From: [redacted]
To: Manston Airport
Subject: Manston - RIN 20013061 detailed submission with documentation for Deadline No.2 (Part 1 0f 5)
Date: 05 February 2019 17:45:28
Attachments: ATTACH 1 Manston Falcon Consultancy.pdf
ATTACH 2 AviaSolutions-Analysis-of-Manston-Airport-Report-by-Azimuth-Northpoint-2017a.pdf
ATTACH 3 AviaSolutions-Local-Plan-Representations-Review-2017a.pdf
ATTACH 4 Altitude_Aviation_Report.pdf

DUBIOUS ASSESSMENT BY APPLICANT OF ECONOMIC BENEFITS FROM A PROPOSED CARGO HUB AS OPPOSED TO THE PROVEN BENEFITS OF EXISTING AND GROWING RECREATIONAL, TOURISM AND OTHER EMPLOYMENT BENEFITS IN THE AREA

APPLICANT'S CREDIBILITY

1. You will be aware that there have been five reports done on the viability of Manston Airport only one of which, the Azimuth report for RSP was favourable and that has since been totally discredited in other reports particularly the report by York Aviation. All other reports found that Manston airport was unviable and not required. These were Falcon consultancy 16th July 2014 (Attach 1), Avia Solutions August 2017 (Attach 2&3), York Aviation 10th November 2017 (Attach 5), and Altitude January 2018 (Attach 4) all these are attached in PDF form.
2. The application shows imagined foreseeable figures without showing how these are actually arrived at; and these figures both in expected demand, number of flights, income, and employment have increased from the original consultation and seem not to be based on any realistic concrete substance but merely as a means of trying to show that it is a site of National significance. These figures need to be questioned deeply as are the reasons for their amendments.
3. The main pursuant (Mr Anthony Freudmann) of this application has a history of failure in the aviation industry and of losing other people's money in the process. I attach a summary by KCC of just some of these failures (Attach 6). His previous character has shown an inclination to use other people's money freely inasmuch as he was struck off the roll as a solicitor for using clients money (Attach 7). He was instrumental in obtaining nearly £300,000 form KCC in a failed attempt to establish flights between Manston and Virginia in America in 2006 (Attach 8). He has a history of being involved in buying old military aircraft sites with the intention of developing the land with property developers. I attach a list in date order of some of the 'aviation' history of Mr Freudmann (Attach9) which would not be too difficult for PINs to verify.
4. This leads to the real fear about the true ambitions of this DCO application i.e. that it is primarily an attempt at a land grab for property development. Meaning that if approved they will make an effort to run it as an airport until it inevitably fails and then seek to develop the land themselves. This view is bolstered by the the fact that there has been explorations on the possibility of developing Manston previously for real estate. KCC state in their summary (Attach 6), "The Wiggins Group and Planestation failed in their ambition for Manston to become a successful international airport; but even then 10 years ago, they also had ambitions for property development on the airport site, in collaboration with property developers MEPC plc.

Prior to the airport closing Mr Freudmann using Riveroak investments, (a USA hedge fund whose investments are mainly in real Estate and have no experience in aviation) made an offer of £5m to the previous owner Ann Gloag which was rejected, because, as Ann Gloag stated "They were introduced to us as a potential buyer and in good faith we entered into discussions with them. However we had serious concerns from the outset about the way Riveroak conducted their business with us. We are aware of the £7m figure that had been made public by Riveroak. For clarification, the structure of the offer meant the final amount would have been considerably less. They also failed to provide any business plan

to back up their claims of future employment or to reassure us that their bid offered commitment to maintain it as an operational airport." (Attach 6).
Later with Riveroak Investments Mr Freudmann attempted a compulsory purchase order through Thanet District Council who commissioned Falcon Aviation to do a feasibility study on the future viability of a going concern operational airport which identified "no business plan with a credible investment plan of less than twenty years is likely to provide the commitment necessary to rebuild confidence. From an investor's standpoint the payback period might be as long as 50 years. The level of investment would have to be significant (£100m's) and there are never any guarantee of success." (Attach 1). Also TDC found that Riveroak Investments could not show they had sufficient funds to cover a compulsory purchase and that TDC would subsequently be liable.

My summary of this is that the applicant has serious credibility problems and that the submission is based on invented demand and forecasts, possibly with nefarious intentions. The application doesn't hold up in many ways and they have neither demonstrated the feasibility of the application nor the means to finance it.

AT RISK

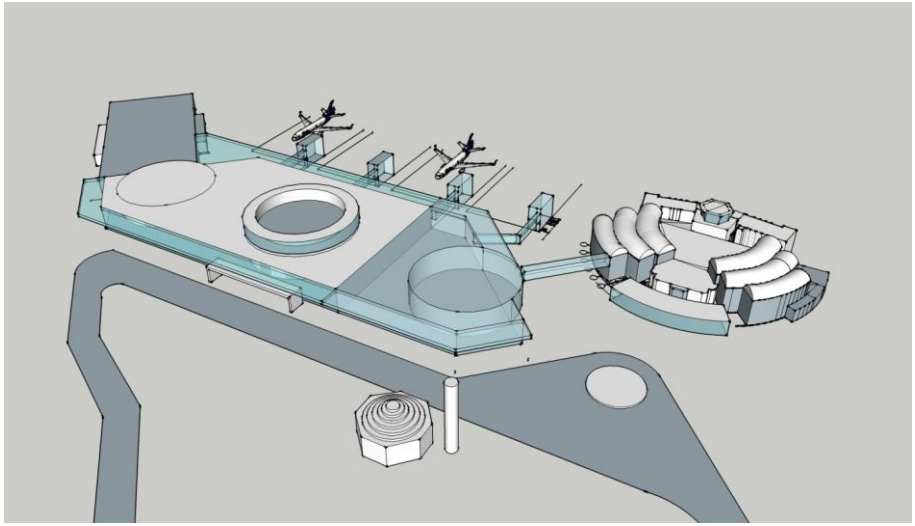
1. On the other hand the current owners of the site at Manston, Mr Chris Musgrave and Mr Trevor Carter have a strong track record in taking over large difficult sites following the demise of earlier uses and regenerating them to create jobs and bringing economic benefits to the wider area. They acquired Wynard Park in Biilingham after Samsung closed and have now created 2,000 jobs and attracted £200m of private investment. They invested in an advanced manufacturing park, jointly with The University of Sheffield, Boeing, British Aerospace and Rolls Royce, to build seventeen units for local small and medium sized aerospace enterprises on the site of the former Orgreave Colliery. They acquired Discovery Park from Pfizer after Pfizer had announced they were closing down all operations and demolishing the buildings on the site. When Pfizer decided on this they were employing 2,200 staff who were subject to redundancy notices. Since taking over the site 700 of these jobs were retained and another 1,700 created. Currently total job numbers are over 2,400 and they are on track to deliver more than 3,000 jobs (Attach 6).
2. Messrs Musgrave and Carter under their company StoneHill Park have a planning application in at TDC for an extensive development which includes 4,000 houses that will provide a significant percentage of the number required by the housing department and all with supporting facilities, obviating the need to build on green belt land. It will also include a school, medical centre, community centre, a country park, a sports' village, as well as an advanced manufacturing High Tech Business Park which would not only provide a good percentage of the required homes, including social housing, but give a real prospect for much needed jobs in the area. (Attach10) They plan to transform the Manston site with a £1 billion redevelopment over a twenty year period into a mixed-use scheme helping to create more than 4,000 jobs.
3. Their plans also include preservation of a heritage runway with museums which respect and honour Manston's past history and commemorates the memory of all those who gave so much to our country as a whole.

The two proposal are as different as chalk and cheese.
The DCO application you are now examining is fraught with misleading information designed to indicate that it is a site of National Significance when in fact it is not, and is submitted by a company whose paramount mover is one with a chequered past that should be raising alarm bells. Were this to be given approval I can only see that it would be detrimental in itself to the area and would set us back many years.
The SHP proposal on the other hand comes from people with a proven track record of delivery and is one that fulfils the real need for homes and jobs that are so desperately needed for our area. The potential jobs that this could supply are far in excess of any airport which are increasingly mechanised and at its best had no more than 144 jobs.

To approve a DCO for RSP at the expense of Stonehilll Park would be an unforgivable tragedy for Thanet and Ramsgate.

Remaining attachments are in parts 2,3,4,&5 of this email owing to email size restrictions.

Barry Latchford





FALCON CONSULTANCY LIMITED

THANET DISTRICT COUNCIL

thanet district council

EXPERT OPINION ON THE PROSPECTS FOR THE VIABLE DEVELOPMENT OF MANSTON AIRPORT

STAGE 1 – INITIAL EVALUATION AND VALIDATION OF THE AIRPORT OWNER'S ASSESSMENT

16 JULY 2014

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

PREFACE

AIRPORTS

History:

Before considering the future of Manston Airfield, it is worth reflecting for a moment upon the history of regional airports in the UK, their role and the challenges that face them in the short to medium term future.

Unlike most other countries, the early regional airports in this county were constructed, not by a central civil aviation agency but by the councils of the cities they were designed to serve. This is important because, at the time of their inception, there was no national strategic plan for the location of airports. These airports were developed as public facilities, and managed professionally to ensure a safe operational platform for aviation activities.

In those early days of aviation, airports catered for a number of small airlines, private aviators and post office mail carriers. There was no requirement for paved runways and the operational infrastructure required was relative cheap to provide.

World War II delivered a profound change in civil aviation. Surplus military airfields offered an attractive prospect for the development of new additional airports, with the consequence that the UK abounded with airfields/airports that were uneconomically close to each other. An outstanding example of the civil use of a WWII airfield is Manchester Ringway Airport a development that curtailed the growth of purpose-built, nearby Liverpool Airport.

The War also provided a quantum leap in the capabilities and performance of civil aircraft. As a consequence, airport owners had to provide far greater sophistication in airport aeronautical facilities, typically, runways, taxiways, hard standing for aircraft parking and navigation aids such as Radar and ILS.

Ever increasing safety regulation required airports to employ dedicated personnel and costly equipment. The cost of the local councils' ownership of their local airport began to spiral upwards.

The advent of another generation of post war aircraft introduced the jet and brought air travel to the public at large, spawning a demand for the growth of passenger and cargo facilities thus requiring councils to provide ever greater capital expenditure.

Meanwhile surface transport links improved across the nation with the construction of the Motorway network and investment in the railways. As each airport sought to compete for a larger share of the "catchment" area of passengers and cargo so the airlines, anxious to focus their resources wisely, began to pick and choose the airport that offered the best surface transport "feed". Some airport's lost where others gained. It could be argued that mainland Britain has too many airports too close together and, ideally, needs one very large airport serving the South East, another perhaps in the North West and these fed by a handful of regional airports no nearer than 1.5 to 2 hours driving from each other

In 1986, the Airport's Act ended the management of airports as public assets and required them to operate as businesses. In the absence of a national airport strategy, airports competed openly with each other and a race began to build the facilities necessary to attract the airlines. Councils faced an impossible task to raise the necessary finance and most turned to various forms of private sector initiates to bridge the gap, including outright sale.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

Non-aviation Profit Generation:

Although safety remained the imperative and regulation ensured its compliance, the new breed of airport managers turned their focus to the commercial exploitation of the drawing power of the airport activity and developed a diverse range of non-aeronautical activities yielding higher profits than the aeronautical services they provided. Initially focused merely upon land surplus to the airport's operation, Schiphol Airport, Amsterdam developed the concept into an "Airport City", a business and retail community that is strategically planned and marketed to have synergy with the airport's activities. Today a successful airport seeks to generate approximately half its turnover and considerably more than half its profit from non aviation activities such as real estate development, retailing and rental.

Airlines:

As airports developed so did the airlines. Aircraft grew in capacity and with more seats to fill, airlines reconsidered their commercial strategies. The large legacy airlines such as Air France, Lufthansa, and British Airways took their lead from the US airline industry, developing "hub and spoke" networks. This technique worked on the broad principal that ultimate market efficiency was reached when a third of a load of passengers disembarked at the destination, a third remained on board in transit to the ultimate destination and a third connected to another flight or another airline. Under this philosophy, regional airports were firmly relegated into the role of hub feed airports. The opportunity for them to attract lucrative long hauls flights receded.

The, regional airports responded to the decline in scheduled airline business and found new revenue opportunities by attracting seasonal tour traffic and all freight services.

For a while, regional airports enjoyed a niche role in a new concept of airline operation, the low cost carrier (LCC). The business model of the LCC is to provide a short to medium distance air travel product to the market that had hitherto not afforded to fly by eliminating all unnecessary costs and maximising on the capacity of the aircraft. They chose to base their operations on regional airports where they could negotiate virtually free operating costs with the desperate airport operator, arguing that the airport could generate compensating revenues from car parking and retailing, especially Duty Free. For a while this formula satisfied both airline and airport operator although the airports struggled to generate the investment necessary for upkeep and modernisation.

At the time of writing this introduction, fierce competition between all the airlines is redrawing the map once again and forcing the low cost airlines back towards the larger airports. Ever larger aircraft delivered to the major airlines offer many more seats to be filled from the major airports and the capacity and performance of these aircraft is so great that, for the moment at least, the growth is air cargo can be absorbed in the belly holds of passenger aircraft.

The seasonal tour business too is changing as passengers prefer to book individual inclusive tours on the large airlines from the main airports.

Thus the role of the regional airport has been relegated once again to hub feed.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

So far, this overview has dealt with the role of regional airports in serving the airline community. However regional airports may serve a number of aviation roles from which they may generate revenues.

GENERAL AVIATION (GA)

The General Aviation community is diverse, comprising private aviation, corporate aviation, crop spraying, air ambulance, gliding, helicopters, and training.

GA has enjoyed a brief period of growth exploiting the war surplus facilities, hangars and runways; in many cases facilities that far exceeded their needs. However it was not long before the cost of maintaining these facilities exceeded the meagre revenues generated by this segment of the civil aviation market. Inevitably, failing airports had to close and much of the private flying community, operating light aircraft gravitated back to grass runway airfields.

Serving major businesses, corporate aviation has flourished. Large, high performance corporate aircraft have evolved that are generally accommodated at major airports and serviced in FBO (Fixed base Operations) specially designed service facilities. Around London, where the capacity at Heathrow and Gatwick is limited, specialist corporate airports have developed at Farnborough, Fairoaks and Biggin Hill served by the excellent road and rail connections to London that are the imperative for their corporate clients. However even here, the operational constraints are limiting further growth. If Manston could offer a guarantee of long term operation, necessary to support the high levels of investment, an FBO operator might be attracted.

MISCELLANEOUS

Regional airports may also provide the operating facility for other civil aviation activities:

AIRCRAFT MAINTENANCE REPAIR AND OVERHAUL (MRO)

MRO is a highly competitive business where the availability of high skills at low cost is the imperative. The airlines have chosen to look around the world for low MRO costs and are willing to fly the aircraft wherever this can be found. A large investment is required to construct a modern MRO facility and investors must be assured of continuity of airport operation.

SPECIALIST CARGO CHARTERS

Employing “just-in-time” manufacturing principles, some industries charter large cargo aircraft to deliver components from remote suppliers as required. Perishable commodities such as flowers and food stuffs are often transported by air.

Cargo charterers welcome the open availability of regional airports if the transport links are suitable but this invariably requires the airport to provide largely under-utilised equipment and facilities,

PARCEL AND MAIL HUB

A lucrative business for a regional airport, operating a post office hub (generally at night) or a parcel hub involves a large number of aircraft arrivals and departures in a concentrated period of time. However it is best located at airports that do not have community noise issues.

AICRAFT BREAKERS

Aircraft breaking is a specialist business with few participants. A substantial runway is required but the utilisation is extremely low.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

CONTENTS

1 KEY OBSERVATIONS 7
1.1 OVERVIEW: 7
2 EXECUTIVE SUMMARY 8
2.1 PRESENT STATE 8
2.2 THE ROLE THE AIRPORT 8
2.3 MANSTON AS A UK REGIONAL AIRPORT 8
2.4 MANSTON AIRPORT'S PASSENGER MARKET 10
2.5 CARGO 10
2.6 BUSINESS PLANNING 11
2.7 THE ROAD TO SUSTAINED PROFITABILITY 12
3 CONCLUSIONS AND RECOMMENDATIONS 13
3.1 THANET DISTRICT COUNCIL'S OBJECTIVES & SUMMARY OF CONCLUSIONS 13
3.2 RECOMMENDATIONS 14
4 UK DEMAND FOR REGIONAL AIRPORTS 15
4.1 PASSENGERS 15
4.2 CARGO 19
4.2.1 UK Background 19
4.2.2 Cargo Trends 20
4.2.3 Cargo Opportunities 22
4.3 GENERAL AVIATION (GA) /CORPORATE 23
5 PRESENT STATE OF THE AIRPORT 25
5.1 MAIN RUNWAY 25
5.2 HANGERS 25
5.3 CARGO BUILDING 26
5.4 EQUINE FACILITY 26
5.5 AIRCRAFT PARKING APRONS AND TAXIWAYS 26
5.6 CAR AND VEHICLE PARKING 26

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

5.7 AIR TRAFFIC CONTROL TOWER AND FIRE FIGHTING AND RESCUE CENTRE 26
6 AIRPORT PLANNING 27
6.1 THE INFRATIL MASTERPLAN 27
6.2 PLANNING OPTIONS 28
7 INDEX OF DOCUMENTS PROVIDED BY THANET DISTRICT COUNCIL AND KENT INTERNATIONAL AIRPORT LIMITED 29
8 SIGNIFICANT EXTRACTS FROM THANET REPORTS: 30
9 GLOSSARY OF TERMS 32
10 APPENDIX A – CAPACITY PLAN 33

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

1 KEY OBSERVATIONS

1.1 Overview:

	Key Observations	Comment
1	The airport is a major (sunk) capital asset. Nevertheless it has lacked the investment needed to develop it for today's airport role, especially for the development of key transport links to London.	The closure and surrender of the CAA licence is unfortunate as is the disposal of equipment, but can be turned to an advantage. Until a positive and realistic business plan has been developed, investment is visible through construction, and the fast rail link is near completion, that airport should remain closed. .
2	The site offers ample opportunity for considerable aviation and commercial development (with other land available for acquisition).	A Business Plan must set out the phased development of the airport in respect of both operational facilities and commercial infrastructure, so that the full synergies of both may be realised.
3	It is located in the S.E. where airport capacity is a major issue.	The issue of capacity saturation and the need for additional runway capacity in the S.E. should be exploited as the core business opportunity.
4	Although there are plans for additional runways in the S.E., the reality is that a new runway is years away.	Whatever the political decisions arising from the Davies Commission, the planning process will take at least 10 years and the benefit of one new runway may be short lived thereafter. Manston could play a significant role in providing the required capacity even if only in the short term.
5	Many regional airports have to supplement their aviation revenues through a visionary strategy of real estate development, Manston is no exception.	Air operators and investors in airport real estate must be assured that the airport will remain operational for at least 20 years, thus the real estate business must be integral to the aviation business
6	Neither Infratil nor Kent Airport Limited have offered a clear strategic option to develop the airport (with financial projections)in partnership with the Council,	Either the airport is written off or a long term business plan to profit is developed in financeable phases and with full council and national political support.
7	The airport has never sustained growth. Now, the doubts surrounding Manston's survival have become a self fulfilling prophesy.	No business plan with a credible investment plan of less than 20 years is likely to define the commitment necessary to rebuild confidence. Phase 1 investment required could be in the order of £100m with no guarantees of success. Political support will be required to attract investors and PR work will be needed to convince the airlines.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

This Report was commissioned following the unexpected closure of the airport by its owners, Kent International Airport Limited

The Report was compiled by the FCL in only 7 working days following contract signing. Further research is therefore essential to prove and develop the comments contained herein.

2 EXECUTIVE SUMMARY

Kent Airport Limited and Thanet Council have provided FCL with sufficient data to understand the key issues and opinions that have led to the airport's closure. Kent Airport Limited declined to provide the full range of information requested, restricting it to that which they considered relevant. For this reason, the FCL Team have initiated our own research in advance of Stage 2.

2.1 Present State

Kent Airport Limited is selling off crucial airport equipment and facilities, rendering the airport inoperable. Any proposal to reopen the airport with existing facilities would need to consider, whether to purchase new or second hand replacement equipment.

The general appearance of redundancy and the reputation of failure will conspire to frustrate any promotion of the airport to prospective operators.

2.2 The Role the Airport

Airports play various roles in the civil aviation industry mix. For example, Heathrow is clearly:

- A capital city gateway airport,
- A hub for global air passenger traffic connectivity,
- A major cargo airport,
- A huge retail facility
- A large real estate business.

(It is important to note that highly successful airports attract adjacent commercial land values equivalent to city centres. Under the airport ownership and properly managed and developed in synergy with the aviation activity, the profits from an airport real estate portfolio help to sustain the airport's investment planning.)

2.3 Manston as a UK Regional Airport

Manston has always been perceived as a Regional Airport.

Kent Airport Limited is right to identify the negative marketing features of the airport's location as a regional airport. The airport is not well located to serve as a travel interchange serving the wider UK.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

Regional Airports provide an operational service to most segments of the civil aviation operation, typically regional airlines, corporate aircraft, flying training, private flying and so on.

The primary segment is commercial air transport (the airlines). However, this business is rarely profitable as airports struggle to resist the downward pressure on airport charges as the airlines seek to offer lower fares.

Cargo generates very little revenue for an airport and is invariably unprofitable.

Much of the revenue from FBO's comes from the sale of fuel and the provision of aircraft maintenance.

Regional Airports need the profits from rentals, retail, car parking and real estate to bridge the profit gap of the aviation activities.

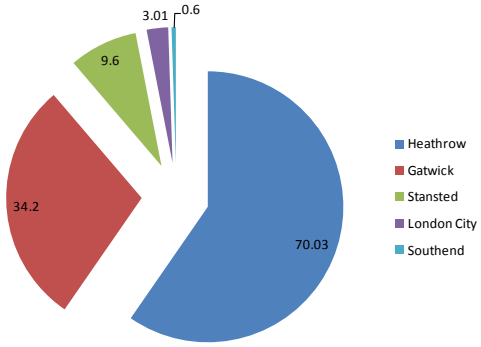
Schiphol Airport Amsterdam invented the concept of the Airport City, the development of specialised retail and business community located at the airport with synergy between the airport activity and the focused development of the real estate.

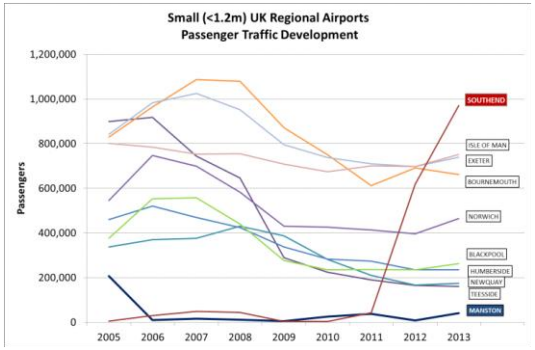
MANSTONS ROLE AS A UK CIVIL AIRPORT		
ROLE	**ATTAINMENT**	**REASON**
Regional Airport	Repeatedly failed to sustain scheduled airline services and attract other profitable aviation activities.	• Poor UK network location • Poor surface transport links • Limited UK catchment area
Cargo Airport	Proven record of success in attracting all-freight air carriers.	• Ideal operating facilities • Ease of access.
London Corporate FBO	Failed to attract a share of the London Corporate market.	• Lack of quality facilities and • Poor surface transport links Farnborough to Canary Wharf 45 miles / 1.14 hrs Manston the Canary Wharf 72 miles 1.25 hrs
London Satellite Airport	Failed to compete with other satellite airports.	• Lack of quality facilities and • Poor surface transport links
Airport "City" Business Park	Failed to develop a viable estate portfolio.	• Failure to sustain activity growth • Lack of vision • Lack of infrastructure.
NOTE 1:	*Where airports are close to their capacity, they are able to sustain published aviation tariffs. The activity drives up real estate values and the throughput generates retail revenues. Such airports generate substantial profits.*	
NOTE 2:	*Manston Airport was up for sale for some time. That there was no interest reflects its poor business reputation, (it has never made a profit in all the years since the RAF moved out) and the general industry perception that it is not in an ideal location. It has failed to fulfil its perceived role as a regional airport.*	

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

London Air Passenger Market – 2011

Total market: 134,997,486





2.4 Manston Airport's Passenger Market

Kent Airport Limited had commissioned a professional passenger market assessment (DF Aviation Consultancy) however this stopped short of a demand forecast. Although we were told of the contacts made with airlines, no minutes of meeting were available.

FCL agrees that as a regional airport, Manston has no natural sustainable passenger market. The practical experience of the airport's operation demonstrates that its catchment area and its propensity to travel is insufficient to generate for the airlines enough traffic on one route to sustain a twice daily operation, the minimum required to risk launching a service.

The Infratil Masterplan for Manston does not provide a sound basis to initiate a refurbishment plan nor does it convey an attractive proposition for investors and potential users of the airport. It is not surprising therefore those airlines have shown little faith in its realisation.

Nevertheless, the airport is s approximately and hour's surface travel from London. As saturation of runway capacity in the S.E. moves towards reality and decisions to build new runways seems years away, Manston's location should enable it to compete for a market share as a London airport.

Southend Airport on the opposite bank of the Thames, has demonstrated that a share of this huge and lucrative market can be captured with adequate facilities and a travel time to London competitive with other London Airports (Luton, Stansted, Gatwick and so on).

FCL's research has discovered a submission by Infratil to the Davies Commission, this has yet to be analysed.

2.5 Cargo

Kent Airport Limited had commissioned a professional cargo market assessment (ILS Solutions) this also stopped short of a demand forecast. The assessment pointed towards a contact list and a price based marketing strategy but we are unaware of follow up.

The construction of an international component assembly plant (e.g. car plant) on nearby land would dramatically stimulate the cargo throughput.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved



IMPORTANT:

The Davies Commission is due to decide whether or not to shortlist a Thames Estuary option for new airport capacity for London, and will then undertake formal consultation on the shortlisted options.

Manston is not shortlisted.

2.6 Business Planning

Kent Airport Limited is right to identify the ongoing evolution of the airline industry as new aircraft enter service with ever more impressive performance capabilities. It is true that these developments detract from Manston's immediate market opportunity, in the short term.

Kent Airport Limited's negative operating financial projections are reasonable, based on past performance but it must be noted that an analysis of the accounts of some major airports would show a similar shortcoming. The pressure on the air travel and air cargo industry to reduce tariffs against a background of high fuel costs places inevitable pressure upon them to drive down their operating costs especially all costs associated with the time the aircraft is on the ground, including airport charges. Airport operating revenues are under pressure and must be compensated by exploiting the aviation activity base to attract other revenue generating activities.

Kent Airport Limited did not provide a comprehensive Business Plan to support their decision to close the airport. The decision would appear to have been made on the basis of past performance and short term projections without the support of a credible long term (minimum 20 years) investment plan, a key component of a detailed Business Plan (developed logically from a demand forecast through a capacity plan, phased master plan, CAPEX/OPEX projections to financial projections for the full planning term).

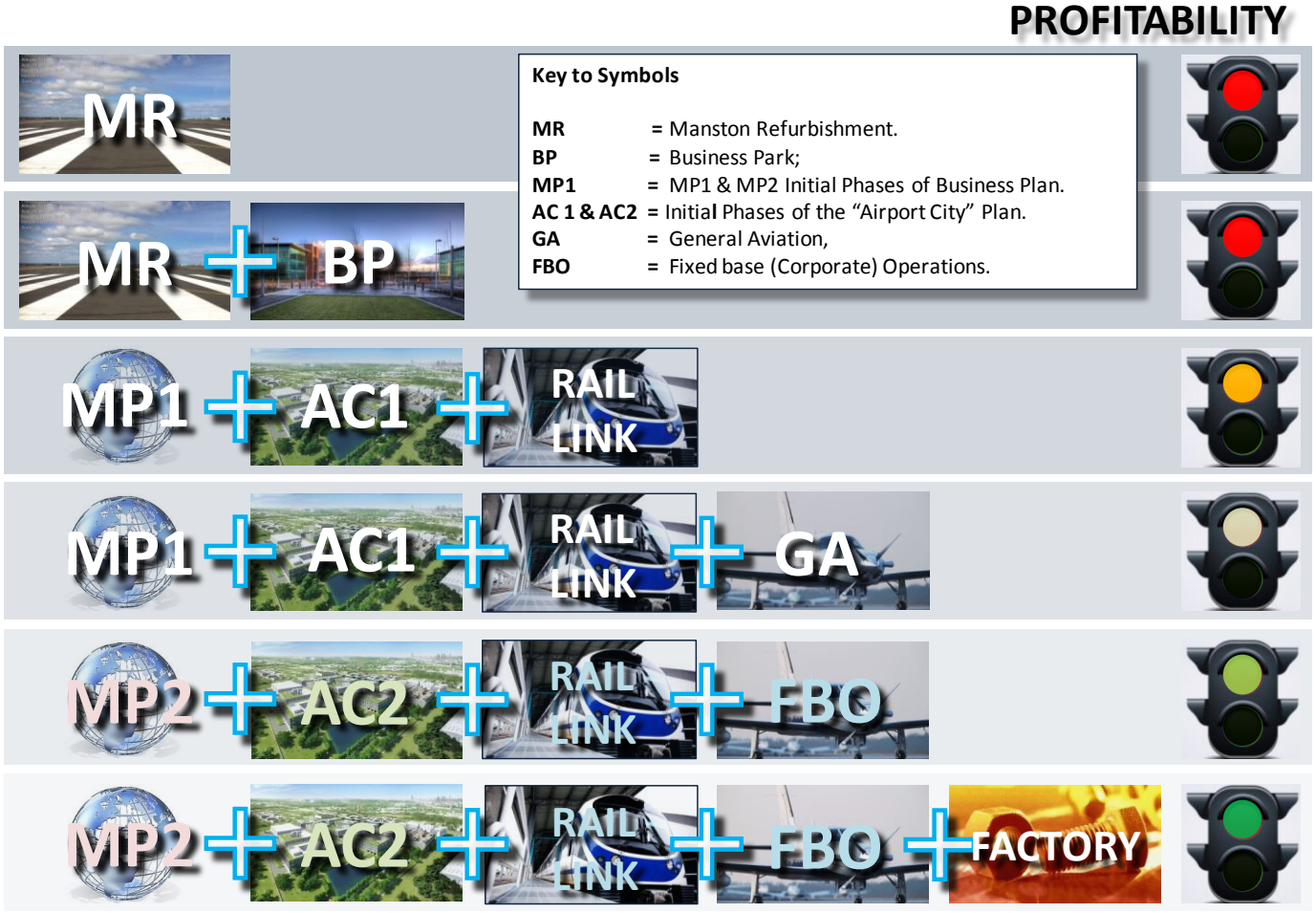
FCL's observations of Manston Airport at the end of Stage 1 are:

- It is not unique among the UK's regional airports in failing to secure a scale of aviation activities that will cover the cost of its aviation related operation.
- It is fortunate among regional airports in its location in the S.E. so close to London, for, given significant improvement in road and rail links to the capital, it could compete as a London airport.
- The trigger to revival would seem to be a fast rail link to London and the protracted timescale needed to properly address the saturation of the S. E. airports.
- The promotion of any revival will depend upon a credible investment plan and initial construction that encompasses the trigger (above) and provides airline user friendly facilities.
- The success of Manston revival must be proved through a 20 year business plan with financial projections based on the assumption that the trigger will be realised.
- More work must be done to engage the airlines' views on a Manston Business Plan that offers a 20 year commitment.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

2.7 The Road to Sustained Profitability

The chart below offers FCL's view of the path to profitability. Note that, even with an associated business park, the airport is unlikely to succeed and, in our opinion, will generate substantial operating losses. However, through phased planning and investment aimed at capturing a share of the London traffic, the airport could move into profit. A nearby international component assembly plant (e.g. car factory) would add further value.



Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

3 CONCLUSIONS AND RECOMMENDATIONS

3.1 THANET DISTRICT COUNCIL'S OBJECTIVES & SUMMARY OF CONCLUSIONS

Stage 1 – The Brief

THANET COUNCIL'S OBJECTIVES	FCL'S CONCLUSIONS
Validation of the underlying costs and profit drivers.	We have had insufficient financial detail and insufficient time to probe Kent Airport Limited's financial figures. However, in our view, the order of costs as presented are in line with the operation as it was before closure.
Validation of assumptions regarding investment needs.	We are unable to validate the assumptions many of which are now rendered irrelevant by the airport's closure and the sale of assets.
Take a view on whether all available opportunities have been taken to identify different aircraft operators capable of being attracted to and capable of operating from the airport – freight and passenger, and including short haul aircraft and private aviation.	In our view Kent Airport Limited rightly commissioned professional reviews of the commercial passenger and cargo operator markets but these offered no projections of demand. We have no evidence that the reviews were subjected to detailed scrutiny or followed up with sound commercial propositions to identified target airlines. In our opinion, overtures by Kent Airport Limited to airlines to introduce air services to Manston were unlikely to succeed without the tangible evidence of substantial investment necessary to convince them of the medium term sustainability of their operations.
Take a view on whether all available markets for ancillary airport operations which could take place at the airport have been considered.	In our view, Kent Airport Limited has identified all the aviation related activities that are typical of regional airport but we have no evidence that these markets have been assessed and projected into a comprehensive Business Plan.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

3.2 Recommendations

The FCL Team are not convinced that enough has been done to develop a visionary strategy and Business Plan for Manston. Therefore, FCL recommends that Thanet District Council should take the following next steps:

1. Revisit the Stage 2 ToRs and instruct FCL, typically:
    a. Develop a high level Vision of the maximum planning potential of the airport, identifying any further potential land acquisitions necessary to fully realise the potential.
    b. Develop a high level, 20 year, Business Plan, commencing from the opening of the rail link, that integrates five business models:
        1)Manston as a London Airport,
        2)Manston as a multi-purpose Regional Airport,
        3)Manston as a Cargo Airport,
        4)Manston as a Corporate FBO (Corporate aircraft service centre),
        5)Manston as a sophisticate Airport City (Real estate).
    c. In partnership with the Council, undertake a first-cut review of the environmental issues of major development.
    d. In partnership with the Council, define an aero-political strategy to promote Manston as a London airport.
    e. In partnership with the Council, define a framework "Airport City" strategy.
    f. In partnership with the Council, develop an investment strategy
2. Open discussions to establish the earliest construction of the rail link,
3. Open discussions to facilitate a Phase 1 "Airport City" business park including the relaxation of Planning restrictions / Processes,
4. Instruct FCL to engage an expert to establish the cost of replacing the equipment essential to resume operations,
5. Open discussions on investment funding,
6. Open discussions with Government on the S.E. Runway issue.

Meanwhile there is no commercial justification for reopening and marketing the airport in the same configuration as it was upon closure. It should remain closed but arrangements put in hand for the low level maintenance of key facilities.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

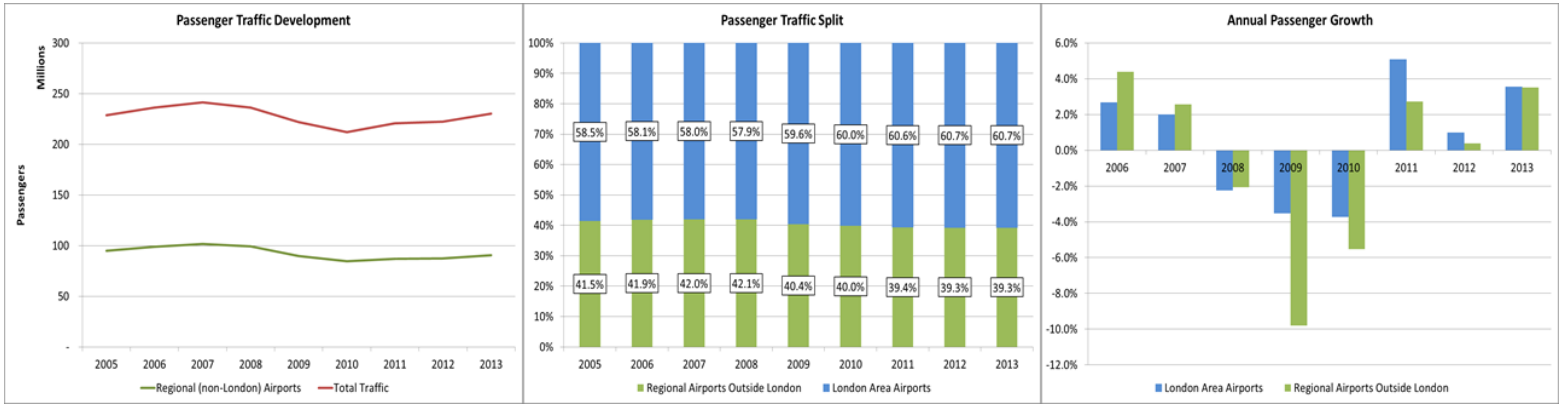
4 UK DEMAND FOR REGIONAL AIRPORTS

4.1 Passengers

In 2013 there were 230.1 million passengers using airports within the United Kingdom. Those airports serving the London Area including Heathrow, Gatwick, Stansted, Luton, Southend and Manston dominate total activity accounting for 139.7m passengers. The rest (loosely termed Regional or non-London Area airports) accounted for 90.4m passengers. The split of traffic has been steadily increasing in favour of London Area airports rising from 58.5% in 2005 to 60.7% in 2013.

Since 2005 and throughout the recession in the UK the overall development of passenger traffic has hardly changed, rising only by 0.08% (CAGR) over the period. This masks the fact that traffic at regional airports has actually declined 0.53% compared with a rise of 0.49% for those in the London Area over the period. Furthermore, whilst growth rates at regional airports in 2006 and 2007 were ahead of those in the London Area, since then rates have been lower with the impact of the recession hitting traffic development in the regions far more severely than that in the London Area. In 2013 however growth at regional airports was (3.5%) almost the same as the London Area (3.54%).

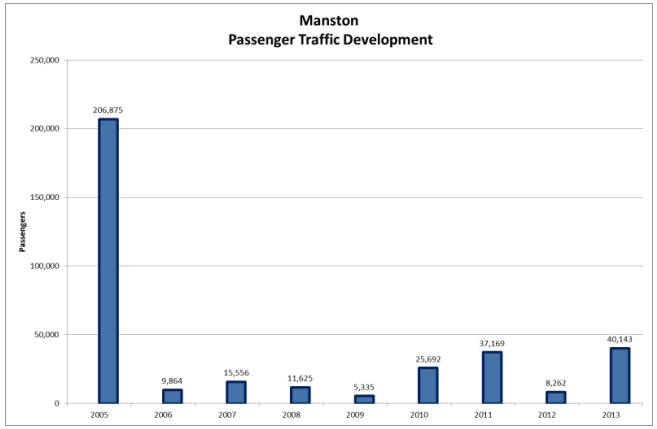
Figure 1 UK Airport Market 2005-2013 Source CAA



Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

Passenger traffic development at Manston during this period (2005-2013) has been small apart from during 2005 when a low cost carrier EUJet briefly set up a base at the airport only to collapse and cease operations in July of that year. In the period prior to closure announcement, the arrival of the Dutch carrier KLM, providing services directly to Amsterdam, appeared to herald the beginnings of a new dawn at the airport.

Figure 2 Passenger Traffic at Manston 2005-2013



Generally speaking traffic development at the airport has been lower than might be expected for a smaller airport in the UK, especially when compared to other airports at similar coastal locations such as Blackpool, Humberside and Newquay. They all tend to have low traffic flows, yet even they have seen greater flows than Manston. Indeed there are examples at coastal locations such as Exeter and Bournemouth that can support larger traffic volumes. It therefore remains a mystery why a major piece of aviation infrastructure at a coastal location in the UK cannot support greater volumes than at Manston.

Of particular interest to Manston is the development of traffic at Southend Airport. For many years the airport handled low passenger volumes until in 2008 it was purchased by the Stobart Group and major investments followed. These included a newly terminal building, control tower and an extended runway. However the most significant development was a new station built within walking distance of

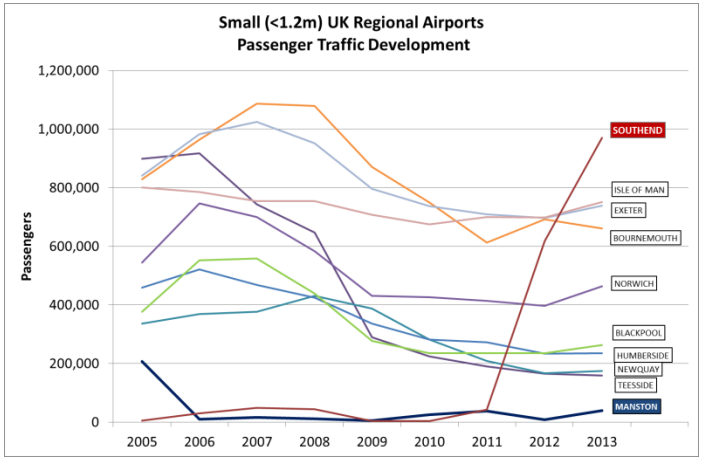
This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

the terminal enabling access to regular rail services to central London in under an hour.

EasyJet began operating services opening a base at the airport in April 2012 and a rapid increase in passenger numbers followed; from 42,439 in 2011 to 969,950 in 2013. In the first four months of 2014 traffic had risen by a further 40%.

Figure 3 Passenger Traffic at Smaller UK Airports 2005-2013



This is relevant to Manston because Southend has shown that where access to the London area conurbation can be achieved swiftly and seamlessly the potential for airport passenger expansion can be rapid. Traffic development is not simply a function of local catchment area but of accessibility.

This model holds considerable potential for the Thanet region because it enables the airport facility at Manston to move towards achieving a critical operating mass in a realistic time frame. If it could be replicated on the site the scale of traffic flow would generate activity to justify the levels of investment likely. This need not be necessarily measured simply in cash-flow terms for the airport operating

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

account but more importantly from the regional perspective at the job creation and economic regeneration levels.

The key question is which carrier would respond to this development of the airport and its access in order to develop traffic at the airport. An extensive review of potential candidates undertaken by previous consultants concluded that EasyJet, Ryanair and Jet2 are likely targets although a further potential target could be the Low Cost-long haul operator Norwegian.

The airport owners made the following comment when asked about contact with airlines:

"….we spoke with a number of airlines. No passenger airlines with any current activities had any interest to start operations at the airport (albeit Ryanair had had an interest that went away just prior to Christmas)"
Alistair Welch July 2014

This response from the airlines is not unsurprising given that the fundamental issue of access to London area conurbation has not yet been addressed by any investment proposal at the airport. Indeed it seems probable that the airport's history of consistently failed passenger operations and marginal airline activity would undoubtedly dissuade most carriers. It is interesting to note however the flicker of hope - which came and went - from Ryanair, demonstrates that even without access resolution, traffic expansion could be possible.

There is therefore a challenging period ahead where the issue of reduced journey time to the London area conurbation needs to be radically addressed. Even the proposed Thanet Parkway station would require some additional mode of transport to connect passengers from the terminal to the station. A solution is necessary that minimises journey time to the capital. This is a critical issue since there are so many alternative airport choices that the traveller to and from the London conurbation can decide upon.

However if an improved access could be resolved the future potential of the airport could soon be realised.

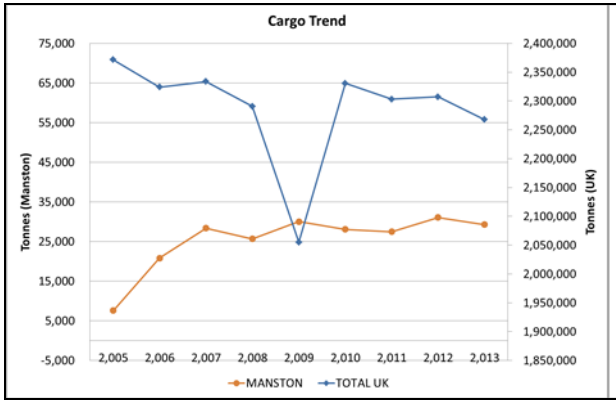
Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

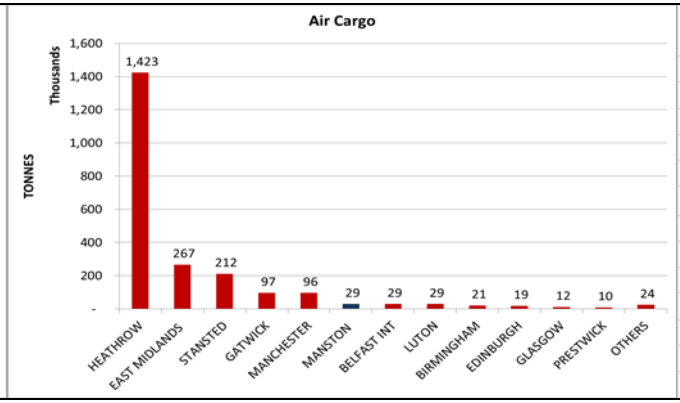
4.2 Cargo

4.2.1 UK Background

Manston is the sixth largest airport for air cargo in the UK representing an important and often overlooked aspect of the operation at the airport. In 2013 cargo reached 29,306 Tonnes. This was down 6% on the previous year in a market that was down 1.7% throughout the UK on the year previously. Almost all (99.9%) of the cargo at Manston was carried on dedicated cargo aircraft.

Figure 4 Cargo Trend; Largest Cargo Airports in UK; Proportion Cargo Carried by Aircraft Type Source CAA





	Passenger Aircraft	Cargo Aircraft
HEATHROW	95.12%	4.88%
EAST MIDLANDS	0.01%	99.99%
STANSTED	2.16%	97.84%
GATWICK	99.99%	0.01%
MANCHESTER	85.01%	14.99%
MANSTON	**0.03%**	**99.97%**
BELFAST INT	0.36%	99.64%
LUTON	3.41%	96.59%
BIRMINGHAM	72.48%	27.52%
EDINBURGH	1.77%	98.23%
GLASGOW	93.38%	6.62%
PRESTWICK	0.28%	99.72%
OTHERS	42.90%	57.10%

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

By comparison London Heathrow, the largest cargo airport in the UK handling over 1.423million Tonnes in 2013, handled only 5% on dedicated cargo aircraft with the balance carried in the under-belly of passenger aircraft. This was true also of Gatwick which handled almost no cargo on dedicated freighters with most its cargo conveyed on passenger aircraft.

East Midlands is the UKs most important dedicated cargo airport with nearly all its 267,000T carried on cargo aircraft. It is an important base for Royal Mail as a major overnight mail hub as does DHL, Fedex, TNT and UPS express cargo operators A significant factor in the success of the airport is its close proximity to an excellent motorway network which ensures that 90% of the land mass of England and Wales is within a four hours truck journey from the airport.

In addition twenty four hour operations also make the airport friendly for freighter operations. Despite all these advantages East Midlands airport cargo throughput has only grown by 5.6% in the past nine years..

Airport competition in the UK is naturally centred on London Heathrow and it is estimated that approximately 85% of the UK forwarding industry is based with a 10 mile radius of the airport.

Manston airport also faces competition from five airports in Europe with excellent motorway links to the south east of England. Frankfurt (699km), Amsterdam (483km), Brussels (319km), Paris (377km) and Liege (403km) all have excellent cargo hub capability with fast motorway connections across Europe and to the UK.

4.2.2 Cargo Trends

In general airfreight business has had a turbulent period since 2010. The economic downturn and the fall in demand from China and Asia has significantly altered the key economic drivers of the cargo business. There is been very little growth in airfreight from Asia since the peak in April 2010. This has been exacerbated by the increase in aviation fuel since 2009. The current Fuel Price Index is 559 which has stabilised in the past year but the price of aviation fuel is still high at USD120/bbl.

Over recent months airfreight markets have maintained the 2013 year-end improvements but there has been no further increase in growth. Stronger economic growth has not generated the

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

expansion in economic trade as it has done in the past, as production has been on-shored due to a variety of factors.

Airlines are replacing their passenger aircraft with more fuel efficient aircraft at an increasing pace. Wide bodied twin aisle passenger aircraft deliveries are expected to grow by 19% this year which will effectively increase belly hold capacity worldwide by 8% allowing more and more cargo to be conveyed in the free under-belly cargo holds of passenger aircraft.

Capacity is growing at a far faster pace than demand for airfreight and as sea freight yields are falling there is also a shift from airfreight to sea freight.

The climate for cargo-only aircraft operations could not be much worse. This has led to decisions by many major airlines to move out of freighter aircraft or to down size their fleets significantly. Current developments in the carrier market include:

- Japanese Airlines (JAL) which have moved away from freighter aircraft in 2013 as have
- British Airways in May 2014.
- MK Airlines a UK Cargo Airline ceased operations in 2010. (It previously operated produce freighters into Manston).
- Eva Air of Taiwan is reviewing its freighter operations.
- Lufthansa is reshaping and reducing its freighter fleet
- Air France/KLM are actively reviewing their fleets and there are indications that a sale of Martinair the wholly owned subsidiary of KLM is about to be sold.
- Cathay Pacific has ordered more freighters but these are being delivered into the desert for storage. Cathay Pacific has also cancelled freighter operations to Manchester after many years and restructured its freighter operations.

By contrast the only airlines currently increasing their freighter fleets are the four Middle East carriers, Emirates, Etihad, Qatar Airways and Saudia Airways Cargo. In Asia Korean Air still operate and extensive freighter fleet but it has no operations into the UK.

In conclusion dedicated freighter operations are not finished but trade flows coupled with strong demand need to be in place to make such operations viable in the next few years.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

4.2.3 Cargo Opportunities

Although the current climate for cargo operations is not positive especially for "all cargo operations" there are still cargo airlines who successfully manage niche opportunities.

CAL of Israel is one example of a profitable cargo only airline. UN and other relief charity organisations could use Manston as a centre for their operations. The UK is the second largest contributor in the world to disaster relief flights. A flexible low cost operation is required by the major relief organisations.

The slot position at Stansted is tighter than it was under previous ownership as the success of Ryanair and Easy Jet is beginning to put pressure on slots at Stansted. Manston could be a south east alternative to "cargo only operations" out of Stansted.

Perishable and Equine freighter charters have been operated successfully in the past and with a strong marketing effort is possible that these activities could be restarted as there was a proven track record of fast and efficient operations of these two specialised activities.

In addition the produce charters activity could be augment by industry investment if packaging and distribution on airport activity.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

TAG Farnborough,

Recently voted International FBO of the Year by readers of Aviation International News magazine for the sixth consecutive time,

Invested more than £100 million (US$160.7 million) over the last 10 years to improve the airport's facilities and infrastructure.



The airport now features an award-winning main terminal, control tower, on-site radar and two three-bay hangars, providing over 240,000ft2 of hangarage space, and further planned developments include re-designing one of the airport's departure lounges, with the introduction of a bar and new seating areas.

www.farnboroughairport.co.uk/

4.3 General Aviation (GA) /Corporate

General Aviation is defined according by UK CAA to encompass aircraft ranging from micro-lights and amateur-built aircraft, through balloons, airships and gliders, to piston twins and single-engine turbine aeroplanes up to 5700kg Max Take-Off Mass (MTOM), and single-pilot helicopters up to 3175kg (MTOM).

GA provides significant economic benefits for the UK of around £1.4 billion per annum and has a large direct and indirect employment base. The sector delivers vital services, including search and rescue, mail delivery, life-saving (organ) transport, law enforcement, aerial survey and environmental protection flights, as well as underpinning the training of future pilots, ground-based aircraft engineers and technicians.

Business and general aviation connects many UK and international destinations that do not have, and are unlikely to develop, scheduled air services or other direct transport links. GA aerodromes can also complement commercial air transport and provide increased connectivity at important hubs such as London. These links are particularly important for

local businesses. According to a recent study ninety-six per cent of city pairs served by business aviation in Europe have no scheduled air connection.[1]

The UK Government is keen that, while recognising that at congested airports this may not be always be appropriate, it encourages airport operators to ensure that GA aircraft are able to continue to enjoy equitable access to their airports.

There is evidence however that GA activity is declining and that this is not just a result of economic recession. Excessive regulation, increasing costs and taxation are all perceived to be contributing factors.

The number of annual private pilot's licence applications has fallen dramatically from 4500 in 1991 to around 2500 in 2012. There have also been recent declines in the number of hours flown by fixed-wing light aircraft: estimates[2] suggest 7% fewer hours flown in 2012 than 2003.

Overall revenue generated from GA is limited in scope and tends not to factor as a major contributor to airport economic activity. The range of competitor airports for Manston

[1] The Role of Business Aviation in the European Economy, Oxford Economics, October 2012

[2] DfT GA Challenge Panel Interim Report – January 2014

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

Business Aviation

London Biggin Hill Airport is just 12 miles from Canary Wharf and 15 from Central London, and it has three full service FBO's to cater for all the different wants and needs of the business aviation user.



- *Around sixty based business jets ranging from small four seat citations to ultra long range Gulfstream, Global, and Falcon jets*
- *Convenient opening hours.*
- *Maintenance and hangarage facilities for most types of business jet.*
- *The Airport is a Port of Entry with full border control facilities during all opening hours.*
- *No runway slots required.*
- *Very user friendly airport.*
- *Close to the centre of London and in the heart of the South East of England.*

where serious high yielding corporate aviation activity takes place include Lydd, Luton, Biggin Hill and Farnborough. In several instances there are significant investments by Fixed Based Operators present at these airports.

On balance therefore the likelihood that the continuation of GA at Manston will be a reason to prompt the retention of the airport is slim. However there is no doubt that GA is a valuable contributor to airport activity for training and recreational purposes and it would seem likely that the airport would be used by GA when open.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved



5 PRESENT STATE OF THE AIRPORT

At the time of closure to aircraft movements the airport was operating in a safe and secure manner. The state of the airport's operating surfaces can therefore be considered as being adequate. However essential aeronautical equipment has been disposed of leaving the airport inoperative. As with any facility that becomes unused deterioration will now occur as routine maintenance and heating is withdrawn. The airport was briefly visited on the 2nd July and the following opinions formed:-

5.1 Main Runway

The main runway is 2752m x 61m on a heading of 28 / 10. Originally constructed during WW2 it replaced the grass runways that had served the RFC, and then the RAF, since 1915. It has seen several re-surfacing operations, concluding with an asphalt overlay in 1999 (undertaken by the PSA) and then a slurry-seal type coat in 2013 (as advised by the current owners). The runway is therefore in pristine condition and should require only minor maintenance during the next 5 to 10 years.

Terminal Building – The passenger terminal was opened by The Duchess of York in 1989 with flights then operating to Yugoslavia and Spain. The building is set out on a single level with all the usual processes (check-in / baggage reclaim etc) well arranged. Some areas may require re-decoration but the overall impression is that the building is well maintained and more than adequate for the processing of up to, say, 750,000 passengers per annum. The running cost of the building may be high as a building of the late 1980's will not have the same thermal insulation values as a modern structure. Some elements of the building (e.g. electrical installations / flat roof covering) may need renewal in the short term; this opinion is based upon the 25 year design life often used at that time.

5.2 Hangers

There are a number of aircraft hangers, and similar small sheds, on the site. These were not inspected in detail but we were advised that they are all generally water-tight and fit for purpose. It is also understood that these hanger buildings do not contain any specialist aircraft maintenance or servicing equipment.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved



5.3 Cargo Building

The Cargo building, including a cold store and pallet conveyor, has not been extensively used as the majority of cargo handling was undertaken on the apron, direct from the aircraft to the lorry. There was one water leak noted, possibly from a blocked roof gutter, which will require attention. The cold store and pallet conveyor has had very little, if any, use and so is in very good condition.

5.4 Equine Facility

The equine building was not inspected but we were advised that it is only a few years old and had only handled about 10 horses since it was opened. It is therefore reasonable to assume this facility is also sound.

5.5 Aircraft Parking aprons and taxiways

There are 2 aprons, one for passenger and one for cargo aircraft. Both are formed of concrete and both are in good condition. The passenger aircraft stands nearest to the terminal building are on a significant slope, but remote, level, stands are available close by.

5.6 Car and Vehicle parking

There is ample car and vehicle parking adjacent to the terminal. Local information is that the car parks have never been congested. Some minor repairs are required to the car park surface and the general area could benefit from attention to the soft and hard landscaping.

5.7 Air Traffic Control Tower and Fire Fighting and Rescue centre

These buildings were not inspected but from a distant view they both appeared sound.

To conclude the facilities of the airport are in a generally good condition and are at least equal, or better, than some other regional airports in the UK. The airport equipment was also seen to be in a generally reasonable condition but we understand that items are now being offered for sale.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved





AIRPORT PLANNING

6.1 The Infratil Masterplan

Kent Airport Limited do not appear to have prepared an airport masterplan but refer to the Kent International Airport, Manston – Master Plan November 2009 – developed by their predecessors, Infratil Airports Europe Ltd.

The following comments refer to the global zoning strategy of the airport estate as illustrated in that plan, the illustrations of which are contained in Pages 58 to 60 of the relevant document. :

(a) The overall site zoning policy does not seek to optimise the operational land footprint in order to maximise other commercial activities within the current airport boundaries.

(b) The Master Plan advocates future investment in separate Cargo and Passenger aprons, which may not present the optimal solution in terms of capital and life time costs, operational flexibility as well as consolidated servicing and staffing requirements.

(c) The proposed Passenger Terminal development, on the eastern and western flanks of the passenger apron is likely to frustrate the potential future expansion of the apron pavement and limit its flexibility to accommodate a broader potential future fleet mix.

(d) The proposed alternate location of fuel storage facilities immediate to the Threshold 28 runway strip safeguarding area places the hazardous installation in close proximity to the position of greatest accidental risk at the airport.

(e) The Master Plan has failed to fully capitalize on the potential ground transportation resources and links in the immediate vicinity of the airport boundaries

(f) The Master Plan did not explore additional land acquisition opportunities within the context of related commercial activities.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

6.2 Planning Options

In view of the above it is recommended that the airport is subject to a rigorous capacity and operational zoning strategy review. Such a study shall address the following key issues:

(a) Current and potential future ground transportation modal interface conditions. Stimulation of commercial opportunities through enhanced transportation links

(b) Definition of the optimal sustainable operational airfield footprint envelope commensurate with the potential unconstrained capacity of the single existing runway and the projected aircraft mix. (Saturation Capacity Plan)

The definition of a high level Airport Saturation Plan will provide a strategic framework tool and decision matrix which can then be used to test and validate the following granular development aspects:

a) Identification of operational land use requirements specific to target market sectors and their technical requirements reconciled with the demand forecast targets.

b) Definition of the footprint(s) of residual land resources within the current airfield boundaries available for other aviation-related and general commercial activities.

c) Illustration of short, intermediate and long term enabling tactical development initiatives to release maximum commercial land area in line with (d) above.

d) Delivery of environmentally sensitive and sustainable solutions using leading edge and emerging technologies.

e) Preparation of CAPEX aligned with any investment requirements to achieve those targets identified under headings (c) to (f) as outlined above.

Appendix – A to this report provides a range of generic illustrations consistent with the advocated planning deliverables.

At this stage of the study such illustrations are not aligned with any specific operational or commercial targets or business strategies. They are, however, representative of a holistic approach to Airport Planning with a view to optimising the use and value of the existing available land and technical resources of the airport estate.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

7 INDEX OF DOCUMENTS PROVIDED BY THANET DISTRICT COUNCIL AND KENT INTERNATIONAL AIRPORT LIMITED

TITLE	SUBJECT	PROVIDED BY
Project Brief –	Viability of Manston Airport, June 2014	Thanet District Council
No document Name	Kent International Briefing Notes	2 July 2014
Kent International Airport and Kent facilities Limited	Management Accounts Financial year ending 31 March 2014	Thanet District Council
Manston Market Assessment	Market evaluation prepared by DF Aviation Consulting Limited	Thanet District Council
High Level Air Cargo Overview - Freighters	ILS Solutions High Level Market Overview	Thanet District Council
Kent International Airport, Manston – Master Plan	Infratil Airports Europe Ltd. Masterplan November 2009 –	
Thanet Economic and Employment Assessment December 2012	County demographics	Thanet District Council
Thanet Local Development Framework Employment Land Review 2010	Development Planning	Thanet District Council
Thanet Employment Topic Paper May 2013		Thanet District Council

In addition to these documents, FCL accessed the Infratil submission to the Davies Commission.

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

8 SIGNIFICANT EXTRACTS FROM THANET REPORTS:

Thanet Economic and Employment Assessment – Report 2012

Thanet benefits from a regionally significant airport and a major cross channel port, both of which have identified growth potential. If Manston Airport can achieve its ambitious growth plans, this could result in 2,000 additional jobs and up to 420 additional induced jobs as a result of the impact on the wider supply chain. We must however be cautious in interpreting these figures, as despite some promising developments, the airport faces a number of challenges.

The majority of manufacturing sectors have continued to decline during this time, as has agriculture forestry and fishing.

It is however clear that whilst across the UK around 5 per cent of businesses have the potential to export, in Thanet this figure is half (2.5%). This can be partly explained by foreign ownership figures which are lower than the UK average although given the presence of Ramsgate Port and Manston Airport provided easy access to overseas markets we might expect this figure to be higher.

If Manston Airport can achieve its ambitious growth plans, this could result in 2,000 additional jobs and up to 420 additional induced jobs as a result of the impact on the wider supply chain.

Employment Land Review 2010

In line with Government guidance, the Council wishes to ensure that its strategy, land allocations and policies provide for choice, flexibility and competition, and are sustainable and based upon a realistic assessment of the needs of local business and market reality. Thanet's economy is one the key themes in the Council's Corporate Plan, with the main priorities to attract inward investment and support indigenous companies, attracting more jobs to the area and helping those who are unemployed. **Note: This policy may be at variance with a priority to attract commerce to the airport.**

There are very few major employers in Thanet, with over 65% of businesses employing between 1-4 people. Out of a total of 4,000 firms, only 100 firms employ more than 100 people. (Figure 10). The largest companies in the district include Thorley Taverns, Cummins, Piper Windows, Thanet Earth and Tescos.

Government and European Funding

2.39 Thanet benefits from having Assisted Area Status. Through the Grants for Business Investment (GBI) scheme the aim is to assist businesses to increase productivity by funding capital investment in equipment and technology. It is for businesses looking to expand, modernise, rationalise, diversify and increase productivity in order to maintain or establish sustainable growth and provide skilled jobs. Thanet is a Tier 2 area where any size of business can access the grant, with a possible 15% more funding available than a Tier 3 area. It is important that the District maximises the potential of its Area Assisted Status in order to promote inward investment and support the growth of indigenous companies to achieve economic development. 2.40 Under the

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

European Structural Fund Thanet has Objective 2 Status which enables the district to benefit from the European Competitiveness Grants through a bidding process and qualifies for Interreg Funding which is dependent on having partners in two other European Regions outside of the UK.

Regional Spatial Strategy: South East Plan *Policy EKA5: The Gateway Role* recognises that the growth of gateways should be supported as catalysts for economic development. Kent International Airport should become a catalyst for economic development and growth as a major passenger terminal, and the large land reserves within and adjacent to this should remain available for ancillary and related activity.

Thanet District Council's Corporate Plan; 3.47 **An integrated transport hub:**
- work with KIA to agree a masterplan for the airport
- develop a sustainable business plan to enable the Port of Ramsgate to be successful
- Work with the transport authorities to develop a plan to improve public transport links in Thanet
- work with partners to maximise benefits of the high speed rail link

Policies EC2, EC4 and EC5 relate to the Kent International Airport (KIA) at Manston, and the surrounding land. The policies support the growth of KIA which has significant potential to encourage the economic regeneration of Thanet, and East Kent as a whole. Policy EC4 relates to the land north of the runway (the Northern Grass), and is restricted for airside development purposes; for activities that have an operational requirement for direct access to aircraft and therefore dependent on a location immediately adjacent to the runway or capable of direct access to it via taxiways. This allocation, whilst restricted, does provide additional employment land for the district, as well as supporting the development of the airport. Planning permission was granted for a large hanger for aircraft painting, but this has now expired, and a freight building for a Border Inspection Point to facilitate the movement of fresh produce has been built. The only other airside development currently present has been established at the airport for a number of years.

Supporting the Growth of Kent International Airport (KIA)
The future growth of the airport to one of regional significance is supported as a preferred option for providing economic prosperity in the District, which continues the view of the existing Local Plan. One of the currently preferred options supports the recommendations set out in the Draft Airport Masterplan. These recommendations include the release of the Northern Land, which is currently protected for airside development, for general employment purposes.

Thanet Employment Topic Paper May 2013
Facilitating further growth at the Airport and Ramsgate Port could unlock further opportunities. Current export levels from Thanet are low and there could be growth potential in this area given the close proximity of Thanet to Europe coupled with transport links. There is also the potential for growth given knock on effects from the airport in terms of the supply chain. Facilitating further growth at the Airport and Ramsgate Port could unlock further opportunities. Current export levels from Thanet are low and there could be growth potential in this area given the close proximity of Thanet to Europe coupled with transport links. There is also the potential for growth given knock on effects from the airport in terms of the supply chain.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

9 GLOSSARY OF TERMS

TERM	EXPLANATION	TERM	EXPLANATION
AODB	Airport Operational Data Base	PSA	Present State Analysis
CAPEX	Capital Expenditure	PSR	Present State Report
CCTV	Closed Circuit Television	"Quick Fix"	A period of concentrated effort to rectify minor deficiencies
CUTE	Common User Terminal Equipment		
FCL	Falcon Consultancy Limited	RFFS	The Fire and Rescue Service
FBO	Fixed Base Operation (Corporate Aviation)	SLA	Service Level Agreements (typically between MSE and Customs/Passport Control)
FIDIC	Fédération Internationale Des Ingénieurs-Conseils		
FIDS	Flight Information Display Systems	VOR/DME	Aeronautical Navigation Equipment (*Visual Omni Directional Range & Distance Measuring Equipment*)
HR	Human Resources		
ILS	Aeronautical Navigation Equipment *(Instrument Landing System*)		
MRO	Aircraft Maintenance repair and Overhaul Base		
MARS	Multiple Aircraft Ramp System		
OLS	Obstacle Limitation Surface		
OPEX	Operating Expenditure		
AIRPORT CODES			
AMS	Amsterdam Airport Schiphol	**MSE**	**Kent International Airport**
BOH	Bournemouth	SEN	Southend Airport
JER	Jersey	SOU	Southampton
LCY	London City	STN	London Stansted
LGW	London Gatwick		
LHR	London Heathrow		

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved

10 APPENDIX A – CAPACITY PLAN

This document is confidential and its circulation is restricted.

Falcon Consultancy is a limited liability company registered in the UK. All rights reserved



Review of Azimuth & Northpoint Forecast for Manston Airport – FINAL REPORT

Report prepared by AviaSolutions for Thanet District Council

August 2017



Disclaimer of Liability

This publication provides general information and should not be used or taken as business, financial, tax, accounting, legal or other advice, or relied upon in substitution for the exercise of your independent judgment. For your specific situation or where otherwise required, expert advice should be sought. Although Avia Solutions Limited or any of its affiliates (together, "Avia") believes that the information contained in this publication has been obtained from and is based upon sources Avia believes to be reliable, Avia does not guarantee its accuracy and it may be incomplete or condensed. Avia makes no representation or warranties of any kind whatsoever in respect of such information. Avia accepts no liability of any kind for loss arising from the use of the material presented in this publication.

Copyright © 2017 the General Electric Company. All rights reserved.

"GE," "General Electric Company," "General Electric," GECAS", "GE Capital Aviation Services Limited", "AviaSolutions," the GE Logo, and various other marks and logos used in this publication are registered trademarks, trade names and service marks of the General Electric Company. No part of this publication or any trademark or trade name may be used without the written permission of the General Electric Company.

Contents

Executive Summary 4

1. Introduction 5

1.1. Context 5

2. REVIEW OF AZIMUTH ASSOCIATES REPORT 7

2.1. Volume I – Demand in the south east of the UK 7

2.1.1. Overview 7

2.1.2. Requirement for additional airport capacity in the UK and South East 7

2.1.3. Can Manston Airport relieve pressure on the UK aviation system, and be considered a nationally significant infrastructure project? 9

2.2. Volume II – A qualitative study of potential demand 10

2.2.1. Overview 10

2.2.2. Methodology 10

2.2.3. Conclusions 10

2.2.4. Additional Consideration Conclusion 11

2.3. Volume III – The forecast 12

2.3.1. Overview 12

2.3.2. Forecast Results 12

2.3.3. Forecast Review 13

2.3.4. Infrastructure Review 14

2.4. Conclusions 15

3. REVIEW OF NORTHPOINT REPORT 16

3.1. The Shortcomings of the AviaSolutions Report and an Overview of RSP's Proposals for Airport Operation at Manston 16

3.1.1. Summary of Evidence 16

3.1.2. AviaSolutions Review 16

3.1.3. Manston Airport Benchmarks 16

3.1.4. Freight Projections 17

3.1.5. Cross Channel Transhipments 18

3.1.6. Substitutable Bellyhold Capacity 19

3.1.7. Additional Comments 20

Executive Summary

AviaSolutions has reviewed the cases for Manston Airport prepared by Azimuth Associates and Northpoint on behalf of RiverOak Strategic Partners in February 2017. Azimuth's case for Manston Airport is based on an assessment of the airport's ability to capture a significant share of the air and road freight market in London and the south east. Northpoint's forecast is based on a similar premise coupled with the introduction of multiple aviation related auxiliary activities.

AviaSolutions' view is that the Azimuth and Northpoint forecasts both represent a highly ambitious outlook for air freight volume at Manston Airport and the likelihood of the forecasts being realised is very low. We do believe that there may be scope for the reintroduction of passenger services, broadly consistent with the volume projections set out in AviaSolutions report, although this alone would not generate sufficient revenue to develop profitable operations.

Neither report puts forward a sufficiently credible case, nor provides the evidence, for AviaSolutions to change its views on the financial viability of Manston Airport.

We remain of the view that whilst Heathrow Airport continues to offer substantial freight capacity to an extensive global network, and Stansted Airport offers capacity for air freighter movements, the London air freight market has capacity to grow without the re-introduction of capacity at Manston Airport. Freight Forwarders have invested heavily in infrastructure around the UK's core cargo airports and carriers have developed their networks as such. Without clear value drivers that support relocating services to Manston Airport, the case remains to be made that demand exists for a freight facility at Manston Airport.

Provision of capacity alone is no guarantee of financial success, a view reinforced by the empirical evidence of multiple failed attempts to develop profitable aviation operations at Manston Airport.

1. Introduction

1.1. Context

AviaSolutions ("Avia") has been commissioned by Thanet District Council ("TDC") to undertake a detailed analysis of the reports prepared by Sally Dixon of Azimuth Associates ("Azimuth") for RiverOak in February 2017.

- Volume I – Demand in the south east of the UK
- Volume II – A qualitative study of potential demand
- Volume III – The forecast

Additionally, a Representation to the Local Plan was produced, entitled "The Shortcomings of the AviaSolutions Report and an Overview of RSP's Proposals for Airport Operation at Manston" prepared for RiverOak Strategic Partners by Chris Cain of Northpoint Aviation Services ("Northpoint"). The Representation is largely a repeat of the Appeal prepared on behalf of RiverOak Strategic Partners, which has already been the subject of review by AviaSolutions in March 2017. In the second part of this document, AviaSolutions presents the earlier critique of Northpoint's appeal, updated to reflect some additional airport benchmarks included in the Representation.

Avia has previously been engaged by TDC to assess the financial viability of Manston Airport. The report was completed in September 2016 and concluded that it is unlikely that the airport would be financially viable in the long term, and almost certainly not possible in the period to 2031. This conclusion was reached after interviewing key stakeholders and industry experts and analysing extensive market data. In the UK, today and into the foreseeable future, there is excess market capacity for air freighter movements due to the strength of the bellyhold market at Heathrow, which continues to grow despite the statutory movement cap. Stansted and East Midlands, which both are much more centrally located than Manston Airport, provide ample capacity for air freighter movements in the short to medium term, by which time we expect the south east market to introduce new capacity at Heathrow.

Azimuth Associates is an independent aviation and business research consultancy providing analysis and insight into the future direction and potential for airport development around the world (source: www.azimuthassociates.co.uk).

In March 2017, RiverOak Investment Corp., LLC announced that RiverOak Strategic Partners Limited, a newly UK-registered joint venture company had acquired all rights and interests and has assumed full financial and operational responsibility for the Development Consent Order (DCO) with respect to Manston Airport and the future reopening and operation of the airport. The new operating company, which is not affiliated with RiverOak Investment Corp., LLC, will pursue the DCO application to acquire and reinstate Manston as a fully operational

airport and if successful, will be operated, owned and managed completely independently of RiverOak Investment Corp., LLC (source: www.riveroakic.com/news.html).

The stated objective of the Azimuth report is to consider whether there is a compelling case in the public interest to create a freight focused facility at Manston Airport. The report contends that the decision for Manston Airport to be returned to operational use hinges on three key questions:

1. Does the UK require additional airport capacity in order to meets 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 network and meet the requirement of a nationally significant infrastructure project?

The report considers a range of data sources and publications to answer the above questions, concluding that there is an overwhelming case to support planning and development at Manston Airport.

In this review of the Azimuth and Northpoint reports, Avia considers the supporting evidence, rationale and the case put forward by the authors to inform subsequent discussion on the future of Manston Airport.

2. REVIEW OF AZIMUTH ASSOCIATES REPORT

2.1. Volume I – Demand in the south east of the UK

2.1.1. Overview

The first document prepared by Azimuth (Volume I) sets out an overview of airport capacity in the UK, focussing on the south east of England. This is followed by a review of air freight capacity in the south east that may fulfil excess air freight demand in the short to medium term. The report proceeds with an outline of the political context for UK aviation decision making before focussing on Manston Airport's potential as a freight focussed airport and the various external influences on the airport's future.

The report by Azimuth draws on a range of data sources and publications although there are several aspects of the report which we believe merit further scrutiny and challenge which are set out below.

2.1.2. Requirement for additional airport capacity in the UK and South East

There is little to add with regards to Azimuth's assessment of the lack of capacity in the UK airport sector and its impact on the UK economy (Chapter 2). Supporting information is drawn from extensive material available on the subject including a range of data sources referred to in the Airports Commission publication on UK airport capacity, July 2015. We do note however that the conclusions drawn from the research are centred on air passenger traffic rather than air freight.

In Chapter 3 of Volume I, the focus of the report shifts to air freight, drawing on information from Boeing and Airbus forecasts which consider the global aviation markets and intercontinental trends in production and supply, citing long term air freight growth rates of 4.2% and 4.0% respectively. Azimuth further note that the UK air freight market has become constrained at London airports, with the implication that a lack of air freight capacity is one of the causal factors behind the stagnation of the UK air freight market, the annual performance of which is set out below.

UK Air Freight ('000 Tonnes)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2016 Vs 15	CAGR (2006-16)
London Airports	1,717	1,724	1,743	1,564	1,808	1,803	1,806	1,761	1,820	1,806	1,869	3.5%	0.9%
UK Airports	2,315	2,325	2,282	2,048	2,325	2,298	2,302	2,262	2,304	2,299	2,385	3.7%	0.0%

Source: CAA

We would also highlight the excess capacity that exists in the UK market today which supported air freight growth of 3.7% in 2016, and in the London market which increased by 3.5%. Stansted Airport (the second largest UK airport by freighter ATMs after East Midlands Airport) increased freight tonnage by 7.3%, though utilised only around half of the airport's statutory freighter movement cap (20,500 per annum). Further, load factors from Heathrow in bellyhold remain well below constrained levels. Azimuth has not commented on the market's ability to continue driving freight throughput out of the existing infrastructure as evidenced by the above growth in 2016.

A key observation is Azimuth's absence of comment on the uniqueness of the UK air freight market, particularly in London. Only around 30% of UK air freight is carried on dedicated freighter aircraft, substantially lower than the global average, where 56% of revenue tonne kilometres (RTKs) are transported on freighter aircraft. This is at least in part due to the significant bellyhold capacity and network diversity available to exporters and importers from an airport as large as Heathrow. The lack of excess air transport movement (ATM) capacity at Heathrow (480,000 annual movement cap) has led to a sustained increase in aircraft size, which increases bellyhold capacity and keeps the price of bellyhold air freight low, relative to dedicated freighter based capacity. Around 35% of ATMs at Heathrow are widebody, long haul aircraft resulting in an average bellyhold cargo capacity of around 7-8 tonnes per aircraft and an extensive network of direct flights to destinations around the world that is unrivalled by any other European airport.

A central tenet of the Azimuth reports appears to be that the bellyhold and dedicated freighter markets are mutually exclusive, whereas the reality is that they are intrinsically linked and overlapping markets with some minor exceptions (low density bulk freight), and where price per kg plays a pivotal role in determining the movement of goods by shippers and freight forwarders. Bellyhold freight tends to be far more cost effective than freighters for an equivalent distance and density from Heathrow which, especially when coupled with the extensive network, ensures the predominance of Heathrow in the UK air freight market.

2.1.3. Can Manston Airport relieve pressure on the UK aviation system, and be considered a nationally significant infrastructure project?

The Azimuth report concludes that the London Airports will be at capacity by 2030 based on the Airports Commission findings. As noted earlier, the findings of this report relate mainly to passenger plus freighter movements, and AviaSolutions' view is that excess cargo capacity (combining bellyhold and freighter capacity) will continue to exist in the south east of England beyond 2030.

Azimuth put forward a case for the re-introduction of Manston Airport to relieve pressure on the London airport system. However, AviaSolutions view is that the provision of airfield and terminal capacity alone is not sufficient to develop financially viable air freight based airport operations as there must be a corresponding demand scenario to support such operations. In the long term, only if additional runway capacity is not delivered at Heathrow / Gatwick is there likely to be excess demand that will spill from the London system to Manston Airport, but that is a very long term, risk-laden investment proposition.

The stated objective of RiverOak is to develop an air freight focussed business at Manston Airport, but the provision of capacity is not the determinant of profitability. It is AviaSolutions' view that Azimuth's report does not provide sufficient evidence of demand at Manston Airport from air freight operators to support the required investment in facilities and profit generation potential to re-establish Manston Airport as a going concern.

Manston Airport continued to provide a gateway to the UK air freight market until ceasing operations in 2014. It is therefore difficult for Azimuth to argue that the UK air freight market has stagnated due to a lack of capacity, without also acknowledging that one of the providers of air freight capacity in the UK and south east market during this period (Manston Airport) was unable to attract sufficient cargo volume throughput to operate profitably, leading to its eventual demise as a London based air freight focussed facility. The Azimuth report does not acknowledge nor address the fact that even if there has been a lack of air freight capacity in the UK and south east causing the cargo market to stagnate (a hypothesis that is not supported by Avia), the market still chose not to utilise Manston Airport as a solution to this capacity shortfall.

Overall, taking these issues into consideration, whilst the airport envisioned by inference from RiverOak Strategic Partners' proposal would technically be capable of handling more than 10,000 freighter ATMs, it is Avia's view that the demand would not exist at Manston Airport to support such a number of ATMs, and by deduction, therefore Manston Airport would not serve to relieve pressure elsewhere on the aviation system.

2.2. Volume II – A qualitative study of potential demand

2.2.1. Overview

The second document prepared by Azimuth sets out an assessment of the expected demand for Manston Airport as a freight hub for the south east of the UK. The objective is to provide a 20-year demand forecast for freight and passenger movements based on a thorough review of the market, existing literature and stakeholder interviews. The report contends that Manston Airport has the location, airspace, capacity potential and demand required to grant a DCO which would allow the redevelopment of the airport.

Azimuth acknowledges the challenge of reliably forecasting freight demand and instead of extrapolating past trends seeks to establish a body of qualitative evidence to underpin the proposal to retain Manston Airport as a freight based airport serving London and the south east market. The report identifies specific opportunities for Manston Airport based on constraints in the London airport market and aviation related activities which could improve the prospects of profitability at the airport.

2.2.2. Methodology

The report sets out an extensive review of the air freight market characteristics and the available air freight forecasting literature, acknowledging not only the lack of academic research into this subject but also the differences between forecasting cargo and passenger movements. The review concludes that instead of adopting a mathematical model, a qualitative approach that gathers opinions from industry experts will allow areas of potential demand for Manston Airport to be identified and explored. There follows an outline of the methodology to identify and select interviewees and the freight related questions that would inform the demand forecast model for Manston Airport.

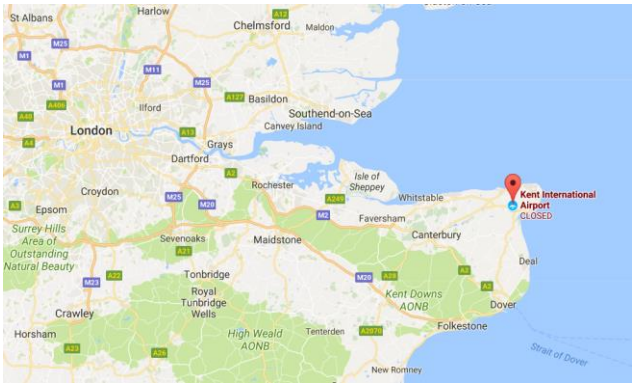
Chapter 5 sets out the stakeholder responses which are almost entirely favourable and present Manston Airport as a solution to the challenges caused by an air freight market operating in London's highly congested air travel system. Chapter 6 provides a summary of these findings and their influence on expected freight and passenger demand at Manston Airport, including sector and geographic market opportunities.

2.2.3. Conclusions

The report concludes with a summary of the stakeholder feedback which is considered to be an affirmation of the findings in Volume I, namely a significant and deteriorating lack of aircraft movement capacity in London and the south east. The report ends with statements outlining the implications of the research outcomes for UK aviation policymakers and RiverOak.

Avia's assessment of this report is that it reflects a wider body of evidence that supports an urgent need for additional movement capacity in the London air travel market. Similarly, we would concur with the view that UK aviation policymakers do not have the same depth of knowledge about the air freight market that they do about the air passenger travel market and a National Air Freight Demand Model would be a useful development.

The findings of the stakeholder interviews do however contrast markedly with Avia's own findings, published by Thanet District Council in September 2016 ("Commercial Viability of Manston Airport", Chapter 6.3). Avia's primary research indicated that whilst Manston Airport offered some service quality and processing time benefits, the cargo market did not value these over the remote geographic location which is 3/4 surrounded by the English Channel. When considered against its competitors such as Stansted Airport and East Midlands Airport, the location of Manston Airport and its relative access to the south and south east of the UK is inferior.



Source: Google

2.2.4. Additional Considerations

We would also add that the perceived advantages and opportunities that exist for Manston Airport reported by Azimuth are not new. This is not to underestimate the value of introducing these non-core activities at the airport, more to highlight the fact that previous owners will also have sought to exploit these opportunities, though no previous owner has been able to do so successfully.

- Maintenance, Repair & Overhaul (MRO) base
- Fixed Base Operator (FBO) facility
- Integrator operations
- Aircraft recycling

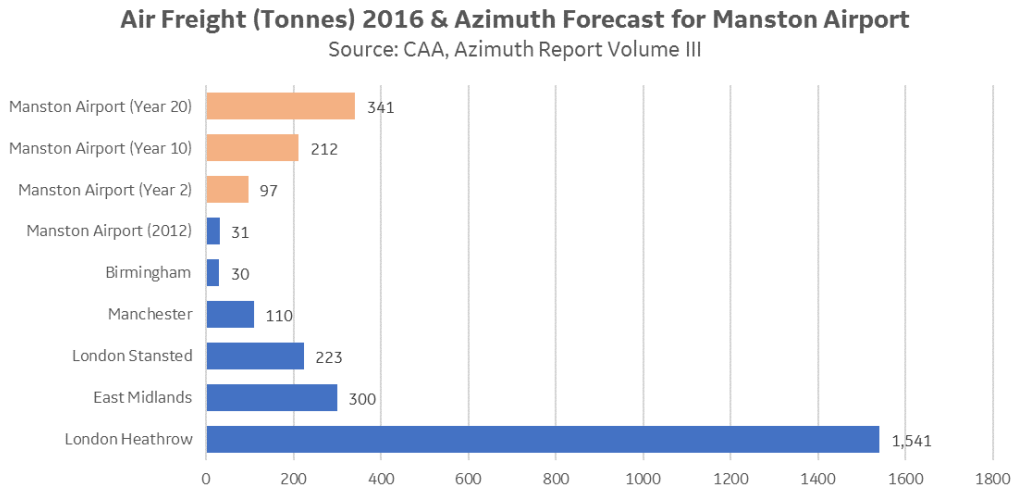
2.3. Volume III – The forecast

2.3.1. Overview

The third document prepared by Azimuth presents the air traffic forecasts for Manston Airport including freight and passenger movements for the first 20 years of operation (notionally 2020 to 2040). The report also sets out the expected infrastructure requirements to provide suitable facilities to accommodate the demand.

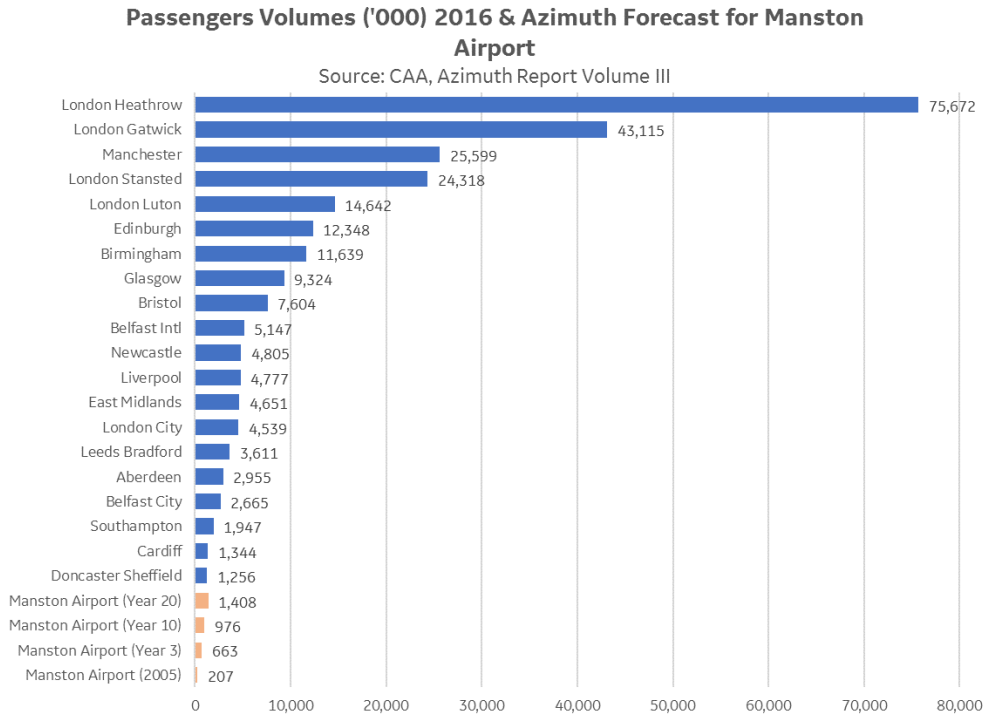
2.3.2. Forecast Results

The chart below illustrates the expected volume of freight (tonnes) at Manston Airport as set out in the Azimuth report (Volume III). The forecasts are compared with the most recent air freight tonnage throughput (2016) at the UK's five largest air freight airports. Manston Airport is forecast to become a significant provider of air freight capacity by Year 2, which would see the airport rank alongside Manchester, and towards the end of the forecast horizon would be competing with London Stansted and East Midlands (assuming limited growth of the UK air freight market more generally over the next 20 years).



The report notes that the bottom-up approach to the air freight forecast, based on specific traffic types, is considered '*… more conservative than those derived by a macro-level, top down method*'. The approach utilises the outcomes of the stakeholder interviews (primary data) and industry forecasts from IATA, Boeing and Airbus *inter alia* (secondary data). The report asserts that the 'push' and 'pull' factors at Manston and more widely in the London and south east air freight market will catalyse a change in the air freight model, in a similar way that the low-cost passenger model has led to a paradigm shift in fares and demand for passenger air travel.

The chart below illustrates the forecast passenger volume at Manston Airport as set out in the Azimuth report (Volume III). For context, the forecasts are compared with the most recent passenger throughput (2016) at UK passenger airports with more than 1 million annual passengers.



The report notes that the short to medium term passenger forecast is based on market intelligence rather than an extrapolation of past performance or an allocation of spill from London's congested airports. This includes *inter alia* a scheduled carrier with twice daily services to a European hub, two based low cost aircraft during years 3-5 and a further based aircraft thereafter and a small number of other charter operations. Longer term forecasts reflect recent industry projections from IATA, Boeing and Airbus.

