



MANSTON AIRPORT: A NATIONAL AND REGIONAL AVIATION ASSET

VOLUME I
Demand in the south east of the UK

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This report has been produced by Dr Sally Dixon, an independent aviation and business research consultant. The author wishes to thank all those who contributed to the research. However, the views expressed herein are those of the author only and are based upon independent research by her.

Executive Summary

This report aims to answer three key questions:

1. Does the UK require additional airport capacity to meet its political, economic, and social aims?
2. Should this capacity be located in the South East of England?
3. Can Manston Airport, with investment from RiverOak, relieve pressure on the UK airport network and meet the requirement of a nationally significant infrastructure project?

On the 24 October, Chris Grayling MP, Secretary of State for Transport, said the Government's recently updated aviation demand forecasts:

"show that the need for additional runway capacity is even greater than originally thought. They show that all 5 of London's main airports will be completely full by the mid-2030s, and 4 of them within a decade." (HC Deb 24 October 2017, c 197WS)

A further consultation on the revised draft Airports National Policy Statement was launched on 24 October and will end on 19 December 2017. MPs are due to vote on the Government's decision to support the third Heathrow runway in 2018. As such, a new runway at Heathrow is not likely to be operational until at least 2030¹ and may be subject to further delays due to the complexity of such a project, its controversial nature, and potential legal challenges.

UK airport capacity

The aviation sector is of vital importance to the UK, contributing £52 billion (3.4%) to UK GDP and supporting 961,000 jobs (Oxford Economics, 2015, p. 4). In 2014, the total value of tradable goods carried through UK airports exceeded £140 billion (Airports Commission, 2015, p. 73). The importance of air travel is forecast to continue to grow, with 50% more flights in 2035 than there were in 2012, from around 9 million per year to 14.4 million (Eurocontrol, 2013). The freighter fleet is set to more than double over the next 20 years (Boeing, 2014).

However, airport capacity is a problem not just in the UK but also in Europe, where capacity is forecast to increase by 17% by 2035 leaving a shortfall of around nine runways' worth of capacity (Eurocontrol, 2013). By 2035, European airports will be unable to accommodate around two million flights due to capacity shortages leading to a loss of between 434,000 and 818,000 jobs and between €28 billion and €52 billion in EU GDP (EC, 2015). At the end of November 2017, airfreight in Europe reached capacity, which has led to an increase in prices and delays² Heathrow Airport also reported severe congestion, with trucks queuing and some being turned away³.

Whilst in Europe, around 56% of all air freight (measured in revenue tonne-kilometres (RTKs)) is carried in dedicated freighters (Budd and Ison, 2017, p. 34), the UK has seen a decline in the use of freighters. One commentator (see York Aviation's report for Stone Hill Park Ltd, November 2017) believes this is due to shippers' preference for belly

¹ 8 February 2016, The Transport Committee heard evidence from the Secretary of State for

² https://aircargoworld.com/allposts/freightos-warns-of-airfreight-rate-jump-as-europe-reaches-capacity/?goal=0_1711f92e66-42df020a11-39626945

³ <https://www.flexport.com/help/381-freight-market-update-november-8-2017>

freight. However, when the air freight market in the UK is considered against that of Europe, the lack of availability in the UK for freighter slots, airports' preference, in a constrained market, for passenger flights, and delays in loading and unloading freighter aircraft provide an equally plausible explanation for the reduced proportion of freighter to belly freight transport of goods in the UK.

In the UK, non-EU trade accounts for just under half of all trade and 35% of these goods are air freighted. Both figures could increase following the UK's withdrawal from the EU (Oxford Economics, 2013, p. 5). The Airports Commission forecast that, over a 60-year time frame without additional capacity, there would be a £21 to £23 billion cost to users and providers of UK airport infrastructure and £30 to £45 billion in costs to the wider economy (Airports Commission, 2015, p. 17).

Demand in the South East of England

It is clear that the aviation market prefers the South East, with forecasts showing that by 2050, the value of air cargo lost to London due to capacity constraints would equate to £106 billion per annum with net national losses of around £3.9 billion per annum (Oxford Economics, 2013, p. 5). The London airports facilitate 76% of the UK's air freight (Oxford Economics, 2013, p. 3) and all London airports will be at full capacity by 2030 (Airports Commission, 2013, p. 20).

The number of additional dedicated freighters movements required at London airports is forecast to be 53,954 with no additional runways (York Aviation, 2013, p. 7). Indeed, without extra capacity in the South East, 2.1 million tonnes of freight would have to be diverted elsewhere (York Aviation, 2015, p. 19), mainly to Northern European airports. This tonnage equates to some 100,000⁴ truckloads and could put huge pressure on the UK's road network and the Channel crossings.

Manston Airport

Manston Airport is located in the South East where aviation industry demand is highest and most constrained. The airport has a long runway, an ideal airspace location, benefits from easy surface access to London and the rest of the UK, is located close to mainland Europe, and, with RiverOak's proposed investment, can provide rapid handling and turnaround times for air freight. The airport would provide almost immediate relief to the pressing situation that is causing £2 billion in potential trade from being lost to the South East each year if it remains without additional runway capacity (Centre for Business Research, 2016).

The DCO process requires RiverOak to provide evidence that shows Manston Airport can relieve pressure on the UK's airport network by handling at least 10,000 freighter movements per year. York Aviation (a firm of air transport consultants), in an unpublished report for Transport for London (TfL) entitled *Note on Freight Connectivity*, specifically mention Manston, saying the airport⁵ can take 14,000 movements per annum, relieving other South East airports (York, 2013, p. 7). Whilst in the short to medium-term Manston will be vital as an operational airport, even in the longer term, after the proposed opening of Heathrow's third runway and to 2050, Manston provides the only airport infrastructure in the South East that can provide the capacity needed to support the overspill predicted within all timeframes.

⁴ See footnote 16 on page 12 for an explanation of this calculation

⁵ York Aviation say, "It is reasonable to assume that around 14,000 freighters a year could still be accommodated in the vicinity of London by using capacity at airports such as Manston". However, it should be noted that there are no other airport such as Manston in the London area in terms of runway length, airspace, slot availability, land available for warehousing, etc.

Conclusion

There can be little doubt that, in an increasingly competitive economic climate, the UK cannot afford to lose one of its long-serving and strategically significant airports. This report describes the unmet demand in the South East and shows that Manston Airport, with the level of investment proposed by RiverOak, its geographic location and airspace position, is capable of handling air freight in the volumes required by the DCO process. Indeed, this report demonstrates that Manston Airport is a valuable regional and national asset, capable of providing infrastructure badly needed by the UK in the short, medium and long-term, playing a role in helping Britain's connectedness and trade with the rest of the world, and of making a substantial contribution to the future economic and social well-being of the UK.

Definitions and abbreviations

ACI	Airports Council International
Air freight	The carriage of goods by aircraft
ATM	Air Transport Movement and/or Air Traffic Movement
BAA	Formally the British Airports Authority
Backload	The transportation of cargo on a return trip to the originating airport
Belly freight	Cargo stowed under the main deck of a passenger aircraft
CAA	Civil Aviation Authority
Cargo	The term cargo and freight are used interchangeably in this report and refer to goods carried by road, sea or air
Consolidator	A person or company that combines small volumes of commodities from different originators so they can be shipped together and who usually owns the aircraft used for transport
CPO	Compulsory Purchase Order
DCO	Development Consent Order
Dedicated carrier	An aircraft that transports only freight (not passengers)
DfT	Department for Transport
EASA	European Aviation Safety Agency
EIA	Environmental Impact Assessment
EU	European Union
EUROCONTROL	European Organisation for the Safety of Air Navigation
FAA	Federal Aviation Administration
Freight	The term freight and cargo are used interchangeably in this report and refer to goods carried by road, sea or air
Freight forwarder	A person or company that organises the shipment of commodities from an originator (manufacturer, producer, etc.) to a destination (customer, etc.) but generally does not own the aircraft used in the transport
FTK	Freight tonne kilometre
GVA	Gross Value Added
ICAO	International Civil Aviation Organisation
ICT	Information and communications technology
JIT	Just-in-time, a manufacturing system that allows materials or components to be delivered just as they are required in the manufacturing process, thereby minimising storage costs
LCC	Low cost carrier
LCY	London City Airport
LGW	London Gatwick Airport
LHR	London Heathrow Airport
Long haul	No generally agreed definition as 'long' or 'short' is subjective. In Europe, a flight taking more than four hours to complete and/or originating/destined outside Europe is considered long haul
Short haul	As above. Short haul in Europe generally indicates a flight within Europe so taking around four hours or less to complete
TfL	Transport for London
UK	United Kingdom
USA	United States of America
WTO	World Trade Organization

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1 Introduction

1.1 Background and rationale

1.1.1 This report is the first in a series of documents that make the case for Manston Airport to return to full operation. These reports cover:

- **Volume I: The need for airport capacity in the South East of the UK and the potential role of Manston Airport as part of the UK's airport network**
- Volume II: The findings from a qualitative study that identifies the push and pull attractors for Manston Airport and details the opportunities and the sectoral and geographical markets the research uncovered
- Volume III: The forecast for air freight and passenger traffic for Manston Airport over the first twenty years of operation
- Volume IV: A description of the socio-economic impacts of the operation of Manston Airport as described by the forecast in the third volume of this body of work

1.1.2 For many years the UK has struggled to resolve the issues surrounding airport capacity expansion. Indeed, over more than seven decades, successive governments have been unable to define a national framework for the UK's airport infrastructure. Privatisation of the Nation's airports, which followed the 1986 Airports Act, made this task more difficult, with both public and private sector issues now needing to be resolved. As a global trading nation, the UK relies on the ability to import and export goods. Our domestic and international transport infrastructure, including airports, railways, seaports and roads, must therefore be fit for purpose and with sufficient capacity if the UK is to continue to prosper in a highly connected world.

1.1.3 To help speed the process of approving major infrastructure projects including airports, the Government introduced the 2008 Planning Act. This was followed by the appointment of the Airports Commission under Sir Howard Davies who was tasked with recommending a solution to the UK's airport capacity issues. In July 2015 the Airports Commission report was published and on the 25 October 2016, in line with the Airports Commission's recommendation, the Government decided to support construction of a third runway at London's Heathrow Airport. However, the Government is not expecting extra capacity to be available until at least 2030⁶. This means the UK and the South East in particular, has some years to wait before airport congestion is relieved. Even when this is in place, there will be need for additional capacity particularly for freight. Without immediate capacity expansion, delivered responsibly, the forecasts described in this report show that the UK and particularly the South East of England will continue to miss out on the full social and economic benefits they could derive from aviation.

1.1.4 This document therefore makes the case for Manston Airport to be reinstated as a freight-focused airport. Its re-opening would ease the pressure on existing infrastructure in the South East of England and allow some of the currently unmet demand to be handled now and in the future. Although the Secretary of State for Transport, Chris Grayling, has confirmed his on-going support for Manston Airport (HC

⁶ 8 February 2016, The Transport Committee hears evidence from the Secretary of State for Transport on the Government's plans for airport expansion in the South East.
<http://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-committee/news-parliament-2015/airport-expansion-ev-session-15-16/> at 15.07.35

Deb 15 September 2016, c OA1020), the airport, with its 2,742-metre runway, has been closed since May 2014. Ann Gloag, co-founder of Stagecoach, purchased the Manston Airport site on 1 November 2013. Staff were given notice of Ms Gloag's intention to close the airport on 19 March 2014 and the airport closed on 15 May 2015. The intention of the current owner is to secure a change of use from airport to a mixed-use development called Stone Hill Park. This development would potentially include 4,000 homes, a business park, and sports facilities. Such change of use would forever lose the airport facility and the important role it can play in the success of the local, regional and national economies.

1.2 RiverOak's vision for Manston Airport

1.2.1 RiverOak has a clear vision for the future of Manston Airport: To revive Manston as a successful freight-focused airport with some passenger operations, aircraft maintenance and repair, and the creation of a hub for aviation-related commercial opportunities. RiverOak, who specialise in identifying profitable market opportunities, has identified the substantial need for additional and specialised airport capacity for dedicated freighters in the South East of England. The only cargo hubs in the UK are East Midlands and Stansted airports, both of which focus on the integrator market. The UK needs a new hub for dedicated freighters, providing them with rapid turnaround times and the specialist security clearing ability that is currently absent at other UK airports.

1.2.2 The ideal location for this is close to the main market in the South East. RiverOak's long-term plan is to integrate Manston into the UK's airport network, effectively providing Heathrow with its fourth runway primarily dedicated to freighter cargo. Mindful of Manston's long and distinguished history, RiverOak will maintain its heritage and enhance the economic benefits to the region by creating a wide range of aviation-related employment opportunities as well as training and education to meet the necessary skills requirements.

