higher oil price	2030 oil price raised from \$45/barrel to \$72/barrel	455	-10	-2
Lower oil price	2030 oil price reduced from \$45/barrel to \$20/barrel	480	15	3
Higher radiative forcing factor	Radiative forcing factor raised from 2.5 to 4	455	-10	-2
Lower radiative forcing factor	Radiative forcing factor reduced from 2.5 to 2	470	5	1