2.3.3. Forecast Review

The projections set out in the Azimuth Report claim to be supported by stakeholder interviews and an extensive review on the literature available to inform the approach to air freight forecast modelling. The forecast growth reflects the combined expectation that Manston Airport can benefit from the spill resulting from a lack of air freighter capacity in the London and south east market and stimulate market growth by capturing a share of the freight market that is currently transported by road to and from Europe.

Avia's assessment of the forecast methodology is that the approach adopted by Azimuth is reasonable, though the reliance on primary data (interviews) to develop the bottom-up freight forecast has significant potential to exaggerate or overstate the market appetite to introduce services at Manston Airport.

For example, the forecast inputs set out in chapter 2.1 and 2.2 of the report focus exclusively on the opportunity, and do not take into consideration the many risks that would be incurred by a cargo operator or freight forwarder choosing to commence operations at Manston Airport. Many of the commercial risks which precipitated the recent air freight decline and subsequent closure of Manston Airport are still in evidence today. Azimuth continues to cite the lack of capacity at other airports in the south east as a major push factor in favour of services at Manston Airport, despite the evident excess combined freighter and bellyhold capacity at Heathrow and Stansted and mature air freight bases at both airports.

Furthermore, the use of OEM forecasts, which are developed around global trading patterns, as a base for long term development of air freight at Manston Airport is unsuitable, particularly given the static volumes seen in the UK air freight market over the last decade. Global trends are significantly ahead of recent trends in the UK market. To use global trends as the basis of forward projections for the UK market given the historic divergence between the two markets is at best naïve and without the necessary qualification is disingenuous.

Therefore, whilst there is the possibility given the right macro and micro economic conditions for Manston Airport to regenerate itself and act as catalyst for air freight operations transitioning away from Heathrow and Stansted, the probability of such an outcome remains very low. In our view this represents a significant risk to investors at the airport, and a significant operational risk to any airline that places services at the airport.

2.3.4. Infrastructure Review

The assessment of infrastructure requirements to meet the forecast demand has been developed by other independent consultants; Viscount Aviation, Osprey Consulting Group and RPS Group. The approach appears methodical, resulting in various capacity solutions covering aircraft stands, terminal buildings for international arrivals and departures and car parking. Fuel storage and transportation requirements are also considered, though the report appears to overlook air traffic control, security and fire service facilities which add significantly to the upfront capital cost of restoring commercial services.

2.4. Conclusions

Avia has considered the material set out in the Azimuth report which presents traffic forecasts for Manston Airport and is intended to establish the rationale for retaining Manston as an operational facility that contributes to the national aviation network.

Traffic forecasts are inherently subjective, but should be based on professional experience and judgement. However, at the heart of the Azimuth forecast is an assumption that there will be a paradigm shift in the approach to air freight in the London and south east, which will stimulate a switch from road freight to air freight and see significant air freight capacity move eastwards from London's Heathrow and Stansted airports. Given that Heathrow continues to offer substantial bellyhold capacity to a truly global network, and Stansted is utilising only around half of its statutory provision of air freighter movements, Avia's view is that the Azimuth forecast represents a highly ambitious outlook for air freight at Manston Airport, and one where the probability of such an outcome arising is very low under normal market conditions. We do however believe that there may be scope for the reintroduction of passenger services, broadly consistent with the projections set out by Azimuth and AviaSolutions' earlier report.

Avia's opinion, based on updated market information since the publication of our previous study (September 2016) is consistent with our earlier view that Manston Airport does not represent a financially viable investment opportunity under normal market conditions. As such, our conclusions are very much at odds with those of Azimuth, which in our opinion do not sufficiently consider or recognise the risks associated with investment in an airport which has failed to generate adequate financial returns since privatisation in 1998.

3. REVIEW OF NORTHPOINT REPORT

3.1. The Shortcomings of the AviaSolutions Report and an Overview of RSP's Proposals for Airport Operation at Manston

3.1.1. Summary of Evidence

Chris Cain indicates the position that he holds with Northpoint Consulting and its relevance to the project. He also states his relevant experience that qualifies him to opine on the project in hand. Northpoint then set out the three key elements of the AviaSolutions Viability Study that the report seeks to challenge, namely freight projections, cross channel transshipments and substitutable bellyhold capacity. Finally, the report sets out suggestions for alternative forecasts for Manston Airport.

3.1.2. AviaSolutions Review

Northpoint's Proof of Evidence focuses on three key aspects of the AviaSolutions Viability Study, namely the overall freight projections, cross Channel transhipments and substitutable belly hold capacity.

3.1.3. Manston Airport Benchmarks

Northpoint put forward several benchmark airports as comparable to a re-opened Manston Airport offering air cargo, air passenger links and aircraft servicing and re-cycling. We set out our reasoning why the comparison with Manston Airport is incongruous due to the vastly differing location and catchment characteristics of each benchmark airport.

Alliance Fort Worth: The airport in the centre point of an 18,000-acre industrial complex, with a multi-modal railway head located some 2km away and handling around 400k tonnes in 2016. The airport is at the heart of a huge complex of industrial and manufacturing companies with the business park specifically designed for large-scale manufacturing, distribution and industrial use. Many areas of the campus have direct access to the taxiway and airport apron to increase the speed of logistics. Additionally, it sits to the north of Fort Worth and the West of Dallas which have a combined GDP believed to be close to that of London.

Hamilton Ontario Airport: The airport's website indicates it handled a total of 439k tonnes of freight in 2016, behind the Northpoint forecast for Manston in 2040. It also handled 300k passengers. It is an express cargo hub for domestic and international shipments with multiple airlines offering flights on international routes as far as South America. Additionally, the airport is the local point of access to the air travel market for the city of

Hamilton, with a population of c. 500k. Cargo partners include UPS and DHL who use it as their international Canadian hub and Canada Post.

Bergamo: Secondary hub for DHL / UPS facility, handling 117k tonnes of air freight in 2016, with DHL as a base operator and with UPS also present. The airport has 24/7 customs facilities with no restrictions on night operations. Most of Milanese cargo volume is processed through Milan Malpensa (550k tonnes in 2016) due to the large number of widebody aircraft offering bellyhold capacity across its extensive long haul network.

Liege: Located at the centre of the golden-triangle (Paris / Amsterdam / Frankfurt), the airport offers quick connections to all European destinations. It's breadth of airline customers is huge and offers a resilience from changes in mix. Operations are 24 hours a day with a limit of 90 ATM per night with no time restrictions. Offers aircraft landing to first truck leaving in 1 hour.

Leipzig: DHL's European hub, with the airport handling over 1m tonnes in 2016 which has grown rapidly in 10 years from 100k tonnes. The growth coincides with DHL making the airport its European hub and the birth of Aerologic, a JV between DHL and Lufthansa that has its base at the airport. The airport is a multi-modal hub with train line in terminal. The airport has a 24-hour operating permit for cargo flights and direct link to the trans-European motorways and railway network.

There are clearly structural and geographical reasons as to why each of these airports is different to the proposal for Manston Airport. As such, suggesting these are comparable benchmarks is not realistic. In order for Manston Airport to acquire the status of these airports it would need to demonstrate key elements of development, namely; commitments from key express players (DHL / UPS / FedEx / Amazon / Alibaba); an ability to operate night operations with few regulatory restrictions; and geographical advantages from nearby cities, industrial parks, and population centres.

3.1.4. Freight Projections

There are very few long term forecasts for the UK air cargo market, a position supported by Dr Dixon's report. However, RiverOak and AviaSolutions have both considered a report by York Aviation, and another by Oxford Economics / Ramboll. RiverOak consider that both these reports support their position.

Of these reports, York Aviation's forecast (produced for the Freight Transport Association) assumes that unconstrained cargo growth would be in line with UK GDP growth, a method that Dr Dixon appears to disagree with in the body of her report. York Aviation's study also assumes that freight growth is bellyhold focussed. This report also questions Boeing and Airbus' forecast growth rates, which are utilised in the long term growth forecast by Dr Dixon.

The cargo forecast produced by Oxford Economics and Ramboll was produced for Transport for London (TfL). The forecast produced was based upon various extrapolations of historic trends and provided high and low case projections.

AviaSolutions did not prepare its own UK cargo market forecasts (outside the scope of the original study) and instead adopted the mid-point of the most recent local forecast available for the UK market, namely that prepared by Oxford Economics. The UK market forecast was allocated by AviaSolutions based upon a cascade / preference model across the systems' airports (e.g. LHR, STN). As such, the AviaSolutions report does foresee some growth in the UK air cargo market, despite the market's stagnation for the last 16 years.

The differences between Northpoint's view and the assessment in the AviaSolutions Viability Study arise from alternative views of overall market growth and the airports that will handle the increase in demand. AviaSolutions' conclusions were based in part on inputs from industry experts, from its own knowledge of the sector, and from a detailed quantitative analysis of the freight capacity (bellyhold and main deck) which individual airports would be able to offer. Northpoint's views are based on the opinion that demand will be supply driven, and the evidence of the experts with whom RiverOak consulted.

It should also be noted that recent growth in the UK freight market is driven in large part through the weakening of UK Sterling (GBP) since the EU Referendum in June 2016. European shippers can access capacity to the West and East at more competitive rates than on continental Europe and channel traffic through the UK accordingly. Secondly, fears of cross-border tariffs in an increasingly protectionist environment are believed to be driving an element of inventory build-up in many economies, as the UK prepares to leave the EU and the USA focuses inwardly.

3.1.5. Cross Channel Transhipments

Northpoint's second point is in relation to the trucking of freight to and from continental Europe. This practice is recognised in the AviaSolutions report, largely in the context of UK airfreight being flown in and out of continental European airports. It is important though to note that a reverse flow also exists with continental European freight being trucked across the Channel to be flown into and out of UK airports. A lack of verifiable data on these flows hinders quantitative analysis, although the practice has existed for many years and despite this the freight industry chose not to use Manston Airport when it was open.

UK carriers rely heavily on European-originating freight to fill services ex-UK and on European-destined freight to fill services inbound to the UK. This freight is often priced at a discount to the direct-flight option as it is a sub-optimal routing, and the airline offers this routing to fill residual capacity it cannot fill otherwise with point to point shipments. The same is true in reverse for European carriers. It should also be noted that most freight shipped across the Channel in either direction will be flown from Heathrow in the UK and from the major

European hubs on the continent. This is driven through the large-scale passenger networks available at these airports, with bellyhold capacity to an extensive range of destinations, at a competitive price. This is a market position that would be difficult for Manston Airport to replicate.

Northpoint cite a York Aviation estimate of 55,000 additional dedicated freighter movements in the south east by 2050. This evidence cannot be located in the York Aviation report. Northpoint further cite York Aviation stating 'recognising that Manston is the only realistic opportunity to meet that scale of demand [55,000 freighter ATM]', again, this reference is not apparent in the York Aviation report.

3.1.6. Substitutable Bellyhold Capacity

Northpoint's final observation is in relation to the competitive dynamic between bellyhold capacity and pure freighters. Carriage of airfreight is a commodity and price is often the determining factor when selecting an airline for carriage (assuming all options are from airlines of a similar high regard).

AviaSolutions' experience in the freight industry is that many bellyhold operators can, when supply exceeds demand, reduce rates to such a level as to cover the marginal cost of freight plus a margin. The business is often operated as an addition to the passenger service, and therefore its real marginal costs are low. It is simply impossible for a freighter operator to reduce its rate to match this marginal cost and operate at profitably. Therefore, freighters tend to operate on thick routes where the economies of scale of a freighter operation can be realised. These routes are also curtailed by a non-related market, that of passenger demand. Where large scale passenger demand exists e.g. UK to USA, a residual effect of this is large scale freight capacity, which is unmatched to demand. The reverse can be seen on routes to the East, where passenger demand is less, but freight demand, particularly inbound to the UK, is high. As such, many freighters operate on these routings.

Given these market dynamics, AviaSolutions is unable to reconcile Northpoint's stance, but note that none of Azimuth's 24 interviewees were from a passenger airline providing bellyhold capacity, the segment of the industry responsible for most of the airfreight to and from the UK.

While not all cargo can be flown in the bellyhold of passenger aircraft, the extent of freight that can be carried may surprise the casual observer. Dependent on the aircraft type, heavy shipments up to seven tonnes can be transported, and regularly many wide-body aircraft transport pallets of 4,500kg. Shipments can easily be accommodated up to 2.43M x 3.17M and up to 1.6M in height, with some larger items able to be split across multiple ULD. An example of this includes the carriage of luxury cars, which are a regular component of many wide-body passenger services. Many passenger airlines now offer express services that guarantee the shipment will travel, and can also provide carriage for many types of dangerous goods.

AviaSolutions also disagrees with the assertion that, because 50% of global airfreight is flown on freighters, and within the UK only 30% is flown on freighters, that therefore the UK must be suffering from a lack of freighters

slots. In fact, it could be argued that this difference is due to the highly developed passenger network available from the UK providing sufficient bellyhold capacity such that freighters cannot operate the routes on an economically sustainable basis.

3.1.7. Additional Comments

Northpoint appears to argue that Manston would be attractive because it would be available for night time operations, while at the same time indicating that freighter movements at German airports can be scheduled in daylight hours. The report does not therefore highlight how it proposes to handle Express Freight (e-commerce) which is almost exclusively handled through night operations.

The report also (inadvertently) recognises that passenger operations are more remunerative to airport operators than freight only movements, hence AviaSolutions in its report on the possible viability of a re-opened Manston Airport thoroughly investigated the passenger market, an investigation criticised by both Northpoint and Azimuth.

Northpoint is misleading in suggesting that airport operators always give preference to passenger operators, as the allocation of slots is not in their gift. In the UK, slots are allocated by an independent body (Airport Co-ordination Limited) and provided that airlines utilise the slots allocated to them, they may hold them in perpetuity. This situation would also mean that Manchester Airport Group (the owner of Stansted Airport) may have some difficulty in displacing "...several thousand freighter movements to create 'new' passenger slots...", notwithstanding the legal ring-fencing of annual freighter movements that exists at Stansted.

It should be noted that the passenger numbers given in Table 1 of Northpoint's Evidence relate to travel to all destinations from the catchment area, while the figures in the AviaSolutions report relate to passengers travelling just to destinations which a Low-Cost Carrier might serve from Manston. While of course Manston's core catchment area "...does not have a large airport like Stansted close to it like as Southend does..." (Paragraph 3.3), the wider area corresponding "...closely to the industry standard 60-minute drive time..." is of course very close to Gatwick Airport.

Northpoint also discusses various aviation-related activities which could be attracted to a re-opened Manston Airport. However, such activities tend not to need an airport to be in a specific location. Consequently, there is considerable competition in these markets, both national and international, from airports with limited commercial traffic but considerable unoccupied real estate for such activities.

Northpoint concludes by indicating that the RiverOak vision is a completely different model from that envisioned in the AviaSolutions report, which focussed on passenger driven revenues. While AviaSolutions does not accept this categorisation, it notes that its remit from TDC was to assess if a re-opened Manston Airport could be viable,

and not per se to express an opinion on the RiverOak proposal. In view of Northpoint's own words, "...the preference airports will always give to more remunerative passenger operations...", we investigated the passenger market. Additionally, it was also necessary to establish the scale of belly hold capacity on passenger services likely to be available to be able to assess the volume of freight that might be available for freighters at Manston Airport.

Northpoint asserts that "...the AviaSolutions work...does not stand-up to close scrutiny...". It does not however identify any factual errors in the work and its evidence merely highlights areas where different interpretations of facts, and different assumptions about the future apply.

.



Manston Airport
Local Plan Representations - FINAL REPORT

Report for Thanet District Council

By AviaSolutions

August 2017



Disclaimer of Liability

This publication provides general information and should not be used or taken as business, financial, tax, accounting, legal or other advice, or relied upon in substitution for the exercise of your independent judgment. For your specific situation or where otherwise required, expert advice should be sought. Although Avia Solutions Limited or any of its affiliates (together, "Avia") believes that the information contained in this publication has been obtained from and is based upon sources Avia believes to be reliable, Avia does not guarantee its accuracy and it may be incomplete or condensed. Avia makes no representation or warranties of any kind whatsoever in respect of such information. Avia accepts no liability of any kind for loss arising from the use of the material presented in this publication.

Copyright

Copyright © 2017 the General Electric Company. All rights reserved.

"GE," "General Electric Company," "General Electric," GECAS", "GE Capital Aviation Services Limited", "AviaSolutions," the GE Logo, and various other marks and logos used in this publication are registered trademarks, trade names and service marks of the General Electric Company. No part of this publication or any trademark or trade name may be used without the written permission of the General Electric Company.

Contents

Executive Summary 4

1. Introduction 5

1.1. Introduction 5

1.2. Documents Reviewed 5

2. Local Plan Representations 6

2.1. Colin Bandick – Comment ID 136 6

2.2. Beau Webber – Comment ID 572 7

2.3. David Stevens – Comment ID 826 9

2.4. Phillip Kruger – Comment ID 950 12

2.5. Dover District Council – Comment ID 1221 14

2.6. Bob Parsons – Comment ID 1316 15

2.7. John Jeapes – Comment ID 1425 17

2.8. Supporters of Manston Airport (SuMA) - Comment ID 734 18

Executive Summary

AviaSolutions has reviewed the Local Plan Representations that referred specifically to AviaSolutions' earlier report prepared for Thanet District Council "Commercial Viability of Manston Airport" (September 2016) that Thanet District Council is using as evidence in the Local Plan process.

AviaSolutions' opinion, based on updated market information since the publication of our previous study, is consistent with our earlier view that Manston Airport does not represent a financially viable investment opportunity under normal market conditions.

The objections raised through the Representations are similar across the eight documents under review and variously suggest that AviaSolutions' report did not fully consider the excess demand for air freight and passenger movements in the congested London airport system nor the full range of commercial opportunities available to the operator of Manston Airport. This argument is put forward alongside a range of counter-proposals for Manston Airport. However, it is evident that these counter proposals do not stand up against scrutiny on a variety of regulatory, commercial and financial aspects.

The Local Plan Representations do not make a credible case, nor provide the evidence for AviaSolutions' to change its views on the financial viability of Manston Airport. We remain of the view that whilst Heathrow Airport continues to offer substantial freight capacity to a truly global network, and Stansted Airport utilises only around half of the statutory provision of air freighter movements, the London air freight market has capacity to grow without the re-introduction of capacity at Manston Airport. Freight Forwarders have invested heavily in infrastructure around these core airports, carriers have developed their networks as such, and without clear value drivers that support relocating services to Manston Airport, the case remains to be made that demand exists for a freight facility at Manston Airport. This view is reinforced by the empirical evidence of multiple failed attempts to develop profitable operations at the airport.

1. Introduction

1.1. Introduction

Thanet District Council (TDC) commissioned AviaSolutions on 26th June 2017 to provide support pertaining to TDC's treatment of Manston Airport within the Local Plan, and more specifically, to provide commentary as required with regards to Local Plan Representations ("Representations") it received through the public consultation period.

This work scope follows the previous engagement of AviaSolutions by TDC to report on the financial viability of Manston Airport (AviaSolutions: Commercial Viability of Manston Airport[1]) and a subsequent Frequently Asked Questions report[2].

1.2. Documents Reviewed

AviaSolutions has reviewed the following Representations, copies of which may be found in the Appendix of this report.

Colin Bandick	Comment ID 136
Beau Webber	Comment ID 527
David Stevens	Comment ID 826
Phillip Kruger	Comment ID 950
Dover District Council	Comment ID 1221
Bob Parsons	Comment ID 1316
John Jeapes	Comment ID 1425
Supporters of Manston Airport	Comment ID 734

[1] *https://www.thanet.gov.uk/media/3500741/Final-Report-for-TDC-Manston-Airport-Viability-Oct2017_2.pdf*

[2] *https://www.thanet.gov.uk/media/3553836/AviaSolutions-FAQ-for-TDC.pdf*

2. Local Plan Representations

2.1. Colin Bandick – Comment ID 136

Representation Details

Comment ID: 136 Respondent: Colin Bandick

Response Date: 30 Jan 2017 Response Type: Object

Summary of Representation

Mr. Bandick surmises that the former Manston Airport site should be reinstated as an airport dedicated to the carriage of airfreight, but also with a parallel development of a rail-head, permitting intermodal freight. It is further suggested that this rail-head would permit the carriage of the Road Feeder Service ("RFS") vehicles on board the freight trains and disperse them via strategic locations throughout the UK. The support for this type of service, would, in Mr. Bandick's opinion, be forthcoming from the rail freight industry.

AviaSolutions Response

In the UK, there are currently no intermodal airfreight to rail freight exchanges[3], and the major freight hubs of Heathrow, East Midlands and Stansted are no exception. The reasons are multifaceted and revolve around key areas. Firstly, current legislation permits the carriage of bonded 'Known' freight by Road Feeder Services (trucks) but this does not extend to rolling stock. Secondly, the structure of the industry is highly concentrated amongst the large Freight Forwarders; they have invested heavily (strategically, presenting barriers to entry of new competitors) in their current infrastructure which is centred around hub airports and the distribution channels they can already access.

[3] 3. *Page 41- Department for Transport (2009), The Air Freight End-to-End Journey: An analysis of the end-to-end journey of air freight through UK international gateways. Available from http://webarchive.nationalarchives.gov.uk/+/http:/www.dft.gov.uk/about/strategy/transportstrategy/tasts/userexperience/endtoendjourney.pdf*

2.2. Beau Webber – Comment ID 572

Representation Details

Comment ID: 572 Respondent: Beau Webber – Save Manston Airport Association

Response Date: 13 March 2017 Response Type: Object

Summary of Representation

The Representation by Mr. Webber is strongly pro-Manston airport and raises several areas of objection. These include:

- Stating that "There is … 'currently unmet demand for freight in the South East, which for the South East of the UK is calculated to be around 80,000 movements ….' – this is nearly 10 times the movement requirement for the Development Consent Order, which is 10,000 movements per year. So, to say that there is no need for aviation at Manston Airport requires wilful blindness"

- In the RiverOak non-statutory consultation document, they say, additional facilities proposed include:
  - a base for at least one passenger carrier;
  - an aircraft recycling and engineering facility;
  - a flight training school;
  - a fixed base operation for executive travel; and
  - business facilities for aviation related organisations.

AviaSolutions Response

Several of the URL's provided by Mr. Webber link to a secure site that has restricted access permissions, so it has not been possible to ascertain the source of these quotes. Notwithstanding this, AviaSolutions believes that the points raised regarding demand / capacity is invalid.

As one of the premier UK freight hubs, Stansted Airport currently handles c. 10,000 ATM annually for dedicated air freighters. This less than half of the statutory 20,500 ATM allocated under its licensing agreement for dedicated freighter operations. Whilst some of these slots are arguably less favourable, or less cost attractive, if demand for these slots were as much as 80,000 ATM, it is difficult to understand why they remain at less than half of their allocation. Furthermore, the industry fully expects a new runway to be built in the South East (the Government currently opting for Heathrow) which will bring additional belly-hold capacity into the market. The strong, mature, long haul market from Heathrow is one of the prime reasons that freight flourishes in the UK; it offers a far wider, more frequent set of destinations than dedicated freighters could ever achieve. Finally, whilst not definitive, it is believed the '80,000' freighters quoted may be a reference to a

York Aviation[4] report in which (p19), it presents various scenarios and the residual unmet demand. 80,000 ATM in this case correlates to a 'No Expansion' scenario, which is clearly at odds with industry expectations. Furthermore, the report purely considers the effect on the London Area Airports; the residual demand could be met by regional airports such as the national freight centre at East Midlands, or Manchester Airport (same ownership as Stansted under MAG).

In addition, Manston Airport whilst operational, offered the air freight industry additional cargo capacity, though annual cargo throughput remained relatively constant from 2000 to 2013 at around 30,000 tonnes.

With regards to the facilities it is stated RSP wish to provide at Manston Airport:

- A base for at least one passenger carrier - a plausible option - this was explored in the AviaSolutions viability study. This would most likely be a Low-Cost Carrier, seeking to pay the minimal landing and passenger charges. The AviaSolutions Viability Study used a proxy yield of £3.5 per passenger which is above the rates paid by Low Cost Carriers at many regional airports.
- An aircraft recycling and engineering facility - these facilities are courted by many airports around the world, and in the UK. Whilst it is acknowledged that at least one party has expressed an interest in Manston Airport due to a personal tie, this does not substantiate a sustainable economic industry interest.
- A flight training school - many airports offer flight training schools, it is difficult to justify what Manston Airport's unique proposition would be given the relatively thin catchment for such activities.
- A fixed base operation for executive travel - Executive travel in private jets is likely to be undertaken by wealthy individuals and business people. The offer at Manston Airport, located so far from central London, is highly questionable. It is challenging to understand why users would opt to travel to Manston over Farnborough, Biggin Hill, London City Airport or similar mature and more convenient airports.
- Business facilities for aviation related organisations - whilst aviation related organisations would undoubtedly support the airport, the revenue generated by the airport from these activities is relatively small. Typically, this comes in the form of property rent, the market rates for which are not likely to be sufficient to turn the airport into a financially viable entity.

[4] *http://www.fta.co.uk/export/sites/fta/_galleries/downloads/air_freight/air-freight-implications-from-new-capacity.pdf*

2.3. David Stevens – Comment ID 826

Representation Details

Comment ID: 826 Respondent: David Stevens

Response Date: 17 March 2017 Response Type: Object

Summary of Representation:

The Representation by Mr. Stevens objects to the SP05 proposal along the following lines:

- It is the view of Mr Stevens that the information put forward by RSP and its associates, in conjunction with the forthcoming proposed DCO process, demonstrates that there is a reasonable prospect of the Manston Airport site being utilised as a fully operational airport.

- Furthermore, it is Mr Stevens view that the AviaSolutions Viability Study, which is being used as evidence from by Council, is not evidence based and is opinion, which has been shown to be unreliable by Mr. Chris Cain, a consultant for RSP for the following reasons:
  - Excluded the RiverOak business plan because Avia would not or could not sign a non-disclosure agreement.
  - When the RiverOak plans are run through the Avia model it shows that the airport is viable.
  - Was based on an out of date growth rate of 1% when it should be nearer to 3.7%.
  - Worked on a modest investment of £77m when RSP are looking to invest up to £300m.
  - Assumed that cargo tonnage would remain static at 30,000 tons when two experts working independently using different models project figures of between 220,000 to 230,000 tons.
  - Uses the assumption that belly hold capacity will be able to take up all the demand, which is simply not the case.
  - Ignored the income and jobs generated from general aviation activities, which is worth between 20%-25% of a smaller airport's total revenue.
  - Ignored the plans for maintenance, repair and tear down which will generate substantial income as well as providing skilled jobs.
  - Focused primarily on passenger not freight which is the basis of the RSP plan.
  - Stated that Manston was in the wrong place, but the key to freight operations is trucking time and Manston is within three to three and a half hours of most of the South East.

AviaSolutions Response

AviaSolutions' Viability Study examined the financial viability of Manston Airport under various demand scenarios. The majority of these scenarios resulted in the airport being financially unviable, predominantly due

to the competitive landscape reducing Manston Airport's ability to attract sufficient cargo and / or passenger traffic.

With regards to the proposal put forward by RiverOak Strategic Partners and its associates, and the forthcoming DCO, it is unclear which material this refers to specifically. In any case, given the DCO is yet to be submitted, AviaSolutions has not had access to this material and cannot provide comment on the probability of its success, or whether it would then result in a financially viable entity as its substance and detail is not known.

With regards to Mr. Stevens comments pertaining to Mr. Chris Cain's evidence and the effect this has on the AviaSolutions viability study.

- AviaSolutions client throughout has been Thanet District Council, therefore all and any work AviaSolutions conducts must be done in a manner that can be shared with Thanet District Council. RiverOak, at the initial meeting between AviaSolutions and RiverOak, made it clear that it did not intend to share its Business Plan, in the same way it had not been shared with Thanet District Council. It is thought that an NDA would not have altered this course of action.
- It is suggested that RiverOak's Business Plan, against the AviaSolutions Viability Study indicates a profitable business, however no information has been provided to this effect. AviaSolutions has not shared publicly its financial model so it is difficult to understand how such a claim could be substantiated.
- Mr. Stevens indicates that the AviaSolutions report is based on '1% growth', however it is unclear what this refers to. A search on the document reveals the only growth rate of '1%' is the 'Tonnes per ATM' at Heathrow when considering the average freight carried on-board passenger aircraft. The actual growth rate in the AviaSolutions model for total freight in the London System is 1.9%.
- The investments used in the AviaSolutions model were based on the demand forecast. In infrastructure investment, normal practice is to stagger facilities investment in line with demand to ensure maximum return on capital investment. The investment is a function of the growth in demand, thus increasing the investment to £300m would simply reduce the free cashflow requirement to service the debt and / or shareholder returns.
- AviaSolutions' model assumed cargo throughput could be between 30,000 tonnes and 140,000 tonnes by 2050 depending on the development of additional capacity at alternative London airports. This is based on a cascade model that AviaSolutions has developed to mimic the most likely business behaviour in a capacity constrained environment. The suggestion that Manston might achieve 220,000 tonnes does not specify which experts have predicted this, although for the purposes of this report it is assumed to be Sally Dixon[5]. This level of freight activity would place

[5] *Sally Dixon – Manston Airport: A National and Regional Aviation Asset: Volume III pg. I*

Manston Airport as the 3rd busiest freight airport in the country within 10 years, a case that is simply unachievable under normal market conditions given the level of maturity of the cargo operation at Heathrow, Stansted and East Midlands.

- AviaSolutions has not assumed belly-hold capacity will absorb all freight demand. However, given the extremely mature aviation networks operating from the UK, that belly-hold will continue to represent the largest share of capacity. Bellyhold capacity tends to be cheaper (except on the busiest of freight routes), more frequent, and offers more destinations than freighters.
- General aviation income is usually derived from an FBO license fee and landing fees. By way of a comparator, a highly successful regional UK airport might expect to generate revenues of £1million annually from GA, and after operating costs and overheads are deducted the impact on EBITDA at an airport the size of Manston is limited.
- MRO and Tear-down facilities are large, complex investments that often require operating partners to be involved in the infrastructure proposal and development thus ensuring the facility has a means of revenue generation form the outset. Whilst RiverOak state they will develop these facilities, it has yet to be demonstrated that such facilities are in demand in Manston. Notwithstanding such demand issues, the revenue the airport actually generates from such operations usually only constitutes rent and licenses, which are generally low value operations for the airport.
- Manston Airport is located in the south east of Kent. Viewed on a map, 3/5ths of the circle around it is the sea. It is not realistic that it could be considered as an excellent location for RFSs. Freight transported to Heathrow, Stansted and East Midlands has instant access to the UK motorway network, is much more closely located to large conurbations, and therefore reduces RFS time and cost.

2.4. Phillip Kruger – Comment ID 950

Representation Details

Comment ID: 950 Respondent: Phillip Kruger

Response Date: 17 March 2017 Response Type: Object

Summary of Representation

The Representation by Mr. Kruger objects to the SP05 proposal through an objection to the AviaSolutions Viability Report:

- The AviaSolutions report ignores the impact of BREXIT.
- The AviaSolutions report ignores the impact of the Paramount Theme Park or Ebbsfleet Garden City.
- New runway capacity at Heathrow or Gatwick will not be ready until 2036 so the need for freight capacity at Manston is more pressing.
- The AviaSolutions viability report does not consider the diversified income streams available, as indicated by Mr. Chris Cain in his evidence.
- Lessons to be learnt from other benchmark airports.

AviaSolutions Response

The objections put forward have been considered by AviaSolutions:

- Brexit was not considered directly in the report which was written a few months after the referendum, at which point little was known on the impact Brexit may have. Now, more than a year on from the vote, the impact of Brexit is still unclear, as is the potential positive or negative impact on the freight industry. At present, huge volumes of freight move in both directions across the Channel seeking the most advantageous prices, however, due to the networks available from the UK, generally this is to the UK's advantage and it is believed to be a net-beneficiary. A Brexit agreement that increases the friction in this operation may result in less freight moved across the Channel, and therefore more residual capacity from the UK. However, the UK Government has stressed that it will seek an arrangement with the EU that has the least possible impact on the free movement of goods between the UK and EU states, therefore we would expect the impact to moderately supress air freight demand in any case.
- In June 2017, it was announced that Paramount has pulled out of the proposed an entertainment park development in Swanscombe, Kent. Despite this, the developers are continuing the planning and though there is clearly a risk that the project may never materialise, therefore incorporating any incremental demand assumptions would not be prudent. Furthermore, the airports at Gatwick and Southend will both be closer to the theme park than Manston, therefore any benefit to Manston Airport is considered marginal at best.

- New runway capacity consensus amongst the industry is that it will be operational by 2030, which leaves a limited period of time for Manston Airport to develop its infrastructure and operation to recoup its investment. Currently there is residual capacity at Stansted airport to handle freighter operations, and airports in the Midlands have additional capacity. This again indicates that should Manston Airport re-open, it will face stiff competition from the outset.
- Whilst the income available from diversified business opportunities certainly augments airport profitability, the ability to generate such income on a long-term basis is challenging. Businesses of these type require high levels of investment meaning that barriers to entry are high, furthermore once they are established at an airport their barriers to exit are high. It is AviaSolutions' opinion that such businesses are unlikely to invest in Manston Airport until such time as they can be sure of its long-term future. Manston Airport presents significant risk, particularly in light of its recent track record of unprofitable operations.

2.5. Dover District Council – Comment ID 1221

Representation Details

Comment ID: 1221 Respondent: Dover District Council

Response Date: 23 March 2017 Responses Type: Observation

Dover District Council's representation raised no objections, rather it provided a commentary on the process thus far, and the position of the Council. In summary, it stated that Dover District Council upheld its previous resolution with regard to the airport;

> "This Council supports the campaign to retain Manston as an operational airport, recognising the role and place it can have in the UK aviation industry, making the better use of regional capacity in accordance with the views of the South East Local Enterprise Partnership, while making a significant contribution as one of the strategic priorities for regeneration of the East Kent area"

The Council came to this conclusion through an appraisal of the process to date including:

- A summary of DDCs agreed representations to TDC, including; an encouragement on TDC to more actively engage in the Duty to Cooperate (DCT) system, until any DCO process is concluded not to change the designation of the site away from 'Aviation Use Only'; a clear specification of other potential uses of the site, and a consideration of the impact on DDC of such uses.
- The chronology since its original resolution was passed in July 2014
- A summation of potential interested parties including RiverOak Strategic Partners and City financier Eddie Truell.
- A summary of the potential challenges DDC has to a housing and commercial development, including; employment and leisure floor space demand, the district centre and its effect on trade in across the two authorities' constituencies, and the visual impact on the landscape of any redevelopment.

AviaSolutions Response

DDC do not raise any objections specifically related to the viability of Manston Airport, rather it focuses on the process and political aspects. As such, AviaSolutions has not provided further comment at these areas of concern are outside of its remit.

2.6. Bob Parsons – Comment ID 1316

Representation Details

Comment ID: 1316 Respondent: Bob Parsons

Response Date: 13 February 2017 Response Type: Object

Summary of Representation

The Representation by Mr. Parsons objects to the SP05 proposal through an objection to:

- Manston's location has been described as being remote from a reasonable catchment area to support passenger flights but this is exactly the opposite for cargo where it is located close to dual carriageway and motorway routes avoiding the capital, railway infrastructure and ferries for efficient payload ground handling. The airport can deliver similar services for air cargo that the three-year-old London Gateway does for marine containers currently transferred from/to about five Freightliner/DB Cargo rail services in each direction per day.
- Manston has the potential to also develop some passenger services; some perhaps linked to operation of regional combi aircraft with a cargo capacity of (say) 3,000kg-4,000kg and 50 passengers to destinations beyond a reasonable time achievable by road or rail for time critical business and able to mix passenger and cargo capacity to ensure a high overall load factor.
- With its 2,750m runway the airport also has the potential to accept the largest aircraft for maintenance and end of life recycling which was a minor business under previous owners but is increasingly important for aircraft manufacturers' life cycle planning. The process removes reusable equipment that might then be reconditioned and form part of maintenance of equivalent aircraft with a continuing working life, the remainder of the body being deconstructed for removal to specialist recycling businesses.
- Turning to ground transport, there is a fairly high volume of air cargo moved by road between airports. As an example, the German operator Lufthansa operates about 200 HGV services, Mondays to Fridays, serving UK airports. Attracting cargo from/to Manston can, as with marine containers, allow for air cargo to be conveyed directly by rail from/to inland terminals in a similar way to present Royal Mail rail services and the planned international "Euro Carex" rail operation (Eurotunnel being the UK partner, the trains planned to use Deutsche Bahn's rail freight terminal at Dagenham via HS1).

AviaSolutions Response

AviaSolutions has reviewed the representation and provides the following response:

- Manston Airport is located in the south east of Kent. Viewed on a map, 3/5ths of the circle around south east Kent is the sea. It is not realistic that it could be considered as an excellent location for RFSs. Freight transported to Heathrow, Stansted and East Midlands has instant access to the UK motorway network, is much more closely located to large conurbations, and therefore reduces RFS time and cost.
- In the UK, there are currently no intermodal airfreight to rail freight exchanges[6], and the major freight hubs of Heathrow, East Midlands and Stansted are no exception. The reasons are multifaceted and revolve around certain key features. Firstly, current legislation permits the carriage of bonded 'Known' freight by Road Feeder Services (trucks) but this does not extend to rolling stock. Secondly, the structure of the industry is highly concentrated amongst the large Freight Forwarders; they have invested heavily (strategically, presenting barriers to entry of new competitors) in their current infrastructure which is centred around hub airports and the distribution channels they can already access.
- Whilst the income available from diversified business opportunities certainly augments airport profitability, the ability to generate such income on a long-term basis is challenging. Businesses of these type require high levels of investment meaning that barriers to entry are high, furthermore once they are established at an airport their barriers to exit are high. It is AviaSolutions' opinion that such businesses are unlikely to invest in Manston Airport until such time as they can be sure of its long-term future. Manston Airport presents significant risk, particularly in light of its recent track record of unprofitable operations.
- The suggestion for operators to utilise 50 seat combi aircraft is an interesting consideration, however, there are no airlines operating these aircraft types in the UK or Europe, and the concept is largely out-dated globally in all but the most remote regions; it would be challenging for the airport to attract such an operator. Furthermore, the range of such an aircraft would be considered limited, only able to operate to destinations that are currently operated to by aircraft from Heathrow and Gatwick. Such short haul flights attract very little freight which is generally transferred throughout Europe by RFS.

[6] *3. Page 41- Department for Transport (2009), The Air Freight End-to-End Journey: An analysis of the end-to-end journey of air freight through UK international gateways. Available from http://webarchive.nationalarchives.gov.uk/+/http:/www.dft.gov.uk/about/strategy/transportstrategy/tasts/userexperience/endtoendjourney.pdf*

2.7. John Jeapes – Comment ID 1425

Representation Details

Comment ID: 1425 Respondent: John Jeapes

Response Date: 10 February 2017 Response Type: Object

Summary of Representation

The Representation by Mr. Jeapes objects to the SP05 proposal through an objection to various aspects:

- Mr Jeapes has a clear belief that Aircraft Tear Down and Recycling would be suitable for Manston Airport and that this should be consider further.

AviaSolutions Response

AviaSolutions has reviewed the representation and provides the following response:

Whilst it is evident that Mr Jeapes has domain knowledge of the Aircraft Recycling sector it remains questionable whether:

- Aircraft recycling alone could support Manston Airport's viability.
- Any investor has the desire to invest in potentially the world's largest aircraft recycling centre in Manston Airport.
- Investors are willing to invest in Manston Airport given its uncertain future, or at what point in the future they may wish to invest. It is not unreasonable to assume they may defer investment for two years to ensure the airport is viable.
- Manston or the wider region in Kent has the labour knowledge and skills to support an operation in its start-up phase.
- How competitors will react. It would be highly unlikely that those businesses already operating in this sector would simply accept a loss of business.
- How such a business located in Manston, with its relatively high cost base vs. emerging economies, will compete in a labour-intensive industry.

2.8. Supporters of Manston Airport (SuMA) - Comment ID 734

Representation Details

Comment ID: 734 Respondent: Ruth Bailey, on behalf of Supporters of Manston Airport

Response Date: 16 March 2017 Response Type: Object

This document has been supplied as a non-submitted Representation.

The objections are as follows:

- AviaSolutions Viability Study cannot be used as evidence as it failed to meet the brief in that it did not consider ALL options, including various diversified businesses.
- The AviaSolutions report does not consider opportunities to offer short term capacity at Manston Airport whilst a new runway is developed, and then transfer/ redistribute services to a new runway at Heathrow or Gatwick.

AviaSolutions Response

AviaSolutions has considered the document supplied and has provides the following response:

- AviaSolutions considered what it believed to be the most viable means of ensuring the airport became a financially viable entity. This approach has been adopted because an airport must have a profitable core service offer. It is not conceivable that an investor would invest c. £75m - £300m to develop a business where its core service is unable to generate profits. In airport terms, this means the airport needs to be profitable from either its passenger or cargo operations, or a combination of the two. Additional and auxiliary services, no matter their number or diversity, should serve to improve EBITDA margins and generate incremental profit. If these businesses are required simply to break-even, the risk is likely to be considered too great for investors.
- With regards to a joint venture / share of operations with either Heathrow or Gatwick, airports in the UK operate in a free market and compete to attract airline customers. Airlines in turn operate their fleet, network and schedule for commercial objectives. In our view, Manston Airport (working with either London Heathrow or London Gatwick) could not develop the above proposition as neither Manston nor Heathrow/Gatwick has the authority to 'direct' aircraft to alternative airports. Furthermore, the commercial proposition to the airline is simply not the same, as operations from Manston Airport (when compared with Heathrow for example) will not generate the same levels of demand or average seat yields. A further key feature of Heathrow Airport is the diversity of connecting options, which would not be available at Manston. The concept of an airport seeking to 'redistribute' airline traffic is simply untenable in the UK aviation sector.

Analysis of the Freight Market Potential of a Reopened Manston Airport

Issued: January 2018

(Analysis completed in October 2017)

Scope of the Report and Limitation of Liability

- This report contains the results of our analysis in relation to potential air cargo demand at the former Manston Airport site (the "Work"). It has been prepared for Stone Hill Park Limited ("SHP") in connection with the proposed application for a Development Consent Order by RiverOak Strategic Partners Limited and for no other purpose. The proposed application is for the redevelopment and reopening of Manston Airport for international air freight along with passenger, executive travel and aircraft engineering services ("the Project"). The proposed application would also, we understand, seek to compulsorily acquire the whole of the former Manston Airport site from SHP.
- We do not accept a duty of care to any person other than SHP in respect of this report.

ALTITUDE AVIATION ADVISORY LIMITED

January 2018

Contents

1. Introduction 1
1.1. Objectives of the Study 1
1.2. Structure of the Report 2
1.3. Introduction to the Air Cargo Sector 2
1.5. About Altitude Aviation Advisory 5
2. Executive Summary 6
2.1. Overview 6
2.2. Introduction 7
2.3. Need for Further Airport Capacity in the UK for Dedicated Freighters 8
2.4. South East Requirement for Additional Dedicated Freighter Capacity 10
2.5. Market Position of a Reopened Manston 11
2.6. Other Potential Options for New Dedicated Freight Capacity 12
2.7. Conclusion 13
3. Review of Azimuth Reports - Context 15
3.1. Aims of Azimuth Report 15
3.2. Aviation Economic Contribution 16
3.3. RSP Vision for Manston Airport 16
4. Development of the UK Air Cargo Industry 19
4.1. Introduction 19
4.2. UK Air Freight Development Since 1990 19
4.3. UK Freighter versus Bellyhold Mix 20
4.4. UK Freight on Cargo Only Aircraft 22
4.5. UK Bellyhold Freight 26
4.6. UK Air Mail 27
4.7. Heathrow 28
4.8. East Midlands 29
4.9. Stansted 31
4.10. Others (excluding Manston) 31
4.11. Manston 32
5. Current Freight Demand vs Supply at UK Airports 35
5.1. Context 35
5.2. Literature Review 35
5.3. Analysis of Current Freight Demand vs Supply at UK Airports 37
5.4. Conclusion 41
6. UK Capacity Outlook 43
6.1. Context 43
6.2. Review of Individual South East Airports 43
6.3. Review of Individual Regional Airports 47
6.4. Overall Capacity Outlook to 2040 49

6.5. Capacity Outlook Prior to New Runway at Heathrow (2029) 50
6.6. Post 2040 Capacity Outlook 50
7. UK Demand vs Supply Outlook 52
7.1. Our Forecast for the UK Market 52
7.2. Other UK Market Forecasts 54
7.3. Future Requirement for Freight Capacity at UK Airports 55
8. Review of Azimuth Freight Forecasts 56
8.1. Context 56
8.2. Supporting Arguments (Volume I) 56
8.3. Approach to Forecasting (Volume II) 60
8.4. Expert Interviews and Discussion (Volume II) 62
8.5. Methodology Used in Manston Forecasts (Volume III) 64
8.6. Manston Air Freight Forecasts (Volume III) 67
8.7. Manston Cargo ATM Forecasts (Volume III) 71
8.8. Conclusion 73
9. Overall Conclusion 74
10. Appendix - Overview of the Cargo Industry 76
10.1. Modes of Transport for Transportation of Cargo 76
10.2. Types of Air Cargo 77
11. Appendix - Air Cargo Global Market Trends 81
11.1. Air Cargo Share of Global Cargo 81
11.2. Air Cargo Mix 83
11.3. Bellyhold and Freighter Capacity versus Demand 84
11.4. Global Market Outlook 85
12. Appendix - Case Studies of Leading European Cargo Airports 87
12.1. Context 87
12.2. Leipzig 87
12.3. Liege 89
12.4. Conclusions 90
13. Appendix – Supporting Material 91
13.1. Assumptions made to calculate indicative cargo bellyhold capacity 91
13.2. Outlook for A380 in the UK Market 92
14. Appendix – Review of AviaSolutions Report 93
14.1. Introduction 93
14.2. Potential Development Scenarios 93
14.3. Cargo Analysis 94
14.4. Potential Future Freight Operations - Model 95
14.5. Conclusions 96
15. Appendix – Review of Northpoint Report 97
15.1. Introduction 97

15.2. Manston Airport Benchmarks 97
15.3. Air Cargo Forecast Methodology 98
15.4. Manston Air Freight Forecasts 101
16. List of Figures 102
17. List of Tables 103
18. References 104

1. Introduction

1.1. Objectives of the Study

1. This report has been commissioned by Stone Hill Park Limited ("SHP"), the owners of the former Manston Airport site. The site is currently subject to a proposed application for a Development Consent Order ("DCO") under the Planning Act 2008 currently promoted by RiverOak Strategic Partners Limited ("RSP"). The proposed application is for the redevelopment and reopening of Manston Airport for international air freight along with passenger, executive travel and aircraft engineering services ("the Project"). RSP contends that the Project is a Nationally Significant Infrastructure Project for airport development for air freight and hence, should fall within the Planning Act 2008. RSP's proposed application could also seek powers of compulsory acquisition over the site, allowing RSP to compel the purchase of the site from SHP's ownership to RSP's ownership. The report has been developed in this context.

2. To date, RSP has generated a range of submissions as part of the DCO pre-application process. These include reports commissioned from Azimuth Associates ("Azimuth")[1] and Northpoint Aviation Services ("Northpoint")[2].

3. The objective of this report is to provide a review of the Azimuth and Northpoint reports. We also review other relevant documents, including two AviaSolutions reports[3] commissioned by Thanet District Council.

4. The Azimuth and Northpoint submissions are notable for making major assertions as fact without providing relevant supporting evidence. While we have drawn on our own extensive experience in the UK and international airport sector, we have utilised published material to support our analysis. As such, we have made efforts to limit the extent to which we rely on our own opinions, assumptions and/or calculations.

5. The focus of our analysis is the air cargo sector. We provide an evidence based assessment of key issues impacting the future development of air cargo in the UK. This comprises of:

    - Review of key historic and likely future trends in the air cargo sector.
    - Assessment of the ability of existing airports to meet future freighter and bellyhold cargo demand in the UK.
    - Appraisal of the ability of the Manston Airport site (if re-opened) to support the future development of the UK air cargo sector. Specifically, we investigate whether the site has the potential to meet the objectives specified by RSP in its proposed DCO application.

6. In this report, we do not, at this stage, undertake an in-depth review of air passenger related issues.

[1] (Azimuth Associates, 2017 a), (Azimuth Associates, 2017 b), (Azimuth Associates, 2017 c)
[2] (Northpoint Aviation Services)
[3] (AviaSolutions, 2016), (AviaSolutions, 2017)

1.2. Structure of the Report

7. Later in this section (Section 1.3), we provide an overview of the air cargo sector for the general reader. This includes an explanation of some key terms used in our report and an overview of important market dynamics. In the appendices (sections 10 and 11), a fuller description is provided.

8. A brief overview of Altitude Aviation Advisory is presented in Section 1.4.

9. The next section of the report (Section 2) is the Executive Summary.

10. In Section 3, we review the introductory section of the Azimuth suite of reports. In particular, we review the stated aims of the Azimuth reports, and comment on whether the questions put forward by Azimuth are appropriate and sufficiently targeted to adequately support the proposed DCO application.

11. In sections 4 to 7, we present our own analysis of the UK and global cargo market, including historic trends and outlook. This is then referenced later in the report when we critique the Azimuth freight forecasts.

    - Section 4 – We provide an analysis of how the UK cargo sector has developed, and focus on individual airports that are relevant in the consideration of the future potential for Manston. We also provide a summary of Manston's historic performance.
    - Section 5 – We investigate if there is an overall shortage of airport freight capacity in the UK, or if shortages are restricted to Heathrow only.
    - Section 6 – We provide a review of published capacity expansion plans from existing airports. This allows us to build up a picture of freight capacity at UK airports in the period to 2050.
    - Section 7 – Our forecast for UK freight demand is presented in this section. Our forecasts are compared with other published projections. We also assess whether there is likely to be any overall imbalances between demand and supply in the period to 2050.

12. In Section 8, we provide a comprehensive review of the Azimuth freight forecasts for Manston. This includes a critique of the methodology as well as the forecast projections themselves.

13. In the appendices, background material on the air freight segment and recent trends is included. There is also a case study of two major European freighter airports and further supporting analysis for some of the material in the main body of the report. We also review other related reports by Northpoint (on behalf of RSP) and AviaSolutions (on behalf of Thanet District Council).

14. Finally, a list of figures and a list of references are included at the end of the document.

1.3. Introduction to the Air Cargo Sector

15. Generally, products that make use of air transportation are high value and/or time critical, and can be easily packaged.

16. Whilst there are many different types of *air cargo*, at a high level, most can be categorised as either *freight*[4] or *mail*. Most freight can then be defined as either *general* or *express*.

    - Mail is typically letters and parcels, delivered to final destination by the postal service of a given country.
    - Express freight is typically "next-day" shipments that are collected from the shipper by close of business and are required by the consignee by close of business the following day.
    - General freight is everything else (this category is very broad, and also includes several types of low-volume specialist products such as hazardous, valuable and live animal cargo).

[4] In this report, we concentrate on the freight segment (which is more relevant in the context of Manston). Where it is not meaningful to distinguish between freight and mail, we provide analysis of the air cargo segment overall.

17. Air cargo can be carried either in a dedicated aircraft (a *freighter* or *cargo only aircraft*), or in the hold of commercial passenger aircraft (when it is known as *bellyhold cargo*).

18. A freighter aircraft will be able to carry more cargo than can be carried in the bellyhold of a similarly sized passenger aircraft. Furthermore, freighter aircraft are able to handle larger individual pieces of cargo than can be loaded in the bellyhold of passenger aircraft.

19. With this exception, there is typically no aircraft driven preference from the customer as to whether cargo is shipped in a freighter or in the bellyhold of a passenger aircraft. Other sources of preference include:

    - Freighters may be the only option if there are no passenger flights offering bellyhold capacity (the number of unserved destinations has shrunk as the number of passenger flights has grown).
    - From an origin with both bellyhold and freighter capacity, a larger number of frequencies and destinations may be available via bellyhold, due to the generally more extensive schedules of passenger airlines than cargo airlines.
    - Bellyhold capacity on passenger aircraft is often significantly cheaper to provide than freighter capacity, as many of the largest fixed costs are assigned to the passenger business (e.g. aircraft operation, landing fees, fuel needed to fly the aircraft[5]).

20. In recent years, bellyhold has been capturing an increasing share of the overall air cargo market. This is a global development, primarily due to faster growth in passenger demand than cargo demand. Therefore, bellyhold cargo capacity has been growing ahead of cargo demand, diminishing the need for dedicated freighter aircraft.

21. The air transport of air freight is typically carried out by one of three types of operator:

    - *Cargo only airlines* (using freighters), such as Cargolux.
    - *Passenger airlines* (using bellyhold space on passenger aircraft), such as British Airways. Some passenger airlines also operate a number of freight-only aircraft (a relatively small number compared to the number of passenger aircraft they operate).
    - *Integrators*, such as DHL, use a mix of their own freighter aircraft and purchased space on passenger aircraft. A large majority of the cargo handled by integrators is express freight. Integrators have a wider role than purely air transportation; they transport freight from door-to-door using a network of vans and trucks, as well as aircraft when necessary.

22. All carriers make extensive use of trucking in order to get freight to/from an airport. *Road feeder services* use trucks to bring freight to an airport from consolidation points across the catchment region.

23. Additionally, trucks will replace flights where it makes economic sense to do so.

    - For express freight, where next day delivery is required, this typically includes destinations within ca. 500km of the airport.
    - For general freight (i.e. without next day delivery requirement), trucks may be the more economic option for any intra-regional route. Replacement of flights with trucks has become more prevalent in Europe, to the extent that Airbus comments on it in their most recent forecast.

24. In this report, we refer to the concepts of *passenger hub* and *cargo hub* airports. These are terms that can be used somewhat loosely, and on occasion can simply be used to signify a large airport. For clarity, we define here precisely what we mean by these terms.

25. First, it is useful to present the Airports Commission[6] definition of a passenger hub:

[5] Incremental fuel needed for the uplift of cargo will typically be charged to the cargo business.
[6] (Airports Commission, 2015, p. 13)

> *"Airlines and alliances route their traffic through one or more key airports ('hubs'), with feeder traffic from other airports in the network (the 'spokes') supplementing local origin and destination traffic at the hub. For passengers, the hub-and-spoke model maximises the choice of direct destinations at the hub airport and offers potential to travel to a very wide variety of destinations on one ticket."*

26. Although the UK has several large airports, Heathrow is the only major passenger hub in the UK. A significant proportion of its passengers are transfer or connecting passengers (changing flights at Heathrow). In contrast, Gatwick is not a major passenger hub, despite being the 8th largest airport in Europe in 2016. Its traffic primarily consists of passengers starting or finishing their air journey at Gatwick.

27. The concept of a cargo hub is similar to a passenger hub. Cargo is fed into the hub from a wide geographic area. This can be through cargo feeder flights generating *transhipment cargo* (cargo which is transferred from one aircraft to another at the cargo hub). The other source of cargo that feeds into a cargo hub is from road feeder services. These trucking routes play a similar role to flights in bringing freight from a large catchment into the airport, which is then transferred to a flight (or even onto another trucking service).

28. Major passenger hubs are frequently also acting as cargo hubs (due to the significant amount of bellyhold capacity available, the schedule connectivity, and the economies of scale). Heathrow is the UK's largest cargo hub, despite having a relatively small number of dedicated freighter services. Frankfurt is a leading example of a major passenger hub that also has an extensive range of freighter flights.

29. The other two cargo hubs in the UK are East Midlands and Stansted. Neither airport is a passenger hub. In both cases, cargo is almost exclusively carried on dedicated freighter aircraft. *Dedicated freighter hubs* (cargo hubs at non-passenger hub airports) typically have fairly unrestricted operating conditions (e.g. 24-hour operations, slot availability) and are centrally located. Integrators usually account for a substantial share of cargo at dedicated freighter hubs.

30. These definitions are important in the context of Manston. The location of Manston on a peninsula prevents its development as a cargo hub[7]. Even if the airport was to successfully attract high cargo tonnage in the future (which we consider unlikely), it would merely become a large cargo airport rather than a cargo hub.

31. The final term to introduce is *freight forwarders*. These are firms specialising in arranging storage and shipping of merchandise. Freight forwarders typically provide warehousing, negotiate and book aircraft cargo space, prepare documentation, arrange insurance and track progress of freight. They also consolidate cargo, where several smaller shipments are assembled and shipped together to avail of better freight rates and security of cargo[8]. Freight forwarder activity is usually concentrated at major cargo hubs (whether bellyhold or dedicated freighter hubs). This is due to economies of scale benefits.

[7] True cargo hubs are at the centre of their catchment area, with 360-degree connectivity (i.e. receiving road feeder services from all spokes of the wheel). Due to its location, Manston could only receive road feed from the west of the airport.
[8] www.businessdirectory.com

1.5. About Altitude Aviation Advisory

32. Altitude was formed in May 2013, and brings together a wide range of experience gained within the aviation sector. The two principals have worked in the aviation sector for a combined total of more than 50 years.

33. Team members have been involved in a diverse mix of strategic and commercial projects for a wide range of clients including airports, airlines, investors, debt providers, government and regulatory bodies. Our main service areas are airport transactions, business optimisation, traffic forecasting, route development and economic regulation.

34. Since 2013, we have worked directly for 10 different UK airports on a range of strategic, business planning and traffic forecast assignments. We have also provided due diligence support for various UK airport transactions covering 8 airports (all to financial close). In total, we have undertaken multiple projects across 13 different UK airports, either directly and/or as part of a transaction.

35. While the UK is our home market, the company has a global footprint. Our team experience encompasses over 150 airports worldwide. In 2017 alone, we have undertaken projects in Australia, Italy, USA, Russia, Denmark, Turkey, Belgium, Ireland, Serbia, Iceland, Hungary, Cyprus, and Portugal.

36. The Altitude team has considerable cargo experience. This includes previous employment working in the cargo division of a major airline and consultancy experience leading stand-alone cargo strategy projects in geographies as diverse as the UK, Eastern Europe, Middle East, and North America.

2. Executive Summary

2.1. Overview

37. We have undertaken an in-depth review of the Azimuth reports, and developed our own analysis of the future potential for freight at a reopened Manston Airport.

38. Manston has historically played a role as a niche air freight airport. We do not see potential for a more significant role in the future. This is in contrast to Azimuth. Azimuth's forecasts show the airport more than doubling its previous annual freight record in the first year of freight traffic returning. By year 18 of Azimuth's forecast, Manston is forecast to exceed the 2016 freight tonnage at East Midlands Airport (the largest dedicated freighter hub in the UK). This is simply not credible or likely.

39. We have identified significant weaknesses in the Azimuth analysis and forecasts. The following factors have not been acknowledged and/or adequately reflected:

- There is no overall shortage of freight capacity in the UK or South East specifically. While Heathrow is constrained, there is significant spare freight capacity at the established dedicated freighter hubs at Stansted and East Midlands.
- Cargo activity in the UK has become very consolidated on the 3 cargo hubs (Heathrow, Stansted and East Midlands). All three of these airports have plans to significantly expand cargo capacity, and they forecast strong growth in cargo tonnage. Furthermore, other established passenger airports have the capability of handling much higher cargo volumes if demand existed.
- There has been a strong trend towards bellyhold freight, with the role of dedicated freighters diminishing. The most recent (2017) Department for Transport ("DfT") forecasts to 2050 assume the number of freighter flights in the UK will remain flat at 2016 levels[9].
- Trucking is a highly integrated component of the air freight business model, and not merely a substitute for air freighter flights when airport capacity is constrained. The increasing use of truck feeder services is due to cost efficiencies and is not restricted to the UK.
- Manston is in a poor location to serve the wider South East or UK market. Other structural disadvantages include lack of critical mass, lack of a passenger hub, and night flight restrictions. These factors have limited Manston's role to that of a niche freight airport.

40. We consider the Azimuth freight forecasts to be extremely optimistic, with negligible supporting evidence. In particular:

- Historic performance is ignored (both at Manston or more generally across the UK market – the Azimuth growth forecast for Manston would be unprecedented in a UK context).
- There is a heavy reliance on qualitative techniques, with no substantive attempt to quantify the size of the markets Manston will be competing in, or how it would gain market share.
- Many of the references from published studies are too generic to be meaningful or are taken out of context.
- In making the case for Manston, Azimuth seeks to rely on reports prepared by York Aviation in 2013 and 2015. We share York Aviation's view, as set out in a parallel report commissioned by SHP, that these reports do not support Azimuth's conclusion that there would be a substantive role for Manston in the UK air freight industry.

41. Finally, we also view the Azimuth cargo air transport movement ("ATM") projections for Manston to be very optimistic and again unlikely. The projected average freight loads per flight are much lower than historic levels, and also lower than typically seen at cargo airports specialising in general freight (i.e. with

[9] (Department for Transport, 2017a, p. 33)

limited integrator presence). Even if the freight forecasts were achieved (which we consider very unlikely), we would anticipate significantly lower numbers of cargo air transport movements.

2.2. Introduction

42. Azimuth has published four reports in support of RSP's proposed DCO application. Volume 1[10] aims to answer the following questions:

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

43. Azimuth concludes that *"the answer to each of the above questions is overwhelmingly yes"*. However, the questions conflate different issues. The first two questions provide poor context for the third question, and are not relevant to RSP's proposals for Manston.

44. We agree that the UK needs additional airport capacity, and that it should be located in the South East of England. This is not surprising given that:

- In September 2012, the Government asked Howard Davies to chair an independent Commission to identify and recommend options to maintain the UK's position as Europe's most important aviation hub[11] ("the Airports Commission").
- The Airports Commission concluded that "*a new runway in the South East is needed by 2030*". It also "*concluded that the best answer is to expand Heathrow's runway capacity*" as "*Gatwick… is unlikely to provide as much of the type of capacity which is most urgently required: long-haul destinations in new markets. Heathrow can provide that capacity most easily and quickly. The benefits are significantly greater, for business passengers, freight operators and the broader economy*[12]".
- In October 2016, the Government announced that its preferred scheme to meet the need for new airport capacity in the South East was a Northwest runway at Heathrow. This was subsequently confirmed in its revised draft Airports National Policy Statement ("ANPS"), published in October 2017. The ANPS[13] stated that "*The Heathrow Northwest Runway scheme delivers the greatest support for freight. The plans for the scheme include a doubling of freight capacity at the airport*." The draft ANPS, once ratified by Parliament, will settle the "need" case for the Northwest runway at Heathrow, but no other form of airport development.

45. However, while we agree with the positive response to the first two questions, it does not automatically lead to a "yes" for the third question. The third question covers fundamentally different issues to the first two questions.

46. There are clear distinctions between different types of airport capacity. The Gatwick option would have provided more incremental runway movements than the recommended Heathrow option[14]. However, a key reason for recommending Heathrow was that *"It delivers more substantial economic and strategic benefits than any other shortlisted option, strengthening connectivity…*[15]*"*

[10] (Azimuth Associates, 2017 a, p. I)
[11] (Airports Commission, 2015, p. 37)
[12] (Airports Commission, 2015, p. 4)
[13] (Department for Transport, 2017b, p. 31)
[14] (Airports Commission, 2015, p. 238)
[15] (Airports Commission, 2015, p. 245)

47. RSP is promoting a reopened Manston Airport on the basis of providing capacity for dedicated freighter flights:

- Bellyhold freight comprises ca. 70% of UK freight (see Figure 4), a proportion that has been growing since 2004 (see Figure 5). Azimuth's freight forecasts do not assume any bellyhold freight[16]. We agree with this Azimuth assumption, and consider that the development of bellyhold freight at Manston is extremely unlikely.
- Azimuth's forecasts passenger traffic of ca. 1.4 million by the 20th year of operation[17]. We consider these forecasts to be optimistic. However, even taking these forecasts at face value, the passenger throughput would represent less than 1% of 2016 passenger traffic at London airports.

48. Therefore, rather than asking "*Can Manston Airport, with investment from RiverOak, relieve pressure on the UK network and meet the requirement of a nationally significant infrastructure project?*", more relevant, targeted questions would be:

- Considering planned airport expansions, will there be a need for further airport capacity in the UK for dedicated freighters?
- Will the South East in particular require additional capacity for dedicated freighters?
- Would a reopened Manston be well placed to effectively serve a significant proportion of the dedicated freighter market?
- Are there other potential airport options for new dedicated freighter capacity?

49. In the rest of the Executive Summary, we address each of the sub-questions above in turn.

2.3. Need for Further Airport Capacity in the UK for Dedicated Freighters

Current Situation

50. There is no overall shortage in UK airport capacity for dedicated freighter operations. Both of the two largest freighter hubs, East Midlands and Stansted, can accommodate significantly more freighter services than they currently operate (see Section 5.3).

51. The UK does lack available dedicated freighter capacity at its major passenger hub airport, Heathrow.

- Heathrow is also the UK's largest freight airport with ca. 65% of the UK's overall throughput (see paragraph 109).
- Freight forwarder activity has consolidated around Heathrow on the strength of its extensive network of long haul passenger services. These services, typically using widebody aircraft, provide substantial bellyhold cargo capacity.
- At Heathrow, only ca. 5% of freight is carried on dedicated freighters (see Figure 4). A lack of available runway slots restricts freighter activity. In the absence of operating constraints, major passenger hubs tend to also play a role as key hubs for freighter aircraft (e.g. Frankfurt). Freighter services complement the connectively provided by passenger flights, while the cargo industry benefits from economies of scale and scope from the consolidation of activity at a hub airport.

52. Where dedicated freighter flights cannot be accommodated at Heathrow (due to capacity constraints), freight customers have the following choices:

- Operate freighter flights (or use existing freighter flights) from other UK airports where capacity is available (e.g. Stansted, East Midlands).
- Transport freight in the bellyhold of passenger flights from Heathrow (or other UK airports).

[16] (Azimuth Associates, 2017 c, p. 11)
[17] (Azimuth Associates, 2017 c, p. 16)

- Transport freight to a major European air freight hub (e.g. Liege, Frankfurt), typically by road truck.
- Use surface modes of transport (road, rail, water) for the whole journey (note that this is not a realistic option for most potential air freight consignments due to the distances involved and/or urgency of shipment).

53. Azimuth asserts that UK air freight has been constrained since 2000[18]. Furthermore, Azimuth concludes that shortage of airport capacity is leading to more trucking of freight ("*flying freight from Manston, negating the need to truck, to and from European airports for air transportation*[19]").

54. We consider that these conclusions are highly simplistic:

- As discussed above, we agree there is a shortage of dedicated freighter capacity at the UK's main passenger hub airport (Heathrow). However, freighter capacity is available at other airports. For example, both Stansted and East Midlands have expanded freighter activity significantly since 2000, and continue to have spare capacity.
- Therefore, any shortage of air freight capacity in the UK relates specifically to Heathrow hub capacity rather than a more general lack of capacity.
- Trucking is a highly integrated component of the air freight business model, and not merely a substitute for air freighter flights when airport capacity is constrained. The increasing use of truck feeder services is due to cost efficiencies and is not restricted to the UK (see Figure 32). We see no evidence that the growth in trucking is primarily driven by lack of Heathrow capacity for air freighter flights.
- In any case, even if there were significant levels of trucking caused by constraints at Heathrow, this would only be reduced by the provision of more Heathrow runway capacity. As there is already spare capacity at other airports in the UK, provision of further capacity would not make any significant difference to trucking levels. There is no reason why economic decisions to truck freight rather than fly would change in the absence of new Heathrow capacity.

Future Requirement

55. We have assessed the future demand for air freight in the UK, reflecting some notable trends:

- Increasing role of passenger aircraft in the carriage of air freight, and the relative diminishing in importance of freighter aircraft. Passenger demand has developed strongly in recent years. This has led to expansion of cargo capacity in the bellyhold of passenger aircraft outstripping growth in air freight demand (see Figure 37).
- This trend has led to cutbacks in dedicated freighter operations from leading airlines such as Cargolux, IAG, Air France-KLM and Singapore Airlines (see paragraph 425). Airbus forecasts growth of just 42 freighters in European fleets by 2036[20]. In the UK, freight tonnes carried on all-freighter aircraft peaked in 2004, and has fallen from 37% of the total air freight to 30% by 2016 (see Figure 5). The most recent Department for Transport forecasts to 2050 assume the number of freighter flights in the UK will remain flat at 2016 levels[21].
- There has also been a clear move towards consolidation of air freight activity at major passenger or freight hubs[22]. In the UK, the leading 3 airports (East Midlands, Stansted and Heathrow) have steadily grown their share of overall UK air freight tonnes on dedicated freighter services – from 41% in 1990 to 86% in 2016 (see Figure 7). The UK bellyhold market is even more consolidated,

[18] (Azimuth Associates, 2017 a, p. 8)
[19] (Azimuth Associates, 2017 a, p. 19)
[20] (Airbus, 2017a, p. 105)
[21] (Department for Transport, 2017a, p. 33)
[22] See Paragraph 24 onwards for our definition of passenger and cargo hubs. Note that the location of Manston on a peninsula prevents its development as a cargo hub. Even if the airport was to successfully attract high cargo tonnage in the future, it would merely become a large cargo airport rather than a cargo hub.

with the leading 3 airports (Heathrow, Manchester, Gatwick) achieving a combined market share of 97%+ in each year since 1996 (see Figure 11).

56. These fundamental market trends have not been recognised or have been ignored by Azimuth in its assessment of the potential for a re-opened Manston.

57. We have developed a forecast of UK air freight demand to 2050, linked to UK economic growth (see Section 7.1). We forecast a compound annual growth rate ("CAGR") 2016-40 of 2.4%, much higher than recent growth rates (e.g. CAGR 2010-16 of 0.4%, CAGR 2000-2016 of 0.2%). This results in ca. 4.2m tonnes of demand in 2040.

58. Based on published expansion plans and various prudent assumptions (see Section 6.4), we estimate that the available air freight capacity at the leading 5 UK airports alone will be around 5m tonnes per year in 2040. This is comfortably higher than the envisaged demand levels. Furthermore, the potential freighter capacity is significantly above our freighter demand forecast, and the potential bellyhold capacity is significantly above our bellyhold demand forecast.

59. Furthermore, we do not envisage overall capacity shortages in the shorter term. Only towards 2050 could capacity start to become constrained, assuming no further development of capacity from 2040 onwards. Therefore, any business that Manston could capture would primarily be at the expense of other UK airports.

Conclusion

60. The UK currently has sufficient overall airport capacity for air freight, albeit capacity at Heathrow is constrained.

61. Based on planned expansions at the existing major airports, we do not envisage a need for additional freight capacity to be developed in the period to 2040, or possibly 2050.

62. Therefore, there is not a compelling need for development of further airport capacity for freighter aircraft in the UK.

2.4. South East Requirement for Additional Dedicated Freighter Capacity

63. Cargo is less time sensitive than passengers. Therefore, an airport's cargo catchment area is typically many times larger than its passenger catchment. This is one of the key factors that leads to the high degree of consolidation seen for air cargo.

- For example, Leipzig Airport considers its catchment covers a 10-hour trucking radius (see Figure 38), while Liege sees its catchment as all areas within access of a full day trucking (see Figure 39).
- East Midlands serves the whole of England and Wales, exploiting its central location in England.
- Similarly, the extensive network of long haul flights from Heathrow means it attracts freight from the whole of Great Britain.

64. Mainly due to the hub strength of Heathrow, 78% of 2016 UK air freight was flown from airports in the South East & East of England. Heathrow and Stansted alone achieved 65% and 7% market share respectively.

65. Much of the UK's high value manufacturing is located outside London and the South East[23]. In Q1 2015, only 15% of UK manufacturing jobs were located in London and South East[24]. Clearly, a substantial proportion of air freight using Heathrow in particular will be travelling to/from other areas of the UK.

66. We do not see a need for new air freight capacity to be located in the South East specifically. New capacity would be most usefully concentrated at existing major air freight hubs, whether in the South East

[23] (Heathrow Airport, 2014, p. 19)
[24] (House of Commons Library, 2015, p. 7)

(Heathrow, Stansted) or outside (East Midlands). This would enable the air freight industry to continue to benefit from the economies of scale and scope flowing from market consolidation.

67. The Airports Commission negatively assessed the freight potential of Gatwick due to its location. It stated, "*Gatwick's position to the south of London limits its effectiveness as a national freight hub*[25]." This is consistent with our view that locations which can be accessed from a wide national catchment (whether in the South East or not) are more advantageous than locations in less accessible parts of the South East. We would also consider Gatwick to be a more accessible location than Manston.

2.5. Market Position of a Reopened Manston

68. We have argued above that there is no requirement for additional air freighter capacity in the South East, over and above developments already in the pipeline (being consented or planned) at existing airports.

69. However, even if our assessment is incorrect and further capacity is needed in the future, Manston would not be an effective solution.

70. While a re-opened Manston would contribute to overall UK freighter capacity, it clearly would not provide "hub" capacity of the type that is constrained at Heathrow.

- The inability of Manston to achieve more than 43,000 tonnes[26] in any single year in the period from 2000 until its 2014 closure highlights that the capacity provided at Manston was not a suitable substitute for Heathrow freighter capacity.
- In the same way, many other UK airports have material underutilised freighter capacity despite Heathrow constraints.

71. Manston's geographical location severely restricts its ability to develop into a national dedicated freighter hub. Were Manston airport to be re-opened at some point in future, it would likely be competing directly with East Midlands and Stansted for cargo-only flights. The outlook for the airport in this scenario is poor.

72. Firstly, the location of Manston on a peninsula physically limits the size of its catchment area.

- Within a 3-hour drive, only the South East & East of England, and a small part of the Midlands, are accessible (see Figure 17).
- In comparison, most of England and Wales can be accessed within 3 hours of East Midlands Airport, while Manston's catchment is essentially a sub-set of the Stansted catchment.
- The case studies of Liege and Leipzig, as well as the strong growth of cargo at East Midlands, indicate the importance of a large catchment area and central location. While these airports attract cargo from an extensive area, they also benefit from strong cargo demand within their immediate catchment.

73. In addition to Manston's poor geographic location, it is also relatively far from important transport infrastructure. The motorway network is not especially close (the airport is ca. 22 miles from the M2 and 38 miles from the M20). Successful freight airports in the UK and Europe have been shown to be extremely close to the national motorway network, helping to minimise the shipper/consignee to airport transport time[27].

74. Secondly, there is a consensus[28] in the air freight industry that the ability to handle night flights is critical for many types of air cargo (in particular for express freight, but also for other types of cargo).

- East Midlands and Stansted are both able to accommodate flights 24 hours per day.

[25] (Airports Commission, 2015, p. 24)
[26] Average ca. 28,000 tonnes/year for the period 2000-2013 (last full year of operation). Source: CAA airport statistics.
[27] For example, East Midlands Airport is within 3 miles of the M1 motorway. Similarly, Stansted is less than 3 miles of the M11 motorway. The Heathrow Cargo Centre is within 3 miles of the M4, ca. 5 miles from the M25 and ca. 8 miles from the M3.
[28] For a typical industry comment on this issue, see paragraph 446

- Both Liege Airport and Leipzig Airport cite the ability to accept night flights, and the support of local government in doing so, as factors in their success.
- It is unclear (in the context of historic restrictions) whether or not night flights would be allowed at Manston Airport were it to reopen. However, it does seem clear that restrictions on night flying would have severe limitations for air cargo potential at the airport.

75. Finally, as noted previously, there is a clear move towards consolidation of freight activity at a few large airports. In order to be successful, Manston would need to reverse this well-established trend. It is not apparent how this could be achieved, even with markedly lower airport charges (which in turn would compromise the financial viability of the airport).

76. Therefore, even if there was a future need for additional airport capacity for freighter activity, Manston is poorly placed in both geographic and potential operational terms to service such a requirement. Other airports are in a much better position to exploit any such future opportunities.

2.6. Other Potential Options for New Dedicated Freight Capacity

77. Azimuth concludes that "*Manston is the only real choice for the location of a freight-focused airport in the South East of England*[29]". As discussed above, we dispute the need for a new freight-focussed airport, or that any such airport would need to be located in the South East. If new capacity was needed in the South East, a more central location than Manston's position on a peninsula would be desirable.

78. Bournemouth Airport is dismissed by Azimuth on account of its location and distance from the motorway network. We agree that these are significant disadvantages but similar issues apply to Manston (with its location arguably even more compromised than Bournemouth).

- From the South West, West London and the Midlands, Bournemouth is generally more accessible than Manston.[30]
- Bournemouth Airport[31] highlights that:

> *"With ample room to grow, our thriving cargo facility is expanding to meet the demands of importers and exporters from across the UK. Accommodating a huge variety of freight and passenger aircraft, Bournemouth supports cargo logistics round the clock, with the following benefits: 2271m runway, excellent good weather record, congestion free (with no slot restrictions), experienced in handling many cargo aircraft including the AN-124 Ruslan, 'Freighter friendly' airport management."*

79. As discussed, the South East is not necessarily the best location for new freighter capacity. Outside the South East, Doncaster Sheffield Airport has a central UK location. It markets itself as "*the UK's Freighter Gateway*[32]":

> *At the centre of the UK with easy access to the M18, M1, A1M, M62 and M180 Doncaster-Sheffield is the ideal airport for freighter operations. DSA is justifiably gaining the reputation as the most effective freighter airport in the UK. The attributes that are delivering this include…. exceptional performance record, 24 hour operation, runway 2,893m x 60m, CAT III, Class "D" controlled airspace, no slot constraints/congestion, Competitive jet fuel prices, short taxiing distances, excellent cargo reception and handling, inclusive pricing, NEQ capacity up to 9,300kg Hotac."*

[29] (Azimuth Associates, 2017 a, p. 19)
[30] For example, the following distances have been sourced from Google Maps for the typical fastest routing. Bournemouth Airport to Hounslow: 90 miles, Manston Airport to Hounslow: 103 miles. Bournemouth Airport to Bristol: 70 miles, Manston Airport to Bristol: 201 miles. Bournemouth Airport to Birmingham: 167 miles, Manston Airport to Birmingham: 197 miles.
[31] www.bournemouthairport.com/about-us/doing-business-together/cargo/
[32] www.therouteshop.com/profiles/doncaster-sheffield-airport/

80. Both these airports are currently operational, and benefit from a large site with a long runway. Doncaster Sheffield operates 24 hours a day, whilst night flights at Bournemouth can be arranged with prior notice.

81. Furthermore, Birmingham and Doncaster Sheffield have longer runways than Manston, with spare capacity to develop freighter activity. Both have superior locations than Manston.

2.7. Conclusion

82. It is highly unlikely that a re-opened Manston could play any significant role in serving the needs of the UK air cargo industry. There is currently no shortage of overall capacity, and future demand growth into the long term can be met with planned expansion from the leading cargo airports in the UK.

83. The Azimuth freight forecasts for Manston are summarised below:

- In Year 2 (the first year of freight traffic), tonnage is forecast to be more than double the previous Manston peak annual value.
- By Year 11, freight throughput is forecast at similar tonnage to 2016 Stansted performance. Growth from Year 2 to Year 11 is forecast at CAGR 9.7%.
- By Year 18, Manston is forecast to exceed the 2016 freight tonnage at East Midlands Airport (the largest dedicated freighter hub in the UK).

84. We consider the forecasts to be extremely optimistic, not credible or likely, with negligible supporting evidence.

- Growth in freight at Manston would be unprecedented in a UK market context, and in complete contrast to previous historic performance.
- As discussed previously, we do not expect there to be an overall shortage of freighter capacity in the UK or South East. Even if we are wrong in this assessment, Manston and other smaller airports have shown no signs of benefiting from supposed capacity shortages in recent years. Furthermore, there is demonstrable spare capacity at Stansted and East Midlands, both better established and located.
- The rationale for why Manston will be able to achieve a massive uplift on previous performance is weak. The stated advantages of using Manston were present when the airport struggled to grow freight volumes, despite investment in infrastructure and marketing (the previous owners invested £7m on new aprons and taxiways, increasing the freight capacity to 200,000 tonnes[33] per annum). Lack of Manston capacity was not a factor.
- As well as the forecasts ignoring historic performance, they also do not reflect the very clear market trends towards consolidation of freight at major passenger and dedicated freighter hubs. UK airports outside the major three freight hubs have seen volumes fall. There is also a trend away from freighter services towards bellyhold freight.

85. Manston previously operated as a niche air freight airport. While it could theoretically regain this role in the future, its structural disadvantages (location, lack of critical mass, lack of passenger hub, night flight restrictions etc.) will severely limit its potential. Even if reinvested, relaunched and supported, we would not expect freight volumes to be materially above historic levels, and considerably below the volumes forecast by Azimuth.

86. Finally, the forecast of freighter ATMs is simply not credible.

- By year 20, ca. 17,000 freighter flights are forecast for Manston.

[33] (Wiggins Group plc, 2002, p. 16)

- This represents one-third of current UK freighter flights, in a market where the number of freighter ATMs has been contracting. This trend has been recognised by the DfT, with its 2017 forecasts to 2050 assuming the number of freighter flights in the UK will remain flat at 2016 levels[34].

87. In particular, we note that York Aviation's professional opinion[35] is that the capability of Manston Airport is 21,000 annual air cargo aircraft movements. This capacity is more than enough to accommodate any potential a re-opened Manston Airport may have.

88. In paragraph 48, we put forward four questions in relation to RSP's proposals for Manston. These are more relevant and targeted than the broader questions posed by Azimuth in its first report[36]. The answers to our questions have been developed over the course of the Executive Summary of this report. We summarise our conclusions in the table below.

Question	Response
Considering planned airport expansions, will there be a need for further airport capacity in the UK for dedicated freighters?	No, planned expansions at existing airports should comfortably provide sufficient freighter capacity until 2040 and beyond.
Will the South East in particular require additional capacity for dedicated freighters?	No, Stansted is planning significant capacity growth. A third runway at Heathrow will provide additional bellyhold capacity (putting downward pressure on freighter demand). Finally, the South East market can be well served by airports more centrally located in England.
Would a reopened Manston be well placed to effectively serve a significant proportion of the dedicated freighter market?	No, a reopened Manston would only serve a niche role, similar to its historic record. It has a poor location and operating restrictions.
Are there other potential airport options for new dedicated freighter capacity?	Yes, there are many UK airports with excess freighter capacity. For example, Doncaster Sheffield Airport has a central UK location. It markets itself as the UK's freighter gateway. It benefits from a large site with a long runway, and has 24 hour operations.

Table 1 – Summary of Analysis of Potential Future Freight Role for a Reopened Manston Airport

89. As can be seen above, when one asks more targeted questions, the outcome is very different to that presented by Azimuth. Our overall conclusion is that the RSP proposals and the Azimuth forecasts are deeply flawed. The outlook put forward by RSP / Azimuth does not reflect market realities. We would expect freight tonnage and freight ATM outturn at a reopened Manston to be considerably below the Azimuth forecasts.

[34] (Department for Transport, 2017a, p. 33)
[35] (York Aviation, 2017)
[36] (Azimuth Associates, 2017 a, p. I)

3. Review of Azimuth Reports - Context

3.1. Aims of Azimuth Report

90. This section reviews the first Azimuth report, titled "*Manston Airport: A National and Regional Aviation Asset, Volume I, Demand in the south east of the UK, March 2017*".

91. The first Azimuth report[37] aims to answer the following questions:

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

92. Azimuth concludes that *"the answer to each of the above questions is overwhelmingly yes"*. However, the questions conflate different issues. The first two questions provide poor context for the third question, and are not relevant to RSP's proposals for Manston.

93. We agree that the UK needs additional airport capacity, and that it should be located in the South East of England. This is not surprising given that:

- In September 2012, the Government asked Howard Davies to chair an independent Commission to identify and recommend options to maintain the UK's position as Europe's most important aviation hub[38] ("the Airports Commission").
- The Airports Commission concluded that "*a new runway in the South East is needed by 2030*". It also "*concluded that the best answer is to expand Heathrow's runway capacity*" as "*Gatwick… is unlikely to provide as much of the type of capacity which is most urgently required: long-haul destinations in new markets. Heathrow can provide that capacity most easily and quickly. The benefits are significantly greater, for business passengers, freight operators and the broader economy*[39]".
- In October 2016, the Government announced that its preferred scheme to meet the need for new airport capacity in the South East was a Northwest runway at Heathrow. This was subsequently confirmed in its revised draft Airports National Policy Statement ("ANPS"), published in October 2017. The ANPS[40] stated that "*The Heathrow Northwest Runway scheme delivers the greatest support for freight. The plans for the scheme include a doubling of freight capacity at the airport*." The draft ANPS, once ratified by Parliament, will settle the "need" case for the Northwest runway at Heathrow, but no other form of airport development.

94. However, while we agree with the positive response to the first two questions, it does not automatically lead to a "yes" for the third question. The third question covers fundamentally different issues to the first two questions.

95. There are clear distinctions between different types of airport capacity. The Gatwick option would have provided more incremental runway movements than the recommended Heathrow option[41]. However, a key reason for recommending Heathrow was that *"It delivers more substantial economic and strategic benefits than any other shortlisted option, strengthening connectivity…*[42]*"*

[37] (Azimuth Associates, 2017 a, p. I)
[38] (Airports Commission, 2015, p. 37)
[39] (Airports Commission, 2015, p. 4)
[40] (Department for Transport, 2017b, p. 31)
[41] (Airports Commission, 2015, p. 238)
[42] (Airports Commission, 2015, p. 245)

96. RSP is promoting a reopened Manston Airport on the basis of providing capacity for dedicated freighter flights:

- Bellyhold freight comprises ca. 70% of UK freight (see Figure 4), a proportion that has been growing in recent years (see Figure 5). The Azimuth freight forecasts do not assume any bellyhold freight[43]. We agree with this Azimuth assumption, and consider that the development of bellyhold freight at Manston is extremely unlikely.
- Azimuth forecasts passenger traffic of ca. 1.4 million by the 20th year of operation[44]. We consider these forecasts to be optimistic. However, even taking these forecasts at face value, the passenger throughput would represent less than 1% of 2016 passenger traffic at London airports.

97. Therefore, rather than asking "*Can Manston Airport, with investment from RiverOak, relieve pressure on the UK network and meet the requirement of a nationally significant infrastructure project?*", more relevant, targeted questions would be:

- Considering planned airport expansions, will there be a need for further airport capacity in the UK for dedicated freighters?
- Will the South East in particular require additional capacity for dedicated freighters?
- Would a reopened Manston be well placed to effectively serve a significant proportion of the dedicated freighter market?
- Are there other potential airport options for new dedicated freighter capacity?

98. Over the course of this report, we address each of the sub-questions above in turn (an overview of our analysis is included in the Executive Summary).

3.2. Aviation Economic Contribution

99. Azimuth[45] refers to a study by the Centre for Economics and Business Research on the impact on trade of airport capacity shortages. Given the distinctions between different types of airport capacity[46], general references to the economic impacts of airport capacity shortages have limited relevance. More relevant is whether there is or will be a shortage of airport capacity for dedicated freighter aircraft. In Section 5, we address this issue directly.

100. On a similar basis, references to a European shortage of runway capacity[47] in Paragraph 2.2.2 are too general to be meaningful in the context of Manston Airport. Additional capacity can only contribute to alleviating shortages if it is the right type of capacity and in the right location.

3.3. RSP Vision for Manston Airport

101. The RSP vision for Manston Airport[48] also creates misconceptions. The Azimuth report states the vision is "*To revive Manston as a successful freight-focused airport*". This implies Manston was previously a successful freight airport. In analysing this, the following points are particularly relevant:

- Its throughput has never exceeded ca. 43,000 tonnes or more than 2.0% UK market share in a single year.
- The airport was also chronically loss making, with major operating losses each year from 2006 until its closure (period of data availability).

[43] (Azimuth Associates, 2017 c, p. 11)
[44] (Azimuth Associates, 2017 c, p. 16)
[45] (Azimuth Associates, 2017 a, p. 5)
[46] Passenger hub capacity, other hub capacity, freighter hub capacity, other freighter capacity, geographic location of capacity relative to demand etc.
[47] (Azimuth Associates, 2017 a, p. 5)
[48] (Azimuth Associates, 2017 a, p. 1)

- The historic volumes and financial performance clearly indicates that Manston Airport was not a viable financial proposition, despite considerable investment in freight capacity.