1.3 Aim and objectives of the report

1.3.1 The aim of this report is to consider whether there is a compelling case in the public interest to create a freight-focused facility at Manston Airport. The decision about whether Manston Airport should be returned to operational use hinges on three key questions:

1. Does the UK require additional airport capacity in order to meet its political, economic, and social aims?
2. Should this additional capacity be located in the South East of England?
3. Can Manston Airport, with investment from RiverOak, relieve pressure on the UK airport network and meet the requirement of a nationally significant infrastructure project?

This report demonstrates that the answer to each of the above questions is overwhelmingly yes.

1.3.2 The report summarises the available statistical data to underpin the proposal and support business planning and development at Manston Airport. There are a number of other objectives set out for this work and in particular the results will:

- Provide the information required to support the DCO application
- Inform the Manston Airport business case and master plans
- Inform Manston Airport's marketing strategy

- Initiate stakeholder consultation
- Continue to inform and gain support from key stakeholders
- Provide a platform for lobbying Government and industry organisations
- Play a key role in forming Government policy for air freight in the UK

1.4 The aims of the DCO

1.4.1 A Development Consent Order (**DCO**) will be sought by RiverOak to secure the rights and consents necessary for Manston's re-development as an airport as required by the Planning Act 2008. This means that, at the end of a process overseen by the Government's Planning Inspectorate, the Secretary of State for Transport will decide the future of Manston Airport.

1.4.2 The DCO process was established by the Planning Act 2008, as amended by the Localism Act of 2011 and the Infrastructure Acts of 2013 and 2015. This procedure was introduced to streamline the decision-making process for Nationally Significant Infrastructure Projects (**NSIPs**). One of the main aims of the DCO is to provide a one-stop shop for those promoting NSIPs⁷. There are two main pre-conditions for the inclusion of a Compulsory Purchase Order (**CPO**) within a DCO.

"The first criterion is that the land is required for the development to which the development consent relates. For this to be met, the promoter should be able to demonstrate to the satisfaction of the decision-maker that the land in question is needed for the development for which consent is sought. The decision-maker should be satisfied, in this regard, that the land to be acquired is no more than is reasonably required for the purposes of the development."

(Guidance Related to Procedures for Compulsory Acquisition (DCLG), February 2010, issued under section 124 PA 2008, paragraph 24)

1.4.3 The second pre-condition is that there is a compelling case in the public interest for the land to be acquired compulsorily. Part 3 of the 2008 Act sets out thresholds for infrastructure development to be considered nationally significant. For airports:

"The construction of a new air passenger transport services for at least 10 million passengers per year, or air cargo transport services for at least 10,000 air transport movements of cargo aircraft per year (or if alteration to existing airports would increase passenger numbers or cargo aircraft movements by these number)" (Smith, 2015, p. 4).

1.5 Report structure

1.5.1 Following this introductory section, the report commences with an overview of the UK's airport infrastructure, particularly considering national and South East capacity issues. This section is followed by a description of the UK's airport capacity issues relating specifically to air freight. Next, the report considers the capacity of the main UK air freight airports as well as airfields in the South East that may provide the possibility of additional capacity in the short- to medium-term to help alleviate the unmet demand for air freight to and from the UK.

⁷ Neil Cameron QC, Landmark Chambers available from http://www.landmarkchambers.co.uk/userfiles/documents/resources/Development_Consent_Orders_-and-_Compulsory_Purchase_-_NC.pdf

1.5.2 These sections are followed by an outline of the political context in which decisions about airport capacity are made. This section also looks at the potential impact of BREXIT on UK aviation. The report then looks at Manston Airport specifically and describes its potential as a freight-focused airport. The penultimate section outlines the external issues and opportunities that may impact on the future of Manston Airport. The report concludes with a summary of the findings in relation to the three questions posed and recommends that the Planning Inspectorate, through the DCO process instigated by RiverOak, reinstate Manston as an operational airport.

2 UK airport capacity

2.0.1 The huge growth in aviation over the past eight decades has been at the focus of a wide range of contrasting arguments about when, where and if airports should be built or expanded. Since the 1920s and '30s, when aerodromes were owned privately or by local authorities or municipalities, airports have been nationalised, denationalised and privatised. A wide range of options for the expansion of existing airports and for the construction at sites mainly in the Thames Estuary have been driven by the 'predict and provide' approach to aviation of successive governments. However, on-going and often unresolved issues persist, providing politicians with a choice to make: Should they favour aviation's links to economic growth and job creation or should they preference concerns for the environmental well-being of local people and the planet generally.

2.1 Capacity in the South East

2.1.1 Figure 1 shows the location of the UK's airports, with the largest concentration being in the South East of the Country.

Figure 1 Map showing the location of UK airports



Source: www.gov.uk/government/uploads/system/uploads/attachment_data/file/450387/avi0109.pdf

2.1.2 The most recent and widely circulated documents that describe the UK's airport capacity situation are those used by the Airports Commission in its 2017 report. However, a number of other studies (see for example York Aviation, 2015; Oxford Economics, 2013, 2015) also point to the urgent need for airport capacity in the UK. Indeed, on the 24 October 2017, Chris Grayling MP, Secretary of State for Transport said that evidence from updated aviation demand forecasts, *"show that the need for additional runway capacity is even greater than originally thought. They show that all 5 of London's main airports will be completely full by the mid-2030s, and 4 of them within a decade."* (HC Deb 24 October 2017, c 197WS) The new government figures show that in 2016 Air Traffic Movements (ATMs) in the UK grew by 10%, *"despite average load factors being higher and airlines using bigger aircraft"* (Department for Transport, 2017, p. 9).

2.1.3 The Airports Commission reviewed all available information and consulted widely and arrived at the conclusion in 2015 that:

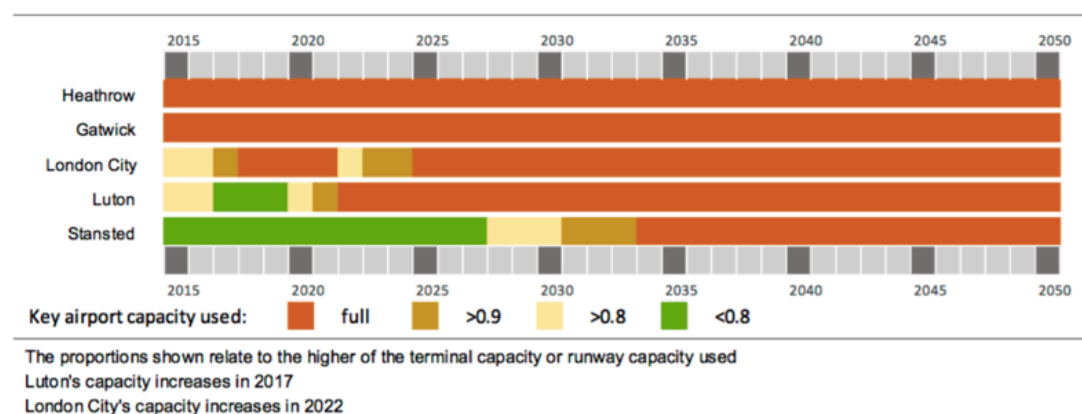
"While London remains a well-connected city its airports are showing unambiguous signs of strain. Heathrow is operating at capacity, and Gatwick is quickly approaching the same point. There is still spare capacity elsewhere in the South East for point-to-point and especially low-cost flights, but with no availability at its main hub airport London is beginning to find that new routes to important long-haul destinations are set up elsewhere in Europe rather than in the UK. Other UK airports are increasingly squeezed out of Heathrow, with passengers from the nations and regions obliged to transfer through other European airports, or Middle Eastern hubs. That costs them time and money, and is off-putting to inward investors. Without action soon the position will continue to deteriorate, and the entire London system will be full by 2040." (Airports Commission, 2015, p. 3)

2.1.4 By 2017, the Airports Commission's analysis of the capacity at the London airports shows that *"even in the low demand growth scenario all London airports are full by 2040. Under the high demand growth scenario, all the London airports are full by 2030"* (DfT, 2017, pp. 102-3). Figure 2 shows the central growth scenario for the London airports without new runways. The figure shows the timeline of capacity usage; where airports are full, or have less than 90% and 80% or more than 80%.

2.1.5 For the UK, DfT central demand figures show that all the main airports except Manchester (where an increase in capacity is expected) will be full by 2050 without additional capacity. This is shown in Table 1. However, it should be noted that the figures focus on passenger aircraft usage and may not reflect the need for freighter aircraft going forward.

2.1.6 This lack of airport capacity is losing the UK considerable potential trade, particularly with non-EU countries. Figures compiled by the Centre for Economics and Business Research (CEBR, 2016) for the Let Britain Fly campaign show that in 2015 the UK missed out on at least £9.5bn in potential trade. Without airport development, CEBR predicts that losses will continue to accumulate at the rate of £1.1 million every hour. For the South East, these losses due to lack of runway capacity amount to £2 billion in potential trade each year.

Figure 2 Central growth scenario, no new runways, London airports, timeline of capacity usage



Source: DfT, 2017, p. 103 section 7.23 figure 7.4

Table 1 Proportion of capacity used by airport, central demand, baseline capacity

	2016	2030	2040	2050
Heathrow	100%	100%	100%	100%
Gatwick	100%	100%	100%	100%
Stansted	70%	88%	100%	100%
Luton	81%	100%	100%	100%
London City	80%	100%	100%	100%
London	93%	98%	100%	100%
Manchester	89%	81%	70%	91%
Birmingham	50%	66%	95%	100%
Bristol	76%	95%	100%	100%
East Midlands	79%	63%	87%	100%
Southampton	82%	99%	100%	100%

2016 is modelled

The proportions shown relate to the higher of the terminal capacity or runway capacity used

The London total proportions relate to a weighted average by number of passengers

Runway capacity is assumed to increase at Manchester; so lower utilisation figures reflect an increase in capacity rather than a decrease in demand

Source: DfT, 2017, p. 102 section 7.20 Table 33

2.2 Aviation's contribution to the economy

2.2.1 Oxford Economics (2015, p. 4) calculate that the aviation sector contributes £52 billion or 3.4% to UK GDP and supports 961,000 jobs. In terms of the value of the UK air freight industry, Oxford Economics estimate that airlines earn around £3.1 billion from shippers annually, carrying 2.3 million tonnes to, from, and within the UK (*ibid*, p. 5). Indeed, the Airports Commission says that:

"[A]viation supports British manufacturing, carrying high value exports, particularly to emerging markets, and helping to secure the position of UK based manufacturers in complex global supply chains. Today around 40% of the UK's trade with economies outside the EU by value is transported by air and in 2014 alone, the total value of tradable goods carried through UK airports exceeded £140 billion." (Airports Commission, 2015, p. 73)

2.2.2 Whilst the European aviation market is becoming more mature it is nonetheless predicted that there will be 50% more flights in 2035 than there were in 2012, from around 9 million per year to 14.4 million (Eurocontrol, 2013). However, across Europe, it is estimated that airport capacity will increase by just 17% by 2035, leaving a shortfall of around nine runways' worth of capacity (*ibid*, 2013). It is, as Eurocontrol say, essential therefore that we make the best possible use of existing infrastructure.

2.2.3 From the advent of commercial aviation, government policy has been to meet rather than to manage demand for airport capacity (Humphreys *et al*, 2007). This strategy is derived from the close link between a country's economic status in world rankings (including attracting inward investment and creating jobs) and their global connectivity. However, issues about where to locate new airport infrastructure are dogged by a political conundrum: Politicians want to win elections, a desire that may hinge on which side of the airport development debate they campaign. For most politicians with airports within their constituency, there are considerable anti-airport development lobbies. However, the people of Thanet, where Manston Airport is located, are largely in favour of the re-opening and development of the airport (see section 7.1 for further details).

2.2.4 One of the justifications for the privatisation of the UK's airports was a desire to increase competition between UK airports, particularly the London airports. This competition is seen as essential if customers, both passengers and freight, are to benefit in terms of service and pricing. However, capacity constraints defeat the free market ideal, putting upward pressure on fares and creating significant barriers to entry for new players who are unable to acquire landing and take-off slots at main airports (Airports Commission, 2015).

3 Air freight capacity

3.0.1 2014 marked 100 years since the birth of commercial aviation. This century of flight has transformed the way we live and how and with whom we conduct business⁸. The history of air freight has always been entwined with that of passenger aviation, with mail the first cargo transported by air. However, after the Second World War, airmail gave way to the age of air freight. The use of air freight was prompted by a general worldwide trend towards globalisation, a change in management practices including just-in-time (JIT) and made-to-order models, trade and economic liberalisation between countries, and other political changes (Ishutkina, 2009) including open skies agreements.

3.1 The air freight market

3.1.1 Aviation makes an enormous impact on our economy, creating jobs and contributing to GDP (Oxford Economics, 2013). Indeed, most studies conclude that world air freight traffic is strongly correlated to GDP (e.g. Boeing, 2014) and that world merchandise trade is a component of GDP, is an important measure of economic performance (Boeing, 2014, p. 2), and that transport infrastructure contributes to economic development (Ishutkina, 2009; Prud'homme, 2005).