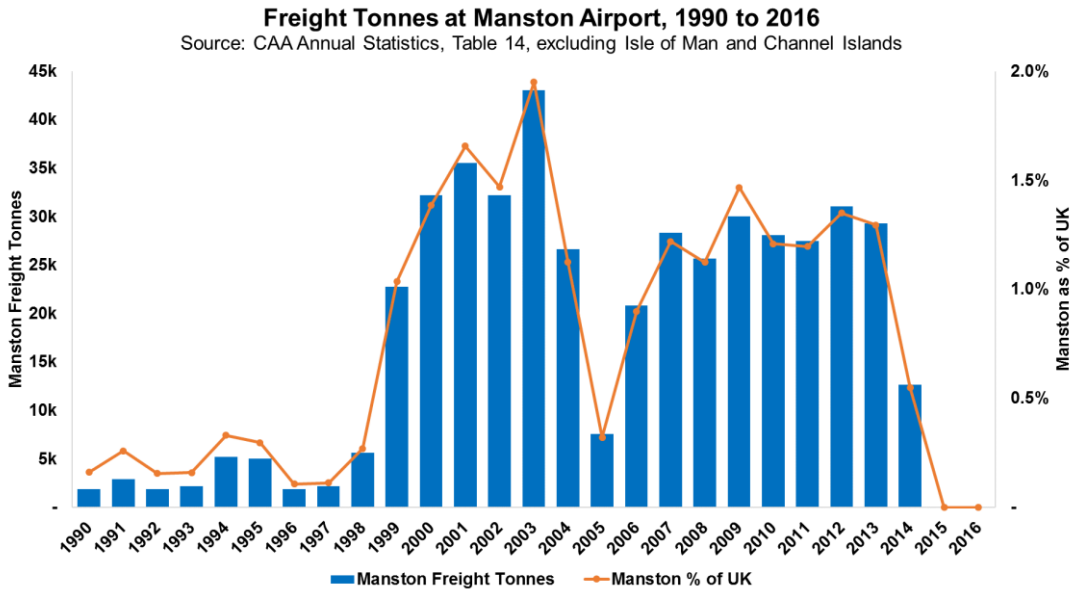


Figure 1 - Manston Airport Freight Tonnes 1990-2016



Figure 2 - Manston Airport Operating Margin (Operating Profit / Revenue) 2006-2014

102. As part of the RSP vision, it is stated that "*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.*"

- This description ignores Heathrow, which accounted for ca. 65% of all UK freight in 2016. It also implies, without foundation, that the focus on integrators at East Midlands and Stansted is incompatible with dedicated freighter provision.
- Furthermore, no evidence is presented to support the assertion that other UK airports are unable (either now or in the future) to support rapid turnaround times or possess specialist security clearing ability.

103. The reported vision also comments that "*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*."

- We highlight in paragraph 219 that the surface catchment area for freight is very wide, and there is no requirement for additional airport capacity for freight to be located in the South East specifically.
- The comment about Manston acting as a fourth runway for Heathrow is evidently untenable. Manston is ca. 100 miles from Heathrow, a similar distance as Birmingham Airport. Heathrow's existing two runways recorded ca. 473,000 air transport movements in 2016[49] (ca. 236,500 per runway), whereas Manston has never achieved more than 5,000 commercial air transport flights (passenger, cargo, air taxi combined) in a single year in the period since 2000.

[49] CAA Airport Statistics

4. Development of the UK Air Cargo Industry

4.1. Introduction

104. This section provides an overview of the development of the air cargo sector in the UK. The aim of this section is to highlight the key trends and the characteristics of the main airport players.

105. This analysis is then referenced in the following sections when considering the future outlook for the sector, and the role a reopened Manston could conceivably play.

4.2. UK Air Freight Development Since 1990

106. Since 1990, the UK air freight market can be divided into two distinct periods based on the growth trends seen. The period 1990-2000 was generally one of strong growth, with CAGR of 6.9% and positive annual growth in 9 of 10 years. In contrast, the period since then (2000-2016) has been one of stagnation (CAGR 0.2%, positive annual growth in only 8 of 16 years).

107. The 11th September terrorist attack in 2001, and the global financial crisis in 2008-09 coincided with particularly poor years for the UK air freight market.

108. In 2016, 2.4m tonnes of freight tonnes was handled at UK airports. This is the first year the previous 2004 peak was (slightly) exceeded.

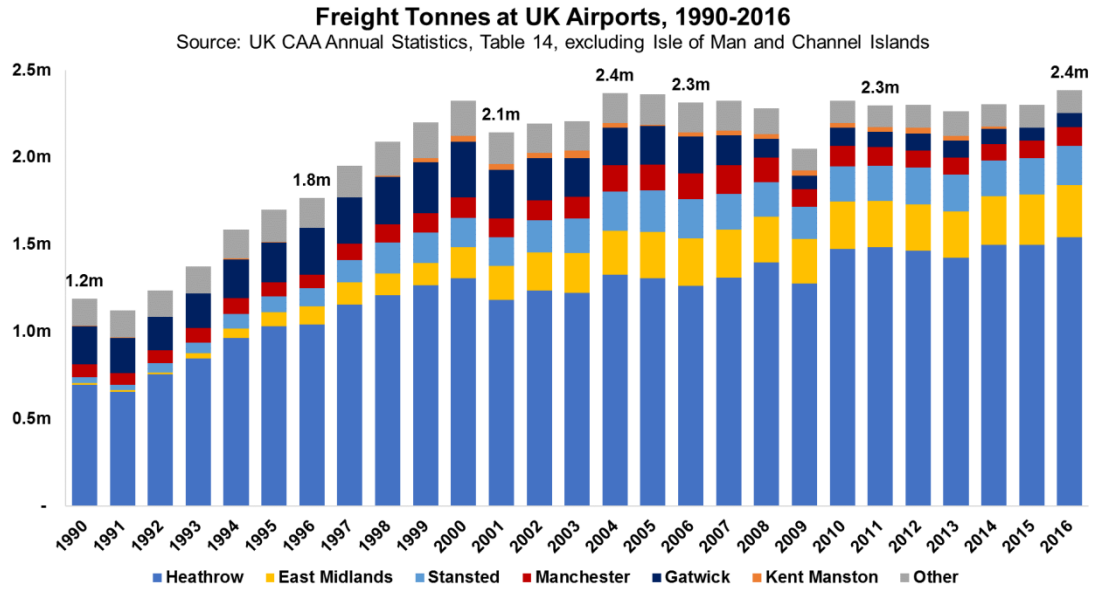


Figure 3 – Timeseries of UK freight tonnage

109. Heathrow is the airport in the UK that handles the most air freight. It has occupied this position through the entirety of the period 1990-2016. This is despite having constrained capacity (on the number of aircraft movements) through much of the period. In 2016 the airport achieved a market share of 64.6%.

110. East Midlands and Stansted are now the second and third largest airports for air freight in the UK. It has taken these airports 20+ years to reach this level, having grown from a very low market share in 1990. They had a 2016 market share of 12.6% and 9.4% respectively.

111. Manchester is the fourth largest UK airport for air freight. Note that it has grown very slowly, and continues to do so (1990-2016 CAGR of 1.6%, compared to 2.8% for UK airports excluding Manchester; 2011-2016 CAGR of 0.25%, compared to 0.77% for UK airports excluding Manchester).

112. In 2016 Gatwick was only the 5th largest UK air freight airport, having been clearly second-largest until ca. 2000.

113. Between them, these 5 airports accounted for ca. 95% of all UK air freight handled in 2016 (up from 87% in 1990).

114. Note that at no time in the period since 1990 has Manston played a significant part in the UK air freight market. Its share peaked at 2.0% in 2003, and in the 5 full years prior to its closure in 2014 (2009-13), it had an average share of 1.3%. The number of cargo ATMs only exceeded 1,000/year on a single occasion since 2000 (1,081 in 2003), averaging 462/year in the 2009-13 period (see Section 4.11).

4.3. UK Freighter versus Bellyhold Mix

115. At the top 5 airports in the UK, there are two distinctly different models of freight operation in place. At East Midlands and Stansted, virtually all freight is carried on cargo only aircraft (the low-cost carriers that operate passenger flights from these airports do not currently handle freight).

116. In contrast, at Heathrow, Manchester and Gatwick, less than 10% of freight is carried on cargo only aircraft (5.4%, 9.2% and 0.0% respectively).

- Overall, 29.7% of UK air freight in 2016 was carried on cargo only aircraft, with 70.3% carried in the bellyhold of passenger aircraft.

117. Despite Heathrow's low *proportion* of freight carried on cargo only aircraft, it continues to handle a significant share of the total UK freight carried on cargo aircraft[50].

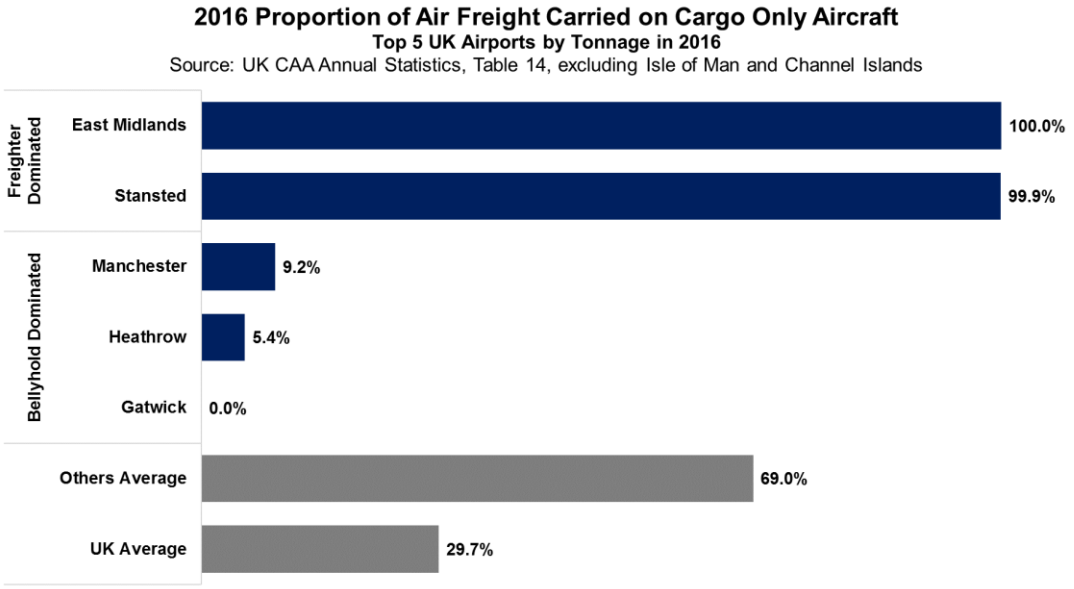


Figure 4 – Freighter/Bellyhold split at selected UK airports

[50] In 2016, Heathrow handled 12% of all UK freight carried on cargo only aircraft (a share it has broadly maintained since 2003).

118. Freight carried on all-cargo aircraft peaked in 2004, and has fallen significantly since while bellyhold freight has generally been growing. This is consistent with global trends highlighted in the appendix (Section 11.3) of this report.

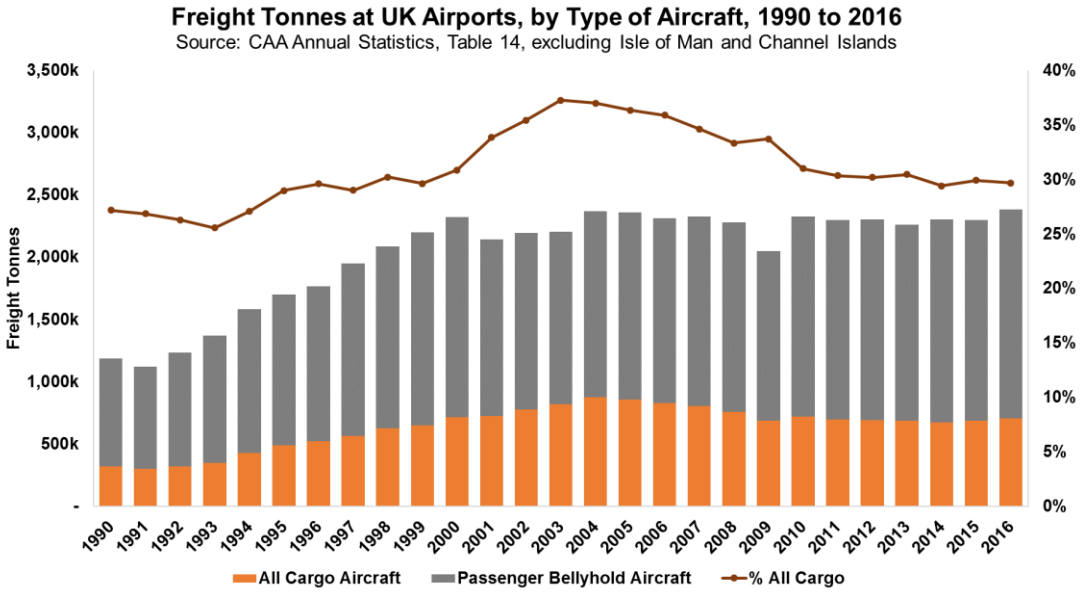


Figure 5 – Split of UK air freight between bellyhold and dedicated freighter aircraft

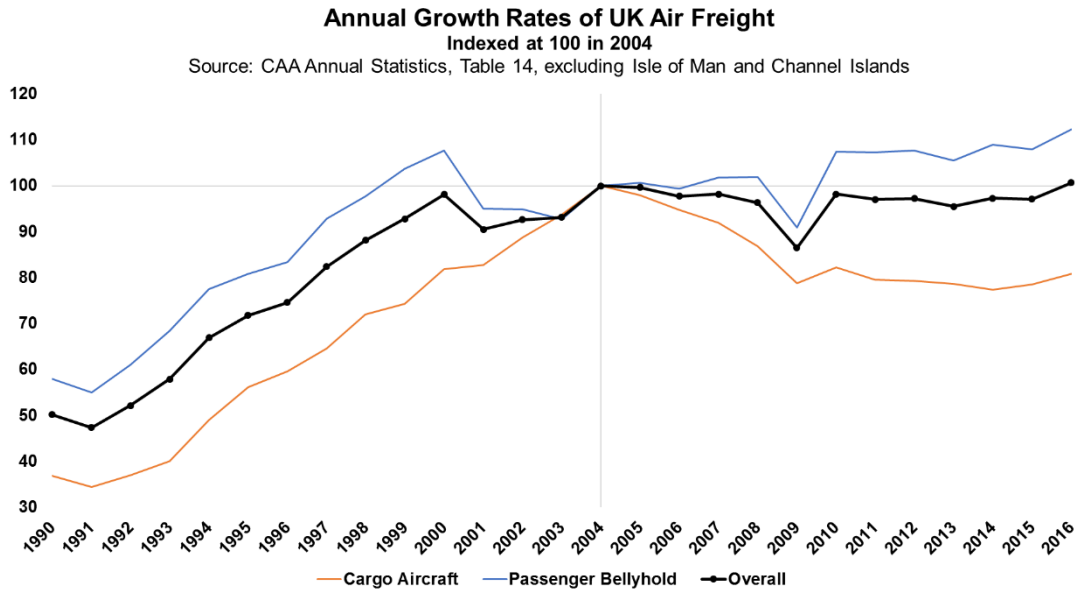


Figure 6 – Annual growth rates of UK freight

4.4. UK Freight on Cargo Only Aircraft

Airport Consolidation

119. In 1990, there were many UK airports from which carriers operated cargo only flights. Since then, there has been a very clear trend to consolidate cargo only operations at a few airports. In 2016, the three largest airports for freight (carried on cargo only aircraft) accounted for 86% of this UK market, up from 41% in 1990.

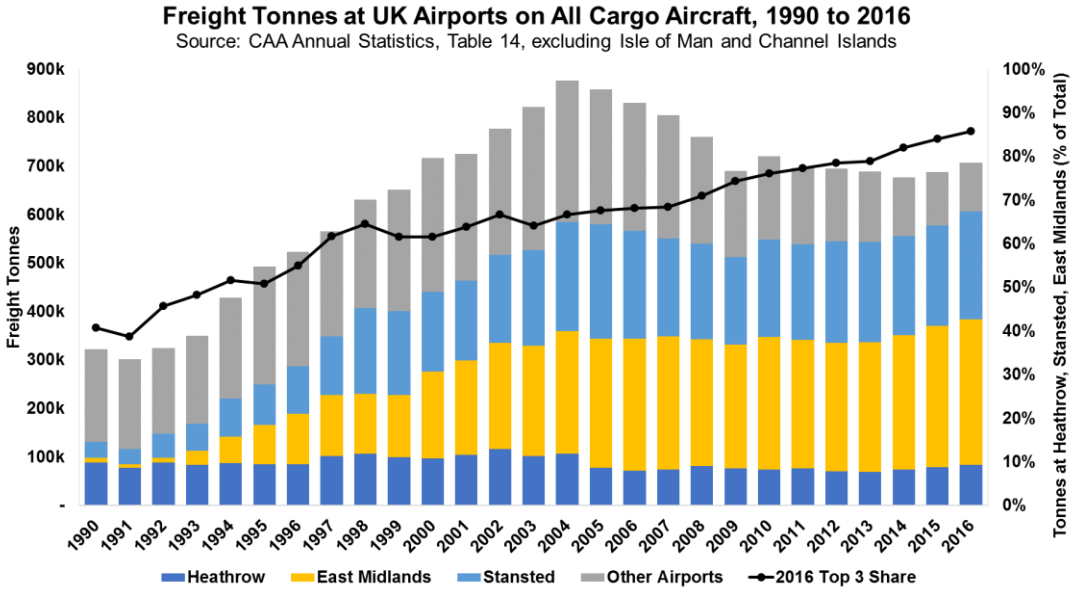


Figure 7 – Timeseries of UK freight on cargo-only aircraft

120. Historically, the following four airports have all been highly ranked in the UK for freight on cargo aircraft:

- Liverpool #5 in 1996 (peak tonnage in 1995, ca. 30,000 tonnes).
- Belfast International #4 in 2015 (ca. 38,000 tonnes in 2006).
- Prestwick #4 in 2001 (ca. 43,000 tonnes in 2001).
- Manston #4 in 2013 (ca. 43,000 tonnes in 2003).

121. However, by 2016 total freight on cargo aircraft across these airports was less than 20,000 tonnes (with Manston having shut completely).

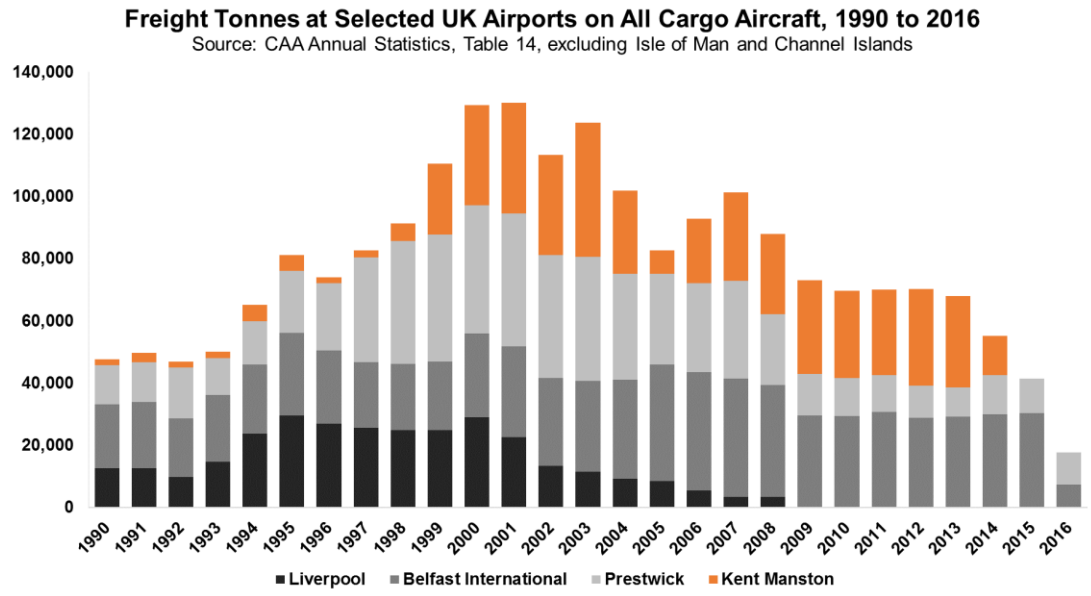


Figure 8 – Reduction of freight on cargo-only aircraft at selected airports

122. Note that none of the airports above has material capacity constraints. The trend towards consolidation of freight at a few airports is driven by cost efficiencies. It has resulted in airports which previously had significant freight volumes on all-cargo aircraft seeing their share of the market shrink/disappear.

123. In fact, of the 16 airports with more than 1,000 tonnes of freight on cargo aircraft in 1990, only 3 had higher equivalent freight volumes by 2016 (East Midlands: +290,000 tonnes, Stansted: +191,000, Luton: +4,000 tonnes, other 13 airports combined: -134,000 tonnes).

124. A similar trend can be seen when analysing the number of cargo aircraft movements; there is a sharp reduction in freighter flights from airports outside the "big three" of Heathrow, Stansted and East Midlands.

- Total freighter flights from other airports fell by almost 75% between 2000 and 2016 (from ca. 74,000 to ca. 19,000). Birmingham is the only significant cargo airport in this category that managed any meaningful growth in cargo ATMs (from 497 in 2000 to 1,184 in 2016).
- The number of freighter flights from the top 3 airports (Heathrow, East Midlands and Stansted) has varied relatively little over the same period.

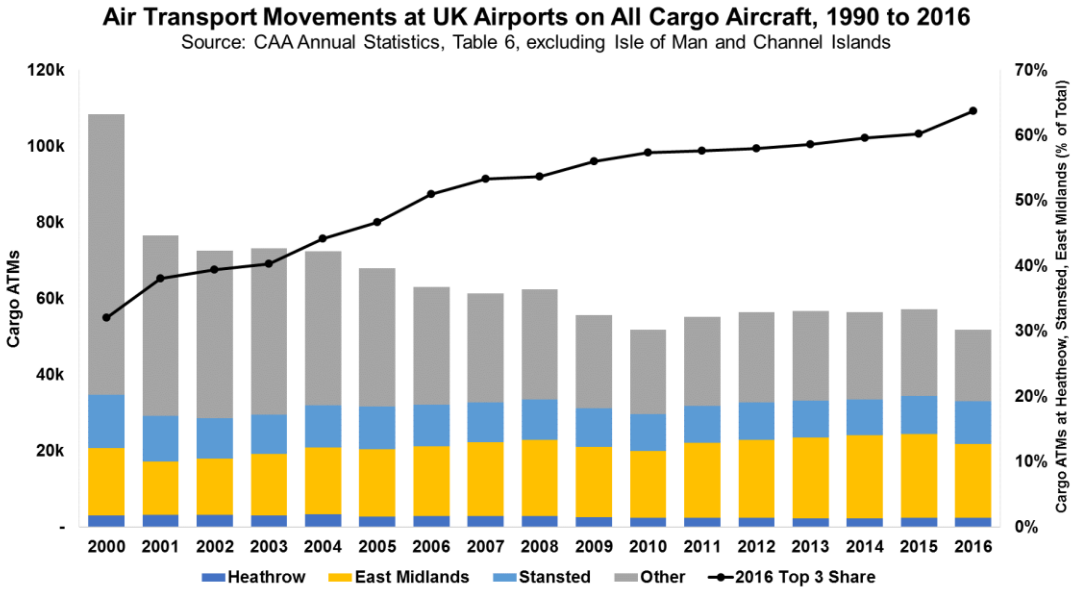


Figure 9 – Consolidation of freight on cargo-only aircraft at Heathrow, East Midlands and Stansted

125. Note that the decline in freighter movements has generally occurred at airports with limited infrastructure constraints. This indicates that airport capacity issues are not the main driver for the reduction in freighter flights at UK airports.

126. The Azimuth cargo ATM forecasts for Manston exceed 17,000 by year 20 (see Figure 25). This forecast should be seen in the following context:

- The most recent (2017) Department for Transport forecasts to 2050 assume the number of freighter flights in the UK will remain flat at 2016 levels[51].
- The Manston cargo ATM forecast is equivalent to 33% of the 2016 UK cargo ATM total, and over 80% of 2016 UK cargo ATMs if the two dedicated freighter hubs (East Midlands and Stansted) are excluded.
- After East Midlands and Stansted, Edinburgh is the next largest UK airport in terms of cargo ATMs, with 5,195 flights in 2016 (less than one-third of the projected Manston level in year 20).
- Since 2001, East Midlands and Stansted are the only UK airports to surpass 10,000 cargo ATMS in any single year.

[51] (Department for Transport, 2017a, p. 33)

Cargo-only Growth at a Regional Level

127. The change over time in the volume of freight carried on cargo only aircraft differs significantly by UK region. This is at least partially due to the locations of the larger airports at which freight has tended to consolidate since 2003.

128. For example, freight on dedicated cargo aircraft has grown substantially in the Midlands region, where East Midlands Airport has steadily developed into a major base for cargo only operations (in particular, express cargo). In contrast, freight on dedicated cargo aircraft has fallen in recent years in both the South East & East of England region and the Other UK regions.

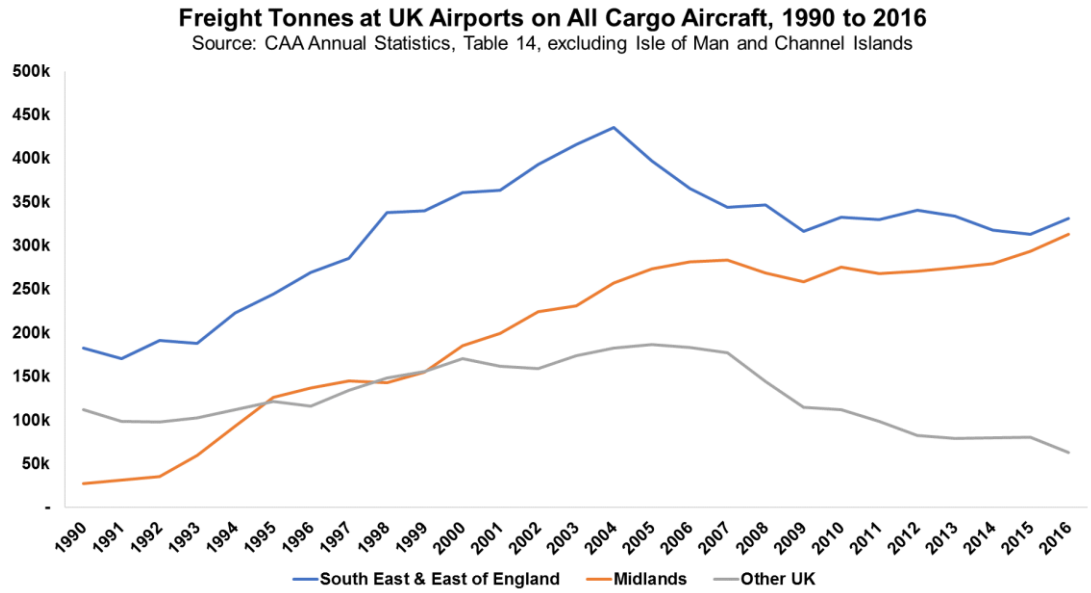


Figure 10 – Breakdown of UK freight on cargo-only aircraft, by region.

129. This reduction in freight on dedicated cargo aircraft in the South East & East region is sometimes attributed to shortage of suitable airport capacity. However, this does not explain the similar decline seen in the Other UK regions. Nor does it explain why this decline has not continued at the South East & East of England region airports through the period 2009-16 (through which the same constraints existed, and the decline continued at Other UK regional airports).

4.5. UK Bellyhold Freight

130. Heathrow handled 87% of all UK bellyhold freight in 2016. Manchester and Gatwick are the only other airports with significant bellyhold freight; in 2016, they had bellyhold market share of 5.9% and 4.7% respectively. These three airports have been the largest three airports for bellyhold freight since 1990, and have held a bellyhold market share of 96-98% over this period.

131. Heathrow dominates this segment as a result of its extensive long-haul network operated by wide body aircraft, which have significant cargo capacity. Freight tonnage on passenger aircraft has continued to grow at Heathrow (CAGR 2006-16 2.0%) despite the airport effectively operating at full runway capacity.

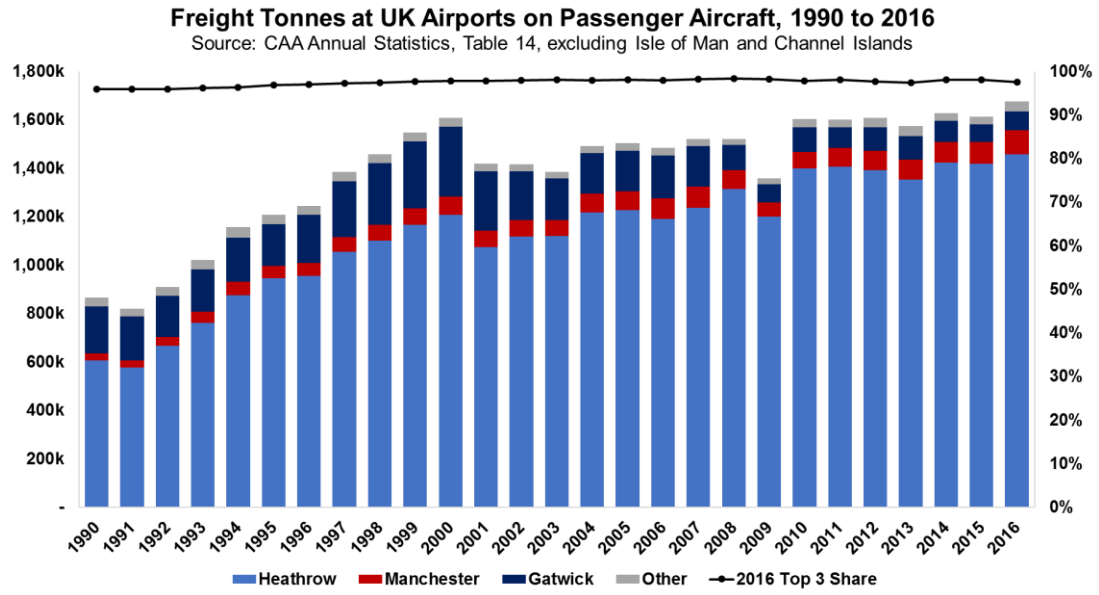


Figure 11 - Timeseries of UK freight on passenger aircraft

4.6. UK Air Mail

132. Mail is a relatively minor component of overall UK air cargo (ca. 200,000 tonnes in 2016 compared to 2.4m tonnes of air freight). For completeness, we include a brief overview of the UK air mail sector.

133. While volumes have fluctuated year on year, there has been no sign of sustained growth since the turn of the century (consistent with the widespread adoption of electronic communications).

134. As with air freight, air mail is concentrated on a small number of airports (Heathrow, East Midlands, Stansted, Edinburgh), with similar consolidation trends. Royal Mail has focussed on a small number of airports for night mail flights.

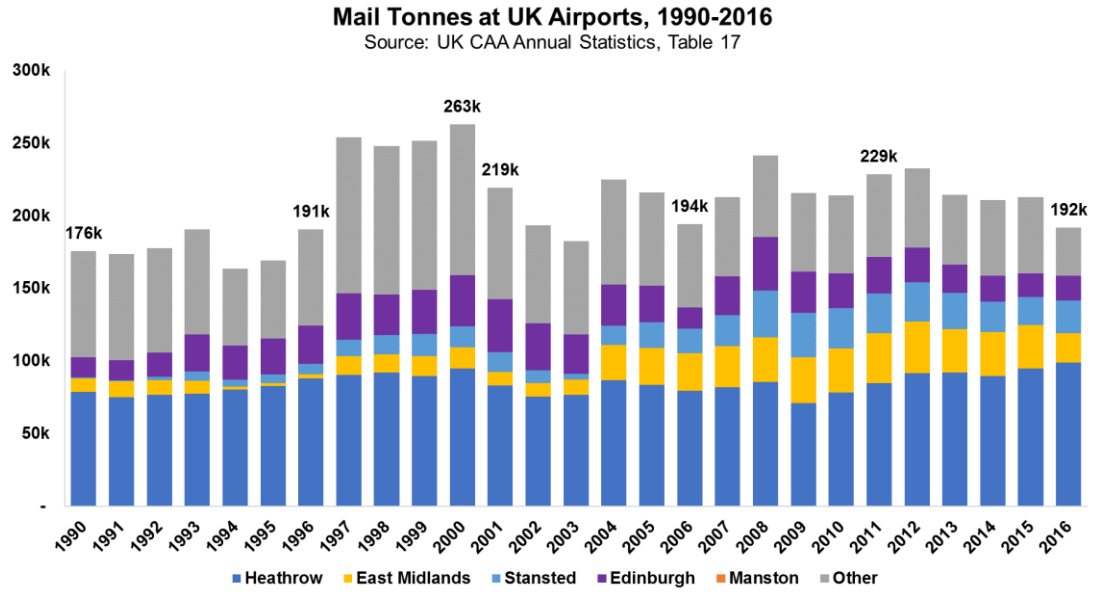


Figure 12 – Timeseries of UK Mail tonnage

4.7. Heathrow

135. As previously noted, Heathrow is the largest freight airport in the UK by some margin (as well as the largest passenger airport and only major passenger hub). It dominates the UK bellyhold segment and has a significant share of UK freight carried on dedicated freighters[52].

136. Despite operating very close to its air transport movement (ATM) limit for a number of years, Heathrow has managed to grow the volume of freight it handles faster than the overall UK market. It has had a higher annual growth rate than the average of other airports in the UK in 7 of 11 years over the period 2006-16, and also has a higher CAGR over that period (+2.0% compared to -2.2% at other UK airports).

137. It is likely that Heathrow cargo capacity has also been increasing through the adjustment of its mix of aircraft. There are two aspects to this:

- An increase in the proportion of ATMs allocated to widebody long haul flights, instead of narrow-body short-haul flights;
- The tendency for new long haul aircraft types (with the notable exception of the A380) to have more space for cargo than previous models.

138. We analyse each of the above factors in turn in the following paragraphs.

Widebody Share of Overall Flights

139. Data from OAG shows that the widebody share of Heathrow annual ATMs has risen from 34.0% in 2007 to 38.8% in 2017. Only two years in the ten-year period 2007-17 have seen this proportion fall. The airport stated in 2016 that "*fleet size at Heathrow has not fully matured and there is further potential to upsize / densify*"[53].

Cargo Capacity for Newer Aircraft Types

140. In general, older aircraft types have a lower cargo capacity than their newer equivalents. Of the older aircraft, the B747-400 is the most common in the UK. Likely replacements for this aircraft all have significantly higher cargo volume (given the payload available, volume is likely to be the constraining factor in the majority of markets to/from the UK). For example, the B777-9X has indicative cargo capacity of 109m^3 compared to just 71m^3 for the B747-400.

141. Further, industry sources reinforce the view that newer aircraft have a beneficial impact on cargo capacity. For example, American Airlines has commented:

> *"The introduction of the 787-9 brings another more fuel-efficient aircraft type with even greater cargo capacity into the American Airlines fleet…. On routes where we operate the aircraft, our cargo customers will see notable capacity improvements"*[54]

142. An exception to the trend for newer aircraft to have more cargo capacity is the A380, which has less cargo capacity than a B747. However, there are no indications that there will be any material increase in the prevalence of this aircraft in the UK[55].

143. Further analysis is provided in the appendices (see Section 13.1).

[52] The number of cargo ATMs operated at Heathrow is fairly low (ca. 2,500 in 2016) but average loads are high.
[53] (Heathrow Airport, 2016a, p. 8)
[54] (Vance, 2016)
[55] See Section 13.2 in appendix

144. The following charts, based on UK CAA data, shows that Heathrow has generally been successful at increasing its average freight tonnage per ATM, helping to maintain growth despite operating near its ATM limit.

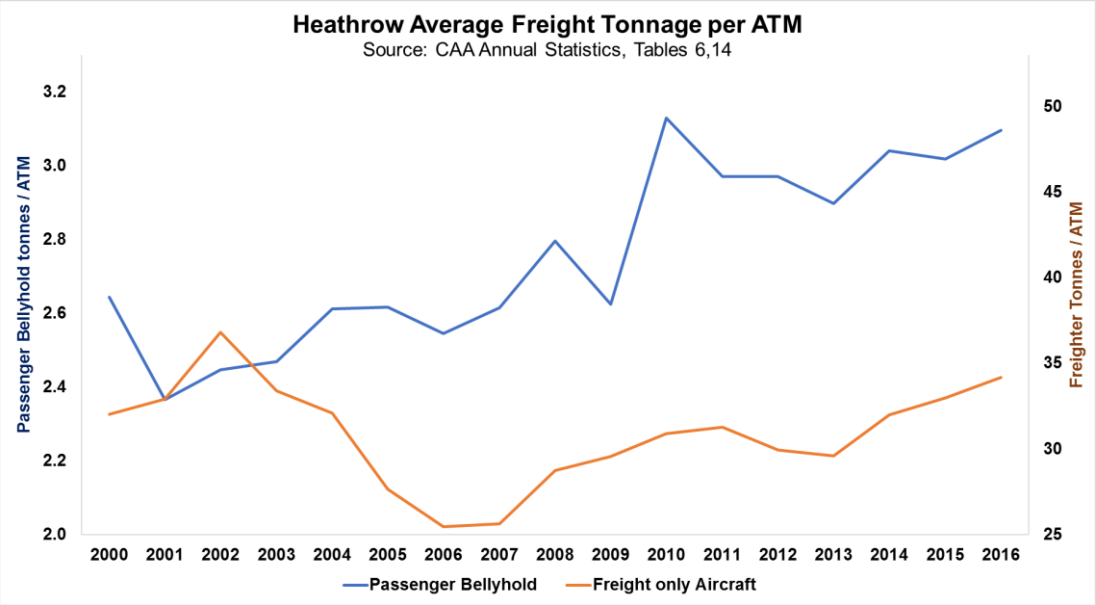


Figure 13 – Change over time of average tonnage per ATM at Heathrow

4.8. East Midlands

145. East Midlands Airport has a significant freighter operation. Since 2000, it has been the largest airport in the UK for cargo-only operations by tonnage handled (circa 300,000 tonnes of freight and ca. 20,000 tonnes of mail in 2016). The number of cargo ATMs in 2016 was ca. 19,000.

146. Almost all the freight handled by the airport is carried on cargo-only aircraft[56]. Bellyhold freight represents a tiny minority of tonnage at the airport, as most passenger flights are operated by low-cost carriers, which do not currently carry freight.

147. The type of freight handled at East Midlands Airport is predominately express cargo, a sector of the air freight market that has shown strong growth over the past decade. East Midlands is also a significant mail handling airport in the UK[57]. The airport states:

> *"DHL is the largest operator with services to key hubs in the USA and in Europe. UPS also link to their hubs in the USA and Europe and TNT have a smaller operation with a link to Europe"*[56]

148. Several of these integrators have invested significantly in operations at East Midlands Airport. For example, DHL invested £90m on infrastructure at East Midlands Airport in 2014[58].

149. The appeal of East Midlands Airport to the integrators is linked to the airport's location in the centre of England, where it is well placed to serve the whole of the UK. The ability to operate night flights is a key advantage. The airport states:

> *"The express freight operators provide an international next-day delivery service. This relies on the excellent surface access connectivity (90% of England and Wales is within a 4*

[56] (East Midlands Airport, 2015, p. 57)
[57] (East Midlands Airport, 2015, p. 16)
[58] (DHL, 2014)

hour (55mph) truck drive away from East Midlands Airport) along with the ability to operate aircraft at night"[57]

150. For express freight in particular, it is important to minimise trucking time between the shipper/consignee and the airport. As such, the location of an airport relative to warehouse locations is important. The map below highlights locations of large warehouse facilities in the UK[59]. A large number are seen to be near to East Midlands Airport, or on the motorway network with quick access to East Midlands Airport.

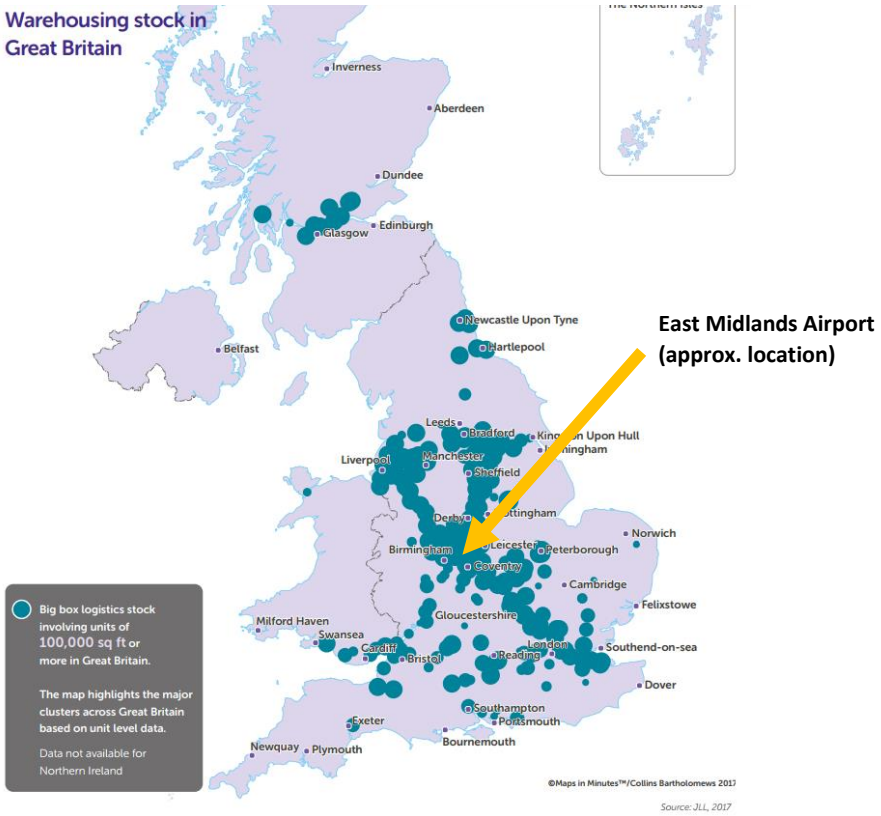


Figure 14 – Locations of large warehousing units in the UK, Source: Freight Transport Association

151. Regarding accessibility of the airport, East Midlands Airport states:

"There are in the region of 500 HGV movements to and from East Midlands Airport every day. However because of the nature of the freight hubs at East Midlands Airport, with pure-freight aircraft flying overnight, the vast majority of these vehicle movements take place very late at night (normally after 9pm) and very early in the morning (between 2am and 5am) and as such have no impact on peak motorway traffic levels"[57]

152. This pattern of utilisation fits with the airport's traffic being weighted heavily toward express freight. By implication, we can say that the vast majority of truck movements to/from East Midlands are not impacted by peak motorway traffic levels (as they are not using the motorway network at these times).

153. The "*East Midlands Gateway*", a project consisting of new warehousing and a rail freight station, is currently in development at a site next to East Midlands Airport. It is planned that the first warehouses will be occupied by September 2018. Construction of the rail station is due to begin after December 2019[60].

[59] (Freight Transport Association, 2017, p. 74)
[60] http://slp-emg.com/wp-content/uploads/2017/05/New-branding-A3.pdf

154. The importance of night flights to express freight has been stated before in this document, and is emphasised again by the breakdown of East Midlands ATMs, showing that ca. 64% of cargo ATMs in 2014 were at night (17,029 of 26,681)[61].

4.9. Stansted

155. Stansted has developed to become the main airport in South East & East region for freight on all cargo aircraft. It handled ca. 223,000 tonnes of freight in 2016, with further ca. 23,000 tonnes of mail (the number of cargo ATMs in 2016 was ca. 11,000). Amongst the London airports, it handled the highest volume of dedicated freighter traffic, and was also "*the most significant hub for express freight"*[62].

156. On express freight, the airport adds: *"The airport's express freight market, anchored by key operators such as FedEx and UPS, is the second biggest in the UK"*[62] (behind East Midlands Airport). TNT and around ten other companies also operate weekly services from the airport.

4.10. Others (excluding Manston)

157. Other airports that are significant for freight in the UK are Manchester, Gatwick and Birmingham. Together with the three airports discussed above, they accounted for 96% of UK air freight (by tonnage) in 2016. As an airport in the south of the country, Gatwick is worthy of more detailed examination.

Gatwick

158. In 2016, Gatwick handled 3% of the UK's air freight (ca. 80,000 tonnes). This was all in the bellyhold of passenger aircraft. However, it has previously had a share of the UK market as large as 18.5% (in 1990).

159. The proportion of Gatwick freight carried on cargo-only aircraft was between 6% and 25% over 1990-2006. In 2007, freighter share at Gatwick dropped to 1.4%, before falling close to 0% from 2012 onwards.

160. In 2008, a revised air traffic rights agreement between the UK and the USA meant that a significant number of long-haul UK-US operations switched from Gatwick to Heathrow. The loss of widebody capacity at Gatwick saw bellyhold freight fall by ca. 40% in 2008. It remained around the 2008 level in 2016.

161. Gatwick is operating reasonably close to its ATM capacity. This limits the growth potential for freight through additional passenger or freighter flights.

162. As of 2017, fewer than 10% of existing ATMs at Gatwick are used by widebody aircraft[63]. Thus, there is significant scope for Gatwick to increase its cargo capacity by increasing the share of widebody aircraft using the airport. To some extent this will happen naturally as passenger demand increases. Widebody share has risen in every year since 2014 (from 7.3% in 2014, to 9.4% in 2017[63]).

163. On routes where widebody capacity is in place at Gatwick, there is every indication that demand for freight is at least as strong as its closest competitor Heathrow; Gatwick Airport cites examples such as Emirates, Continental and Delta achieving *higher* freight tonnage per ATM at Gatwick than at Heathrow[64].

164. Freight volumes at Gatwick have grown strongly in 2016 and 2017 so far. This is driven by the rapid expansion of long haul routes by a number of airlines, including Norwegian, British Airways, Cathay Pacific and WestJet. We would expect this trend to continue as more slots are deployed for long haul flights, increasing bellyhold freight capacity.

[61] (East Midlands Airport, 2015, p. 111)
[62] (Stansted Airport, 2015b, p. 6)
[63] (OAG)
[64] (Gatwick Airport, 2015)

4.11. Manston

Historic Freight

165. Freight at Manston has accounted for an average of 0.8% of the UK total in the period 1990-2014 (prior to closure). Its peak share of the UK market occurred in 2003, when it reached 2.0%.

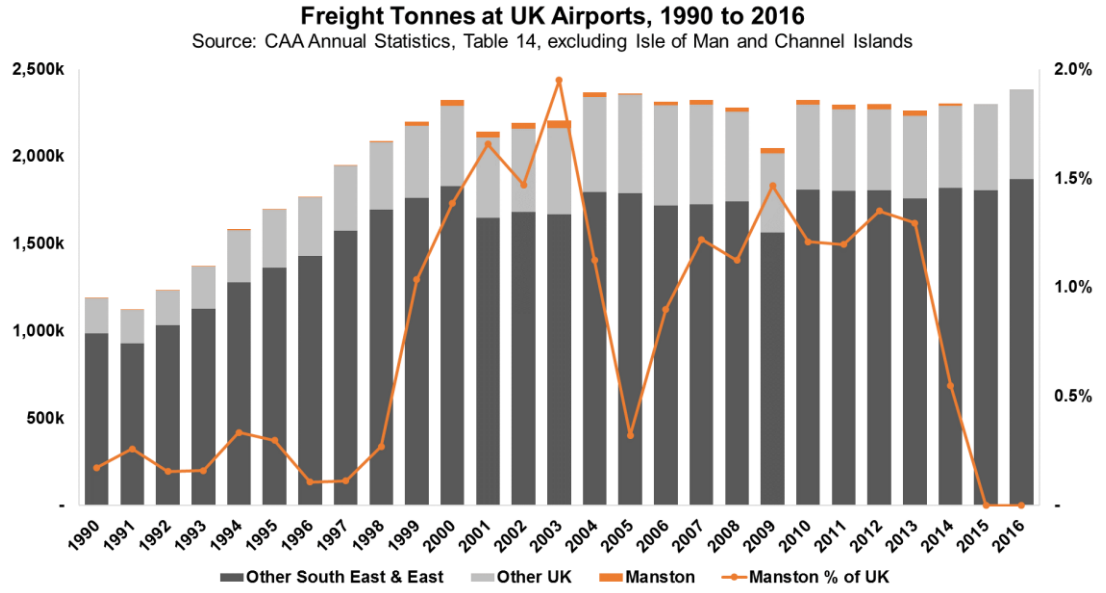


Figure 15 – Timeseries of UK freight, including that handled at Manston

166. The total number of cargo air transport movements at Manston averaged ca. 550 per year in the period 2000-14. This is equivalent to less than one aircraft rotation per day on average (peak year in 2003 was 1.5 rotations per day). Manston's share of UK cargo ATMs briefly peaked at 1.5% in 2003. In every year since 2005, Manston cargo ATMs have accounted for less than 1% of the UK total.

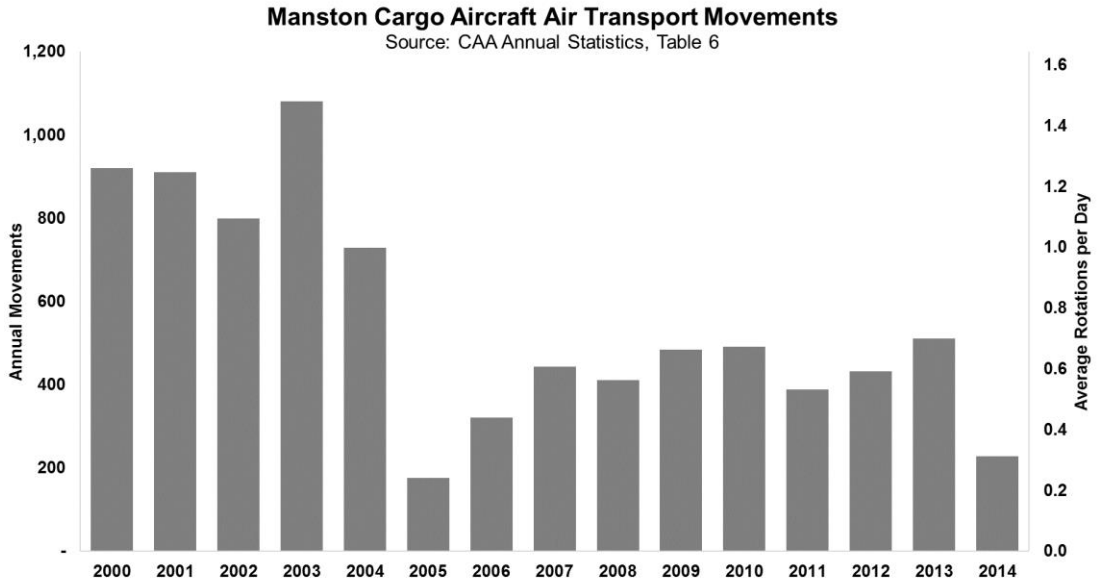


Figure 16 – Manston cargo-only aircraft movements

167. The hypothesis has been put forward that Manston previously was unsuccessful as it lacked the infrastructure to handle additional flights. However, with a peak of 1.5 rotations[65] per day, it seems certain that higher numbers of flights per day could have been handled if market demand was there.

168. As noted previously, the previous owners invested £7m on new aprons and taxiways, increasing the freight capacity to 200,000 tonnes[66]

Competitiveness of a Reopened Manston

169. Were Manston airport to be re-opened at some point in the future, it would likely be competing directly with East Midlands and Stansted for cargo-only flights. The outlook for the airport in this scenario is poor.

170. Firstly, the location of Manston on a peninsula physically limits the size of its catchment area.

- Within a 3 hour drive, only the South East & East of England, and a small part of the Midlands, are accessible.
- In comparison, most of England and Wales can be accessed within 3 hours of East Midlands Airport, while Manston's catchment is essentially a sub-set of the Stansted catchment.
- The case studies of Liege and Leipzig (Section 12), as well as the strong growth of freight at East Midlands, indicate the importance of a large catchment area and central location. While these airports attract cargo from an extensive area, they also benefit from strong cargo demand within their immediate catchment.

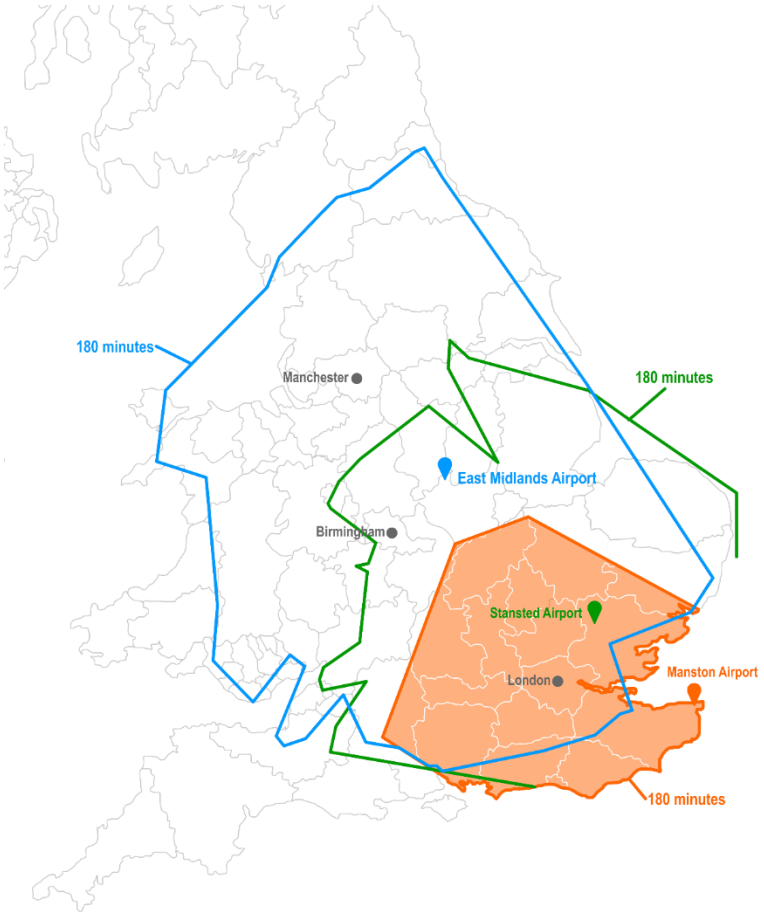


Figure 17 – 3-hr catchment region of Manston in comparison with those of East Midlands and Stansted
Source: Altitude analysis, Google Maps (truck speed set at 55 miles per hour)

[65] A rotation is an aircraft turnaround at an airport, representing an arrival and a departure flight.
[66] (Wiggins Group plc, 2002, p. 16)

171. In addition to Manston's poor geographic location, it is also relatively far from important transport infrastructure. The motorway network is not especially close (the airport is ca. 22 miles from the M2 and 38 miles from the M20). Successful freight airports in the UK and Europe are extremely close to the national motorway network, helping to minimise the shipper/consignee to airport transport time.

172. Secondly, there is consensus in the air freight industry that the ability to handle night flights is critical for many types of air freight (in particular for express freight, but also for other types of freight).

- East Midlands and Stansted are both able to accommodate flights 24 hours per day.
- Both Liege Airport and Leipzig Airport cite the ability to accept night flights, and the support of local government in doing so, as factors in their success (see appendices, Section 12).

173. It is unclear (in the light of historic restrictions) whether or not night flights would be allowed at Manston Airport were it to reopen. However, it does seem clear that restrictions on night flying would have severe limitations for air freight potential at the airport. Observations at other freight hubs such as East Midlands, a significant volume of freight activity takes place during night time hours, including onward (or inward) road haulage taking advantage of road capacity overnight to move freight outside of peak traffic periods. Manston's local road network is not ideally placed to accommodate large volumes of HGV traffic arriving in quiet hours

174. Finally, as noted previously, there is a clear move towards market consolidation of freight activity at a few large airports. In order to be successful, Manston would need to reverse this well-established trend. It is not apparent how this could be achieved, even with markedly lower airport charges (which in turn would compromise the financial viability of the airport).

175. Therefore, even if there was a future need for additional airport capacity for freighter activity, Manston is poorly placed to service such a requirement and better existing operational alternatives are available.

5. Current Freight Demand vs Supply at UK Airports

5.1. Context

176. Azimuth asserts that UK air freight has been constrained since 2000[67]. Furthermore, Azimuth concludes that shortage of airport capacity is leading to more trucking of freight ("*flying freight from Manston, negating the need to truck, to and from European airports for air transportation*[68]").

177. We consider that these conclusions are highly simplistic. They do not recognise the operational needs and behaviours that underpin the freight market:

- As discussed below, we agree there is a shortage of dedicated freighter capacity at the UK's main passenger hub airport (Heathrow). However, freighter capacity is available at other airports. For example, both Stansted and East Midlands have expanded freighter activity significantly since 2000, and continue to have spare capacity.
- Therefore, any shortage of air freight capacity in the UK relates specifically to Heathrow capacity rather than a more general lack of capacity.
- Trucking is a highly integrated component of the air freight business model, and not merely a substitute for air freighter flights when airport capacity is constrained. The increasing use of truck feeder services (see Figure 32) is due to cost efficiencies and is not restricted to the UK. We see no evidence that the growth in trucking is primarily driven by lack of Heathrow capacity for air freighter flights.
- In any case, even if there were significant levels of trucking caused by constraints at Heathrow, this would only be reduced by the provision of more Heathrow runway capacity. As there is already spare capacity at other airports in the UK, provision of further capacity would not make any significant difference to trucking levels. There is no reason why economic decisions to truck freight rather than fly would change in the absence of new Heathrow capacity.

178. In the remainder of this section of our report, we provide an analysis of current UK airport capacity for freight, and whether this has constrained demand. In the following section (Section 6), we investigate the outlook for future airport capacity for freight at UK airports.

5.2. Literature Review

179. As noted above (see paragraph 176), Azimuth asserts that UK air freight has been constrained since 2000. Its case for Manston relies heavily on this assertion, yet no evidentially supported and reasoned justification is provided. Three references are provided.

180. The first document cited is the Air Transport White Paper from the Department for Transport[69]. We have not found references to air freight being constrained in this document, which in any case dates from 2003.

181. The second document is by Oxford Economics[70]. This report is a technical note which examines how increased airport capacity (or conversely the lack of additional new capacity) could affect air freight and the economy. The study was undertaken for Transport for London / Mayor of London, promoters of the new Thames Estuary hub airport scheme.

[67] (Azimuth Associates, 2017 a, p. 8)
[68] (Azimuth Associates, 2017 a, p. 19)
[69] (Department for Transport, 2003)
[70] (Oxford Economics, 2013)

182. References in the Oxford Economics report to existing capacity constraints focus on Heathrow, and its forward-looking analysis is primarily in the context of the potential benefits of the proposed new hub airport. For example, on Page 8:

> *"Capacity constraints at Heathrow, however, set in as early as 2005 and future cargo growth is threatened by the inability of London area airports to keep up with demand. A new hub airport for London, with enough capacity to meet demand for the next 30 to 40 years, would be particularly important for the growth of bellyhold cargo."*

183. The Oxford Economics report also notes the divergent trends between short haul and long haul cargo in the UK. On Page 14, the factors that could explain the decline in short haul air cargo are explored.

> *"In all likelihood, short-haul cargo may have fallen due to both capacity constraints at Heathrow and freight forwarders substituting road or rail transport for short-haul destinations. In addition, the cost of air cargo is higher on short-haul routes because a larger portion of the trip is spent on the ground and more time in the air is spent climbing and descending. Lastly, the lack of widebody planes on short-haul journeys make bellyhold cargo less attractive at those distances to begin with."*

184. On Page 16, the Oxford Economics report goes on to state:

> *"The fact that volumes have fallen so dramatically could be due to both capacity constraints at Heathrow and also to the substitution of air cargo on short-haul distances with rail or truck transport. Which phenomenon is more important? The opening of the Channel Tunnel in 1994 between the UK and France has made it faster and cheaper to transport cargo by road between continental Europe and the UK. In terms of truck transport, it is estimated that 97,000 tonnes of air freight actually crosses the English Channel by truck per year, as compared to 87,000 tonnes flown on bellyhold. In fact, the volume of short-haul cargo peaked around the time the Channel Tunnel opened and has declined ever since. Therefore, this hints that much of the decrease in short-haul volumes may be due to the relatively lower cost of truck transport to continental Europe rather than capacity constraints at London area airports. In other words, the generalised cost of surface transport (relative to air transport) has decreased, spurring a modal shift on short-haul routes."*

185. The final reference is to rankings of European Union countries for the quality of air transport infrastructure[71]. This appears to relate to overall air transport infrastructure, and is not specific to freight. In any case, the UK is ranked reasonably highly in the most recent results (#7 out of 28 EU countries for 2015/16).

186. To summarise, the three studies quoted by Azimuth do not provide any meaningful support for the assertion that UK airport capacity for freight has been constrained for many years. The Oxford Economics study identifies constraints at Heathrow and hub capacity specifically but also highlights other factors for recent freight trends. The 2003 Air Transport White Paper and the European Union infrastructure ranking study do not address the issue directly.

187. In the next subsection of our report, we show that there is no overall shortage in UK airport capacity for dedicated freighter operations (the type of capacity a reopened Manston would potentially provide as identified by RSP).

188. In paragraph 235, as part of our review of the Azimuth forecasts for Manston, we highlight how results from a York Aviation study have been applied incorrectly.

[71] https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/quality-airports-infrastructure_en#2015-2016

5.3. Analysis of Current Freight Demand vs Supply at UK Airports

189. There is no overall shortage in UK airport capacity for dedicated freighter operations. Both of the two largest airports, East Midlands and Stansted, can accommodate more freighter services than currently operating (sufficient to meet demand). Many other airports in the UK have spare capacity for freighter services.

190. In this sub-section of our report, we examine the current freight capacity at UK airports. In the following section (Section 6), we analyse future UK airport freight capacity.

East Midlands Airport

191. East Midlands Airport does not require slot coordination[72]. It is designated as a Level 2 airport, with the UK slot coordinator (Airport Coordination Limited) only providing data collection services[73]. IATA[74] defines a Level 2 airport as one "*where there is potential for congestion during some periods of the day, week or season, which can be resolved by schedule adjustments mutually agreed between the airlines and facilitator*". In other words, the airport cannot be considered as facing significant capacity constraints.

192. The airport does not appear to have any limit on the number of overnight ATMs it can operate. Note that it *does* have limits on the amount of noise any given aircraft can make at night. There is a limit on the land area that is exposed to noise above a certain threshold, as well as a rule preventing operation of the noisiest aircraft types between 23:00 and 07:00 (as per many other UK airports including Heathrow, Gatwick, Stansted).

193. The airport appears to have established a common position with the local authority which supports operation of the airport. For example:

> *"The Council will provide for the operational growth of East Midlands Airport whilst having regard to its impact on local communities and the wider environment…. Noise-sensitive development, particularly housing, will be resisted where it can be demonstrated that the noise levels associated with the airport would be detrimental to the occupiers or users of any such development"*[75]

194. The airport's runway[76] is long enough to handle the typical large cargo aircraft flying today, including the B747-400, B747-8F and the AN-225. It can also handle the A380, which could be relevant if older examples of that model are converted to a cargo aircraft in future[77].

Stansted Airport

195. Stansted is designated as a Level 3 coordinated airport. A process of slot allocation is required whereby it is necessary for all airlines to have a slot allocated by a coordinator. Therefore, Stansted is facing some capacity constraints in peak periods.

196. Nevertheless, there remains significant capacity available at most times of day, as shown below for the Summer 2017 scheduling season.

[72] Allocation of airport "slots" to airlines by an independent body. A slot provides permission for an airline to arrive or depart an airport for a specific time at a specific weekday and for a specific period applied for.
[73] https://www.acl-uk.org/faqs/
[74] (IATA, 2017c, p. 22)
[75] (East Midlands Airport, 2015, p. 69)
[76] East Midlands Airport runway length is 2,893m, compared to ca. 2,750m for Manston Airport.
[77] (East Midlands Airport, 2015, p. 73)

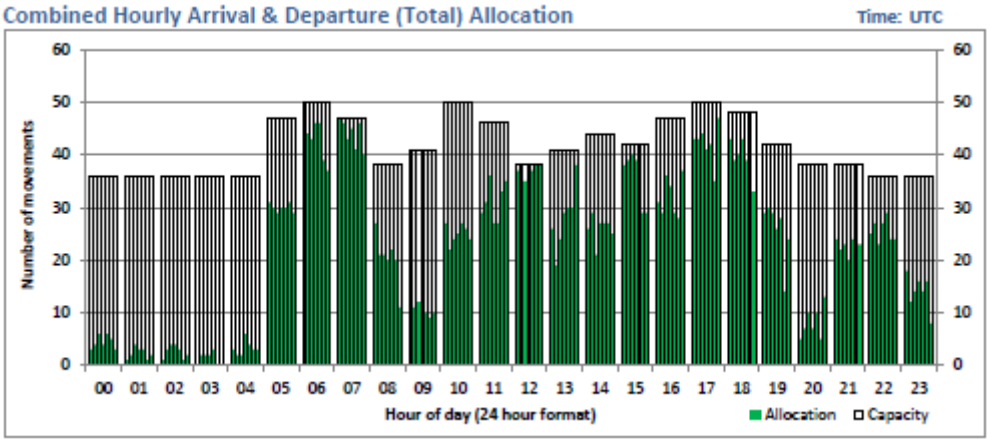


Figure 18 - Peak Week, Hourly Runway Allocation, Stansted Airport, Summer 2017. Source Airport Coordination Limited[78]

197. The number of cargo ATMs grew by ca. 13% in 2016 (source: Altitude analysis of CAA data), indicating that capacity constraints are not severe for freighters.

198. The airport is more tightly regulated than East Midlands Airport. Stansted's annual number of ATMs is limited. Currently, these limits stand at 243,500 passenger aircraft ATMs and 20,500 cargo aircraft ATMs[79]. These limits compare to 2016 movements of ca. 153,000 passenger ATMs and ca. 11,000 cargo ATMs. The airport considers the ultimate capacity of the runway to be 285,000 ATMs[80].

199. Separately, there is a quota on the overall number of ATMs allowed between the hours of 23:30-06:00 (7,000 ATMs in the summer season and 5,000 in the winter season). In 2013, the airport reports there were ca. 9,300 night ATMs in total, and that cargo aircraft ATMs take up a "*sizeable proportion*" of the quota[80].

Heathrow Airport

200. The UK does lack available dedicated freighter capacity at its only major passenger hub airport, Heathrow.

- Heathrow is also the UK's largest freight airport with ca. 65% of the UK's overall throughput (see paragraph 109).

201. Freight forwarder activity has consolidated around Heathrow on the strength of its extensive network of long haul passenger services. These services, typically using widebody aircraft, provide substantial bellyhold cargo capacity to a wide range of destinations.

202. At Heathrow, only ca. 5% of freight is carried on dedicated freighters (see Figure 4).

- If more capacity for freighter services existed at Heathrow, we would anticipate much greater levels of dedicated freighter activity.
- In the absence of operating constraints, major passenger hubs tend to also play a role as key dedicated freighter hubs (e.g. Frankfurt). Freighter services complement the connectivity provided by passenger flights, while the cargo industry benefits from economies of scale and scope from the consolidation of activity.

203. Where dedicated freighter flights cannot be accommodated at Heathrow (due to capacity constraints), freight customers have the following choices:

[78] (Airport Coordination Limited, 2017, p. 11)
[79] (Stansted Airport, 2015a, p. 9)
[80] (Stansted Airport, 2015b, p. 29)

- Operate freighter flights (or use existing freighter flights) from other UK airports where capacity is available (e.g. Stansted, East Midlands).
- Transport freight in the bellyhold of passenger flights from Heathrow (or other UK airports).
- Transport freight to a major European air freight hub (e.g. Liege, Frankfurt), typically by truck.
- Use surface modes of transport (road, rail, water) for the whole journey (note that this is not a realistic option for most potential air freight consignments due to the distances involved and/or urgency of shipment).

204. The capacity constraints at Heathrow also limit the number of passenger flights that can be operated. This in turn will have an impact on the bellyhold capacity that is available. However, it is not clear whether this is a substantial issue in relation to potential freight volumes.

- Heathrow continues to dominate the long haul passenger segment (72% of UK passengers in 2016[81]).
- Where demand is available, it is typically more economic to use constrained Heathrow slots for long haul flights (compared to short haul). Heathrow's share of overall UK long haul passengers has actually grown since 2002 (from 70% to 72% in 2016). In comparison, its share of short haul passengers has dropped from 24% to 17%. This indicates that short haul services are being squeezed out of Heathrow to accommodate long haul growth (due to current capacity constraints)[82].
- Air freight is focussed on long haul markets. Less than 10% of Heathrow freight in 2016 was to/from UK and Europe[83], despite accounting for 62% of passenger flights[84].
- Therefore, the extent to which constraints on Heathrow passenger flights are limiting bellyhold freight at Heathrow is difficult to establish from current publicly reported information.

205. Note that AviaSolutions[85] has undertaken analysis that suggests that average cargo loads at Heathrow are markedly lower than average cargo capacity.

> *"At Heathrow with a significant number of wide-bodied aircraft (35%), we estimate the average belly-hold freight capacity to be 7 tonnes per ATM at LHR (2015), significantly higher than the actual freight per ATM of 3 tonnes".*

206. This indicates there is excess bellyhold capacity at Heathrow. However, capacity may nevertheless be insufficient for demand on certain routes, directions of travel or at particular times of year, etc.

Other Airports

207. In addition to spare capacity at East Midlands and Stansted, other South East and regional airports could also accommodate significant freight volumes if the demand was there. This is true for both freight on dedicated freighter aircraft or bellyhold freight.

208. Bournemouth Airport[86] highlights that:

> *"With ample room to grow, our thriving cargo facility is expanding to meet the demands of importers and exporters from across the UK. Accommodating a huge variety of freight and passenger aircraft, Bournemouth supports cargo logistics round the clock, with the following benefits: 2271m runway, excellent good weather record, congestion free (with*

[81] Source CAA airport statistics, Altitude calculations
[82] Source CAA airport statistics, Altitude calculations.
[83] (Heathrow Airport, 2017, p. 5)
[84] CAA airport statistics
[85] (AviaSolutions, 2016, p. 31)
[86] www.bournemouthairport.com/about-us/doing-business-together/cargo/

no slot restrictions), experienced in handling many cargo aircraft including the AN-124 Ruslan, 'Freighter friendly' airport management."

209. Bournemouth Airport has some disadvantages due to its coastal location and distance from the motorway network. However, similar issues apply to Manston (with its location arguably even more compromised than Bournemouth, given its position on a peninsula). From the South West, West London and the Midlands, Bournemouth is generally more accessible than Manston[87].

210. Outside the South East, Doncaster Sheffield Airport has a central UK location. It markets itself as "*the UK's Freighter Gateway*[88]":

"At the centre of the UK with easy access to the M18, M1, A1M, M62 and M180 Doncaster- Sheffield is the ideal airport for freighter operations. DSA is justifiably gaining the reputation as the most effective freighter airport in the UK. The attributes that are delivering this include…. exceptional performance record, 24 hour operation, runway 2,893m x 60m, CAT III, Class "D" controlled airspace, no slot constraints/congestion, Competitive jet fuel prices, short taxiing distances, excellent cargo reception and handling, inclusive pricing, NEQ capacity up to 9,300kg Hotac."

211. Both of these airports are currently operational, and benefit from a large site with a long runway. Doncaster Sheffield operates 24 hours a day, whilst night flights at Bournemouth can be arranged with prior notice.

212. Finally, there are a range of other UK airports (currently in use) that previously carried significant volumes of freight, and would be able to do so again if demand returned.

- Prestwick handled ca. 42,000 tonnes of freight in 2001, compared to only ca. 11,000 in 2016. We are not aware of any reasons why Prestwick would be unable to handle similar or higher volumes in the future (assuming demand existed).
- Similarly, Liverpool had negligible freight throughput in 2016 but has handled as high as ca. 30,000 tonnes in 1995. Again, we would assume the airport has the capacity to accommodate similar or higher volumes in the future.
- Gatwick bellyhold freight volumes have been as high as ca. 290,000 tonnes in the past, compared to ca. 80,000 tonnes in 2016. As more long haul routes are added at the airport, freight throughput is once again growing. In the 12 months ending September 2017, Gatwick added ca. 15,000 tonnes of cargo (+20.3%)[89].

213. Taking all UK airports combined, the difference between peak year and 2016 freight tonnes was ca. 225,000 tonnes (freight on dedicated freighters only)[90].

- This excludes airports which have closed (e.g. Manston, Plymouth), where commercial activities have been downsized (e.g. Blackpool, Coventry) and London airports (where pressure on slots may reduce the ability to recover to historic volumes should dedicated freight demand return).

[87] For example, the following distances have been sourced from Google Maps for the typical fastest routing. Bournemouth Airport to Hounslow: 90 miles, Manston Airport to Hounslow: 103 miles. Bournemouth Airport to Bristol: 70 miles, Manston Airport to Bristol: 201 miles. Bournemouth Airport to Birmingham: 167 miles, Manston Airport to Birmingham: 197 miles.
[88] www.therouteshop.com/profiles/doncaster-sheffield-airport/
[89] http://www.mediacentre.gatwickairport.com/press-releases/2017/booming-global-connections-drive-gatwick-to-record-september.aspx
[90] CAA airport statistics.

5.4. Conclusion

214. We conclude that there is no overall shortage of freight capacity at UK airports, whether for dedicated freighters or bellyhold freight.

- The two largest dedicated freight airports have spare capacity.
- There is significant excess capacity at a range of other UK airports that are currently in use. These airports have seen demand reduce due to trends towards consolidation at major airports and switch to trucking.

215. We acknowledge that there is a shortage of freighter capacity at Heathrow. Slot constraints could also be having some impact on the bellyhold market, although the impact may be relatively moderate.

216. However, it is important not to conflate Heathrow constraints with the wider capacity situation. We see no evidence to support the assertion that there is a long-standing shortage of overall UK airport capacity for freight. Indeed, the evidence is to the contrary, given the reductions in freight throughput experienced by many UK airports.

217. There would be substantial benefits to adding freight capacity at Heathrow, the UK's only major passenger hub airport. It can also be argued that freight capacity at a proposed new hub airport in the Thames Estuary would also generate strong benefits if it could be delivered. This option, though, was emphatically ruled out by the Airports Commission.

218. Therefore, it is difficult to see what benefit would accrue from adding freight capacity at non-hub airports, as there is already sufficient supply at advantageous geographic locations. In particular, freight volume at Manston has never exceeded ca. 43,000 tonnes in any single year. This is despite the supposed shortage of UK airport freight capacity and despite a previous owner investing to increase Manston's capacity to 200,000 tonnes per annum.

219. From a freight perspective, we do not consider it meaningful to focus on the South East alone as a separate market. Freight is less time sensitive than passengers. Therefore, for major airports, the freight catchment area is typically many times larger than the passenger catchment area. This is one of the key factors that leads to the high degree of market consolidation seen for air freight.

- East Midlands serves the whole of England and Wales, exploiting its central location in the UK.
- Similarly, the extensive network of long haul flights from Heathrow and its hub operation means it attracts freight from the whole of Great Britain.
- For Europe's major freight hubs, the catchment can be even wider. For example, Leipzig Airport considers its catchment covers a 10-hour trucking radius (see Figure 38), while Liege sees its catchment as all areas within access of a full day trucking (see Figure 39). The catchment areas for these two airports are particularly wide, as a result of their wide range of air services.

220. Mainly due to the hub strength of Heathrow, 78% of 2016 UK air freight was flown from airports in the South East & East of England. Heathrow and Stansted alone achieved 65% and 7% market share respectively.

- Much of the UK's high value manufacturing is located outside London and the South East[91]. In Q1 2015, only 15% of UK manufacturing jobs were located in London and South East[92].
- Clearly, a substantial proportion of air freight using Heathrow in particular will be travelling to/from other areas of the UK.

221. More important is the type of airport capacity. Freight has consolidated around the three major air freight airports (Heathrow for bellyhold, while freighter activity is concentrated on East Midlands, Stansted and

[91] (Heathrow Airport, 2014, p. 19)
[92] (House of Commons Library, 2015, p. 7)

Heathrow). This enables the air freight industry to benefit from the economies of scale and scope flowing from consolidation. These cost efficiency pressures are unlikely to reverse.

6. UK Capacity Outlook

6.1. Context

222. In the previous section, we demonstrated that there is currently no overall shortage of freight capacity at UK airports.

223. In this section of the report, we analyse the scope for developing freight capacity at existing airports, in order to meet future demand.

- We focus on the published expansion plans of the three major freight airports.
- We consider the spot years of 2029 (prior to assumed new runway opening at Heathrow in 2030), 2040 (medium term planning horizon) and 2050 (long term planning horizon).

224. We also review comments in the Azimuth report in relation to the future role of individual airports.

6.2. Review of Individual South East Airports

Heathrow Airport

225. In its final report, the Airports Commission[93] "*unanimously concluded that the proposal for a new Northwest Runway at Heathrow Airport… presents the strongest case*." Heathrow is working on a timeline of a 2025 opening[94]. However, we consider that an assumed opening date of 2030 is more prudent, given the complexity of the planning and construction process. This aligns with the Airports Commission's stated need for one additional runway to be in operation in the South East of England by 2030.

226. Heathrow is developing its infrastructure to increase its cargo handling capability. The airport states:

> *"We are developing proposals for a complete overhaul of our cargo facilities as part of our expansion plans for an additional runway. Redevelopment of the airfield will provide an opportunity for the first time to expand the site and create new efficiencies*[95]

227. The airport has commented on the factors that currently reduce its competitiveness for cargo, and has developed a strategy to address these issues:

> *"Our customers have told us about the bottlenecks caused by some of the infrastructure, inefficient facilities and processes that are slower and more arduous than those of our European competitors. Our stakeholders rate us as poor for our facilities and value for money"*[96]

228. In its 2016 document 'Heathrow Cargo Strategy', Heathrow states:

> *"Our cargo strategy will lift freight volumes to 3 million tonnes a year by 2040"*[97]

229. Based on UK CAA data for 2016, this represents CAGR of 2.7% over 2016-40. Documentation from the airport indicates that growth is likely to come from additional bellyhold capacity rather than freighter ATMs:

> *"This will provide capacity at Heathrow for freight and cargo to be carried in the belly hold of passenger flights"*[98]

[93] (Airports Commission, 2015, p. 9)
[94] https://www.heathrowexpansion.com/local-community/important-dates-information/ (retrieved 19th October 2017).
[95] (Heathrow Airport, 2014, p. 20)
[96] (Heathrow Airport, 2016b, p. 2)
[97] (Heathrow Airport, 2016b, p. 2)
[98] (Heathrow Airport, 2014, p. 20)

230. Azimuth[99] discusses Heathrow in its first report.

231. Azimuth states that "*Indeed, more than 99% of air freight at Heathrow is carried in the bellyhold of passenger aircraft*". This is incorrect. Since 2010, the proportion of bellyhold freight at Heathrow has consistently been around 95%. A CAA report seems to be incorrectly attributed by Azimuth as a source for this figure.

232. It is also suggested that:

> *"The 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, it is likely that the new runway will be used to meet this pent-up demand".*

- This is a pessimistic viewpoint. Heathrow's runway capacity in 2016 was 99% utilised[100]. With ca. 50% additional capacity on opening of a third runway, we would envisage some opportunities for additional freighter flights. Despite severe slot constraints, the number of freighter movements at Heathrow has remained stable since 2010[101].
- Therefore, there is some prospect of more freighter traffic at Heathrow after the opening of the third runway. Nevertheless, we do not dispute that there will be ongoing constraints on freighter activity at Heathrow, especially in the very long term.
- Of course, the major expansion of passenger flights following the new runway opening will lead to a substantive uplift in bellyhold capacity. As previously discussed, for most types of general freight, there is no inherent market preference for bellyhold or freighter carriage (with cost often the key deciding factor, which generally favours bellyhold). Therefore, the new Heathrow runway will add a significant amount of new cargo capacity into the UK market.

233. The Azimuth report also speculates that:

> *"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."*

- We view the references to low cost carriers as not relevant. Even if low cost carriers switch to Heathrow (which may depend on the level of airport charges after the new runway opens), this will have limited impact on bellyhold capacity.
- The full service short haul carriers operating at Heathrow currently contribute very little in terms of freight tonnage. Less than 10% of Heathrow freight is to/from UK and Europe[102], compared to 62% of passenger flights[103].
- There are several factors that cause this. In general, air freight is less competitive than trucking for shorter distances. Furthermore, the cargo carrying capacity of short haul aircraft (typically narrowbody types) is limited. Finally, air freight that is flying short distances tends to be express cargo, which is more likely to use dedicated freighter aircraft.
- Therefore, whether low cost carriers operate a significant proportion of Heathrow short haul services in the future will not have a significant impact on bellyhold availability. Similarly for long haul low cost, as these airlines typically carry bellyhold cargo (e.g. Norwegian).

[99] (Azimuth Associates, 2017 a, pp. 15-16)
[100] 474,963 ATMs compared to cap of 480,000 (source CAA airport statistics).
[101] Cargo ATMS at Heathrow since 2010 were 2010: 2,414; 2011: 2,456; 2012: 2,378; 2013: 2,347; 2014: 2,332; 2015: 2,388; 2016: 2,452; (source: CAA airport statistics).
[102] (Heathrow Airport, 2017, p. 5)
[103] In 2016 Heathrow handled 477,614 aircraft movements. 295,605 of these flew Domestic or European routes [source: CAA airport statistics, Altitude analysis].

234. Azimuth also compares Heathrow processing times unfavourably to Manston Airport. We noted above (see paragraph 227) that Heathrow has a strategy to improve its process efficiency. However, the broader point is that this is not a meaningful comparison.

- Using a dedicated freighter at an unconstrained airport should nearly always be the fastest way of transporting air freight, assuming equivalent trucking time to reach the airport[104].
- However, for the majority of general cargo, the time-sensitivity is in the order of days rather than hours. A bellyhold freight consignment through a major hub will typically be much cheaper. Freight can be consolidated with other freight consignments. The incremental cost of carriage for bellyhold is relatively low, meaning that rates charged are typically much more competitive than for freighters – especially if there is not enough volume to fully utilise freighter capacity.

235. Finally, Azimuth[105] refers to a York Aviation study, in the context of Heathrow:

> *"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".*

- This is an incorrect reading of the York report, which York Aviation rebut in detail in its November 2017 report commissioned by SHP[106].

236. In summary, the Azimuth analysis substantially underplays the potential for freight growth at Heathrow.

Stansted Airport

237. The airport has outlined infrastructure improvements to facilitate cargo traffic growth, including the potential for more cargo handling facilities to be built, and increasing the number of stands for cargo aircraft from 16 to 24[107].

238. Stansted Airport also published a 'Sustainable Development Plan' document in 2015 detailing the future demand it expects to handle:

> *"There is potential for cargo goods volume at the airport to increase on the single runway, potentially doubling the current throughput of cargo on dedicated aircraft to around 400,000 tonnes per annum….. Further growth can be expected from belly hold cargo as the range of airlines and destinations operating from the airport increases. The current modest amount carried in the belly hold of passenger aircraft could increase to around 60,000 tonnes a year"*[108]

> *"There is potential that cargo movements could rise to make full use of the current movement limit, however this needs to be considered against growth in passenger movements and the night quota. For planning purposes we have assumed that the number of cargo movements will be in the range of 15,000 and 18,000 per annum…. The majority of the cargo movements are expected to operate during the late evening and at night. Cargo aircraft will continue to operate during the off-peak periods between passenger movement peaks"* [109]

239. Note, the document is vague regarding the timescales relating to its forecast; it never states the year in which it expects demand to reach the forecast level. An assumption that the figure of 460,000 tonnes per annum is achievable by 2040 results in a CAGR of 2.7%[110].

[104] Although for most parts of the UK, trucking time to Heathrow will be significantly shorter than to Manston.
[105] (Azimuth Associates, 2017 a, p. 16)
[106] (York Aviation, 2017)
[107] (Stansted Airport, 2015b, p. 36)
[108] (Stansted Airport, 2015b, p. 26)
[109] (Stansted Airport, 2015b, p. 29)
[110] We believe this is a reasonable assumption, as both Stansted and East Midlands forecast are owned by MAG; MAG produced both forecast documents in the same year and using the same formatting and template; 2040 is the stated forecast year for East Midlands.

240. A plan for 15,000-18,000 cargo ATMs, when there is currently a limit of 12,000 overnight ATMs in total, possibly indicates growth of general cargo is expected.

241. Azimuth[111] argues that freighter services at Stansted will be forced out by passenger services.

> *"However, the airport is under pressure from Ryanair to increase the number of passenger flights. Ryanair is the dominant carrier at Stansted Airport and, since the 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 maintain four rotations per day to maximise the profitability of each aircraft, late evening and night time slots will be required. Freight carriers have traditionally used these night slots."*

242. Azimuth continues:

> *"Since the airport also has a limit on total movements, this may mean Stansted has to choose between increasing passenger movements or retaining its freight. In this case, it seems likely that Stansted's management will preference passenger movements."*

243. There is no foundation for a number of the points raised above. Taking the various points in turn:

- No supporting evidence is provided for the statement that Ryanair is applying pressure on the airport to increase passenger flights (especially the implication that this would be at the expense of cargo flights). The Summer 2017 peak week runway profile (Figure 18) clearly indicates significant capacity for Ryanair to expand operations.
- We do not see any reason why handling freight from dedicated freighters would have any impact on the turnaround time of Ryanair aircraft.
- Azimuth appears to have limited understanding of the low cost carrier sector. We estimate that Ryanair averaged less than 2.5 rotations per aircraft per day across its network in FY17 (based on an analysis of its financial accounts).
- Ryanair operate from airports with night curfews or with night restrictions. Across 2017, an analysis of OAG schedule data for Stansted suggests that less than 3% of Ryanair flights operate in the night time period. Stansted Airport expects that cargo aircraft will continue to operate during the off-peak periods between passenger movement peaks (see paragraph 238).
- Stansted Airport has a separate movement cap for cargo and passenger ATMs. There is also an overall ATM cap[112], which is the sum of the separate passenger and cargo ATM caps. Therefore, the suggestion that Stansted will need to prioritise passenger flights over cargo flights is misplaced.
- Finally, no acknowledgement seems to have been made by Azimuth that Stansted Airport has stated that it is planning to grow freight tonnage alongside developing the passenger business (see paragraph 238).

Gatwick Airport

244. As discussed in paragraph 212, Gatwick has previously carried bellyhold volumes of ca. 290,000 tonnes (ca. 210,000 higher than the 2016 outturn). Gatwick had lost freight volumes as traffic mix has changed, in particular following the loss of long haul services after changes to traffic distribution rules in 2008.

245. Freight volumes have been growing rapidly since 2015, helped by the recent expansion of long haul services (many by low cost carriers). As more long haul services are added at the airport, we would expect continued growth.

[111] (Azimuth Associates, 2017 a, pp. 14-15)

[112] www.acl-uk.org/wp-content/uploads/2017/07/STN-Local-Rule-4-1.pdf . Note that the airport also has an overall movement cap, which comprises of passenger ATMs + cargo ATMs + 10,000 other movements.

246. Azimuth[113] only comments briefly on Gatwick:

- "*It has increased its annual tonnage from only 3,000 in 2014 to 73,000 tonnes in 2015*." This is a somewhat surprising statement. Growth of this scale would merit more than a passing mention. However, the true freight tonnage in 2014 was ca. 89,000 tonnes, not 3,000 tonnes (source: CAA airport statistics).
- "*Gatwick is not a serious competitor in the freight market*." We note that current freight throughput (year ending September 2017) was almost 90,000 tonnes, more than double the peak annual value achieved by Manston in its entire existence. It was the 5th largest UK freight airport in 2016.

Other South East Airports

247. Azimuth[114] discusses the potential of other South East airports. As noted previously, we do not believe there is requirement for new freight capacity in the South East specifically. Therefore, we only briefly comment on the potential of other airfields.

- Bournemouth is only fleetingly considered by Azimuth. As highlighted in paragraph 208, we consider there to be some potential for freight development from this airport, a view shared by the airport itself.
- We also note that in its analysis of Southampton, Azimuth wrongly states that it handled 185,000 tonnes in 2015 (the correct figure is 185,000 kilogrammes or 185 tonnes). The short runway at Southampton constrains its ability to serve the freight market.

6.3. Review of Individual Regional Airports

East Midlands Airport

248. East Midlands is the UK's leading airport for dedicated freighter activity. Its central location enables it to serve a wide catchment, encompassing England, Wales and Scotland.

249. This is acknowledged by Azimuth[115]. However, it argues that the airport is not in a good position to serve the South East.

> *"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.*

250. Earlier in the report (see paragraph 170 onwards), we provide a comparative analysis of the accessibility of East Midlands versus Manston. Given the wide catchments areas for cargo (see paragraph 219), we consider that the East Midlands is very accessible for the South East market. The M25 orbital motorway can be reached in just over 1.5 hours.

251. East Midlands Airport notes that the vast majority of vehicle movements to/from the airport take place very late at night or very early in the morning (see paragraph 151). Therefore, motorway bottlenecks alluded to by Azimuth should have a limited impact, as journeys will not be taking place during peak hours. In any case, congestion on the UK motorway system will affect all UK airports (including a reopened Manston).

[113] (Azimuth Associates, 2017 a, p. 16)
[114] (Azimuth Associates, 2017 a, pp. 18-19)
[115] (Azimuth Associates, 2017 a, pp. 17-18)

252. East Midlands has a benign planning environment (see paragraph 192 onwards). Despite the relatively low level of restrictions, the airport acknowledges sensitivity to developments that will impact on night time noise:

> *"Any further consideration or development at the airport related to night flights will require the application of stringent controls over night-time noise."*[116]

253. East Midlands Airport has land available for development of additional cargo facilities in order to support growth:

> *"The DHL Hub building opened in 2000 and it was always intended that the site would be developed in phases. Land continues to available for phased development on the western side of the building"*[117]

> *"Land will be reserved for the development of an integrator hub at Cargo East on land between the Pegasus Business Park and the runway/taxiway. This will enable the development of additional apron to serve the new hub operation. The building will be of a significant scale and will provide for the sortation systems required by the integrated carriers and also landside vehicle access for vans and for HGV's"*[117]

> *"Opportunities will be identified for incremental redevelopment and improvements to the existing Transit Sheds in Cargo East. A site for new cargo development, to the east of the current Royal Mail hub, will also be reserved. These development schemes will be made on a case by case basis and in response to operators' requirements"*[118]

254. As noted in paragraph 153, a rail interchange adjacent to the airport is in development, further strengthening its market position.

255. In the 'Sustainable Development Plan' document referenced previously, East Midlands Airport also publishes a demand forecast for the airport.

256. This forecast assumes that freight at East Midlands continues to be carried on freight-only aircraft, and that the type of freight carried by integrators (primarily express) will grow faster than that carried by other types of carrier.

> *"The forecast for future cargo tonnage is for some 618,000 tonnes in 2035 and some 700,000 tonnes in 2040…. by 2040, the number of cargo movements could grow to around 42,600. This reflects the growth of the integrated carriers and that the average freight load per cargo aircraft movement is predicted to increase from 14.4 tonnes in 2012 to 17.9 tonnes at 2040"* [119]

> *"The future split of day and night movements is expected to be similar to that of today"*[120]

257. Note that the airport does not include in its forecast any significant growth of mail (as it expects "*structural changes to the mail market. This is as a result of the shift from letters to parcels*"[119]).

258. In addition to stating its forecast demand, East Midlands Airport made clear statements on its future capacity in its 'Sustainable Development Plan' document. It does not believe it will be constrained by 2040:

> *"There are therefore no plans for the development of a second runway within the planning horizon covered by this Master Plan (2040) …. The capacity of the East Midlands Airport*

[116] (East Midlands Airport, 2015, p. 69)
[117] (East Midlands Airport, 2015, p. 79)
[118] (East Midlands Airport, 2015, p. 80)
[119] (East Midlands Airport, 2015, p. 61)
[120] (East Midlands Airport, 2015, p. 111)

runway is estimated to be between 34-36 runway movements per hour. This provides the airport with sufficient runway capacity for the foreseeable future and will be more than sufficient to accommodate an airport of a scale to handle 10 million passengers and 1.2 million tonnes of cargo annually" [121]

"the Land Use Plan identifies the land, the uses and the facilities required to support the operation of an airport capable of handling 10 million passengers annually and 1.2 million tonnes of cargo"[122]

"there will need to be a minimum of seven additional cargo stands provided including the ability to regularly park aircraft up to Code F (Boeing 747-8F) size"[123]

Other Regional Airports

259. There are a range of other regional airports with spare freight capacity which could play a larger role in the future.

- Doncaster Sheffield (see paragraph 210).
- Manchester Airport is the largest passenger airport outside the South East. It operates a two-runway system (the only UK airport with two runways except Heathrow). It has previously handled substantially more freight than currently handled.
- Similarly, Liverpool and Prestwick have previously handled much higher freight volumes than currently. Both airports have significant spare runway capacity and a large site to develop cargo infrastructure (Prestwick already has the facilities to handle specialist cargo). While Prestwick may be too far north to effectively serve the South East market, it could relieve pressure on other UK airports by capturing a larger share of freight demand to/from Scotland and the North of England. Liverpool is well connected to the UK motorway network, and the airport is owned by the operators of Liverpool Port.

6.4. Overall Capacity Outlook to 2040

260. We have projected the overall airport capacity for freight in 2040. For the three largest freight airports, future capacity has been sourced from the published plans described in the previous sub-section.

- While Heathrow and Stansted do not explicitly state their maximum expected future cargo capacity, we can assume each airport will have at least enough capacity to serve its predicted demand[124].
- The Heathrow figure assumes the opening of the planned third runway.

261. For other airports, we assume the following:

- Gatwick has handled ca. 0.2m annual tonnes of freight as recently as 2006. We assume it has the capability (demand permitting) to handle similar volumes in the future.
- Manchester handled ca. 0.17m annual tonnes of freight in 2007, and in its 2006 Masterplan, the airport forecast cargo tonnage of 0.25m tonnes by 2015[125]. We assume that the airport will be able to accommodate freight up to its masterplan forecast (0.25m tonnes).

[121] (East Midlands Airport, 2015, p. 73)
[122] (East Midlands Airport, 2015, p. 9)
[123] (East Midlands Airport, 2015, p. 75)
[124] Documentation from these airports indicates they have identified and made provision for developments of ground facilities (warehouses, stands etc…) to accommodate the forecast demand. Only Heathrow requires development of runway capacity.
[125] (Manchester Airport, p. 29)

- We assume that the remaining UK commercial airports (which are still fully operating) can handle freight tonnage at the level of previous peak year throughputs. This provides an assumed capacity of ca. 0.3m tonnes.
- Finally, we assume that by 2040, an additional 0.1m tonnes could be handled at airports with large sites but limited historic freight throughout (e.g. Doncaster Sheffield). This is likely to be a conservative assumption.

262. Total UK air freight capacity in 2040 is estimated to be ca. 5.4m tonnes per annum (including the impact of a new Heathrow runway). Of this, ca. 65% could be bellyhold capacity, with ca. 35% from freighters. Capacity at the three main cargo airports (Heathrow, East Midlands and Stansted) is estimated to be ca. 4.6m tonnes.

Airport	Estimated 2040 Capacity (m tonnes)	Possible Utilisation	
		Freighter	Bellyhold
Heathrow	**3.00**	0.09	2.91
East Midlands	**1.10**	1.08	0.03
Stansted	**0.46**	0.40	0.06
Manchester	**0.25**	0.03	0.23
Gatwick	**0.20**	0.00	0.20
Other UK	**0.39**	0.30	0.09
Total UK	**5.40**	**1.89**	**3.51**

Table 2 – Summary of estimated 2040 air freight capacity at UK airports
Source: Heathrow Airport, East Midlands Airport, Stansted Airport, Manchester Airport, UK CAA, Altitude analysis and assumptions

6.5. Capacity Outlook Prior to New Runway at Heathrow (2029)

263. We have also considered the potential capacity available prior to the third runway at Heathrow (assumed to open in 2030). There is limited information on the phasing of future capacity developments in the period to 2040, so this estimate has a greater reliance on our assumptions.

264. We have modelled the potential UK air freight capacity in 2029 at ca. 3.6m tonnes. This is based on the following prudent assumptions:

- No additional passenger or cargo ATMs at Heathrow compared to 2016. We assume that the airport will be able to accommodate freight growth at half the achieved annual growth rate for bellyhold tonnes/ATM recorded from 2006-16.
- We assume that the current Stansted and East Midlands capacity is at least 20% above 2016 freight outturn. We then model that the incremental capacity to be added by 2040 will be brought onstream at a constant rate.
- We model that Manchester is able to handle freight that was forecast for 2015 in its 2006 masterplan (same as 2040 assumption).
- For all other existing commercial UK airports, we assume the airports can handle historic peak values.

265. This is a deliberately cautious approach. Neither Stansted nor (especially) East Midlands face substantial freight constraints currently, and should be able to handle much higher freight volumes in the coming years.

6.6. Post 2040 Capacity Outlook

266. In the long term, there is the possibility of additional runway capacity in the South East. The Airports Commission stated in its final report:

> *"Even with a third runway at Heathrow, capacity in the London and South East system could be highly constrained by the 2040s and, as the Commission noted in its Interim*

Report, there would be likely to be sufficient demand to justify a second additional runway by 2050 or, in some scenarios, earlier"[126]

267. The regulatory environment, particularly with regard to noise and night flying, looks likely to be a key determinant as to the overall capacity that might be available for cargo movements post-2040.

[126] (Airports Commission, 2015, p. 334)

7. UK Demand vs Supply Outlook

7.1. Our Forecast for the UK Market

Context

268. We have assessed the future demand for air freight in the UK, reflecting some notable trends:

- Increasing role of passenger aircraft in the carriage of air freight, and the relative diminishing in importance of freighter aircraft. Passenger demand has developed strongly in recent years. This has led to expansion of cargo capacity in the bellyhold of passenger aircraft outstripping growth in air freight demand (see Figure 37).
- This trend has led to cutbacks in dedicated freighter operations from leading airlines such as Cargolux, IAG, Air France-KLM and Singapore Airlines (see paragraph 425). As of Q4 2016, 15% of widebody freighter capacity globally was in storage (see Figure 36). Airbus forecasts growth of just 42 freighters in European fleets by 2036[127]. In the UK, freight tonnes carried on all-freighter aircraft peaked in 2004. Since 2004, its share of total air freight has fallen from 37% (ca. 876,000 tonnes) to 30% by 2016 (ca. 708,000 tonnes, see Figure 5).
- There has also been a clear move towards consolidation of air freight activity at major passenger or freight hubs. In the UK, the leading 3 airports (East Midlands, Stansted and Heathrow) have steadily grown their share of overall UK air freight tonnes on dedicated freighter services – from 41% in 1990 to 86% in 2016 (see Figure 7). The UK bellyhold market is even more consolidated, with the leading 3 airports (Heathrow, Manchester, Gatwick) achieving a combined market share of 97%+ in each year since 1996 (see Figure 11).
- Cargo ATMs across UK airports have contracted, from ca. 108,000 in 2000 to ca. 52,000 in 2016. The most recent (2017) Department for Transport forecasts to 2050 assume the number of freighter flights in the UK will remain flat at 2016 levels[128].

269. We expect these trends to continue into the long term. These fundamental market developments do not appear to have been recognised by Azimuth, or have been ignored, in its assessment of the potential for a re-opened Manston.

Forecast Approach

270. Air cargo forecasting is complex, with a wide variety of factors influencing long-term demand. These include:

- High-level economic factors (such as overall GDP growth of the producer and consumer countries, and exchange rates) as well as low-level economic factors (e.g. business rates and import/export taxes).
- The state of global relations and the proliferation of protectionist trade measures.
- The mix of products being traded (remembering that generally only high-value items are suitable for air freight).
- The rate of product miniaturisation (which reduces air cargo volumes/tonnages).
- Development of entirely new products (e.g. iPhone and the global uptick in air freight when a new model is released).
- Technological advances enabling mode shift to or from air freight.

[127] (Airbus, 2017a, p. 105)
[128] (Department for Transport, 2017a, p. 33)

- Fuel prices impacting the competitiveness of air freight relative to other modes (while some products must travel by air, for others this is a preference, which is influenced by price).

271. It is also reasonable to suggest that there is less of a global focus on air cargo forecasts than, for example, air passenger forecasts. As such, there is less detailed, less well-defined, and less-robust data available upon which to base air cargo forecasts.

272. In the interests of simplicity and transparency, we have adopted a very high level econometric approach.

- Future freight growth has been linked to projections of future UK GDP growth.
- We use the UK Office for Budgetary Responsibility long term predictions of UK GDP[129]. In real terms, UK GDP is anticipated to grow by CAGR 2.2% in the period 2016-40 (CAGR 2016-29: 2.2%, 2029-40: 2.3%) with CAGR of 2.4% for period 2040 to 2050.

Forecast Results – Base Case

273. We project the size of the UK air freight market in 2040 to be ca. 4.2m tonnes per annum. This breaks down as ca. 3.1m tonnes of bellyhold demand and ca. 1.1m tonnes of freighter demand. We also project that:

- 2029: ca. 3.3m tonnes (of which ca. 0.9m tonnes of freighter demand).
- 2050: ca. 5.1m tonnes (of which ca. 1.2m tonnes of freighter demand).

274. Key assumptions made in generating our base case forecast include:

- Low growth experienced in the last decade will not continue, with future demand elasticities only slightly below historic long-term observed ratios.
- Future demand elasticities will decline slightly with time (also due to increasing market maturity).

275. We forecast the 2016-40 growth rate to be 2.4% CAGR. This is slightly behind the level of growth seen in the long-term historic data (between 1990 and 2016, CAGR was 2.7% CAGR). Nevertheless, we view our forecast as relatively optimistic. Our forecast growth rate is well ahead of the level of growth seen in more recent years (e.g. 2010-16 CAGR of 0.4%).

276. Our forecast growth rate is behind global forecast growth by Airbus (CAGR 2016-36 of 3.8%). This is not unexpected given that the UK is a relatively mature market, and that our forecast is for a longer period. Note also that our forecast is for tonnage, compared to flown tonne-kilometres for Airbus (as such, changes in the average sector length would influence the Airbus forecasts).

Forecast Results – Scenario with lower demand elasticity

277. We have also produced a scenario in which we lower our forecast demand elasticities to be in line with observed ratios from the four most recent historic years (i.e. 2013-16, over which UK air freight tonnage has grown at 1.8% CAGR). GDP growth in this scenario is as per our base case.

278. This scenario results in a UK demand of 3.6m tonnes of air freight in 2040 – significantly lower than our base case forecast (see Figure 19). This highlights the strength of the market recovery we are assuming in our base case.

[129] (Office for Budget Responsibility, 2017, January)

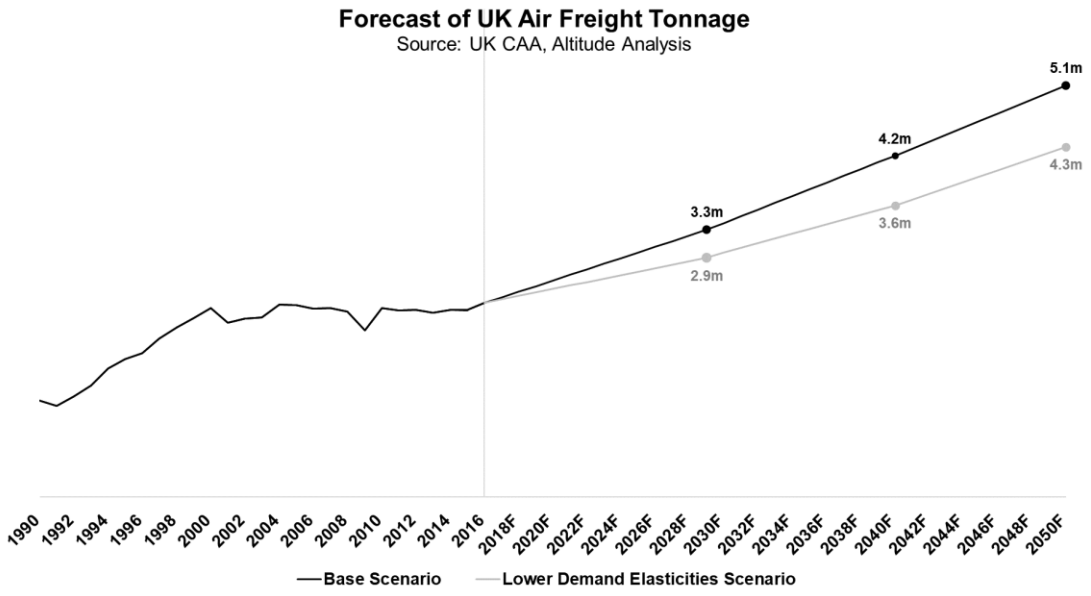


Figure 19 – Altitude forecast of UK air freight demand to 2050

7.2. Other UK Market Forecasts

East Midlands Airport UK Market Forecast

279. In its 2015 'Sustainable Development Plan' document, East Midlands Airport has published its assumptions for the size of the UK market in 2040. It predicts total demand of 4.4m tonnes per annum:

> *"A review of the airport's cargo forecasts has also been carried out. This assumes growth in the UK's total air freight demand, doubling from 2012 levels (2.3 million tonnes) to 4.4 million tonnes by 2040 (combined annual growth rate of 2.3%)"*[130]

280. This gives an average growth rate that is similar to our forecast but from a starting point of 2014 rather than 2016. Growth in the period 2014-16 was significantly lower than 2.3%, explaining the minor differences in the 2040 projections.

York Aviation London Airports Forecast

281. York Aviation published a report in 2015 for the Freight Transport Association and Transport for London. The report included a prediction of the volume of air freight demand in London in 2050. Note the final year of outturn data upon which this forecast is based appears to be 2013.

282. York Aviation's forecast air freight demand at London airports is 4.2m tonnes per annum by 2050[131]. Using the report's stated figure for 2013 freight tonnage at London airports (1.8m tonnes), the forecast CAGR 2013-50 is 2.3%.

283. However, while the growth rate is similar to our UK wide forecast growth, there are again differences in the starting point (achieved growth in the period 2013-2016 was lower than the average growth rate of the whole forecast period).

[130] (East Midlands Airport, 2015, p. 16)
[131] (York Aviation, 2015, p. 19)

7.3. Future Requirement for Freight Capacity at UK Airports

284. As indicated previously, we have compared our forecast demand with our assumed airport capacity for three spot years:

- Prior to new Heathrow runway (2029, last year before assumed new runway opening).
- Medium term planning horizon (2040).
- Long term planning horizon (2050).

285. For the period to 2040, the potential air freight airport capacity in the UK is comfortably higher than the volume of demand we forecast for the UK as a whole.

- In 2029, we forecast base case demand of 3.3m tonnes, compared to a conservatively modelled airport capacity of 3.6m tonnes. In practice we would anticipate that both Stansted and East Midlands capacity could be significantly higher than we have assumed. Therefore, we do not see any overall capacity shortage prior to the third runway at Heathrow.
- By 2040, we forecast demand of 4.2m tonnes, compared to assumed airport capacity of ca. 5.4m tonnes.

286. Furthermore, the potential freighter capacity is significantly above our freighter demand forecast, and the potential bellyhold capacity is also ahead of our bellyhold demand forecast.

287. By 2050, if there is no further capacity development, demand levels are projected to approach capacity provision. This may lead to capacity constraints at preferred airports for the freight sector.

288. Based on planned expansions at the existing major airports, we do not envisage a need for additional freight capacity to be developed in the period to 2040, and possibly not until 2050.

289. Therefore, there is not a compelling need for development of further airport capacity for freighter aircraft in the UK (other than that already in the pipeline or at operational airports with identified potential future capacity).

8. Review of Azimuth Freight Forecasts

8.1. Context

290. In this section, we assess the Azimuth freight forecasts for Manston. As part of this assessment, we review in turn:

- Arguments put forward by Azimuth in Volume 1 in relation to the future potential of Manston. These arguments are then deployed later on in the Azimuth study in support of its freight forecasts.
- The discussion of forecasting approaches put forward by Azimuth in Volume II.
- The research Azimuth undertook (interviews) and their findings and conclusions (Volume II).
- The methodology adopted by Azimuth in its freight forecasts for Manston Airport, set out in Volume III.
- The Manston freights forecasts that have been developed by Azimuth (Volume III).

291. Note that there is a degree of repetition across the various Azimuth reports. To avoid excessive duplication, we review similar points only once.

8.2. Supporting Arguments (Volume I)

292. In this sub-section, we review the key arguments for Manston that Azimuth[132] deploy in Volume I of its report. We critique these points in the same order as they appear in the Azimuth report.

General

293. In Table 2 (P11), Azimuth outlines the leading European airports for freighter movements. In relation to the table, on Page 10 it comments that:

> *"The figures highlight the reliance on belly-freight at most of the UK's airports…. As the UK progresses with negotiations to exit the EU, the Country will find it advantageous to have sufficient capacity at airports that can handle dedicated freighters, without the need to truck to airports in mainland Europe."*

294. We make a couple of observations:

- By Year 5 of the Azimuth[133] forecasts, the predicted freight throughput of Manston is already ahead of the 2014 volumes of some of the leading European airports in the table (Dublin, Rome, Frankfurt Hahn). This highlights the scale and speed of the freight growth that is forecast for Manston by Azimuth.
- The non-UK airports in the table are predominantly major passenger hubs or large passenger airports (typically primary capital city airports). The only exceptions to this are the major integrator hubs at Leipzig and Liege, and Frankfurt Hahn (one of the smaller freight airports in the sample, with lower throughput than envisaged for Manston in Year 4 of the forecasts). This illustrates the importance of "hub" capacity for freighter operations, where wide body long haul passenger flights complement dedicated freighter operations. Manston would not provide this type of capacity.

295. Azimuth also quotes Oxford Economics, Transport for London and York Aviation studies highlighting freight capacity shortages (Volume I, P1-13). We reiterate our previous comments that we do not believe there is an overall shortage of freight capacity. Azimuth ignores the context of these studies, and does not distinguish between hub capacity and freighter capacity at other airports. We refer to the November

[132] (Azimuth Associates, 2017 a)
[133] (Azimuth Associates, 2017 c, p. I)

2017 report by York Aviation[134] which clearly explains how Azimuth misrepresents the studies relied upon to the extent that York Aviation make clear that *" the York Aviation work relied upon by RSP does not, and cannot be taken to, support RSP's proposed alteration to Manston Airport and, therefore, cannot be relied upon by RSP, the Planning Inspectorate, the Secretary of State and any future appointed Examining Authority (should RSP submit the application and the Secretary of State accepts the application)".*

296. Therefore, it does not follow, as stated on Page 13, that "*It is clear from the figures presented here that the capacity available at Manston Airport is vital to the continued competitiveness of the UK.*"

297. Azimuth acknowledges the importance of integrators and freight forwarders on Page 14:

> *"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."*

298. However, both integrators and freight forwarders consolidate activity at major hubs. It is not clear why they would relocate to the peripheral location of Manston. Heathrow is the major consolidation point in the South East. Even under the highly optimistic Azimuth forecasts, Manston freight throughput would remain a fraction of the Heathrow outturn volumes.

299. Page 14 of the Azimuth report outlines various advantages that Manston apparently benefits from. However, these stated advantages were insufficient to enable the airport to be viable when it was operational.

300. Page 22 raises concerns about the number of destinations served from Heathrow.

> *"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 bellyfreight to those destinations no longer served from Heathrow and indicates the need for dedicated freighters on those routes."*

- It is not clear that the number of destinations served from Heathrow is falling (recent trend is inconclusive).
- As discussed in paragraph 204, capacity constraints have primarily impacted short haul routes, which are less relevant for bellyhold freight. The freight tonnage per flight has been increasing at Heathrow in recent years (see Figure 13).

BREXIT and Security Issues

301. Section 5.2 (P22-23) discusses the potential effect of BREXIT on UK aviation. We agree with the comment that "*There are many unknowns at this stage*". However, only positive outcomes (in relation to Manston) are considered. Some major assertions are made that are based on conjecture and lack logic.

302. For example, on Page 23, it is speculated that:

> *"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."*

[134] (York Aviation, 2017, p. 9)

303. Two major assumptions are made. Firstly, that any border issues will be significant and of a permanent nature. However, this will not necessarily be the case. A news report in the Guardian[135] interviewed the chief executive of the Belgian port of Zeebrugge.

> *"Gridlock at the border, vast motorway car parks and jobs lost: British ports have been vocal about the risks of a hard Brexit. In case Conservative MPs missed the message, the Port of Dover advertised at the party conference, warning that an extra two minutes on lorry inspections could lead to queues of 17 miles at Dover and similar "chaos in Calais and Dunkerque".*
>
> *Across the North Sea, continental ports are worried about the great unknowns of Brexit. One of the most exposed is the Belgian port of Zeebrugge, which does 45% of its trade with the UK. "We are vulnerable if something happens to the trade from the UK to the continent," said port chief executive Joachim Coens. "So what I mainly hope is that we could continue having a good trade relationship with the UK… as we have been doing for centuries."*
>
> *However, Zeebrugge is less concerned about the resumption of customs checks – "I think we can handle that," says Coens. The Belgian port could even take business from Calais, he suggests, because it specialises in people-free freight – "roll on, roll off" in industry jargon – removing problems about drivers having to clear UK border controls.*
>
> *Meanwhile, Zeebrugge is fast-tracking the development of apps and scanners to further reduce paperwork. It is developing a UK-specific programme for every stage of the logistics chain, which would allow goods to clear customs even when lorries are miles from the port."*

304. The second major assumption is that customs checks would not have a similar impact on processing times for air freight. As air freight is much more time sensitive than trucked freight, the addition of an hour (say) to processing time would have a much greater impact on air freight than trucking.

305. Even if BREXIT was to negatively impact trucked freight from Europe into the UK, it could equally impact trucked freight in the other direction. Therefore, there could be less flown freight into the UK for onward trucking distribution to other parts of Europe.

306. Azimuth continues:

> *"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 can provide nationally significant to the Nation's airport infrastructure*".

- This outcome is a possibility.
- It is also plausible that the UK could lose trade with other parts of the world. For example, if Japanese car manufacturers relocated assembly plants from the UK to locations within the single market, this would have a negative impact on trade and freight.

307. In summary, the impact of BREXIT is essentially unknown. No business decision or planning application can be made based on such an unknown.

308. Also on Page 23, Azimuth speculates on the impact of increasing passenger security at airports, following terrorism attacks at Brussels and Istanbul airports.

[135] https://www.theguardian.com/politics/2017/oct/07/zeebrugge-brexit-braced-for-tariffs-trade-loss

> *"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, making a switch to dedicated freighters more likely."*

309. We do not see the logic in this assertion. If passengers need to arrive at the airport earlier, this will not impact aircraft turnarounds or the loading or unloading of freight. These are independent processes. Therefore, it is difficult to see how such a development would have any impact on bellyhold freight.

310. The potential positive impact of e-commerce development is discussed on Page 24. The analysis of the opportunity is anecdotal. No consideration is given to how e-commerce may be replacing other types of freight.

Previous Manston Performance

311. Finally, on Page 26, there is some discussion on why Manston was unsuccessful, despite an efficient cargo product:

> *"Manston established a reputation for speedy handling of perishable cargo, with unloading and throughput times much faster than competitor airports."*

312. Azimuth goes on to state:

> *"Since Manston 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 4. 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 strongly indicates that Manston, with the investment required would have a strong future."*

313. We understand that there was significant investment from previous owners. In 2002, it was reported that £7m had been invested on new aprons and taxiways, increasing the freight capacity to 200,000 tonnes[136]). It seems unlikely that the low level of freighter activity was due to lack of capacity.

- The report states that Manston had 2,073 ATMs in 2013, its last full year of operation. This was also the busiest year for ATMs since 2005. However, CAA data indicates that only 511 fights were cargo related.
- This is equivalent to an average of less than 1 rotation per day in its final full year. If demand was there, we would expect that the airport should have been able to handle much greater levels of freight activity.

314. The Azimuth conclusion (see above) that a reopened Manston would have a strong future is based on the "*considerable growth in Manston's cargo market from 2010 until 2013*". The actual growth was 1,203 tonnes (CAGR 1.4%). In fact the airport did not achieve significant growth at any stage in the last decade of operations, with the 2013 outturn only 2,680 tonnes ahead of the 2004 value.

[136] (Wiggins Group plc, 2002, p. 16)

8.3. Approach to Forecasting (Volume II)

315. In Volume II of its reports, Azimuth[137] discusses at some length air freight forecasting literature and its own research methodology.

316. In the interests of brevity, we do not provide detailed comment on Azimuth's literature review. In general, we find the review is very broad, with much of the material of limited relevance (e.g. use of game theory). The approach is also somewhat academic, with minimal practical application.

317. Azimuth[138] concludes that:

> *"…in the case of Manston Airport, closed for several years and lacking investment for many more, this approach is not appropriate. Any attempt to build an econometric model would have to establish criteria whereby a proportion of the total predicted UK air freight traffic was 'diverted' to Manston. However, deciding upon the proportion to divert to Manston raises significant problems.*
>
> *Therefore, instead of providing a mathematical forecasting model, this review of the literature suggests a qualitative approach that aims to predict human and organisational behaviour. Indeed, the DfT (2014, p. 3) place a heavy reliance on an understanding of human behaviour in achieving realistic outputs. A qualitative approach that gathers the opinions of industry experts would allow areas of potential demand for Manston Airport to be identified. It is this type of approach that has been selected in the case of Manston Airport."*

318. We disagree with the conclusion that a purely qualitative methodology is appropriate. While qualitative approaches can be useful, they are most robust as a complement to a quantitative approach. Furthermore, qualitative approaches are typically only adopted for relatively short term forecasts.

319. The issues with a purely qualitative approach in the context of Manston Airport are:

- Assumptions are subject to bias, lack transparency and are impossible to independently verify.
- Does not identify current market size for relevant segments.
- Forecasts do not reflect historic traffic patterns.

320. In particular, we would have expected some attempt at quantification of the overall UK market size for the different freight segments assumed in the Azimuth forecasts. Otherwise, it is extremely difficult to gauge what level of market share for Manston is implied in each freight niche.

321. In describing its research methodology, Azimuth[139] state that:

> *"It should be noted that a comparative case study approach was not deemed possible, as no airports in sufficiently similar circumstances were identified."*

[137] (Azimuth Associates, 2017 b, pp. 6-25)
[138] (Azimuth Associates, 2017 b, p. 20)
[139] (Azimuth Associates, 2017 b, p. 22)

322. While no two airports are exactly alike, there are various airports with similar characteristics to Manston prior to its closure. For example, Prestwick Airport is an airport with modest passenger volumes that also accommodates dedicated freighter flights. Its peak annual freight tonnage was ca. 43,000 tonnes, almost identical to the equivalent value for Manston (source: CAA airport statistics).

- Prestwick Airport[140] has "*the ability to handle large pieces of specialist cargo*".
- It has invested in the "*latest security screening technology which ensures even long and heavy pieces of cargo can be processed quickly and securely*".
- A dedicated sales team has been established, "*targeting high yielding and specialist areas, whilst still delivering a high quality and cost effective service to routine loads". Furthermore, the "management team also continues to promote the airport as a major UK cargo hub at key global events and trade shows and is doing significant work on evaluating the potential for the airport to become a handling consolidation point for Scotland's perishable export industry and the local aerospace industry*".

323. Despite this investment, the airport's current freight throughput is well below historic levels (ca. 11,000 tonnes in 2016, source: CAA airport statistics). The airport identifies the following challenges:

- "*… the dedicated freighter only aircraft market that the Company has specialised in has been in global decline*".
- "*However, income per tonne has remained static over the last 3 years primarily because of the static market, increasing belly hold capacity and the overall competitive nature of the business*".

324. We note there are many similarities to Manston. The proposed strategy for a reopened Manston has some notable areas of commonality with the current Prestwick strategy. Prestwick incurs substantial financial losses, as did Manston for many years before its closure.

325. Clearly there are some differences. The demand in Scotland will not be as strong as in the South East. However, the level of airport competition is much stronger in the South East.

326. It should also be noted that Azimuth[141] is forecasting ca. 341,000 tonnes of freight on dedicated freighters within 20 years of reopening. This is higher than current freighter tonnage at any UK airport. Therefore, clearly there is no equivalent case study that supports the Azimuth growth forecasts.

[140] (Glasgow Prestwick Airport Limited, 2016)
[141] (Azimuth Associates, 2017 c, pp. 11-12)

8.4. Expert Interviews and Discussion (Volume II)

327. The qualitative forecasts by Azimuth[142] were informed by interviews with 24 different parties.

- Only a minority of the parties interviewed appear to be airlines or freight forwarders. Many of the interviewees seem to be of limited direct relevance.
- It is not clear how much air cargo to/from the UK is transported by interviewees. With the notable exceptions of DHL and FedEx, most operators interviewed appear to be relatively small. Azimuth[143] comment that "*there was a wide range between 90 tonnes and 20,000 tonnes per year for the smaller shippers to vast amounts for the integrators.*"
- There is limited visibility on how much cargo these operators used to fly through Manston when it was open.

328. There is also a lack of information on the following points:

- Which airports would a re-opened Manston be capturing cargo from?
- Why do operators not use East Midlands or Stansted, given stated concerns with Heathrow?
- What are the relative economics of using Manston versus bellyhold freight at Heathrow, freighters at alternative UK airports or trucking?

329. Not all the comments support the RSP case for Manston:

- Page 30: *"… it's not going to work if you can only fly between 10.00 and 21.00".* This suggests the airport would need to accommodate night flights to be viable.
- Page 41: "*Integrators monopolise the freight-friendly airports such as East Midlands (DHL) and are reluctant to change their operations, preferring to cope with slot restrictions at Heathrow rather than moving to other more cost effective airports (DHL, FedEx). The explanation for this is the focus on associated fixed costs and the resources involved to make a move to another airport (FedEx)*". This confirms that integrators (and associated high freight tonnage) will be unlikely to move to Manston. The remaining opportunities discussed are mainly in niche areas.

330. We question some of the responses from interviewees:

- On Page 42, Frankfurt is highlighted as an example of a successful cargo airport which does not have 24 hour operations. This is not a relevant comparison in the context of Manston. Frankfurt is one of Europe's leading passenger hubs (over 60m passengers in 2016), with dedicated freighter flights complementing bellyhold provision.
- On Pages 43/44, it is hypothesised that "*With London being a major economy and with scant landing slots available for cargo, a portion of Frankfurt cargo is likely being transported from Frankfurt to London by truck. Manston could readily handle this business in a more cost effective and timely manner, with less environmental impact than trucking from Frankfurt to the UK.*". There is simply no supporting evidence for this assertion, or consideration of the possibility that trucking may be more cost effective (and environmentally friendlier) than flying.
- On Page 46, there is speculation of the impact of Brexit. "*With the UK's exit from the EU, more stringent border control procedures can be expected… Given increased friction at the border crossings, this market is more likely to consider moving to airfreight*". We address this issue from paragraph 302 onwards.

[142] (Azimuth Associates, 2017 b, pp. 25-46)
[143] (Azimuth Associates, 2017 b, p. 26)

331. In the discussion section of the Azimuth[144] report, a range of market opportunities for Manston are put forward. We have commented on many of these areas in depth earlier in our report. On Page 58, Azimuth discusses how future preferences may shift away from bellyhold freight.

> *"Whilst the UK air freight market is currently dominated by belly-hold rather than dedicated freighters, this is the reverse of the situation in the rest of Europe. Several factors may contribute to a change to this dominant model. These include reduced capacity on aircraft such as the A380, the LCC model, which generally focuses on rapid turnarounds, which preclude the carriage of freight. In addition, many interviewees talked of freight being bumped from passenger aircraft and the negative impact this has on their business. If the market was to move away from belly-freight and towards the use of more dedicated freighters, Manston would be well placed to attract this growing market".*

332. We disagree with this assessment:

- Trends in the UK and globally have been strongly towards bellyhold (due to passenger demand and hence belly hold capacity outstripping air cargo demand, see Appendix Section 11.3).
- The A380 is the exception. In general, newer widebody aircraft types have more bellyhold capacity than predecessors (see paragraph 140 onwards).
- There is limited freight uplift from full service passenger airlines operating short haul routes. Therefore, increased penetration of low cost carriers in this segment will not have a major impact (see paragraph 233).

333. On Page 64 of the Azimuth report, it is speculated that Manston could act as a base for Amazon, including the development of a drone hub. No supporting evidence is provided. For the locational reasons highlighted previously, Manston does not seem an obvious choice to host such activity.

[144] (Azimuth Associates, 2017 b, pp. 56-66)

8.5. Methodology Used in Manston Forecasts (Volume III)

334. Volume III of the Azimuth[145] report provides freight forecasts for the first 20 years of Manston Airport (after assumed reopening).

335. In the preamble, Azimuth once again seeks to justify its qualitative approach (Page 3).

> *"The second option was to take a qualitative approach focused on collecting market data. This allows base data to be derived from a method that takes account of how commodities are currently transported and how they are likely to be transported in the near future. This approach is particularly applicable in the Manston case since the airport is not currently operational. Indeed, in the short-term, any useful forecast needs to be built from the likely behaviour of potential airport users.*
>
> *This method is confirmed by the ACI-North America, who represents local, regional and state governing bodies that own and operate commercial airports in the United States and Canada, and recommends deriving customised inputs from a detailed market assessment. This assessment should be informed by carriers, their business partners and other supporting entities in the air freight community (ACI-NA, 2013, p. 3)."*

336. We do not believe that the ACI[146] study provides sufficient rationale for the Azimuth forecast approach. The same ACI study states on Pages 46/47:

> *"The best source of customized inputs in a forecast derives from a detailed market assessment. Carriers, their business partners, and all of the supporting entities in the air cargo community can provide meaningful input to ensure that the forecast is anchored in reality and adds clarity to the planning requirements."*
>
> *"Use the most reliable and current data – A correct and solid traffic basis is essential. If not available, different data sources should be consulted to establish the best possible estimates."*
>
> *"Typically, at least two forecast scenarios are developed to provide a range of potential future activity levels. The baseline forecast represents a continuation of the airport's current role in the region and in the national transportation system. The baseline forecast represents the most likely scenario and will be used for future planning. An alternative scenario(s) can be used as a sensitivity analysis to assess the ability of the airport to respond to optimistic demand factors that depart from the baseline forecast."*

337. Therefore, ACI is not advocating a completely qualitative approach.

- The Azimuth study does not provide a detailed market assessment (rather, anecdotal evidence about the size of selected niches).
- Interviews only covered a small selection of current UK operators.
- No attempt has been made to establish a solid traffic base (from which Manston could seek to capture market share).
- The ACI study suggests that historic traffic performance should inform baseline projections, rather than be disregarded. Alternative scenarios are more appropriate for the types of optimistic demand factors incorporated in the Azimuth forecasts.

[145] (Azimuth Associates, 2017 c)
[146] (Airports Council International - North America, 2013)

338. The ACI study (Page 50) goes on to highlight the different demand data that should be considered, including segmenting tonnage by origin/destination, commodity, desired level of service[147] and shipment size.

339. Key factors to consider are summarised on Page 52, including regional demographics, regional employment and production, regional industrial location patterns, shifts in commodity demand and shifts in distribution practices and patterns.

340. A more balanced assessment of the ACI guidelines is that both qualitative and quantitative methods play an important role in the development of air cargo forecasts. It is not our reading that ACI proposes that a purely qualitative approach is sufficient.

341. On Page 3 of its report, Azimuth makes reference to the Airport Commission:

> *"The Airports Commission also recommends using the Delphi Method, pointing out that relying on, "a single, central-point forecast would be a risky approach" (Airports Commission, 2013, p. 8)."*

- The Airports Commission developed multiple scenarios in its traffic forecasts.
- However, despite this, only one scenario is presented in the Azimuth projection.

342. Volume III also refers to York Aviation and Transport for London analysis (Page 1). As highlighted previously and as supported by York Aviation themselves (see paragraph 235), Azimuth makes incorrect interpretations from the studies.

343. Azimuth also quotes selected secondary data in support of its forecasts. On Page 4, it quotes a one month snap shot of global freight volume growth from November 2016. In the context of long term forecasts for Manston, this is meaningless.

344. Boeing and Airbus freight forecasts are also highlighted.

- Boeing and Airbus are both leading industry bodies which regularly publish air cargo forecasts.
- Boeing on a bi-annual basis (most recent in 2016).
- Airbus, annually (most recent in 2017).
- Note that both forecasts are in units of flown tonne-km – a combination of the tonnage of cargo flown and the distance it is flown for (as such, changes in the average sector length would affect the forecasts). The tonne-km forecasts include both bellyhold and cargo carried on dedicated freighters (though these are not separated in the projections).

345. Global Airbus projections are then used as the source for a simplistic annual growth for Manston for years 11-20 of the Azimuth forecast.

- There are obvious difficulties in comparing growth rates for tonnage at a UK airport (in a mature market) with global freight tonne-km projections (which include forecast growth in faster growing economies).

346. We have undertaken a more in-depth review, outlined in the paragraphs below.

347. In its latest forecast, Boeing predicts air cargo growth of 4.2% CAGR over the period 2015-35[148]. The most recent Airbus forecast, for the period 2016-36, gives a CAGR of 3.8%[149].

[147] Trade-off between the cost and the quality of service as determined by transit time, reliability and security, often compared to the same characteristics for available surface options.
[148] (Boeing, 2016, p. 2)
[149] (Airbus, 2017a, p. 101)

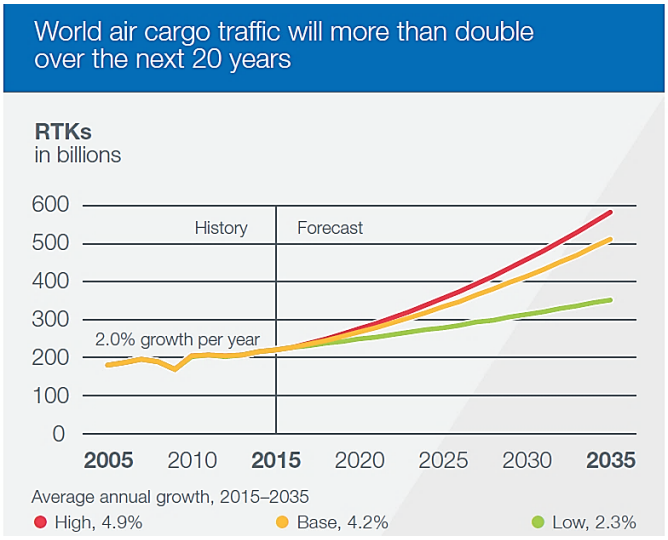


Figure 20 – Global 20-year air cargo forecast - timeseries of high, base and low forecasts

Source: Boeing

348. Boeing also provides a regional breakdown of expected growth rates[150]. For the flows involving Europe, most are below the global average CAGR. Growth of intra-Europe air cargo is forecast to be the lowest of any regional flow shown (2.2%). This indicates global growth projections need to be treated with caution in the context of the UK market.

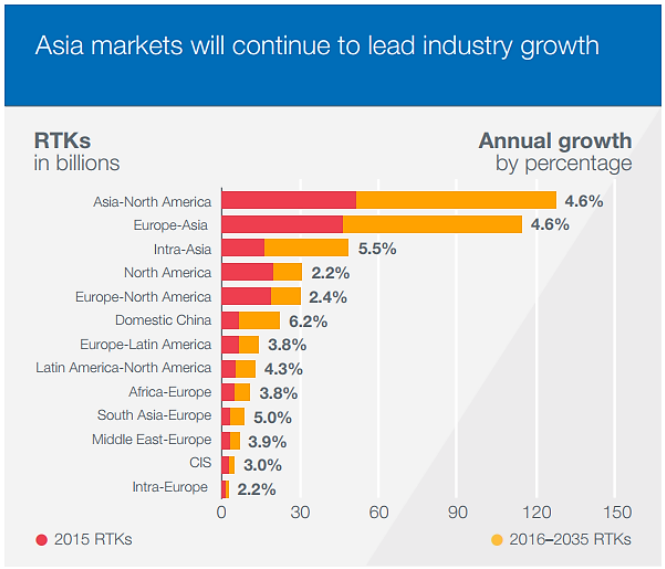


Figure 21 –Global 20-year air cargo forecast – size, and growth rates, of key flows

Source: Boeing

349. While Airbus and Boeing forecast strong growth in tonne-km in future years, it should be noted that only limited growth in freighter aircraft is envisaged for European based airlines. Airbus forecasts growth of just 42 freighters in European fleets by 2036[151] (Boeing does not appear to provide an equivalent number).

350. History shows that Airbus and Boeing forecasts tend to be optimistic. Boeing has reduced its 20-year forecast of growth in every iteration since at least 2010/11, while Airbus has reduced forecast growth in

[150] (Boeing, 2016, p. 16)
[151] (Airbus, 2017a, p. 105)

every iteration since at least 2012. This has resulted in lower tonne-km at the end of each forecast e.g. the 2017 version forecasts lower tonne-km for 2036 than the 2015 version forecast for 2034.

351. Similarly, the number of dedicated freighter aircraft Airbus expects to be in operation by the end of its 20-year forecast has been reduced by around one third, from ca 3,000 (based on the 2012 forecast[152]) to ca, 2,000 (based on the 2017 forecast[149]). We note this downgrading of freighter outlook has not been mentioned in the Azimuth reports, notwithstanding its use of Airbus cargo projections.

- Note the drop of one third in the number of freighters expected to be operating in future is greater than the drop in its cargo tonne-km CAGR forecast, implying increasing dependence on bellyhold capacity to meet air cargo demand. This is consistent with historic trends, highlighted previously in this report.

352. Alongside the figures discussed above, Boeing publishes high and low forecasts. These show global air cargo CAGRs of 4.9% and 2.3% respectively. Notice that the downside (-1.9ppts) is significantly larger than the upside (+0.7ppts). Notwithstanding the differences in geography and forecast units highlighted previously, our projections for the UK sit within this range (CAGR 2.5% for same time period as Boeing projection).

353. Both the consistent reductions of the forecast numbers with each new iteration, and the large potential downside (relative to upside), indicate some uncertainty for the sector in the future.

8.6. Manston Air Freight Forecasts (Volume III)

354. Given the lack of transparency in the Azimuth forecasts, it is not possible to undertake a detailed critique of the forecast building blocks / assumptions. The only breakdown provided is by imports and exports. There is no segmentation by carrier type, commodity type etc.

355. The freight forecasts for Manston are summarised in the chart below.

- In Year 2 (the first year of freight traffic), tonnage is forecast to be more than double the previous Manston peak annual value.
- By Year 11, freight throughput is forecast at similar tonnage to 2016 Stansted performance. Growth from Year 2 to Year 11 is forecast at CAGR 9.7%.
- By Year 18, Manston is forecast to exceed the 2016 freight tonnage at East Midlands Airport (the largest dedicated freighter hub in the UK).

[152] (Airbus, 2012, p. 137)

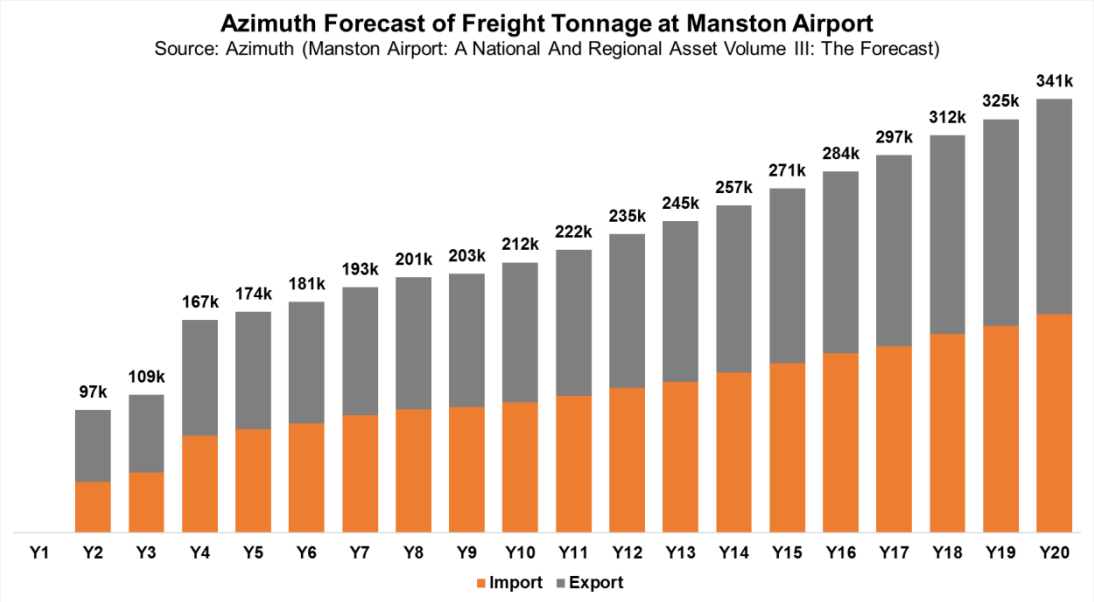


Figure 22- Azimuth Forecast of Freight Tonnage at Manston Airport

356. We have contrasted the projected air freight growth with historic Manston growth, historic UK growth and our base case demand projections for the UK.

- By year 20 of the Azimuth forecasts (assumed to be 2039), Manston freight throughput is forecast to have grown by almost 12 times the 2013 outturn (the last full year of operations). The equivalent CAGR from 2013 is 9.9%.
- This compares to our projected demand growth for the UK market of 2.3% over the same period.

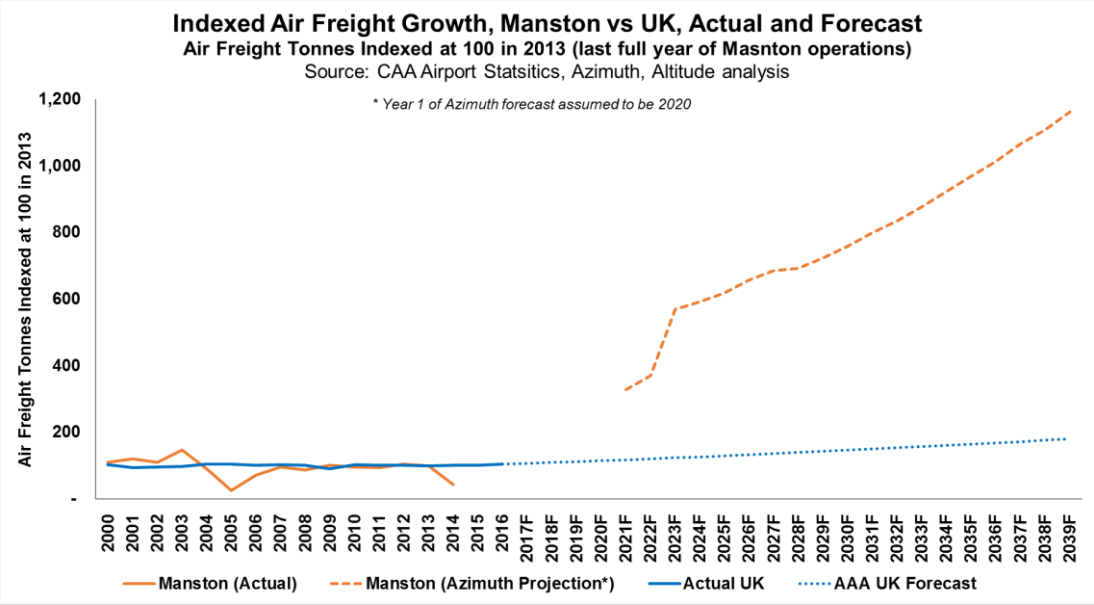


Figure 23- Azimuth Forecast Compared to Historic Growth and UK Forecast

357. We have also compared the Azimuth projections for Manston to the 2016 performance at the leading air freight airports in the European Union.

- The projected volumes for Manston by year 5 would see it comfortably within the top 20 EU airports in 2016.
- By year 20, Manston's projected volumes would be higher than all but the 12 largest EU airports in 2016.
- 19 of the airports in the top 20 are either major/large passenger hubs or major integrator hubs. The one exception is Luxembourg, the home base of Cargolux, which is one of the largest all cargo airlines in the world with a fleet of 27 freighter aircraft[153]. Given that Manston is not expected to develop into either a passenger or an integrator hub, this shows the level of ambition in the Azimuth projections.

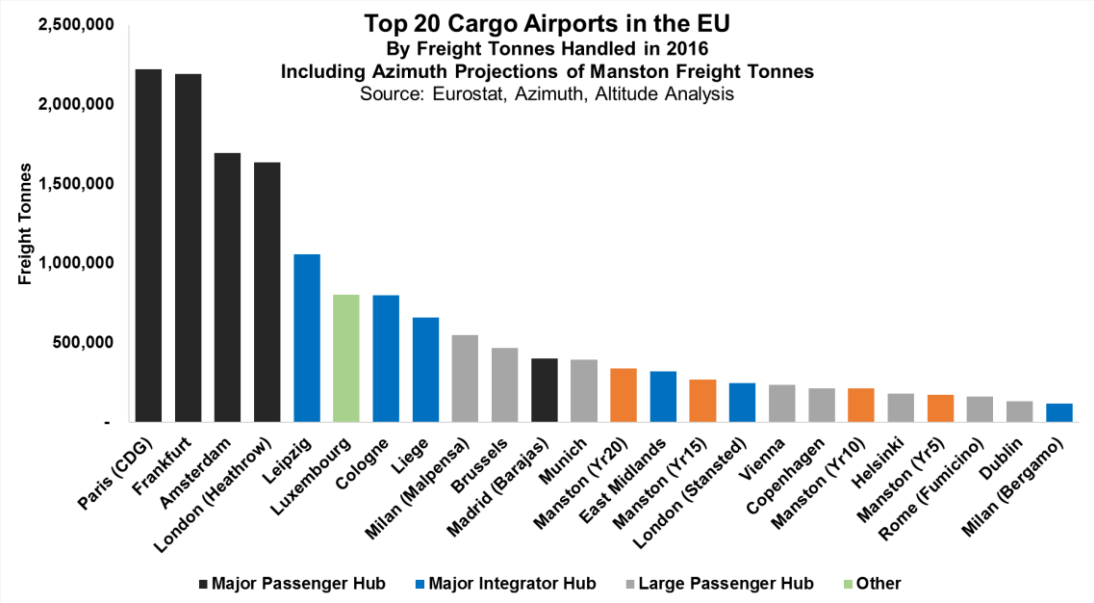


Figure 24- Azimuth Forecast Compared to EU Air Freight Benchmarks

358. Not surprisingly, we consider the forecasts to be not credible, given their extreme optimism and the negligible supporting evidence.

- Growth in freight at Manston would be unprecedented in a UK market context, and in complete contrast to previous historic performance at Manston.
- We do not expect there to be an overall shortage of freighter capacity in the UK or South East. Even if we are wrong in this assessment, Manston and other smaller airports have shown no signs of benefiting from supposed capacity shortages in recent years.
- The rationale for why Manston will be able to achieve a massive uplift on previous performance is weak at best. There is no evidence that bellyhold will not continue to dominate the UK market. The stated advantages of using Manston were present when the airport struggled to grow freight volumes, despite investment in the airport. Lack of capacity was not a material factor.
- As well as the forecasts ignoring historic performance, it also does not reflect the very clear market trends towards consolidation of freight at major passenger and dedicated freighter hubs. UK airports outside the major three freight airports have seen volumes fall.

[153] Ranked the 9th largest cargo airline in the world in 2016 (source: aircargonews). Source for Cargolux fleet is the Cargolux website.

359. There also seems to be a discrepancy between the methodology description and the long term forecast results. On Page 7 it is stated:

> *"Therefore, from Years 11 to 20 an annual percentage growth has been applied to the figures derived for Year 10."*
>
> *"However, to be conservative, and in line with the Airbus forecast, a 4% uplift on the Year 10 figures has been applied to extrapolate the long-term forecast for Manston Airport. "*

360. We therefore expected that long term growth for Manston (Year 11 onwards) would be 4%. The Year 10 to Year 20 CAGR is 4.8% (adding ca. 25,000 tonnes by Year 20, compared to a 4.0% CAGR).

361. As highlighted previously, there are significant issues with using a simplistic annual growth uplift based on global manufacturer forecasts for global tonne-km. Further issues are:

- The manufacturer forecasts have a track record of optimism, and have consistently been revised down in later iterations.
- The Airbus forecast referenced has since been updated, with growth of CAGR 3.8% (lower than the forecast used by Azimuth).
- There is significant variation in growth rates for different parts of the world, with the European market more mature than average. Within the European context, the UK is one of the more mature markets. Therefore, use of a global figure is likely to significantly overstate demand growth in the UK and is not an appropriate tool for looking at demand in the UK market.
- While Airbus and Boeing forecast strong growth in tonne-km in future years, it should be noted that only limited growth in freighter aircraft is envisaged for European based airlines. Airbus forecasts growth of just 42 freighters in European fleets by 2036[154] (Boeing does not appear to provide an equivalent number). Therefore, demand in the most relevant segment for Manston is likely to be lower than the overall average.

362. We are also surprised to see imports and exports almost entirely balanced in the Azimuth forecasts.

- Exports were a minority of overall freight before Manston was closed. Exports accounted for between 6.0% (2010/11) and 24.3% (2004/05) in the last 11 years of operation. The average export percentage in the period 2002/03 to 2013/14 was 12.6%.
- The UK is generally an import rather than an export market for goods. HMRC[155] data indicates that exports accounted for 37.5% of total UK air freight to/from non-EU countries by weight in 2016.
- Therefore, the assumption that flights will be equally loaded for both inbound and outbound operations seems very optimistic.

[154] (Airbus, 2017a, p. 105)
[155] www.uktradeinfo.com/Statistics/BuildYourOwnTables/Pages/Table.aspx

8.7. Manston Cargo ATM Forecasts (Volume III)

363. The Azimuth forecasts also include freighter ATM projections, summarised below.

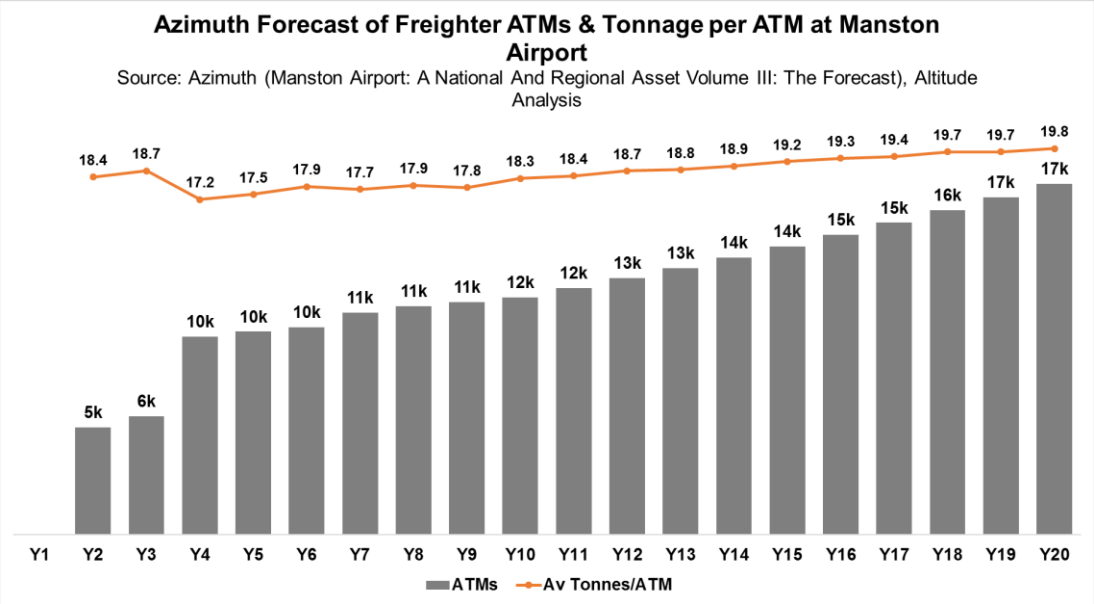


Figure 25- Azimuth Forecast of Freighter ATMs & Tonnage per ATM at Manston Airport

364. The tonnes per ATM forecast figure (ca. 17-20 tonnes) is very low compared to historic levels at Manston. In the last full 5 years of operation, the airport recorded an average of 63 tonnes per cargo ATM.

- The low figure is driven by an assumption that the most predominant cargo aircraft at Manston will be smaller Code C and Code D aircraft. We understand that this differs to the historic pattern, explaining the difference in average loads.
- The projected average load is slightly above current Stansted levels. However, given the lack of integrator operations at Manston, we would have expected the average load figure to be higher.
- As an illustration, if the average load in Year 20 was consistent with historic levels, the same forecast freight tonnage (340,000 tonnes) could be handled by ca. 5,400 cargo flights.

365. We note that York Aviation's professional opinion[156] is that the capability of Manston Airport is 21,000 annual air cargo aircraft movements. This figure is higher than the Azimuth's Year 20 freighter ATM forecast for Manston.

- This is despite very optimistic cargo tonnage projections and average cargo per ATM assumptions that are much lower than historic values.

[156] (York Aviation, 2017)

366. The cargo ATM forecasts have also been compared to leading European airports. This emphasises the extremely challenging nature of the Azimuth forecasts. By year 20, the projected cargo ATMs at Manston are higher than achieved by all but 6 EU airports in 2016. Again, it is noticeable that the leading EU airports for cargo ATMS are either major/large passenger hubs or major integrator hubs, which are not the business models proposed (or that would be realistically achievable) for Manston.

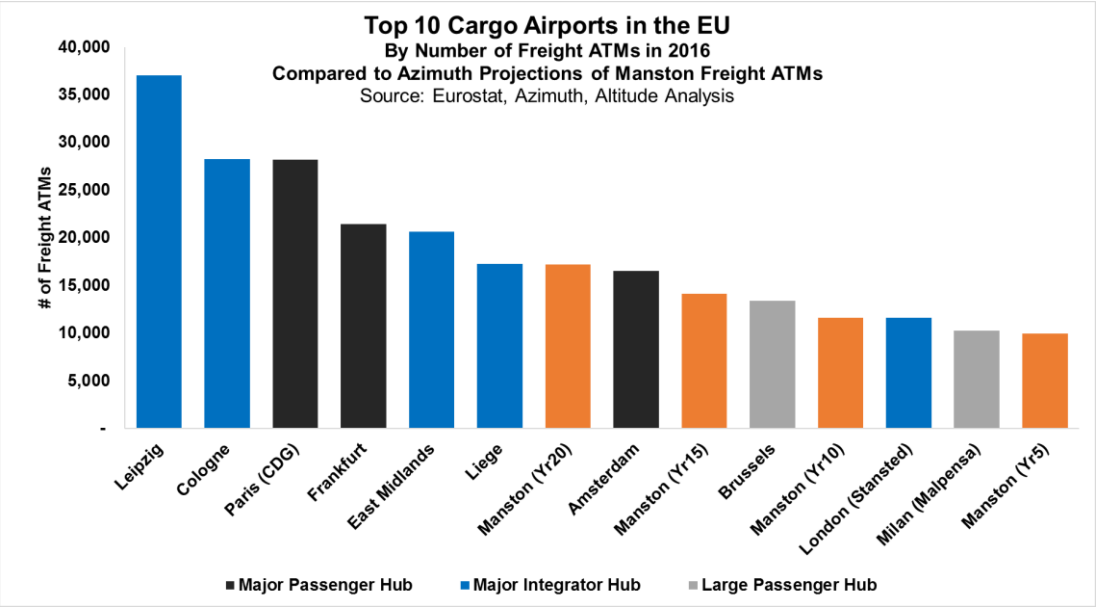


Figure 26- Azimuth Forecast Compared to EU Freighter ATM Benchmarks

367. Finally, we also compare the average air freight tonnes per cargo ATM projected for Manston with leading EU benchmarks. Note that the air freight total includes bellyhold as well as freighter cargo.

368. The projections for Manston indicate low average loads compared to the leading EU airports, with the exception of some integrator hubs (which have a higher proportion of smaller aircraft for short haul flights, reflecting the nature of the express market). This sheds further doubt on the validity of the Azimuth projections for cargo ATMs. If the average loads were higher, this would result in lower cargo ATMs for the same air freight tonnage.

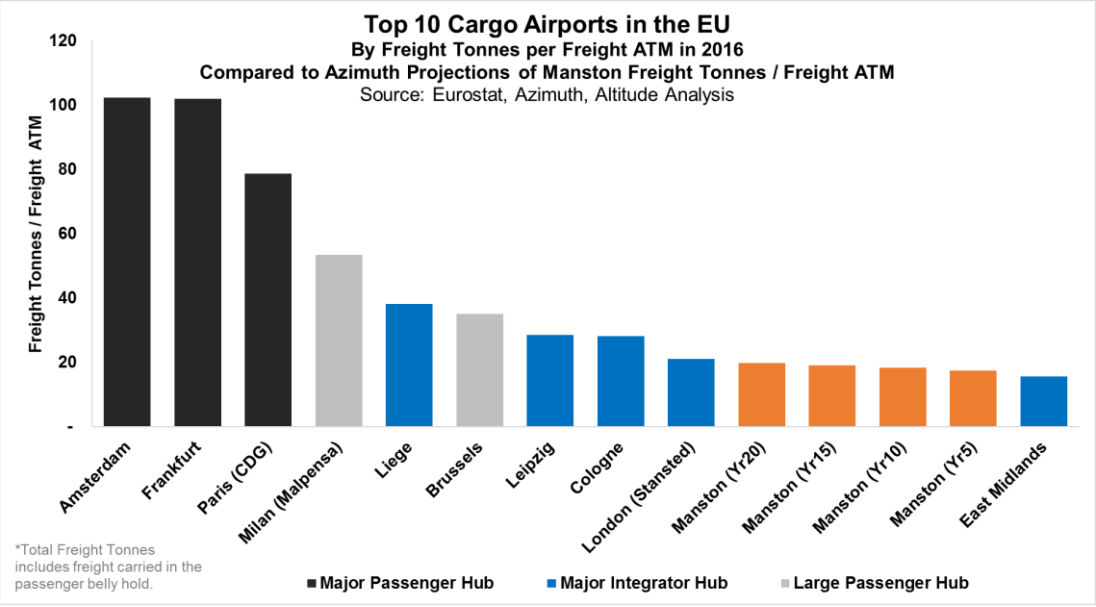


Figure 27- Azimuth Forecast Compared to EU Air Freight Tonnes per Freighter ATM Benchmarks

8.8. Conclusion

369. It is highly unlikely that a re-opened Manston could play any significant role in serving the needs of the UK air cargo industry. There is currently no shortage of overall capacity (beyond that identified specifically at Heathrow), and future demand growth into the long term can be met with planned expansion from the leading cargo airports in the UK.

370. Manston previously operated as a niche air freight airport. While it could theoretically regain this role in the future, its structural disadvantages (location, lack of critical mass, lack of passenger hub, night flight restrictions etc.) will severely limit its potential.

371. Our overall conclusion is that the RSP proposals and the Azimuth forecasts are deeply flawed. The outlook put forward by RSP / Azimuth does not reflect market realities. We would expect freight tonnage and freight ATM outturn at a reopened Manston to be considerably below the Azimuth forecasts. We see no realistic prospect that Manston could ever develop to reach the threshold required of a Nationally Significant Infrastructure Project, namely to increase cargo ATMs by at least 10,000/year compared to the existing capability.

9. Overall Conclusion

372. It is highly unlikely that a re-opened Manston could play any significant role in serving the needs of the UK air cargo industry. There is currently no shortage of overall capacity, and future demand growth into the long term can be met with planned expansion from the leading cargo airports in the UK.

373. The Azimuth freight forecasts for Manston are summarised below:

- In Year 2 (the first year of freight traffic), tonnage is forecast to be more than double the previous Manston peak annual value.
- By Year 11, freight throughput is forecast at similar tonnage to 2016 Stansted performance. Growth from Year 2 to Year 11 is forecast at CAGR 9.7%.
- By Year 18, Manston is forecast to exceed the 2016 freight tonnage at East Midlands Airport (the largest dedicated freighter hub in the UK).

374. We consider the forecasts to be extremely optimistic and not credible, with negligible supporting evidence.

- Growth in freight at Manston would be unprecedented in a UK market context, and in complete contrast to previous historic performance at Manston.
- We do not expect there to be an overall shortage of freighter capacity in the UK or South East. Even if we are wrong in this assessment, Manston and other smaller airports have shown no signs of benefiting from supposed capacity shortages in recent years. Furthermore, there is demonstrable spare capacity at Stansted and East Midlands, both better established and located.
- The rationale for why Manston will be able to achieve a massive uplift on previous performance is weak. The stated advantages of using Manston were present when the airport struggled to grow freight volumes, despite investment in infrastructure and marketing (the previous owners invested £7m on new aprons and taxiways, increasing the freight capacity to 200,000 tonnes[157]). Lack of Manston capacity was not a factor.
- As well as the forecasts ignoring historic performance, they also do not reflect the very clear trends towards consolidation of freight at major passenger and dedicated freighter hubs. UK airports outside the major three freight hubs have seen volumes fall. There is also a trend away from freighter services towards bellyhold freight.

375. Manston previously operated as a niche air freight airport. While it could theoretically regain this role in the future, its structural disadvantages (location, lack of critical mass, lack of passenger hub, night flight restrictions etc.) will severely limit its potential. Even if reinvested, relaunched and supported we would not expect freight volumes to be materially above historic levels, and nowhere close to the volumes forecast by Azimuth.

376. Finally, the forecast of freighter ATMs is not credible.

- By year 20, ca. 17,000 freighter flights are forecast for Manston.
- This represents one-third of current UK freighter flights, in a market where the number of freighter ATMs has been contracting. This trend has been recognised by the Department for Transport, with its 2017 forecasts to 2050 assuming the number of freighter flights in the UK will remain flat at 2016 levels [158].

377. In particular, we note that York Aviation's professional opinion is that the capability of Manston Airport is 21,000 annual air cargo aircraft movements. We would envisage that freighter ATMs at Manston would

[157] (Wiggins Group plc, 2002, p. 16)
[158] (Department for Transport, 2017a, p. 33)

be only a fraction of the level required under Section 23 of the Planning Act of 2003 (being at least 10,000 ATMs/year above the existing capability).

378. In paragraph 48, we put forward four questions in relation to the RSP proposals for Manston. These are more relevant and targeted than the broader questions posed by Azimuth in its first report[159]. The answers to our questions have been developed over the course of this report. We summarise our conclusions in the table below.

Question	Response
Considering planned airport expansions, will there be a need for further airport capacity in the UK for dedicated freighters?	No, planned expansions at existing airports should comfortably provide sufficient freighter capacity until 2040 and beyond.
Will the South East in particular require additional capacity for dedicated freighters?	No, Stansted is planning significant capacity growth. A third runway at Heathrow will provide additional bellyhold capacity (putting downward pressure on freighter demand). Finally, the South East market can be well served by airports more centrally located in England.
Would a reopened Manston be well placed to effectively serve a significant proportion of the dedicated freighter market?	No, a reopened Manston would only serve a niche role, similar to its historic record. It has a poor location and operating restrictions.
Are there other potential airport options for new dedicated freighter capacity?	Yes, there are many UK airports with excess freighter capacity. For example, Doncaster Sheffield Airport has a central UK location. It markets itself as the UK's freighter gateway. It benefits from a large site with a long runway, and has 24 hour operations.

Table 3 – Summary of Analysis of Potential Future Freight Role for a Reopened Manston Airport

379. As can be seen above, when one asks more targeted questions, the outcome is very different to that presented by Azimuth. Our overall conclusion is that the RSP proposals and the Azimuth forecasts are deeply flawed. The outlook put forward by RSP / Azimuth does not reflect market realities. We would expect freight tonnage and freight ATM outturn at a reopened Manston to be considerably below the Azimuth forecasts. We see no realistic prospect that Manston could ever develop to reach the threshold required of a Nationally Significant Infrastructure Project, namely to increase cargo ATMs by at least 10,000/year compared to the existing capability.

[159] (Azimuth Associates, 2017 a, p. I)

10. Appendix - Overview of the Cargo Industry

10.1. Modes of Transport for Transportation of Cargo

380. Air cargo makes up only a small proportion of global cargo (by tonnage). Seabury estimated that in 2016, air cargo had a share of just 1.5% of containerised air and sea trade[160]. For international transit in particular, sea is the dominant mode of cargo transport.

381. In many cases, cargo reaches its destination using a mix of modes. Road and rail are commonly used to collect cargo from many different shippers across a large geographic area, and bring it to a central hub for consolidation, before onward shipping by air or sea (with a similar process occurring at the other end of the air/sea journey in order to distribute cargo to consignees).

382. The different modes of transport each have inherently different costs associated with them, usually related to speed of transit and quantity of product being moved. Air (a relatively fast and relatively low-quantity mode) is more expensive than sea (a relatively slow mode capable of moving vast quantities of product at a time). Generally, products that make use of air transportation are high-value and/or time critical, and can be easily packaged.

383. Transportation of high value items by air helps businesses maximise profits by minimising the time for which its inventory is tied up in supply chains. For high value items, the benefits of being able to quickly realise the value of product inventory and reinvest can outweigh the additional cost of air transport. As such, the proportion of global trade that travels by air is much greater when measured by value (ca. 35%[161]), than when measured by tonnage.

384. For time critical products, the trade off between a) the cost of transport, and b) the deterioration in the value of the product with time, can be a key factor in determining what mode (or modes) to use. Products such as flowers, newspapers and some pharmaceuticals have no value if they are not available to consumers a short period after they are shipped. For these products, air is often the only viable mode of transport.

385. The nature of the cargo, or its physical size, may also influence mode choice (for example heavy plant machinery may be too large for air transport, while air transportation of many substances is restricted or prohibited).

[160] (Seabury, 2017, p. 4)
[161] (IATA, 2017a, p. 5)

10.2. Types of Air Cargo

386. Whilst there are many different types of air cargo, at a high level, most can be categorised as one of general freight, express or mail.

- Mail is typically letters and parcels, delivered to final destination by the postal service of a given country.
- Express cargo is typically 'next-day' shipments that are collected from the shipper by close of business and are required by the consignee by close of business the following day.
- General freight is everything else (note that general freight is a very broad category which also includes several types of low volume specialist cargo such as hazardous, valuable and live animal freight).

387. The air cargo market is served by various different business models. These include:

- Cargo-only airlines, such as Cargolux, which operate aircraft carrying only cargo.
- Integrators, such as DHL Express, which facilitate cargo transportation from shipper through to consignee, and typically own/lease and operate the vehicles necessary to achieve this (and which carry only cargo). Integrators tend to have a focus on express cargo.
- Traditional airlines such as British Airways, which carry cargo on their passenger flights (known as bellyhold cargo). These carriers may additionally operate cargo-only flights (in which case they are known as combination carriers).
- Couriers and road hauliers, which move cargo between the shipper/consignee and the airport hubs.
- Freight forwarders, which typically help shippers to organise the transport of freight, but do not take part in actually moving it.

388. Steer Davies Gleave was commissioned by the UK Department for Transport to improve its understanding of the UK air cargo industry. Its report, 'Air Freight: Economic and Environmental Drivers and Impacts' provides a breakdown of the UK air cargo market in 2008, by type of cargo and type of carrier – see below. General cargo and specialist products accounted for 75% of the market, express for 18% and mail for 7% (all by tonnage)[162].

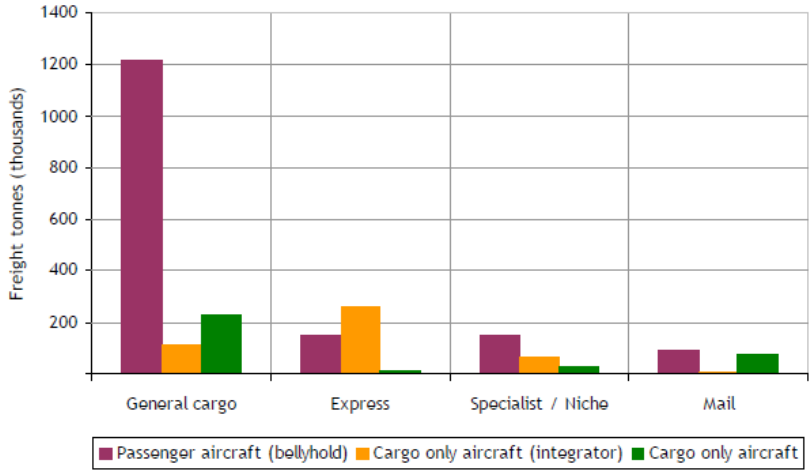


Figure 28 - UK air cargo in 2008 by type of cargo and type of carrier

Source: Steer Davies Gleave [2010], AIR FREIGHT Economic and Environmental Drivers and Impacts

[162] (Steer Davies Gleave, 2010, p. 47)

Bellyhold Cargo

389. A commercial passenger aircraft has a considerable amount of space underneath the passenger cabin, used to store the checked baggage of passengers. The checked baggage generally does not utilise all this space, and some airlines choose to generate additional revenue by filling it with cargo.

390. The routes operated, the aircraft used, and flight timings are typically determined by passenger demand. However, passenger demand does not always align with cargo demand. Some routes may have very little cargo demand, while others may have much more than can be accommodated.

391. The revenue generated from bellyhold cargo can be a significant minority of overall revenue. Furthermore, carrying bellyhold cargo does not substantially increase costs (for example, the aircraft itself and the crew, the landing fees etc are incurred with or without the cargo).

392. Bellyhold cargo can therefore offer an airline a significant revenue upside opportunity, with little downside risk (as long as the airline is careful to price cargo to cover the incremental cost of carriage e.g. increased fuel burn).

393. Loading and unloading cargo from the aircraft can make very short turnaround times impossible to achieve. Therefore short haul low cost operations, which rely on very high aircraft utilisation to achieve profitability, typically do not to carry bellyhold cargo.

394. The capacity available for cargo in the bellyhold of passenger aircraft is difficult to estimate. It depends on many factors, including how many passenger and crew bags there are to accommodate (and how heavy they are, and how efficiently a given airport's staff loads those bags), the volume of fuel needed, the temperature and altitude of the departure airport, the type of engines etc. Many of these factors vary significantly from departure to departure, even if the exact same aircraft hull is used.

395. Complicating matters is that the limiting factor on the amount of cargo that can be uplifted depends on its density. One flight may depart with a bellyhold that is physically full but with spare weight capacity. Another may depart with space available in the bellyhold but not able to carry more weight. Reporting of air cargo load factor typically states only the weight used versus the overall available weight.

Cargo Carried on Cargo Aircraft

396. A cargo aircraft (or freighter) is operated purely for cargo, and carries no commercial passengers. Most of the aircraft used are very similar to commercial passenger aircraft, with the exception that all seats and overhead storage, carpets, toilets, galleys etc. are removed from the space that is normally the passenger cabin; this space is then filled with cargo. Additionally, as there is no checked baggage, all space underneath the passenger cabin is available for cargo. For example, a 747-400 cargo aircraft can carry multiple times more freight than a 747-400 passenger aircraft.

397. As there are no commercial passengers on a freighter aircraft, the size of aircraft operated, the routes and the timings are all chosen to fit cargo demand.

398. IATA highlights the higher average yield from freight carried on cargo-only aircraft in comparison with that carried in the bellyhold of passenger aircraft:

> *"At an aggregate industry level, cargo-only services have exhibited a greater sensitivity to fuel price changes. Cargo only services on average earned a premium of 10% in 2014 over belly hold services"*[163]

399. Note that the yield premium of freighters is not a comparison on a like for like basis. It will include, for example, the impact of freighters serving different markets.

[163] (IATA, 2015, p. 5)

400. The absence of commercial passengers also means that all costs must be covered by the revenue from cargo only. The impact of this on profitability (in comparison with bellyhold cargo profitability) is demonstrated in the following illustrative example (from a 2015 Seabury presentation on air cargo trends).

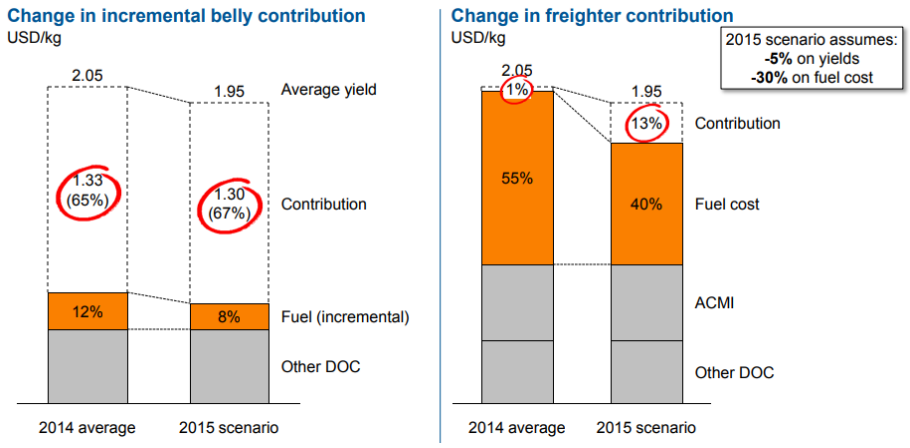


Figure 29 - Freighter vs bellyhold profitability, and impact of fuel price

Source: Seabury [2015], 'Air Cargo 2015: Recent trends and impact on air cargo industry'

401. In 2015, when carrying an item on a freighter, only 13% of revenue goes to profit. Carrying the same item at the same price, but as bellyhold cargo, results in 67% of the revenue going to profit[164].

402. Furthermore, it is seen that freighter profitability is more sensitive to fuel price than bellyhold cargo (fuel price reduced by 30% between 2014 and 2015; illustrative contribution increased by 12 percentage points ("ppts") on the freighter, but only by 2ppts for the bellyhold cargo)[164].

403. Whilst the current low fuel price environment means freighter profitability has increased, it also means future increases in fuel price could significantly reduce the profitability of freighter operations.

404. Another challenge for operators of freighter aircraft is that, unlike passenger demand, cargo demand can be highly directional. A freighter may be full on one sector, and carry very little on the return journey. Long haul freighters may operate circuitous routes with multiple stops (taking them literally all around the world in some cases), in order to minimise flying on sectors with low cargo demand.

405. Freighters may be scheduled (the flight operates regularly to a published timing and route), or charter services (a flight operated on a one off basis to meet irregular/unusually large demand e.g. moving Formula 1 race equipment between one race location and the next).

Trucking

406. The air cargo industry primarily uses trucking in one of two ways. There are road feeder services, operated to move cargo between the shipper/consignee and the airport hub, and there are trucks operated between airport hubs in place of flights.

407. According to Boeing, the use of road feeder services enables carriers to "*extend their networks and add scheduling flexibility*"[165].

408. Integrators generally operate their own road feeder services, while cargo-only and traditional airlines may use third parties (as well as accepting cargo from independent hauliers and couriers).

[164] (Seabury, 2015, p. 7)
[165] (Boeing, 2016, p. 31)

409. The book 'Moving Boxes by Air: The Economics of International Air Cargo' states that trucks operate between airport hubs in place of flights where and when "*the lower unit cost of operating trucks*"[166] makes it sensible to do so. For express freight, this can often be the case on shorter routes, as described by the Steer Davies Gleave report[167]:

> *"for distances of 400 – 500km, cargo will generally go by road. For distances above this, flights will be used, except at weekends, where many packages are only required on the Monday and so can be trucked. The circa 500km cutoff is a function of the integrators next day delivery guarantee."*

410. On such routes, relatively low aircraft utilisation (air transport of express freight is typically required overnight, but not through the day) combined with the lower time benefit of air transport, makes trucks a preferable option in many cases.

411. Regarding less urgent general cargo, the same report states[167]:

> *"Users of air freight with a requirement to send a consignment over 500 kilometres within Europe but without the need for next day delivery, will be likely to purchase a modal option other than air freight".*

412. The lower time benefit of air transport on short routes is derived from the high proportion of the total journey time that is taken up by sorting/handling and ground-based distribution; globally, the average air cargo flight accounts for just 33% of the average air cargo shipment time[168]. On routes with below-average flight times, this percentage falls even lower.

[166] (Morrell, 2011)
[167] (Steer Davies Gleave, 2010, p. 66)
[168] (IATA, 2017a, p. 7)

11. Appendix - Air Cargo Global Market Trends

11.1. Air Cargo Share of Global Cargo

413. While air freight had a share of 1.5% of the world's total air and sea freight in 2016, this share has been dropping during the period since 2000 (when air freight had a share of 2.5% of the global market). This is illustrated in the chart below[169]. Note that over the period 2013-16, air share of the global market has stabilised at ca. 1.5%.

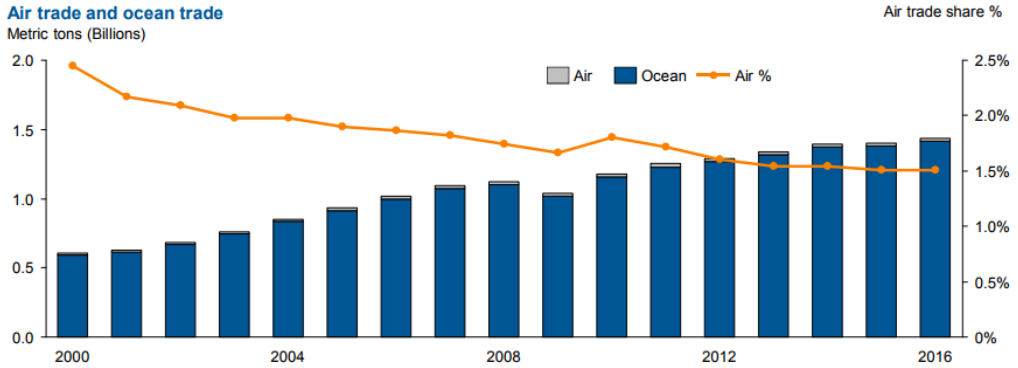


Figure 30 – Evolution of air and ocean freight tonnage with time

Source: Seabury

414. The 2008 financial crisis appears to have marked a shift in the nature of global trade. Before this point, sea and general air freight were growing strongly. In the period since 2008, growth of both has reduced dramatically (sea from 8.9% to 2.5% CAGR, general air freight from 4.3% to 0.9% CAGR). Conversely, the period since 2008 has seen rapid growth of express and mail air freight, as well as China-Europe rail (although these are from a much smaller base, particularly China-Europe rail)[170].

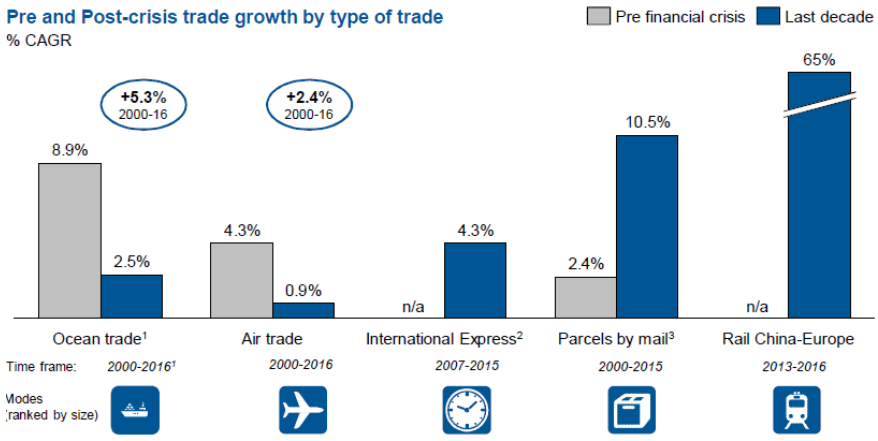


Figure 31 – Cargo growth rates by mode (pre- and post- financial crisis)

Source: Seabury

[169] (Seabury, 2017, p. 4)
[170] (Seabury, 2017, p. 23)

Trucking

415. Within Europe, the past decade has seen an increase in the use of trucking as a substitute for air transport. Referring to Europe, Boeing provides the diagram below, and states[171]:

> *"Since 2006, airport pairs of truck flights grew 3.1 percent on average per year. Weekly frequencies of truck-flights grew 14.3 percent on average per year between 2006 and 2013, but the growth has been at pause since 2013"*

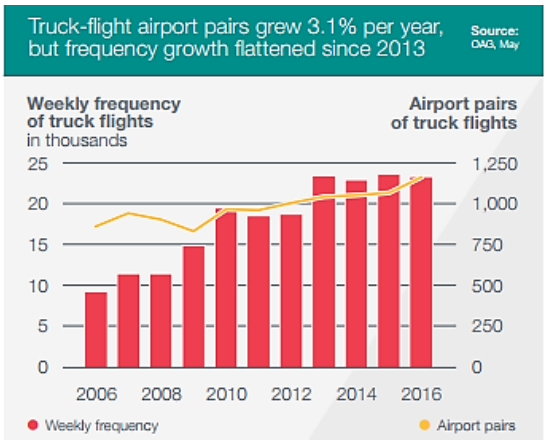


Figure 32 – Example of the growth of trucking within Europe

Source: Boeing

416. The same source also refers to a rise in 'long haul truck-flight operations in Europe', claiming "*their dramatic rise over the past decade has clearly contributed to a decline in growth of scheduled freight carried by air*". Steer Davies Gleave provides data showing a similar trend over the period 2002-07[172]:

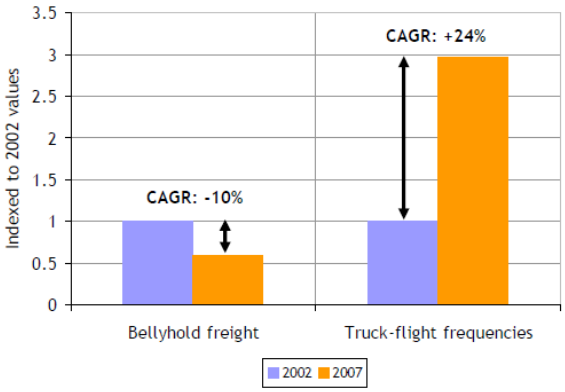


Figure 33 – Comparison of bellyhold airfreight tonnage and truck-flight frequency growth

Source: Steer Davies Gleave (2010), AIR FREIGHT Economic and Environmental Drivers and Impacts

[171] (Boeing, 2016, p. 32)
[172] (Steer Davies Gleave, 2010, p. 7)

11.2. Air Cargo Mix

417. Within air cargo, the low growth of general freight and the rapid growth of express and international mail is shown explicitly in the chart below[173]: Note that a significant proportion of the growth in general freight since 2008 occurred in 2010-11, and that growth of general freight since then has been lower (or even negative).