"In 2014, airlines transported 51.3 million metric tons of goods, representing more than 35% of global trade by value . . . equivalent to USD6.8 trillion worth of goods annually, or USD18.6 billion worth of goods every day." (IATA, 2015, p. 4)

3.1.2 Sales (2013) points to several major influences on the air freight business: Global recessions, which negatively affect the volume of goods being made, bought and shipped; and fuel prices, which affect transport costs. Fuel prices and volatility have led to the scrapping of many older uneconomical aircraft and to the acquisition of more fuel-efficient, widebody aircraft such as the B777, B747-8 and the A350. The use of these aircraft allows passenger carriers to transport large amounts of belly freight cargo and changed the face of the air freight market. As Sales says, *"Despite these difficulties, the air freight business manages to remain robust and is working harder to find better and more cost-efficient ways of overcoming these obstacles"* (Sales, 2013, p. 41).

3.1.3 Boeing's traffic and market outlook describes an air cargo market recovery that began in 2014. Their market outlook 2016-2035 (Boeing, 2016a) forecasts air cargo traffic, measured in revenue tonne-kilometres (RTKs), at 4.2% although there are differences between the forecasts for regional pairs. For example, Asia-Europe is forecast to grow during the period to 2035 by 4.6% (Boeing, 2016b, p. 16). The Airbus forecast is for growth at 4% globally (Airbus, 2016). The Boeing and Airbus forecasts are based on the opinions of experts who summarise the world's major air trade markets and identify key trends.

3.1.4 With demand for air cargo services set to more than double, the number of aircraft in the freighter fleet is expected to increase by more than half over the next 20 years. Whilst a large proportion of air freight is currently carried as belly freight in passenger aircraft, particularly in the UK, Boeing says that:

⁸ <http://www.flying100years.com>

“Dedicated freighter services nonetheless offer significant advantages, including more predictable and reliable volumes and schedules, greater control over timing and routing, and a variety of services for outsize cargo, hazardous materials, and other types of cargo that cannot be accommodated in passenger airplanes. In addition, range restrictions on fully loaded passenger flights and the limited number of passenger frequencies serving high-demand cargo markets make freighters essential where both long-range and frequent service are required.” (Boeing, 2014, p. 3)

3.1.5 Around 56% of all air cargo (measured in RTKs) is flown in dedicated freighter aircraft (Budd and Ison, 2017, p. 34). The remaining 44% is carried as belly freight on passenger aircraft, or on combi or quick change aircraft that can accommodate both passengers and freight. Boeing forecast that:

“Freighters will continue to carry more than half of the world’s air cargo for the next 20 years, as the majority of players in the industry continue to rely on and augment their cargo operations by flying freighters.” (Boeing, 2016b, p. 4).

3.1.6 The reasons for using dedicated freighters include:

“Range restrictions on fully loaded passenger flights and the limited number of passenger frequencies serving high-demand cargo markets make freighters essential where both long-range and frequent service are required.” (Boeing, 2016b, p. 4)

3.1.7 The EU predicts that by 2035, European airports will be unable to accommodate around two million flights due to capacity shortages. This will lead to a loss of between 434,000 and 818,000 EU jobs and between €28 billion and €52 billion in EU GDP (EC, 2015, p. 7). Air freight flights enable the flow of goods between economies. This mode of transport relieves surface infrastructure deficiencies (Gourdin, 2006) and enables access to markets for commodities where speed adds value, provides a different distribution mechanism (such as next day delivery), enables the use of efficient production methods such as JIT manufacturing, and ensures high value machinery and equipment maximise their capital value (Ishutkina, 2009, p. 114).

3.1.8 At the end of November 2017, airfreight in Europe reached its capacity for the first time in at least 10 years. This situation led to a rise in shipment costs, with the price reaching as high as US\$13 per kilogram for a trans-Atlantic route⁹. According to press reports, “major airports in Europe are experiencing delays of a week in uplift, particularly Milano Malpensa Airport”¹⁰. Heathrow Airport is also reported to be severely congested, with queuing trucks, truck wait fees, and trucks being turned away¹¹.

3.2 Air freight in the UK

3.2.1 By 2000, UK air freight had become constrained, particularly at the London airports (DfT, 2003; Oxford Economics, 2013). Whilst globally around 56% of air freight is carried on dedicated freighters, in the UK this proportion is nearer to 33% with the

⁹ https://aircargoworld.com/allposts/freightos-warns-of-airfreight-rate-jump-as-europe-reaches-capacity/?goal=0_1711f92e66-42df020a11-39626945

¹⁰ <https://www.flexport.com/help/381-freight-market-update-november-8-2017>

¹¹ <https://www.flexport.com/help/381-freight-market-update-november-8-2017>

remaining 67% being carried as belly freight (DfT, 2009, p. 14). It seems that capacity constraints are reducing competition and the desire to strive to provide the highest quality service and aviation infrastructure is critical to the air freight industry. An EU rating of the quality of air transport infrastructure rated the UK 5.52 and ranked 12th out of the 28 EU countries¹². This rating/ranking is based on a survey by the World Economic Forum using a scale where 1 is extremely underdeveloped and 7 is extensive and efficient. This renders the UK less attractive and competitive than other European airports. London's six airports, Heathrow, Gatwick, Stansted, Luton, London City and Southend facilitate 76% of the UK's air cargo. Providing sufficient aviation capacity to meet future air freight demand is, say Oxford Economics (2013, p. 8), the first step to encouraging future trade growth. This will become ever more critical as the UK commences its exit from the EU.

3.2.2 By weight, the UK imports (57% or around 1.3 million tonnes) more than it exports (43% or approximately 1 million tonnes) (DfT, 2009, p. 9). A large proportion of exports, by both weight and value, include machinery and transport equipment. Imports are more mixed across all types of commodities when measured by weight but by value, machinery and equipment dominate. The US and Asia are the primary markets for UK air freight for both imports and exports (*ibid*, p. 9).

3.2.3 York Aviation (2013, p. 4) points to the lack of correlation between freight tonnage handled and the number of scheduled departures. The main reason given by the authors of this work is the relative importance of belly freight and the presence of an active integrator. Their report also highlights the lack of a central means by which to calculate how much freight is uploaded or offloaded at any particular airport. The mix of belly freight and dedicated freighters makes the relationship between departures and air freight tonnage very difficult to approximate. This means that predicting freight movements and tonnage at an airport level is difficult and contentious. Having a common database of figures and an agreed method would help considerably.

3.2.4 A key point raised from the data analysed by York Aviation (2013, p. 5) for TfL's Thames Estuary airport proposal is that most freighters do not operate a point-to-point service (known in shipping as non-liner or tramp shipping). Instead they 'hop' from airport to airport, picking up and setting down cargo, as demand requires. Many freight operations move between more than one of the main European freight airports as well as a number of overseas airports. Whilst some freighters do operate simple round trips, the data shows that inbound patterns do not necessarily mirror outbound patterns, providing flexibility to add new pick up/drop off points as the market dictates.

3.2.5 The busiest UK airport for air freight is London's Heathrow, where most freight is carried in the hold of passenger aircraft. However, it seems that industry leaders have called for infrastructure changes at Heathrow as the airport has seen cargo volumes increase by 10% this year, leading to congestion, delays and an inability to reach the airport's cargo centre¹³.

3.2.6 For freight-only aircraft, Stansted and East Midlands currently dominate (DfT, 2009). Aircraft-to-aircraft movements account for around 15% of air freight traffic in

¹² http://ec.europa.eu/transport/facts-fundings/scoreboard/countries/united-kingdom/investments-infrastructure/index_en.htm

¹³ <http://news.moov.com.ng/london-heathrow-airport-struggles-with-increasing-cargo-congestion-delays/>

the UK, mainly through Heathrow (*ibid*). Three of the four largest integrators, DHL, UPS and TNT, have a strong presence at East Midlands with offices at Heathrow, Stansted and other airports. Fedex's UK base is Stansted. Table 2 shows the 2016 figures for passengers and freight at the London airports.

Table 2 2016 South East UK Airport operations

Airport	Passenger	%	Tonnes freight	%	ATM	%
Heathrow	75,671,863	46%	1,541,029	83%	474,963	41%
Stansted	24,318,395	15%	223,203	12%	180,430	15%
Gatwick	43,114,888	26%	79,588	4%	280,666	24%
Luton	14,642,282	9%	25,426	1%	128,519	11%
London City	4,538,735	3%	69		85,169	7%
Southend	874,411	1%	0		23,449	2%
Total	163,160,574	100%	1,869,315	100%	1,173,196	100%

Source: CAA Airport Data, 2016¹⁴

3.2.7 In terms of mail carried through UK airports, the Royal Mail dominates the market. Their strategy is to wet lease aircraft (hire aircraft with flight crew) and take space on other flights through integrators. In 2016, 185,000 tonnes of mail were carried through UK airports (down from 206,000 in 2015), mainly Heathrow (99,000 tonnes) on scheduled flights (CAA Table 02.2, 2016¹⁵).

3.3 The UK's competitive position

3.3.1 On the 25 October 2016, the Government decided their preferred option for the future direction of air freight and passenger travel in the UK. Several options were considered, including a new airport on the Isle of Grain or the Outer Estuary. This proposal was discounted, leaving only a third runway at Heathrow or a second at Gatwick on the table. Heathrow was the preference of the Airports Commission, now supported by Government under Theresa May. However, given the complexity of the project, its controversial nature and the potential for legal challenges, new infrastructure is unlikely to be operational within the next decade or more. This leaves the air freight industry and those who depend upon it, to operate under constrained conditions unless more use of existing infrastructure can be made. Moreover, even once a third runway is in place, and into the long-term there will still remain considerable capacity constraints in relation to freight. Since there is a clear case for additional freight capacity in the UK it seems undeniable that there is a compelling case, in the public interest, to consider a freight-focused facility at Manston Airport. A facility that already exists at Manston and, with appropriate investment, can be brought back into use relatively quickly.

3.3.2 The UK's airports operate in a global marketplace, competing against airports in northern Europe. Indeed, York Aviation describes their concerns over the role of Germany, The Netherlands and Belgium acting as the major freight centres in Western Europe. Their 2013 report says:

¹⁴ <http://caa.co.uk/Data-and-analysis/UK-aviation-market/Airports/Datasets/UK-Airport-data/Airport-data-2016/>

¹⁵ As above

“These airports have developed major and specialist air freight roles, with freight being trucked from all over Europe to feed these freight hubs. The integration of trucking with air freight should not be overlooked, even within the UK.” (York Aviation, 2013, p. 3)

3.3.3 These concerns seem justified when the UK’s airports are compared to those in the rest of Europe. Table 3 shows the total air transport in freight tonnes and the number of freighter movements at the main European freight airports in 2015 and 2014. The figures highlight the reliance on belly freight at most of the UK’s airports. They also point to the importance of the relationship between freight handled and the presence of integrators located at the airport. For example, East Midlands Airport handles a relatively small tonnage of freight compared to Heathrow but much of this is carried on dedicated freighters. East Midlands is the UK’s hub for DHL and UPS and supports operations for TNT and Royal Mail. As the UK progresses with negotiations to exit the EU, the UK may find it advantageous to have sufficient capacity at airports that can handle dedicated freighters, without the need to truck to airports in mainland Europe.

Table 3 Freight movements at the main European airports

	Freight tonnes		Freight flights (‘000s)	
	2015	2014	2015	2014
Leipzig	982,534	904,110	36	33
Paris CDG	2,175,838	1,475,817	30	31
Cologne	739,457	738,430	27	26
Liege	625,285	581,802	26	24
East Midlands	321,150	307,242	22	22
Frankfurt	2,075,657	2,131,585	22	21
Amsterdam	1,655,328	1,670,671	16	16
Brussels	483,121	408,045	13	12
Luxembourg	736,880	707,150	10	10
Milan MXP	511,192	469,658	10	9
Stansted	226,776	225,851	10	9
Madrid	382,628	376,827	9	9
Copenhagen	196,579	200,054	8	7
Helsinki	177,441	187,419	7	8
Vienna	209,053	210,277	5	5
Munich	336,030	309,148	4	4
Dublin	137,267	127,448	4	4
Heathrow	1,588,884	1,585,885	2	2
Luton	*28,008	*27,414	*2	*2
Rome	145,017	143,008	1	2
Manchester	*100,021	*93,466	*1	*1
Gatwick	*73,371	*88,508	*0	*0

Source: http://ec.europa.eu/eurostat/statistics-explained/index.php/Air_transport_statistics#Further_Eurostat_information

Except those marked * CAA statistics

3.4 The need for air freight capacity in the South East

3.4.1 Quantifying the cost of existing airport capacity constraints, the Airports Commission estimates that over a 60-year time frame and without additional capacity, there would be a £21 to £23 billion cost to users and providers of airport infrastructure and between £30 to £45 billion to the wider economy (Airports Commission, 2015, p. 17). In terms of cargo, Oxford Economics (2013) forecasts suggest that, *“by 2050, the value of air cargo lost to London due to capacity constraints would equate to £106 billion per annum”* (Oxford Economics, 2013, p. 5). They also calculate that in the same timeframe, *“net national losses due to airfreight capacity constraints could equate to £3.9 billion per annum.”* (*ibid*, p. 5)

3.4.2 These figures were calculated prior to the referendum on the UK’s exit from the EU. In 2012, non-EU trade accounted for just under half of all UK trade, with around 35% of these goods being air freighted (Oxford Economics, 2013, p. 5). If the proportion of trade changes, with a greater reliance on non-EU activity after the UK’s withdrawal from the EU, the demand for air freight would be likely to increase.

3.4.3 The London airports facilitate 76% of the UK’s air freight (Oxford Economics, 2013, p. 3). However, the Airports Commission shows that all London airports will be at capacity by 2030. London’s Heathrow and Gatwick airports are already constrained and London City Airport is expected to reach capacity by 2025 with Luton and Stansted airports following closely behind (Airports Commission, 2013, p. 20). What the Airports Commission makes clear is that, *“the demand for landing slots in London and the South East of England will continue to grow”* (2015, p. 54). Whilst some commentators criticised the Commission’s focus on capacity in London and the South East, the Commission believes the strength of the London aviation system is crucial to the UK as a whole.

3.4.4 Boris Johnson, the then Mayor of London, proposed construction of a new airport in the Thames Estuary, an idea originally mooted in the 1950s. Johnson believed that locating an airport to the east of London and away from the major conurbations of the capital would have significant benefits including reducing the environmental and security problems of aircraft over-flying London.

3.4.5 York Aviation predicts that by 2050 the London area could require an additional 80,000 freighter slots per year to meet demand if no additional airport infrastructure is provided (York Aviation, 2015, p. 19). If this capacity is not provided in the UK, 2.1 million tonnes of freight will be trucked elsewhere at a cost of more than £400 million in trucking and user time (*ibid*, p. 31). York Aviation calculates the GVA lost to the sector’s economy and to the wider economy at £637 million and £978 million respectively (*ibid*).

3.4.6 Indeed, York Aviation predicts that, even with the third runway at Heathrow, 45,000 freighter movements will be required (York Aviation, 2015, p. 19). Section 4 of this report considers where freighter aircraft could be handled, concluding that an operational Manston Airport is the only viable option. Furthermore, York Aviation’s earlier report for TfL states that, *“around 14,000 freighters a years could still be accommodated in the vicinity of London by using capacity at airports such as Manston, which already handles some long haul freighters”* (York Aviation, 2013, p. 7).

3.4.7 The 2.1 million tonnes of freight that would be diverted elsewhere by 2050 without additional capacity in the London area (York Aviation, 2015, p. 31) is equivalent

to around 100,000 truckloads per year in addition to current movements¹⁶. Even with additional runways at Heathrow or Gatwick the volume of freight to be diverted elsewhere would be around 1.2 million and 1.7 million tonnes respectively (*ibid*, p. 19). York Aviation says they derived these figures as follows:

“we have considered the potential air freight capacity that might exist in London under different the scenarios. In line with the structure of the market now, we have assumed that the majority of capacity will be provided via aircraft bellyhold freight. We have estimated this capacity based on the number of forecast international movements at the relevant airports in the London system multiplied by the expected average tonnage per international movement in 2050 at each airport. The latter has been derived by taking the tonnes per international movement now estimated from CAA Statistics and growing this by 0.5% per annum to 2050 to reflect increasing loads and larger aircraft. In relation to the 2nd Runway at Gatwick scenario, we have made a further adjustment to allow for the fact that we would expect the airport to attract more long haul services in such a scenario. We have assumed that tonnage per movement in this scenario would increase significantly to be around double that observed at Gatwick in the other scenarios in 2050. This reflects the Gatwick Airport long-term demand forecasts from its submissions to the Airports Commission, which suggest a doubling in the proportion of long haul traffic at the airport by 2050.” (York Aviation, 2015, p. 19)

3.4.8 Given that around half the goods that could be transported between Heathrow and continental Europe as air freight are already trucked by road (DfT, 2009, p. 50), an increase of 100,000 movements in each direction would potentially put huge strain on the road network. The movement of surface traffic has pinch points on the M25 and at Dover. Not only does this delay the movement of commodities, it puts extreme pressure on the road network in the South East. With South East airports at or near capacity, resilience of both the airport and road networks are key issues. It is clear from the figures presented here that the capacity available at Manston Airport is vital to the continued competitiveness of the UK.

¹⁶ Maximum total truck weight (truck, fuel and load) is 44 tonnes for trucks with 6 axles. Maximum payload is 28.1 tonnes. For trucks with 5 axles, maximum payload is 20.3 tonnes. Average load used for this calculation is 21 tonnes to take account of smaller truck sizes and lighter or part loads.

4 Air freight capacity at UK airports

4.0.1 The previous sections have outlined some of the arguments that demonstrate the need for additional airport infrastructure in the UK. This section considers the South East of England particularly and focuses on the potential at existing airports. The DfT 2017 report shows that it is the South East that has the greatest difference between unconstrained and constrained passenger demand (defined as *“those passengers deterred from travelling to or from mainland UK”*), in excess of 7.5 million by 2050 (DfT, 2017, pp. 98-99).

4.0.2 Whilst little research on competition in the air cargo airport market has been undertaken (Kupfer *et al*, 2016), it is apparent that air freight operators have no enduring loyalty to specific airports, particularly in situations where there are other options located within a few hours trucking time. For this reason, East Midlands Airport, with its focus on freight has also been included in the review.

4.0.3 There are a number of factors that influence a cargo airline’s choice of airport including congestion, airport delays, custom clearance times, turnaround time and market access (Kupfer *et al*, 2016, p. 56). Kupfer and colleagues’ research on the drivers behind freight airlines’ choice of airport includes the presence of forwarders, night-time operations, airport charges, the airport’s experience with cargo, and demand for air freight services from the local region. These authors find that the presence of a major forwarder is the most important attribute for airlines when choosing an airport. The RiverOak vision is to encourage integrators and freight forwarders to locate in the Manston area, have a competitive pricing structure, and build on the previous excellent cargo handling service provided by the airport. Manston is well located, with easy surface access from throughout the South East. The proposed Lower Thames Crossing will improve access and the Thames Estuary 2050 project aims to stimulate business in the local area.

4.0.4 Freighter operators find competitive advantage by locating at an airport that minimises flying time. Gardiner (2006, p. 11) outlines these savings in fuel costs as well as potentially in ACMI costs (aircraft, crew, maintenance and insurance). Gardiner discusses how, when it was operational, carriers chose Manston Airport, which is 65 miles southeast of London, to avoid the London Air Traffic Control area when approaching from the south. Savings of up to 45 minutes flying time and 20 minutes taxiing can be made when compared to Heathrow or Stansted airports, a potential attraction for future users. Additionally, Manston was highly efficient in offloading aircraft and the time taken to get cargo onto trucks could be as little as 45 minutes. This compares to an average of 4 to 7 hours at Stansted Airport and far longer at Heathrow Airport. Gardiner quotes the Managing Director of MK Airlines as saying, *“Why bother flying a product at eight miles a minute when it sits in a warehouse for 7 hours?”* (Gardiner, 2006, p. 154)

4.0.5 The following sections consider the options for increasing air freight operations in the South East of the UK and at East Midlands Airport. These sections demonstrate that other South East airports cannot accommodate sufficient capacity for freighter aircraft to meet the forecasts for demand outlined in Section 3.4.

4.1 Stansted Airport

4.1.1 The Airports Commission ruled Stansted out of its preferred three options for airport expansion, focusing their shortlist on Gatwick Airport and two options at Heathrow. The Commission did not favour the construction of a four or five-runway hub airport at Stansted Airport since it may involve the closure of either Heathrow or Gatwick, be excessively costly, and require extensive improvements to surface transport. Neither did the Commission shortlist the construction of a second runway at Stansted although this may be reconsidered sometime between 2040 and 2050.

4.1.2 The Airports Commission noted that planning conditions prevent Stansted from operating to its maximum capacity and will reconsider lifting these during the next phase of its work if there is a case for optimising aviation capacity in the London system. Stansted Airport's owners, Manchester Airport Group (**MAG**), are seeking to raise the passenger cap from 35 million per year to 44.5 million and the number of aircraft movements from 274,000 to 285,000. However, the final report by the Airports Commission (2015, p. 332) recommends that the cap at Stansted (the G1 planning cargo-only cap was 20,500) be reviewed on the basis of extensive stakeholder consultation.

4.1.3 In October 2017 and following extensive consultation, Stansted Airport's CEO, Ken O'Toole, issued a statement explaining that whilst residents supported ongoing growth and investment in the airport, there are concerns about an increase in the current cap on the number of aircraft movements. Mr O'Toole's statement says this, *"means the airport's growth over the next ten years to serve 43 million passengers can be achieved without increasing the existing limits on aircraft movements and noise."*¹⁷

4.1.4 TfL is working to improve passengers' surface access to Stansted Airport and once in place, these improvements are likely to stimulate the demand at Stansted for passenger flights. Indeed, Ryanair has already increased the frequency and number of routes it provides from the airport. Ryanair's expansion will continue to increase pressure on slots, particularly at peak times such as early morning, Ryanair is the dominant carrier at Stansted Airport and, since the low cost carrier (**LCC**) model is based on fast turnarounds, the airline will not tolerate interference from cargo handling. Ryanair is increasing their offering to more distant destinations including Turkey, North Africa, Cyprus and the Middle East. For the airline to operate four rotations per day to maximise the profitability of each aircraft, late evening and potentially night time slots will be required.

4.1.5 It seems likely that MAG, will want to maximise the use of their infrastructure, in line with the DfT's desire to make full use of existing capacity (DfT, 2012). Given the statement by the CEO in October 2017, this is likely to focus on the passenger market. At present, Stansted Airport has capacity to accommodate a number of freighter flights. However, cargo-only flights account for only around 8% of ATMs at Stansted. Freight carriers have traditionally used night slots at the airport and these may become less available if the LCCs utilise them. This situation occurred at Schiphol Airport (see Section 7.5 for more details), where air traffic capacity constraints were announced in September 2017. These constraints particularly affected freight operators, as passenger flights were preferenced for a number of reasons. As such, it may be that moving freight

¹⁷ <http://mediacentre.stanstedairport.com/london-stansted-airport-targets-growth-within-current-environmental-and-aircraft-movement-limits/>

to Manston Airport could represent a significant opportunity for MAG should they want to free up slots for higher value passenger aircraft use.

4.2 London Heathrow Airport

4.2.1 Heathrow is the UK's only hub airport, handling around 475,000 ATMs per year (CAA 2016 figures), with average daily movements of nearly 1,300. Whilst Heathrow handles 63% of the UK's air freight, very few dedicated cargo aircraft use the airport (CAA, 2016). Indeed, more than 99% of air freight at Heathrow is carried in the hold of passenger aircraft as belly freight (CAA, 2013, p. 35). However, Heathrow does handle around 200 freighter movements per month (CAA, Table 6) including Cathay Pacific and Emirates (CAA, 2013, p. 36).

4.2.2 The proposed addition of a third runway at Heathrow is unlikely to resolve the capacity issues for dedicated freighters. Since Heathrow's passenger market has been constrained for some years, the new runway may be used to meet as yet unmet passenger demand. Should Low Cost Carriers, who do not carry belly freight for operational reasons, fill much of the additional runway capacity, Heathrow's freight handling, in terms of tonnes per year, is unlikely to increase substantially. Heathrow's focus on passenger and belly freight markets is also likely to continue to keep dedicated freighters out of the airport. This means that markets not served by passenger aircraft will remain unreachable for UK importers and exporters without a dedicated freighter operation.

4.2.3 However, in 2015, Heathrow Airport Limited (**HAL**) announced their blueprint for a £180 million overhaul to their cargo facilities. The plans include new underground access roads, improved air-to-air facilities and a specialist pharmaceutical storage area. HAL's aim is to reduce what they declare as their current processing time of eight to nine hours to around four hours¹⁸, still considerably longer than Manston's previous and proposed processing time. Even so and as York Aviation figures show, there will be a shortfall of slots for dedicated freighters, likely to be in the region of 45,000 by 2050 (York Aviation, 2015, p. 19).

4.2.4 Of interest to the Manston Airport freight forecast is that Delta Airlines reported to the CAA that whilst Heathrow is a good connecting airport for the US, it is not so well placed for Europe (*ibid*, p. 38). The CAA (2016, pp. 34-35) report a number of concerns expressed by cargo operators, including:

- *Problems with airfield access leading to bottlenecks at control posts and cargo access points viewed as a lower priority than passenger equivalents*
- *Limited space to hold cargo and empty equipment resulting in more vehicle movement*
- *Road congestion becoming increasingly an issue and impacting on already lengthy journey times*

4.2.5 As such, even with an operational third runway at Heathrow Airport, Manston Airport will still be vital to ensure the UK meets the needs, wherever possible, of the demand for air freight.