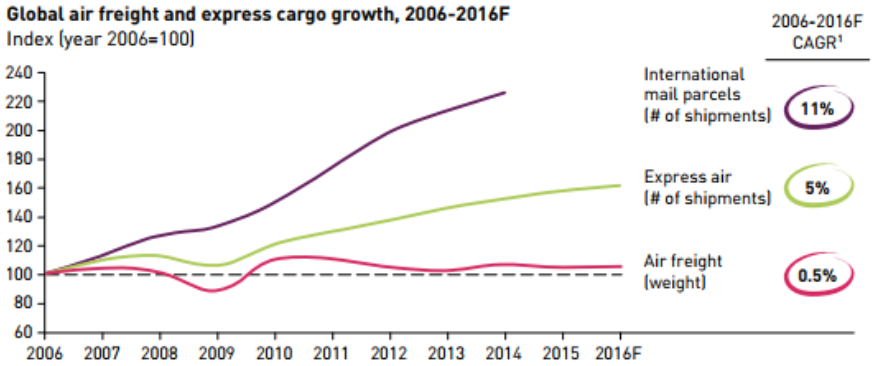


Figure 34 – Air cargo growth rates by type of cargo

Source: Seabury

418. Boeing confirms the relatively fast growth of express cargo[174]:

> *"International express traffic continued to grow faster than the average world air cargo growth rate, expanding 7.2 percent in 2014 and 3.6 percent in 2015".*

419. Within general freight, evolution of certain commodities has hurt air cargo volumes. For example, due to the miniaturisation of electronics, a modern laptop is significantly smaller and lighter than a personal computer from 1995, and so takes less space and weight to ship.

[173] (Seabury, 2016, p. 45)
[174] (Boeing, 2016, p. 7)

11.3. Bellyhold and Freighter Capacity versus Demand

420. In recent years, air cargo capacity has increased dramatically. This has been driven primarily by increased passenger demand resulting in an increase in the number of passenger aircraft (and therefore an increase in bellyhold capacity). Boeing states "*lower-hold capacity increased 27 percent from 2010 to 2015… the number of large freighters in service increased by 8 percent over this same period*"[175]. A similar trend is seen in the chart below from CAPA[176]:

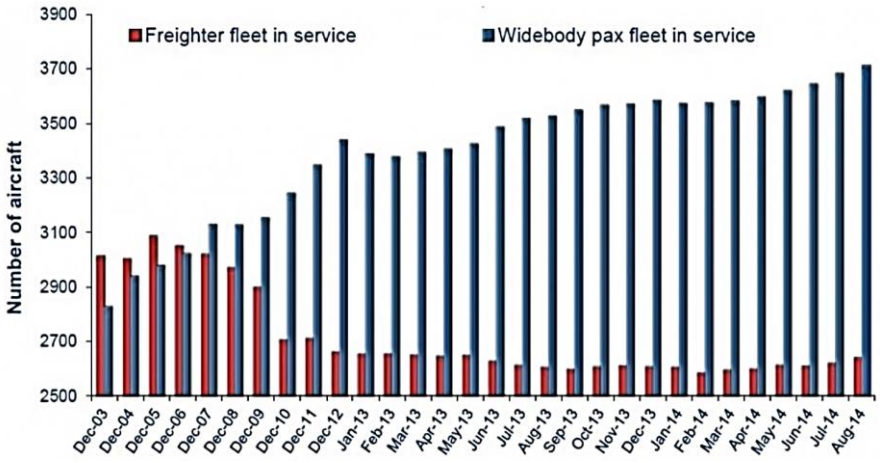


Figure 35 – Number of freighters and widebody passengers aircraft in service globally, Source: CAPA

421. The global financial crisis in 2008 had a significant impact on freighter numbers, while high fuel prices in the period 2011-14 is likely to have been a factor that kept freighter numbers depressed (see paragraph 400).

422. Whilst cargo capacity has been growing rapidly, cargo demand has not kept pace. This is illustrated by the fact that, as of Q4 2016, 15% of widebody freighter capacity globally was in storage[177].

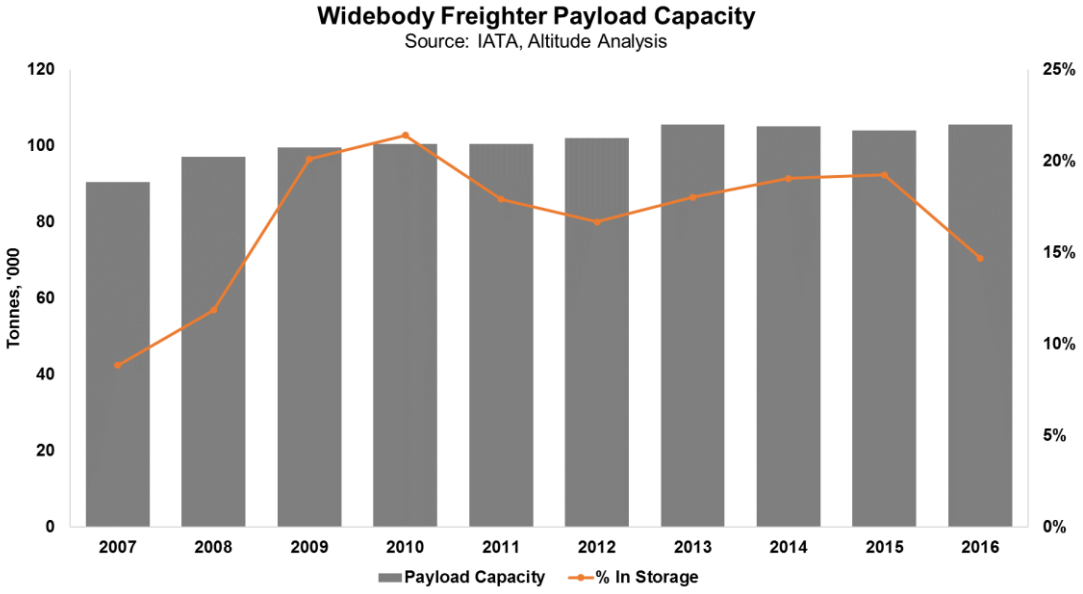


Figure 36 – Change in widebody freighter payload capacity with time

[175] (Boeing, 2016, p. 3)
[176] (CAPA, 2014c)
[177] (IATA, 2016, p. 3)

423. Additionally, the global average load factor achieved by airlines carrying cargo in the first 6 months of 2017 was just 45%[178]. Referring to bellyhold capacity, Airbus states that "*cargo load factors, on average, do not exceed 30 to 40% on international routes*"[179].

424. The chart below from IATA[180] shows the growth of both passenger and freight demand; since 2008, growth of passenger demand has far exceeded growth of cargo demand. This illustrates why growth of bellyhold capacity has outstripped that of freighters, why a number of freighters are being kept in storage, and why there remains significant amounts of unused cargo capacity.

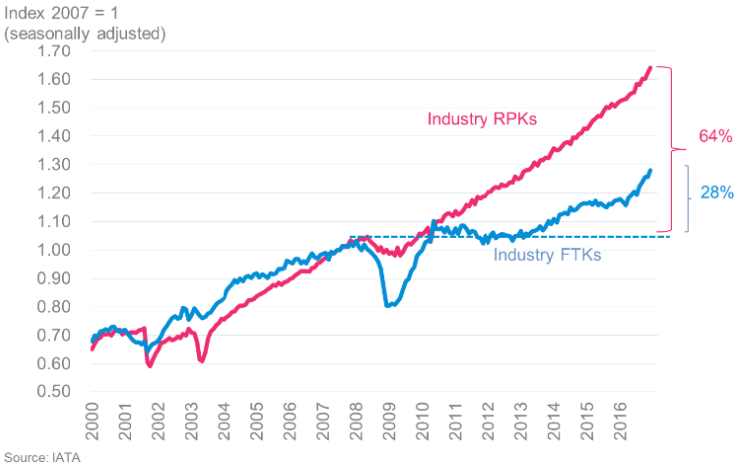


Figure 37 – Passenger growth compared with air freight growth, Source: IATA

11.4. Global Market Outlook

Outlook from Selected Carriers

425. The trend towards a reduced role for dedicated freighter aircraft (see Section 3.3) is reinforced by airline developments. In the text below, we provide selected examples of airlines cutting back on usage of freighter aircraft.

426. Luxembourg based dedicated freighter operator Cargolux (also in the world's top 10 air cargo carriers), acknowledges in its 2016 annual report the challenging operating environment it faces. The annual report also raises the possibility that dedicated freighter operators will not be viable in the future:

> *"There is clearly a current oversupply of capacity in the markets, which makes for a more challenging environment for cargo operators that have to achieve a healthy level of sustainable profitability…. There has been a modal shift from air freight to sea freight over the years whilst rail freight between Asia and Europe is an additional competitive challenge…. I also do not believe that it will be beneficial for shippers and forwarders if dedicated air freight operators were to disappear from the market."*[181]

[178] (IATA, 2017b)
[179] (Airbus, 2014, p. 35)
[180] (IATA, 2016, p. 3)
[181] (Cargolux, 2017, p. 7)

427. In 2014, the largest UK based combination carrier, IAG Cargo, decided to cease long haul flying using its own dedicated freighter aircraft (which had operated from Stansted).

> *"IAG Cargo CEO Steve Gunning said the carrier's dedicated cargo operations "made no profitable contribution" and the end of its freighter services will make the carrier "financially stronger""*[182]

428. Several other leading airlines are cautious about the prospects for the freighter segment. The following quotes are from a selection of combination carriers, all in the world's top 10 carriers of air cargo:

> *"Air France-KLM Martinair Cargo is pursuing its restructuring within a difficult economic environment. Air freight is being impacted by the situation of structural industry overcapacity…. the business is progressively retiring a portion of its full-freighter fleet to refocus most of its activity on the bellies of passenger aircraft. Within the framework of the Perform 2020 plan, this full-freighter fleet will thus be progressively reduced to five aircraft by 2017"*[183]

> *"Air France-KLM said freighters would become a "niche product" as cargo markets face continued overcapacity. Air France-KLM executive VP Erik Varwijk said slowing demand and greater belly capacity on scheduled passenger services made exclusive freighters redundant"*[184]

> *"Emirates VP cargo commercial operations Duncan Watson said the airline does not plan to add more freighter aircraft in the foreseeable future"*[185]

> *"Singapore Airlines Group subsidiary SIA Cargo faces another challenging year as conditions in the cargo market remain unfavourable. SIA Cargo has been unprofitable for seven of the past eight years, with losses further widening in recent quarters. Cargo capacity has been relatively flat since 2009, with additional belly space from passenger aircraft offsetting freighter reductions…. SIA Cargo is cutting its 747-400 freighter fleet in 1QCY2017, to only seven aircraft. At its peak in 2007 SIA Cargo operated 16 747-400 freighters. SIA will need to decide within the next few years whether to cut its freighter operation entirely or start investing in 747 replacements"*[186]

[182] (CAPA, 2014b)
[183] (Air France-KLM Martinair Cargo, 2017)
[184] (CAPA, 2014a)
[185] (CAPA, 2016)
[186] (CAPA, 2017)

12. Appendix - Case Studies of Leading European Cargo Airports

12.1. Context

429. In assessing the future potential of a re-opened Manston Airport, we have undertaken a review of Leipzig and Liege airports. Both are leading airports for all-cargo operations (rather than passenger hubs providing bellyhold capacity).

430. We have identified some of the key attributes that have helped Leipzig and Liege develop major roles within the European air cargo sector.

12.2. Leipzig

431. Leipzig Airport handled more than 1.0m tonnes of cargo in 2016. This throughput made it one of the top 5 cargo airports in Europe[187].

432. Leipzig is located in eastern Germany, ca. 100km from the Czech border and ca. 160km from the Polish border. Regarding its location, the airport states:

> *"[it is] located at the very heart of the central German logistics region…. [it is] an ideally located alternative to enter the growing markets in East Europe and Asia…. Besides outstanding infrastructural connections, the region is characterised by its motivated and qualified workforce and a high level of potential with regard to available space and investment"*[187]



Figure 38 - Trucking isochrones from Leipzig; 6hrs (dotted), 8hrs (solid-medium) and 10hrs (solid-thick)

Source: Leipzig Airport[188]

433. Leipzig Airport markets its proximity to eastern Europe as a benefit due both to the increasing economic power of this region, as well as the reduced flight time to Asia (compared with airports further west).

434. The airport has published a document stating trucking times to locations in eastern and western Europe. Only one of the ten examples given is within the 500km radius often considered as the realistic limit for express cargo. Three of these trucking destinations are over 1000km from Leipzig[189]. This gives some indication as to the possibilities for trucking of general cargo.

[187] (Leipzig Airport, 2017)
[188] (Leipzig Halle Airport)
[189] (Leipzig Halle Airport, 2014, p. 10)

435. Leipzig Airport has direct access to the European motorway network, and also has direct access to the rail network making rail-air transhipment possible.

436. The airport has two 3,600m runways, and operates cargo flights 24 hours a day. It has support from politicians at several levels for 24-hour operations. For example, the President of Saxony has said:

> *"Leipzig is in the second position of all hubs in Germany and this is why the state government and the city of Leipzig are convinced that 24 hours a day air traffic is necessary"*[190]

437. Note that this support appears to have been hard-won; the airport is reported to have spent ca. €100m on a noise control system, and is also said to be in regular communication with relevant stakeholders regarding noise[190].

438. DHL is one of the Leipzig Airport's largest customers. It decided to make the airport its European hub in 2004, began operations there in 2008, and now handles "*an average of 1,600t of cargo every day*"[191]. As of October 2016, DHL's total investment on its Leipzig hub was €655 million[192].

439. DHL Chief Executive Frank Appel said of Leipzig:

> *"It is in an excellent location, strategically positioned in the heart of Europe and is also in an excellent position to reach Asia and that is why we decided to expand our capacities here"*[190]

440. DHL's Leipzig hub manager is reported as adding other reasons for choosing Leipzig, including:

> *"the excellent road and rail connections, unrestricted night flights and a pool of skilled workers"*[190]

441. DHL operations support two of the airport's largest operators of scheduled cargo flights: EAT Leipzig is a wholly-owned subsidiary of DHL (it operates DHL's parcel and express flights, as well as providing adhoc charter services), while AeroLogic is a joint venture between Lufthansa and DHL (primarily operating long haul cargo-only flights for DHL).

442. The airport is also home to Ruslan Salis, a leading air charter company offering heavy lift services for large items of freight. A relatively large number of other carriers also operate charter cargo flights from Leipzig (34 are listed on the Leipzig Airport website). This indicates the airport is able to offer a competitive proposition for a wide range of different types of air cargo.

[190] (Air Cargo News, 2016a)
[191] (Saxony Economic Development Corporation, 2017)
[192] (Cargo Forwarder Global, 2016)

12.3. Liege

443. The airport handled 660,000t of freight in 2016, making it the 8th largest cargo airport in Europe (bigger than both East Midlands and Stansted). The majority of freight was general freight (ca. 56%), with express accounting for ca. 25%. Freight handled at Liege has grown at an average rate of 5.6% CAGR over the 4-year period 2013-16[193].

444. Liege's proximity to major population centres of northern Europe means that there are "*around 400 million consumers*"[193] within easy reach of the airport. This advantageous position means that 66% of all European freight transits through the region[193].

445. It has direct access to the motorway network. The airport states:

> *"Motorway transport is now the solution preferred by major logistics players and those specialised in the transport of goods in Europe…. The Flexport® is less than one day by truck from the largest European cities, thus reaching around 400 million consumers. It offers the advantage of an excellent, uncongested motorway network"*[193]



Figure 39 - ½ day & full-day trucking isochrones from Liege airport

Source: Liege Airport[193]

446. Whilst Liege benefits from an advantageous geographic location, the regulatory environment in which it operates is also conducive to air cargo; the airport operates 24-hours per day, 7 days per week:

> *"The other advantage at Liège is genuine 24 hour operations, an increasing rarity in Europe…. This does not just mean that the runway operates through the night but that there are no limits of any kind on the number of night slots that can be offered, and no extra charge for landing then…. This has been guaranteed by local government for 30 years and it is backed up by positive action, including purchasing and demolishing some houses under the flight path and spending heavily on noise insulation for others"*[194]

447. Note that when trying to construct a viable slot pair where one end of the route is a constrained airport, the ability to land at any time of day at the other airport can be particularly valuable. As more and more airports become constrained, 24-hour operation may therefore become increasingly important.

448. TNT is the main customer at Liege. Despite a recent buyout of TNT by FedEx, there appears to have been little loss of traffic to FedEx's handling facilities at other airports. This perhaps indicates that integrators are reluctant to shift location once their infrastructure investment has been made.

[193] (Liege Airport, 2017)
[194] (Air Cargo News, 2016b)

449. Other customers with significant tonnage at the airport include CAL, Ethiopian Cargo, Qatar Cargo, El Al Cargo and Icelandair Cargo. Similar to Leipzig, the diverse customer mix is indicative of the competitive proposition the airport offers.

450. The main runway is 3,690m long meaning many kinds of large cargo aircraft can take off at full capacity[195]. Whilst this is typically not necessary for express cargo carriers operating short-haul flights, it may be a key enabler for some long haul freighter operators.

451. Freight-only carriers also get advantages at Liege that they do not find at many other European airports. VP Commercial Steven Verhasselt said in 2016:

> *"The general trend is towards belly cargo but when you are operating a freighter, you want to fly into an airport dedicated to helping that type of cargo…. If we can save you a block hour from not having to taxi or wait for passenger airlines to land first, than [sic] that is a real cost saving and more important than cheaper landing or parking rates"*[196]

452. TNT and CAL both switched from Cologne to Liege in the 1990's "*attracted by Liege's strategy to focus on air freight in general and on the express business specifically*"[197], and are now amongst the largest of the airports customers.

453. The airport continues to expand its cargo handling facilities, with a new €4 million, 6,000m^2 cargo terminal due to open in 2017. It is also taking a role in the development of the 100+ hectares of land around the airport.

- For example, by forming a partnership – Land In Liege – with the land owner, which aims to "create synergies between the airport development and the development of the areas surrounding it"[198].

12.4. Conclusions

Leipzig and Liege airports are typical – albeit leading – integrator hubs. The airports are structurally different from Manston in many regards. There is no realistic prospect for Manston to develop a similar business model. However, without the cargo volumes associated with an integrator hub (or a major passenger hub), Manston will find it very challenging to generate significantly higher cargo throughput than historically achieved.

Liege / Leipzig Feature	Situation at Manston
Located close to motorway network, maximising catchment size.	Located on an A-road, ca. 40 miles from the motorway network (M20).
Catchment contains many of Europe's largest population centres.	Catchment is limited by the English Channel / North Sea.
24-hour operation.	Not clear but likely to be restricted.
Runway length of at least 3,600m, enabling largest aircraft to take off with full payloads.	2,750m runway, potentially limiting take-off payload for largest aircraft.
Significant investment in noise control measures.	Not clear.
Significant investment in cargo handling facilities.	Not clear.
Support from regional government.	Not clear.

Table 4 – Liege/Leipzig Structural Features vs Manston, Source: Altitude

[195] (Liege Airport, 2017)
[196] (Air Cargo News, 2016b)
[197] (Cargo Forwarder Global, 2017)
[198] (Land In Liege, 2017)

13. Appendix – Supporting Material

13.1. Assumptions made to calculate indicative cargo bellyhold capacity

454. Despite the difficulties in stating a cargo capacity for an aircraft type (see paragraphs 394-395), by making some assumptions[199] it is possible to generate estimated like-for-like comparison of the potential cargo capacity of different aircraft types.

Aircraft	Typical Passenger Capacity (#)	Indicative Cargo Capacity Volume (m^3)	Indicative Cargo Capacity Mass (kg)	2017 ATMs, UK-World (excl Europe)
Newer Aircraft Types				
B777-300	350-400	116	24,000	15,000
A350-1000	350-400	112	25,000	-
B777-9X	350-400	109	30,000	-
B787-10	300-350	105	21,000	-
A350-900	300-350	95	20,000	2,100
B787-9	250-300	91	22,000	12,000
A330-900neo	250-300	84	15,000	-
B787-8	200-250	71	15,000	11,000
A330-800neo	250-300	64	22,000	-
A380	400+	57	34,000	12,000
Older Aircraft Types				
A340-600	350-400	109	26,000	2,000
A330-300	300-350	84	15,000	6,000
B777-200	300-350	77	22,000	3,000
B747-400	400+	71	25,000	12,000
A340-300	300-350	71	15,000	500
A330-200	200-250	64	22,000	6,000
B767-300ER	150-250	46	23,000	9,000

Note there are additional ATMs where the precise aircraft model is not known: B777: 18,000, B787: 2,000, A330: 500

Table 5 – Indicative cargo capacity of selected aircraft types
Source: Boeing, Airbus, British Airways, JAL Cargo, Qatar Cargo, Qantas Cargo, OAG, Altitude Analysis

455. The following set of assumptions are intended to enable comparison of the cargo capacity (weight and volume) of different aircraft types on a basis that is as close to like-for-like as possible.

456. They do not result in a cargo capacity that is directly comparable with airline or manufacturer stated capacities, nor with cargo capacities actually achieved by the aircraft operators in the real world.

- Seat capacity as stated by the aircraft manufacturer. Where more than one configuration is listed, the highest capacity 2- or 3-class version is assumed (single-class configurations are possible but not common for widebody aircraft, and therefore not representative of the likely average configuration).
- Passenger load factor of 100%.
- A passengers to crew ratio as close to 20 as possible (with the number of crew and the number of passengers as whole numbers).
- Passenger and crew average weight of 85kgs per person.
- An average of 1.1 hold bags per premium (F/J/W) class passenger, and 0.8 hold bags per economy (Y) class passenger/crew member.
- Average premium bag weight of 21kgs and average economy bag weight of 20kgs.
- An allowance of 1500kgs for miscellaneous items (e.g. cabin baggage).
- The maximum possible weight available for passengers/crew/bags/misc./cargo is equal to the difference between the Empty Operating Weight and Minimum Zero Fuel Weight stated by the

[199] See Appendix section 13.1 for detail of these assumptions

aircraft manufacturer. Where the manufacturer defines multiple weight variants, the highest MZFW version is used.

- Average bag volume of 0.18m^3.
- LD3 container volume of 4.5m^3, and pallet volume of 11.4m^3 (Source: Boeing).
- Average LD3 packing factor of 95% for passenger/crew baggage.
- Assumption that no LD3 container will contain both F/J passengers bags and W/Y passenger bags (note no similar assumption is made for transfer/OD bags).
- The hold will be configured with enough LD3 containers to fulfil the passenger/crew baggage requirement (and no more), while adhering to the publicly-known allowable hold configurations (Boeing, Airbus, Qantas Cargo, JAL Cargo, SIA and Scoot]). Note: Available cargo volume is mathematically larger if the number of LD3 units in the hold is maximised. However, the LD3 is less useful for cargo than a pallet (it is smaller, so the maximum dimensions of the freight it can hold is lower; it has a small opening through which freight must be loaded; LD3s are smaller than pallets and are not cuboids; hence they have worse volume utilisation than pallets). In our experience, airlines do not typically use a max-LD3 hold configuration, despite the reduced mathematical cargo volume inherent in substituting LD3s for pallets.
- Bulk hold volume is not included in our cargo volume estimate[200].

13.2. Outlook for A380 in the UK Market

457. We do not believe the A380 will significantly increase in prevalence in the UK market, for the following reasons:

- The only UK airline with outstanding orders for the type is Virgin Atlantic (6 aircraft on order). However, Virgin has continually deferred this order (since 2006) and it is widely considered unlikely that deliveries of these aircraft will ever be made (a Forbes article from 2016 states "Virgin Atlantic's ever-deferred order for six is basically dead"[201]).
- The other major UK carrier (British Airways) currently has no outstanding A380 orders.
- There are currently outstanding orders of just 97 aircraft; 46 of these are for a single airline, Emirates, which is not based in the UK (but serves the UK market).
- Additionally, just 2 new orders globally have been made for the aircraft since 2015[202].

[200] The bulk compartment is typically around 10-15m^3, capable of storing loose-loaded items. At IAG Cargo, this space was primarily used for blankets and newspapers for passengers, with around 2-4m^3 typically made available for mail bags/express cargo. Use of this space may vary significantly airline by airline.
[201] (Forbes, 2016)
[202] (Airbus, 2017b)

14. Appendix – Review of AviaSolutions Report

14.1. Introduction

458. AviaSolutions was commissioned by Thanet District Council to investigate the commercial viability of Manston Airport. Its report[203], dated September 2016, is briefly reviewed in this section of the appendix.

459. The AviaSolutions report has a fairly wide scope, including a review of the site development options, analysis of passenger potential, airport financial projections and asset condition reports. Consistent with our overall scope, we focus only on the aspects of the AviaSolutions report addressing cargo potential.

460. Northpoint was subsequently retained by RSP to critique the AviaSolutions report. We review the Northpoint report[204] and the subsequent response from AviaSolutions[205] in the next appendix section (Section 15).

14.2. Potential Development Scenarios

461. AviaSolutions[206] outlines various potential scenarios for cargo activity at Manston. It states that:

> *"In the past, Manston Airport was able to attract a certain level of cargo activity, and a potential future role would be for it to again serve this market. In our assessment, we assume as a minimum that Manston attracts this previous freight, totaling 30,000 tonnes per annum."*

462. Given cargo consolidation trends and competition from more established airports, we consider it possible that a reopened Manston may not be able to achieve historic tonnage. However, as a modelling assumption, we consider this to be reasonable.

463. AviaSolutions then puts forward two possible reasons why the scale of activity in the future could exceed historic levels:

> *"The selection of the East Kent area by a major multinational manufacturing (e.g. an Asian electronics or white goods company) or retail group (e.g. Amazon) as the location of its distribution network. Such location decisions can have a significant impact on freight volumes. However the UK's planned exit from the EU leaves makes this less likely.*
>
> *As a consequence of their lower sensitivity to airport location, freighters are generally amongst the first category of traffic to be 'squeezed' out of busy airports. With the pressure on runway capacity in the South East of England, it is possible that freighters currently operating through the London airport systems might seek to move to an alternative airport."*

464. In relation to the first possible reason, we are not aware of any firm or proposed development that would have a significant impact on freight demand. Therefore, while this a theoretical possibility, the same could apply to any location in the UK. Any future such development would be heavily contested between different UK regions, with more established and more central distribution locations likely to have an advantage.

465. The second reason suggested by AviaSolutions is investigated further in subsequent sections of the AviaSolutions report. We comment on this analysis later in this appendix.

466. AviaSolutions continues, commenting on the potential for integrator services at Manston:

[203] (AviaSolutions, 2016)
[204] (Northpoint Aviation Services)
[205] (AviaSolutions, 2017)
[206] (AviaSolutions, 2016, p. 15)

> *"We also considered the role of integrators in the air freight market. Whilst general cargo traffic tends to be more flexible about the location of the airport it uses than passenger traffic, this does not apply to the major integrated freight operators. The business model of operators such as DHL, FedEx and UPS is based on a hub and spoke principle involving both aircraft and road feeder services: the surface element of the network has a greater requirement for a central location within the market being served. We consider the geographic location of Manston precludes it from being a suitable base airport for an integrator in particular when compared to UK competitors such as East Midlands Airport."*

This assessment of the potential for integrators is consistent with our view.

14.3. Cargo Analysis

467. In Section 6 of the AviaSolutions report, more detailed analysis of the cargo market is undertaken. In assessing the key airport dynamics of the UK market[207], AviaSolutions draws similar conclusions to our analysis:

> *"The busiest airport for freight has consistently been Heathrow, responsible for two thirds of the country's air freight. This position owes much to the very considerable cargo capacity in the holds of the wide-body aircraft providing the many long haul passenger services from the airport. In contrast, East Midlands' position as the second busiest freight airport is due to its role as the centre of the UK distribution network of the integrated cargo carriers, especially DHL but also UPS and Royal Mail. Stansted is preferred by FedEx and is also used by the cargo operations of a number of airlines. These included British Airways before it discontinued its all-freighter operations in April 2014 and switched to the freighter operations of Qatar Airways.*
>
> *It has been argued by, for example, York Aviation on behalf of the Freight Transport Association that the stagnation of growth in UK air freight market since 2000 has been caused by a lack of airport capacity in the London area and specifically at Heathrow. Whilst the lack of ATM growth at Heathrow has undoubtedly hampered the development of the national air freight market, it is also true that over this period there was adequate airport capacity available at both Stansted and Manston to support additional dedicated freighter movements. Freighter movements at Stansted decreased over the period, while Manston closed. This strongly suggests that the stagnation of UK airfreight is not a consequence of capacity constraints given the excess capacity at Stansted and Manston."*

468. In particular, the highlighted distinction between Heathrow freighter capacity and overall UK or South East freight capacity is key. AviaSolutions further explores the dynamics of bellyhold versus freighter:

> *"It is important to note that, in the UK market, only 30% of airfreight is carried on dedicated freight aircraft. This is substantially less than the global average, where approximately 56% of RTK's are transported on freighters. In part, this disparity is due to the excellent belly-hold networks available from UK airports and in particular from Heathrow.*
>
> *As passenger demand increases additional belly-hold capacity will enter the market. This capacity growth is unhooked from the demand scenario for belly-hold cargo and can result in excess capacity in the market. As a result airlines will often sell this belly-hold capacity using a marginal cost pricing structure. This pricing structure does not need to account for the high cost of the aircraft and must only meet the additional marginal cost that each kilogram of cargo incurs. Through the application of this pricing in the key structure, belly-*

[207] (AviaSolutions, 2016, p. 27)

hold cargo often undercuts the minimum price that can be charged on dedicated freighter operations.

As a result of this market dynamic, an airport focused on airfreight carried by dedicated freighters may be overly exposed to a declining or stagnant total market, or at best to a market that is not exposed to strong potential."

469. Again, this view of the market aligns with ours. One area of difference is in relation to the bellyhold capacity of newer aircraft. AviaSolutions asserts that:

"However, there are some elements of the market that appear to be limiting the increase in belly-hold capacity. These include

- *Some of the newer aircraft types have a smaller bellyhold cargo capacity than the aircraft they replace; and*
- *Low Cost Carriers (such as easyJet and Ryanair) are gaining market share but generally ignore the freight market."*

470. As we argue in our report, most newer aircraft types have higher cargo capacity than their predecessors (see paragraph 140). Furthermore, short haul passenger flights contribute a small minority of overall freight, regardless of whether operated by full service or low cost carriers (see paragraph 233).

471. AviaSolutions undertook interviews with freight industry representatives[208]. The list of interviewees was not extensive, with 4 people from the air cargo sector. However, compared to the stakeholders interviewed by Azimuth, there interviews are more relevant for analysing the potential for Manston to play a national role in the UK freight sector.

472. The conclusions from the interviews are summarised below:

"We conclude therefore that there is limited interest from the cargo industry in using a re-opened Manston Airport for air freight. The larger scheduled freighter operators are unlikely to relocate their services to the airport, particularly if the airport does not have a unique product offer. We believe it is more likely that were Manston Airport to re-open, the most likely role would be to serve smaller freight operators and the larger operators on an ad-hoc basis. There is no compelling reason to believe that the airport would be able to generate appreciably more freight activity than previously, other than in the context of a shortage of airport capacity in the London area."

473. This summary is consistent with our assessment of the potential market for Manston.

14.4. Potential Future Freight Operations - Model

474. The next stage of the AviaSolutions report[209] investigates potential demand versus supply imbalances in the South East. Not enough detail of the assumptions/workings is provided to be able to undertake a comprehensive review.

475. The approach differs from ours in some important respects:

- Demand growth rates based on trend analysis rather than linked to GDP.
- Future capacity based on assumed average loads for bellyhold and freighter flights at different airports. Future freight capacity expansion plans for airports do not seem to be explicitly taken into account.

[208] (AviaSolutions, 2016, p. 29)
[209] (AviaSolutions, 2016, p. 30)

- Focus on South East airports rather than national demand/supply.

476. Nevertheless, despite the different methodology, the conclusions are broadly similar to our analysis.

- Demand can be fully accommodated up to 2045 in the Heathrow third runway case.
- In all runway scenarios, demand can be fully accommodated up until 2040.

477. AviaSolutions then provides its modelling assumptions on the potential capture by Manston of unaccommodated demand:

> *"For the purposes of our assessment and in recognition of RiverOak's stated intention to develop Manston as a freight airport, we have assumed that half of the remaining unaccommodated demand is flown via Manston, with the other half going to other UK regional airports, potentially led by East Midlands and Manchester."*

478. We consider this a generous assumption, given the strength of alternative options at established airports or from a highly developed trucking network.

479. Later in the AviaSolutions document (Section 7.3.1), the Manston freight forecasts for the Heathrow third runway scenario are presented. Freight tones are modelled at 30,000 from 2018 to 2045, before growing to 100,00 tonnes in 2050. Appendix C (Section 11.1.1) of the AviaSolutions report provides the Manston freight forecasts for the no new runway scenario (the most favourable for Manston). Again, the forecast is for 30,000 tonnes from 2018 to 2040, but growing to 80,000 tonnes in 2045 and 140,000 tonnes in 2050.

480. These figures look reasonable for the short to medium term, with some potential for modest outperformance in a growing market. In contrast, we consider the forecasts to be on the high side in the long term. Even if South East capacity by 2050 is more heavily constrained than we assume, we consider it likely that centrally located regional airports will benefit to a much greater extent than Manston.

14.5. Conclusions

481. Section 8 of the AviaSolutions report provides its overall conclusions for the freight potential at Manston:

> *"Our freight interviews indicated that the demand to use the airport for freight was very limited. This, in large parts, is due to two factors; the infrastructure investments that have already been made by the industry around Heathrow and Stansted, and the geographical location of the airport. Infrastructure, and the associated knowledge, skill and supporting industry at airports such as Heathrow and Stansted, as well as the major European hubs such as Frankfurt, and Paris, would be almost impossible for Manston to replicate. The geographic location of the airport, tucked into the corner of the UK, cannot compete with airports such as East Midlands for Integrator services that are sold as fast delivery, due to the increases in surface transportation times. The interviews did however indicate that charter services and ad-hoc freighter flights would certainly return, providing some revenue income for the airport. In summary, we conclude that freight would return to the airport in limited quantities, not dissimilar to the tonnage previously processed at the airport."*

482. These conclusions are substantially in line with our conclusions (see Section 2.7).

15. Appendix – Review of Northpoint Report

15.1. Introduction

483. In the main body of our report, we have reviewed the reports issued by Azimuth on the potential for freight development at a reopened Manston. RSP also commissioned Northpoint to review the Azimuth forecasts, the original AviaSolutions report and more generally the RSP proposals. Northpoint's analysis was issued in a report titled *"The Shortcomings of the Avia Solutions Report and an Overview of RSP's Proposals for Airport Operation at Manston"*.

484. In this appendix, we briefly review the Northpoint report.

- Where the Northpoint report covers similar ground to the Azimuth reports, we do not repeat our commentary from the main body of our report.
- Furthermore, our focus is on areas of the Northpoint report relating to freight. Other areas, including passenger development and financial viability, are not covered at this stage.
- Finally, we restrict our commentary to the key issues of substance. For example, Northpoint expresses strongly worded opinions on the AviaSolutions approach. While we believe this criticism is misplaced, we have separately reviewed the AviaSolutions report, and do not see the need for further comment in this appendix.

485. Our review of the Northpoint report has been undertaken in chronological order (the same order issues appear in the Northpoint report).

15.2. Manston Airport Benchmarks

486. Northpoint describes the business model for a reopened Manston as a "*mixed use airport offering air cargo, air passenger links and aircraft servicing and recycling*[210]". Northpoint then highlights that this would be:

> *"…in line with the business models of successful benchmark airports such as Alliance Fort Forth in Texas, USA; Hamilton Airport in Ontario, Canada; Bergamo in Italy; Liege in Belgium; and Leipzig in Germany."*

487. There is no explanation of what characteristics these airports may have in common with Manston, or why these airports would be more relevant than UK examples of mixed use airports such as Prestwick.

- See paragraph 322 onwards for a review of Prestwick Airport and similarities to Manston.

488. In the appendices (Section 12), we have provided case studies of Leipzig and Liege airports. The case studies demonstrate very clearly that these airports have very little in common with Manston, and cannot be considered as relevant benchmarks using objective criteria.

489. AviaSolutions[211] subsequently reviewed all the airports put forward by Northpoint and concludes:

> *"There are clearly structural and geographical reasons as to why each of these airports is different to the proposal for Manston Airport. As such, suggesting these are comparable benchmarks is not realistic. In order for Manston Airport to acquire the status of these airports it would need to demonstrate key elements of development, namely; commitments from key express players (DHL / UPS / FedEx / Amazon / Alibaba); an ability to operate night operations with few regulatory restrictions; and geographical advantages from nearby cities, industrial parks, and population centres."*

[210] (Northpoint Aviation Services, p. 1)
[211] (AviaSolutions, 2017, p. 16)

490. We agree with this assessment. The catchment, location and regulatory framework are all much less favourable at Manston, rendering any comparisons between the airports meaningless.

15.3. Air Cargo Forecast Methodology

491. In Section 2 of its report, Northpoint puts forward its approach to air cargo forecasting and critiques the AviaSolutions approach. The Northpoint methodology appears to be similar to the Azimuth approach, which is reviewed in Section 8 of this report. We focus our assessment of the Northpoint approach on selected key points not covered in the Azimuth forecast review.

492. Northpoint[212] downplays the importance of location for freight, stating that *"In order to forecast where future freight capacity might optimally be developed, it is therefore not appropriate to rely on the geography of consignee demand"*. Instead, the importance of supply side issues is stressed:

> *"The effect of this is to push freight forecasting away from typical neo-classical demand/price mechanism models and any use of airport specific progression, towards supply driven modelling particularly requiring transparency about the supply factors that are used. So, for example, freight operations will be attracted either to where there is a large volume of network carriers flying international services or to where there are few night time restrictions because these are important for express freight operations, or in the case of dedicated freighters where there are no restrictions on slot availability and there is sufficient space to create efficient apron based loading and unloading operations alongside specialist handling facilities such as refrigerated storage, bonded warehouses and major logistics sheds."*

493. Northpoint then argues that *"In the south east of England this points to a relatively small number of airports being suitable for any large-scale freight operations."* Northpoint[213] sees this as an opportunity for Manston, stating that *"…there are few alternatives other than for Manston to cater for non-belly freight movements at south-east airports."*

494. There is an inconsistency in this argument. If the geography of demand is of secondary importance, Northpoint's focus on airport capacity in the South East is misplaced. In any case, South East airports already attract a disproportionate share of the UK's freight demand (see Section 2.4).

495. On Pages 4 and 5 of its report, Northpoint makes a number of assertions, in support of its forecasts, which we dispute:

- *"Based on long-term growth trends in the sector, this report contends that freight capacity in the south-east will need to expand by over 100% in the next 25 years."* No further explanation is provided for such a sweeping statement. As we have highlighted, there is spare freight capacity in the South East currently (see Section 5.3). Furthermore, the focus on South East airports only is not justified (see paragraph 219).
- "*… the expansion for Stansted and Luton for passenger services, primarily of a low-cost nature, means that there will be very few spare slots during the day and more importantly at night, that can be used by express freight carriers for dedicated freight operations*." This assertion ignores the plans of Stansted to grow its freight volumes and to expand its freight infrastructure. It also does not consider the separate planning cap for freight flights (see paragraph 237 onwards).
- *"In this context, and keeping in mind the need for basic infrastructure requirements such as a substantive runway, good road connections and sizeable areas available for apron and shed development, there are few alternatives other than for Manston to cater for non-belly freight movements at south-east airports."* As noted previously, we disagree with a narrow focus on the South East market. Even so, there are other options. In addition to the substantial expected freight

[212] (Northpoint Aviation Services, p. 4)
[213] (Northpoint Aviation Services, p. 5)

capacity growth at Heathrow and Stansted, other airports such as Gatwick and Bournemouth could play a larger role in the future.

- *"Indeed, I anticipate existing volumes at Luton, Stansted and Gatwick will continue to fall as slots and space become increasingly valuable."* The implication that volumes are falling at Stansted and Gatwick is incorrect. Both airports have enjoyed strong growth since 2015 (Gatwick especially, see paragraph 212).

496. On Page 5, Northpoint then outlines the perceived benefits of Manston:

> *"Manston, in contrast, will have no foreseeable slot restrictions, an established reputation for efficient handling and if RSP's proposals are approved, a substantial apron capable of handling several large aircraft concurrently all with excellent airside support facilities and access to dual carriageway roads to London, the M25 orbital and in the foreseeable future to a new Dartford crossing improving access to ports in Essex and in East Anglia. It is even well positioned for trans-shipping freight to trucks, which can then use Dover port or the Channel Tunnel to access the near continent."*

497. We disagree with this assessment of the potential for Manston:

- As discussed previously (Section 4.11), Manston's location is poor.
- The infrastructure advantages are not unique to Manston, while the potential night flight restrictions at Manston are not mentioned.
- We are unconvinced by the potential of improved access to ports. For example, Liverpool Airport currently has very limited freight volumes despite common ownership with Liverpool Port.
- Similarly, it is not clear what advantages could accrue from trans-shipping freight to trucks for onward cross-channel travel. The directional flows where this would make economic sense are not articulated.

498. In referring to the Northpoint forecasts, it is stated on Page 5 that *"They nevertheless demonstrate that, under a range of scenarios, Manston is strongly placed to attract surplus demands in the South East by offering an attractive supply side solution to the air freight industry."* As far as we can see, only one (very optimistic) scenario is presented by Northpoint.

499. Northpoint then provides a wide range of comments on the AviaSolutions forecast methodology (Pages 6-7). AviaSolutions[214] refutes many of these in its follow up report. We make the following observations:

- Northpoint promotes the use of global historic trends and manufacturer forecasts in the context of Manston projections. As we also comment in relation to the Azimuth forecasts (see paragraph 361), the simplistic application of global manufacturer projections to a UK airport is problematic. The divergent freight trends in different markets caution against the application of global metric.
- Northpoint appears to suggest that, for Manston, global forecasts are more relevant than national projections. We find this puzzling. While freight is an international business, UK demand characteristics should not be disregarded.
- Northpoint also seems to argue that bellyhold capacity at Heathrow is constrained, and set to diminish due to newer aircraft types having lower bellyhold capacity than predecessors. However, as we show in Section 4.7, the average freight load for both bellyhold and freighter flights at Heathrow has been growing significantly. This suggests that spare capacity exists and/or average capacity per flight is improving. In the same section, we also highlight that – with the exception of the A380[215] – newer passenger aircraft typically have higher bellyhold capacity than legacy aircraft.

[214] (AviaSolutions, 2017)

[215] As at 31st October 2017, 217 A380 aircraft were in operation with outstanding orders for a further 100. This compares to 1,744 A330/A340/A350 family aircraft in operation, plus a further 1,057 outstanding orders (source: Airbus website). In addition, there is a large

500. The Northpoint report then addresses the issue of cross-channel transhipments (Page 7 onwards). Its argument is that lack of airport capacity in the South East has led to a major increase in trucking from the UK to European airports. As we noted previously, there is not (nor has been) any overall shortage of airport capacity for freight in the South East or the UK more generally (Section 5). Furthermore, the increasing use of truck feeder services is due to cost efficiencies and is not restricted to the UK (see Figure 32).

501. AviaSolutions[216] also correctly points out that:

> *"It is important though to note that a reverse flow also exists with continental European freight being trucked across the Channel to be flown into and out of UK airports. A lack of verifiable data on these flows hinders quantitative analysis, although the practice has existed for many years and despite this the freight industry chose not to use Manston Airport when it was open."*

502. On Page 9, Northpoint draw inappropriate conclusions from York Aviation studies. Our comments on this in relation to Azimuth also apply here. Similarly, we find Northpoint comments on Brexit impacts speculative and one-sided.

503. Northpoint then devotes Pages 10-14 on *"The Availability of Substitutable Bellyhold Capacity"*. We disagree with the following assertions:

- "*However, Avia adduces no evidence on comparative charging rates between bellyhold and freighter carriers and therefore with Heathrow known to be one of the most expensive airports in the world, we remain sceptical that this is a material factor that would drive the re-allocation of consignments from freighters to bellyhold aircraft."* As we illustrate in Section 4.7, Heathrow has grown its share of the UK freight market despite its relative expense. Despite high airport charges, we understand that the incremental costs of cargo carriage at Heathrow are fairly low. Therefore, where excess bellyhold capacity exists, it makes economic sense for airlines to try to fill that capacity with competitive charges for freight customers.
- *"First, just under 50% global air cargo is shipped bellyhold; the comparative figure in the UK is 70%. Since the economies of the UK's main EU competitors are not materially different from our own, there is no logical explanation for this difference other than the shortage of slots available to integrator aircraft or dedicated freighters …"*. There is available airport capacity for integrators / dedicated freighters (see Section 5). A much more credible explanation for the high proportion of bellyhold in the UK is Heathrow, which is Europe's largest passenger hub airport. Heathrow provides an extensive schedule of widebody passenger flights to many of the world's most important air freight markets. Furthermore, the geographical position and island status of the UK make it a less suitable location for freighter flights serving the wider European market (compared to say, Germany). This is especially true for flows to/from Asia.
- *"Second, there are many types of freight (e.g. time critical, heavy, large or live) for which bellyhold capacity cannot provide an acceptable substitute to dedicated freighters*." It is correct that some types of freight are unsuitable for bellyhold. However, this segment of the market is very small and is accommodated at existing airports such as Stansted.
- *"Third, Heathrow's principal attraction for freight forwarders, namely the range of international destinations it serves directly, is also its potential Achilles heel, because that network may not be sufficiently concentrated on certain 'thick' freight routes to be able to cope with the underlying demand – in other words the more complex the passenger network, the greater the likelihood it may not match the required pattern of freight distribution flows."* We do not follow the logic of this. At any airport, there will be some routes where freight demand exceeds bellyhold supply.

backlog of Boeing widebody orders (ca. 1,200 as at October 2017) in addition to aircraft already in operation. Therefore, the A380 is not overly significant in relation to overall bellyhold capacity.

[216] (AviaSolutions, 2017, p. 18)

This is not a new phenomenon, and we are not aware of any suggestions that there will not be an ongoing role for freighter aircraft in the future. Therefore, it is unclear how this factor will be a negative for Heathrow going forward.

- *"Fourth, new aircraft tend to have less bellyhold capacity than older ones and Heathrow and Stansted are the two airports where these new aircraft are most likely to be introduced."* This point is incorrect and was addressed earlier with regards to Heathrow earlier in this section (paragraph 499). The comment is relation to Stansted is irrelevant, as Stansted bellyhold freight is negligible.
- *"And finally, it is very likely that a sizeable chunk of the available runway capacity at both airports will be taken up by Low Cost Carriers (i.e. Ryanair at Stansted and easyJet at Heathrow), and as with most Low-Cost Carriers, carrying freight does not form part of their business model."* We have previously argued that the airline mix is much less important than the route mix. Short haul full service airlines only generate a small fraction of bellyhold freight, so any differences in airline mix within the short haul sector will have minimal impact (see paragraph 233).
- *"Hence, in the medium to long term it is hard not to see the average freight capacity per aircraft arriving at Heathrow diminishing, even if with the new runway, the total number of aircraft that can operate there increases."* This would require a reversal of historic trends – as discussed above, the average loads per flights have been growing strongly. We would anticipate this trend to continue in the future.

504. We have a very different view of the freight outlook, both generally and specifically for Manston. No credible evidence is presented by Northpoint in support of its assessment. There are major flaws in key lines of argument, with its study exhibiting many of the same fundamental issues as the Azimuth reports.

15.4. Manston Air Freight Forecasts

505. Northpoint present summary air freight forecasts in Appendix A of its report. The forecasts are even more ambitious than the Azimuth forecasts, with 472,000 tonnes projected by 2040. This figure is equivalent to two-thirds of all tonnage on freighter aircraft in the UK in 2016.

506. The building blocks to the forecast are not easy to follow. However, the following assumptions appear highly suspect:

- Stansted to see freight volumes reduce dramatically, in contrast to the airport's own forecasts and expansion plans. It appears all this "spilled" freight is expected to divert to Manston, rather than more established UK competitors.
- Similarly, spill from Gatwick and Heathrow, despite growing long haul services at Gatwick and a new runway at Heathrow. Again, it seems all spill is expected to be captured by Manston.
- There is also a major assumption that a substantial proportion of freight can be "clawed back" from European airports. By 2040, it appears that this factor contributes 100,000 tonnes to Manston in the Northpoint forecasts. The assumption is unfounded and ignores market economic reality.

507. In Section 8.6, we concluded that the Azimuth forecasts were extremely optimistic and therefore not credible. The Northpoint forecasts are even more ambitious. Therefore, we draw similar conclusions in relation to their credibility.

508. As with the Azimuth forecasts, we also note the Northpoint cargo flight projections are high, even taking into account the projected freight tonnage.

16. List of Figures

Figure 1 - Manston Airport Freight Tonnes 1990-2016 17
Figure 2 - Manston Airport Operating Margin (Operating Profit / Revenue) 2006-2014 17
Figure 3 – Timeseries of UK freight tonnage 19
Figure 4 – Freighter/Bellyhold split at selected UK airports 20
Figure 5 – Split of UK air freight between bellyhold and dedicated freighter aircraft 21
Figure 6 – Annual growth rates of UK freight 21
Figure 7 – Timeseries of UK freight on cargo-only aircraft 22
Figure 8 – Reduction of freight on cargo-only aircraft at selected airports 23
Figure 9 – Consolidation of freight on cargo-only aircraft at Heathrow, East Midlands and Stansted 24
Figure 10 – Breakdown of UK freight on cargo-only aircraft, by region. 25
Figure 11 - Timeseries of UK freight on passenger aircraft 26
Figure 12 – Timeseries of UK Mail tonnage 27
Figure 13 – Change over time of average tonnage per ATM at Heathrow 29
Figure 14 – Locations of large warehousing units in the UK, Source: Freight Transport Association 30
Figure 15 – Timeseries of UK freight, including that handled at Manston 32
Figure 16 – Manston cargo-only aircraft movements 32
Figure 17 – 3-hr catchment region of Manston in comparison with those of East Midlands and Stansted Source: Altitude analysis, Google Maps (truck speed set at 55 miles per hour) 33
Figure 18 - Peak Week, Hourly Runway Allocation, Stansted Airport, Summer 2017. Source Airport Coordination Limited 38
Figure 19 – Altitude forecast of UK air freight demand to 2050 54
Figure 20 – Global 20-year air cargo forecast - timeseries of high, base and low forecasts 66
Figure 21 –Global 20-year air cargo forecast – size, and growth rates, of key flows 66
Figure 22- Azimuth Forecast of Freight Tonnage at Manston Airport 68
Figure 23- Azimuth Forecast Compared to Historic Growth and UK Forecast 68
Figure 24- Azimuth Forecast Compared to EU Air Freight Benchmarks 69
Figure 25- Azimuth Forecast of Freighter ATMs & Tonnage per ATM at Manston Airport 71
Figure 26- Azimuth Forecast Compared to EU Freighter ATM Benchmarks 72
Figure 27- Azimuth Forecast Compared to EU Air Freight Tonnes per Freighter ATM Benchmarks 72
Figure 28 - UK air cargo in 2008 by type of cargo and type of carrier 77
Figure 29 - Freighter vs bellyhold profitability, and impact of fuel price 79
Figure 30 – Evolution of air and ocean freight tonnage with time 81
Figure 31 – Cargo growth rates by mode (pre- and post- financial crisis) 81
Figure 32 – Example of the growth of trucking within Europe 82
Figure 33 – Comparison of bellyhold airfreight tonnage and truck-flight frequency growth 82
Figure 34 – Air cargo growth rates by type of cargo 83
Figure 35 – Number of freighters and widebody passengers aircraft in service globally, Source: CAPA 84
Figure 36 – Change in widebody freighter payload capacity with time 84
Figure 37 – Passenger growth compared with air freight growth, Source: IATA 85
Figure 38 - Trucking isochrones from Leipzig; 6hrs (dotted), 8hrs (solid-medium) and 10hrs (solid-thick) 87
Figure 39 - ½ day & full-day trucking isochrones from Liege airport 89

17. List of Tables

Table 1 – Summary of Analysis of Potential Future Freight Role for a Reopened Manston Airport 14
Table 2 – Summary of estimated 2040 air freight capacity at UK airports Source: Heathrow Airport, East Midlands Airport, Stansted Airport, Manchester Airport, UK CAA, Altitude analysis and assumptions 50
Table 3 – Summary of Analysis of Potential Future Freight Role for a Reopened Manston Airport 75
Table 4 – Liege/Leipzig Structural Features vs Manston, Source: Altitude 90
Table 5 – Indicative cargo capacity of selected aircraft types Source: Boeing, Airbus, British Airways, JAL Cargo, Qatar Cargo, Qantas Cargo, OAG, Altitude Analysis 91

18. References

Air Cargo News. (2016a, October 29). *Rapid growth and need for speed fuels DHL's Leipzig investment*. Retrieved from http://www.aircargonews.net/news/single-view/news/rapid-growth-and-need-for-speed-fuels-dhls-leipzig-investment.html

Air Cargo News. (2016b, September 16). *Steven Verhasselt: Liege Airport has room for freighters*. Retrieved from http://www.aircargonews.net/news/single-view/news/acn-interview-liege-airport-has-room-for-freighters.html

Air France-KLM Martinair Cargo. (2017, September 06). Retrieved from http://www.airfranceklm.com/en/air-france-klm-martinair-cargo

Airbus. (2012). *Global Market Forecast 2012-2031.*

Airbus. (2014). *Global Market Forecast 2014 - Freight.*

Airbus. (2017a). *Global Market Forecast 2017/2036.*

Airbus. (2017b, July 31). *Orders & Deliveries.* Retrieved from http://www.aircraft.airbus.com/market/orders-deliveries/

Airport Coordination Limited. (2017). *Stansted Airport, Summer 2017, Start of Season Report.*

Airports Commission. (2015). *Final Report.*

Airports Council International - North America. (2013). *Air Cargo Guide.*

AviaSolutions. (2016). *Commercial Viability of Manston Airport.*

AviaSolutions. (2017). *Review of Azimuth & Northpoint Forecast for Manston Airport – FINAL REPORT.*

Azimuth Associates. (2017 a). *Volume I: Demand in the south east of the UK.*

Azimuth Associates. (2017 b). *Volume II: A qualititive study of potential demand.*

Azimuth Associates. (2017 c). *Volume III: The Forecast.*

Boeing. (2016). *World Air Cargo Forecast 2016-2017.*

CAPA. (2014a, April 23).

CAPA. (2014b, January 20). *IAG Cargo CEO: freighter operations 'made no profitable contribution'*. Retrieved from https://centreforaviation.com/news/iag-cargo-ceo-freighter-operations-made-no-profitable-contribution-300661

CAPA. (2014c, October 22). *Air cargo: few other industries would tolerate its structural overcapacity.* Retrieved from https://centreforaviation.com/insights/analysis/air-cargo-few-other-industries-would-tolerate-its-structural-overcapacity-192139

CAPA. (2016, February 29).

CAPA. (2017, February 03).

Cargo Forwarder Global. (2016, October 13). *DHL Express Pushes Leipzig Further up Front*. Retrieved from https://www.cargoforwarder.eu/2016/10/13/dhl-express-pushes-leipzig-further-up-front/

Cargo Forwarder Global. (2017, January 16). *Liege Airport Strengthens its Position in Cargo*. Retrieved from https://www.cargoforwarder.eu/2017/01/16/liege-airport-strengthens-its-position-in-cargo/

Cargolux. (2017). *Annual Report 2016.*

Department for Transport. (2003). *The Future of Air Transport.*

Department for Transport. (2017a). *UK Aviation forecasts, Moving Britain Ahead.*

Department for Transport. (2017b). *Revised Draft Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England.*

DHL. (2014, June 30). *Press Release.* Retrieved from http://www.dhl.co.uk/en/press/releases/releases_2014/local/063014.html

East Midlands Airport. (2015). *Sustainable Development Plan.*

Forbes. (2016, June 06). *Airbus A380: The Death Watch Begins.* Retrieved from https://www.forbes.com/sites/richardaboulafia/2016/06/06/airbus-a380-the-final-countdown/#20ca0f5d553d

Freight Transport Association. (2017). *Logistics Report.*

Gatwick Airport. (2015). *A Second Runway for Gatwick - Response to Airports Commission Consultation.*

Glasgow Prestwick Airport Limited. (2016). *Annual Accounts 2015-16.*

Heathrow Airport. (2014). *The Promise of Heathrow - Heathrow's Vision for Growth.*

Heathrow Airport. (2016a). *Passenger Growth within 480k ATM Cap.*

Heathrow Airport. (2016b). *Heathrow's Cargo Strategy.*

Heathrow Airport. (2017). *Our Cargo Strategy.*

House of Commons Library. (2015). *BRIEFING PAPER Number 01942, Manufacturing: statistics and policy.*

IATA. (2015). *Cargo Chartbook 2015 Q2.*

IATA. (2016). *Cargo Chartbook 2016 Q4.*

IATA. (2017a). *Air Cargo Strategy.*

IATA. (2017b, August 02). *Press Release No.: 44*. Retrieved from http://www.iata.org/pressroom/pr/Pages/2017-08-02-01.aspx

IATA. (2017c). *Worldwide Slot Guidelines, 8th Edition.*

Land In Liege. (2017, August 22). Retrieved from http://landinliege.com/en/

Leipzig Airport. (2017, August 22). Retrieved from www.leipzig-halle-airport.de/en/business-and-partners/cargo-173.html

Leipzig Halle Airport. (2014). *Europe's Dynamic Cargo Hub.*

Leipzig Halle Airport. (n.d.). *Logistics Exports. Join Us.*

Liege Airport. (2017, August 22). Retrieved from www.liegeairport.com/flexport/en

Manchester Airport. (n.d.). *Masterplan to 2030.*

Morrell, P. S. (2011). *Moving Boxes by Air: The Economics of International Air Cargo.*

Northpoint Aviation Services. (n.d.). *The Shortcomings of the Avia Solutions Report and an Overview of RSP's Proposals for Airport Operation at Manston.*

OAG. (n.d.).

Office for Budget Responsibility. (2017, January). *Fiscal Sustainability Report, Fiscal sustainability report supplementary data series, Table 1.1: Central Projection.*

Oxford Economics. (2013). *Impacts on the Air Freight Industry, Customers and Associated Business Sectors.*

Saxony Economic Development Corporation. (2017, August 22). *Logistics - Cargo Transportation / Freight Forwarding*. Retrieved from https://business-saxony.com/en/industry-sectors/further-sectors/logistics/sector-structure/cargo-transportation-freight-forwarding

Seabury. (2015). *Air Cargo 2015: Recent trends and impact on air cargo industry.*

Seabury. (2016, December). Analysis of 2016. *Airline Cargo Management, 15*(4), pp. 42-47.

Seabury. (2017). *The Future of Sea Freight and its Impact on the Air Cargo Industry.*

Stansted Airport. (2015a). *Sustainable Devlopment Plan - Summary.*

Stansted Airport. (2015b). *Sustainable Development Plan - Land Use Plan.*

Steer Davies Gleave. (2010). *AIR FREIGHT Economic and Environmental Drivers and Impacts.*

UK Department for Transport. (2013). *UK Aviation Forecasts.*

Vance, D. (2016). Vice President of Cargo Operations, American Airlines. (A. C. News, Interviewer)

Wiggins Group plc. (2002). *Annual report.*

York Aviation. (2015). *Implications for the Air Freight Sector of Different Airport Capacity Options.*

York Aviation. (2017). *Summary Report Analysing use of York Aviation Material by Riveroak Strategic Partners Limited and Assessment of Capability of Manston Airport.*



York Aviation

STONE HILL PARK LIMITED

SUMMARY REPORT ANALYSING USE OF YORK AVIATION MATERIAL BY RIVEROAK STRATEGIC PARTNERS LIMITED AND ASSESSMENT OF CAPABILITY OF MANSTON AIRPORT

NOVEMBER 2017



York Aviation

Originated by: Louise Congdon/James Brass/Niall Gunn/Richard Connelly

Dated: 10th November 2017

Reviewed by: Richard Kaberry

Dated: 13th November 2017

STONE HILL PARK LIMITED

SUMMARY REPORT ANALYSING USE OF YORK AVIATION MATERIAL BY RIVEROAK STRATEGIC PARTNERS LIMITED AND ASSESSMENT OF CAPABILITY OF MANSTON AIRPORT

Contents

Page

EXECUTIVE SUMMARY 1

1 INTRODUCTION 6

2 CRITIQUE OF RSP APPROACH TO FORECASTING 11

3 FREIGHT FORECASTS 35

4 CAPABILITY OF THE SITE 52

5 SOCIO-ECONOMIC IMPACT 60

6 PEER REVIEW OF OTHER REPORTS 67

7 CONCLUSIONS 74

EXECUTIVE SUMMARY

1. York Aviation was appointed by Stone Hill Park Limited (SHP) in September 2017 to review the evidence presented by RiverOak Strategic Partners Limited (RSP) in connection with RSP's prospective application for a Development Consent Order (DCO) for the redevelopment and re-opening of Manston Airport as a hub for international air freight services, which also offers passenger, executive travel and aircraft engineering services.

2. We were the authors of two specific reports upon which RSP seek to rely in making their case, namely a report for the Freight Transport Association (FTA) and Transport for London (TfL) in 2015 and a note on Freight Connectivity for TfL in 2013. The first of these documents was used by RSP in its public consultation and this may have led respondents to believe that we were supporting the re-opening of Manston, which is not true and, as we go onto explain in this report, our analysis in these documents for the FTA and TfL does not support RSP's conclusion that there would be a substantive or sustainable role for Manston in the UK air freight industry.

3. The RSP case is principally based on circumstantial evidence presented in the Volumes I to IV of *Manston – A Regional and National Asset* prepared by Dr Sally Dixon of Azimuth Associates (June 2017 consultation version). Much of the material upon which Azimuth seek to rely as the basis of RSP's case relates to the economic costs to the UK if additional passenger hub capacity is not provided in the South East of England by 2050. This is not relevant to the specific question as to whether there would be sufficient demand for pure freighter movements to be operated to/from Manston in the foreseeable future or by their assessment year 2040.

4. The analysis presented by Azimuth shows a lack of understanding of the economics of the air freight market. This leads to a misinterpretation of our work, upon which Azimuth seek to rely to support RSP's case. Just because there could be excess air freight demand in 2050, compared to the bellyhold capacity available in the absence of further runway capacity at the UK's main hub, it does not follow that displaced bellyhold freight will seek a more expensive pure freighter service from a relatively nearby airport over the use of available bellyhold capacity from a more distant airport which can be provided at a lower cost to the shipper with only a marginal penalty in terms of the overall shipment time.

5. Fundamentally, Manston's past operation was economically inefficient due to the inherent lack of viability. Hence, reopening the Airport, in the face of a very limited niche market, has the potential to damage the productivity of the UK aviation sector overall, particularly, as we have demonstrated in our own assessment of cargo demand for Manston in Section 3 of this report, that there are more economically efficient alternatives available for any freight displaced due to specific capacity constraints at Heathrow both now and in the future.

6. Manston is too peripheral for integrator operations serving the UK. Integrators have a strong preference for locations more centrally located in the UK with good road access to all of the major markets. The availability of land for warehouses, for example as suggested in terms of the use of the 'Northern Grasslands' part of the overall Airport site, is far less important than a location central to the market and the availability of good road access, neither of which are characteristics of Manston. It is simply in the wrong place to serve the market being located at the far south east at the end of a peninsular, away from the main centres of population and distribution in the UK.

7. In the absence of hard market evidence of the need for Manston Airport, Azimuth undertook an interview survey to supplement RSP's case and to inform the forecasts. However, the list of interviewees was small, dominated by mainly local companies with something of a vested interest in seeing Manston re-opened. Even so, if anything, the views of those interviewed by Azimuth suggest that there would, at best, be a limited role for Manston. The one airline interviewed made clear that *"success at Manston depended upon identifying a niche market and becoming known for excellence. In particular, suggestions included a perishables centre, handling of live animals, easy access for charter flights, and handling cargo that is not necessarily straightforward"*. The scale of this opportunity was never quantified by Azimuth. It is clear, however, that the realistic expectation for Manston is for a small niche operation rather than as a general 'overspill' cargo airport for London.

8. The outputs from these interviews are then used by Azimuth as a basis for postulating a number of cargo aircraft movements that might operate at Manston. However, it is not possible to relate the proposed services to be operated with the responses by the interviewees. There is simply no explanation for, or justification for, the services postulated by Azimuth. At the very least, there is a lack of transparency in the approach adopted.

9. In our view, the Azimuth cargo movement forecasts simply lack credibility. To illustrate this lack of credibility of the forecasts, in Year 2 (the first operational year), a cargo throughput of nearly 100,000 tonnes is forecast by Azimuth. This would make Manston the 5th largest freight airport in the UK in its first year after re-opening (compared to 2016 actual throughput at the other airports). This would place it close to the scale of freight operations at Manchester Airport, which includes a substantial amount of bellyhold freight. It would make Manston the 3rd busiest airport in the UK in terms of tonnage carried on dedicated freighter aircraft. This is simply not a credible proposition. This lack of credibility is important in reaching any decision under section 23 of the Planning Act 2008 (as amended).

10. We have updated and further developed our analysis of the UK air freight market from that previously undertaken in 2013 and 2015 for TfL and for the FTA and TfL (RSP seek to rely on our 2013 and 2015 work as corroboration of their own cargo movement forecasts). When properly interpreted, our forecasts of air freight demand and capacity across the UK as a whole, taking the role of bellyhold fully into account, show that, to the extent that there is any need for additional pure freighter movements, there is plenty of freighter capacity at Stansted and East Midlands to accommodate any growth. These airports are better located relative to the market and the key locations for distribution within the UK. Overall, we conclude from this analysis that there will be no shortage of freighter capacity in the UK in the period up 2040 (RSP's assessment end date) and that overspill from other airports would not provide a rationale for re-opening Manston.

11. Taking the most optimistic basis for assessing its potential role, we have estimated that Manston might be able to achieve at most 4,470 annual air transport movements by cargo aircraft by 2040, but this is highly unlikely given its location and the clear market trend away from the use of dedicated freighter aircraft. Our more likely projection is that it might attain 2,000 annual air cargo aircraft movements by 2040 and it is equally plausible that it might not achieve more than 750 such movements annually. These are all far below Azimuth's projection, upon which RSP rely, of 17,171 annual cargo aircraft movements.

12. Our initial assessment of the passenger market is that the throughput might, at best, be around half of that projected by RSP and, hence, given the dependence on passenger related income for the financial viability of airport operations, this will impact substantially on the viability of the proposal. The other activities suggested by RSP, such as business aviation, maintenance, repair and overhaul, and aircraft dismantling are highly competitive markets and, to the extent that Manston might attract any such operations, these are unlikely to contribute substantially to the overall viability of the Airport.

13. The existing infrastructure at Manston Airport, if made good, is capable of handling 21,000 annual air cargo aircraft movements[1]. The actual usage of that capability would depend on the pattern of operation and how the infrastructure was used on a day by day basis. Our assessment, therefore, provides essential missing information from RSP's materials to date which is necessary for the purposes of section 23 of the Planning Act 2008 (as amended), for assessment purposes under the Environmental Impact Assessment Regulations and for consultation purposes.

14. Without prejudice to our view that demand to use Manston is not likely to be anything like 17,171 cargo aircraft movements a year, we have considered the land required to accommodate such a number of movements. Our assessment is that the land required would be substantially less than shown on the RSP Master Plan and that the proposed land take is excessive and without justification in terms of the compulsory acquisition of the land. Any development required to handle 17,171 annual movements by air cargo aircraft can all be accommodated to the south of the B2050 and, even allowing for passenger operations and other activities, would not require all of the airfield land to the south of the road. Obviously, on the basis of more realistic forecasts of future demand, the area required to support the ongoing operation of the Airport would be materially smaller.

15. We can see no justification for the inclusion of the 'Northern Grasslands' area within the DCO on the basis of it being for associated development. There will be little requirement for or likelihood of the relocation of freight forwarding activity from adjacent to the UK's main cargo hub at Heathrow to Manston, as suggested by RSP, and any requirement for such activity specifically to support the proposed level of freight activity at Manston could easily be accommodated on land to the south of the B2050. The development on the 'Northern Grasslands' site appears to be speculative commercial development which, based on the precedent at East Midlands Airport – the UK's principal airport for pure freighter operations – would be expected to be largely for non-aviation related uses.

[1] Based on an 18-hour operational day. Should a night time noise policy be agreed with Thanet District Council pursuant to the existing planning agreement that enabled a longer operational day and/or a number of scheduled night movements, then the capability could, in theory, be higher than 21,000 annual cargo aircraft movements.

16. In terms of the socio-economic implications of the proposed development, Azimuth have shown a lack of understanding of how such impacts should properly be calculated. Leaving aside the use of inappropriate multipliers, the impacts have been assessed at a national scale and should have taken displacement of activity from other airports fully into account, reducing the impacts well below those stated. Furthermore, the assessment should have considered the impact on alternative uses of the site, including SHP's proposed mixed use development and the socio-economic benefits deriving therefrom. We have set out a more realistic and robust assessment, which shows that the local impacts within Kent, even on Azimuth's forecasts, would be substantially less than claimed and it is these lower order effects which would need to be balanced with the environmental and other impacts in assessing the acceptability of the proposed development against the alternatives.

17. Unsurprisingly, the socio-economic impacts associated with the Airport are lower still on the basis of more realistic forecasts of likely usage if it re-opened. The operation is simply of a much smaller scale such that, in Year 2, it would generate only 452 jobs, 17% of Azimuth's estimate of 2,654. By Year 20, the differential is even larger, with the Azimuth estimates reaching over 30,000 jobs compared to our estimate of just over 1,000 jobs. Once again, the evidence presented by Azimuth on behalf of RSP cannot be relied upon. It is infected with the flaws in the traffic forecasting methodology identified previously but also the approach to identifying socio-economic impacts is, in itself, badly flawed. The socio-economic impacts are, as a result, massively overstated. In any event, these benefits would not be realised if the Airport ceases operation again due to it not being commercially viable.

18. As well as the Azimuth reports which form the basis of RSP's case, we have also reviewed a number of other reports on the potential for Manston. In overall terms, we agree with Aviasolutions for Thanet District Council that there is little realistic prospect of the re-opening of Manston Airport being a commercially viable proposition. We have reviewed their original report and the more recent reports and concur with their views on the overall structure of the UK air cargo market, noting that they, unlike Azimuth, have correctly understood the implications of our 2015 work for the FTA. We do not accept Northpoint's rebuttal of the Aviasolutions work. Like Azimuth, Northpoint's work is largely aspirational without any robust evidence or analysis of the market. Northpoint, too, misinterpret our previous work for the FTA and TfL.

19. In overall terms, we do not consider that the case that the re-opening of Manston Airport would constitute a Nationally Significant Infrastructure Project has been robustly made or substantiated. In any event, given that the baseline capability of Manston Airport is at least 21,000 annual cargo air transport movements (see section 4), this means that RSP must, effectively, be seeking to increase the capability of Manston Airport from 21,000 annual air transport movements by cargo aircraft to at least 31,000 such movements each year, a level of activity which has not been consulted on or assessed in RSP's Preliminary Environmental Information Report (PEIR). Indeed, RSP's consultation material does not provide any detail as to what the increase in capability would be as a result of its proposals (i.e. the increase in capability as a result of its proposed alteration to Manston Airport). As a minimum, the increase in capability would be to 31,000 annual air transport movements by cargo aircraft, but in our view their proposals would result in a significantly higher 'new' capability which is not revealed or assessed by RSP.

20. Our overall assessment is that RSP have failed to provide their own evidence of the capability of Manston Airport and the amount by which their proposals would increase that capability by. Rather, the only information that they present is a forecast of future freight demand, which has no credibility as explained in this report. There are, hence, major omissions in RSP's consultation material. This failure means that, in our opinion, the requirements in section 23 of the Planning Act 2008 (as amended) have not been satisfied. In essence, we would have expected RSP to be able to show:

- the capability of Manston Airport of providing air cargo transport services;
- the amount by which RSP is proposing to increase that capability by and thus the "new" capability; and
- a credible forecast for why that 'new' capability is required.

None of this information is provided by RSP.

1 INTRODUCTION

1.1 York Aviation was appointed by Stone Hill Park Limited (SHP) in September 2017 to review the evidence presented by RiverOak Strategic Partners Limited (RSP) in connection with RSP's prospective application for a Development Consent Order (DCO) for the redevelopment and re-opening of Manston Airport as a hub for international air freight services, which also offers passenger, executive travel and aircraft engineering services.

1.2 York Aviation is a specialist air transport consultancy that focusses on airport planning, demand forecasting, strategy, operation and management. The company was established in 2002. We offer a broad range of services to airports, airlines, governments, economic development organisations and other parties with an interest in air transport. Our team is a mixture of experienced air transport professionals and economists. Key members of the team have substantial experience of airport operations and development gained through working for Manchester Airports Group. Our core services include:

- business planning and strategy;
- capacity and facilities planning;
- master planning and planning application support;
- demand forecasting;
- economic impact assessment and economic appraisal;
- policy and regulatory advice;
- route development;
- transaction support.

1.3 Our clients include:

- Transport for London;
- Transport for the North;
- Department for Transport;
- Scottish Enterprise;
- Northern Ireland Government;
- Manchester Airports Group;
- Birmingham Airport;
- London City Airport;
- London Luton Airport;
- Ryanair;
- Freight Transport Association.

As well as numerous investors in airports and other parties with an interest in the development, operation and management of airports in the UK and abroad.

1.4 Louise Congdon, Managing Partner of York Aviation has provided evidence in relation to the need for and economic impact of airport development at several airport public inquiries, including Manchester Runway 2, Liverpool Airport, Doncaster Sheffield Airport, Stansted Generation 1, London Ashford Airport (Lydd) and London City Airport.

1.5 We were the authors of two specific reports upon which RSP seek to rely in making their case, namely a report for the Freight Transport Association (FTA) and Transport for London (TfL) in 2015 and a note on Freight Connectivity for TfL in 2013. The first of these documents was used by RSP in its public consultation and this may have led respondents to believe that we were supporting the re-opening of Manston, which is not true and, as we go onto explain in this report, our analysis in these documents for the FTA and TfL does not support RSP's conclusion that there would be a substantive and sustainable role for Manston in the UK air freight industry.

Historical Position

1.6 Manston Airport closed to commercial operations in May 2014, following several unsuccessful attempts to attain commercially viable operations. In the decade prior to closure, the Airport did manage to attract some cargo and passenger activity but not to levels that could ensure financial and commercial viability for its owners. The historic traffic performance is set out in **Table 1.1**. The Airport's cargo traffic peak was in 2003.

Table 1.1: Historic Commercial Traffic at Manston Airport

	Passengers	Cargo (tonnes)	Air Transport Movements[2] (excl. Air Taxis)	of which, Cargo Aircraft Movements[3]	Total Aircraft Movements
2003	3,256	43,026	1,106	1,081	24,934
2004	101,328	26,626	3,333	730	23,324
2005	204,016	7,612	4,631	177	21,358
2006	9,845	20,841	461	322	16,687
2007	15,556	28,371	608	444	21,521
2008	11,625	25,673	540	412	19,269
2009	5,335	30,038	583	485	18,902
2010	25,692	28,103	1,151	491	16,260
2011	37,169	27,495	1,472	419	18,695
2012	8,262	31,078	687	432	14,688
2013	40,143	29,306	1,640	511	17,504
Source: CAA Airport Statistics					

[2] Air Transport Movements (ATMs) are those services sold to the public as distinct from private flights or those operated on behalf of individual companies using their own aircraft. All substantive cargo operations in the UK would be treated as air transport movements. Aircraft movements are all aircraft movements at an airport, including 'touch and go' landings by flying school aircraft.

[3] Based on more detailed records maintained by the former airport operator, it would appear that CAA data may not record all empty cargo positioning flights. However, we do not have complete data. The total number of cargo flights could, hence, be somewhat greater than shown.

1.7 Table 1.1 shows that the number of air cargo movements and the tonnage carried was fairly consistent over the last 10 years of the Airport's operation, but these operations were not sufficient to support a commercially viable operation at the Airport.

1.8 We address the realistic levels of freight demand that Manston Airport might attract if re-opened in **Section 3** of this report.

The Application

1.9 RSP's prospective DCO application is predicated on its proposed alterations to the Airport's infrastructure, the effect of which is expected to increase by at least 10,000 a year the number of cargo air transport movements (CATMs) a year that the Airport is capable of accommodating. In practice, the case set out in the consultation documents produced by RSP and used in the Preliminary Environmental Information Report (PEIR) are predicated on it being able to attract and handle a forecast of 17,171 CATMs and 1.4 million passengers per annum (mppa) by 2039 and all of the assessments are made on this basis.

1.10 In order for RSP's proposals to be considered a Nationally Significant Infrastructure Project (NSIP), which can be taken forward using the DCO procedure under the Planning Act 2008 (as amended), it must comprise of an alteration to an airport which would *"increase by at least 10 million per year the number of passengers for whom the airport is capable of providing air passenger services"* or *"increase by at least 10,000 a year the number of air transport movements of cargo aircraft for which the airport is capable of providing air cargo transport services."*[4] [5] In this case, the relevant criterion relates to air transport movements for cargo aircraft. It is clear, therefore, that validating the capability of Manston Airport of providing air cargo transport services is vital to determining the legitimacy of a DCO.

1.11 RSP's prospective DCO application does not provide any explanation or understanding of the capability of the Airport before its proposed alteration is made. The capability of the Airport is a necessary component of Section 23(5) of the Planning Act 2008 (as amended), as it is from that figure that a prospective applicant must consider the effect of its proposed alteration, which must be expected to have the effect of an increase of at least 10,000 annual air transport movements by cargo aircraft. Without identifying the capability of Manston Airport, one does not have all of the components required under section 23 of the Planning Act 2008 (as amended) for a decision to be made as to whether the proposed alteration falls within section 23. In addition, an applicant must then explain what the 'new' capability would be following its proposed alteration in order to then assess the effects of the proposed alteration. We consider this further in **Section 4**.

[4] Section 23(5) of the Planning Act 2008 (as amended).

[5] It is noted that the Planning Act 2008 (as amended) also refers to an increase in permitted use as a relevant criterion. In this case, the existing planning consent under which Manston operated contained no limit on the number of annual aircraft movements permitted although there was a prohibition on night movement of aircraft between 23.00 and 07.00 in force, pending agreement to a night movement policy with the local planning authority, Thanet District Council. In any event, the increase would still need to be at least 10,000 per year in the number of air transport movements of cargo aircraft for which the airport is permitted to provide air cargo transport services.

1.12 A further consideration is the extent of development proposed in terms of its capability of supporting the projected number of movements but, more importantly, given that RSP is seeking to compulsory acquire the entirety of the Manston Airport site from SHP, whether the land area proposed is actually necessary in order to handle the projected number of aircraft movements and whether there is a *"compelling case in the public interest"* for its acquisition[6]. This requires consideration as to whether the case for the development and re-opening of Manston Airport is *"compelling"* and whether the full extent of land required has been fully justified. We consider this in Section 4 of this report.

1.13 We consider the socio-economic case for the development in **Section 5** of this report.

This Report

1.14 RSP sets out its strategic case and need for the re-opening of Manston Airport as a hub for international air freight in 4 volumes prepared by Dr. Sally Dixon of Azimuth Associates (Azimuth), namely '*Manston Airport - a Regional and National Asset, Volumes I-IV; an analysis of air freight capacity limitations and constraints in the South East and Manston's ability to address these and provide for future growth; June 2017'.* **Section 2** of this report reviews this analysis and the extent to which the analysis presented by Azimuth justifies the forecast cargo and passenger activity projected for Manston. This is important for the purposes of section 23 of the Planning Act 2008 (as amended) and whether the analysis presented by Azimuth provides a compelling case in the public interest for the acquisition of the site through compulsory acquisition procedures.

1.15 Within this report, we address, in particular, the use made by Azimuth of analysis that we undertook for Transport for London[7] and for the Freight Transport Association[8] in connection with the work of the Airports Commission and the need for new hub airport capacity for London. For reasons which will be made clear, the York Aviation work relied upon by RSP does not, and cannot be taken to, support RSP's proposed alteration to Manston Airport and, therefore, cannot be relied upon by RSP, the Planning Inspectorate, the Secretary of State and any future appointed Examining Authority (should RSP submit the application and the Secretary of State accepts the application). Given the errors in the interpretation and use of our work by Azimuth, we are concerned that the consultation carried out to date has not properly informed the public in respect of the valid interpretation of our work regarding the prospects for the viable operation of Manston as a freight airport.

1.16 We also review independent reports produced variously by Aviasolutions (Avia) for Thanet District Council in September 2016 and August 2017 and Northpoint Aviation Services (Northpoint) for RSP. This peer review of the other reports is at **Section 6** of this report. To the extent that we agree with these other reports, we do not repeat the detailed analysis in this report but reference the corroborating evidence as appropriate.

[6] Department for Communities and Local Government, *Guidance on compulsory purchase process*, October 2015, page 6.

[7] Referenced by Azimuth as Transport for London (TfL), *Note on Freight Connectivity*, unpublished paper 2013. For the avoidance of doubt, this note as made available by TfL under a Freedom of Information Request is appended to this report at **Appendix A**.

[8] York Aviation (2015), *Implications for the Air Freight Sector of Different Airport Capacity Options*.

1.17 Our conclusions are presented in **Section 7**.

2 CRITIQUE OF RSP APPROACH TO FORECASTING

2.1 In this section, we review the work of Azimuth that forms the justification for the DCO and was part of RSP's consultation documents in June and July 2017. The work is presented in 4 volumes:

- Volume I: Demand in the south east of the UK
- Volume II: A qualitative study of potential demand
- Volume III: The forecast
- Volume IV: The economic and social impact of airport operations

This section also addresses the basis of the demand forecasts for Manston as set out in Volumes I, II and III, focussing principally on air freight in this summary report. We address the socio-economic assessment in Volume IV in Section 5 of this report. Given the repetition of much of the material across the first three volumes of Azimuth's work, we have grouped issues broadly under the appropriate volume in this section.

2.2 We do not, in the main, dispute the accuracy of the factual detail, some relevant and some not, set out in the Azimuth reports or the veracity of the secondary evidence presented. We do, however, have serious and considerable issues in relation to the interpretation and the completeness of this evidence base, in particular relating to the use of previous York Aviation reports, and the inferences and conclusions drawn from it. Ultimately, we consider that the case put forward by Azimuth is weak and unsubstantiated as the extensive evidence base presented does not, in reality, support the conclusions drawn which, in many cases, go well beyond what can reasonably and sensibly be inferred from the information presented. Much of the information is effectively circumstantial and falls far short of making a compelling case, or indeed any case, that the demand forecasts would be capable of being realised.

2.3 Although Azimuth state at paragraph 1.2.1 of Volume 1 *"RiverOak, who specialise in identifying profitable market opportunities, has identified the substantial need for additional and specialised airport capacity for dedicated freighters in the southeast of England"*, we are unaware of any other research upon which RSP rely. All other documents produced in support of the prospective DCO appear to rely on the work of Azimuth.

2.4 In essence, the work of Azimuth sets out to address three key questions, which they assert provide the answer as to whether there is a compelling case in the public interest for the development of Manston Airport sufficient to meet the test for the inclusion of compulsory acquisition powers as part of the DCO. These are largely addressed in Volumes I and II, and lead on to the preparation of demand forecasts set out in Volume III. The three tests put forward by Azimuth are:

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

2.5 At the outset, we query whether these are the correct questions to be addressed in terms of the case that RSP seek to make for the use of Manston as a major freighter hub. As is clear from the draft Airports National Policy Statement (NPS)[9], the first two questions relate to the requirement for more capacity at the UK's main passenger hub airport at Heathrow. The updated draft NPS makes clear at paragraph 1.30 that, in relation to the Government's preferred solution of a new northwest runway at Heathrow:

"Consideration has been given to alternative solutions to the preferred scheme, and the conclusion has been reached that there are no alternatives that would deliver the objectives of the Airports NPS in relation to increasing airport capacity in the South East and maintaining the UK's hub status."

2.6 Hence, these first two questions are not relevant to considering whether there is a need for dedicated freighter capacity at Manston sufficient to meet the tests for a DCO. Manston would make no contribution to meeting the identified requirement of passenger hub capacity for the UK or for the South East of England. Furthermore, the draft NPS makes clear, at paragraph 1.39 in relation to any other development consent application for airport development, that:

"Nevertheless, the Secretary of State considers that the contents of the Airports NPS will be both important and relevant considerations in the determination of such an application, particularly where it relates to London or the South East of England. Among the considerations that will be important and relevant are the findings in the Airports NPS as to the need for new airport capacity and that the preferred scheme is the most appropriate means of meeting that need."

2.7 This confirms that the proposed northwest runway at Heathrow addresses the identified need as set out by the Airports Commission for new airport capacity in the South East of England and that this provides a context against which any other DCO application would need to be assessed.

Demand in the South East of the UK (Volume I)

2.8 As has been noted above and in the most recent 2017 reports from Avia, much of the analysis presented by Azimuth relates to the evidence for a shortage of airport capacity overall in the South East of England and, specifically, the work of the Airports Commission relating to the need for additional hub airport capacity serving both the needs of passengers and of air freight. Much of the evidence presented by Azimuth to justify the existence of an airport capacity shortfall in the South East of England relates to the shortfall in capacity for passenger aircraft and, specifically, a shortage of capacity at the main aviation hub at Heathrow as noted above. This does not provide any underpinning justification for the specific development that RSP proposes at Manston, which comprises a specialist freight airport with a small number of low fare, regional and charter flights for passengers.

[9] Department for Transport, *Revised Draft Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England*, October 2017. Note that the provisions referred to have not changed since the original draft as of February 2017, which pre-dated RSP's consultation.

2.9 Azimuth cite a number of reports which highlight the potential shortage of airport capacity, not just in the UK but across Europe, and the economic costs of not addressing these shortfalls. Azimuth then seek to imply that Manston could provide part of the solution and contribute to delivering these benefits. This is not justified and creates a false impression of the potential economic significance of RSP's proposals. A key point is that the reports relied on by Azimuth need to be seen in the context in which they were written, namely to set out the economic consequences of the failure to address the shortage of hub airport capacity principally for passengers but also providing bellyhold capacity for freight in the UK. All of the reports pre-date the Government's decision to promote an additional runway at Heathrow and were largely directed at ensuring that a positive decision was taken regarding the development of additional runway capacity.