4.3 London Gatwick Airport

4.3.1 Whilst Gatwick Airport's submission to the Airports Commission did not include plans for freight, a subsequent statement says their plans are to make provision for ten

¹⁸ <http://your.heathrow.com/takingbritainfurther/trade-and-exports/improved-cargo-facilities/>

times the amount of freight the airport currently handles¹⁹. Gatwick Airport handles very few dedicated freighters, although it has increased its annual tonnage from only 3,000 in 2014 to 73,000 tonnes in 2015 (see Table 2). This lack of experience, which is a key element in the choice of a freight airport for operators (Kupfer *et al*, 2016), means that Gatwick is not a serious competitor in the freight market. Indeed, even with a second runway at Gatwick Airport there would be a need for around 65,000 additional freighter movements per year from 2050 (York Aviation, 2015, p. 19).

4.4 Luton Airport

4.4.1 Luton Airport is located close to the M1 and therefore well situated to access the UK's road network. Luton Airport handles around 28,000 tonnes of cargo each year with DHL, MNG Airlines and British Airways operating dedicated freighters from the airport. The current number of stands at Luton is unable to support significant growth²⁰. Luton Airport's business profile is similar to Stansted Airport's in terms of the dominance of LCCs, focusing the airport on passenger traffic. It would therefore be improbable for Luton Airport to provide a hub for dedicated freighters.

4.5 London City Airport

4.5.1 London City Airport has benefited from planning permission to build seven new aircraft stands, a parallel taxiway and to extend the passenger terminal. However, the airport is focused on the passenger market and handled only 24 tonnes of freight in 2015. London City Airport has a short and constrained runway, at 1,900 metres, and is therefore unable to support a large freighter operation.

4.6 Southend Airport

4.6.1 Southend Airport is focused on the LCC passenger market, handling only five tonnes of freight in 2015. Although extended in 2012, Southend's runway is unlikely to be suitable for long or mid-range freighter aircraft.

4.7 East Midlands Airport

4.7.1 East Midlands Airport is a major successful integrator hub, focused on handling packages and parcels. DHL has a purpose-built facility at the airport and is the major operator. UPS and TNT also use the airport as well as Royal Mail. As with Stansted, the airport is owned and operated by MAG. The airport has a 24-hour licence and imposes additional charges on aircraft using the airport between 23.30 and 06.00, dependent on the noise band of the aircraft. The airport also charges a shoulder supplement between the hours of 06.01 to 07.00 and 21.01 to 23.29.

4.7.2 In 2016, East Midlands Airport handled 257,151 freight aircraft movements. At present the airport serves a wide catchment area as shown in Figure 2. However, surface access to these geographically distant businesses, of which many are concentrated in the South East, is hampered by congestion on the UK's road network. Therefore, total time taken to deliver from origin to final destination increases, particularly around the bottlenecks on some of the major motorways. Figure 2 clearly shows the number of businesses located in the South East, within the Manston catchment area.

¹⁹ <http://www.aircargoweek.com/cargo-omitted-from-gatwicks-response/>

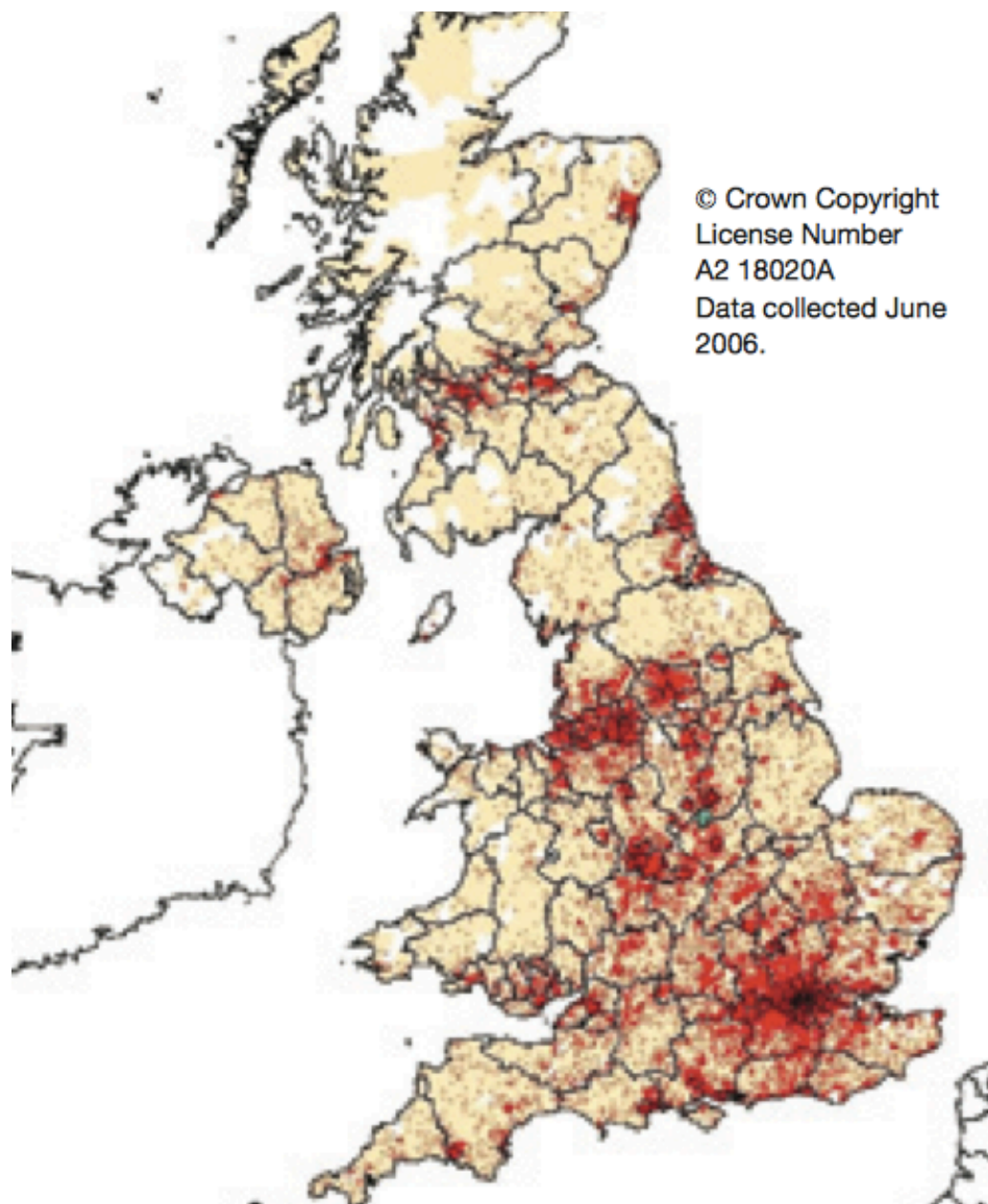
²⁰ <https://www.caa.co.uk/WorkArea/DownloadAsset.aspx?id=4294972551>

4.8 Other South East UK airfields

4.8.1 There are few other options for increasing air freight capacity in the South East. The Thames Estuary Airport proposed by Boris Johnson, the then Mayor of London, has been ruled out as an option, with the Airports Commission saying its substantial disadvantages outweighed its potential benefits. Other airports in the South East and the constraints on their development are shown in Table 3.

4.8.2 The final option in the South East is Manston Airport, which is described in detail in Section 6. Manston is the only real choice for the location of a freight-focused airport in the South East of England. Indeed, The 2003 White paper, *The Future of Air Transport*, states that Manston "*could play a valuable role in meeting local demand and could contribute to regional economic development*" (DfT, 2003, p. 132).

Figure 3 Location of businesses served by integrators at EMA



Source: DfT, 2009, page 26 (data collected in June 2006 by Manchester Airports Group)

Table 4 South East Airfields

Airfield	Constraints
Biggin Hill	Difficult road access to main M25 artery, restricted opening hours, short runway, runway direction and proximity to Gatwick Airport creates numerous airspace issues, residential location, experiences poor weather conditions due to elevated location.
Bournemouth	Handled 1,565 tonnes in 2015, down 17% from 2014. Has recently (2016) attracted £40 million of government investment. However, the airport is some 30 miles from the M3 and M27 on a route that passes through the New Forest National Park, not ideal for fleets of trucks.
Farnborough	Restricted number of movement particularly at weekends, only certain aircraft categories permitted, Business Aviation focus that would not fit with a cargo model
Lydd	Short runway with considerable approach issues (including MOD Hythe firing range and proximity of Dungeness Power Station), rural location with relatively poor surface transport connectivity
Northolt	RAF station, safety issues raised due to proximity to Heathrow, difficulties integrating with London airspace, short runway
Rochester	General aviation aerodrome with grass runways. A planning application was validated in September 2017 for a replacement paved lit runway and parallel grass runway. However, the runways are less than 1,000 metres and not suitable for cargo operations.
Shoreham	Short runway, light aircraft use only
Southampton	Handled 185,000 tonnes in 2015, an increase of 39% on the previous year. The airport is close to the M3 and M27 and has the benefit of an onsite railway.

4.8.3 There are, of course, a number of European airports that are able to take overflow air freight traffic from the UK. However, use of these airports involves considerable trucking of cargo to and from the UK incurring additional costs to the shipper and placing huge burdens on the UK's road and sea crossing infrastructure. Hauliers are experiencing considerable delays due to the ongoing migrant situation in Calais. Many report having to avoid Calais after dark, parking trucks in Belgium overnight and adding several hours to journey times.

4.8.4 These truck movements are lost economic opportunities for the UK. The reinstatement and redevelopment of Manston Airport will recapture much of this benefit for the UK. Flying freight from Manston Airport, negating the need to truck to and from European airports for air transportation, should help to ease congestion in the area. During Operation Stack, which has been used since 1996, the coast-bound side of the M20 in Kent has to be closed to traffic in order to park trucks waiting to cross the Channel. This is a costly exercise in terms of policing, delay for hauliers, and the effect on the local economy and quality of life. Indeed, the Freight Transport Association calculated the cost to the haulage companies of the three week delay in July 2015 to be £700,000 a day with costs of £250m to the UK economy as a whole²¹.

²¹ <http://www.bbc.co.uk/news/uk-england-kent-33688822>

5 The politics of aviation

5.0.1 Since the 1986 Airports Act, the UK government no longer builds airports or adds runways (DfT, 2003) and, “*can only encourage and incentivize airport operators to invest in new capacity, when it believes capacity would best benefit the national interest*” (Humphreys *et al*, 2007, p. 341). As such, it is vital that government makes, “*best use its regulatory, fiscal and planning levers to encourage the investment it wants*” (*ibid*, p. 343).

5.1 Political setting

5.1.1 The UK’s international transport networks are a key enabler to trade in goods and services (DfT, 2009). Therefore, continued procrastination about the location of additional airport infrastructure, particularly runways, has led to considerable frustration. Graham Brady, Conservative MP and Chair of the 1922 Committee²², tabled an Early Day Motion on 29 February 2016, which criticises the Government for procrastination over airport capacity in the South East. His motion reads:

"This house regrets the continuing delay in making a final decision on airport expansion in London and the South East; believes that a decision is vital for the prosperity of the nations and regions of the United Kingdom and urges Ministers to make sure that this delay is not repeated; notes that the Airports Commission spent three years and millions of taxpayers' money examining the evidence in a process that has been robust and rigorous; believes the government should get on with making a decision on airport expansion in the South East of England as swiftly as possible; further believes that every additional period of delay will cost the UK billions in lost trade and investment and damage the UK's competitiveness; therefore urges the government to use the coming months to make rapid progress and announce a final decision in parliament before the summer recess."

5.1.2 At present, neither the UK nor EU governments have specific policies for air freight. However, the UK Draft Aviation Policy Framework states that:

"In the short term, to around 2020, a key priority for us is to continue to work with the aviation industry and other stakeholders to make much better use of existing runways at all UK airports." (DfT, 2012, p. 19)

5.1.3 The 2013 Aviation Policy Framework makes clear the Government’s support for aviation infrastructure and highlights the benefits to the economy of providing transport and trade routes for imports and exports to the rest of the world (DfT, 2013, p. 16). Indeed, the policy framework states that:

"The UK's continued economic success depends on being able to connect with the countries and locations that are of most benefit to our economy. This is important in relation both to destinations that fall into that category today and those locations that will become crucial to our country's economic success in the future. While it remains vital for the UK to maintain its connectivity with established markets such as the USA and in Europe, it is also important that we take advantage of the growing opportunities presented in the

²² A body of Conservative Members of Parliament known formally as the Conservative Private Members’ Committee

emerging economies of the world to remain competitive in the global economy.” (DfT, 2013, p. 28)

5.1.4 The Aviation Policy Framework indicates the Government’s concerns over the falling number of destinations served by Heathrow Airport and the impact on connectivity. Profitable routes are operated at higher frequencies, reducing the number of destinations served (DfT, 2013, p. 28). This reduces the possibility of using belly freight to those destinations no longer served from Heathrow and indicates the need for dedicated freighters on those routes.

5.1.5 Indeed, in line with RiverOak’s desire to re-open and re-develop Manston Airport, the Framework describes Government’s key priorities to around 2020 (DfT, 2013, p. 30) as:

- *making best use of existing capacity to improve performance, resilience and the passenger experience;*
- *encouraging new routes and services;*
- *supporting airports outside the South East to grow and develop new routes; and*
- *better integrating airports into the wider transport network.*

5.2 The potential effect of BREXIT on UK aviation

5.2.1 At the Royal Aeronautical Society’s conference held in October 2016 on the effect on Britain’s aviation, aerospace and space sectors of the UK leaving the EU, David Jones MP, the then Minister of State at the Department for Exiting the EU, stressed the importance of the UK aerospace sector to the UK’s on-going prosperity. He said the UK’s aerospace sector would be the economic and trade spearhead for forging new links with the rest of the world. The MP stated that the sector is six times more productive than the rest of the UK’s economy and will be central to building a new outward-looking Britain and providing post-Brexit opportunities. As such, it seems counter-productive to allow a potentially viable airport such as Manston to be used for housing.

5.2.2 There are many unknowns at this stage - prior to the completion of negotiations – and building a future for the aviation sector will not be without risks. These risks include the ability to influence future EU aviation policy, access to Galileo’s precision satellite navigation signals, participation in the ATM SESAR initiative, collaboration in aviation and military R&D programmes, and aviation market access²³. Indeed, in principle, UK airlines may lose their rights to fly between European countries. This will adversely affect airlines such as EasyJet, where 24% of their seats are on flights between countries remaining in the EU²⁴.

5.2.3 One option for the UK will be to join the European Common Aviation Area (ECAA)²⁵. This is an agreement between the EU and partners from south-eastern and northern Europe (including Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo under UNSCR 1244, Norway and Iceland). The objective of the ECAA was to integrate the EU’s neighbours in southeast Europe in the EU’s internal aviation market, which, at the time, consisted of

²³ <https://www.aerosociety.com/news/tailwind-or-turbulence-brexit-and-uk-aerospace/>

²⁴ https://peresuau.files.wordpress.com/2016/06/2016_06_28-brexit-suau-sanchez-la-vanguardia.pdf

²⁵ http://ec.europa.eu/transport/modes/air/international_aviation/country_index/ecaa_en.htm

25 EU Member States as well as Norway and Iceland. ECAA airlines have open access to the European single market in aviation.

5.2.4 The EU is currently the UK's most important trade partner, accounting for half of all UK exports and imports (Dhingra *et al*, 2015). Following the vote to exit the EU (so-called Brexit), Britain now has to negotiate Free Trade Agreements (**FTA**) with the EU. It is likely the UK and the EU will agree trade deals but higher tariffs and non-tariff barriers would make imports and exports more expensive, affecting trade between the UK and the EU. Friction at the borders between EU countries and the UK, particularly at the Channel ports, is likely to increase to meet the demands of security checks and ensuring tariffs are paid where necessary. This may serve to switch transport away from trucking to air freight, avoiding congestion at the Channel crossings. It is also likely that increased trade will occur between Britain and more geographically distant countries. Trucking of goods to these countries will not be an option thus increasing the need for air freight, making the capacity Manston Airport can provide nationally significant to the UK's airport infrastructure.

5.2.5 Backloading (the transportation of cargo on a return trip, using empty space paid for on the outward leg) from international airports is important as this helps airlines to maximise profit on their return journeys. However, this requires fourth or fifth freedom rights, depending if two non-UK countries are involved²⁶. Freedoms of the air are a set of commercial aviation rights that grant one country's airlines privileges to enter and land in another country's airspace. They result from the Chicago Convention, the Convention on International Civil Aviation of 1944²⁷. There are nine levels of freedoms, where the first provides rights to overfly a foreign country and the eighth and ninth provide full cabotage (rights to operate inside a foreign country). The fifth freedom provides the right to operate between two foreign (non-domicile) countries when the flight originates or terminates in the home country.

5.2.6 The events on the 22 March 2016 at Brussels Airport²⁸, the 28 June 2016 at Istanbul and the 18 March 2017 at Paris Orly have put airports around Europe on high alert. London airports increased their security and are under pressure to check everyone entering airport terminal buildings²⁹. Airports in the UK and Europe carry out security checks on passengers as they go airside. Once airside, some airlines scan hand luggage again at the departure gate. Airports are not designed to security check all visitors as they enter the airport. If required, it will cause huge delays and require passengers to arrive many hours (almost certainly at least three) before their flight. These delays impact belly freight, potentially making a switch to dedicated freighters more likely. This is particularly the case for perishable and high value goods. However, switching from belly freight to dedicated freighters requires slots to be available, particularly in the South East. An operational Manston Airport with a focus on freight would help to accommodate this potential increase, allowing the UK to maximise the economic benefits it derives from trade with the rest of the world.

²⁶ Freighters frequently 'hop' between countries rather than make point-to-point journeys to or from the UK and one other overseas country

²⁷ <http://www.aviationlaw.eu/wp/wp-content/uploads/2013/09/Freedoms-of-the-Air-Explained.pdf>

²⁸ <http://www.dailymail.co.uk/news/article-3504030/Europe-s-biggest-airports-step-security-armed-police-patrols-terror-attacks-Brussels.html>

²⁹ ITV news report, Good Morning Britain, 22nd March

5.3 The continuing impact of e-commerce

5.3.1 E-commerce is the fastest growing retail market in Europe and North America with online sales forecast to grow strongly year on year. In the UK, Germany, France, The Netherlands, Sweden, Italy, Poland and Spain, this market grew from £132.05 billion in 2014 to £156.67 billion in 2015, a growth of 18.6%³⁰. 2017 figures show around 19% growth for the year in Europe³¹. In the US, digital sales during Thanksgiving week (between 23 and 26 November, were at an all-time high of \$13 billion, and increase of 14.4% year-on-year³².

5.3.2 In the UK, the increasing use of smartphones for internet shopping has driven online spending with UK retailers to £133 billion in 2016, 16% higher than 2015³³. Retail is not the only market to migrate to e-commerce. The shift to consumer-driven healthcare is creating new e-commerce opportunities throughout the supply chain including retailers, manufacturers, and online merchants.

5.3.3 The International Air Transport Association (IATA) says that:

“E-commerce is a future growth driver for the air cargo industry, and therefore there's an increasing need for speed, visibility and easy returns, all of which will impact the logistics chain”³⁴.

5.3.4 IATA's figures for August 2017 show continued strong growth in the air freight sector. Global freight tonne kilometres (FTKs) grew at 12% for the year with demand increasing 2.5 times faster than capacity³⁵. This growth coincides with increasing world trade volumes, up 4.2% to end July 2017. IATA surveys also show increased confidence in the market, with 58% of respondents expecting further increases in freight volumes in the coming year and just 11% expecting a decrease³⁶. Indeed, IATA says:

“The results of our latest survey of airline CFOs and heads of cargo, conducted in early-July, suggest that the squeeze on industry profit margins peaked in the first quarter of the year. 77% of respondents reported that profitability increased in year-on-year terms in Q2 2017 – more than double the corresponding share in the previous survey and the highest proportion in almost seven years. Having been at or below the 50-mark for the past four surveys, the weighted-average score jumped to its highest level in more than two years.”

5.3.5 The impact of e-commerce on air freight has led to capacity issues and rate increases. The air freight press is reporting the difficulties felt by forwarders and shippers, with one commentator saying, “It's a carrier's market. Airlines are definitely becoming more selective with what they take and accept. E-commerce is a massive issue this year.”³⁷

³⁰ <http://www.retailresearch.org/onlineretailing.php>

³¹ <https://ecommercenews.eu/ecommerce-europe-grows-19-percent-2017/>

³² Adobe figures reported in <https://aircargoworld.com/allposts/5-ways-that-this-years-cyber-monday-shook-up-logistics/3/>

³³ <https://www.imrg.org/media-and-comment/press-releases/uk-online-sales-in-2016/>

³⁴ <http://www.iata.org/whatwedo/cargo/Pages/e-commerce-logistics.aspx>

³⁵ <http://www.iata.org/whatwedo/Documents/economics/freight-analysis-aug-2017.pdf>

³⁶ <http://www.iata.org/whatwedo/Documents/economics/bcs-jul-17.pdf>

³⁷ <https://theloadstar.co.uk/forwarders-shippers-caught-updraught-air-cargo-perfect-storm/>

5.3.6 Since countries with 1% better air cargo connectivity engage in 6% more trade ³⁸, it is imperative for the UK, particularly post-Brexit, to ensure our manufacturers, importers and exporters are fully globally connected, with unconstrained access to air freight transportation.

5.3.7 The potential for further dependence on air freight due to the impact of e-commerce is set against the freight capacity constraints at South East airports. Addressing these capacity constraints by bring Manston Airport back into the UK airport network seems to be vital for the continued and growing prosperity of the UK. Without rapid increases in freight capacity, the UK will suffer even greater economic losses than those currently described (see for example Centre for Business Research, 2016).

³⁸ <http://www.iata.org/whatwedo/cargo/Pages/index.aspx>

6 Manston Airport

6.0.1 Manston Airport is located on the Isle of Thanet in East Kent, 17 miles from the Port of Dover, 65 miles from Central London and 60 miles from the Port of Tilbury. Figure 4 shows the airport's location in the South East of the UK. The airport's runway has a length of 2,742-metres and a width of 61 metres, heading 10/28. It is capable of handling all types of aircraft. The airport has been closed to traffic since May 2014.

Figure 4 Map showing location of Manston Airport



6.1 History

6.1.1 Manston has been an airfield since the Great War. In 1915, aircraft began using farmland at Manston for emergency landings when unable to use their destination landing strip on top of the cliffs at Westgate. By the end of 1916, there were two units stationed at the Admiralty Aerodrome at Manston. By 1939 and the outbreak of World War II, Manston was still an all-grass airfield. It was from here that Barnes Wallace designed and tested his bouncing bombs in the sea near Reculver in preparation for the Dambusters raids. In the 1940s, the runway at Manston, the longest and widest in southern England at the time, was built to assist the safe landing of badly damaged aircraft returning from Europe.

6.1.2 In 1958, Manston became a joint RAF and civil airfield and played a key role in the early and developing years of charter air travel. From this time and during the 1960s, the airport was home to a fleet of five Hermes 4A aircraft, operating successful passenger services from Manston to Le Tourquet for Silver City Airways. In 1961, one of the directors of Silver City, Wing Commander Hugh Kennard, founded Air Ferry, which flew charter flights from Manston. When the company was taken over by Air Holdings Group, Kennard founded Invicta Airways, which operated passenger and cargo flights

from Manston. Indeed, during the summer of 1965, 120,143 passengers were flown from Manston to destinations including Basel, Dusseldorf, Luxembourg, Malaga, Palma, and Seville³⁹. The airline operated from Manston throughout its 18-year history.

6.1.3 In terms of passenger operations, several charter services have used the airport over the years of its operation. In the 1990s there were summer services to Jersey, Mallorca, Crete, Cyprus, and the former Yugoslavia. Operators such as Dan Air, the Yugoslavian carrier, Aviogenex, and Aspro Holidays operated successful services from Manston. For several years, Manston hosted seasonal charter flights connecting cruise line passengers from the USA to the Port of Dover. In 2001 this operation accounted for some 9,000 passengers. The airport arranged bonded transportation by coach between the airport and the port so that passengers cleared customs and immigration in Dover. Their baggage was not reclaimed at the airport but delivered to their cabin on the cruise ship.

6.1.4 In 1999, RAF Manston was closed and ownership of the airport passed to the private sector. The Wiggins Group plc/PlaneStation first purchased the civilian enclave from Seaborne Aviation in 1997, completing the purchase of the remainder of the Airport from the MOD in 1999. The Wiggins Group plc/PlaneStation owed the airport until 2005. Infratil, a New Zealand company who also operated Prestwick (Glasgow) airport, took control of Manston in 2005. The Airport has enjoyed a unique position in the hearts of local people. In 2005, the residents of Thanet expressed, "*broad support for the proposed expansion of the airport*" (MORI, 2005) with 85% in favour of expansion of the airport of which 63% were strongly in favour. More recently, many local people have campaigned vigorously to save the Airport from housing development and a number of action groups coordinate the continuing activities of Manston Airport's supporters.

6.1.5 The low cost carrier EUJet had a base at Manston between 2004 and 2005. The airline used a small fleet of Fokker 100 jets and had a schedule including 21 domestic and European destinations. Between 2010 and March 2012, Flybe operated a daily service from Manston to Edinburgh, Belfast and Manchester. In April 2013, KLM began a twice-daily service between Manston and Amsterdam, which ended when the airport's owners gave notice it was closing.

6.1.6 Helicopter search and rescue operations ran from Manston from the early 1960s until the closure of the RAF base in 1995 (with some small gaps). Manston was the preferred Search and Rescue airport for the area but the closure of the airport forced the contract to be re-awarded.