2.10 Furthermore, the reference at paragraph 5.1.4 to concern expressed in the Aviation Policy Framework[10] regarding the implications of capacity shortfalls on the range of destinations served does not, as Azimuth infer, indicate a need for additional aircraft movements by dedicated freighter aircraft as these would require a concentration of freight flows to a specific destinations to fill a single aircraft at a time. Rather, the Aviation Policy Framework refers to the need for a wide range of global destinations being available at the UK's national hub airport, offering passenger and bellyhold capacity so as to maximise the choice and convenience for both passengers and shippers[11] of airfreight. It is this variety of destinations and, importantly, the high frequencies of service that lead the market to favour a bellyhold hub and spoke system so that freight can reach its end destination in the most efficient and cost effective way possible.

2.11 In the light of the Government's support for the provision of a third runway at Heathrow and the potential for further development of airport capacity beyond 2030[12], the use of these economic assessments of a constrained situation to 2050 is no longer relevant, if indeed it ever was, as a context for the potential re-opening of Manston as a freight airport. The use of this data by Azimuth to support RSP's proposals is disingenuous at the very least.

Reliance on York Aviation work

2.12 Ultimately, Azimuth rely heavily on two existing pieces of research undertaken by York Aviation during the Airports Commission process. The first an unpublished note for Transport for London (TfL) prepared in the early stages of that process (see Appendix A), and a later more detailed piece of research undertaken for the Freight Transport Association (FTA), in conjunction with TfL[13]. Both documents considered the overall position of the air freight market in the London system and what might be the circumstances of that market in 2050 under different assumptions regarding runway capacity development in the South East. Whilst we continue to believe that, in the very long term, there will be excess demand for air freight and that existing infrastructure in the London area will struggle to service this demand, more recent developments lessen the capacity pressure.

[10] Department for Transport, *Aviation Policy Framework*, 2013.
[11] Shippers are the originators of the airfreight, i.e. the exporters or importers.
[12] Department for Transport, *Beyond the Horizon The future of UK Aviation*, Call for Evidence, July 2017, paragraph 7.23.
[13] The FTA report being included explicitly in RSP's consultation documents on its website.

2.13 The key point, however, is that, to the extent that there is excess air freight demand in the long term, it does not follow that there will be a market for Manston, as asserted by Azimuth, as any excess demand at the Heathrow hub does not lend itself to being displaced onto dedicated freighter operations at Manston, for reasons we explain later in this section. To the extent that there is any role for additional freighter aircraft to accommodate some part of the displaced demand, there is ample spare capacity at other airports in the short to medium term at least. Thus, the York Aviation work relied upon by RSP does not, and cannot be taken to, support the need for a re-opened Manston Airport as a freight airport and cannot be so relied upon by RSP, the Secretary of State, the Planning Inspectorate and any appointed Examining Authority (should RSP submit its application and the Secretary of State accepts the application).

2.14 Specifically, Azimuth seek to rely on estimates presented in our reports of the number of freighter movements which might be required to carry the freight tonnage that could be displaced from the London airports in 2050 if there is no additional capacity provided by that date. It is important to note that our reports for TfL and the FTA went on to explain why there were other alternatives, such as regional airports or trucking to Europe, which would be favoured to meet demand ahead of any residual use of more dedicated freighters.

2.15 Despite the reports being very clear, when read in their entirety, that the solution to any shortage of capacity would not be extensive use of pure freighter aircraft, Azimuth rely on the freighter movement equivalents from our reports as justification for their projections of freighter movements at Manston both in the short to medium term and up to 2039. There are a number of problems with this approach:

- The analysis as at 2050 is not representative of the position at 2039 or any earlier date;
- The Government is committed to there being a third runway at Heathrow, with a major justification being the increase in bellyhold freight capability at the UK's principal freight hub;
- Gatwick has increased its effective hourly movement capacity, enabling more passenger aircraft and associated bellyhold capacity, particularly related to recent expansion of the long haul network;
- Stansted has 20,500 annual movements that are reserved for freighter aircraft, of which only around half are currently used. The Airport's Sustainable Development Plan[14] sets out an aspiration to grow cargo, including on dedicated freighter aircraft, to 400,000 tonnes annually;
- Regional airports have developed additional long haul services, providing additional bellyhold capacity, and have plenty of spare capacity to accommodate additional freighter aircraft movements to the extent that there is any need for more pure freighter capacity;
- The Government has not ruled out the provision of further additional airport capacity beyond 2030.

2.16 Fundamentally, the use of theoretical levels of excess air freight demand at 2050 cannot be used to underpin short to medium term forecasts for the expected usage at Manston or an assessment as to whether it could be viably developed in the meantime, regardless of the precise timing of the delivery of the third runway at Heathrow.

[14] Stansted Airport Ltd, *Sustainable Development Plan 2015*, Summary.

Transport for London

2.17 At the outset, it is important to note that our 2013 paper for TfL (referenced by Azimuth as an unpublished TfL note[15]) points out the UK did not then appear to be disadvantaged in terms of air freight capacity and that there was still substantial capacity for freighter movements remaining at Stansted. This is an important consideration in terms of short term forecasting and should have informed Azimuth's thinking.

2.18 In this paper for TfL, we estimated the excess air freight that could not be accommodated in bellyhold capacity on passenger aircraft under different scenarios of additional capacity at the London airports and converted that excess to an equivalent number of freighter movements. The 54,000 potential additional freighter movements that Azimuth (and Northpoint) cite at paragraph 3.4.5 are the additional freight carrying capacity required in the event of there being no further runway capacity at any of the London airports[16] (a severely constrained scenario) that is simply no longer realistic as we have set out above. Azimuth's (and Northpoint's) use of this figure as a potential market for Manston is misleading.

2.19 The note then goes on to set out how this requirement for additional freight capacity might be met and the economic consequences. In the first instance, we noted that around 14,000 additional freighter movements could be accommodated in the London system if no capacity expansion takes place, and this included the use of additional available freighter slots at Stansted. Azimuth appear to have taken our inclusion of Manston, as an example of a smaller airport in the South East that could accommodate some movements, as an indication that it could play a substantial role, wrongly stating in the Executive Summary and at paragraph 3.4.5 that we said that Manston was expected to handle 14,000 freighter movements. Manston was given simply as an example of an airport with freighter activity at the time of writing (2013) with the potential to accommodate some additional movements (as we set out in Section 4 of this report, the capability of Manston Airport is 21,000 annual cargo aircraft movements before allowing for any night operations).

2.20 In essence, our assumption was that, across the London airports (including Manston albeit on the periphery of the South East of England), it was plausible that, by 2050, double the number of existing freighter movements could be accommodated compared to 2012. If anything, the correct inference to draw from this is that we expected the number of freighter movements to double from 2012 levels, i.e. to around 1,000 movements a year at Manston.

2.21 Beyond this, the question of how excess freight demand in the London system in the future will be served is largely left open in our 2013 note but we made clear, at paragraph 26, that we believed the two most likely options would be greater use of bellyhold capacity and freighter operations at UK regional airports, noting Birmingham, East Midlands and Manchester particularly, or the trucking of freight to major European hub airports with substantial route networks and bellyhold capacity. This reflects the growing role of regional airports in serving their local freight markets (avoiding the need to truck to London), while balancing particularly the attractiveness of the substantial bellyhold capacity, lower air freight rates, and flexibility offered by the major continental hubs. We discuss this further below in relation to the economics of the air freight sector.

[15] See Appendix A.
[16] Based on the Airports Commission capacity assumptions.

2.22 Our TfL note also makes clear (paragraph 25) that, to the extent that there was a capacity constraint, the first consequence might well be less capacity for transit freight through the UK airports, prioritising freight to and from the UK. Ultimately, our TfL note concludes that:

"In the constrained, max use, case, there would be severe limitations of pure freighter movements at the London airports, which could amount to around 26% of the required air freight capacity to/from London. The extent to which this would act as a limitation on overall air freight volumes would depend on the extent to which the freight is still carried from regional airports or by truck. Clearly this would impact on the cost/efficiency of shipment, which in turn could impact on freight volumes carried. Again, it is outside the scope of the current exercise to assess these effects.

Overall, in assessing the economic value for air freight between the scenarios, the main difference is likely to lie in producer costs passed through to users and the impact that would have on business costs and hence output/freight generated. It would not be safe to assume that the reduction in cargo ATMs at the London airports necessarily translates to lost shipment value in its entirety."

2.23 Azimuth, at paragraph 3.3.2, incorrectly characterises our note to TfL as expressing a concern about the amount of trucking to Europe. Significantly, the last part of paragraph 9 is omitted by Azimuth. When looked at in its entirety, it is evident that we were noting that trucking is an inevitable part of the market, for reasons which we explain later in this section:

"However, the role of the low countries and Germany in acting as the major freight centre in western Europe is noticeable. In total, the main German freight airports handled almost 4.2 million tonnes of freight in 2012 which, when combined with the Netherlands and Benelux countries, amounted to 7.2 million tonnes of air freight flown. 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. In practice, it is unlikely that the UK could replicate this role, even with unconstrained airport capacity, due to its island location on the western edge of Europe."[17]

2.24 In other words, our assessment was that there would not, in effect, be a shortage of capacity for freight, albeit that there would be some loss of producer efficiency by way of increased trucking and time related costs, which would be small in the context of the overall cost of air freight transport. Our summary conclusion in this note makes this clear:

"The key difference between these two scenarios would be in terms of the efficiencies and economies of scale gained by the industry arising from the concentration of freight activity at a single hub. In both cases, the overall volume of air freight to and from the UK is expected to be broadly the same, although the actual freight carried including transit freight would be higher in the hub case. However, under the new hub scenario, savings from greater efficiency may be passed onto users, so reducing shipping costs and facilitating trade leading to higher freight volumes, but it is beyond the scope of the current exercise to assess this. "[18]

[17] See Reference 6, paragraph 9.
[18] Ibid, paragraph 30.

2.25 We were cautioning against the assumption that there would be a requirement for more capacity for dedicated freighter aircraft in a constrained scenario as there would be other more cost effective routes by which the freight would be carried, albeit at a higher cost than with the availability of more bellyhold capacity under a 4-runway hub scenario as being advocated by TfL at the time. Use of more dedicated freighter aircraft would represent a further increase in cost for shippers as we explain further later in this section.

Freight Transport Association

2.26 Our work for the FTA and TfL in 2015[19] again identified the potential for excess demand for air freight in the London system by 2050 and converted this number to freighter movements to demonstrate the point that a four runway hub could house this excess demand in one place. If this demand could not be served in the London system, the report makes clear our belief that it would then be trucked to alternate airports that offer significant options in terms of bellyhold freight or freighter operations. In this context, the bellyhold capacity and destinations offered by the continental hubs are a decisive factor in determining how the market will be served due to the range of destinations served and the lower costs inherent in using bellyhold freight. These continental airports act as freight consolidation hubs for the whole of Europe given their more central locations and, hence, offer consolidation advantages and more competitive freight rates.

2.27 Azimuth's interpretation of our work for FTA appears to erroneously assume that excess demand in the London system will need to be met by additional freighter movements from an airport in the vicinity of London. For instance, at para 4.2.3, they state that *"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"*. Whilst our report does estimate that the excess air freight demand with a third runway at Heathrow would be around 1.2 million tonnes by 2050, equivalent to 45,000 additional freighter movements, at no point does our report say that this is how the market could or should be served. Indeed, as we state on Page 20 of our FTA report *"we have assumed that freighter aircraft primarily act as a means to supplement bellyhold capacity where insufficient bellyhold capacity is available"* and our later analysis of how the market might react to this excess tonnage focusses on this assumption by considering the attractiveness of alternative airports in terms of both passenger and freight services on offer. We continue to be of the view that bellyhold capacity elsewhere will be the primary alternate given the price advantages, the flexibility offered by the long haul networks of major airports, including those on Continental Europe, and the low cost of trucking as our report for FTA makes clear.

2.28 By the time of this report for FTA, Manston had closed but, even if it had not and had been included within our modelling work, the lack of bellyhold capacity and limited overall market presence would have meant it could only be projected to capture a very small percentage of the excess demand. For instance, East Midlands, an airport with around 10 times the freight throughput of Manston, and only 1 hour further away from London than Manston (and substantially closer than Manston to many of the major regional markets and manufacturing centres) captured only 8% of the excess demand in our 2015 modelling. In the Heathrow 3rd runway scenario, this equates to around 100,000 tonnes in 2050. This would equate to around 3,600 additional freighter movements in 2050.

[19] See paragraph 1.14 above.

The Economics of the Air Freight Industry

2.29 Throughout the analysis, Azimuth appear to assume complete interchangeability between bellyhold freight, pure freighter operations and express/integrator operations without any analysis of the economic drivers for the use of each type of freight transport and the economics of trucking of air freight between the UK and Europe. This is a fundamentally unrealistic assumption and leads to a misrepresentation of the market opportunity for pure freighters.

2.30 In our work on international connectivity for Transport for the North (TfN) in 2016 (in conjunction with MDS Transmodal[20]), we identified the key characteristics of the air freight market. We identified that air freight can, in principle, be broken down into three main sectors:

(i) bellyhold, where cargo is carried principally in wide-body long-haul passenger jets[21]. Shippers are able to take advantage of flights to a wide variety of destinations from the main hub airports such as Heathrow and from other major European hubs, e.g. Frankfurt and Paris, similarly offering a wide range of global destinations on passenger flights;

(ii) freight only services, which are viable on only a handful of routes and/or for specialist commodities on an ad hoc basis. This is an increasingly limited sector in the UK due to the variety of bellyhold routes available and the strong presence of the integrators in the market;

(iii) express 'parcel' type services that operate on a hub and spoke network basis by 'integrators' (typically DHL, Fedex and UPS). These services increasingly carry larger consignments and East Midlands and Stansted Airports dominate the UK market, feeding bigger hubs located more centrally within Europe.

2.31 In general, air freight is seeking door to door journey times of the order of 4-5 days, which is possible using bellyhold through major hub airports, whilst integrator freight will generally seek a door to door journey time of no greater than 2 days.

2.32 The majority of tonnage moves by bellyhold as, in essence, this capacity is sold at marginal cost, with the majority of the airlines' operating costs covered by the passengers carried. The market is dominated by Heathrow and the other major European passenger hub airports because the sheer range and frequency of services provides a competitive environment which typically delivers the lowest freight rates and the greatest range of destinations served. There is high locational inertia in the air freight sector, which is likely to remain focussed around Heathrow for the foreseeable future as it is expected to remain by far the largest UK airport for cargo. In our TfN work, we estimated that around 70% of freight from the North of England in 2015 was trucked to or from other hubs for uploading, with some freight trucked to Heathrow for consolidation by the freight forwarders before being trucked back to Manchester to avail of bellyhold capacity there. Assuming similar proportions from other regions of the UK, it is clear that at least a part of any excess demand at the London airports is likely to be satisfied at regional airports, not least as airports such as Manchester, Birmingham and Edinburgh increase their range of direct long haul services offering bellyhold capacity.

[20] Transport for the North, *International Connectivity Evidence Report*, York Aviation/MDS Transmodal July 2016, Appendix C.

[21] Short haul flights provide small amounts of bellyhold capacity but, generally, low fares airlines do not carry cargo within their operating model.

2.33 The integrator sector carries more urgent parcel traffic based upon hub and spoke networks offering (typically) two day intercontinental transits. Spoke services from the UK from East Midlands and Stansted serve central European hubs at airports such as Brussels and Frankfurt. The need for frequency tends to mean that, typically, only one 'spoke' can be justified per integrator per country and these spoke services tend to be centrally located to maximise accessibility from all parts of Great Britain. East Midlands Airport is ideally placed in this regard. The integrators are increasingly using bellyhold capacity as well, essentially acting as freight forwarders in this regard.

2.34 A handful of freight only services complement bellyhold and integrator services where there is sufficient cargo to justify dedicated aircraft to a particular destination. There are a small number of scheduled freighter services which circumnavigate the globe, picking up and dropping off cargo at each point. More often, dedicated freighter services, other than those linking with major cargo hubs such as Hong Kong, Seoul or Dubai, operate on an ad hoc basis dealing with special consignments, such as large loads, or specific commodities where time is of the essence, such as the perishables trade, which was previously the principal cargo usage at Manston. Whilst there is some cascade from bellyhold to pure freighter operations where capacity is not available or time is critical, ultimately, it is the economics of the operation which is key. It does not follow that displaced bellyhold freight will seek a more expensive pure freighter service from a nearby airport over the use of available bellyhold capacity from a more distant airport.

2.35 In particular, we identified that the high cost of air freight leads to a pressure to be cost effective and the role of freight forwarders[22] in consolidating loads in order to secure the lowest possible freight rates. Cargo, other than integrator operations, tends to be assembled by specialist air freight forwarders, which cluster around the major hub airports so as to avail of the competitive freight rates on offer. As the road transport costs are very low compared to the value of the cargo and the air freight costs, air cargo is often trucked long distances to find capacity (at a lower freight rate). This forms an important driver in how freight moves from its origin to the actual airport of uploading and applies both within the UK and between the UK and Europe.

2.36 The charges levied per tonne of cargo for the long haul flight leg are high relative to inland haulage costs so that a relatively small difference in air freight rates between different airports will easily cover any additional costs for road haulage. It is for this reason that the majority of air freight will always gravitate towards bellyhold where there is capacity available, even if there is a substantial road haul as part of the journey. Given the wide range of bellyhold services available from the UK, which will increase following the development of a third runway at Heathrow and long haul service growth elsewhere, it is reasonable to expect that pure freighter operations will continue to make up a declining share of the market.

[22] A freight forwarder, forwarder, or forwarding agent is a person or company that organizes shipments for individuals or corporations to get goods from the manufacturer or producer to a market, customer or final point of distribution. For example, the freight forwarder may arrange to have cargo moved from a plant to an airport by truck, flown to the destination city, then moved from the airport to a customer's building by another truck.

2.37 Trucking of air freight is not a new phenomenon. The work by Steer Davies Gleave for the Department for Transport (DfT) in 2010[23] estimated that over 50% of air freight leaving the UK for Europe was trucked rather than using the bellyhold of passenger aircraft. In other words, airlines are using trucks rather than aircraft to distribute freight arriving on and connecting to their global passenger (bellyhold) and freighter operations. At the time of this analysis, Manston was still operational. If it was more economical to use a pure freighter service from Manston rather than trucking over the Channel, this would have been happening in 2010 but it was not. Other than the potential additional border checks as a consequence of Brexit, Azimuth advance no reasons why freight would switch from the cheaper trucking/bellyhold model to expensive pure freighter operations. We believe that the economics of air freight will continue to favour the use of bellyhold freight, other than for a minority of consignments, to and from the UK even if there is a lengthy trucking leg.

Manston in the context of the drivers of air freight

2.38 At Para 4.0.2, Azimuth suggest the reasons why cargo airlines choose airports. In reality, Manston does not fulfil a number of these key criteria meaning that, even in the most favourable circumstances, it can never be more than a niche player in the market. Specifically:

- It does not provide convenient access to the main markets;
- The drive time to Central London is nearly two hours[24];
- The great majority of the Airport's natural catchment is sea and there is very limited evidence of any local demand base;
- Competition is strong from the London airports, with already established freight forwarding and a wide range of bellyhold capacity;
- Given that the Airport is closed and staff dispersed, Manston would not provide any advantages in terms of experience of cargo handling and is likely to offer only marginal advantages in terms of the speed of transit through the Airport;
- Manston could potentially offer lower airport costs, albeit this would impact on the viability of the Airport, but these lower airport costs and any reduction in flying time would not offset the additional cost of freighter transport compared to bellyhold;
- It is also unclear as to what extent night time operations will be an option at Manston given the operating constraints under which the Airport formerly operated which prohibited scheduled night flying[25].

[23] Steer Davies Gleave, *Air Freight: Economic and Environmental Drivers and Impacts*, March 2010

[24] Based on Google maps standard driving speeds.

[25] Azimuth Vol 1 paragraph 7.1.6 quotes from a 2005 MORI survey that people were not impacted by night flights but this would reflect that there were no scheduled night flights when the airport was operational. Local resident support for re-opening (paragraph 7.1.1) needs to be seen in this context. We note that RSP's Consultation Overview Report states (on page 11) that *"Air freight operations would be predominantly during the daytime, in accordance with operations at other similar air freight airports. There may be a requirement for a small number of night-time flights, the details of which will be determined as part of the on-going project design, taking account of feedback from the Statutory Consultation, and presented with the DCO and assessed within the Environmental Statement. For the purpose of the PEIR assessment, and as a worst case, the working assumption is that there might be a maximum of eight (8) aircraft movements at night between the hours of 2300 and 0600."*

2.39 A key consideration is Manston's geographic position substantially away from the economic spine of the UK and with very limited local demand. It is remote from most markets with a journey time to the M25 of nearly 1 hour and accessibility beyond would be subject to the general levels of traffic congestion in the London area. Azimuths's suggestion (paragraph 1.2.2) that Manston might effectively serve as a 4th runway for Heathrow for air cargo flights is merely fanciful given the journey time of 1¾ hours, which is little shorter than the time from Heathrow to East Midlands Airport with an already well developed infrastructure for handling air freight and more likely to fulfil such a role in relation to freight overspill from Heathrow that is time critical or of such a special nature as to warrant the use of pure freighter aircraft.

2.40 Many of the other points raised by Azimuth regarding security, e-commerce and just-in-time delivery are all factors relating to the overall efficiency of the industry. If anything, what the analysis presented by Azimuth demonstrates is the importance of developing efficient freight networks serving the whole of the UK rather than the need for a re-opened freight focussed airport in the South East of England. Manston could only recapture economic benefits from cargo being trucked to the continent, as asserted at paragraph 4.8.4, to the extent that it provides a more economically efficient solution. Manston was not viable in the past and there do not appear to be significant changed circumstances that would make it viable in the future. This lack of inherent viability is indicative of the fact that it did not provide an economically efficient solution.

2.41 One of the key reasons that the UK aviation sector is so productive, as cited by Azimuth at paragraph 5.2.1, is that it allows the market to work. Inefficient and unnecessary actors in the market are allowed to fail. There is a strong argument to suggest that the closure of Manston is simply a part of the process of the market working and delivering more efficient solutions. The argument around the importance of the sector and Manston's role only applies if it is commercially viable (and makes an adequate return to shareholders) and represents an economically efficient allocation of resources. Otherwise, it will in fact damage the productivity of the UK aviation sector.

2.42 Azimuth asserts, paragraph 6.2.2, that the perceived lack of investment in Manston by the previous owners was an impediment to freight growth. However, this is at odds with previous statements by former operators of the Airport and comments by interviewees, in Azimuth's Volume I, on the quality of service received by customers at Manston. In its 2002 results, the Wiggins Group plc claimed that, following investment, Manston was capable of handling 200,000 tonnes of cargo a year[26]. The subsequent owners, Infratil, published a Master Plan in 2009[27] which identified triggers when there might need to be some increase in cargo aprons or warehousing at 100,000 tonnes and 200,000 tonnes of cargo annually. Given that peak tonnage was 43,000 tonnes, this does not suggest that lack of capacity or shortage of investment was an impediment to increasing cargo volumes at Manston in the past, rather the limitation was the market.

[26] https://www.investegate.co.uk/wiggins-group-plc---230-/rns/final-results/2002073007004526862/
[27] Manston, *Kent International Airport Master Plan*, November 2009, page 62.

2.43 The only specific impediment to increasing throughput cited by Azimuth is a limitation to 1 aircraft being handled at a time but we understand that this was not the case, albeit supervised taxi-ing procedures had to be put in place when there were 2 aircraft using the apron at the same time. In practice, it does not appear that lack of investment was an issue which impacted on freight throughput. Rather, it must be assumed that the previous owners did not believe there was a viable economic case for investment. Lack of investment does not necessarily mean constrained demand and it may simply be that there was not sufficient demand to justify investment and that the market was functioning properly.

Qualitative assessment of demand (Volume II)

Forecasting Methodology

2.44 Volume II of Azimuth's work begins with an assessment of different forecasting approaches for cargo, noting that forecasting of cargo is not as well developed as that for passenger activity. We agree that air freight forecasting is difficult and that there is a lack of hard data. However, we do not agree with Azimuth's assertion that quantitative methods are, therefore, not suitable and that qualitative methods are more appropriate. The evidence cited by Azimuth at Table 3 does not support this conclusion and suggests that causal methods (regression analysis) remain the most appropriate for forecasting demand for cargo and freighters. Such an approach is far more akin to the type of analysis undertaken by York Aviation in its work for TfL and FTA and upon which Azimuth seek to rely as a basis for the scale of activity that Manston might attract.

2.45 Whilst we understand the reason for Azimuth's assertion that it <u>may</u> not be appropriate to extrapolate Manston's future performance from its historic performance, this does not take away from the importance of grounding any future forecast in quantitative evidence of the drivers of the market and how these might change in the future. In any event, the assertion is at odds with the reliance placed by Azimuth on our quantitative assessments of 'spill' from the London airports at 2050, in the circumstances of no additional runway at Heathrow, as corroboration of their qualitative projections for Manston to 2039. To reiterate, reliance on these estimates is not appropriate for considering the potential role for Manston, not least as they relate to 2050 and cannot be applied to 2039, or any earlier year, without working through from first principles how any constraints in the London system might bite and the likely market reaction.

2.46 As well as reviewing forecasting methodologies, Azimuth sets out some air freight growth forecasts produced by others. At paragraph 3.6.1, Azimuth cite the DfT's assumption for growth in freighter movements in its 2013 UK Aviation Forecasts at 0.4% p.a[28]. The DfT makes clear that the growth in freighter flights is seen as a residual, representing the share of freight on pure freighter flights after allowance is made for bellyhold cargo being the primary mode. It is clear that the DfT is expecting the share of the market using pure freighters to and from the UK to continue to decline. Indeed, the most recent UK Aviation Forecasts published by the DfT[29] suggest that there is expected to be no growth in the number of pure freighter movements to and from the UK above 2016 levels in the period to 2050. Hence, any increase in freight movements at Manston would have to come at the expense of other airports. We discuss the ability of other airports to handle such movements in Section 3.

2.47 Given the existence of a definitive 'official' UK forecast for freighter movements over the period to 2050, it is not clear why Azimuth rely on global forecasts for air freight produced by the manufacturers Boeing and Airbus for the purpose of selling aircraft (paragraph 2.1.10) as a basis for the longer term projections of freighter movements at Manston in their Volume III (paragraph 2.3.2). The global growth rates cited by Azimuth are inappropriate for projecting growth in freighter movements at Manston for several reasons:

- They relate to RTKs (Revenue tonne kilometres) (Boeing[30]) and FTKs (Freight tonne kilometres) (Airbus[31]) and will reflect increased tonnage per aircraft, including freight carried in the bellyholds of passenger aircraft, and longer sector lengths as well as any growth in aircraft movements;
- The projections relate to growth in air cargo at the global level and lower growth is clearly shown as expected to/from and between more advanced economies such as the UK;
- In the case of Airbus, specific lower growth rates are cited for growth in freight tonne kilometres in freighter aircraft (2.6% p.a. compared to 3.8% per annum in their latest forecasts which are lower in any event than the previous forecasts used by Azimuth). Even then, this growth rate relates to FTKs not to freighter movements.

2.48 Taken together, these reports point to a declining market share for freighter aircraft in mature markets such as the UK, where there is a good supply of bellyhold capacity. It is, hence, not reasonable to use the Boeing and Airbus growth rates as a basis for projecting future growth in movements by pure freighter aircraft to and from the UK, particularly given the existence of DfT projections for such movements. Rather than being conservative, as suggested at paragraph 2.3.2 in Volume III, the use of a 4% per annum growth rate for years 10 to 20 at Manston is highly optimistic, and is certainly not supported by the DfT's analysis of the UK market.

[28] Department for Transport, *UK Aviation Forecasts 2013,* paragraph 3.49.
[29] Department for Transport, *UK Aviation Forecasts*, October 2017, paragraph 2.56. The decline in pure freight movements since 2001 is illustrated in Figure 4.5.
[30] Boeing, *World Air Cargo Forecast 2016-2017*, page 2.
[31] Airbus, *Growing Horizons – Global Market Outlook 2017/2036*, page 101. Note that the 2016 version to which Azimuth refer is no longer available on the Airbus website.

Interviews

2.49 Having rejected the recognised methodologies for forecasting freight demand at an airport, Azimuth rely on interviews with 24 individuals and/or organisations as set out in Table 4 of their report. To a large extent, these are people with past connections with Manston and who may not have a totally unbiased view on the desirability of it re-opening. It is notable that few cargo airlines or large scale air freight operators were interviewed, rather the list is dominated by local interested parties and logistics firms, not all of which are still in business. In some cases, throughout the remainder of Volume II, individuals are referred to who are not listed in Table 4 and, in other cases, individuals or organisations are referred to in different terms to those listed in the table. This does not suggest a very robust or rigorous approach to setting out the potential for Manston. Although the framework of questions is set out at paragraph 4.3.1, we are unable to identify any questions that would enable an assessment to be made of future passenger or freight volumes that would be likely to use Manston and which could be used as the basis for any forecast of future usage.

2.50 In the light of this, the remainder of Volume II is largely a qualitative description of current problems experienced in transporting cargo in general in the UK and in terms of past operations at Manston. These do not, however, provide any insight into the potential scale of demand for freight or passenger services at Manston. Essentially, it constitutes a speculative description of where there might be opportunities if Manston re-opens. We highlight the speculative nature of some of these comments relating to freight activity below. Taking Azimuth's categories in turn:

Process and Issues associated with airfreight

2.51 This analysis is generic and of no direct relevance to the potential for Manston. In particular, no linkage is drawn between the commodities which typically use air freight set out at paragraph 5.1.2 and the economic sectors active in Kent. Significantly, at paragraph 5.1.5, Azimuth cite a respondent that made clear that *"tendered"* prices determine how air freight moves. This is a powerful reason why bellyhold will in most instances win over pure freighter operations. Issues of price for pure freighter operations are reinforced at paragraph 5.1.10, particularly in relation to the risks associated with higher fuel prices.

2.52 There are then a number of comments regarding the current difficulties of operating at Heathrow at paragraph 5.1.6ff. It is recognised that there are few realistic slots available for additional freighter operations at Heathrow so unsurprisingly Coyne Airways cite a difficulty for them if they sought to fly to Heathrow on an ad hoc basis. However, in reality, this airline is not a major player in the UK or Europe, operating a small number of weekly flights from Amsterdam to feed its network of flights within the Caspian Sea region[32]. Comments from ACC Shipping and Active Transport need to be read in the context that they are local Kent shippers and transporters of cargo that have a vested interest in seeing Manston re-opened.

[32] http://www.coyneair.com/caspian_schedule.htm

Future trends in airfreight

2.53 To some extent, the issues highlighted here regarding security relate to the specific issues around Calais at the time when the interviews were carried out but the situation has now changed since October 2016. It is recognised that security of air freight is an increasing concern globally but this would apply at Manston as well as elsewhere.

2.54 Again, paragraph 5.1.15 highlights the dominance of bellyhold freight. Whilst noting that the A380 aircraft has more limited space for bellyhold cargo than B747s at paragraph 5.1.14, Azimuth neglect to point out that other new aircraft, such as B787 and A350 aircraft, do not suffer from similar reductions in space and capacity and continue to offer substantial bellyhold opportunities and capacity.

Motivation to use Manston

2.55 The response cited at paragraph 5.1.19 makes clear that the most important factor in considering freighter operations is *"cost, speed and access to road networks"*, which is not a condition which Manston can meet for the majority of the UK. The local transport firms (paragraph 5.1.21) clearly saw an advantage for them in Manston re-opening but it is far less clear that this was reflected by the broader industry. Significantly, paragraph 5.1.20 does not address the operational reasons why major freight forwarders seek to locate close to Heathrow, Stansted or East Midlands, except possibly for their city centre sales offices.

2.56 The response quoted at paragraph 5.1.23 makes clear that for Manston to be an attractive option to freighter operations, it would need to offer night operations. In the light of the past ban on scheduled night flying, this would be a major change to operating mode, with consequential environmental impacts. Furthermore, RSP's position in relation to whether scheduled night flights will be allowed or not is ambiguous (see paragraph 2.37 above) and we understand that some supporters of the re-opening have said that such operations would not be allowed. In the event that night flights are not allowed or heavily restricted, this would further diminish the attractiveness of Manston for pure freighter operations (comparisons with the major European freight hub at Frankfurt as included by Azimuth are simply not realistic).

Demand model and data for Manston Airport

2.57 This section does not, in fact, contain any data for Manston nor set out a view on how future demand might be modelled.

Freight focussed findings

2.58 The one airline interviewed made clear (paragraph 5.2.3) that *"success at Manston depended upon identifying a niche market and becoming known for excellence. In particular, suggestions included a perishables centre, handling of live animals, easy access for charter flights, and handling cargo that is not necessarily straightforward"*. We would have expected the remainder of the report to concentrate on quantifying the size of this niche market, including any Brexit implications for exports (paragraph 5.2.1). It is clear, however, that the realistic expectation for Manston is for a small niche operation rather than as a general 'overspill' airport for London.

2.59 The spurious suggestion that freight might be *"banned"* from Heathrow (paragraph 5.2.6) and Manston might benefit is clearly nonsense in the context of the Government's support for a third runway to provide capacity for freight in the bellyholds of passenger aircraft as much as for passengers.

2.60 Whilst the suggestion from Coyne Airways about the potential for Manston to offer fuel cost savings when flying south from the UK (paragraph 5.2.11) is interesting, it appears not to take any account of the locations where freight is generated in the UK or where it is consolidated into viable loads. It does not seem likely that Coyne Airways would itself relocate its one European feeder service from Amsterdam to Manston given this would increase rather than decrease fuel burn. As noted earlier, the real reason freight is trucked across the channel is to avail of cheaper freight rates available at the main European hub airports, which act as focal points for cargo for the whole of Europe.

2.61 Azimuth also claim that the bellyhold model is broken and that there is about to be a shift back to pure freighter operations at paragraph 5.2.25 but this is pure speculation and at odds with other industry commentators (see Airbus freighter forecasts which project an increasing share of bellyhold globally[33]) and the UK Government's view as expressed by the Department for Transport.

2.62 Whilst paragraph 5.2.24 says there was underinvestment in facilities by the previous owners, the quotation from Finlays at paragraph 5.2.26 makes clear that Manston previously offered a good level of service. Hence, there is little evidence to suggest that underinvestment was any impediment to Manston attaining its natural share of the market in the past. Although Finlays have now relocated their operation back to Stansted, we would accept that they might choose to return to Manston with a similar number of movements as previously if the facilities were re-instated and provided the cost of operating was competitive compared to Stansted. There may also be scope for some humanitarian and military flights (paragraph 5.2.48) but these will be small in number and not the basis for a viable operation of the Airport.

2.63 At paragraph 5.2.45, Fedex's criteria for an airport to be attractive to an integrator are set out and these seems to describe the characteristics of their main UK base at Stansted. There is then a discussion about some of the problems DHL perceive at Heathrow but, of course, DHL's principal UK operation is focussed at East Midlands where they have an extensive operation. From our work with the integrators and with the Freight Transport Association, we know that Manston is too peripheral for integrator operations serving the UK. Integrators have a strong preference for locations more centrally located in the UK with good road access to all of the major markets. The availability of land for warehouses (paragraph 6.2.6) is far less important than a location central to the market and the availability of good road access, neither of which are characteristics of Manston. This would apply equally to the suggestion that Amazon might locate there or that the Airport could become a base for drone operations (6.3.24-27). It is simply in the wrong place to serve the market being at the far south east at the end of the country on a peninsula.

[33] See Footnote 31.

2.64 The comparisons to Frankfurt Airport, in terms of the ability to sustain a freight operation without night movements, are simply irrelevant given that Frankfurt carries the second highest freight tonnage of any European airport and acts as a major cargo hub for air and road freight given its highly central location. Much of Frankfurt's cargo is carried in the bellyholds of passenger aircraft and this underpins the freight hub role. Given that Manston does not have anything like the overall market attractiveness of Frankfurt, for many reasons, any constraint on night operations would be a major impediment to freighter operations.

2.65 We do not discuss the passenger market in this report, albeit we have reviewed Azimuth's forecasts and disagree with their conclusions, which we can report upon should any application be made by RSP. The latter parts of Azimuth's Section 5 mention opportunities around ancillary activities such as MRO, aircraft recycling, flying schools and business aviation. We would simply highlight, at this stage, that these areas are highly competitive markets and it is not immediately obvious why Manston would provide an attractive option for operators in these markets when compared to what is often global competition. Nor is it evident that such activities would contribute substantially to the viability of Manston.

Analysis and Conclusions

2.66 Sections 6 and 7 of Azimuth's Volume II, go on to discuss what this means for Manston and draw conclusions. In general terms, Azimuth seek to draw conclusions about the cargo performance of Frankfurt, Heathrow and Stansted airports which are not consistent with the actual facts.

2.67 Again, there is reliance on our work for TfL and the FTA (paragraph 6.1.8) to justify the conclusions reached. As stated above this work does not support RSP's case.

2.68 Azimuth then identify that there are sectoral and geographic markets for which Manston has potential but there is no quantification of the scale of these markets. This is a fundamental gap if the scale of any potential opportunity is to be understood.

2.69 At paragraph 6.3.1, Azimuth set out 9 potential scenario drivers for Manston. However, it is not clear how these scenario drivers have been taken forward to the forecasts set out in Volume III, which do not set different potential scenarios for growth. If we take each of these drivers in turn:

1. *The UK's position in Europe* – Azimuth appear to assume that there will be an opportunity for multi-hop freighter services from Manston but it is far from clear that the traffic rights for such services will continue to be available post-Brexit.
2. *Changes to fuel prices* – in the face of the decline in the value of sterling, these are more likely to work against the operation of more freighter aircraft.
3. *The availability of more efficient aircraft* – the introduction of B787 and A350 aircraft will increase bellyhold capacity rather than reduce the capacity.
4. *Onshoring of manufacturing in the UK* – it is not clear how this is relevant given Kent does not have a strong manufacturing base.
5. *Changes to logistics and transport systems in Kent* – this is a circular argument as it relies on the re-opening of Manston driving a step change in the logistics and transport sector in Kent.

6. *Dramatic changes to economic performance* – it is noted that these are not factored into the forecasts but to the extent that there are Brexit effects on the economy, these would reduce trade and demand for air freight.

7. *Manston becomes a major integrator/forwarder base* -

8. *Manston becomes an Amazon base* -

9. *Manston becomes a hub for drone activity* –

for the reasons noted above, all three of these seem highly unlikely and are, at best, pure speculation with no evidence base whatsoever.

2.70 Section 7 sets out the conclusions from Volume II. According to Azimuth (paragraph 7.1.1), the key issues that are seen to favour Manston are:

- Lack of available slots at other South East airports;
- Bumping of freight from passenger aircraft;
- Security issues particularly with outsized cargo;
- Speed of turnaround.

However, our analysis of the factors would suggest that, other than perhaps the last two factors, there are few factors which would favour Manston and, in any event, these could be replicated by other airports closer to the main UK distribution centres, such as Doncaster Sheffield Airport, if these were deciding factors in the market.

2.71 Based on their analysis, Azimuth then set out (at paragraph 7.1.2), the markets which it believes that Manston could attract:

- Parcels and packages through an integrator;
- Perishables including fruit, vegetables, flowers, fish, and shellfish;
- Outsized freight;
- Formula One and luxury cars;
- Live animals;
- Time sensitive items such as aircraft [parts] and the oil and gas industry;
- Humanitarian and military flights.

In addition, some passenger operations along with a number of ancillary activities such as recycling, MRO[34] etc. are postulated for Manston.

[34] Maintenance, repair and overhaul of aircraft

2.72 Whilst, except for integrator operations, they are plausible markets for some potential operations from Manston, Azimuth make no assessment of the potential quantum of local demand as a basis for assessing how big a market there is. Whilst seeking to discredit analytical methods for projecting future demand at Manston, at the same time, Azimuth rely heavily on estimates made by us and using such methods that suggest there would be excess demand in the London system at 2050 if there is no new runway at all. Fundamentally, Azimuth make no assessment of the viability of what might be on offer or address any concerns as to why such operations have not secured a viable future for the Airport previously.

2.73 The key conclusion drawn by Azimuth is that *"This report demonstrates the potential demand for Manston Airport, indicating its viability and clearly showing that Manston Airport is a valuable local, regional and national asset, providing airport infrastructure badly needed by the UK."* (Paragraph 7.0.1) There is, quite frankly, no factual basis for Azimuth to make this claim. Azimuth claim that the capacity is *"badly needed by UK"* but this is linked to erroneous use of the economic costs of there being no further runway capacity in the UK (see paragraph 2.6 of this report) and a lack of understanding of the air freight market.

2.74 In summary, Azimuth's insistence that Manston's past market performance is not a relevant consideration in understanding how it might perform in the future is both erroneous and contradictory to the evidence put forward to support the qualitative market forecasting approach. The interview findings presented are clearly focussed towards operators that have used Manston in the past and would be pleased to be able to use it again but the evidence presented does not suggest that operators would do more than reinstate past operations. This did not result in an airport that was viable and certainly did not result in annual cargo air transport movements predicted by Azimuth. In our view, and having regard to the evidence, it is unlikely that circumstances have changed so dramatically in the intervening period since the Airport was last operational that there is likely to have been a fundamental change in its ability to capture market share. Its previous cargo performance remains the best starting point from which to consider its future.

2.75 In defence of their position, Azimuth cite lack of investment by the previous owners as being a key cause of Manston's inability to fulfil its potential previously but this is not borne out by the interview responses as the quality of service was noted as good. Fundamentally, the failure to consider the drivers of the Airport's previous performance effectively is a key error which infects the subsequent forecasts presented. The limited size of the market is perhaps the best explanation as to why there was not still further investment in developing the facilities as the operation was fundamentally not viable and it would have been imprudent to invest further.

Forecasting (Volume III)

2.76 The forecasts set out in Volume III draw extensively on the analysis in Volumes I and II. Although stated to be derived on a 'bottom up' basis (Executive Summary Page 1) and claimed to be more conservative than top down, econometrically driven, projections, reliance is still placed, at paragraph 1.1.1, on our quantitative work for TfL/FTA to justify/verify the overall quantum of movements projected, stating *"Rather than merely extrapolating past activity, studies that have focused on the 'lost' or suppressed demand include York Aviation's work (2015, p. 19)."* This work was itself fundamentally top down, based on examining past activity and its implications for the future. Azimuth rely on this as, effectively, the only quantitative evidence presented of a possible level of future demand which might be available to Manston. However, for the reasons set out earlier, Azimuth has incorrectly interpreted our findings and their use of our data to support RSP's case cannot be relied on.

2.77 Paragraph 2.1.2 again suggests that the literature review undertaken showed that *"a qualitative approach was the most appropriate method through which to gather data on the potential demand for an individual airport"*. Whilst we agree that freight forecasting is difficult, as Azimuth themselves note, at paragraph 2.1.4, qualitative forecasts still need to be based on *"market data"* and, at paragraph 2.1.6, Azimuth go on to refer to the anecdotal information collected in the interviews as primary market data. Overall, this anecdotal evidence does not provide a basis for the development of a forecast of future usage nor for the presentation of a business case of the proposed development.

2.78 To further justify the approach to forecasting, Azimuth claim that the Airports Commission recommended the use of a Delphic approach. This is not strictly true as what the Airports Commission actually said was:

> *"In cases where there is limited or no data available, judgement based forecasting, using techniques such as the 'Delphi Method' is applied. This approach involves experts in the field considering historical patterns to predict future trends and is often used in conjunction with both naïve and causal models to compare forecast trends. The Delphi method is considered especially useful for long term forecasting (20-30 years) and is effective in drawing on existing knowledge to identify areas of agreement and disagreement in forming the forecast. However, for complex themes the Delphi Method is not always considered appropriate as there is no way of testing different outcomes e.g. through scenario testing."*[35]

2.79 First of all, the Delphi Method involves a number of independent experts considering historic patterns of data and forming a judgement based forecast. Results are shared and refined until a consensus is reached amongst experts. This is not the same as a single judgemental based forecast as Azimuth have presented, based not on historic data but some unquantified estimate of 'lost' demand. In any event, we would question the appropriateness of this methodology, for the reasons that the Airports Commission cite, namely the importance of scenario testing in the context of a forecast to be used for a planning application, particularly one where the applicant is purporting to promote a NSIP under Section 23 of the Planning Act 2008 (as amended) and seeking to demonstrate that there is a compelling case in the public interest for the compulsory acquisition of the Airport site.

[35] Airports Commission, Discussion Paper 01, *Aviation Demand Forecasting*, February 2013, Paragraph 2.8

Freight Forecasts

Short to Medium Term (10 years)

2.80 Azimuth place reliance on both the overspill argument (paragraph 2.2.2) and that there will be a reversal away from the existing preference for bellyhold for most types of air freight, despite the overwhelming evidence that this is likely to remain the case in future due to the lower freight rates available. Azimuth's claim is not supported by the facts, current market trends or by other industry observers including the DfT and Airbus.

2.81 Furthermore, Azimuth appear to assume that, to the extent there is overspill seeking freighter capacity as an alternative, that Manston would be the only solution. This is not the case given available capacity for freighters at airports such as East Midlands (particularly well placed for the distribution of goods across the UK), Stansted and Doncaster Sheffield. These airports are already established and operational and, therefore, well placed to deal with any such requirements in the short to medium term using their existing infrastructure and without the need for any compulsory acquisition of land.

2.82 At paragraphs 2.2.6 and 2.2.7, Azimuth set out the methodology they have used for deriving freight movements and tonnage for Manston. In essence, these movement forecasts are entirely based on claimed confidential discussions with airlines, airports and others involved in the industry, which are then converted to freight tonnage based on the capacity of each aircraft and assumed load factors. These discussions would appear to be different from the list of interviewees reported in Volume II, which included only 1 airline (unlikely itself to relocate its single European operation to Manston) and no other airports. Although it is claimed (paragraph 2.2.9) that switching costs have been taken into account, there is no explanation as to how these costs have been factored into the assessment of what operations Manston might attract. It is likely that RSP would need to incentivise such a switch of activity and this would impact on the overall viability of the Airport, particularly in the early years. A further consequential issue arising from this is the economic cost of displacement of activity, which we discuss further in Section 5, as this needs to be accounted for in economic assessment of RSP's proposal.

2.83 A vague list of potential operations is set out at paragraph 3.2.3, albeit with specific assumptions then stated about the loadings on each. However, the basic information regarding the likely annual frequency of each operation is not given, which is essential to enable an understanding of the likelihood of such operations using Manston in the context of the UK air cargo market as a whole and taking into account ongoing operations at other airports. Paragraph 3.2.3 appears to set out simply a list of generic airlines that might offer services if Manston is re-opened. It provides no insight into whether the demand to fill those services will be there or whether the services could be operated viably by the airlines concerned and at what weekly or annual frequency. This is simply not an appropriate or robust basis for a forecast.

2.84 Whilst accepting that there may be confidentiality concerns in revealing the specific plans of any individual airline, this is all the more reason why there needs to be some underpinning analysis of the potential scale and viability of each specific market identified in the forecast in order to provide some basis for asserting that any of the airlines might operate to the destinations postulated. As presented, the aircraft movements and the consequential tonnage forecasts are entirely hypothetical with no obvious linkage back to any of the evidence presented in the earlier volumes. This is not acceptable given the implications and importance of any proposed application for a DCO and the requirement that a compelling case be demonstrated for the purpose of compulsory acquisition. At the very least, there is a lack of transparency in the approach that needs to be explained so that consultees can understand the forecast and in order to determine whether or not the proposed DCO application falls within Section 23 of the Planning Act 2008 (as amended).

2.85 To illustrate the lack of credibility of the forecasts, Table 1 shows for Year 2 (the first operational year), a throughput of nearly 100,000 tonnes. This would make Manston the 5th largest freight airport in the UK in its first year after re-opening (compared to 2016 actual throughput at the other airports). This would place it close to the scale of freight operations at Manchester Airport, including bellyhold freight. It would make Manston the 3rd busiest airport in the UK in terms of tonnage carried on dedicated freighter aircraft. This is simply not a credible proposition. It is simply at odds with the verifiable evidence and contrary to all experience there is of operations at Manston. If there is a short term market of that scale available for Manston, why did it historically not exceed 43,000 tonnes (2003)? Without full explanation of the scale of each of the markets and a reasoned justification for the number of movements assumed for each of the operations identified at paragraph 3.2.3, the forecasts as presented cannot be considered robust and substantial further evidence is required to validate the basis of the RSP DCO proposal.

Long Term (10-20 years)

2.86 As noted earlier in this section, the long term forecasts wrongly apply a 4% per annum growth rate as a basis for deriving the longer term freighter aircraft movement forecasts for Manston. To reiterate, this is inappropriate and unrealistic given that it is based on forecasts by Airbus for freight tonne kilometres at the global level[36]. Even if the short term forecasts were credible, which they are not, their extrapolation is on an unrealistic basis. At most, any extrapolation should more realistically have been based on the 2013 DfT freighter movement growth rate of 0.4% per annum and the latest DfT estimates[37] suggest that even this may be too high.

2.87 Table 6 then sets out the infrastructure requirements for cargo, which are based entirely on the forecasts put forward. However, even then, we are not told how these infrastructure requirements have been derived in terms of the operating pattern over the day, turnaround times, the number of night movements and other key assumptions for each aircraft type stated or indeed how they relate to the capability of Manston Airport with its existing infrastructure. Such information is critical to validate the infrastructure required (if indeed any is required given our assessment of the capability of Manston Airport), as well as to carry out the assessment of the environmental impacts.

[36] Now reduced to 3.8% in the latest Airbus forecasts.
[37] Department for Transport, UK Aviation Forecasts, October 2017, paragraph 2.56.

Passenger Forecasts

2.88 Although not the main focus of this summary report, we note that the passenger forecasts, set out by Azimuth in Section 2.4, suffer from many of the same problems as the freight forecasts. They appear to be based almost entirely on supposition and inferences that cannot be relied upon. There appears to be no consideration of what is known about market sizes, nature or previous performance, nor a recognition of the extent to which growth will need to be incentivised through discounting of airport charges and marketing support payments. Similarly to the freight forecasts, and for reasons that are not given, Boeing global growth rates appear to be used by Azimuth for passenger operations beyond year 10 rather than the UK specific forecasts produced by the DfT[38], which are substantially lower. This, once again, is a substantial overstatement of the potential for growth.

Overall Conclusions on Forecasts

2.89 Azimuth's entire analysis of the air freight market is focussed on the existence of a theoretical opportunity based on estimates of spill from London in the event of the third runway at Heathrow not being built or being delayed, an unsupported hypothesis that there is a trend away from bellyhold freight, and based on a small sample of interviews with largely marginal players in the UK air freight sector and/or local interests.

2.90 Azimuth's reports do not at any point provide any substantive evidence or analysis as to whether Manston Airport can effectively, viably and sustainably compete in that market. Azimuth's reports do not explain how Manston Airport will be able to price effectively against the bellyhold rates offered by growing established and operational UK regional airports or the continental hubs. Azimuth's reports do not explain how Manston Airport will compete against the range of destinations offered by the long haul passenger networks of the continental hubs or the much greater freighter network offers of East Midlands or Stansted airports. We agree that there may be a niche market for Manston, just as there was previously, and that this market will probably grow in the future in line with the pure freighter market overall (noting that the DfT does not see growth in this market to 2050), but we cannot see how Manston will provide a sufficiently attractive alternative in a broader freight market to attract a market share sufficiently large as to reach the volume and movement numbers envisaged by Azimuth and required to justify RSP's proposals to be considered under the Planning Act 2008 (as amended). Indeed, if we look at past history, it seems highly unlikely that commercially viable operations for the Airport would be attainable for the foreseeable future.

2.91 In overall terms, the forecasts presented by Azimuth at Table 1 of Volume III are simply not credible and do not provide a robust basis for promoting a DCO. We present analytically derived cargo movement forecasts in Section 3 of this report to evidence and support this conclusion that any future projected use of Manston Airport would be significantly lower than that asserted by RSP.

[38] Department for Transport, UK Aviation Forecasts 2013 and 2017.

2.92 In terms of Azimuth's key questions, as set out at paragraph 2.3 at the start of this section, the first two tests may well be met in terms of the need for more airport capacity in the South East of England. That is why the draft Airports National Policy Statement is promoting the development of a third runway at Heathrow as a solution in the period up to 2030. The first two questions are, therefore, irrelevant to RSP's proposals. However, in relation to the third test, the key point is that for Manston to be a long term solution to the UK's capacity problems, it must be a sustainable, commercial proposition, capable of attracting airlines, passengers and shippers to use it. Azimuth's analysis ignores the history at Manston and does not provide any evidence to conclude that any future projected use of Manston Airport would require an increase in the capability of the Airport.

2.93 Indeed, whilst we have provided in this report our assessment of the capability of Manston Airport (Section 4), we note that nowhere has RSP done the same exercise. The failure of RSP to provide their own evidence of the capability of Manston Airport and the amount by which the proposals would increase that capability by is a major omission in RSP's consultation material. Rather, the only information that they present is a forecast of future freight movement demand, which has no credibility as explained in this report. This failure means that, in our opinion, the requirements in Section 23 of the Planning Act 2008 (as amended) have not been satisfied. In essence, we would have expected RSP to be able to show:

- the capability of Manston Airport of providing air cargo transport services;
- the amount by which RSP is proposing to increase that capability by and thus the "new" capability; and
- a credible forecast for why that 'new' capability is required.

None of this information is provided by RSP.

3 FREIGHT FORECASTS

Introduction

3.1 In this section, we present our view of demand in the UK air cargo market at present and consider how this market will develop in the future, setting out a number of potential cargo forecast scenarios for Manston Airport specifically over the period to 2039/40 (RSP's assessment year). This is a more robust approach than the qualitative approach adopted by Azimuth and builds on the approach adopted in our work for TfL and the FTA, by updating this work and assessing Manston's potential share of the market. This is the correct way to use our earlier work to inform an assessment of the potential at Manston.

3.2 The analysis presented here builds on our previous work but supersedes it and extends it in terms of:

- considering changes in the market and circumstances since the time of the previous research, notably the decision to move forward with a third runway at Heathrow, the increasing long haul passenger operations at regional airports and the continued commitment from Stansted Airport to the freight market through its future plans;
- examining the demand and capacity position not only in London but across the UK as a whole;
- analysing potential cargo capacity growth in more detail using Airports Commission traffic forecast data, not available at the time of our previous work;
- more explicitly considering the nature of air cargo that might be affected by any form of constraint within the London airport system or in the UK;
- providing some indication of how cargo demand is spread geographically in the UK to aid consideration of how it might be served in the future.

3.3 Our previous work did not consider in detail the role that might be played by Manston Airport or indeed other UK regional airports. It considered, in broad terms, the effect of a constrained London system capacity on freight demand and how this demand might be met within the confines of the capacity position at the time, noting particularly the role that might be played by the major continental hub airports, given the price advantages that they might offer through the availability of bellyhold capacity.

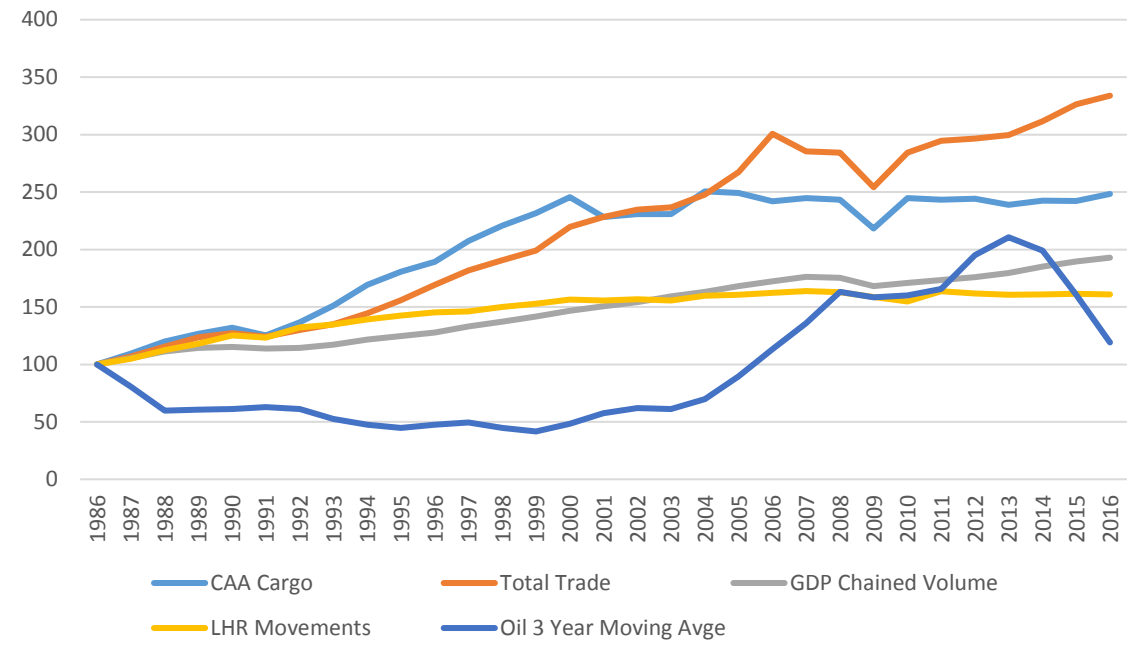
3.4 In this report, we now consider specifically the potential role for Manston by way of a scenario analysis that draws on the analysis of the overall market and the past performance of the Airport. The use of scenarios rather than a single forecast is intended to show a range of possible outcomes for Manston, allied to an assessment of the likelihood that the scenarios might be achieved in a manner which properly reflects the uncertainties identified in air freight forecasts.

Historic Performance of the UK Air Cargo Market

3.5 Our assessment of the quantum of air freight demand in the UK is fundamentally driven by analysis of the past performance of UK air cargo against a range of key economic and market indicators, notably UK trade in goods, GDP, oil price and ATM numbers at Heathrow. **Figure 3.1** shows the indices for these various metrics over time (with each indicator set to 100 in 1986).

3.6 This analysis reveals a number of interesting patterns. Until around 2000, UK air cargo was strongly related to UK trade in goods, with what would appear to be some stimulus provided by falling oil prices that would have made the cost of air cargo relatively more competitive with other cheaper modes. However, in around 2000, the market changed and this relationship appears to break. UK trade in goods continues to grow but growth in air cargo essentially stalls.

Figure 3.1: UK Air Cargo and Economic Metrics (Index: 1986 = 100)



Source: CAA Statistics, ONS

3.7 It is, therefore, helpful to look at why this might have happened. There are two main factors that need to be considered. The first is the oil price, which, through much of the late 80s and 90s, had been on a relatively benign downward trend. However, in around 2000, it started to rise again, accelerating through the mid-2000s and peaking in around 2013. The price of fuel is a key factor in the attractiveness of air cargo compared to other modes, particularly for pure freighter services, where the full direct operating costs of the flight must be borne by the cargo being shipped (as opposed to bellyhold freight where direct operating costs are largely covered by passenger operations, with cargo revenue essentially treated as a marginal benefit). This change in oil prices slowed demand for air freight globally and, in particular, drove users towards bellyhold rather than freighter options[39]. We set out the effect in the UK further below.

[39] Department for Transport, *UK Aviation Forecasts 2013*, paragraph 3.48, Steer Davies Gleave for Department for Transport, *Air Freight: Economic Drivers and Environmental Impacts*, 2010, Executive Summary.

3.8 The second point to note is the relationship to Heathrow ATMs. Up until around 2000, Heathrow was still growing its annual ATMs, which ultimately was driving the availability of bellyhold capacity in the UK air freight market. However, with runway capacity constraints biting, from around 2000, the rates of growth in ATMs at Heathrow initially slowed dramatically then stalled as it reached its consented limit.

3.9 When these two factors are combined, it is possible to understand what has happened in the UK air cargo market. It also has two key implications for considering the growth of the air cargo market moving forward and specifically in relation to Manston:

- ✈ it is reasonable to assume that the fundamental link between economic or trade growth and air cargo still exists and that, ultimately, with economic growth and increasing trade, demand for air cargo will grow. However, with oil prices remaining higher than seen in the past, it is likely that the growth path will be lower. We have assumed that it is likely to be more in line with the growth in real GDP over time;
- ✈ the capacity position at Heathrow is clearly a constraining issue for UK air freight demand but it is noticeable that this constraint has not resulted in significant gains being made by other airports in the London system. This suggests that, while there is probably a degree of constrained demand in the London system at present, this is affecting bellyhold air cargo and that is not translating through into substantially greater freighter growth at, for instance, Stansted or East Midlands. We examine this issue further below.

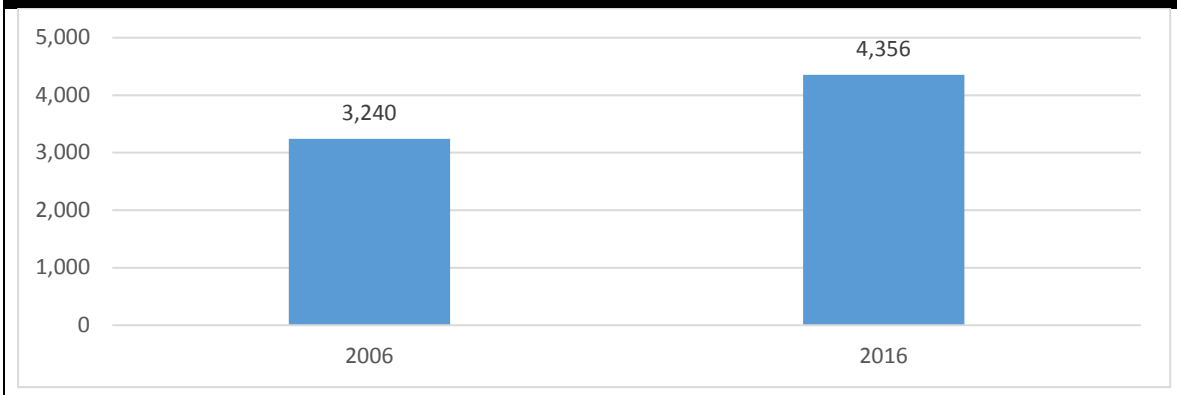
3.10 This is particularly important as it suggests that the market for bellyhold freight is different from that for pure freighter traffic. This is a function of price and urgency in relation to general air freight, as opposed to either express freight or niche products. For express freight or niche products, shippers are prepared to pay a premium which allows the use of freighters because either speed is of the essence or the destination is hard to reach or the cargo is difficult to handle in some way. For general air freight, these drivers are not the same. Accepting that all air cargo is to some degree sensitive to speed of delivery, it seems that what is likely to be being pushed from bellyhold capacity, in a capacity constrained environment, is less time sensitive and shippers' willingness to pay is lower. Hence, in the current market with relatively high fuel prices, freighter options are not an adequate substitute.

3.11 This is very important from the perspective of considering the potential role of Manston. It suggests that it will be very difficult for the Airport to compete effectively for any traffic displaced as a result of constraints in the London market as it cannot and will not be able to provide the price, frequency and breadth of destination advantages that bellyhold freight can offer. The airports competing for cargo traffic being pushed away from Heathrow, now and in the future, are the large UK regional airports with growing long haul passenger networks and the near European global hub airports, which offer the closest substitutes to Heathrow and are within easy trucking time of, certainly, the London and South East market. In any event, bellyhold capacity at Heathrow is expected to increase substantially once the third runway becomes operational so driving down the competitive prices in the market, making it even more difficult for freighters to compete. Even if there are delays to the provision of additional runway capacity at Heathrow, we would not expect a change to the pattern of behaviours observed since 2000, namely that cargo displaced from Heathrow will be trucked to other airports with available competitively prices bellyhold capacity.

3.12 Whilst the volume of air cargo flown to/from the UK's airports over the past 15 years has remained relatively static, there have been considerable changes in the way that demand has been serviced, which again reflect the drivers and constraints on demand described above. Essentially, the market has been consolidating to a small number of airports and bellyhold cargo has become more dominant.

3.13 The Herfindahl-Hirschman index (HHI) is a commonly accepted measure of market concentration[40]. **Figure 3.2** shows the HHI for the UK air cargo market in 2006 and in 2016. The change in the concentration level in the market over the last 10 years has been marked. The HHI for the UK air cargo market has increased by around 34%. The consolidation in the UK air cargo market in the last 10 years has resulted in an increase in the HHI of nearly 1,100. This continued concentration in the market can also be seen by examining the drivers of change in UK air cargo over the last decade. **Figure 3.3** sets out a bridge diagram between 2006 and 2016 showing the change in freight handled via bellyhold and pure freighter at major UK freight airports.

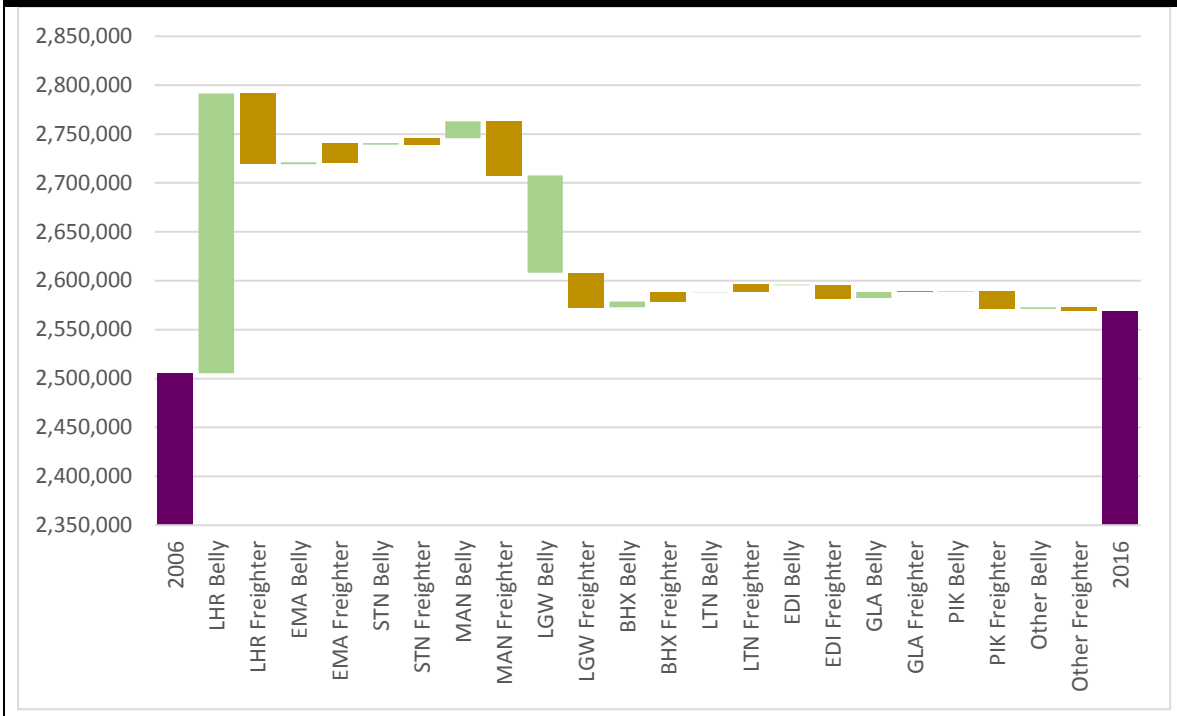
Figure 3.2: UK Air Cargo Market Herfindahl-Hirschman Index of Market Concentration



Source: York Aviation analysis of CAA Statistics

[40] It is calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers, and can range from close to zero to 10,000. The closer a market is to being a monopoly, the higher the market's concentration (and the lower its competition). If, for example, there were only one firm in an industry, that firm would have 100% market share, and the HHI would equal 10,000, indicating a monopoly. If there were thousands of firms competing, each would have nearly 0% market share, and the HHI would be close to zero, indicating nearly perfect competition.

Figure 3.3: Drivers of Change in the UK Air Cargo Market – 2006 to 2016



Source: York Aviation analysis of CAA Statistics

3.14 There are a number of key points to note:

- the market has continued to consolidate into Heathrow through increased bellyhold capacity due to the increasing focus on long haul destinations. These gains have been offset by significant erosion of freighter capacity;
- elsewhere in London, Gatwick has seen both bellyhold and freighter capacity significantly eroded as that airport has become more capacity constrained and it has focussed increasingly on short haul low fare passenger services, albeit this trend is starting to reverse as more long haul operations come on stream. Stansted and Luton have seen some growth in freighter tonnage but this does not come close to offsetting what has been lost from elsewhere with Stansted heavily focussed on the integrator and express services market;
- East Midlands, with major DHL and UPS bases, has been the only airport that has seen significant growth in pure freighter traffic, but again this has not offset losses in freighter traffic from elsewhere, suggesting that, for more general air cargo, bellyhold capacity is fundamentally more attractive, even potentially if this involves trucking to distant airports;
- this is reinforced by what has happened at Manchester, which has seen growth in its bellyhold market, relating to its growing long haul network, but with its freighter traffic falling away. The growth in bellyhold traffic at Birmingham is also probably reflective of its growing long haul passenger network;
- in general, there has been a noticeable switch towards the use of bellyhold capacity. Since 2006, pure freighter cargo's share of the UK market has dropped from 37% to 30%, while actual freighter tonnage has dropped by 17%;

- the performance of Prestwick (PIK) provides perhaps the most obvious direct comparator to Manston, with a similar sized freighter operation in 2006 to Manston at its peak. Freighter traffic at that airport has dropped by 64% since 2006. In the meantime, Prestwick was nationalised to maintain operations as it had been heavily loss making for a considerable period of time.

3.15 The implications for Manston are clear. Bellyhold is the preferred option for a significant proportion of the air cargo market and this preference has intensified in recent years. The only airports experiencing freighter growth are those with significant integrator activity. This suggests that Manston's likely niche freighter offer will struggle to penetrate the market. There has been consolidation into larger airports, which again suggests that Manston will struggle to establish market presence. Finally, the experience of Prestwick, its nearest comparator in many ways, is not encouraging for Manston. Prestwick's well established pure freighter operation has been heavily eroded and the airport has had to be nationalised to maintain its operation due to inherent lack of commercial viability.

The Geographic Distribution of UK Air Cargo Demand

3.16 At the outset, it should be made clear that there is very limited data on where air cargo originates from or is destined for within the UK. However, some indications are available from other research, notably recent work by MDS Transmodal, in conjunction with York Aviation, for TfN in relation to its International Connectivity Strategy[41]. MDS analysed a series of datasets on air freight and road haulage and estimated that around 14% of UK air freight demand originates in or is destined for the North of England. We also know that air cargo is often trucked a considerable distance before being loaded on to aircraft.

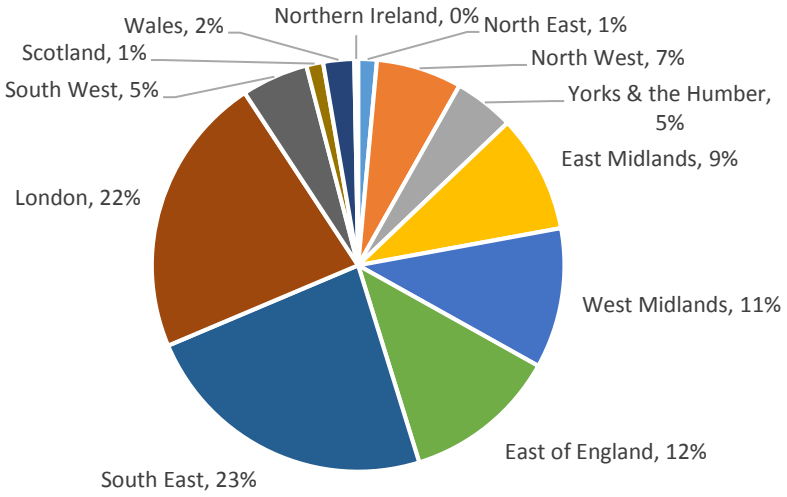
3.17 We have, therefore, developed a simple gravity model that distributes air cargo regionally across the UK based on:

- for exports, the distribution of manufacturing employment in the UK. This is intended to reflect that air cargo exports are likely to be primarily manufactured goods;
- for imports, the distribution of UK population. This is intended to reflect that imports are, in many cases, destined either for consumers directly or retailers. This is clearly a simplification but we believe a sensible one given the data available;
- a relatively low distance decay factor of 1.5, reflecting the relative insensitivity of air freight to trucking times. This has, in part, been calibrated based on observed distance decay factors using data available in the TfN work. This is generic and we have no reason to believe that the balance between trucking costs and the use of air freight would vary across the UK.

3.18 The resulting distribution of air cargo demand is shown in **Figure 3.4**. While there is a heavy concentration of demand in the Greater South East, there is significant demand located across the country. The issue for Manston is that it is poorly placed geographically to serve this demand, even for London and the South East, particularly once the location of distribution centres for import freight, which cluster around the M1 and M6, is taken into account.

[41] Transport for the North, *International Connectivity Evidence Report*, York Aviation/MDS Transmodal July 2016, Appendix C.

Figure 3.4: Modelled Regional Distribution of UK Air Cargo Demand



Source: York Aviation analysis of CAA Statistics, ONS and Google Maps Data

3.19 In the event of air cargo capacity constraints in London, this demand is likely to look initially for cargo capacity closer to home at the major regional airports, particularly those that are developing broader long haul passenger networks. Even if freighter aircraft are required for this demand, there are likely to be substantially better options than Manston. Not least the national freight hub at East Midlands, with its central location in the UK and excellent multimodal connectivity to a wide geographic area.

Future Demand for Air Cargo in the UK

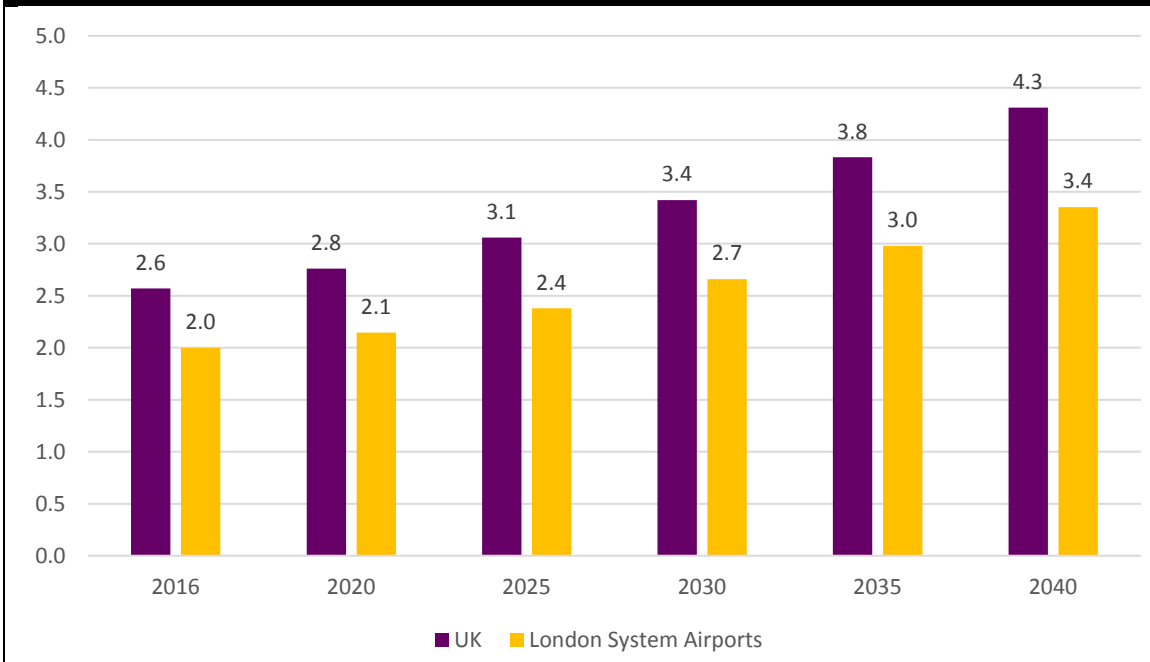
3.20 The initial step in producing our cargo forecasts for Manston is to consider the likely size of the London system and UK air cargo markets in the period to 2040. This is an unconstrained forecast and does not, at this stage, consider whether capacity will be available to deliver this demand.

3.21 In line with our analysis above and consistent with our 2015 report for the FTA, we adopted a relatively simple approach, growing existing air cargo demand forward in line with GDP projections for the UK economy. The GDP forecasts used are the latest forecasts produced by the Office for Budgetary Responsibility at the time of writing. These are taken from:

- Economic & Fiscal Outlook (March 2017), which provides short to medium term forecasts;
- Fiscal Sustainability Report (January 2017), which provides long term forecasts for the UK economy.

3.22 These forecasts suggest average real growth in UK GDP of around 2.2% over the period to 2040. The resulting projections of air cargo demand at the London system airports and across the UK are set out in **Figure 3.5**. This analysis sees total UK air cargo demand reach around 4.3 million tonnes by 2040 and demand in the London system[42] of around 3.4 million tonnes by 2040. At this stage, we have assumed that the split of tonnage between the London airports and the rest of the UK remains as currently, driven by the large concentration of freight forwarders in the vicinity of Heathrow in the light of its major air freight hub role. This may well overstate the scale of demand in London given increasing long haul networks at regional airports.

Figure 3.5: Air Cargo Tonnage Forecasts (million tonnes)



Source: York Aviation

Air Cargo Capacity at UK Airports

3.23 The second stage in our assessment is to consider the extent to which the demand identified above could be met by UK airports and the London system airports. This is, again, in line with our approach taken in our work for the FTA in 2015. However, the analysis undertaken for this research is more detailed, uses more up to date and detailed information on future passenger ATM forecasts and, specifically, considers Stansted's more recent statements in relation to continuing growth in the cargo market to around 400,000 tonnes[43] and removal of the existing 35 mppa passenger planning cap and extension to 43 mppa[44]. Had we been specifically asked, we would have advised Azimuth of the need to carry out such an assessment so as to understand the implications of our earlier work for TfL and the FTA.

[42] Based on the London airports current share of the national market.
[43] Sustainable Development Plan – Stansted Airport (March 2015).
[44] Press Release – Stansted Airport (17 October 2017).

3.24 In order to estimate the likely bellyhold capacity that will be available through the period to 2040, we have produced projections of passenger ATM demand for each of the top 10 freight airports in the UK in 2016, along with a residual forecast for Other UK airports. For Heathrow, Gatwick and Manchester, these forecasts have been split into domestic, EU and non-EU ATMs. The future years for each airport have been based on the ATM forecasts produced by the Airports Commission for which detailed data files have been released[45]. Years prior to the opening of Runway 3 at Heathrow, uses the Base ATMs scenario, while post opening uses the HAL ATMs scenario, which reflects the third runway.

3.25 The existing freight loads per passenger ATM for each airport have been estimated using CAA Statistics. These average loads have then increased by 1.0% per annum tapering to 0.5% per annum for Heathrow and 1.6% per annum tapering to 1.0% per annum for other airports. This reflects trends in average loads identified from CAA Statistics over the last five years.

3.26 In relation to pure freighter capacity, we have, in the first instance, considered what might be termed a business as usual view of capacity moving forward. This considers the likely number of freighter ATMs that might be flown rather than considering the actual movement capacity of individual airports, which may be greater. This is, ultimately, a more stringent view of capacity moving forward and is more likely to lead to a conclusion that there is a lack of freighter capacity to meet any demand than simply considering what any given airport could actually handle, especially given that Stansted is some distance from its freighter ATM cap and East Midlands is not close to any form of ATM limit. To enable this analysis, we have grown freighter ATMs at each airport by 0.4% per annum, in line with the expected growth rate from the DfT's Aviation Forecasts 2013[46]. However, we note that the most recent DfT forecasts[47] suggest that no growth in freighter movements to or from the UK is now expected. Hence, our use of the previous DfT growth rate may overstate the market for pure freighter operations but we have retained this approach so as not to understate the extent of any potential overspill market for Manston.

3.27 Once again, average loads per freighter ATM have been estimated for each airport from CAA Statistics. As with bellyhold cargo per ATM, there has been an upward trend in average loads on freighters in recent years of around 1.1% per annum (York Aviation analysis of CAA Statistics). This is assumed to continue over the period.

3.28 In addition to this business as usual view, we have also taken a view as to the likely total tonnage capacity over time of the two largest freighter airports in the UK, East Midlands and Stansted, based on those airports' development plans:

- the Stansted Sustainable Development Plan talks about developing cargo capacity to handle around 400,000 tonnes of cargo. We have assumed that current capacity is around 300,000 tonnes and that this grows steadily over time to 400,000 tonnes by 2040;

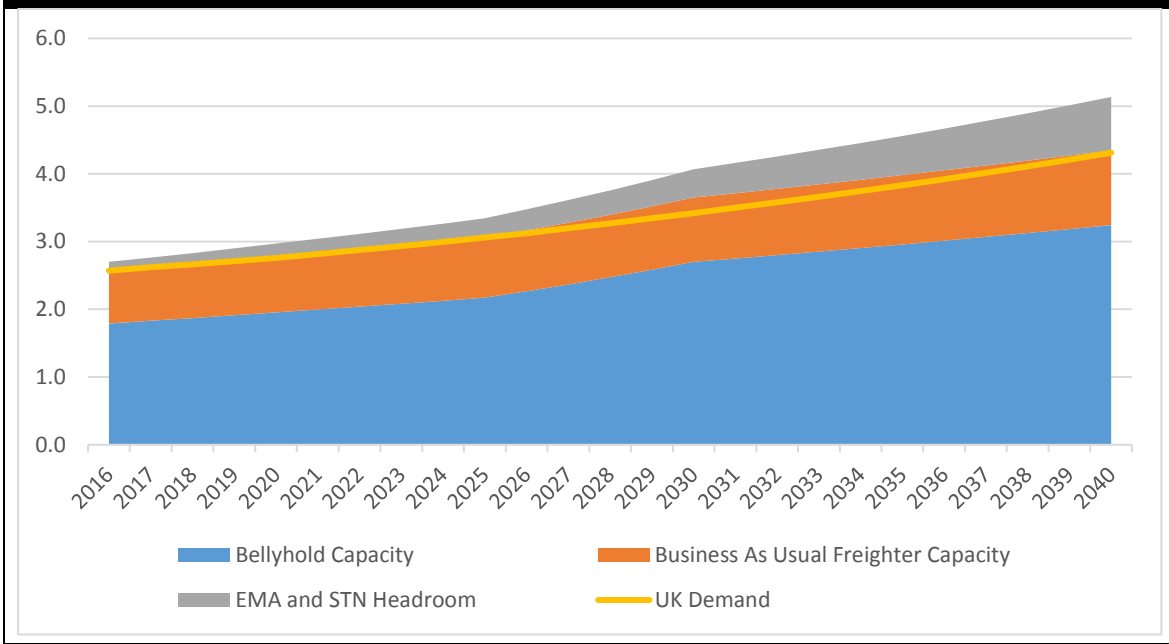
[45] https://www.gov.uk/government/publications/airports-commission-documents-and-data.
[46] The exception to this is the small number of freighter movements at Heathrow, which are not allowed to grow until the Third Runway is opened.
[47] Department for Transport, *UK Aviation Forecasts*, October 2017, paragraph 2.56.

- the East Midlands Sustainable Development Plan describes its runway capacity as able to support a 10 million passenger and 1.2 million tonne cargo airport[48]. We have assumed that this capacity could be developed over time to 2040 from a base capacity of 400,000 tonnes.

3.29 This assessment of the cargo capacity headroom at Stansted and East Midlands helps provide a view of how any excess demand identified could be handled by freighters in the UK if this were the response of the market to any shortage of bellyhold capacity, although it is important to note that we do not believe this would be the primary market response given the lower cost of bellyhold alternatives. It should, however, be recognised that the speed of build-up of this headroom is to a significant degree a matter of conjecture. There will be infrastructure developments required to enable capacity but, if demand were there, it is likely that these could be brought forward as they would be incremental expansion of existing facilities which could be phased in to meet demand more easily and cheaply than the substantial cost involved in re-opening Manston.

3.30 The resulting estimates for air cargo capacity for the UK as a whole and the London system over time are shown in **Figures 3.6** and **3.7**.

Figure 3.6: UK Air Cargo Capacity

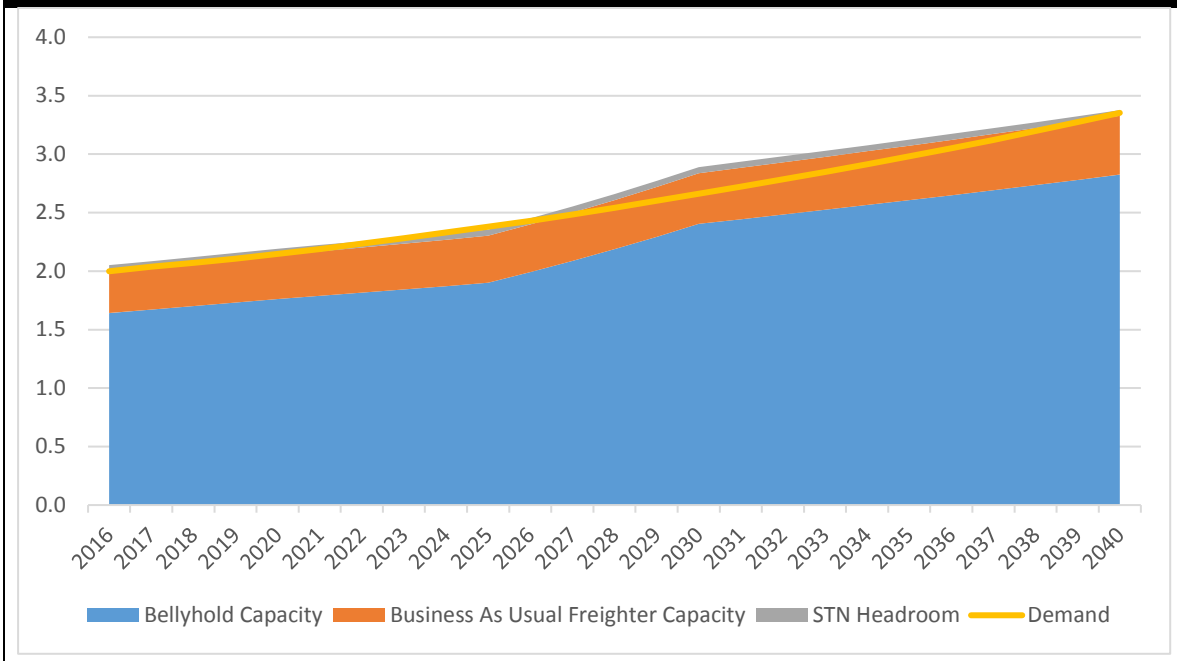


Source: York Aviation

[48] East Midlands Airport Sustainable Development Plan, 2015. Page 75.

3.31 At a UK level, our analysis suggests that there are unlikely to be capacity issues in the cargo market prior to 2040 even on a Business As Usual Freighter Capacity basis. Once the third runway is opened at Heathrow, there is in fact likely to be excess capacity in the market, which is likely to soften demand for supporting freighter capacity dedicated to general air freight (accepting that integrator/express freight is a separate market to a significant degree). It should, however, be noted that capacity on a Business As Usual Freighter Capacity basis is likely to become constrained shortly after 2040 but this can easily be addressed by exploiting the inherent airport capacity headroom still available at Stansted and East Midlands if it is appropriate to serve the market in that way. Overall, we can conclude from this analysis that there will be no shortage of freighter capacity in the UK before 2040 and overspill from other airports would not provide a rationale for re-opening Manston.