6.1.7 One of the questions raised by those who doubt Manston's ability to attract air traffic, is why other operators have been unsuccessful. Manston was first privatised in 1999. Sold to the Wiggins Group (later PlaneStation plc), the airport attracted a considerable amount of air freight traffic. However, in 2004/5, the company purchased the low cost airline, EUJet, without apparently completing satisfactory due diligence. In 2005, both PlaneStation and EUJet went into administration.

6.1.8 Ownership of the airport passed to Infratil, a New Zealand-based company. Under their management the airport continued to attract freight traffic and instigated a twice-daily rotation with KLM to Amsterdam. However, as Pauline Bradley, Director of

³⁹ Woodley, C. (2014) Flying to the Sun: A History of Britain's Holiday Airlines. Available from <https://books.google.com/books?isbn=0750968702>

Manston Skyport (owners of Manston from 2013), says, the airport suffered from the physical distance between its ownership and operation⁴⁰. Infratil's management of Manston seemed to lack a business plan or strategic direction. Indeed, the airport's management made little investment in their facilities, something airlines would expect to demonstrate a commitment to the medium and long term. Other competing facilities at Stansted, East Midlands, and Doncaster invested significantly and benefited in terms of traffic growth. The constraints imposed on prior operations by the airport's infrastructure limited the potential for business development, particularly since Manston's attraction to air freight customers was in its turnaround times. With increased numbers, these would be severely impeded without the major investment proposed by Riveroak.

6.1.9 In 2013, Infratil sold Manston Airport for £1 to Ann Gloag, co-founder of the Stagecoach Group. Sir Roger Gale, giving evidence at the Transport Select Committee's smaller airports inquiry, said Ann Gloag *"had no intention of running this as an airport and every intention of seeking to turn this into an asset stripping property development"*⁴¹. Ms Gloag pledged to keep the airport open for two years but within months the airport was closed.

6.2 Previous operations

6.2.1 Before its closure, the operators of Manston Airport managed all airport activities including ATC, fire cover, security, ground handling, catering, duty-free and slot allocation. The airport focused on the cargo market whilst also providing passenger flights. In terms of cargo, Manston Airport established a reputation for speedy handling of perishable cargo, with unloading and throughput times much faster than competitor airports. By 2012, Manston was carrying around 31,000 tonnes of cargo per year. Table 5 shows the extent of the airport's operation from 2004 until its closure in 2014.

Table 5 Manston Airport operations

Year	Tonnes of cargo	ATMs	Passengers
2004	26,626	3,460	100,592
2005	7,612	4,862	206,875
2006	20,841	913	9,845
2007	28,371	1,205	15,556
2008	25,673	798	11,625
2009	30,038	811	5,335
2010	28,103	1,469	25,692
2011	27,495	1,965	37,169
2012	31,078	1,004	8,262
2013	29,306	2,073	40,143
2014 (Airport closed in May)	12,696	778	12,385

Source: Department for Transport Statistics, Table 02.2 Summary of Activity at UK Airports, 2004 to 2014

⁴⁰ <http://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-committee/news/smaller-airports-ev2/> on 2nd February 2015

⁴¹ As above

6.2.2 Since Manston Airport suffered from a severe lack of investment, and constraints on the ground are likely to have resulted in capacity restrictions that prevented growth past the figures for cargo shown in Table 5. With only one cargo stand, aircraft were unable to exit to the runway if another aircraft taxied into the cargo area behind it. The airport had limited storage, had not invested in up-to-date handling equipment, and closed their Border Inspection Post. In spite of the lack of investment, there was considerable growth in Manston's cargo market from 2010 until 2013. This growth, as shown below⁴², indicates that Manston Airport, with the investment required could have a strong future.

- 2010: 4 weekly freighters
- 2012: 7 weekly freighters
- 2013: 9 weekly freighters
- 2014: 13 weekly freighters
- 2013: 5th busiest UK airport on tonnage handled
- 2013: Overtook Luton Airport to become 4th busiest airport in the South East
- 2013: 3rd busiest UK airport handling dedicated freighters

6.2.3 In 2011, York Aviation reviewed the then owner's forecasts for Manston in light of proposed night time operating. Referring to Boeing and Airbus world freight forecasts for 5.9% growth per annum, York Aviation stated that Manston Airport:

"stands to benefit from these levels of growth within the South East of England due to the likely growth of constraints in airport capacity in the region." (York Aviation, 2011, para 2.22, p. 13)

Since 2011, these constraints have increased considerably and a final Government decision on where to allow additional capacity has yet to be made.

6.3 Infrastructure

6.3.1 The Manston site extends to some 730 acres (296 hectares), 618 (250 hectares) on the main site and 114 (46 hectares) on the Northern Grass. Whilst the airport has been decommissioned, buildings that housed the passenger terminal and office facilities, Border Inspection Post (**BIP**) and cargo hangers still stand, as does the car parking area. The existing taxiway network requires modification in order to allow Manston Airport to attract the widest range of operators as well as being EASA compliant. Improvements would include a new taxiway parallel to the runway, new taxiways linking the aprons and stands, and modifications to existing taxiways to ensure gradients are EASA compliant.

6.3.2 Much of the equipment that was installed at the airport when it closed has now been removed. This, however, is not seen as a drawback as RiverOak plans to upgrade to state-of-the-art navigation and operational equipment. A new radar facility will be installed in its original position to the northwest of the site on what is known as the Northern Grass. Modifications to the airport site will match the forecast produced for Manston. In particular, construction work will allow for the parking of up to 11 aircraft (eight freighters and three passenger) including those classified as Codes E and F⁴³.

⁴² Provided by Alan McQuarrie, cargo manager at Manston Airport at time of closure

⁴³ Aircraft codes are defined by ICAO (Annex 14) and derive from the most restrictive of either the aircraft wingspan or the aircraft outer main gear wheel span. Codes E and F cover the largest

Access to the new cargo facility, which will cover approximately 66,000 m², is proposed from the B2190 (Spitfire Way) to the west of the existing access.

6.3.3 RiverOak Strategic Partners intend to redevelop the site, providing standing for eight freight aircraft and three stands for passenger use. Airport improvements will also include cargo storage and handling, and a new passenger terminal, within two years of taking ownership and before reopening Manston Airport. Construction and development will allow the airport to accommodate at least 10,000 freight movements and up to one million passengers per year within the first six years of operation. Further developments will be made in the medium-term to accommodate the predicted increase in both freight and passenger traffic.

6.3.4 Almost all air cargo is intermodal in that it has to be transferred from airport to final destination by surface transport, generally by road on trucks. Surface access is therefore vital to the success of a freight airport and Manston has good arterial road links. The completion of the East Kent Access Road (A299) means that Manston is now accessible directly from the national trunk road network. In terms of drive time, the airport is less than 60 minutes from the M25 London Orbital, significantly widening the passenger catchment area of the airport.

6.3.5 The proposed new Lower Thames Crossing, announced in April 2017, will improve access from Manston to Essex, Suffolk and Norfolk, reducing travel times from the M25 and onto the M11, A1, and M1. The new proposed crossing means that freight arriving and leaving Manston Airport from/to continental Europe avoids the need to further congest the M25. Manston Airport has excellent high-speed rail links from Ramsgate station, less than 10 minutes' drive from the airport, to Ashford International and Central London.

6.4 Airspace issues

6.4.1 Airspace is an essential element in determining whether Manston is viable as an airport. Major airports must be able to integrate into the European Air Traffic Management Network, which considers air routes, airways and airports across Europe in a seamless and contiguous manner. Successful integration entails connectivity - identifying suitable entry and exit points to join and leave the network - as well as minimising impact by ensuring aircraft can climb to cruising altitude without blocking multiple levels. The South East of England, and the London area in particular, has amongst the busiest and most congested airspace in Europe. However, as Figure 5 shows, from an airspace perspective, Manston's location is ideal. The airport is sufficiently close to the confluence and convergence of major routes, such as those that converge on the Dover beacon, to be able to exploit them whilst sufficiently far away for aircraft to gain height safely before doing so. Aircraft departing from Manston can climb to 6,500 feet (and higher if routed to the north) before having any impact on the efficiency of the Air Traffic Management network.

6.4.2 From an airspace perspective, expansion of an airport also requires consideration of the impact on adjacent airfields and traffic patterns, the routing of civil and military aircraft operating in the area, and the impact on third parties on the ground in terms of safety and noise. The recent proposed airspace changes at airports in the London area highlight the considerable resistance from the broader aviation

aircraft. Code E includes B747 -100, 200, 400, B777, B787 and A330. Code F includes B747-8 and A380-800

Manoeuvring/Control Area (**TMA**) and can therefore provide landing facilities for emergency incidents without causing disruption to the London airports.

6.4.4 For aircraft approaching from the east, the vast majority of the flight path will be over the sea. Only the final 2.5 miles are over land, which includes 1.5 miles over-flight of part of Ramsgate. For aircraft approaching from the west, the area is comparatively lightly populated. Aircraft approaching in this direction may route over Herne Bay but will have an altitude of around 2,400 feet at this point. As part of the development of approach and departure flight paths and operating procedures for Manston Airport, population densities would be taken into account to minimise the number of people affected by aviation noise. Such proposals would be subject to close scrutiny by the CAA as part of their Airspace Change Process.

7 Future potential opportunities for Manston Airport

7.0.1 The previous sections have made a clear case for the reopening of Manston as a freight-focused airport with supplementary passenger operations. Capacity constraints in the South East have particularly affected freighter aircraft. Heathrow Airport lands very few freighter aircraft and with Stansted Airport reaching its current operating capacity, particularly at peak times, the situation is becoming increasingly critical, resulting in air freight being trucked to and from northern European airports.

7.0.2 Airports are both drivers of economic growth in a region as well as drawing on the success of the region to fuel their own growth. In March 2015, Kent County Council, in their brochure, 'Manston Airport under private ownership: The story to date and future prospects' say that, *"For decades we have argued that Manston was a sleeping giant: a regional and national asset."* (KCC, 2015, p. 2) Looking to the future, there are a number of pertinent developments that, whilst not critical to the viability of Manston, are likely to increase the success of the airport including:

- The extent of local support for Manston Airport
- Thames Estuary Growth Commission 2050
- The Lower Thames Crossing

7.0.3 The developments described in this section substantiate the claim that Manston Airport should be designated as nationally significant infrastructure and a valuable asset to Thanet, East Kent, the South East of England, and to the UK.

7.1 Support for Manston Airport

7.1.1 In terms of its political environment, at a local level, the debate about Manston Airport provided a focal point during the 2015 General Election. Both Thanet's Members of Parliament, Thanet North MP, Sir Roger Gale, and Thanet South MP, Craig Mackinlay, made an undertaking during the election campaign to make every effort to ensure Manston became a working airport again. Sir Roger Gale has been a staunch supporter of Manston airport as his website⁴⁴, makes clear. On the 8 February 2017 he made the point that Brexit will drive the need for additional capacity in the South East. He says:

"Last year air freight traffic grew by nearly seven per cent. With Brexit and the need to compensate for the loss of European business by developing new markets in Asia and the Far East we are going to need much more freight, as well as passenger, capacity in the South East. That capacity, without Manston Airport simply will not be available. The facility is going to be vital to service our Country's immediate and future needs." (Gale's View, 8 February 2017)

7.1.2 Thanet District Council was a long-time supporter of the Airport. In May 2015, UKIP (UK Independence Party) won control of Thanet District Council with 33 seats. Their campaign majored on their support for Manston Airport and their promise to instigate a CPO. The Conservatives, who won 18 seats, were also pro-Manston Airport.

7.1.3 There are a number of local action groups who support Manston Airport. These groups have been actively campaigning for the reinstatement of operations at the

⁴⁴ www.rogergale.co.uk

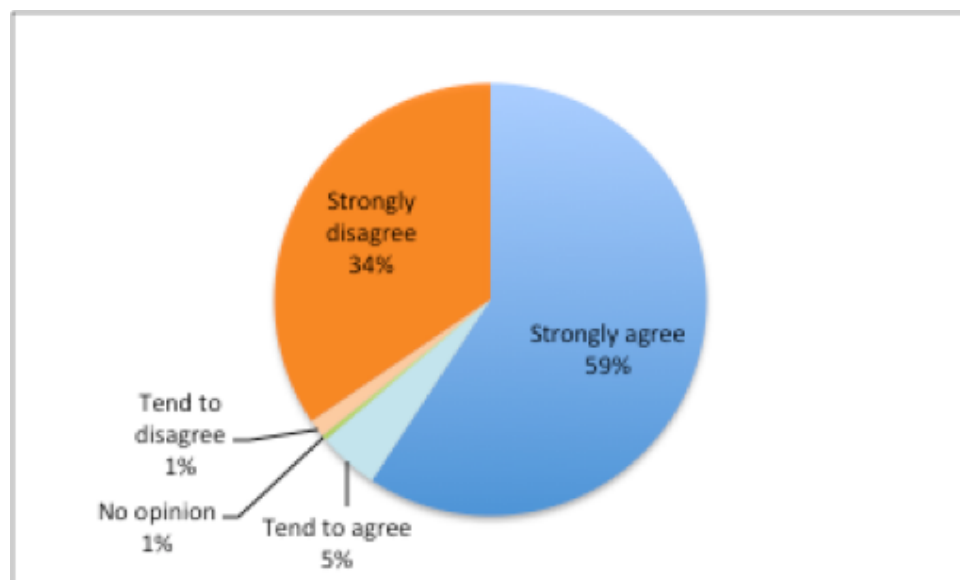
airport. Indeed, research by MORI in 2005⁴⁵ evidenced the local support. The study, which was conducted for Thanet District Council as part of the Section 106 Agreement consultation, was based on a representative telephone survey of 500 residents of Thanet, 2,340 postal and electronic questionnaires, and in depth interviews with 10 key stakeholders. When asked by MORI about local support for the expansion of Manston Airport, 85% were in support, of which 63% were strongly in support (MORI, 2005, p. 4). Only 8% of the population were in opposition, of which 5% were strongly opposed. The most frequently given reason for the local people's support of the airport was about the job creation an airport brings to the area.