Figure 3.7: London System Air Cargo Capacity



Source: York Aviation

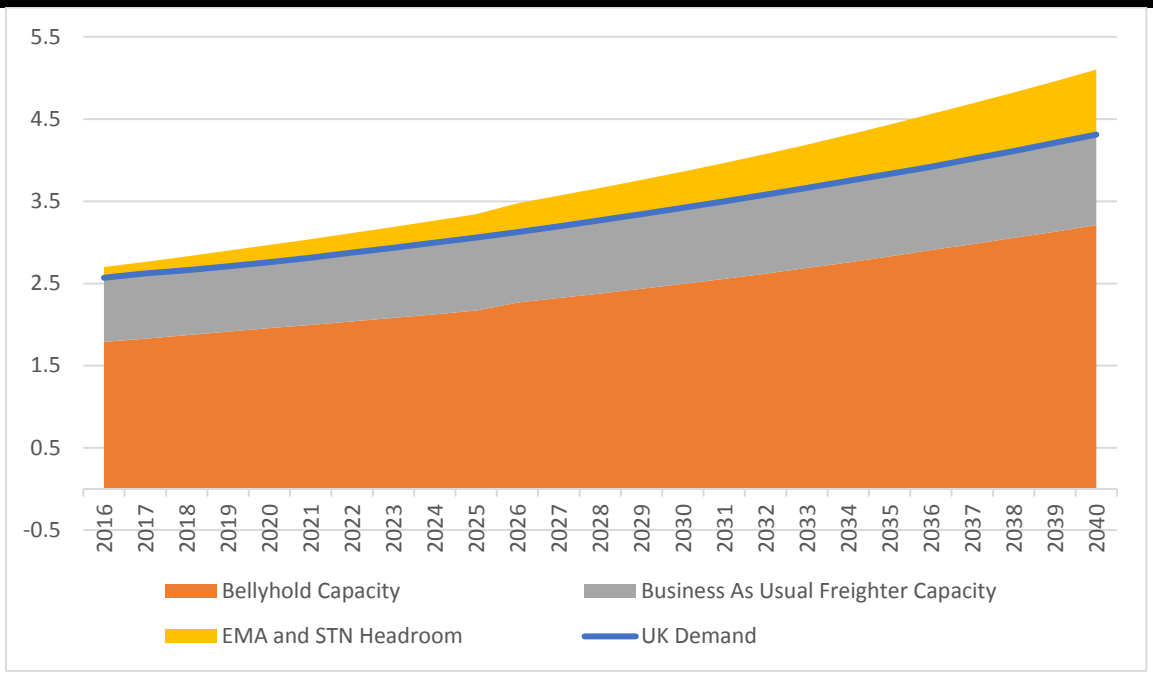
3.32 The situation at the London airports is slightly different if we assume that London maintains its market share of the overall market and there is no natural 'clawback' to the regions. With Heathrow's bellyhold growth relatively constrained, there are potentially some limited capacity constraints in the medium term before the third runway opens but, if there was demand, we would expect Stansted to develop additional freighter capacity sooner. Any constraint would be fleeting. Once the third runway is opened, excess capacity develops rapidly. Potential capacity issues do not then start to re-emerge until around 2040, when it appears that Heathrow is likely to become runway capacity constrained once more.

3.33 The implications for Manston Airport are that, even in pure volume terms, push factors from other airports in London are unlikely to provide opportunities for growth before 2040, and this is before any consideration is given to Manston's suitability to serve the markets in question. In the short to medium term, there is likely to be some limited constraint in the London system before the third runway at Heathrow is opened. However, this is largely a function of bellyhold constraints at Heathrow and it is highly questionable as to whether the type of cargo that is likely to be forced out will be suitable for Manston or indeed would switch from bellyhold to pure freighter operations at all.

3.34 Logic would suggest that what will be pushed out is relatively low yielding, general air cargo that is more sensitive to price and less sensitive to time. Essentially, this is akin to business passengers forcing leisure passengers out of Heathrow. This type of air cargo is not likely to see pure freighters as an effective alternate, given the higher prices involved. It is more likely to seek out alternative bellyhold capacity at UK regional airports (which might actually be closer to its point of origin given our analysis above) or travel via truck to the continental European airports.

3.35 Our analysis here has been predicated on the construction of a third runway at Heathrow, as this is clear stated Government policy. In the event that the third runway is delayed or does not happen at all, it is expected that there would be other adjustments in the UK air transport market, including the provision of more long haul services from other airports offering bellyhold capacity. In this case, whilst there could theoretically be a level of capacity shortfall at the London airports assuming that they maintain a constant market share, we would expect demand and capacity to keep pace at the UK level as growth at regional airports is accelerated. This is illustrated in **Figure 3.8**. We consider that analysis at the UK level remains the most relevant and this does not suggest that there will be a capacity shortfall before 2040.

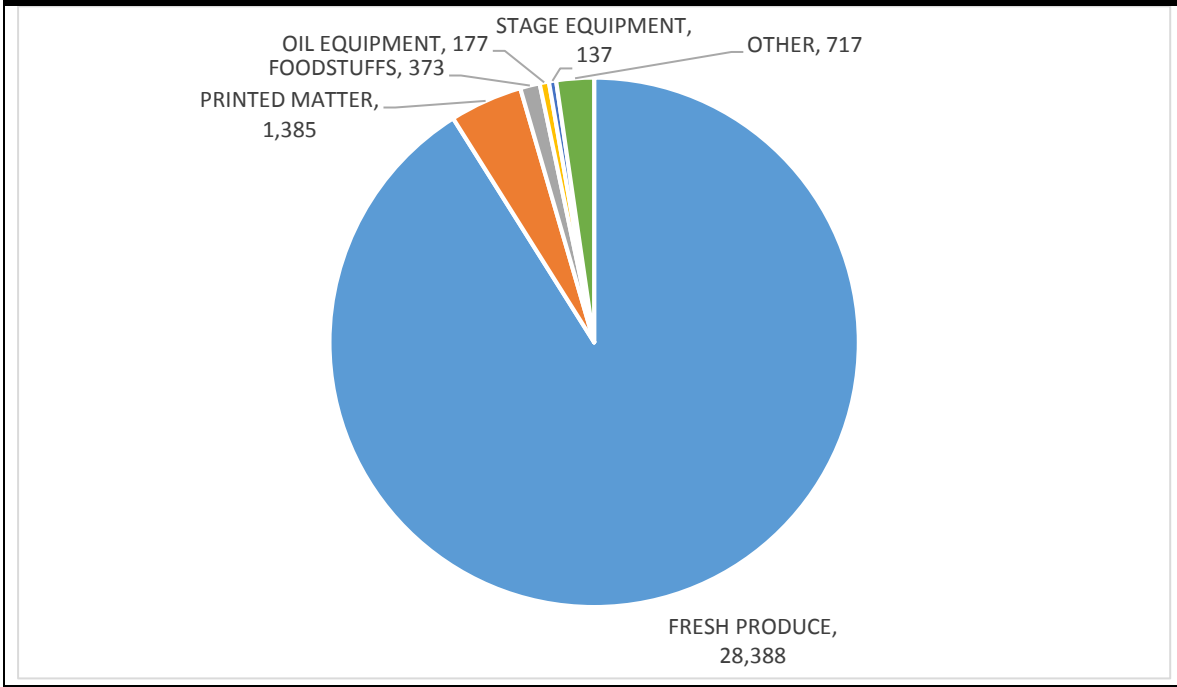
Figure 3.8: UK Air Cargo Capacity with No Third Runway at Heathrow



Source: York Aviation

3.36 An examination of the nature of cargo traffic that used Manston in the past also supports this assessment. Data provided to York Aviation by the current owner and set out in **Figure 3.9** shows that the Airport was essentially an import point for fresh produce (91% of total tonnage in 2012). This is a time critical market with associated high yields (hence allowing freighter operations) but also one that is dominated by Heathrow through its perishables hub and its bellyhold capacity to Africa. It is unlikely that Heathrow would shed significant amounts of this traffic with cargo constraints and certainly it would likely gain market share once the third runway is opened. Heathrow remains better located for the distribution of this produce to the core London market given its location inside the M25.

Figure 3.9: Air Cargo at Manston by Commodity Type in 2012 (tonnes)



Source: York Aviation analysis of Stone Hill Park data

3.37 It should also be remembered that this assessment assumes that Stansted does not accelerate its cargo development plans to meet any excess demand that is suitable for freighter activity. Indeed, we understand that the perishables activity that used to use Manston has shifted back to Stansted and that the operation at Manston was supported by low charges to the airline to compensate for the less attractive location.

Specific Air Cargo Market Forecasts for Manston Airport

3.38 Building on the analysis above, we have considered three scenarios for future cargo growth at Manston Airport. In each case, we have considered the likelihood of the scenario coming forward. It should be noted that, in the air transport market, demand is the driver of airport usage not capacity. Provision of capacity at Manston is no guarantee that airlines, shippers and passengers will use it unless there is demand and Manston represents the most efficient way for that demand to be met.

Scenario 1: Relief for Capacity Constraints in London (Highly Optimistic and very unlikely)

3.39 In this scenario, we have assumed that Manston is able to capture the excess demand that is seen in the London system in the medium term when only Freighter Business As Usual capacity is considered. It is then able to maintain its market share into the long term, even once the excess demand has disappeared with the appearance of the third runway.

3.40 We ultimately regard this scenario as highly optimistic and very unlikely to occur. We do not believe that the nature of excess demand is likely to suit freighter operations. This fits with the current market, where Heathrow is almost certainly constrained in terms of its ability to offer bellyhold capacity and yet there remains significant freighter capacity elsewhere and there has been no upturn in the demand for air freighter operations. We also feel it is highly unlikely that Manston could maintain market share in the context of the opening of a third runway at Heathrow. Even in the absence of a third runway, pure freighter capacity at Manston is not likely to be attractive for most of the freight displaced which would still choose cheaper bellyhold capacity available elsewhere in the UK and Europe.

3.41 We consider this scenario to be an upper bound to the envelope for Manston Airport. Even in this scenario, forecast tonnage only reaches around 105,000 tonnes by 2040 or around 4,470 cargo aircraft movements. The estimate of aircraft movements assumes loads similar to that of Manchester Airport's current freighter operations, growing by around 1.1% per annum. This appears to be a relatively low loading compared to Manston's previous operations[49] (hence providing a higher ATM number for any given tonnage and thus likely to overstate the number of movements).

3.42 We note that Azimuth have assumed an even lower tonnage per cargo air transport movement of under 20 tonnes, so leading to an overstatement of the number of aircraft movement at any predicted tonnage, but this does not appear realistic based on Manston's past operations nor tonnages seen elsewhere.

[49] We estimate that the number of tonnes per cargo ATM previously at Manston was 35-40 tonnes, taking into account empty aircraft backhauls.

Scenario 2: Manston Achieves Its Previous Market Share (More Likely but still with optimistic elements)

3.43 This scenario assumes that Manston essentially re-enters the market as a niche player in the key markets that it served previously, mainly fresh produce. This reflects the view that, in reality, very little has changed in the market compared to when Manston was last operational, not least that Heathrow was already suffering from runway capacity issues prior to 2014. There are no major changes that we would consider sufficient to alter Manston's attractiveness fundamentally compared to 2014. We note Azimuth's contention that Brexit will make trucking to Europe more difficult but would point out that the freight involved is most likely to be general air cargo heading for bellyhold capacity that is relatively less sensitive to time and that additional regulatory burdens are likely to be found at airports as well post Brexit. Hence, the impact on relative transit times may actually be comparatively limited. Furthermore, it is far from clear to us, from the evidence presented by Azimuth, that there were concerns regarding the quality of service offered at Manston historically sufficient to have constrained its share of the market in the past. Hence, it is not unreasonable to start from a position that its past market share was representative of what it might attain in future and that the provision of more infrastructure would not give rise to a change in the market or a higher level of underlying demand.

3.44 We regard this as the most likely of our three scenarios but it also has optimistic elements. Notably, it is highly optimistic to assume that Manston will be able to maintain market share in the face of expanded capacity at Heathrow. We would also note that the Airport was not viable at similar demand levels previously and would appear to have only been able to reach its recorded market share by 'buying' traffic through very low airport charges based on our discussions with SHP and its staff that worked at the Airport when operational. In this scenario, the Airport reaches around 47,000 tonnes by 2040 and around 2,000 cargo aircraft movements.

Scenario 3: Relief for Capacity Constraints in London (More Realistic but still with some optimism)

3.45 Scenario 3 is a variant of Scenario 1 that takes a more realistic view on how the limited excess demand in London in the medium term (allowing for pure freighter Business as Usual activities only) might be served. We would view this scenario as substantially more realistic than Scenario 1 but still with highly optimistic elements.

3.46 In this scenario, the excess demand is split as follows:

- 50% is assumed to be to diverted via truck to make use of bellyhold capacity at UK regional airports or at the continental hubs in Europe. This reflects the view that, in the majority of cases, this freight is likely to be relatively price sensitive, less time critical general air cargo for which pure freighters are not likely to be an appropriate substitute;
- the remainder is assumed to be split evenly between East Midlands, Stansted and Manston airports. This is, again, probably an optimistic assumption given the economies of scale and better proximity to markets overall offered by the other two airports compared with Manston.

3.47 Once the excess demand in London has peaked (just before the opening of a third runway), Manston is assumed to be able to maintain its market share into the future. This is again an optimistic assumption given what will be an excess of capacity in the market for much of the following period through to 2040. This scenario involves the lowest cargo throughput of the three options. By 2040, the Airport is handling only 17,500 tonnes of freight and handling around 750 aircraft movements each year.

Summary of Cargo Forecast Scenarios

3.48 The cargo tonnage and freighter ATMs associated with each of the three scenarios are set out below in **Table 3.1**.

Table 3.1: Summary of Manston Cargo Forecast Scenarios						
	Scenario 1: Relief for London (Highly Optimistic)		Scenario 2: Previous Market Share		Scenario 3: Relief for London (More Realistic)	
	Tonnes	ATMs	Tonnes	ATMs	Tonnes	ATMs
2020	7,608	402	30,359	1,605	1,268	67
2021	18,407	963	30,966	1,619	3,068	160
2022	31,758	1,643	31,616	1,635	5,293	274
2023	45,571	2,332	32,280	1,652	7,595	389
2024	59,860	3,029	32,958	1,668	9,977	505
2025	74,638	3,736	33,650	1,684	12,440	623
2026	76,205	3,773	34,357	1,701	12,701	629
2027	77,958	3,818	35,147	1,721	12,993	636
2028	79,751	3,863	35,956	1,742	13,292	644
2029	81,585	3,909	36,782	1,762	13,598	651
2030	83,462	3,955	37,628	1,783	13,910	659
2031	85,381	4,002	38,494	1,804	14,230	667
2032	87,345	4,050	39,379	1,826	14,557	675
2033	89,354	4,098	40,285	1,848	14,892	683
2034	91,409	4,147	41,212	1,869	15,235	691
2035	93,511	4,196	42,159	1,892	15,585	699
2036	95,662	4,246	43,129	1,914	15,944	708
2037	97,958	4,300	44,164	1,939	16,326	717
2038	100,309	4,355	45,224	1,964	16,718	726
2039	102,716	4,411	46,310	1,989	17,119	735
2040	105,182	4,468	47,421	2,014	17,530	745
Source: York Aviation						

3.49 Our updated analysis of the market and specific consideration of three potential scenarios for freighter growth at Manston Airport demonstrate that, even on the most optimistic assumptions, it is not likely to generate above 4,470 annual movements by air cargo aircraft. On a more realistic basis, it might attain similar levels of tonnage as seen in 2003 by 2040 but with a higher number of aircraft movements due to the assumption we have made that freighter loads would be similar to those seen elsewhere in the UK rather than the higher loads actually observed at Manston in the past. On past performance, the number of movements at Manston might well be lower. **None** of our scenarios suggest that there is a need to increase the capability of Manston Airport given our assessment in Section 4.

4 CAPABILITY OF THE SITE

4.1 Our start point for this assessment is the capability of the Airport site based on its historic and consented planning status and on the basis that the existing infrastructure could all be 'made good'. This assessment is based on the existing Lawful Use in planning terms. The existing Airport's permitted use is for civil aerodrome use, and there are no conditions limiting either passenger numbers or ATMs.

Capacity of Existing Facilities

4.2 In the first instance, it is important to highlight that Manston Airport did not operate under any form of restriction on the number of aircraft movements. The planning agreement between TDC and Manston Airport, which governed the permitted activity of the Airport, was entered into in 2000. In respect of night-time flying it sets out the limitations on such operations until a "Night-time Flying Noise Policy" is in place. Clause 1.1 of the Second Schedule states:

"The Owner agrees not to cause suffer or permit any Regular Night Flying Operations at any time (subject to Paragraph 1.4 below) before a Night-time Flying Noise Policy shall have been prepared and a copy lodged with the Council."

Further, it defines:

"Regular Night Flying Operation means Flight movements which are scheduled or programmed and which occur frequently or regularly to the same or similar patterns for the same operator during Night-time"

4.3 It is understood that the Night-time was defined as 23.00-07.00, though Manston Airport was also seeking a Night Quota Period which would have run from 23.30-06.00. In practice, there were a number of night movements which were deemed to be ad-hoc and often driven by technical delays but that were permitted to operate in any event.

4.4 We have assessed the capability of the existing infrastructure at Manston Airport assuming that the range of existing facilities, as at the time of its closure, are made good. There are three principal elements – runway, passenger and freight:

- **Runway:** for the handling of commercial passenger and freight aircraft, the runway would operate without a parallel taxiway. The current marked parallel taxiway is too close to the runway centreline to allow such aircraft to taxi independently of a runway movement. Landing and departing flights would then need to back track along the runway to and from the entry/exit taxiways. The achievable maximum runway rate with this operation might be around 20 to 24 flights per hour depending on the mix of aircraft types. This runway movement rate, even at 50% utilisation of available slots, would be capable of accommodating around 64,000 aircraft movements a year. However, we recognise that this is in excess of the capability of the passenger and freight handling facilities as existing.

- **Passenger:** the passenger apron has been designed to accommodate 4 E-Jet FK100 passenger aircraft. These aircraft types are now rare and have a wingspan that is much less, at 28 metres, than the typical low fares airline Code C type aircraft that Ryanair, easyJet and Wizzair, for example, use. These airlines typically use aircraft such as the B737-800 and A320, with wingspans of 36 metres. On this basis, the passenger apron would be able to accommodate up to 3 of these larger Code C aircraft simultaneously and could, in the alternative, be used for handling cargo flights. The terminal itself is quite compact and would have a maximum of 6 check-in desks and very small baggage make up area, and a departure lounge that could depart a maximum of 2 flights within the same 30 to 40-minute period, with an hourly capacity in total of around 250 passengers. There are more than 1,000 car parking spaces. We estimate that the passenger terminal at its current size could support around 0.7 to 0.9 mppa based on there being up to two based Code C aircraft with a reasonable number of other visiting flights across a typical day.
- **Freight:** the aircraft parking area close to the freight sheds can park up to 2 or 3 small to medium sized cargo aircraft or one large aircraft. There are two freight sheds that were originally organised to be used one for imported freight and one for export. Adjacent to these is an 'equine' handling facility for processing livestock. In practice Manston, when operational, normally handled one large freight aircraft at a time due to size and juxtaposition of the freight sheds and apron to each other and the single taxiway connecting to the runway. Whilst Manston handled up to 30,000 tonnes of freight at its peak, our understanding is that the freight facilities could have handled substantially more tonnage.

4.5 Our assessment into the capability of Manston Airport is based on the reinstatement of the runway, air traffic control, fire station, navigational aids, apron (stands) and taxiways. We have taken into account the use of both apron areas, one to the west adjacent to the cargo sheds and one to the east, adjacent to the passenger terminal. These could accommodate collectively up to 4 freight aircraft simultaneously. The assessment is also based on an 18-hour operational day (allowing for a small number of ad hoc night movements consistent with previous operations) and with a turnaround window of up to 2½ hours from the arrival to departure of each freight aircraft resulting in the capability of each stand to handle over 7 aircraft rotations a day, or over 14 cargo aircraft movements.

4.6 On this basis, across a year, this would equate to a capability for at least 21,000[50] annual air cargo aircraft movements with the existing consented infrastructure, subject only to reinstatement. This assessment is consistent with the assertion made in presentations on behalf of RSP[51], which stated that the 10,000 cargo aircraft movement threshold, necessary to pass the Section 23 test in the Planning Act 2008 (as amended), could be met by providing for 14 aircraft arrivals and 14 aircraft departures each day. As the existing infrastructure could provide for 4 cargo aircraft being handled simultaneously, this would equate to 20,440 annual air transport movements by cargo aircraft. This would be more than sufficient to accommodate any reasonable forecast of the cargo related movement demand that Manston might attract as we have set out in Section 3.

[50] Should a night time noise policy be agreed with Thanet District Council pursuant to the existing planning agreement that enabled a longer operational day and/or a number of scheduled night movements, then the capability could, in theory, be higher than 21,000 annual cargo aircraft movements.
[51] RSP, Presentations for Thanet District, Dover District, and Canterbury City Councils

4.7 We recognise that the actual usage of that capability will depend on how an airport is used in terms of the daily and seasonal pattern of movements but this does not, of itself, reduce the capability offered by the existing consented infrastructure for air transport movements. Our assessment, therefore, provides essential missing information from RSP's materials to date which is necessary for the purposes of section 23 of the Planning Act 2008 (as amended), for assessment purposes under the Environmental Impact Assessment Regulations and for consultation purposes.

Land Required to accommodate RSP's Forecasts

The RSP Master Plan

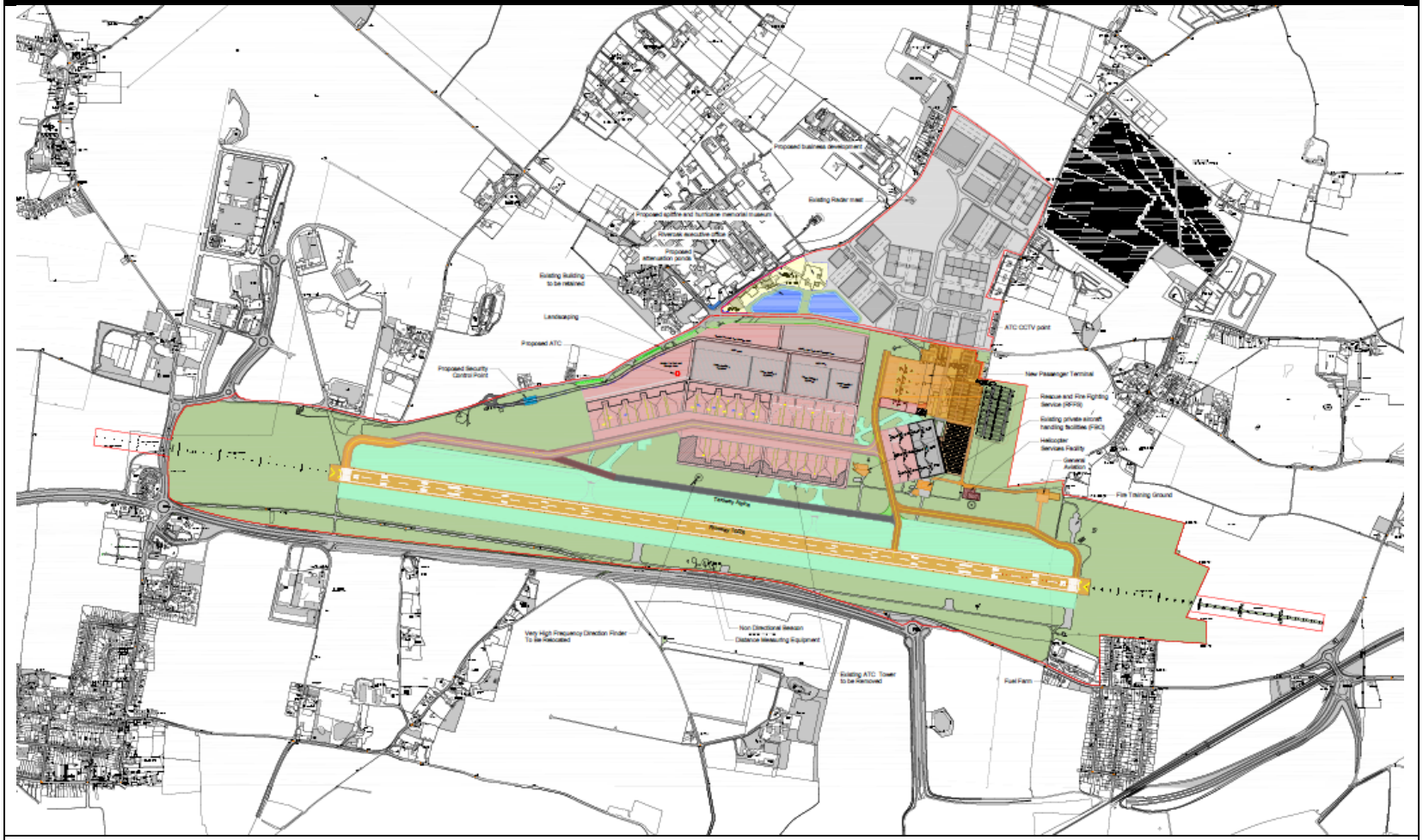
4.8 The Master Plan presented by RSP for the Manston Airport site is shown at **Figure 4.1**. It makes use of the full length of the runway and provides a full length parallel taxiway. The western side of the site is dedicated to freight handling activity and has 19 Code E aircraft stands for cargo flights and 4 large cargo sheds for the processing of freight supported by truck loading and parking areas. The eastern side of the site shows as a new passenger terminal and apron along with a MRO hangar and apron. The existing private aircraft handling facility (FBO) and fire station site is retained. We are not entirely clear how such works would be phased, although we understand that 4 phases of development are planned. RSP projects that Manston will need to be able to handle 17,171 cargo related ATMs and that 1.4 mppa of passengers will be handled by 2039. These represent the basis for the proposed DCO application and we assume, therefore, that these will be the limits on the number of movements and passengers which the site would be capable of accommodating as these form the basis for the assessment of environmental and other impacts. However, this is unclear from the consultation documentation.

4.9 We are unclear why 19 Code E stands are proposed given that the fleet mix at 2039[52] shows 85% of aircraft (at 17,171 annual cargo aircraft movements) being by aircraft smaller than Code E dimensions. Even allowing for some larger Code F types (<2% of movements), it would be possible to reduce the area of apron required for the fleet mix proposed, leaving aside whether 19 stands are required for the simultaneous parking of cargo aircraft at any one time, which we discuss further below.

4.10 To the north of the site, on the 'Northern Grasslands', a new development is shown, which appears to consist of commercial sheds and factory buildings with no obvious connection to the operation of the Airport being located entirely on the landside of the B2050. We assume that RSP's intention is to lease out these landside commercial buildings on this northern site so as to provide a rental income to cross subsidise the operation of the Airport. We discuss the need for this land further below.

[52] Azimuth Volume III, Table 2.

Figure 4.1: RSP Masterplan – Proposed Site Layout



Source: RSP

Land Required

4.11 Without prejudice to our position that we do not consider that RSP's proposals are credible in terms of the level of demand that might be attracted to Manston, we do not consider that the scale of development proposed by RSP for 17,171 cargo related movements is necessary, justifiable or reasonable, based on the principles set out at paragraph 4.5 above.

4.12 At **Figure 4.2**, we illustrate the justifiable and reasonable extent of land required at Manston Airport to support a cargo operation of 17,171 ATMs and passenger operation of 1.4 mppa (even though we do not accept that these ATMs and passenger numbers can be reached). This is based on our experience of airport operations around the world.

4.13 We recognise that there could be an opportunity for maintenance hangars for heavier aircraft maintenance activities but the need for these will not necessarily be triggered by the establishment of passenger operations. Depending on the nature of the freight and passenger carriers that set up services at Manston, the need for maintenance hangars cannot be ruled out and we have allowed for one twin bay hangar with a footprint of approximately 6,000m2 or two single bay hangars at 3,000m2 each.

4.14 It is also reasonable to expect that there will be some business and some general aviation activity. However, unless a bespoke FBO is set up, which we believe is unlikely given the distance from the main business aviation market in London and with Biggin Hill much closer to the core market, there would be very limited use by business aviation. Any small general aviation or flying school activity can be accommodated within the land area shown. These facilities, and any aircraft dismantling activity as also suggested in Azimuth's forecasts, would need to have direct airside access and so would need to be located to the south of the B2050. In other words, all of the operational facilities to support the operation of the Airport would require to be located to the south of the road and not on the 'Northern Grasslands' site.

4.15 We have clearly marked the area of land to the south of the B2050 that is not required for the defined airport operations in green on Figure 4.2. To the north of the Airport site, the 'Northern Grasslands' are marked in yellow and is not required for the scale of airport activity proposed by RSP. We discuss the potential use of this area further below. Figure 5.2 clearly shows that the extent of airport land needed to support the scale of freight and passenger activity proposed by RSP is significantly less than that proposed by the RSP. There are surplus areas of land within the core airport site as well as the 'Northern Grasslands' that are not required to support the throughput proposed.

Figure 4.2: Airport Land for 17,121 Freight ATMs and 1.4 mppa Operation – Surplus Land: Airport Land (Green), Northern Grasslands (Yellow)



Source: York Aviation

4.16 We summarise at **Table 4.2**, those facilities proposed by RSP in its Master Plan but are not, in fact, required to support essential airport operations.

Table 4.2: Classification of RSP Proposed Airport Facilities at Manston Airport

	RSP proposed airport-related development	Facilities not Essential for an Operational Cargo Airport
4	Retention & Extension of Passenger Apron	✓
11	New replacement Passenger Terminal building	✓
12	New and extended passenger car parking areas	✓
23	Relocation of the two existing museums	✓
24	Demolish old Control Tower in northern area	✓
25	Airport related businesses on Northern Grasslands	✓
26	New MRO aircraft maintenance hangars	✓
27	New FBO in refurbished business aviation terminal	✓

4.17 Although a replacement radar is shown by RSP re-using the old radar tower within the 'Northern Grasslands' area, it is not clear that a replacement radar would actually be required, although a radar service would be required. It is likely that a radar service could be procured more cheaply by buying in radar coverage from an alternative radar position rather than re-providing a radar on site. This is increasingly common practice at smaller airports. In the event that a replacement radar was required, this would not need to be located on the 'Northern Grasslands' but could be located within the airfield site to the south of the B2050.

4.18 In terms of the use of the 'Northern Grasslands', there is no particular requirement for extensive freight forwarding facilities on site as consolidation of loads is likely to continue to take place in and around Heathrow as currently. Any freight forwarding activity directly to support 17,171 cargo aircraft movements is likely to be containable within the area shown for freight warehousing within the airfield site.

4.19 No other justification is given for the extent of the commercial development shown on the 'Northern Grassland' part of the site. In our view, it is certainly not 'associated development' required to support the operational airport, other than in terms of providing a financial cross subsidy from rental income for general commercial buildings.

4.20 The need, then, for such an extensive development across the 'Northern Grasslands' cannot, in our opinion, be justified and is substantially in excess of what is seen elsewhere. The scale of supporting infrastructure proposed appears substantially greater than exists at the UK's main pure freight hub at East Midlands. We have seen no reasoned justification for the scale of facilities proposed. It appears to cover an area (c.48 hectares), which is more than double the size of the associated Pegasus Business Park area at East Midlands Airport (c.21 hectares), which currently handles virtually the same cargo tonnage as projected by Azimuth for Manston at 2039. Furthermore, it is significant that a substantial part of the East Midlands area is occupied by hotel development (3 hotels) in support of the much greater passenger throughput at that airport, a Regus office complex, and many of the other occupiers of sites within the Pegasus Business Park are not related to the activity at the Airport and include companies such as PwC, Laser Optical Engineering, Nikon Metrology UK, Medstrom Healthcare, Rail Vision and PKF Cooper Parry making use of an accessible location close to the M1. None of these activities would be essential in relation to freight activity at the airport and so would not meet the test for associated development required for inclusion with a DCO.

Realistic Requirements

4.21 Clearly, as is evident from earlier sections of this report, our opinion is that RSP's projections for the use of Manston Airport cannot be realised. Hence, the area of land required to accommodate lower levels of activity would be proportionately smaller, occupying a substantially smaller area of land to the south of the B2050 than shown on Figure 4.2.

Conclusions on Capability

4.22 The existing infrastructure at Manston Airport, if made good, would be capable of handling 21,000 annual air cargo transport movements[53]. However, the actual usage of that capability would depend on the pattern of operation and how the infrastructure was used on a day by day basis.

4.23 Without prejudice to our view that demand to use Manston is not likely to be anything like 17,171 cargo aircraft movements a year, we consider that the land required to accommodate such a number of movements would be substantially less than shown on the RSP Master Plan.

4.24 We can see no justification for the inclusion of the 'Northern Grasslands' within the DCO as associated development as there will be little requirement for the relocation of freight forwarding activity from adjacent to the UK's main cargo hub at Heathrow to Manston and any requirement could be accommodated south of the B2050. The development on the Northern Grasslands site appears to be speculative commercial development which, based on the precedent at East Midlands Airport – the UK's principal airport for pure freighter operations – would be expected to be largely for non-aviation related uses.

[53] Based on an 18-hour operational day. Should a night time noise policy be agreed with Thanet District Council pursuant to the existing planning agreement that enabled a longer operational day and/or a number of scheduled night movements, then the capability could, in theory, be higher than 21,000 annual cargo aircraft movements.

5 SOCIO-ECONOMIC IMPACT

Introduction

5.1 In this section, we examine the socio-economic benefits that are put forward by Azimuth and the flaws that are apparent in their approach. These render the socio-economic case put forward unreliable. We then move on to provide our own estimates of the socio-economic impacts of Azimuth's traffic forecasts based on more appropriate assumptions and also set out the socio-economic impacts associated with our own traffic forecasts to provide a more reasonable basis for considering the extent of the benefits that might realistically accrue from the re-opening of the Airport.

Comments on Azimuth Socio-Economic Assessment

5.2 Volume IV of the Azimuth's Report sets out the socio-economic case for the DCO for Manston. This assessment naturally relies on the traffic forecasts presented in Volume III. This means, of course, that the socio-economic assessment is rendered unreliable by the failings of the traffic forecasting approach and the incorrect inferences drawn from the assessment of the market. However, there are also substantial failings in relation to the methodology used for the socio-economic impact assessment itself, which result in significant over estimates of the impacts. We would also re-emphasise that the Airport must be commercially viable to be able to deliver these benefits, otherwise it will simply fail and no level of benefit will be delivered. RSP has not clearly demonstrated that the operation of the Airport would be viable at any level of throughput and, in the light of the conclusions of Aviasolutions in their advice to Thanet (see Section 6 of this report), viability must be in serious doubt based on our analysis of the likely usage as set out in Section 3. This renders any analysis of the socio-economic impacts to a large extent moot. Setting aside the issue that the Airport is highly unlikely to be viable and that the traffic forecasts set out are significantly overstated, we have identified below a number of key flaws in Azimuth's approach and analysis of the economic impacts.

5.3 At the outset, it is probably helpful to highlight the key area in which we agree with Azimuth's analysis and conclusions. We agree that the East Kent area is in need of regeneration. It is simply that we do not believe that Manston Airport can deliver the benefits set out. Any attempt to re-open the Airport is not likely to succeed as it is hard to see that viability could be attained with realistic forecasts of usage. Another failure of the Airport would be more likely to damage the image of Kent as a place to invest than enhance it.

5.4 Azimuth spend some time considering the appropriate employment density on which to base an assessment of direct employment. They ultimately conclude that East Midlands Airport provides an appropriate comparator (see paragraph 4.1.4 of Volume IV). This information is then used to drive large parts of the benefit calculations for Manston. York Aviation provides economic impact advice to MAG in relation to both its major freight airports, East Midlands and Stansted. From this knowledge, we would suggest that the job numbers quoted and used here are an incorrect base as they include substantial numbers of non-airport related jobs located on the business park at East Midlands Airport, discussed in the previous section. This means that the employment density used by Azimuth is far too high for genuine airport related activity. In any event, the employment at East Midlands is higher than might be anticipated anyway given the very significant employment supported at the site by DHL's UK main base of operations, which is not likely to be replicated at Manston.

5.5 We accept that it is difficult to identify an ideal comparator for a re-opened Manston in the UK but would suggest that an airport such as Glasgow Prestwick would be a much more appropriate comparator. The Airport has a low fares operation by Ryanair and has a reasonably significant pure freighter operation (although this has been substantially larger in the past). There is also detailed information on the economic impact of that airport in the public domain from work undertaken by both York Aviation[54] and SQW[55]. We have used information from this research later in this section to provide a more realistic base for assessing the economic impact of Manston.

5.6 The multipliers used by Azimuth for indirect and induced employment and economic activity in their assessment are simply inappropriate. Firstly, the multipliers adopted are for the impact at a national level. The study area for this economic assessment and the focus of Azimuth's comments is the sub-region around Manston Airport. Multipliers appropriate to this much smaller area should have been used and would have been substantially smaller. Secondly, the multiplier used (2.1) is a European average taken from research by InterVISTAS for ACI EUROPE[56]. The adoption of this Europe-wide multiplier is strange given that that the research does actually provide a specific multiplier for the UK[57], which is substantially smaller at 1.5. Use of the appropriate multiplier would, of course, have significantly reduced the job impacts suggested, even at a national scale.

5.7 There is a further issue in relation to the use of an inappropriate multiplier covering national level effects in that displacement of activity from other airports should have been taken into account. To the extent that any of the activity projected for Manston is displaced from other airports, as our analysis strongly suggests it will be, there will be a relative reduction in employment and economic activity in the vicinity of these other airports. So whilst, correctly calculated, the employment and economic effects local to Manston would be additional, the effect of displacement of activity would need to be netted off wider national or regional (South East) impact assessments.

[54] The Economic Impact of Glasgow Prestwick Airport – York Aviation (2012). http://www.evaluationsonline.org.uk/evaluations/Search.do?ui=basic&action=show&id=509
[55] Economic Impact of Glasgow Prestwick Airport – SQW (2008). http://www.sqw.co.uk/files/4413/8712/8925/99.pdf.
[56] The Economic Impact of European Airports – InterVISTAS for ACI Europe (2015).
[57] Ibid. Page 103.

5.8 As well as using a multiplier for indirect and induced impacts, a multiplier is used to assess the wider catalytic employment[58]. The multiplier used is taken from out of date research for ICAO[59] and it should be said that catalytic impacts remain a difficult area in terms of quantification. There is not sufficient detail in the ICAO report[60] that Azimuth rely on to understand how this catalytic multiplier has been derived. However, again, there are issues with the use of this multiplier. Firstly, it appears to be a global multiplier, which would again be completely inappropriate for use in considering sub-regional impacts around Manston and it has been wrongly applied to total job numbers rather than direct job numbers. In practice, the correct approach would have been to consider the specific additional connectivity that Manston Airport might provide for Kent and assess how this might relate to attracting additional business activity and tourism to the area.

5.9 In examining the employment projections presented (Section 5.1 of Volume IV), it appears that no allowance has been made for either productivity growth or returns to scale over time and as the Airport grows. While information on potential on-site productivity growth can be hard to come by, we would expect some allowance to have been made. A typical figure might be around 2% per annum based on our experience at other airports. The result of this omission is that future direct job numbers, in particular, are likely to be significantly overstated given the compounding effect of failing to account for productivity growth.

5.10 Section 7 of Volume IV discusses other socio-economic impacts. In particular, it talks about contributions to GDP. Para 7.1.1 describes GDP as *"a monetary measure of the state of a Region's or a Country's economy"*. This is not correct. It is a measure of the size of the economy. It does not comment on the state of the economy or the prosperity or wealth within it. The calculations of GDP impacts presented are based on the job numbers estimated earlier in the report. They are, therefore, likely to be significant overestimates given the flaws in the demand forecast method and the job density and multiplier assumptions.

5.11 The comments in Paragraph 7.1.7 describing how Manston could contribute significantly to Thanet's Economic Growth Strategy aspirations in terms of GVA per job and per capita are, in reality, unsupported. Given the methodology adopted, which essentially measures Manston's impact at a national level, it is actually very difficult to know what the effect might be on the Thanet economy. Undoubtedly, the Airport could support local jobs if it is re-opened but, in reality, the number of those jobs and their value has not been effectively calculated here. The aviation supply chain in the UK is heavily concentrated around the major airports, particularly in relation to air cargo. So, in practice, much of the economic benefit claimed would be realised in and around Heathrow rather than locally if Manston were to re-open. To the extent that any activity would be displaced to Manston, there would be negative economic implications elsewhere.

[58] Catalytic employment is related to additional economic activity generated in areas adjacent to an airport as a result of the additional connectivity offered by the airport.
[59] ICAO – International Civil Aviation Organisation, which is the inter-governmental body which regulates air transport globally.
[60] ICAO – Economic contribution of civil aviation: Ripples of prosperity, 2000.

The Socio-Economic Impact of the Azimuth Traffic Forecasts

5.12 Below, we have set out an estimate of the socio-economic impacts of the Azimuth traffic forecasts using more appropriate assumptions. We have retained the same basic analytical framework, which considers direct, indirect, induced and catalytic impacts, but we have used different basic assumptions in all areas:

- we have estimated the direct employment associated with the re-opening of the Airport based on employment densities observed at Glasgow Prestwick Airport during the production of our 2012 report for Scottish Enterprise[61]. This includes considering which elements of on-site employment are likely to be driven by passenger growth and which by cargo growth. Given the slightly differing approach, it is hard to provide a perfect comparison of job density. However, in Year 3, when both cargo and passenger operations begin, the York Aviation job density is around 650 jobs per million workload units, compared to around 890 assumed by Azimuth;
- we have used an indirect and induced multiplier for Kent of 0.4[62]. This is again taken from our work on Prestwick and reflects impacts of that airport in the Ayrshire economy, which would seem a sensible comparator. This multiplier is also in line with the benchmark multipliers set out in the Homes and Communities Agency Additionality Guide (2014)[63]. At this level, displacement affects do not need to be accounted for albeit they would still arise to the extent that activity at Manston displaces activity elsewhere;
- we have used catalytic multipliers for air freight taken from Steer Davies & Gleave's report on the UK Air Freight Industry for the DfT[64]. This identified national level catalytic multipliers for air freight of 3.46 and 3.76 (inclusive of the direct impact). There is no simple way to adjust these multipliers to the Kent economy. We have, therefore, reduced these multipliers by 75%. This is broadly akin the difference between sub-regional and national level multipliers for indirect and induced effects. As with all estimates of catalytic impacts, these should be regarded with some caution in the absence of a more detailed and specific assessment of the potential effects;
- we have assumed productivity growth at Manston Airport of around 2% per annum. This is typical of our experience of productivity growth rates at UK airports;
- in order to estimate the GVA impacts of the re-opening of the Airport, we have used GVA per job estimates from ONS for Kent. On-site jobs are assumed to generate GVA in line with the Transportation & Storage sector (£57,763), while jobs in the wider economy are assumed to reflect the average GVA per job for Kent (£52,623).

5.13 In **Tables 5.1** and **5.2**, we have set out our estimates of the socio-economic impact of the Azimuth traffic forecasts compared to the original estimates produced by Azimuth.

[61] *The Economic Impact of Glasgow Prestwick Airport* – York Aviation (2012).
[62] Note that this excludes the initial direct effect.
[63] See page 36.
[64] *AIR FREIGHT Economic and Environmental Drivers and Impacts* – Steer Davies and Gleave for DfT (2010). Page 106.

Table 5.1: Employment Impact of Manston Airport – YAL Socio-Economic Assumptions Comparison					
	Y2	**Y5**	**Y10**	**Y15**	**Y20**
Azimuth Impact Assumptions with Azimuth's freight + passenger forecast					
Direct	856	2,150	2,749	3,438	4,271
Indirect & Induced	1,798	4,515	5,773	7,220	8,970
Catalytic/Wider	0	8,601	10,996	13,753	17,085
Total	**2,654**	**15,266**	**19,518**	**24,411**	**30,326**
YAL Impact Assumptions with Azimuth's freight + passenger forecast					
Direct	688	1,555	1,791	2,033	2,291
Indirect & Induced	275	622	716	813	917
Catalytic/Wider	475	1,073	1,236	1,403	1,581
Total	**1,439**	**3,250**	**3,743**	**4,249**	**4,789**
YAL Total as % of Azimuth	**54%**	**21%**	**19%**	**17%**	**16%**
Source: York Aviation and Azimuth Associates					

Table 5.2: Gross Value Added Impact (£ million) – YAL Socio-Economic Assumptions Comparison					
	Y2	**Y5**	**Y10**	**Y15**	**Y20**
Azimuth Impact Assumptions with Azimuth's freight + passenger forecast					
Direct	£43	£108	£138	£173	£215
Indirect & Induced	£78	£195	£250	£312	£388
Catalytic/Wider	£0	£391	£499	£625	£776
Total	**£121**	**£694**	**£887**	**£1,110**	**£1,379**
YAL Impact Assumptions with Azimuth's freight + passenger forecast					
Direct	£41	£99	£126	£158	£197
Indirect & Induced	£15	£36	£46	£58	£72
Catalytic/Wider	£25	£61	£78	£97	£121
Total	**£82**	**£196**	**£250**	**£313**	**£389**
YAL Total as % of Azimuth	**68%**	**28%**	**28%**	**28%**	**28%**
Source: York Aviation and Azimuth Associates					

5.14 The differences between the two sets of estimates are marked. Our assumptions result in economic impacts being around a half to two thirds of those estimated by Azimuth initially. However, the gap widens over time as the impact of Azimuth's failure to allow for productivity growth and high multiplier assumptions feed through. In our view, the Azimuth estimates simply cannot be relied upon as a measure of the potential economic impacts of re-opening of Manston Airport. Not only are they infected by the errors in traffic forecasting, but the approach itself is highly flawed. A more realistic and robust assessment suggests that the local impacts within Kent, even on Azimuth's forecasts, would be substantially less than claimed and it is these lower order effects which would need to be balanced with the environmental and impacts in assessing the acceptability of the proposed development, including the loss of SHP's proposed mixed use development and the socio-economic benefits deriving therefrom.

A More Realistic View of the Socio-Economic Impacts of Manston

5.15 As we have described above, the socio-economic assessment undertaken by Azimuth was destined to fail before it started because of the failings in the traffic forecasts that feed the approach. We do not consider there is any realistic prospect of the Airport attaining 10,000 annual movements by cargo aircraft and the build up of traffic would be materially slower than Azimuth estimate.

5.16 We have, therefore, set out below an assessment of the socio-economic benefits that might be associated with re-opening Manston on the basis of York Aviation's most likely cargo forecast (that Manston is able to regain its previous market share) and our passenger forecasts, which are around half those assumed by Azimuth. Once again, we have used our socio-economic impact assumptions as described above. The resulting employment and GVA impacts are again set out compared to Azimuth's assessment of the economic impact of reopening Manston in **Tables 5.3** and **5.4**.

Table 5.3: Employment Impact of Manston Airport – YAL Forecasts Comparison

	Y2	Y5	Y10	Y15	Y20
Azimuth Impact Assumptions with Azimuth's freight + passenger forecast					
Direct	856	2,150	2,749	3,438	4,271
Indirect & Induced	1,798	4,515	5,773	7,220	8,970
Catalytic/Wider	0	8,601	10,996	13,753	17,085
Total	**2,654**	**15,266**	**19,518**	**24,411**	**30,326**
YAL Impact Assumptions with YAL's freight + passenger forecast					
Direct	216	391	409	442	486
Indirect & Induced	87	156	164	177	194
Catalytic/Wider	149	270	283	305	335
Total	**452**	**817**	**856**	**925**	**1,015**
YAL Total as % of Azimuth	**17%**	**5%**	**4%**	**4%**	**3%**
Source: York Aviation and Azimuth Associates					

Table 5.4: Gross Value Added Impact (£ million) – YAL Forecasts Comparison

	Y2	Y5	Y10	Y15	Y20
Azimuth Impact Assumptions with Azimuth's freight + passenger forecast					
Direct	£43	£108	£138	£173	£215
Indirect & Induced	£78	£195	£250	£312	£388
Catalytic/Wider	£0	£391	£499	£625	£776
Total	**£121**	**£694**	**£887**	**£1,110**	**£1,379**
YAL Impact Assumptions with YAL's freight + passenger forecast					
Direct	£13	£25	£29	£34	£42
Indirect & Induced	£5	£9	£11	£13	£15
Catalytic/Wider	£8	£15	£18	£21	£26
Total	**£26**	**£49**	**£57**	**£68**	**£83**
YAL Total as % of Azimuth	**21%**	**7%**	**6%**	**6%**	**6%**
Source: York Aviation and Azimuth Associates					

5.17 Unsurprisingly, the socio-economic impacts associated with the Airport are reduced even further on the basis of more realistic forecasts. The operation is simply of a much smaller scale. In Year 2, in generates 452 jobs, only 17% of the Azimuth estimate of 2,654. By Year 20, the differential is even larger, with the Azimuth estimates reaching over 30,000 jobs, but with our estimates at only just over 1,000. More likely, the Airport would cease operating again due to the inability to attain viable operations. In these circumstances, it becomes a moot point as there would be no jobs and economic impact over the medium to long term.

Conclusion

5.18 Once again, the evidence presented by Azimuth on behalf of RSP cannot be relied upon. It is infected with the flaws in the traffic forecasting methodology identified previously but the approach to identifying socio-economic impacts is, in itself, badly flawed. The socio-economic impacts are, as a result, massively overstated and, in any event, would not be realised if the operation of the Airport is not commercially and financially viable.

6 PEER REVIEW OF OTHER REPORTS

6.1 In this section, we set out a brief review of other reports produced on the potential for a re-opened Manston Airport.

Aviasolutions for Thanet

Commercial Viability of Manston Airport – September 2016

6.2 We note that this assessment was focussed on the likely viability of a re-opened Manston Airport. Hence the main focus was on scenarios for passenger growth as passenger operations make a significantly greater financial contribution to operating an airport given the ability to earn revenue from retail, catering and car parking as well as direct revenue from airport charges (landing, aircraft parking, passenger fees and any cargo handling fees). We note that Avia took a much more optimistic view than we do of the scope for passenger overspill from the main London airports to Manston but, to an extent, these scenarios were designed to assess whether re-opening Manston would be commercially viable rather than to assess a realistic level of demand.

6.3 Having assessed the historical performance of Manston, Avia assumed that it would be possible for the Airport to regain the broad level of cargo activity that is was handling before it closed. This is not dissimilar to our 'most likely' assumption. Significantly, Avia noted that:

"Our freight interviews indicated that the demand to use the airport for freight was very limited. This, in large parts, is due to two factors; the infrastructure investments that have already been made by the industry around Heathrow and Stansted, and the geographical location of the airport. Infrastructure, and the associated knowledge, skill and supporting industry at airports such as Heathrow and Stansted, as well as the major European hubs such as Frankfurt, and Paris, would be almost impossible for Manston to replicate. The geographic location of the airport, tucked into the corner of the UK, cannot compete with airports such as East Midlands for Integrator services that are sold as fast delivery, due to the increases in surface transportation times. The interviews did however indicate that charter services and ad-hoc freighter flights would certainly return, providing some revenue income for the airport"[65].

This accords with our view of the most likely prospects for Manston.

6.4 Overall, the Avia 2016 work concluded that Manston was not likely to be a commercially viable prospect if re-opened, certainly if it is assumed that another runway would be built at either Heathrow or Gatwick. We concur with this conclusion and, on the basis of our more realistic assessment of the level of passenger demand that the Airport might attract, commercial viability is even less likely to be attained.

[65] Aviasolutions, *Commercial Viability of Manston Airport*, September 2016, Section 8.3.

Local Plan Representations - Final Report – August 2017

6.5 This report largely deals with individual specific representations one at a time. Overall, Avia conclude that their *"opinion, based on updated market information since the publication of our previous study, is consistent with our earlier view that Manston Airport does not represent a financially viable investment opportunity under normal market conditions."*[66]

6.6 In relation to these representations, Avia state clearly that:

"The Local Plan Representations do not make a credible case, nor provide the evidence for AviaSolutions' to change its views on the financial viability of Manston Airport. We remain of the view that whilst Heathrow Airport continues to offer substantial freight capacity to a truly global network, and Stansted Airport utilises only around half of the statutory provision of air freighter movements, the London air freight market has capacity to grow without the re-introduction of capacity at Manston Airport. Freight Forwarders have invested heavily in infrastructure around these core airports, carriers have developed their networks as such, and without clear value drivers that support relocating services to Manston Airport, the case remains to be made that demand exists for a freight facility at Manston Airport. This view is reinforced by the empirical evidence of multiple failed attempts to develop profitable operations at the airport."[67]

6.7 Again, Avia's analysis concurs with our own in terms of the limited role that there would be for a re-opened Manston Airport given the evolution of the air freight market. We concur with Avia's analysis of the potential for other activities at Manston such as business aviation or aircraft dismantling and note that, in our experience, income generation from such activities would be low.

6.8 We note that, in this report, Avia correctly interpret our work for the FTA in terms of the potential for the equivalent of 80,000 air freighter movements to be accommodated away from the main London airports by 2050 in the event of no new runway being constructed. As Avia note, this demand is likely to be accommodated at a variety of other airports, including Manchester and East Midlands, with the former offering a substantial amount of bellyhold capacity by that date and the latter offering a dedicated freighter service. Displacement to regional airports is also a logical response given the amount of cargo from the regions which is currently trucked to the London airports. We have had no dialogue with Avia regarding the interpretation of our work but their interpretation of it confirms that Azimuth have simply misused headline figures from our work to support RSP's case without considering or understanding the broader meaning of our analysis in 2015 as Avia demonstrate.

[66] Aviasolutions, *Local Plan Representations - Final Report*, August 2017, Executive Summary.
[67] Ibid.

Review of Azimuth and Northpoint Forecasts for Manston – August 2017

6.9 In this report, Avia conclude that the Azimuth and Northpoint forecasts are *"highly ambitious"* and that *"the likelihood of these forecasts being realised is very low"*[68]. Avia do not, themselves present any updated forecasts of their own in this report. They make clear that neither report presents *"a credible case"* sufficient for Avia to change its view on the likelihood of viable commercial operations being attained at Manston Airport.

6.10 Avia conclude that:

"We remain of the view that whilst Heathrow Airport continues to offer substantial freight capacity to an extensive global network, and Stansted Airport offers capacity for air freighter movements, the London air freight market has capacity to grow without the re-introduction of capacity at Manston Airport. Freight Forwarders have invested heavily in infrastructure around the UK's core cargo airports and carriers have developed their networks as such. Without clear value drivers that support relocating services to Manston Airport, the case remains to be made that demand exists for a freight facility at Manston Airport.

Provision of capacity alone is no guarantee of financial success, a view reinforced by the empirical evidence of multiple failed attempts to develop profitable aviation operations at Manston Airport."[69]

This accords with our view.

6.11 Like ourselves, Avia point out[70] that provision of infrastructure is not of itself sufficient to ensure a financially viable airport at Manston and that this will depend on the demand that can be attracted. Avia conclude, like ourselves, that *"Azimuth's report does not provide sufficient evidence of demand at Manston Airport from air freight operators to support the required investment in facilities and profit generation potential to re-establish Manston Airport as a going concern."*[71] Avia, like ourselves, highlight that if there had been a market for Manston to accommodate any overflow from Heathrow, this would have been evident prior to the Airport's closure in 2014. Avia also conclude[72], in relation to the extensive interviews carried out by Azimuth, that they largely address the overall issues of airport capacity in the South East of England and do not effectively explain why Manston, at the tip of Kent, would be an attractive solution for the UK air freight sector.

6.12 Avia also note that the other activities that Manston might attract, as suggested by interviewees, such as maintenance, repair and overhaul, aircraft dismantling, a fixed based operator for business aviation and the establishment of an integrator base could have been attracted previously if there was demand at Manston but that such demand was not evident. We concur that the reports of interviews set out by Azimuth do not constitute real evidence of actual demand for such facilities or the likelihood of them locating at Manston.

[68] Aviasolutions, *Review of Azimuth and Northpoint Forecasts for Manston*, August 2017, Executive Summary
[69] Ibid.
[70] Ibid, page 9.
[71] Ibid.
[72] Ibid, page 11.

6.13 Like ourselves, Avia point out that Azimuth's freight forecasts would suggest that Manston would be a major presence in the UK air freight market from Year 2[73] and that by the end of the period would be on a par with the UK's main freight hub at East Midlands by 2039. They go on to note that the methodology adopted by Azimuth to forecast cargo movements could be acceptable, which we take to mean a 'bottom up' movement driven approach. However, they caution that the primary data used (from the interviews) *"has significant potential to exaggerate or overstate the market"*[74]. As Avia note, the aspirations of the interviewees, that as we have noted earlier were largely local interests in Kent, would need to be tempered by commercial realism and the risks attaching to the operations put forward. Avia conclude, in relation to Azimuth's freight forecasts, that *"the probability of such an outcome remains very low"*[75]. We concur.

6.14 In overall terms, Avia conclude that there is nothing in the Azimuth analysis which would give rise to them changing the conclusions set out in their earlier 2016 report.[76]

6.15 Avia then go on to consider the Northpoint report, discussed further below, which was prepared as a direct rebuttal of their 2016 report. In the first instance, they note that they do not accept that the benchmark airports[77] cited by Northpoint as comparators for what Manston could be are relevant:

There are clearly structural and geographical reasons as to why each of these airports is different to the proposal for Manston Airport. As such, suggesting these are comparable benchmarks is not realistic. In order for Manston Airport to acquire the status of these airports it would need to demonstrate key elements of development, namely; commitments from key express players (DHL / UPS / FedEx / Amazon / Alibaba); an ability to operate night operations with few regulatory restrictions; and geographical advantages from nearby cities, industrial parks, and population centres.

We agree. These benchmark airports serve different roles, principally based around their selection by large integrators/distributors as main distribution hubs for large urban conurbations. These are simply not comparable to Manston and it would be misleading to believe otherwise.

[73] Ibid, Section 2.3.2.
[74] Ibid, Section 2.3.3.
[75] Ibid.
[76] Ibid, page 15.
[77] Alliance Fort Worth in Texas, USA, Hamilton Airport in Ontario, Canada, Bergamo in Italy, Liege in Belgium and Leipzig in Germany.

6.16 In relation to air freight forecasts, Avia again note RSP's reliance on our work for the Freight Transport Association. Again, Avia correctly interpret this work as being based on the assumption that *"freight growth is bellyhold focussed"* going on to note that our *"report also questions Boeing and Airbus' forecast growth rates, which are utilised in the long term growth forecast by Dr Dixon."*[78] Avia go on to note Northpoint's use of the 55,000 air cargo movements figure from our earlier work for Transport for London (2013) and cite Northpoint's claim that we asserted that Manston was the only realistic opportunity to accommodate this level of freighter movements if they were displaced. As we have discussed at length in Section 2, this is simply a misapplication of our 2013 work. Unsurprisingly, Avia could not find these figures in the 2015 report for the FTA.

6.17 Avia also highlight Northpoint's misinterpretation of the interaction between bellyhold and pure freighter demand. We agree with their conclusions in this regard, which explain why the market for more pure freighter operations to/from the UK is limited:

"AviaSolutions' experience in the freight industry is that many bellyhold operators can, when supply exceeds demand, reduce rates to such a level as to cover the marginal cost of freight plus a margin. The business is often operated as an addition to the passenger service, and therefore its real marginal costs are low. It is simply impossible for a freighter operator to reduce its rate to match this marginal cost and operate at profitably [SIC]*. Therefore, freighters tend to operate on thick routes where the economies of scale of a freighter operation can be realised. These routes are also curtailed by a non-related market, that of passenger demand. Where large scale passenger demand exists e.g. UK to USA, a residual effect of this is large scale freight capacity, which is unmatched to demand. The reverse can be seen on routes to the East, where passenger demand is less, but freight demand, particularly inbound to the UK, is high. As such, many freighters operate on these routings."*[79]

We agree that the extensive passenger based route network and the availability of bellyhold capacity limits the need for a substantial pure freighter operation to/from the UK, in contrast with other parts of the world where passenger air route networks are less developed. This is why global data on the demand for air freighters is simply not relevant in the UK context.

Northpoint

6.18 We have largely addressed key points of Northpoint's rebuttal of the original Aviasolutions work above on the basis of Avia's most recent report. We highlight here a few other key observations on Northpoint's *"The Shortcomings of the Avia Solutions Report and an Overview of RSP's Proposals for Airport Operation at Manston"* prepared for RSP.

6.19 As with Azimuth's work, the key criticism of this work is that it is based on assertion rather than evidence or systematic analysis of the potential market for Manston. As noted above, benchmark airports in the middle of Continental Europe or adjacent to major conurbations in the US and Canada do not provide robust examples of how Manston might develop given its geographic position. Northpoint set out that:

[78] Ibid, page 17.
[79] Ibid, Section 3.1.6.

"RSP's plans are centred on a developing a strategically important air cargo operation focused dedicated freighters importing and exporting a range of perishable and high-value/time-critical goods to markets in London and across the wider south-east." [80]

And that these operations would be supplemented by a *"modest"* passenger offering, a variety of business and general aviation activities as well as maintenance, repair, overhaul and aircraft dismantling activities. However, the report does not, itself set out how the scale of such activity could be assessed and whether it would, in combination, secure a viable operation.

6.20 In terms of forecasting the volume of air freight that Manston might secure, Northpoint make an unsubstantiated leap from noting the reasons why Heathrow is dominant in the market to asserting that the key determinant for pure freighter operations is the infrastructure provided at an airport and supply driven factors, noting that it is important that these latter are *"transparent"*[81]. We have already noted the lack of transparency in relation to the air cargo forecasts produced by Azimuth upon which RSP rely. Nor are the projections set out in Northpoint's Appendix A any more transparent in terms of how the estimated tonnage to be accommodated by freighter movements at Manston has been derived.

6.21 Although lacking transparency, it would appear that Northpoint, like Azimuth, have relied on Boeing's global forecasts for freight revenue tonne kilometres as a basis for projecting UK air cargo tonnage[82]. For the reasons set out in Section 2, this is inappropriate and will lead to a material overstatement of the overall market.

6.22 Like Azimuth, Northpoint see cross channel movement of air cargo as an opportunity for pure freighter operations at Manston[83] rather than simply the natural economic response to shortage of bellyhold capacity at Heathrow. Northpoint then seek to rely on our assessment of displaced tonnage equivalent to 55,000 annual movements by air cargo aircraft in 2050 from our 2013 work for TfL as corroborating evidence of Manston's potential[84]. This is to misrepresent the conclusions from this work, which indicated clearly that, in practice, there was unlikely to be a problem even if Heathrow did not get a third runway, albeit that there might be some additional trucking costs to make use of bellyhold capacity in Europe. This would still be cheaper for shippers than the alternative use of pure freighter aircraft from Manston or elsewhere. Furthermore, in assessing the scope for airports to accommodate more freighter aircraft[85], we do not agree with their assessment in respect of Stansted for the foreseeable future and Northpoint appear to ignore the main pure freight hub at East Midlands.

[80] Northpoint, *The Shortcomings of the Avia Solutions Report and an Overview of RSP's Proposals for Airport Operation at Manston*, paragraph 1.3.
[81] Ibid, paragraph 2.4.
[82] Ibid, paragraph 2.18.
[83] Ibid, paragraph 2.21.
[84] Ibid, paragraph 2.24.
[85] Ibid, paragraph 2.30.

6.23 In dismissing the potential for these other, established airports, Northpoint seek to highlight the constraining effect of night movement restrictions on air cargo operations. By inference, then, Northpoint appear to assume that Manston will not suffer from such restrictions so making it more attractive. This appears to be corroborated at Appendix A[86] where it is claimed that the presence of a logistics centre at Manston without significant night movement restrictions would be one of the attractions and a factor in the forecasts being attainable. However, it is our understanding that night movements will at best be limited to 8 per night and could be limited further if the promises of no night movements are upheld.

6.24 In relation to the potential in the aircraft maintenance and dismantling/recycling market[87], we note that these are activities being 'chased' by many airports. There is no analysis of competition nor of the likelihood of Manston capturing any of these activities in Northpoint's report. In any event, the level of activity generated by such activities is unlikely to make the difference between the Airport being viable or not.

6.25 Overall, Northpoint present no real evidence in its Conclusions[88] to substantiate why the operation at Manston could be viable. Its forecasts of cargo movement and passenger demand are no more transparent nor based on market analysis than those set out by Azimuth and do not justify why the RSP application would meet the tests set out in Section 23 of the Planning Act 2008. In general, we agree with Avia's conclusions regarding the robustness of this report.

[86] Ibid, Appendix A, A.8.
[87] Ibid, Section 4.
[88] Ibid, Section 5.

7 CONCLUSIONS

7.1 In this report, we have examined the case for RSP's proposed development at Manston Airport. Our overall assessment is that RSP have failed to provide their own evidence of the capability of Manston Airport and the amount by which their proposals would increase that capability by (all we have are forecasts which have no credibility as explained in this report). This results in glairing omissions in RSP's consultation material. This failure means that, in our opinion, the requirements in section 23 of the Planning Act 2008 (as amended) have not been satisfied. In essence, we would have expected RSP to be able to show:

- the capability of Manston Airport of providing air cargo transport services;
- the amount by which RSP is proposing to increase that capability by and thus the "new" capability; and
- a credible forecast for why that 'new' capability is required.

None of this information is provided by RSP.

7.2 RSP's case is principally based on circumstantial evidence presented in the Volumes I to IV of *Manston – A Regional and National Asset* prepared by Azimuth Associates. Much of the material upon which Azimuth seek to rely as the basis for the case for Manston relates to the economic costs to the UK if additional passenger hub capacity is not provided in the South East of England by 2050. This is not relevant to the specific question as to whether there would be sufficient demand for pure freighter aircraft movements to be operated to/from Manston in the foreseeable future.

7.3 The analysis presented by Azimuth shows a lack of understanding of the economics of the air freight market. This leads to a misinterpretation of work by ourselves, upon which Azimuth seek to rely to support their case. Just because there could be excess freight demand in 2050 in the absence of further runway capacity at the UK's main hub, it does not follow that displaced bellyhold freight will seek a more expensive pure freighter service from a relatively nearby airport over the use of available bellyhold capacity from a more distant airport which can be provided at a lower cost to the shipper with only marginal penalty in terms of time. Our previous work simply cannot be relied on to support RSP's case.

7.4 Fundamentally, Manston's past operation was economically inefficient due to the inherent lack of viability. Hence, reopening the Airport, in the face of a limited market, has the potential to damage the productivity of the UK aviation sector overall, particularly, as we have demonstrated in our own assessment of cargo demand for Manston in Section 3 that there are more economically efficient alternatives available for any freight displaced due to specific capacity constraints at Heathrow both now and in the future.

7.5 Whilst there may be a role for Manston, on the margin, providing some niche specialist air freight operations, the market for such services is small and often ad hoc, which will impact on the prospects for a viable operation of the Airport.

7.6 Manston is too peripheral for integrator operations serving the UK. Integrators have a strong preference for locations more centrally located in the UK with good road access to all of the major markets. The availability of land for warehouses, for example as suggested in terms of the use of the 'Northern Grasslands' part of the overall airport site, is far less important than a location central to the market and the availability of good road access, neither of which are characteristics of Manston. This would apply equally to the suggestion that Amazon might locate there or that the Airport could become a base for drone operations. It is simply in the wrong place to serve the market being in the far south east at the end of a peninsular, away from the main centres of population and distribution in the UK.

7.7 In the absence of hard market evidence of the need for Manston Airport, Azimuth undertook an interview survey to supplement the need case and inform the forecasts. However, the list of interviews was small, with few national players interviewed compared to a large number of local companies with something of a vested interest in seeing Manston re-opened. Even so, if anything, the views of those interviewed by Azimuth suggest that there would, at best, be a limited role for Manston. The one airline interviewed made clear that *"success at Manston depended upon identifying a niche market and becoming known for excellence. In particular, suggestions included a perishables centre, handling of live animals, easy access for charter flights, and handling cargo that is not necessarily straightforward"*. The scale of this opportunity was never quantified by Azimuth. It is clear, however, that the realistic expectation for Manston is for a small niche operation rather than as a general 'overspill' airport for London.

7.8 The outputs from these interviews are then used by Azimuth as a basis for postulating a number of cargo aircraft movements that might operate at Manston. However, it is simply not possible to relate the proposed services to be operated with the responses by the interviewees. There is a complete absence of any explanation for or justification of the services postulated. At the very least, there is a lack of transparency in the approach that needs to be explained so that consultees can understand the basis of what is proposed and to ascertain whether there is a credible forecast for why an increase in Manston's capability is required.

7.9 In our view, the Azimuth forecasts simply lack credibility. To illustrate this lack of credibility of the forecasts, in Year 2 (the first operational year), a cargo throughput of nearly 100,000 tonnes is forecast by Azimuth. This would make Manston the 5th largest freight airport in the UK in its first year after re-opening (compared to 2016 actual throughput at the other airports). This would place it close to the scale of freight operations at Manchester Airport, which includes a substantial amount of bellyhold freight. It would make Manston the 3rd busiest airport in the UK in terms of tonnage carried on dedicated freighter aircraft. This is simply not a credible proposition. This lack of credibility is important in reaching any decision under Section 23 of the Planning Act 2008 (as amended).

7.10 We have updated and further developed our analysis of the UK air freight market from than previously undertaken for TfL and the FTA, and upon which RSP seek to rely as corroboration of their own cargo movement forecasts. When properly interpreted, our forecasts of air freight demand and capacity across the UK as a whole, taking the role of bellyhold fully into account, show that there is plenty of freighter capacity at Stansted and East Midlands to the extent that there is a need for more pure freighter capacity. Overall, we conclude from this analysis that there will be no shortage of freighter capacity in the UK before 2040 (RSP's forecast assessment year) and that overspill from other airports would not provide a rationale for re-opening Manston.

7.11 Our initial assessment of the passenger market is that the throughput might, at best, be around half of that projected by RSP and, hence, given the dependence on passenger related income for the financial viability of airport operations, this will impact substantially on the viability of the proposal. The other activities suggested by RSP, such as business aviation, maintenance, repair and overhaul, and aircraft dismantling are highly competitive markets and, to the extent that Manston might attract any such operations, this are unlikely to contribute substantially to the overall viability of the Airport.

7.12 The existing infrastructure at Manston Airport, if made good, is capable of handling 21,000 annual air cargo aircraft movements[89]. The actual usage of that capability would depend on the pattern of operation and how the infrastructure was used on a day by day basis. Our assessment, therefore, provides essential missing information from RSP's materials to date which is necessary for the purposes of Section 23 of the Planning Act 2008 (as amended), for assessment purposes under the Environmental Impact Assessment Regulations and for consultation purposes.

7.13 Without prejudice to our view that demand to use Manston is not likely to be anything like 17,171 cargo aircraft movements a year, we have considered that the land required to accommodate such a number of movements. Our assessment is that the land required would be substantially less than shown on the RSP Master Plan and that the proposed land take is excessive and without justification in terms of the compulsory acquisition of the land. Any development required to handle 17,171 annual movements by air cargo aircraft can all be accommodated to the south of the B2050 and, even allowing for passenger operations and other activities, would not require all of the airfield land to the south of the road. Obviously, on the basis of more realistic forecasts of future demand, the area required to support the ongoing operation of the Airport would be materially smaller.

7.14 We can see no justification for the inclusion of the 'Northern Grasslands' within the DCO on the basis of it being for associated development as there will be little or no requirement for the relocation of freight forwarding activity from adjacent to the UK's main cargo hub at Heathrow to Manston and any requirement to support Manston operations could be accommodated south of the B2050. The development on the 'Northern Grasslands' site appears to be speculative commercial development which, based on the precedent at East Midlands Airport – the UK's principal airport for pure freighter operations – would be expected to be largely for non-aviation related uses.

[89] Based on an 18-hour operational day. Should a night time noise policy be agreed with Thanet District Council pursuant to the existing planning agreement that enabled a longer operational day and/or a number of scheduled night movements, then the capability could, in theory, be higher than 21,000 annual cargo aircraft movements.

7.15 In terms of the socio-economic implications of the proposed development, Azimuth has shown a lack of understanding of how such impacts should properly be calculated. Leaving aside the use of inappropriate multipliers, the impacts have been assessed at a national scale and should have taken displacement of activity from other airports fully into account, reducing the impacts below those stated. Furthermore, the assessment should have considered the impact on alternative uses of the site, including SHP's proposed mixed use development and the socio-economic benefits deriving therefrom. We have set out a more realistic and robust assessment, which shows that the local impacts within Kent, even on Azimuth's forecasts would be substantially less than claimed and it is these lower order effects which would need to be balanced with the environmental and impacts in assessing the acceptability of the proposed development.

7.16 Unsurprisingly, the socio-economic impacts associated with the Airport are reduced even further on the basis of more realistic forecasts of likely usage if it re-opened. The operation is simply of a much smaller scale. In Year 2, in generates 452 jobs, only 17% of the Azimuth estimate of 2,654. By Year 20, the differential is even larger, with the Azimuth estimates reaching over 30,000 jobs, but with our estimates at only just over 1,000.

7.17 Once again, the evidence presented by Azimuth on behalf of RSP cannot be relied upon. It is infected with the flaws in the traffic forecasting methodology identified previously but the approach to identifying socio-economic impacts is, in itself, badly flawed. The socio-economic impacts are, as a result, massively overstated. In any event, these benefits would not be realised if the Airport ceases operation again due to it not being commercially viable.

7.18 As well as the Azimuth reports which form the basis of RSP's case, we have also reviewed a number of other reports on the potential for Manston. In overall terms, we agree with Aviasolutions for Thanet District Council that there is little realistic prospect of the re-opening of Manston Airport being a commercially viable proposition. We have reviewed their original report and the more recent reports and concur with their views on the overall structure of the UK air cargo market, noting that they, unlike Azimuth, have correctly understood the implications of our 2015 work for the FTA. We do not accept Northpoint's rebuttal of the Aviasolutions work. Like Azimuth, Northpoint's work is largely aspirational without any robust evidence or analysis of the market. Northpoint, too, misinterpret our previous work for the FTA and TfL.

7.19 **In overall terms, then, we do not consider that the case for the development of Manston Airport has been robustly substantiated. In any event, the capability of the existing infrastructure at the Airport, once made good in line with existing planning consents, is at least 21,000 annual air transport movements by air cargo aircraft. This means that, in practice, RSP are seeking permission to increase the number of cargo air transport movements that Manston Airport is capable of handling from 21,000 to at least 31,000 a year, well beyond the level assessed in the PEIR. Indeed, RSP's consultation material does not provide any detail as to what the increase in capability would be as a result of its proposals (i.e. the increase in capability as a result of its proposed alteration to Manston Airport). As a minimum, the increase in capability would be to 31,000 annual air transport movements by cargo aircraft, but in our view their proposals would result in a significantly higher 'new' capability which is not revealed or assessed by RSP.**

APPENDIX A

York Aviation

Transport for London

Note on Freight Connectivity

1. This note explains the approach taken to estimating the number of pure freighter air transport movements at the London airports in 2050 under three different scenarios of capacity growth:

   - ✈ Maximum use of existing capacity;
   - ✈ 2+2+2 – additional runways at each of Gatwick and Stansted;
   - ✈ New 4 runway hub.

2. The number of additional freighter movements required depends on the volume of passenger flights providing bellyhold capacity under the different scenarios. Under the constrained Max Use scenario, 48,000 pure freighter movements could be required, up from 14,000 at the London airports today. As there would be no spare runway capacity at the main London airports, this capacity would need to be provided from smaller airports serving the London area or from regional airports, with loss of economies of scale and producer efficiency, or through trucking to alternative hubs in Europe with implications for speed of transit.

3. With the provision of additional runways, increased bellyhold capacity reduces the number of additional freighter movements required to 28,000 and 21,000 respectively under the 2+2+2 and 4 runway hub scenarios. In both cases, we believe there will be sufficient runway capacity available to accommodate these freighter movements, albeit the 2+2+2 scenario will still result in dispersal of air freight capacity across a range of airports with the consequent loss of economies of scale and efficiency which could be attained at a single hub.

Freight Volumes

4. In 2012, the London airports handled 1,805,761 tonnes of freight[1]. Only 17% of this freight was flown on pure freighter aircraft. 83% was flown in the bellyhold of passenger aircraft. This may be as a result of limited capacity for freighter operations at Heathrow, where the bulk of air freight consolidation activity is concentrated. However, it may equally reflect the scale of bellyhold capacity offered at Heathrow, which reduces the need for pure freighter capacity to serve the London market as a whole.

5. Using data from ACI EUROPE[2], the volume of freight flown from the London airports is compared with that flown from other key European cities in Table 1.

[1] CAA Airport Statistics.
[2] The small discrepancy to CAA Statistics is noted but it is not considered to be material. The * against Hahn indicates estimated freight taken from airport's own website.

Table 1

	Tonnes
Heathrow	1,464,596
Gatwick	97,565
Stansted	214,904
Luton	29,637
London	**1,806,702**
Paris CDG	1,935,180
Paris Orly	94,700
Paris	**2,029,880**
Frankfurt	1,986,180
Frankfurt Hahn*	223,000
Frankfurt	**2,209,180**
Amsterdam	1,483,450
Milan MXP	405,858
Milan LIN	15,513
Milan BGY	116,733
Milan	**421,371**
Brussels	394,870
Luxembourg	614,906
Madrid	359,360
Zurich	281,683
Vienna	178,128
Dublin	102,717
Lisbon	90,264
Helsinki	176,987

6. There is no clear evidence that London is currently disadvantaged in terms of air freight capacity as the majority of freight is flown from Heathrow in the bellyhold of passenger aircraft rather than in pure freighter aircraft. To the extent that there is a need for freighter capacity, it can be provided at Stansted where there is ample spare capacity for additional movements and areas are set aside to increase aircraft parking and freight handling facilities if required. Although it is possible that limitations on bellyhold capacity at Heathrow may force greater trucking of freight to Europe, this is not evident from a comparison of overall air freight carried compared to other major European countries. In any event, the fact that freight is trucked rather than flown to Europe may have only a marginal impact on total transit times and, hence, limited economic detriment.

7. As well as the main city airports, there are a number of other specialist freight airports in both the UK and western Europe. Those handling over 75,000 tonnes in 2012 are shown in Table 2.

Table 2

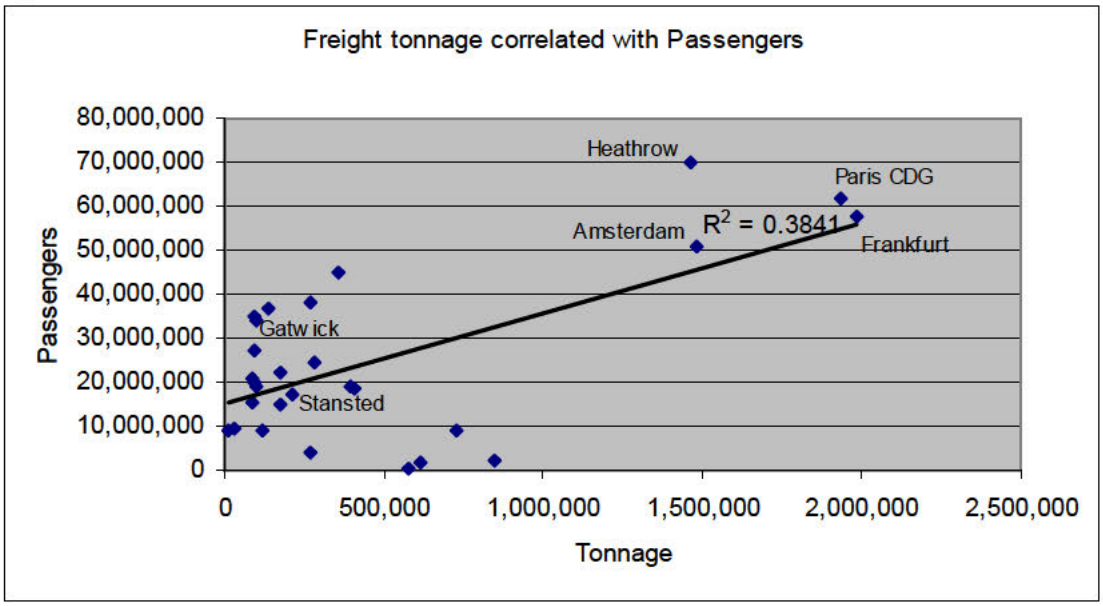
	Tonnes
Manchester	97,215
East Midlands	267,350
Cologne	730,040
Munich	272,203
Dusseldorf	86,729
Leipzig	846,086
Rome	135,777
Liege	577,226

8. Overall, on the basis of substantial air freight flows recorded by ACI EUROPE, the UK handled around 2.2 million tonnes of flown freight, France a similar amount, Italy around 600,000 tonnes and Spain around 500,000 tonnes. This does not suggest that the UK is disadvantaged in terms of freighter capacity overall currently.

9. However, the role of the low countries and Germany in acting as the major freight centre in western Europe is noticeable. In total, the main German freight airports handled almost 4.2 million tonnes of freight in 2012 which, when combined with the Netherlands and Benelux countries, amounted to 7.2 million tonnes of air freight flown. 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. In practice, it is unlikely that the UK could replicate this role, even with unconstrained airport capacity, due to its island location on the western edge of Europe.

10. There is some correlation between air freight flown to/from an airport and passengers carried as shown in Figure 1 below but this relates in large part to belly hold capacity. Figure 1 shows the correlation between flown freight and passengers across 29 European airports in 2012 as recorded by ACI EUROPE and which were either major airports in terms of freight handled or secondary airports serving the same cities.

Figure 1



Freighter Operations

11. The pattern of freighter operations is complex. As well as air freight carried in the bellyhold of passenger aircraft, there are freight charters for specialist and ad hoc consignments and large numbers of flights by the integrators (DHL, Fedex, UPS) etc. Obtaining detailed timetable information for freight operations is not possible as most do not publish timetables. Only scheduled freighter operations are shown in OAG and there is some uncertainty over whether this data is comprehensive.

12. Using OAG data for the week of 17th June 2013, the London airports have 49 scheduled freighter departures (98 freighter movements). According to CAA statistics for 2012, there were just over 14,000 freighter aircraft movements at the London airports or around 270 per week. This suggests that the OAG recorded movements account for only around 37% of total freighter aircraft movements to/from the London airports.

13. Similar data has been extracted for other western European airports. The table in Appendix A summarises the main pattern of freighter departures at airports with more than 30 freighter departures per week. This table also includes the principal UK freight airports and secondary airports serving major cities which in combination had more than 30 scheduled freighter departures per week in June 2013.

14. The number of scheduled freighter departures at the main freight airports is summarised in Table 3 along with the freight tonnage handled and passengers carried. It is evident that there is no clear correlation between freight tonnage handled and the weekly number of scheduled departures. This is illustrated in Figure 2. Amsterdam and Frankfurt have a high number of scheduled movements relative to the total volume of air freight whilst Paris and Heathrow handle similar volumes of air freight but with significantly fewer scheduled movements. We believe that the principal reason for these differences is in the relative importance of bellyhold freight but also the extent to which integrator activity is present; for example Fedex has its principal European hub in Paris and its movements are not recorded in OAG.

Figure 2

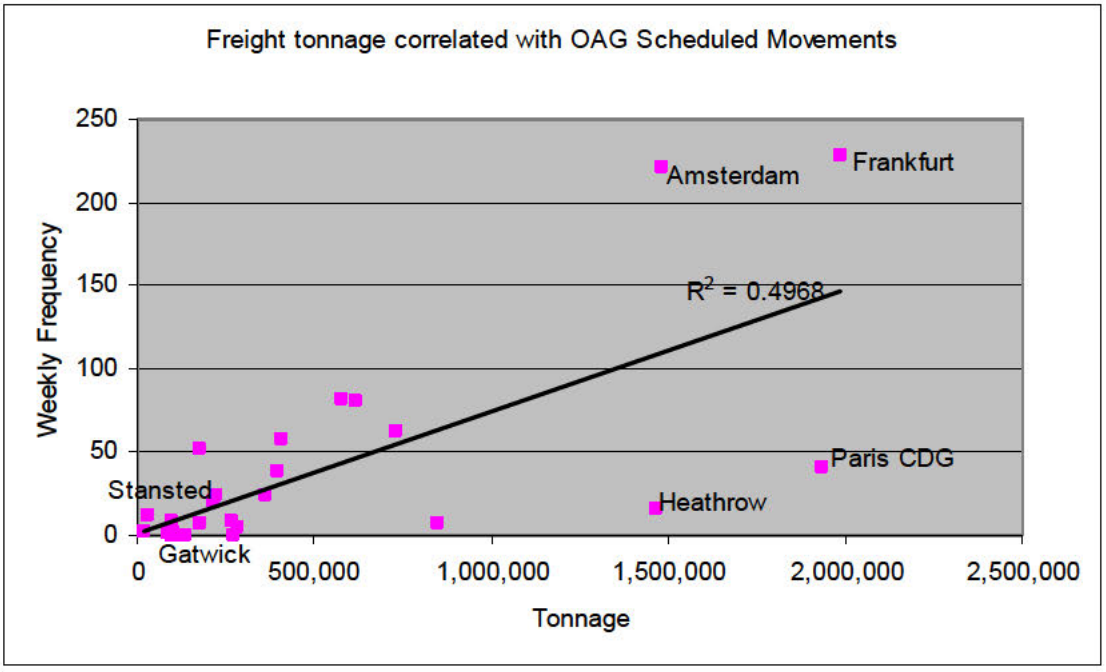


Table 3

	Freight tonnes	Pax	2013 wk freighters
Heathrow	1,464,596	70,038,804	16
Gatwick	97,565	34,222,405	0
Stansted	214,904	17,463,794	21
Luton	29,637	9,630,128	12
Manchester	97,215	19,841,747	8
East Midlands	267,350	4,086,849	9
Paris CDG	1,935,180	61,611,934	41
Paris Orly	94,700	27,232,263	0
Frankfurt	1,986,180	57,520,001	228
Frankfurt Hahn*	223,000		24
Cologne	730,040	9,280,070	62
Munich	272,203	38,360,604	0
Dusseldorf	86,729	20,833,246	1
Leipzig	846,086	2,279,221	7
Amsterdam	1,483,450	51,035,590	221
Milan MXP	405,858	18,522,760	58
Milan LIN	15,513	9,176,997	3
Milan BGY	116,733	8,888,017	0
Rome	135,777	36,980,161	0
Brussels	394,870	18,943,688	38
Liege	577,226	300,813	82
Luxembourg	614,906	1,912,806	81
Madrid	359,360	45,175,501	24
Barcelona	96,519	35,131,771	2
Zurich	281,683	24,751,649	5
Vienna	178,128	22,165,650	52
Dublin	102,717	19,096,572	1
Lisbon	90,264	15,301,236	1
Helsinki	176,987	14,859,981	7

*2011 data from airport website

15. Examination of the detailed information set out in Appendix A also shows how complex the pattern of freighter operations actually is. Few freighters, particularly those serving markets beyond Europe, operate on a strict point to point basis. Many transit more than one of the main European freight airports and a number of points overseas. Examination of arriving freighter patterns also reveals that the inbound pattern does not necessarily mirror the outbound pattern. Hence, there is already considerable flexibility to add new points if the market warrants.

16. Some freighters operate simple round trips. Others operate on a triangular basis, e.g. Lufthansa operating Frankfurt-Dallas-Detroit-Dallas-Manchester-Frankfurt. Inbound freight from the US to Manchester will be flown direct but outbound freight will transit Frankfurt. Other freighters operate effectively round the world journeys, e.g. British Airways operating Chicago-Houston-Stansted-Dammam-Dubai-Shanghai.

17. There is simply no way of knowing how much of the freight capacity on such aircraft is assigned to or used by freight originating in or destined for any airport, which may vary day by day. Freighter departures are, hence, not a reliable proxy for how much air freight capacity is available to uplift goods to and from any country or city.

18. Overall, our analysis of current freighter operations suggests that it is hard to distinguish a relationship between freighter movements and tonnage of freight carried.

19. Nor is it evident that the UK air freight capability is adversely affected today by shortage of capacity at Heathrow. There is ample spare airport capacity at Stansted for pure freight aircraft to the extent that there is demand for such aircraft operations given the amount of bellyhold capacity available at Heathrow. The volume of freight uplifted probably reasonably reflects the UK market, allowing for transit freight, and the limitations of the UK acting as a hub for freight trucked from continental Europe based on its geographic position. The principal issue is one of producer efficiency as a consequence of splitting locations, with the bulk of freight forwarding/consolidator activity being located around Heathrow and freight needing to be trucked to Stansted, Luton, or continental hubs. Whilst concentrating all freight activity at the main hub might make additional freighter flights viable by facilitating onward connections between bellyhold freight and pure freight operations, it is not clear the extent to which this would result in higher volumes of air freight being carried to/from the UK (as distinct from transit freight) as the UK does not appear to be significantly underperforming in aggregate terms compared to countries such as France, Spain or Italy.

Predicting Future Freighter Operations

20. In order to predict the volume of freighter activity in future at the London airports, we have developed a simple spreadsheet as set out in Table 4.