7.1.4 In July 2014, a petition was presented to the Prime Minister by the local MPs, Sir Roger Gale and Laura Sandys, TG Aviation, and the Save Manston Airport group. The petition had 26,524 signatures in support of re-opening Manston as an operational airport.

7.1.5 In July 2016, RiverOak conducted a non-statutory consultation at six locations in Thanet and East Kent. Approximately 1,400 local residents attended the public consultation meetings, which were held in Broadstairs, Margate, Ramsgate, Sandwich, Canterbury, and Herne Bay. Analysis of the responses to the 2016 non-statutory consultation show that 90% of the 822 responses to the consultation were in support of the reopening of the Airport, with only 8% against and 2% undecided. Opposition to the Airport has remained constant at around 8% since the MORI study in 2005.

7.1.6 The findings from the statutory consultation held during the summer of 2017 are published separately. However, as with previous research, support for Manston Airport remains strong. Of those who answered the question "To what extent do you agree or disagree with our proposals for Manston Airport" (1,806 people), 64% strongly agree and tend to agree. Conversely, 35% strongly disagree and tend to disagree as shown in Figure 6.

Figure 6 *Extent of agreement/disagreement with proposals for Manston Airport*



⁴⁵ <http://hbm2015.com/wp-content/uploads/2016/08/2005-04-S106-Consultation-MORI-results.pdf>

7.1.7 The representative from No Night Flights (a campaign group set up to prevent the introduction of scheduled night flights at Manston), Ms Ros McIntyre, gave evidence to the Transport Select Committee on the 2 February 2015. When asked whether her views against the development of Manston Airport were representative of the local population, she responded, *“the most honest answer anybody can give you is that nobody knows”*. Thanet District Council engaging MORI to carry out a representative survey to gauge the feeling of local residents. Their findings suggest Ms McIntyre’s response was not correct. Also, whilst providing evidence to the Select Committee, her interpretation of the MORI study was that local people *“were two to one against night flights”*. This is not supported by the report, which states:

“The vast majority (96%) also say that their current quality of life is either not very much or not at all affected by passenger flights at night. There is little differentiation between night-time passenger and cargo flights, with 93% saying that their quality of life is affected not very much or not at all.” (MORI, 2005, p. 5)

7.1.8 Indeed, even for those living under the flight path, only a small percentage said their quality of life was affected either a great deal (8%) or a fair amount (11%) by night passenger flights and night cargo flights respectively. The proportions for those living in areas away from the flight path were 2% and 4% for night passenger and cargo flights respectively (MORI, 2005). Since this time, there have been a number of innovations in aviation and technological advancements are addressing key issues and redefining the sector. Reductions in aircraft weight, more efficient engines and aircraft, and sustainable aviation fuels are having radical impacts on some of the negative aspects of flying. These developments will impact all airports, making aviation quieter and cleaner, thereby reducing the negative impacts on those who live close to airports.

7.2 The Thames Estuary 2050 project

7.2.1 During his 2016 budget speech, the Chancellor of the Exchequer announced the extension of the Thames Gateway project. Lord Heseltine has been commissioned to develop and implement a plan to create high productivity clusters along the Thames Estuary. The development zone is a critical economic corridor, linking the Channel Tunnel and the seaports of Tilbury and Dover with London. This corridor includes Manston Airport, the only freight-viable airport within the Thames Estuary area. As part of the ambitious Thames Estuary 2050 project, a freight-focused airport at Manston will provide a considerable boost to the local and regional economies. In 2015, the UK missed out on at least £9.5bn in potential trade with emerging economies due to the lack of runway capacity (Centre for Business Research, 2016). The presence of a freight-focused airport in the Thames Gateway will provide businesses with the means to import and export high value, time-sensitive and perishable goods and alleviate some of the trade that is currently lost due to a lack of UK airport infrastructure.

7.3 The Lower Thames Crossing

7.3.1 The proposed new crossing, once complete, will allow surface traffic to access Manston Airport from the east of the Country without negotiating the M25 and the associated bottlenecks. This will be particularly important for freight since trucks would be able to operate between Manston and East London, the East of England, and onwards to the Midlands and the North. The improvement to road infrastructure in Kent is expected to negate the previous accessibility issues that were previously raised about the location of Manston Airport. Indeed, since Manston is located to the south east of London, closer to continental Europe, using the airport saves fuel (potentially around

\$2,000 to \$3,000 per movement⁴⁶) and crew time. This saving for airlines adds to the attractiveness of Manston as a London area airport.

7.4 Manston's role in the resilience of the UK airport network

7.4.1 In addition to benefit of having local support and the ability to harness the opportunities outlined above, an operational airport at Manston has the benefit of providing valuable resilience in the UK airport network. This is particularly vital at times when nearby airports such as Heathrow and Gatwick are closed or restricted. Manston Airport has a long and wide runway with hard standing available away from the runway, which makes the airport particularly important as an emergency diversion airport. Stansted, the current South East diversion airport, has to be closed during an emergency, causing major disruption to passenger flights, which can cause knock on effects such as missed connections.

7.5 Capacity restrictions at Schiphol Airport

7.5.1 Amsterdam's Schiphol Airport has an annual quota restricting its operation. The Alders Agreement of 2008 and the Aviation Policy Memorandum (Luchtvaartnota) set medium term (to 2020) limits on aircraft movements. The 2020 maximum was set at 510,000 movements of which 32,000 can take place at night or early morning. It was envisaged that regional airports, including Eindhoven and Lelystad, would be used to provide 70,000 movements in additional capacity.

7.5.2 Air traffic movements at Schiphol increased from 450,679 in 2015 to 478,864 in 2016⁴⁷. The year-to-date figure for August 2017 is 4.2% higher than the same period in 2016. For this reason, it is expected that the airport will exceed its agreed quota by the end of the year. Therefore, in September 2017, it was announced that air traffic capacity constraints will be introduced at Schiphol for the forthcoming winter season.

7.5.3 These constraints mean that slots may be de-allocated to airlines that have failed to use less than 80% of their requested flight schedules. Since air freight is less predictable than passenger transport, it is likely that freighter airlines will be most affected⁴⁸. Indeed, the airport estimates that full freighter movements could be reduced by 10.5% in 2018, approximately 1,900 ATMs. One of the operators affected is Russia's AirBridge Cargo. The Netherlands Trade Union Confederation (FNV) has said that hundreds of jobs are at stake with Menzies Aviation reportedly cutting 101 positions⁴⁹.

7.5.4 Schiphol currently handles around 1.7 million tonnes of freight. 2016 saw an increase of 2.5% and the January to August 2017 figure shows a 8.3% increase compared to the same period in 2016. Whilst the quota will be reviewed for the period from 2020, the airport is planning a new passenger terminal by 2023, which will increase Schiphol's capacity by 14 million passengers per year to more than 70 million. In terms of ATMs, any new agreement would need to be substantially higher to accommodate both increasing passenger and freighter movements.

⁴⁶ See comment by an interviewee detailed in Volume II

⁴⁷ Figures from <https://www.schiphol.nl/en/schiphol-group/page/transport-and-traffic-statistics/>

⁴⁸ <http://www.aircargonews.net/news/airport/single-view/news/schiphol-airport-braces-for-loss-of-105-of-freighter-slots.html>

⁴⁹ <https://www.ch-aviation.com/portal/news/59960-airbridge-cargo-loses-schiphol-slots-seeks-alternatives>

7.5.5 Manston Airport, focused on air freight, may benefit from the relocation of operations from Schiphol and the knock-on effect in northern Europe. As airports in the region become increasingly congested, many seem to preference passenger services, squeezing out freight, particularly dedicated freighters. Indeed, the ACI say that:

“With demand for air travel set to increase by 50% by 2035, airport capacity is one of the most pressing issues facing European mobility today. As competing global hubs in the Middle East and other emerging economies power ahead with their own infrastructure roll-outs, European air traffic is set to be heavily congested in 2035. EUROCONTROL estimates that 12% of demand will be unaccommodated, meaning 237 million passengers unable to fly.”⁵⁰

7.5.6 These constraints may have a significant impact on freighter operations and affect logistics centres based around airports such as Schiphol. Scarcity in capacity tends to increase air cargo rates (and passenger fares – see Burghouwt *et al*, 2017), which impacts businesses in the supply chain. As such, freighter operators and the distribution centres, logistic operations and other supporting businesses may choose to leave airports like Schiphol and locate elsewhere. Airports who focus on freight and understand the nature of the industry, which does not follow the more regular patterns of the passenger market, seem likely to benefit. A freight-focused operation at Manston Airport, in the South East of England but close to the rest of Europe, may provide an ideal option.

7.6 Enterprise Zones

7.7.1 In the 2011 Budget, the Government announced the creation of a number of Enterprise Zones across England. Enterprise Zones define a geographical area where fiscal incentives and simplified planning controls encourage businesses to flourish by reducing the barriers to growth. Enterprise Zones have been established to include or be based around a number of airports including Manchester, Luton, Newquay and Cardiff. The Government’s Draft Aviation Policy Framework (DfT, 2012, pp. 28-9) outlines the effect of Enterprise Zone Status on airports including transforming airports into international business destinations, creating jobs, and attracting investment to boost air connectivity and maximise economic impact. Should Manston Airport re-open, it may be possible to apply to the Government for Enterprise Zone status, providing incentives for businesses to locate to the area, bringing additional employment and economic benefits to Thanet. These businesses might include a Maintenance, Repair and Overhaul (**MRO**) facility, an aircraft recycling facility, the return of the flying school, and a business jet operation.

⁵⁰ <https://www.aci-europe.org/policy/position-papers.html?view=group&group=1&id=1>

8 Conclusions

This report set out to answer three key questions.

1. Does the UK require additional airport capacity to meet its political, economic, and social aims?

The forecasts discussed in this report highlight the need for additional airport capacity. These forecasts show that 80,000 (York Aviation, 2015) movements will be unmet by current capacity by 2050. Even with the third runway at Heathrow Airport, capacity for 45,000 movements will need to be found (York Aviation, 2015). The UK patently and urgently requires additional airport infrastructure. Without this, the UK is hemorrhaging potential trade, particularly with non-EU countries. In monetary terms, the UK missed out on at least £9.5 billion in potential trade in 2015 and is predicted to accumulate losses at the rate of £1.1 million every hour (CEBR, 2016).

2. Should this additional capacity be located in the South East of England?

The London airports facilitate 76% of the UK's air freight (Oxford Economics, 2013, p. 3) and all London airports will be at capacity by 2030 (Airports Commission, 2013, p. 20). The South East is particularly hard hit by the lack of airport capacity with losses in potential trade running at £2 billion each year (CEBR, 2016). Demand is driven by where airlines want to fly to and from and demand is highest in the South East. Dedicated freighters have been squeezed out of Heathrow Airport and potentially moved from Stansted Airport as they focus on passengers as their preferred market. The other airports in the South East either do not have the runway length or space for warehousing to accommodate a vibrant freight operation, which may be seen, particularly by LCCs who do not carry belly freight, to interfere with passengers operations.

3. Can Manston Airport, with investment from RiverOak, relieve pressure on the UK's airport network and meet the requirement of a nationally significant infrastructure project?

Manston Airport was operational for 100 years until its closure in May 2014. Due to its size, location and lack of airspace constraints, Manston has the potential to attract and accommodate at least 10,000 cargo movements per year. Manston Airport would seem to be the only viable option for a freight-based airport in the South East in the short, medium, and long-term. Moreover, the work in this report shows that the addition of a third runway at Heathrow Airport does not change the need for a freight-based airport at Manston.

It is clear from the data presented in this report that the answer to each of the questions posed is yes. Manston Airport can be operational in as little as two years from the transfer of its ownership to an airport operator. Its strategic location, runway length and potential to accommodate all necessary infrastructure together with the considerable local backing mean it is without comparison in the UK. No other airport in the South East is so well supported. As this report shows, Manston is the only airport in the South East that can provide airport infrastructure for freight cargo that is badly needed by the UK now and in the long term.

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