21. We have first projected forward total flown freight demand to and from London[3] on the assumption that it grows in line with overall passenger demand growth at 2.1% per annum in the absence of any specific forecasts of freight tonnage from DfT. We note that the DfT 2013 forecasts only give information for expected growth in pure freighter movements at 0.4% per annum but the basis of this is not clearly stated. Prima facie, this appears to understate unconstrained demand for pure freighter movements over the period to 2050.

22. In contrast, OE have identified that the expected average freight growth to and from Europe would be in the range 3.37% (Boeing) to 3.99% (Airbus). However, this would lead to substantially higher estimates of freight tonnage growth than passenger growth. Recent trends would suggest this to be unlikely so we have adopted the more cautious approach of using the same underlying growth as for passengers.

23. We have then estimated the bellyhold capacity offered at the London airports in 2050 based on the current average tonnage carried per international movement in 2012 at Heathrow, including both EU and non-EU flights, based on CAA Airport Statistics assuming average tonnes per movement increase by 0.5% per annum. This allows us to estimate the residual volume of freight under each scenario which would need to be accommodated on pure freighter aircraft.

[3] This is a simplifying assumption as it assumes the same proportion of UK regional air freight is trucked to London for uplift and the same proportion of freight is trucked to the continental freight hubs. On balance, this is likely to be a neutral assumption for the situation of unconstrained hub capacity as the proportion of regional freight flying direct from major regional airports might be expected to increase, particularly as more long haul flights develop, whilst the proportion being trucked from London to Europe might be expected to decrease with unrestricted capacity available.

Table 4

	2012	2050 Max Use	2050 2x2x2	2050 New Hub
Freighters 2012	14,123			
Freight in Freighters	310,022			
Total Freight	1,805,761	3,977,759	3,977,759	3,977,759
Tonnes per freighter	21.17	25.59	25.59	25.59
Tonnes per international bellyhold movement London	1.76	2.13	2.13	2.13
Forecast International Movements	834,725	1,051,034	1,298,981	1,375,452
Bellyhold Capacity	1,469,116	2,235,836	2,763,285	2,925,960
Freighter tonnage required		1,741,923	1,214,474	1,051,799
Freighter movement		68,077	47,463	41,106
Additional Freighters Required		53,954	33,340	26,983

24. We estimate that the number of freighters required to accommodate projected air freight demand would rise from 14,000 in 2012 to around 41,000 in the New Hub case, 47,000 in the 2+2+2 case and 68,000 in the Max Use case. In both the New Hub case and 2+2+2 case, we estimate there will be sufficient runway capacity available to accommodate these movements at 2050, at the New Hub and/or Stansted respectively. However, in the Max Use case, the London airports will, by definition, be full with passenger aircraft movements. Whilst we believe there will still be a small number of pure freighter operations accommodated in off-peak periods (as today at Heathrow), the number of freighter operations will be constrained.

25. 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, which already handles some long haul freighters. However, capacity equivalent to an additional 54,000 freighter movements per year could be required to ensure demand is met, although this could be mitigated to an extent if the freighter capacity was prioritised for freight to and from the UK with less transit freight.

26. A key question is the extent to which such freighter capacity would be provided at airports such as East Midlands, Manchester and Birmingham. This could serve to reduce trucking movements from the regions to London, as take place today, with environmental benefits but it would reduce producer efficiency through split operations. In the absence of detailed data regarding freight trucking movements today, it is difficult to determine whether this would have positive or negative impacts overall..

27. In terms of the specific destinations of future freighter movements, our analysis of the existing patterns of service reveals the difficulty of defining market demand and aircraft routings. We do not believe it is sensible to attempt to determine the future geographic split by destination in either the constrained or unconstrained cases as a single freighter may serve a variety or markets as necessary. In the constrained case, it is likely that more freight would be trucked to the continental hubs as well as to UK regional points, which would potential add to shipment costs.

Conclusions

28. Overall, we have made a best estimate of the number of freighter aircraft movements likely to be using the London airports (or near London airports) under each of the capacity scenarios. These are as follows:

- ✈ Maximum use of existing capacity 14,000
- ✈ 2+2+2 – additional runways at each of Gatwick and Stansted 33,000
- ✈ New 4 runway hub 27,000

29. In the latter two cases, our assessment is that, across both bellyhold capacity and pure freighter activity, there would be sufficient capacity to meet expected demand for air freight to and from the UK. Our estimates for additional freighter capacity are substantially above those made by DfT. Hence, to the extent that our baseline is understated (although we do not believe this to be substantial) due to the current patterns of trucking freight to the continent, this will offset any overstatement as a consequence of assuming higher growth than DfT and by reductions in the amount of trucking to London from regional airports due to expected growth in their own freighter operations over the period to 2050.

30. The key difference between these two scenarios would be in terms of the efficiencies and economies of scale gained by the industry arising from the concentration of freight activity at a single hub. In both cases, the overall volume of air freight to and from the UK is expected to be broadly the same, although the actual freight carried including transit freight would be higher in the hub case. However, under the new hub scenario, savings from greater efficiency may be passed onto users, so reducing shipping costs and facilitating trade leading to higher freight volumes, but it is beyond the scope of the current exercise to assess this.

31. In the constrained, max use, case, there would be severe limitations of pure freighter movements at the London airports, which could amount to around 26% of the required air freight capacity to/from London. The extent to which this would act as a limitation on overall air freight volumes would depend on the extent to which the freight is still carried from regional airports or by truck. Clearly this would impact on the cost/efficiency of shipment, which in turn could impact on freight volumes carried. Again, it is outside the scope of the current exercise to assess these effects.

32. Overall, in assessing the economic value for air freight between the scenarios, the main difference is likely to lie in producer costs passed through to users and the impact that would have on business costs and hence output/freight generated. It would not be safe to assume that the reduction in cargo ATMs at the London airports necessarily translates to lost shipment value in its entirety.

23 May 2013

Appendix A

				Total Airport	Total City	Total Country
Heathrow	Amman	1				
	Amsterdam	1				
	Amsterdam	1	onwards to Sharjah and Singapore			
	Brussels	1				
	Copenhagen	1				
	Copenhagen	1	onwards to Sharjah and Singapore			
	Dubai	1				
	Frankfurt	1				
	Leipzig	1				
	Lisbon	1				
	Milan	1				
	Milan	2	onwards to Hong Kong			
	Paris	1	onwards to Delhi and Hong Kong			
	Seoul	2		16	49	71
Stansted	Amsterdam	1	originates in Bogota, Puerto Rico			
	Amsterdam	2	originates in Miami, Buenos Aires, Bogota and Puerto Rico			
	Cologne	1	onwards to Madrid and Johnannesburg			
	Cologne	1	onwards to Tbilisi			
	Cologne	1	onwards to Tbilisi and Delhi			
	Dammam	1	originates in Chicago and Houston, onwards to Dubai and Shanghai			
	Dubai	1	onwards to Hong Kong			
	Frankfurt	1	originates in Chicago and Atlanta, onwards to Shanghai			
	Frankfurt	2	onwards to			
	Frankfurt	1	Chicago			
	Frankfurt	1	onwards to Hong Kong			
	Frankfurt	2	originates in Seoul and Moscow			
	Frankfurt	1	originates in Atlanta, onwards to Delhi and Hong Kong			

	Frankfurt	2	originates in Moscow, onwards to Seoul			
	Luxembourg	2	originates in Hanoi and Hong Kong			
	Zaragoza	1	onwards to Bahrain and Hong Kong	21	49	71
London Luton	Frankfurt	3				
	Istanbul	1				
	Istanbul	2	originates in Paris			
	Istanbul	2	originates in Cologne			
	Milan	4		12	49	71
Manchester	Amsterdam	1	onwards to Dubai and Hong Kong			
	Brussels	1	onwards to Dubai and Hong Kong			
	Dubai	1	originates in Amsterdam, onwards to Hong Kong			
	Frankfurt	2	originates in Detroit and Dallas			
	Frankfurt	1	onwards to Dubai and Hong Kong			
	Frankfurt	1	originates in Toronto and Houston			
	Milan	1	onwards to Hong Kong	8	8	71
East Midlands	Frankfurt	1				
	Keflavik	2	originates in Liege			
	Keflavik	2				
	Liege	2	originates in Keflavik			
	Paris	1		8	8	71
Prestwick	Los Angeles	1	originates in Luxembourg, onwards to Seattle			
	Luxembourg	1	originates in New York and Houston			
	Luxembourg	1	orginates in Los Angeles and Seattle			
	Paris	2	originates in Chicago			
	Seattle	1	orginates in Luxembourg, onwards to Calgary	6	6	71
Amsterdam	Abu Dhabi	4				
	Abu Dhabi	1	onwards to Taipei			
	Almaty	2	onwards to Hong Kong, Delhi, Sharjah			
	Bahrain	1	onwards to Mongolia, Hong Kong, Chennai			
	Baku	2	onwards to Kuala Lumpur			

	Bangalore	1	onwards to Singapore
	Beijing	7	
	Beirut	2	
	Budapest	2	onwards to Moscow
	Chengdu	4	
	Chennai	1	originates Nairobi, onwards to Singapore
	Chennai	1	originates in Chicago and Atlanta, onwards to Singapore
	Chicago	2	originates in Doha
	Chicago	7	
	Chongqing	2	onwards to Shanghai
	Copenhagen	1	originates in Nairobi, onwards to Sharjah and Singapore
	Copenhagen	2	onwards to Sharjah and Singapore
	Curitiba (Br)	1	onwards to Sao Paulo
	Dacca	1	originates in Nairobi, onwards to Singapore
	Doha	1	originates in Chicago
	Doha	3	
	Dubai	2	
	Dubai	1	originates in Eldoret and Nairobi
	Dubai	1	originates in Nairobi
	Dubain	1	originates in Manchester, onwards to Hong Kong
	Entebbe	1	onwards to Nairobi
	Frankfurt	1	originates in Hong Kong
	Frankfurt	1	onwards to Mumbai and Hong Kong
	Gothenburg	3	onwards to Dubai
	Guangzhou	5	
	Harare	3	onwards to Nairobi
	Heathroiw	1	
	Hong Kong	7	
	Houston	7	

	Jeddah	2	
	Johannesburg	1	onwards to Dar-Es-Salaam and Nairobi
	Khartoum	2	onwards to Nairobi
	Kigali	1	onwards to Nairobi
	Kuala Lumpur	1	
	Los Angeles	4	
	Luxembourg	1	originates in Libreville, Brazzaville, Nairobi
	Manchester	1	onwards to Dubai and Hong Kong
	Mexico City	7	
	Miami	2	onwards to Buenos Aires, Bogota, Puerto Rico and Stansted
	Miami	1	onwards to Buenos Aires, Quito and Guayaquil
	Miami	2	onwards to Santiago, Quito, Bogota and Puerto Rico
	Miami	2	onwards to Santiago, Quitoand Guayaquil
	Milan	3	originates in Tokyo
	Milan	2	onwards to Moscow
	Milan	4	onwards to Tokyo
	Mongolia	2	onwards to Hong Kong and Chennai
	Moscow	2	
	Moscow	2	onwards to Shanghai
	Nairobi	1	
	New York	3	orginates in Bahrain
	New York	1	originates in Bahrain
	New York	7	
	Paris	1	onwards to Mumbai and Hong Kong
	Puerto Rico	1	onwards to Bogota
	Puerto Rico	2	onwards to Quito
	Riyadh	1	
	Riyadh	2	onwards to Sharjah, Singapore and Kuala Lumpur

	Santiago	1				
	Sao Paulo	2	onwards to Buenos Aires and Santiago			
	Sao Paulo	1	onwards to Curitiba and Santiago			
	Seattle	1				
	Seoul	7				
	Shanghai	21				
	Sharjah	1	originates in Heathrow, onwards to Singapore			
	Sharjah	2	onwards to Guangzhou			
	Sharjah	1	onwards to Muscat and Hong Kong			
	Stockholm	2	originates in Seoul			
	Stockholm	4	onwards to Seoul			
	Taipei	1				
	Tel Aviv	1				
	Tenerife	1	onwards to Sao Paulo, Quito and Bogota			
	Tenerife	3	onwards to Sao Paulo, Quito and Guayaquil			
	Tianjin	15	onwards to Shanghai			
	Tokyo	1	originates in Frankfurt Hahn			
	Tokyo	5				
	Toronto	4				
	Tripoli	1				
	Vienna	3	onwards to Shanghai	221	221	221
Brussels	Amman	1	onwards to Jeddah			
	Chennai	1	originates in Los Angeles and Dallas, onwards to Singapore			
	Dammam	1				
	Dubai	3	originates in New York			
	Dubai	1	originates in Frankfurt, onwards to Hong Kong			
	Dubai	1	originates in Manchester, onwards to Hong Kong			
	Heathrow	1				
	Istanbul	1	originates in Jeddah			
	Kolkata	1	originates in Los Angeles, onwards to Singapore			
	Milan	2	originates in Riyadh			

	Milan	1	originates in Jeddah			
	Mumbai	1	orginates in Los Angeles and Chicago, onwards to Singapore			
	New Guinea	1	onwards to Seoul			
	New York	1	originates in Jeddah			
	New York	1	originates in Jeddah, onwards to Houston			
	New York	6	originates in Dubai			
	Riyadh	1				
	Riyadh	1	onwards to Jeddah			
	Seoul	1	orginates in New York			
	Seoul	2	originates in New York			
	Sharjah	2	originates in Dallas, onwards to Singapore			
	Sharjah	1	originates in Chicago and Dallas, onwards to Singapore			
	Taipei	1				
	Tianjin	1	onwards to Seoul			
	Vienna	2	originates in Riyadh	36	36	118
Liege	Accra	2	onwards to Lagos and Addis Ababa			
	Addis Ababa	5				
	Bahrain	11	originates in New York			
	Bucharest	1	onwards to Tel Aviv			
	Dubai	12	onwards to Hong Kong			
	East Midlands	4	onwards to Keflavik			
	Entebbe	1				
	Istanbul	5				
	Keflavik	4				
	Keflavik	1	onwards to New York			
	Lagos	2	onwards to Addis Ababa			
	Lagos	1	onwards to Ougadougou			
	Lagos	1	onwards to Port Harcourt			

	Lome	2	onwards to Congo, Addis Ababa			
	Luxembourg	1	originates in Tel Aviv			
	New York	1	originates in Tel Aviv			
	New York	2				
	New York	5				
	Ougadougou	1	onwards to Congo			
	Shanghai	1				
	Shanghai	2				
	Siauliai Lithuania	1				
	Singapore	1				
	Tel Aviv	3	originates in New York			
	Tel Aviv	1	originates in Chicago			
	Tel Aviv	6				
	Vienna	5		82	82	118
Luxembourg	Abidjan	1	onwards to Accra			
	Abu Dhabi	1	onwards to Taipei			
	Almaty	1	onwards to Hong Kong			
	Atlanta	1	onwards to Chicago			
	Atlanta	1				
	Atlanta	2	originates in Doha, onwards to Houston			
	Baku	1	onwards to Almaty and Shanghai			
	Baku	1	onwards to Hong Kong			
	Baku	4	onwards to Shanghai			
	Baku	1	onwards to Singapore and Hong Kong			
	Baku	1	onwards to Singapore and Kuala Lumpur			
	Baku	2	onwards to Taipei and Bangkok			
	Beijing	1	onwards to Xiamen			
	Beirut	1	onwards to Amman and Hong Kong			

			onwards to Amman and
	Beirut	1	Istanbul
	Chicago	1	onwards to Atlanta
	Chicago	1	onwards to Los Angeles
	Congo	1	originates in Liege, onwards to Addis Ababa
	Dallas	1	
	Dammam	1	onwards to Saigon and Hong Kong
	Doha	1	onwards to Hanoi and Hong Kong
	Doha	1	onwards to Singapore and Kuala Lumpur
	Doha	1	originates in Houston
	Doha	1	originates in Chicago
	Dubai	1	onwards to Bangkok and Hong Kong
	Dubai	1	onwards to Hong Kong
	Frankfurt Hahn	3	originates in Shanghai
	Indianapolis	1	onwards to Chicago
	Indianapolis	1	onwards to Los Angeles, Calgary
	Johannesburg	3	
	Komatsu	2	onwards to Seoul
	Kuwait	2	onwards to Hanoi and Hong Kong
	Lagos	1	onwards to Port Harcourt and Kinshasa
	Libreville	1	onwards to Brazzaville
	Libreville	1	onwards to Kinshasa
	Los Angeles	1	onwards to Seattle
	Los Angeles	1	
	Mexico City	1	
	Mexico City	1	onwards to Guadalajara
	Miami	2	onwards to Houston
	Milan	1	onwards to New York and Chicago
	Milan	4	

	Ndjamena	1	onwards to Lagos			
	New York	1	originates in Tel Aviv			
	New York	1	orginates in Tel Aviv, onwards to Chicago			
	New York	1	onwards to Atlanta			
	New York	1	onwards to Houston			
	New York	1	onwards to Mexico City and Guadalajara			
	Prague	2	originates in Chengdu			
	Prestwick	1	onwards to Los Angeles and Seattle			
	Prestwick	1	onwards to Seattle and Calgary			
	Riyadh	1	onwards to Dammam and Hong Kong			
	Sao Paulo	1				
	Sao Paulo	2	onwards to Curitiba			
	Sao Paulo	1	onwards to Manaus			
	Seoul	1				
	Sharjah	1	onwards to Karachi			
	Singapore	1	onwards to Kuala Lumpur			
	Taipei	2				
	Tbilisi	2	onwards to Baku and Shanghai			
	Yerevan	1		80	80	80
Paris	Beirut	1				
	Cairo	1	onwards to Reunion			
	Chicago	5				
	Cologne	2	onwards to Istanbul			
	Delhi	1	originates in Heathrow, onwards to Hong Kong			
	Djibouti	1	onwards to Reunion			
	Hannover	4				

	Heathrow	1				
	Istanbul	1				
	London Luton	2	onwards to Istanbul			
	Mexico City	6				
	Milan	1	onwards to Delhi and Hong Kong			
	Mumbai	2	onwards to Hong Kong			
	Mumbai	1	originates in Amsterdam, onwards to Hong Kong			
	New York	1	onwards to Chicago			
	Niamey	1	onwards to Ouagadougou and Bamako			
	Njamena	1	onwards to Bangui, Brazzavile and Port Harcourt			
	Porto	1	onwards to Mexico City			
	Seoul	2				
	Shanghai	2	originates in Copenhagen			
	Shanghai	2				
	Tokyo	2		41	41	41
Cologne	Basle	4				
	Berlin	5				
	Bucharest	4				
	Bucharest	2				
	Istanbul	2	originates in Paris			
	Istanbul	2				
	Katowice	4				
	Keflavik	5				
	Ljubljana	4				
	Ljubljana	1	onwards to Zagreb			
	London Luton	2	originates in Istanbul			
	London Luton	2	onwards to Istanbul			
	Madrid	1	originates in Stansted			
	Prague	5				
	Sofia	1				
	Tblisi	1	originates in Stansted			

	Tblisi	1	originates in Stansted, onwards to Delhi			
	Tel Aviv	12				
	Zagreb	4		62	62	304
Frankfurt Hahn	Almaty	1	originates in New York			
	Almaty	6	originates in New York, onwards to Shanghai			
	Amsterdam	1	onwards to Tokyo			
	Amsterdam	1	originates in Tokyo			
	Atyrau	1	onwards to Almaty			
	Baku	3				
	Beijing	3				
	Chatearoux	1	onwards to Kabul			
	Doha	2				
	Johannesburg	2				
	Milan	1	onwards to Tokyo			
	Toronto	1	onwards to Mexico City			
	Yerevan	1		24	242	304
Frankfurt	Abu Dhabi	5				
	Almaty	1				
	Almaty	1	onwards to Guangzhou			
	Almaty	1	onwards to Hong Kong			
	Almaty	2	onwards to Shanghai			
	Amman	2				
	Amsterdam	1	originates in Hong Kong and Chennai			
	Atlanta	4				
	Baku	1	onwards to Bangkok and Kuala Lumpur			
	Baku	2	onwards to Kuala Lumpur			
	Bangalore	3	onwards to Chennai			
	Bangalore	1	onwards to Hyderabad and Guangzhou			
	Bangkok	2				
	Beijing	3	onwards to Shanghai			
	Brussels	1	onwards to Dubai and Hong Kong			

	Cairo		3		
	Chicago		7		
	Chicago		1	onwards to Los Angeles	
	Chicago		4	onwards to Mexico City	
	Chicago		2	onwards to Mexico City and Guadaljara	
	Chicago		1	originates in Stansted	
	Coventry		10		
	Dakar		3	originates in Dubai, onwards to Sao Paulo	
	Dammam		2	onwards to Sharjah and Hong Kong	
	Delhi		4	onwards to Singapore and Bangkok	
	Delhi		1	originates in Atlanta and Stansted, onwards to Hong Kong	
	Detroit		2		
	Doha		1		
	Dubai		1	originates in Lagos and Accra	
	Dubai		4	originates in Sao Paulo and Dakar	
	Dubai		3		
	Dubai		1	originates in Dusseldorf	
	Dubai		1	originates in Manchester, onwards to Hong Kong	
	East Midlands		1		
	Heathrow		1		
	Helsinki		1		
	Hong Kong		3		
	Hong Kong		1	originates in Stansted	
	Istanbul		6		
	Istanbul		1	onwards to Tel Aviv	
	Jeddah		1	onwards to Sharjah, Hyderabad and Guangzhou	
	Kabul		1		
	Krasnojarsk		1		
	Krasnojarsk		6	onwards to Beijing and Seoul	
	Krasnojarsk		1	onwards to Seoul and Shanghai	
	Krasnojarsk	y		onwards to Shanghai	

	Krasnojarsk	7	onwards to Tokyo and Osaka
	London Luton	3	
	Madrid	4	
	Malta	1	
	Milan	1	originates in Hong Kong and Dubai
	Milan	1	onwards to Dubai and Hong Kong
	Milan	1	onwards to Hong Kong
	Moscow	10	
	Moscow	2	onwards to Tokyo
	Moscow	1	onwards to Tokyo and Seoul
	Mumbai	1	
	Mumbai	1	onwards to Chennai
	Mumbai	3	onwards to Hong Kong
	Mumbai	1	onwards to Hyderabad
	Mumbai	1	originates in Amsterdam, onwards to Hong Kong
	Nairobi	5	onwards to Johannesburg
	New York	5	
	Riyadh	3	
	Riyadh	1	onwards to Dammam
	Riyadh	1	onwards to Sharjah and Hong Kong
	Sao Paulo	3	
	Sao Paulo	1	onwards to Curitiba
	Sao Paulo	1	onwards to Curitiba, Quito and Puerto Rico
	Sao Paulo	2	onwards to Manaus, Quito and Puerto Rico
	Sao Paulo	2	onwards to Montevideo and Buenos Aires
	Seoul	1	originates in Vienna
	Seoul	2	originates in St Petersburg
	Seoul	12	

	Seoul	2	originates in Atlanta and Stansted			
	Seoul	1	originates in Moscow and Vienna			
	Shanghai	1	originates in Chicago, Atlanta and Stansted			
	Shanghai	18				
	Sharjah	2	onwards to Kolkata and Hong Kong			
	Stockholm	1	onwards to Dubai and Hong Kong			
	Stockholm	4	onwards to Seoul			
	Taipei	3				
	Tel Aviv	3	onwards to Istanbul			
	Toronto	1	onwards to Houston	218	242	304
Milan	Abu Dhabi	2				
	Almaty	1	onwards to Osaka and Hong Kong			
	Baku	1				
	Dammam	1				
	Delhi	1	originates in Paris, onwards to Hong Kong			
	Doha	2				
	Dubai	2	onwards toHong Kong			
	Dubai	1	originates in Frankfurt, onwards to Hong Kong			
	Heathrow	5				
	Hong Kong	1	originates in Frankfurt			
	Hong Kong	2	originates in Heathrow			
	Hong Kong	1	originates in Manchester			
	Istanbul	1				
	Istanbul	2	originates in Lagos			
	Istanbul	1	orginates in Tirana			
	Jeddah	1				
	Luxembourg	1	originates in Chicago and Los Angeles			
	Luxembourg	4				
	Luxembourg	1	orginates in Chicago and New York			
	Madrid	1				
	Moscow	2	originates in Amsterdam			

	New Guinea	1	onwards to Seoul			
	Osaka	1	onwards to Hong Kong			
	Riyadh	1				
	Sao Paulo	1				
	Seoul	1	originates in Uzbekistan			
	Seoul	9				
	Shanghai	4				
	Tokyo	4	originates in Amsterdam			
	Tokyo	1	originates in Frankfurt Hahn	57	57	57
Vienna	Amman	1				
	Copenhagen	2	orginates Seoul			
	Frankfurt	1	orginates Seoul			
	Istanbul	2				
	Kiev	5				
	Liege	5				
	Milan	3	orginates Seoul			
	Moscow	2	orginates Seoul and onwards to Gothenburg or Frankfurt			
	Oslo	3	orginates Seoul			
	Oslo	6				
	Riyadh	2				
	Seoul	1	via Frankfurt			
	Seoul	3	via Gothenburg			
	Seoul	1	via Tel Aviv			
	Seoul	4	via Copenhagen			
	Seoul	1	originates Moscow			
	Shanghai	3	originates Amsterdam			
	St Petersburg	1	orginates Seoul and onwards to Gothenburg			
	Tel Aviv	1	orginates Seoul			
	Timosoara	5		52	52	52

March 2015

Manston Airport under private ownership:

The story to date and the future prospects

Position statement

Published by Kent County Council

Kent County Council
kent.gov.uk

Introduction

For decades Kent County Council has made great efforts to develop aviation at Manston Airport.

Manston, with its proud history as a front-line Battle of Britain aerodrome, has long been a symbol of Kent's determination in the face of adversity.

But our desire to stimulate and grow Manston was not the result merely of nostalgia or sentimentality.

For decades we have been aware of the commercial potential of Manston's long, 2,700 metre runway. For decades we have championed Manston's proximity to London. For decades we have argued that Manston was a sleeping giant: a regional and national asset.

Our 2012 policy document 'Bold Steps for Aviation' made all this clear and promoted the development of Manston to the the Government as an alternative to building a controversial new runway in the Thames Estuary.

Our support for Manston has not merely consisted of kind words and encouragement. We have invested substantial sums of public money.

We have made substantial investments in both road and rail infrastructure to improve access to Manston and East Kent.

Our record in supporting Manston is plain to see and we are proud of it.

It was disappointing and regrettable to learn that all our hard work and investment, and the hard work of the various companies that had tried to make flying profitable at Manston, had failed.

Manston's story began in 1915 when it was a small grass airfield operated by the Admiralty. Now a new chapter is about to begin that will bring new jobs and new prosperity to East Kent. It will be our duty to encourage, guide and nurture to help ensure this happens.

This document sets out the story of Manston Airport over the last 16 years, from its sale by the Ministry of Defence to the present day. We also consider the future, which we are confident will be bright.

Hansard 28th April 2014

Robert Goodwill, Parliamentary Undersecretary of State at the Department of Transport

'Whatever the result of efforts to secure such a resolution (on Manston), the government are unable to intervene directly, as we believe that UK airports and airlines operate best in a competitve and commercial environment. It is therefore for individual airports to take decisions on matters of future economic viability'.

Chapter one

The last 16 years of private ownership

Since the Ministry of Defence sold RAF Manston in 1998, the airport has never made a profit and has never delivered on its promise of jobs for the area. When the airport closed on 15th May 2014 144 people were employed there.

Since 1998 three companies have tried and failed to run Manston as a viable business. The Wiggins Group, with its start-up low cost carrier EUJet, launched scheduled flights to twenty one destinations in Europe in 2004 but collapsed into administration in the summer of 2005 leaving 5,400 passengers stranded. Its fleet of five 108-seat Fokker 100 jets were repossessed by Debis Air Finance.

Infratil Limited, which bought Manston from the administrators in 2005, lost between £40 - £50 million over the next nine years attempting to achieve passenger numbers of over a million per annum. The highest number of passengers was 50,000. Similarly its ambitious plan to grow freight traffic failed.

Lothian Shelf (417) Limited, a company owned by Mrs Ann Gloag, bought Manston for £1 in November 2014. In the next 4 months the airport made revenue losses of £100,000 per week plus significant capital losses.

Mrs Gloag's decision to sell the airport was based on an assessment that these losses could not be sustained. Mr Trevor Cartner and Mr Chris Musgrave acquired 80 per cent of the company in order to provide space for a wide range of businesses, with a focus on attracting companies in the manufacturing sector, as well as the provision of housing, shops, schools and community facilities.

Chapter two

The Wiggins era 1998-2005

In 1998 Wiggins Group acquired Manston Airport for £4.75 million. Its company accounts show that between 1999 and 2002 the company reported losses of £8.6 million, with a further loss of around £2 million reported over the next two years.

In January 2004 Wiggins Group renamed itself Planestation and later that year Planestation bought 30 per cent of airline company EUJet.

In September 2004 EUJet operated flights to destinations across Europe. That year Planestation's losses were £73 million and the company had to borrow £46 million at an interest rate of 28%. In December Planestation bought the remaining 78 per cent of EUJet.

In its busiest month in early 2005 the airport carried 62,709 passengers. EUJet's aim had been to handle over 750,000 passengers per annum but the company became insolvent and went into administration.

In July 2005 all EUJet operations were suspended along with all non-freight operations.

Mr Tony Freudmann had overseen Manston's transfer from an RAF base to a commercial operation. He was Senior Vice President of Wiggins Group between 1994 and 2005. He was 'let go' by Wiggins in February 2005. He is now the spokesman for the RiverOak consortium.

The Wiggins Group and Planestation failed in their ambition for Manston to become a successful international airport; but even then, more than 10 years ago, they also had ambitions for property development on the airport site, in collaboration with property developers MEPC plc.

Chapter three

INFRATIL 2005-2013

Infratil Limited is a successful company listed on the New Zealand stock exchange with the primary purpose of investing in electricity distribution, public transport and ports. The company was established in 1994 with NZ$50m of capital. At the time it acquired Manston and Prestwick airports it controlled assets worldwide in excess of NZ$ 4.4 billion.

Following Wiggins' demise, Infratil Limited bought Manston Airport from the Administrator for £17 million in August 2005.

In addition to Manston, Infratil also owned Prestwick, Flughafen Lubeck, Wellington and Auckland Airports. Its master plan for Manston (published in November 2009) envisaged building a new passenger terminal to accommodate up to 3 million passengers per annum. It also envisaged building a parallel taxi way to the runway and an increase in the freight and passenger aprons. At the time of publishing its plan the airport was handling 32,000 tonnes of freight per annum. The master plan envisaged freight growth of between 4% and 6% per annum to equate to approximately 167,000 tonnes of freight per annum by 2018. It also planned on developing corporate jet facilities with an executive terminal.

In 2009 the airport was handling fewer than 50,000 passengers per annum. Infratil forecast that by 2014 this figure would rise to 527,000, by 2015 to 1,268,000 and by 2033 to more than 4.7 million passengers per annum. In 2009 the airport employed approximately 100 people, some full time and some part time. Infratil forecast that they would be employing more than 500 staff by 2014, 2,800 by 2018 and 6,150 by 2033.

When the airport closed in May 2014 there were 144 people employed at Manston Airport.

In 2012 Infratil announced that Manston and Prestwick airports were for sale.

In each year that Infratil Limited owned Manston it incurred losses of more than £3 million per annum and wrote off the purchase price of £17 million.

> As at 31 March 2013 Infratil's investment in the UK's airports had a book value of $20m and over the year a further $12m was contributed to meet costs. Their sale price crystallised a net economic cost of $32m."
>
> ***(Infratil financial results 2013-14)***

In 2013 KLM started passenger flights to Schiphol Amsterdam. However, over its 12 months of operation its seventy eight seat Fokker planes were less than half full (42 per cent of capacity). KLM operations at Manston made no significant financial contribution to the cost of running the airport.

In November 2013 Infratil Limited sold Manston Airport and the associated liabilities to a company controlled by Mrs Ann Gloag for £1.

Chapter four

Manston Skyport Limited 2013-2014

Mrs Ann Gloag originally approached Infratil with a view to buying both Manston and Prestwick airports, which were being sold as a package. However, Infratil set a deadline for their sale in order to stem their losses. When the Scottish Government bought Prestwick for £1 Mrs Gloag agreed to buy Manston also for £1.

From the discussions that Kent County Council had had with her and her team we believed that she had every intention to maintain and grow the aviation business at Manston Airport.

She gave a press interview with the Isle of Thanet Gazette on 8 August 2014 to dispel the myths and uncertainty that had been widely propagated by campaign groups opposed to the subsequent closure of the airport.

"Can you please outline the reasons behind your decision to close the airport?"

"The prospect of new passenger and freight opportunities failed to materialise and the scale of the losses meant that there was no credible prospect of the airport becoming profitable."

"Would you have bought it if you'd known you would have to close it just months later?"

"I wanted to make it a success and I didn't buy it to close it. Our whole team worked tirelessly to secure new business for the airport but no new operators considered it a viable option. It was only when our aviation team arrived at Manston that we started to discover the scale of the problems."

"Why did you reject RiverOak's offers to buy it?"

"They were introduced to us as a potential buyer and in good faith we entered into discussions with them. However, we had serious concerns from the outset about the way RiverOak conducted their business with us. We are aware of the £7 million figure that has been made public by RiverOak. For clarification, the structure of their offer meant the final amount would have been considerably less. They also failed to provide any business plan to back up their claims of future employment or to reassure us that their bid offered commitment to maintain it as an operational airport."

Prestwick airport made a pre tax loss of £10 million in its final year of ownership under Infratil.

After buying the airport for £1 the Scottish government said it could take a number of years for taxpayers to see a return on public investment in Prestwick.

It announced a £10 million commitment towards 'operating costs, repairs backlog and improvements to the terminal building.'

Prestwick is continuing to lose £1 million a month.

Chapter five

Support given to Manston by Kent County Council over the past 16 years

Kent County Council's support of Manston as an airport over the last 16 years has been unwavering.

Transport infrastructure

Kent County Council has made or enabled substantial transport and infrastructure investment for the benefit of Manston and the surrounding area.

In 1997 Columbus Avenue was constructed on the north side of the airport at a cost of £1.52 million. These infrastructure works were funded through the European Regional Development Fund and the Single Regeneration Budget.

In 1998 Kent County Council completed the A299 Thanet Way extension of the M2 through to Ramsgate.

In 2000 Kent County Council completed the Ramsgate Harbour Approach Road and in 2009 the Euro Kent link road.

The A256 dualling was completed in 2012 and £87 million was invested in the East Kent Access Road in 2013.

Kent County Council is in the planning stage of the £6.7 million Westwood relief scheme to help growing businesses at Westwood and Manston.

Network Rail has just announced the commencement of its £11 million scheme to reduce journey time between Ramsgate and Canterbury; Kent County Council is contributing £4.5 million to the cost of this upgrade. Kent County Council has also committed £12 million to a new Thanet Parkway Station near Manston.

Business premises;

In Spring 2006 Kent County Council acquired the undeveloped area of Manston Business Park, amounting to some 40 acres of developable land, from the Administrator of Planestation plc for £5.35 million.

Manston Business Park and the EuroKent sites subsequently became the key holdings of a joint venture between Kent County Council and Thanet District Council.

By 2015 Manston Business Park has seen the development of industrial units which will be occupied by start-up and small developing businesses.

Support for aviation

In its discussion document Bold Steps for Aviation (May 2012) Kent County Council supported the increased use of Manston Airport and stressed its potential to make a significant contribution to aviation in the UK.

"In Kent, Manston has the potential to make a significant contribution [to the UK's aviation capacity], providing excellent communications to European destinations and reduced flight times.

In addition:

- Over the years Manston has received more than £1million in financial assistance from Kent County Council. When EUJet commenced its flights in 2004 Kent County Council bought a 1.5% shareholding in EUJet Ops Limited.
- In 2007 Kent County Council provided financial assistance to enable the start of charter flights from Manston to Virginia USA, although these flights were discontinued shortly thereafter.
- Between May 2004 and May 2005 when EUJet Ops Limited was acquired by Planestation Limited, Kent County Council acquired options to buy further shares. Planestation Limited was however put into liquidation and the council's investment had no further value.
- When KLM expressed an interest in starting scheduled flights to Amsterdam, Kent County Council provided £100,000 to Visit Kent, the tourist agency which provided marketing and tourism support.

Support offered to investors at the airport

In March 2013, when Infratil were seeking aviation buyers for the airport, Kent County Council distributed a note offering to help new investment at Manston Airport through:

- Financial assistance from the Regional Growth Fund
- Use of land owned by Kent County Council adjacent to the airport
- Expediting the new Thanet Parkway station
- A Route Development Fund to increase the number of passengers
- Working with airlines and train operating companies to achieve integrated ticketing
- Discussing with Ministers to seek assistance from Government. Kent County Council's offer to any investor with a viable business plan remains open, although to date we have received no take up.

Helping to find a new airport operator

Kent County Council met PWC, the agents selling the airport, with a view to helping find a viable new owner/operator. Over 18 months discussions were held with thirty interested parties including low cost airline operators and private investors, many were introduced to PWC by Kent County Council.

In the event, two of the shareholders of Discovery Park Limited made an approach to Mrs Ann Gloag which subsequently led to their purchase of the airport.

Chapter six

What do we know about RiverOak and its proposal for a compulsory purchase order?

RiverOak was introduced to Kent County Council by Mr Tony Freudmann. Subsequently the Leader of Kent County Council invited representatives of RiverOak to meet to discuss their plans for the airport. RiverOak declined, saying that their plans were confidential. The invitation to present their business plan to the council has been repeated on several occasions: RiverOak has always declined to do so.

RiverOak Investment Corp LLC was established in January 2001 in Delaware USA to manage *'niche focussed real estate investments for institutional entities that are strategically driven, including private and public pension funds.'*

Its CEO is Mr Stephen DeNardo.

The RiverOak website states *'within a time frame that spans nearly 4 decades of business experience, Steve DeNardo has successfully been involved in all phases of real estate investment, development and management. His focus and interest has been on the management and turnaround of troubled assets.'*

RiverOak's Chief Investment Officer is Mr George Yerrall. The website says: *'He is in charge of sourcing and analysis of investment opportunities and the execution of investment and asset management strategies.'*

In its statement to the UK Airports Commission (The Davies Commission) RiverOak described its strategy for Manston as handling 250,000 tonnes of cargo per annum by 2030, 500,000 tonnes of cargo per annum by 2040 and 750,000 tonnes by 2050. It also described its long term strategy to include 'aircraft maintenance, repair and teardown operations.'

RiverOak also stated that by summer 2017 at the earliest they would plan to re-open passenger services *'if appropriate contracts can be agreed with suitable carriers.'* They would also re-establish Manston as a key diversion airport, capable of providing emergency resilience to the wider South East airport system.

In an interview on 12 May 2014 with Paul Francis of the KM Group Mr DeNardo was asked *'How did RiverOak become involved in the bid to buy the site from Mrs Gloag?'*

Mr De Nardo replied; *'We have been active in searching for opportunistic transactions in both the UK and Ireland, We have an extensive network of contacts in both and one of our contacts made us aware of the Manston situation.'*

He was also asked *'How did you team up with Annax Aviation whose Chief Executive Tony Freudmann has become spokesman for your bid?'*

Mr DeNardo replied: *'Our contacts put us in direct discussion with Tony Freudmann who we knew had both operational experience at the airport and had made an attempt to purchase the airport.'*

Following Mrs Gloag's refusal to accept an offer from RiverOak to buy Manston Airport, RiverOak then approached Thanet District Council with a view to the council making a Compulsory Purchase Order of the airport in favour of RiverOak. Thanet District Council concluded that a decision on a CPO could not be made until:

- Thanet District Council had commissioned an independent feasibility study on the future viability of a going concern operational airport.
- Any prospective airport owner/operator submit a viable business plan and also enter into an indemnity agreement that would cover any exposure to all costs placed upon Thanet District Council.

Thanet District Council commissioned Falcon Aviation whose report was considered by the Council's cabinet on 31st July 2014. The report identified *'no business plan with a credible investment plan of less than 20 years is likely to provide the commitment necessary to rebuild confidence. From an investor's standpoint, the payback period might be as long as 50 years. The level of investment would have to be significant (£100m's) and there are never any guarantees of success.'*

Throughout Thanet District Council's consideration of a CPO it has been advised by its Section 151 Officer that it appears evident that the airport will not be successful if it reopens and attempts to operate in the same configuration as it has done previously up to its closure.

The advice to Thanet District Council's cabinet was that invitations should be issued to parties willing to enter into an indemnity agreement capable of delivering the twenty year business plan.

During the course of Thanet District Council's processes, on 17 July 2014, Kent County Council unanimously adopted the following motion;

"Kent County Council supports the actions taken so far by Thanet District Council to retain Manston as a regional airport. We recognise the value that a regional airport brings to East Kent and are disappointed at its closure. Kent County Council will explore with Thanet District Council ways in which it can support proposals to retain Manston as an airport." The original Motion proposed by Mr Cowan (Dover Town, LAB) and Mr Truelove (Swale Central, LAB) was replaced by the above, proposed by Mark Dance (Whitstable, CON).

In supporting the amended motion the Leader of Kent County Council said "Thanet District Council's approach is now such that they are going to carry out and have already commissioned, an independent study as to the viability of running the airport as a going concern or not. Nobody knows the conclusion to that, as I said on the radio this morning, after 16, 17, 18 years of Manston, everybody has just lost money. So what is the market telling you? And it will be interesting to see what the independent viability report concludes. And Thanet District Council are absolutely right in doing that. If it does suggest there is viability they will then ask for expressions of interest from people to come forward who have the ambition to do exciting things at Manston in running it as an airport, or not. And if there are some exciting propositions, or if we had an owner that is reluctant to do anything exciting, which again we don't know, we will then make the decision as to whether or not to support the CPO process. And it is premature to have that decision now, which is why we can't support your original motion which was asking for an open ended commitment to support Thanet and their CPO, no matter what. I want to see, and hope, that there are exciting propositions that come forward, with good people, that have got the money to do exciting things. And we will have to wait and see as to whether that's the case, and then we will review our position."

In an endeavour to support Thanet District Council, on 1st September Kent County Council's Director of Governance and Law wrote to Thanet District Council's' Monitoring Officer to remind them of our offer to assist the council. The Monitoring Officer replied: ' We need to do the evaluation of any Expressions of Interest first before we can begin to assess what legal support might be needed moving forward and whether any of that support would need to be commissioned from Kent County Council. We are not in a position to make any decisions until we have the result of this, but I will be more than happy to consider making such an approach at the appropriate time.'

Kent County Council has never been approached by Thanet District Council for the help offered.

Unsuprisingly, **as a result of this**, on 11 December 2014 Thanet District Council recieved a cabinet report detailing the outcome of its excercise to seek an indemnity partner for the compulsory purchase of the airport and a comprehensive and viable business plan. The following was decided:

'That no further action be taken at the present time on a CPO of Manston Airport on the basis that the council has not identified any suitable expressions of interest that fulfil the requirements of the council for a CPO indemnity partner and that it does not have the financial resources to pursue a CPO in its own right.'

The conclusions made by the council's Section151 Officer were that *'The information provided does not provide assurances which would satisfy him that a valid expression has been put forward and he is therefore unable to recommend moving ahead with this proposal. Although the issues here are emotive Members should excercise extreme caution before seeking to move forward with any proposal which is at odds with advice from its officers, particularly where there are likely to be* ***significant risks*** *which would affect the council at a fundamental level.'*

As the Falcon report, Thanet District Council's feasibility study and the advice from the council's 151 Officer show, the financial risks of a compulsory purchase of the airport were unacceptable.

Chapter seven

What do we know about Discovery Park Limited and its directors?

The new owners of Manston, Chris Musgrave and Trevor Cartner, have a strong track record in taking over large difficult sites following the demise of earlier uses and regenerating them to create jobs and bring economic benefits to the wider area.

Ten years ago they acquired Wynyard Park in Billingham after Samsung had announced that it was closing its operations there. They have now created 2000 jobs and have attracted £200million of private investment at Wynyard Park.

Seven years ago they invested in the advanced manufacturing manufacturing park (a joint venture betweeen the University of Sheffield, Boeing, British Aerospace and Rolls Royce) to build seventeen units for local small and medium size enterprises associated with aerospace research and other advanced manufacturing on the site of the former Orgreave colliery. In 2013, when the site was fully occupied, they sold their investment.

In 2012 they acquired Discovery Park from Pfizer after Pfizer had announced that they were closing down all their operations there and were planning to demolish the buildings at the site. When Pfizer made this announcement they employed 2,200 staff all of whom were subject to redundancy notice. By March 2015 700 of the Pfizer jobs have been retained and a further 1,700 jobs have been created by more than 100 new tenants on the site. Currently total job numbers are in excess of 2,400 and Discovery Park is on track to deliver more than 3,000 new jobs.

Trevor Carter and Chris Musgrave plan to transform the 800-acre site at Manston with a £1 billion redevelopment, over a 20-year period, into a mixed-use scheme helping to create more than 4,000 jobs. They will be announcing more details over the next few weeks.

Conclusions

The truth is that Manston has failed over a prolonged period of time to run as a commercially successful airport.

Kent County Council gave strong support to various investors but the reality of commercial aviation at Manston Airport led to very significant losses. In fact, in the 16 years since it was taken into privately ownership it has incurred losses by those who have tried to operate it in excess of £100 million.

The objective now must therefore be to make sure that we have owners who want to do exciting things on the site and that the land is not left abandoned.

Bristow Group had chosen Manston as its location for the regional search and rescue base; when the airport closed the company decided to locate that base at Lydd. Kent County Council is pleased that this vital service will still be located in Kent. Lydd Airport is also starting a substantial investment programme to extend its runway and construct new aviation facilities.

Surely it is now time to look at a B Plan for Manston.

The driver must be to seize the best opportunity to create a significant number of new jobs and bring prosperity into East Kent.

RiverOak has not managed to convince Thanet District Council that there is a viable business plan. We believe the new owners have got a credible plan and the financial ability to create substantial numbers of new jobs which will bring prosperity and economic growth to East Kent.



Paul Carter, Leader of Kent County Council:

"I would like to make it abundantly clear that in my 10 years as Leader of Kent County Council I have done everything in my power to help and support the economy of East Kent. I believe that this document demonstrates and evidences exactly that."

Myth busting questions and answers

1. What is Kent County Council's stance on Manston Airport? At first you supported a CPO process but now you are supporting a business park – is this not inconsistent?

Promoting job creation, supporting business growth and generating economic prosperity for the residents of East Kent is - and always has been - Kent County Council's primary objective. Kent County Council (KCC) has never deviated from this.

The closure of Manston Airport was met with deep disappointment at County Hall. Any viable proposal from an aviation company with sufficient financial backing to run Manston as an airport would have been strongly supported by Kent County Council as our debate at the July council meeting made clear. No viable proposal was presented to Kent County Council or TDC.

The sale of Manston to the Discovery Park Team Musgrave and Cartner in September offers substantial private sector investment to support job creation and economic growth for Thanet. Cartner and Musgrave have a strong track-record at Discovery Park with 1,700 new jobs since 2012.

2. How can you say no viable proposal came forward? Didn't RiverOak say they would pay the full asking price?

Kent County Council asked RiverOak if we could see their business plan. RiverOak has consistently refused to let us see any details on the grounds they are commercially confidential. TDC took a decision that the information supplied by RiverOak to it was insufficient to support a Compulsory Purchase Order.[1] We have therefore concluded that RiverOak's plan is not viable. Representatives of Mrs Ann Gloag explained to the Transport Select Committee why Mrs Gloag refused to accept the offer from RiverOak.[2]

[1] **http://democracy.thanet.gov.uk/documents/b10075/Supplementary%20Agenda%202%2031st-Jul-2014%2019.00%20Cabinet.pdf?T=9**

[2] **http://parliamentlive.tv/Event/Index/d4330491-c83e-4204-a339-28a011b42071**

3. Did you promote Manston to the best of your abilities to attract a new investor when the closure was announced? Is it not true that Manston has unique infrastructure with the longest runway in England and superb transport links?

Kent County Council has taken every opportunity to support and promote the use of regional airports such as Manston. The authority's discussion document Bold Steps for Aviation, written in 2012, makes our position abundantly clear, showing Kent County Council has lobbied central Government to prioritise Manston above other proposals, such as the establishment of a Thames Estuary Airport.

Our support for Manston is evidenced by our substantial investment in transport infrastructure making Manston more accessible to a greater potential customer base, including investing in the East Kent Access Road, a new railway station, and improving the rail infrastructure. The Regional Growth Fund has been made available to companies with plans to increase employment.

Since the Minister of Defence privatised the airport there have been three private owners of Manston Airport: Wiggins, Infratil, and Ann Gloag. Despite ambitious plans to increase passenger numbers and freight operations, each of these has sustained significant financial losses totalling over £100 million.

When Manston Airport was put up for sale, Kent County Council introduced PWC (the marketing agents for Infratil) to 30 potential buyers from around the world (including RyanAir) none of whom in the event decided that they could make the airport profitable.

Myth busting questions and answers

4. What offers of support were made by Kent County Council to Thanet District Council to assist them with their CPO process?

We very much supported Thanet District Council in the potential for a CPO subject to the outcome of their independent feasibility study and submissions by indemnity partners.

At the Leader's request, Kent County Council's Director of Governance and Law offered to help Thanet District Council in the CPO process. TDC responded in writing saying *"We need to do the evaluation of any Expressions of Interest first before we can begin to assess what legal support might be needed moving forward and whether any of that support would need to be commissioned from KCC. We are not in a position to make any decisions until we have the result of this, but I will be more than happy to consider making such an approach at the appropriate time."*

The offer of support was repeated several times by the Leader at different meetings with Iris Johnston.

5. Who now owns Manston? Is it Mr Cartner, Mr Musgrave, Ann Gloag?

The company that owns Manston Airport has three shareholders; Mr Cartner (40%), Mr Musgrave (40%), and Mrs Gloag (20%). This information has been provided to the Select Committee by solicitors acting for Mr Cartner and Mr Musgrave.

6. How could the Leader of Kent County Council support Mr Cartner and Mr Musgraves' purchase of the site? I have heard Wynyard Park is in debt and promised to supply thousands of jobs and only a proportion have been realised.

Information provided to Kent County Council shows that Wynyard Park is currently debt free. Under Mr Cartner and Mr Musgraves' ownership, Wynyard Park has created more than 2000 jobs and attracted £200million of private investment. Publications which have asserted that this is incorrect have been served with a letter from a firm of solicitors specialising in libel.

(NOTE: It is quite normal for development companies to carry debt/bank borrowings on their balance sheet. The key is sensible debt to value ratios).

7. How can you be excited by the new proposition by Cartner and Musgrave if you have seen no plans? What are the plans?

The new owners issued a press release when they acquired Manston Airport outlining their intention to create more than 4,000 jobs and a £1 billion redevelopment. They will be announcing more details in the next few weeks.

At the time when Mr Cartner and Mr Musgrave outlined these plans to the Leader of Kent County Council, the planning consultants had not yet completed the master plan so no document was handed over. However, a fairly detailed description of what was envisaged was discussed. The plans include a new sports centre and the financial backing of the Spitfire museum, as well as plans to bring advanced manufacturing to the site.

8. How can Kent County Council ignore its democratic mandate? Haven't you seen the petitions showing that the people of Thanet want an airport?

The Save Manston Campaign was invited to County Hall to present its petition. However when representatives of the group arrived they had not brought it with them. All letters and emails from objectors have received replies. We have also received letters of support re the closure.

9. When have you met Ann Gloag or her colleagues and what was the purpose of each meeting? Are the minutes available? Was a change of use discussed?

Elected members and officers of the council met Ann Gloag and her company representatives on a number of occasions before and after she bought the airport. The purpose of the meetings was to establish what were her intentions for bringing jobs and new investment to Kent and to sustain a viable airport.

Myth busting questions and answers

At a meeting on 14 March 2014 when we were expecting an update on progress, much to our suprise we were told confidentially that given the scale of losses it had been decided to notify staff the following week that a redundancy process was necessary.

Subsequently a meeting was held on 3 July 2014 to discuss with Ann Gloag what she intended, and she explained she was discussing a possible sale but that the details were commercially confidential.

10. Why have you appeared to support Ann Gloag when she obviously bought the site to turn it into a housing development and never intended to operate an airport? Have you a vested interest? Did you not say you wanted a housing development last year?

Mrs Gloag told us that it was her intention to run Manston Airport as a commercial venture and that was why she hired aviation specialists to put in place a strong business plan for aviation and support the implementation. She also retained the previous Managing Director of Manston, Mr Charles Buchanan. She told us subsequently that it was only when she was advised that the airport could not be made viable, and that the losses of £100 thousand per week could not be sustained, that she decided that the airport must be closed.

During our discussions, a change of use of the airport was not discussed although we did touch on alternative uses for parts of the airport site such as aviation hangar space, servicing and maintenance. The Leader of the Council has no private business interests in the Manston site and will not benefit personally from any proposal relating to the development.

11. Thanet does not need more business parks. Existing local business parks are struggling to attract businesses and are over 50% empty.

When Pfizer announced closure of its R&D facility at Sandwich it was a common view that all the buildings would need to be demolished and the site could not be redeveloped.

Mr Cartner and Mr Musgrave have successfully applied for planning approval for a multi-use development to include commercial, retail and housing: the site is currently over 50% reoccupied by commercial users and there are now 2,400 jobs. It was their success with Discovery Park that persuaded them of the potential at Manston, and they already have a number of substantial potential tenants.

The Tribunal's decision was quashed on appeal to the Queens Bench Division of the High Court of Justice, & an order that the respondent be struck off the roll was substituted on 22nd October 1993.

No. 6200/1992
5133

IN THE MATTER OF ANTHONY FREUDMANN, solicitor

- AND -

IN THE MATTER OF THE SOLICITORS ACT 1974

[redacted]
Clerk to the Solicitors Disciplinary Tribunal

Mr. A.J.C. Paines (in the Chair)
Mr. D.J. Leverton
Mr. R.P.L. McMurtrie

Date of hearing: 29th October 1992

F I N D I N G S A N D O R D E R

of the Solicitors' Disciplinary Tribunal
constituted under the Solicitors Act 1974

An application was duly made on behalf of the Solicitors Complaints Bureau by Geoffrey Williams, solicitor, of 36 West Bute Street, Cardiff on 17th July 1992 that Anthony Freudmann of [redacted], Shrewsbury, Shropshire might be required to answer the allegations contained in the affidavit which accompanied the application and that such Order might be made as the Tribunal should think right.

The allegation was that the respondent had been guilty of conduct unbefitting a solicitor in that he had used clients' funds for his own purposes.

The application was heard at the Court Room, No. 60 Carey Street, London WC2 on 29th October 1992 when Geoffrey Williams, solicitor and partner with the firm of Cartwrights Adams & Black of 36 West Bute Street, Cardiff, appeared for the applicant and Robin W. Onions of Messrs. Lanyon Bowdler of 23 Swan Hill, Shrewsbury appeared for the respondent.

The evidence before the Tribunal included the admissions of the respondent and exhibits "AF1" to "AF3" inclusive. The respondent gave evidence.

The facts are set out in paragraphs 1 to 15 hereunder.

1. The respondent, born in 1946, was admitted a solicitor in 1972. At all material times he practised as a solicitor in partnership under the style of Wace Morgan at 2 Bellmont, Shrewsbury.

2. Messrs. Wace Morgan acted for Mr. & Mrs. K in conveyancing transactions. Mr. & Mrs. K were due to complete a sale and a purchase of property on or about 24th April 1981. The purchaser from Mr. & Mrs. K failed to complete. To enable Mr. & Mrs. K to complete their purchase an advance was made by Mr. H.C. Wace to Messrs. Wace Morgan and thence to Mr. & Mrs. K. At the material time Mr. Wace was a partner in Wace Morgan and subsequently became a consultant.

3. The purchase having been completed the principle amount of the loan was subsequently repaid to Mr. Wace in or about June 1982. Interest however remained outstanding.

4. High Court proceedings were issued by Messrs. Wace Morgan on behalf of Mr. & Mrs. K against the defaulting purchaser. The proceedings sought to recover various losses sustained by reason of the purchaser's default including the sum of £3,061.06 representing interest due on the loan provided by Mr. Wace. Judgment was entered on or about 7th June 1985 for the total sum of £5,576.90. It was agreed that the defaulting purchaser should discharge the judgment by instalments of £100.00 per month.

5. The defaulting purchaser duly made instalment payments. Between 8th April 1986 and 27th October 1987 Mr. Wace received nine payments totalling £3,662.69 both from instalments received from the purchaser and from the partnership funds of Messrs. Wace Morgan. The final such payment of £2,087.79 made on 27th October 1987 was in full and final settlement of all sums due to Mr. Wace.

6. On 22nd January 1991 the sum of £1,223.94 was held in client account by Messrs. Wace Morgan on behalf of Mr. & Mrs. K in relation to their matters. The respondent paid the sum of £1,200.00 into an account he opened at the Shrewsbury branch of Cheltenham & Gloucester Building Society. It was not a client account but rather a trustee account with the respondent named as the trustee of E.C.K. Payments were made from that account by the respondent of a personal nature unbeknown to his partners or Mr. K. The payments had nothing whatsoever to do with Mr. K.

7. The partners of Messrs. Wace Morgan having discovered those matters gave the respondent notice of termination of partnership with immediate effect on 14th June 1991. On the same day the respondent repaid the sum of £1,200.00 to the trustee account at Cheltenham & Gloucester Building Society.

8. Messrs. Wace Morgan submitted a fee note to Mr. & Mrs. K in the sum of £417.75 on 16th September 1991. The firm claimed a further sum of £230.00 for costs incurred. All other amounts recovered from the defaulting purchaser, save for the sums paid to Mr. Wace, were due to Mr. & Mrs. K. At the date upon which the respondent opened the Building Society account, no bills of costs had been delivered to Mr. & Mrs. K. Subsequent to the repayment made by the respondent Messrs. Wace Morgan paid the sum of £809.73 to Mr. & Mrs. K, the payment being made on 19th June 1991. At the date of the application Messrs. Wace Morgan held the sum of £224.31 which was due to Mr. & Mrs. K.

9. Messrs. Wace Morgan acted for Mrs. P in matrimonial proceedings. A lump sum settlement of £5,646.66 was recovered for Mrs. P who was legally aided. A payment was made to Mrs. P and the balance of £1,732.19 was retained pending a Legal Aid taxation.

10. The sum so retained was utilised to open account number R817435/8 with Cheltenham & Gloucester Building Society, High Street, Shrewsbury. The account was opened on 19th September 1986 in the names of the respondent and his then partner, Mr. Trevor Wheatley as trustees for Mrs. P.

11. In the five year period following 6th October 1986 the respondent made various withdrawals from the Building Society account in an approximate total sum of £1,295.00. Those withdrawals were for the personal use and benefit of the respondent and were made without the knowledge of his partners. The payments had nothing to do with Mrs. P. They included a payment of £260.00 to Diners Club Limited and a cash withdrawal of £120.00.

12. Those matters were discovered in or about July 1991. At the date of the applicant's application the respondent had not repaid the sums he withdrew from that account.

13. The respondent acted for Mrs. H in a claim for damages. The sum of £30,000.00 was recovered from the defendants. The sum of £27,000.00 was invested pursuant to instructions received from Mrs. H who was legally aided. The balance of £3,000.00 was invested in an account with Cheltenham & Gloucester Building Society in the names of the respondent and his then partner Miss Madeleine Butcher. Under cover of a letter dated 15th September 1987 the respondent forwarded a Building Society cheque for £1,000.00 to Mrs. H. The respondent advised Mrs. H that he was retaining the balance of £2,000.00 until he resolved the question of the recovery of Legal Aid costs and certain costs not covered by Mrs. H's Legal Aid certificate. He indicated that he hoped "shortly to be able to put a figure on those costs." The costs of the said proceedings were paid in full by the defendants on or about 12th September 1988. The Legal Aid certificate was duly discharged.

14. In or about January 1992 the respondent met Mr. Fraser, the senior partner of Messrs. Wace Morgan and admitted that in the three year period after June 1987 he had made withdrawals from the Building Society account for his own use and benefit. Such withdrawals were made unbeknown to the respondent's partners and the payments had nothing whatsoever to do with Mrs. H. Upon discovery of the matters the partners of Wace Morgan paid Mrs. H the sum of £2,207.00 out of their own resources.

15. Messrs. Wace Morgan submitted separate complaints to the Solicitors Complaints Bureau in relation to the three individual matters referred to.

The submissions of the applicant

16. In the matter of the monies held which belonged to Mr. & Mrs. K the respondent made some fifteen payments out of the Building Society account which included cash withdrawals. All payments were made for the respondent's personal benefit. It was accepted that the respondent had repaid the principle sum back into the account of £1,200.00. The respondent would argue that at the time he had serious personal problems and there was no argument before the Tribunal that those monies were not clients' monies.

17. All monies taken by the respondent were monies which began as credits in client account. If the monies represented costs then no bill or written intimation had been delivered to the client.

18. With regard to Mrs. P, a lump sum had been recovered. It was believed that the statutory charge for costs, as it was a Legal Aid matter, applied. The respondent's explanation was that he had taken an unauthorised loan of office money born out of his frustration. The Building Society account had been opened on 9th September 1986 in the names of the respondent and Mr. Wheatley. The respondent's argument was that it would "all come out in the wash" when arrangements on dissolution of his partnership were concluded. That money had not therefore been repaid.

19. In the matter of Mrs. H, damages had been recovered on her behalf in the sum of £30,000.00 of which £28,000.00 had been paid out to her. The respondent had taken £2,200.00 for his own purposes over the years commencing in June 1987. On 15th September 1987 the respondent wrote to the client in the following terms "I hope shortly to put figure on costs" and sent a further £1,000.00. The proceedings had been settled and costs had been paid in full by the defendants. The respondent had used clients funds for his own purposes. The respondent had made eight withdrawals over a period of two years. The respondent had not sought to make a repayment of those monies and expected as in the case of Mrs. P that it would "all come out in the wash."

20. In respect of the three clients matters, the sums which the respondent had utilised were in the case of Mr. & Mrs. K £1,160.00, in the case of Mrs. P £1,295.00 and in the case of Mrs. H £2,207, making a total of £4,662.87. There had been some twenty-seven separate misappropriations.

21. The applicant accepted that he was unable to establish that the respondent had formed an intention permanently to deprive anybody of the monies taken. The applicant did however take issue with the respondent's argument that he was borrowing the money. In the submission of the applicant for there to be a "borrowing" there must be a willing lender. If there were lenders in this matter, they did not know what was going on.

22. Even if the respondent had not formulated an intention permanently to deprive any person of the monies, in two of the cases referred to he had not repaid any money.

23. There appeared to have been a suggestion that some of the monies represented costs, in which case the sums would have been divisable between the respondent and his partners and should not have been paid to the respondent alone.

24. In the submission of the applicant the respondent had undertaken a misappropriation of clients funds over a long period of time. The number of payments had been on a large scale and had been taken clandestinely. It was accepted that the transactions had been recorded but had occurred without the knowledge of the clients or the respondent's partners.

25. It was submitted that the respondent had indulged in a deliberate and deceitful course of conduct over a long period of time.

26. The behaviour of the respondent had a disastrous effect not only on the respondent himself but also on the solicitors' profession. The Tribunal was invited to consider the matter as one of very great seriousness.

The submissions of the respondent

27. The respondent obtained a degree from London University and served his articles with a small firm of solicitors in West London, qualifying as a solicitor in 1972. He moved in July 1973 to the firm which became Wace Morgan. As an assistant solicitor with the firm, the respondent was responsible for managing and developing the firm's litigation practice. He became a partner in 1975. As a partner his responsibilities remained the same although gradually he assumed responsibility for part of the management of the firm. He was responsible for the introduction of a number of modern systems such as a computerised accounting system and the introduction of the concept of fees and work-load assessment and analysis.

28. During the 1980's the respondent's work changed and he ceased to deal with criminal work. He also reduced the divorce and family work undertaken by him. He developed a specialisation in personal injury litigation, medical negligence and employment law. The success of the firm's litigation department provided an impetus for the growth of the firm. By 1987 the firm had grown considerably. And by 1987 the respondent was responsible for personnel matters, the number of staff employed in the firm being about fifty at that time, as well as financial control. Following the introduction by others of unsuccessful management arrangements the respondent became managing partner. Although it was felt that that position was a full time job, the respondent was still expected to devote one-third of his time to fee earning. He also had Council duties and had been appointed a Deputy District Judge (formerly a Deputy County Court Registrar), the respondent considered both appointments to be not only a personal honour but an honour to the firm. He had come to accept that he was working far too hard and believed that his judgment had become clouded as a result of what he and his partners demanded of him.

29. In particular the respondent took on one case which with hindsight he realised had provided considerable additional pressure. He had been instructed by a lady who had been engaged in bitter divorce proceedings which involved allegations of child abuse, physical cruelty, sexual malpractices and major fraud. The respondent had been the thirteenth solicitor to represent the client, she proved to be an extraordinarily demanding client. When the papers were delivered to the respondent they proved to be of great number. The client would telephone most evenings and at week-ends to speak to the respondent at his home and there followed innumerable hearings in London. The respondent said he worked himself into an absolute standstill by the end of the case in the Autumn of 1988, the respondent was, however, able to reflect with some satisfaction that the financial settlement finally achieved was some three times as much as the amount for which the client's former solicitors had advised her to settle. The respondent confirmed that his firm had been handsomely paid for all the work but the respondent had dealt with the case entirely on his own and upon reflection had come to realise that it had dominated his life to the point when he totally neglected his own affairs.

30. The firm of Wace Morgan was long established and in 1978 had taken over a small firm. Despite the efforts of the partners Messrs. Wace Morgan never showed great profit. The respondent had given a great deal of thought to the profitability of the firm which had not really improved despite the introduction of new business systems to include time recording and costs targets. One of the main reasons why the firm

consistently failed to achieve reasonable profits was the failure by three of the senior partners to achieve their costs targets or indeed to get anywhere close to them.

31. The respondent had built up a sense of grievance and resentment against the three partners who continually failed to meet their targets and to accept their responsibilities as partners. The respondent believed he should have taken a decision and left the partnership but did not do so because he felt great loyalty to his partners and the firm's staff.

32. In addition to the failure to meet costs targets there were persistent problems in credit control in that there were substantial sums outstanding for bills that had not been paid. The respondent's sense of disillusionment was increased when he learnt that one of the partners had delivered bills which had been entered as "bills delivered" but had not been sent to the clients. The firm had become responsible for the payment of V.A.T thereon and the credit control showed the bills as outstanding whereas in fact they had never been delivered.

33. The respondent told the Tribunal that it was against that general background that he behaved in a way which he found difficult to understand and which he did not in any way seek to excuse.

34. In the matter of Mr. & Mrs. K the respondent had not had any personal dealings in the clients' transactions and the file first appeared on his desk in his capacity as managing partner in late December 1990. There appeared to be a substantial sum on client account and having ascertained that no money was due to Mr. Wace, decided to pay the money to the client. He requisitioned a cheque but when it arrived at his desk he again looked at the file and realised that his firm was probably owed fees of several hundred pounds in connection with the collection of the debt. Instead in accordance with his firm's accepted practice he arranged to put the money into a building society account. At the time he opened the account he had absolutely no intention of borrowing or using any of the money.

35. At that time the respondent's own personal finances were strained and on 11th February 1991 he planned to see the firm's Bank Manager with a view either to extending his own overdraft or extending the firm's overdraft. His idea had been to go to the partners to ask for permission to make a special drawing on the firm's overdrawn account. The Bank Manager made it clear that the firm's overdraft could not be extended. The respondent did not following that decision ask for an extension of his own overdraft because to have done so would have meant disclosing the state of his own finances and that of the partnership. The respondent had a number of pressing bills to pay for medical expenses for his son who was an epileptic. The respondent accepted that faced with pressing demands and apparent inability to meet those demands over the period between February and April 1991 he withdrew sums of money from the Building Society account opened in the name of Mr. K. He had not intended to use that money for his own purpose and invited the Tribunal to consider the fact that he had not withdrawn the money in one lump sum. He used the money to pay a number of small bills and said that it was his intention always to borrow the money on the basis that he would repay it as soon as possible.

36. The respondent believed he had made it clear in correspondence that at least part of the money in the Building Society account was money to which the respondent and his partners were entitled as profit costs. He had however accepted advice that until the bill was delivered and the money was transferred from the Building Society account in settlement of that bill then the money remained technically client account money. In the submission of the respondent both Mr. Wace and the client accepted that they had received all monies due to them.

37. As soon as the allegation had been put to the respondent in June 1991, the respondent made arrangements through his wife for the sum to be repaid with immediate effect.

38. In connection with the matter of Mrs. P the respondent said that the sum retained on account of costs pending a Legal Aid taxation was, in accordance with the normal practice referred to before, deposited in an account with Cheltenham & Gloucester Building Society. The respondent accepted that subsequently he withdrew a total of £1,295.00 and that the various withdrawals made had been so made without the knowledge or approval of the respondent's former partners.

39. The respondent was of the view that of the sum retained some if not all of the money was due to Messrs. Wace Morgan as profit costs, again he had to accept that until any bill was delivered the sum in that account technically remained client money. When the respondent took the money it was always his intention to repay and again the money was taken against the background of monies due to the firm and the respondent's own particular difficult financial circumstances.

40. With regard to Mrs. H, the respondent confirmed that he had acted for her and had negotiated an agreed settlement. The respondent said that the sum of £27,000.00 was invested in accordance with Mrs. H's instructions and the balance of £3,000.00 was invested in an account with Cheltenham and Gloucester Building Society. The respondent accepted that he had written to Mrs. H on 15th September 1987 which letter made it clear that the sum of £3,000.00 had been invested with a building society. The respondent believed that he fairly explained the position to Mrs. H and in fact sent her a cheque for £1,000.00 meaning that the sum retained by his firm was £2,000.00 on account of costs.

41. The respondent accepted that he subsequently made withdrawals from that account for his own use without the knowledge or permission of the client, he accepted that he owed the sum of £2,207.00.

42. The respondent was asked to leave the partnership on 14th June 1991. He attended at his office without warning of what was to happen and whilst he was engaged in conversation with one of his partners, another partner let down the tyres on his leased car. His car keys were taken and he was "frog-marched" out of the office in full view of the partners, staff and clients. The car had been parked on a public street and the action of letting down the car tyres had been undertaken in full view of members of the public. The respondent knew that what had happened had quickly become public knowledge in Shrewsbury and the respondent still suffered nightmares about the events of that morning. He accepted responsibility for what he had done, but the actions of his former partners that morning had stripped him of any dignity.

43. The respondent said he could only describe his leaving the partnership as a form of bereavement. He had been involved in the firm since 1973 and never imagined that he would leave the partnership in the manner in which he did. He accepted the need of his former partners to protect their own interests but still found some of their actions difficult to accept. The respondent said that after he left the partnership he decided to try to maintain himself by continuing to work as a Deputy District Judge and also to undertake agency work for the Crown Prosecution Service. He was professionally advised that while the matter was before the Solicitors Complaints Bureau, it was private and as a holder of a Practising Certificate he could undertake work. One of the respondent's former partners wrote and informed the Lord Chancellor's Department of the circumstances of his leaving the partnership, as a result of which the respondent was suspended from his duties as a Deputy District Judge.

44. The respondent began to work as an agent for the Crown Prosecution Service following an approach made to him in October 1991 by the Branch Area Prosecutor. He worked for about one month until the Branch Prosecutor informed him that he had been contacted by one of the respondent's former partners who had made known the circumstances of the respondent leaving the firm. As a result he was no longer able to work as a Crown Prosecution Service Agent.

45. At the beginning of January 1992 the respondent had been approached by a reporter from a local newspaper who told the respondent that he had been informed by a member of his firm that the respondent faced serious charges involving clients money and he wanted to give the respondent an opportunity to comment before he ran the story. The respondent had been devastated. The respondent told the reporter the exact position and the story was not run.

46. The allegations against the respondent had also been reported on two separate occasions to the County Council. The Chief Executive had been informed that the respondent had been dismissed and also the Chairman of the County Council.

47. In July 1992 the County solicitor had been telephoned by one of the respondent's former partners who was informed that the respondent's case had been referred to the Disciplinary Tribunal.

48. All of these actions on the part of the respondent's former partners caused him considerable embarrassment, alarm and distress.

49. Whilst the respondent accepted that he had borrowed what was technically clients' money which he was not entitled to do, he had suffered serious financial loss as the result of his actions. He had lost the share of fees which he would have received in the period June 1991 to October 1992. He was still engaged in a dispute with his former partners over the firm's accounts. He believed that a substantial sum stood to his credit in the capital account but draft accounts had been delivered to him which had been prepared in such a way to show his capital as being in deficit to the sum of £23,000.00. That was not because of any irregularities. It was because of disputes concerning such matters as the value of work in progress, the value of the firm's library and the fact that having repossessed his firm's car, the former partners kept it for a year and then purported to charge the respondent £7,000.00 for that year's leasing costs. The respondent had also to suffer petty losses such as, for example, when the firm without warning stopped his

petrol account at a local garage, after he left them: he went in to pay a petrol bill and was asked by a member of the garage staff why he had left the firm.

50. The respondent's wife's car insurance was cancelled without warning or reference to the respondent, as was his private health insurance. That in itself caused considerable distress as the health cover extended to the respondent's son who was receiving treatment for epilepsy. For some time the insurance company stated that the policy had lapsed and the respondent would have to commence a fresh policy and his son would not be covered. After considerable pressure the respondent had happily been able to negotiate a continuation of the policy.

51. The respondent had been appointed trustee for a Barrister who had practised in Chester and had died in 1982. He gladly accepted her request to act as trustee and did so until 14th June 1992. On 15th June 1992 he had been telephoned by the Barrister's brother and co-trustee who said he had been contacted by one of the respondent's former partners and had been informed that the respondent had left the firm because of a serious breach of trust. The respondent explained the position to his co-trustee who subsequently rang back to state that whilst he wanted the respondent to continue as a trustee he felt that he had no alternative but to change solicitors completely and felt that it would be best if the respondent were to retire as trustee. The respondent agreed to do so but felt very depressed at having let down his Barrister friend.

52. The respondent was forty-six years of age, married, but separated from his wife. There were three children of the marriage. The respondent was still supporting the youngest of the children financially.

53. The respondent had obtained employment on a temporary basis as a company secretary with a small limited company for which he worked one and one-half days per week for a very modest salary. He also had obtained a consultancy with Central Law Training and specialised in legal training relating to Local Government Law. As part of his employment with that firm he was provided with a car and was paid a modest salary. That was also a temporary position.

54. The respondent was a Councillor for Shropshire County Council and had represented a Shrewsbury ward since 1981. Prior to that he had been Parish Councillor for a Parish on the outskirts of Shrewsbury.

55. The respondent had been leader of Shropshire County Council since April 1988. In addition to the leadership of the Council he also held the Chairmanship of the Policy and Resources Committee. Before that he was Chairman of the Leisure Services Committee for three years. The Policy and Resources Committee was the major Council Committee and established the Council's broad policy. It was also required to set and oversee the Council's budget and the budget for the then current financial year was set at £250 million.

56. The respondent was also a trustee of the Shropshire County Council Employees Pension Fund with the value of the Fund standing at approximately £200 million.

57. From 1983 to 1989, when he resigned through pressure of work, the respondent was a founder Director of the Shropshire Hospice. That was an unpaid position which involved many hours of voluntary work culminating in 1989 with the successful opening of the hospice.

58. For many years, the respondent had been the Honorary Solicitor to the Shrewsbury Citizens Advice Bureau. That had involved him in many hours of unpaid work on behalf of the community.

59. Initially when the respondent became leader of Shropshire County Council, there was no salary for that position but subsequently the Government introduced legislation that permitted the payment of salaries to Council leaders. The respondent received a salary of £5,000.00 per annum from May 1991 and in addition received attendance allowances for attending various Committee meetings. His duties increased when he became leader.

60. The respondent had informed the Council's Chief Officer and the Secretary of his Political Party of the proceedings pending against him. He had already decided to stand down from Council duties at the election in May 1993 as the possible outcome of the disciplinary proceedings, the respondent had decided to resign his Council duties and his seat as a Councillor with immediate effect. He was also of the opinion that he would be unable to continue to work for Capital Office Systems Limited and Central Law Training if his ability to practice were removed.

61. Although the respondent remained separated from his wife she had supported him. Their former home had been sold at a reduced sum and his former wife claimed the net equity in the property. The respondent was able to understand her claim as the fact that the house had to be sold on disadvantageous terms was the respondent's fault and not hers.

62. Since the allegations had come to light in June 1991 the respondent had had to live with the probability that the proceedings would culminate in an appearance before the Disciplinary Tribunal and that his entire practising life would be at stake.

63. The respondent fully accepted that he had let himself down, he had let his partners down and that he had let down the solicitors' profession. The respondent maintained that he only borrowed the money, which he always intended to repay. He had striven as best he could since 14th June 1991 to rebuild his life.

64. The respondent bitterly regretted what he had done and offered to his clients, his former partners and the Tribunal his deepest apologies.

The Tribunal FIND the allegation to have been substantiated, indeed it was not contested. The respondent had taken for his own use small sums of money. It was fortunate, and the Tribunal accepted, that no clients had suffered loss. The Tribunal has paid heed to the argument of the respondent that there were outstanding billable costs and accept that to some extent this mitigates the fact that the respondent had taken for his own purposes clients' money. There was no doubt that in the technical sense such money was clients' money and the Tribunal are able to give weight to the respondent's explanation. It is, however, not acceptable for a partner to take for his own use monies which were properly destined to be included in the fees earned by the partnership. The Tribunal perceive that there was within the partnership a considerable clash of personalities. The respondent was doubtless ambitious, dominating and aggressive. There was no doubt that he had done much good work. He entered partnership with partners who perhaps did not appreciate his drive, dynamism and business acumen. Of course, as the respondent himself indicated, the proper solution would have been

to withdraw from the partnership and seek an association with other partners or firm which matched his own views in such matters. It had to be said that the behaviour of the respondent's former partners following his ejection from the partnership did little to serve the good reputation of the solicitors' profession and could not do otherwise than evoke a degree of sympathy for the respondent.

The respondent's professional and public life was in shreds. Before appearing before the Tribunal, the respondent had already been made to suffer to a very considerable degree. The respondent's behaviour had been, of course, unacceptable. It was clear that he had been under pressure which, although to a certain extent he had placed upon himself, had been considerable. The Tribunal was impressed by the testimonial letters offered in support of the respondent.

It is because this respondent has already suffered to a very great degree that the Tribunal has in these exceptional circumstances decided to treat him with an unusual degree of leniency. Although the Tribunal gave grave and deep consideration to making an Order which would deprive the respondent of his ability to practise, they have decided in this case to impose a financial penalty. The Tribunal ORDER that the respondent, Anthony Freudmann of Shrewsbury, Shropshire, solicitor, do pay a fine of £5,000.00 such penalty to be forfeit to Her Majesty the Queen and they further Order that he do pay the costs of and incidental to this application and enquiry, such costs to be taxed by one of the Taxing Masters of the Supreme Court in the absence of agreement between the parties.

DATED AND FILED WITH THE LAW SOCIETY
this 21st day of January 1993

on behalf of the Tribunal



A.J.C. Paines
Chairman

Manston airport: Former managing director Tony Freudmann acting for American group RiverOak who had £5m offer rejected before closure announcement

(/NEWS/LIVE-NEWS/)

NEWS ALERTS
(/NEWS/EMAIL-ALERTS/)

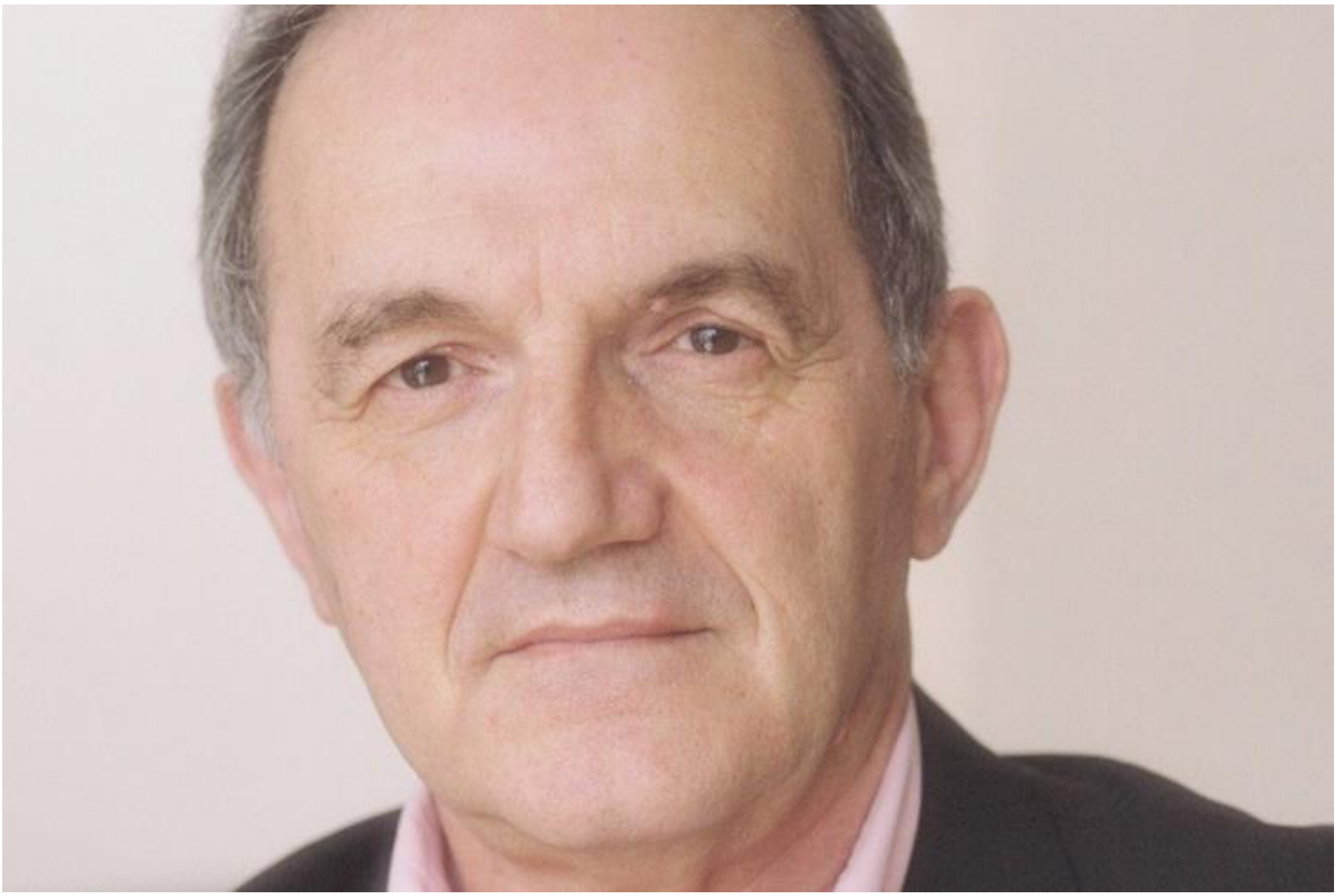
By Chris Price **cprice@thekmgroup.co.uk (mailto:cprice@thekmgroup.co.uk)**

15:00, 07 May 2014 | **Updated:** 15:11, 07 May 2014

The former managing director of Manston airport is working for the American group that attempted to buy the site, it has emerged.

Tony Freudmann led operations at the airport from 1997 to 2004 and is acting as spokesman for RiverOak Investment Corp LLC, who made a £5m offer for the site at the weekend, which was rejected a day later.

The company from Connecticut went public on its involvement after it was announced owner Ann Gloag is to close the airport on May 15, saying no "viable alternative" had been found. (http://www.kentonline.co.uk/kent-business/county-news/airport-bidders-go-public-as-16824/)



RiverOak director Tony Freudmann

After hearing of the airport's troubles, Mr Freudmann said he "made it my business" to find prospective buyers and decided to help RiverOak after a chance meeting.

He said: "My view all along has been that Manston's future is in cargo and engineering.

"By lucky chance I was introduced to RiverOak who have exactly the same view.

> **"My view all along has been that Manston's future is in cargo and engineering..." - Former Manston MD Tony Freudmann**

"The aviation industry is quite small and not many people own airports so the problem was getting other people to look at it as none of them understood the business.

"They were scared by the cash burn and that is why it took PwC so long to sell the business for Infratil.

"There have been a number of parties who have looked at it and with RiverOak I have found a party who understand the business.

"History doesn't repeat itself, I know that. This offer is going back to where the airport was in 2003, which is developing a reputation as a cargo airport and operating in profit.

"The last 10 years has been a departure from that plan."

First revealed by political editor Paul Francis' blog, (http://blogs.kentonline.co.uk/post/Is-there-time-to-rescue-Manston.aspx) Mr Freudmann oversaw Manston's transfer from an RAF base to a commerical operation.



Tony Freudmann

He was vice president of the Wiggins Group, which owned and ran the airport before it was sold to PlaneStation, where he was senior vice president between 1994 and 2005.

Mr Freudmann has also had his own consultancy – FT International – between 2009 and 2013 in which he "delivered high level consultancy services in relation to aviation and tourism development to the public and private sectors in the UK, Germany and America".

He is now chief executive officer of a firm called Annax Aviation Services in which he manages "the global regional airports and airlines strategy of a priately-owned investment group".

He was also instrumental in the failed attempt to establish flights between Manston and Virginia in America back in 2006.

The plug was pulled on that after poor ticket sales. Kent County Council lost £300,000 in the venture.



Manston airport before it closed

Mr Freudmann added: "One of the tragedies of this is what the staff have been through.

"There are 144 staff, a lot of whom are long-serving and loyal. The anxiety of the last few weeks has been awful. I feel very sorry for them.

"Our view is that if the airport is to grow and expand it needs all the staff there at the moment.

"The plan is to move forward on the same cost basis."

ıline&utm_medium=referral&utm_content=thumbnails-d:Below Article Thumbnails:)
ıline&utm_medium=referral&utm_content=thumbnails-d:Below Article Thumbnails:)
You May Like

(http://adtopia.club/native/track.php?acid=177&acsrc=1&acacnt=TABOOLA1TCG&cid=1717596&crvid=163382525&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=Santander+To+Issue+%C2%A31.6+Billion+To+The+Public+%28Look+Up+Your+Name%29&platform=De

Santander To Issue £1.6 Billion To The Public (Look Up Your Name)

Financial Guru

(http://adtopia.club/native/track.php?acid=177&acsrc=1&acacnt=TABOOLA1TCG&cid=1717596&crvid=163382525&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=Santander+To+Issue+%C2%A31.6+Billion+To+The+Public+%28Look+Up+Your+Name%29&platform=De
(http://adtopia.club/native/track.php?acid=171&acsrc=1&acacnt=TAB3PPISNTDR&cid=1645203&crvid=144523196&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=Santander+Is+Refunding+%C2%A31.5+Billion+To+Customers+%28Check+For+Your+Name%29&platfo

Santander Is Refunding £1.5 Billion To Customers (Check For Your Name)

The Claims Geeks

(http://adtopia.club/native/track.php?acid=171&acsrc=1&acacnt=TAB3PPISNTDR&cid=1645203&crvid=144523196&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=Santander+Is+Refunding+%C2%A31.5+Billion+To+Customers+%28Check+For+Your+Name%29&platfo
(https://ltotrye.com/path/lp.php?trvid=10004&trvx=ec19e320&utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_title=How+Over+55%27s+Are+Giving+Their+Children+Early+Inheritances&utm_thumbnail=http%3A%2F%2Fcdn.t

How Over 55's Are Giving Their Children Early Inheritances

Key Equity Release

(https://ltotrye.com/path/lp.php?trvid=10004&trvx=ec19e320&utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_title=How+Over+55%27s+Are+Giving+Their+Children+Early+Inheritances&utm_thumbnail=http%3A%2F%2Fcdn.t
(http://tops.easyvoyage.co.uk/photos-titanic/?utm_source=taboola&utm_campaign=desktop-photostitanic-uk&utm_medium=cpc&utm_content=mediaforceuk-kentmessenger-kentonline)

23 never-seen-before photos of the Titanic that will give you chills

easyvoyage

(http://tops.easyvoyage.co.uk/photos-titanic/?utm_source=taboola&utm_campaign=desktop-photostitanic-uk&utm_medium=cpc&utm_content=mediaforceuk-kentmessenger-kentonline)
(http://clickster.io/api/visitors/57ac89e0a38746122f4af882/5b9aac1b4ca9ff765bdf2383/incoming?adi=inscardbrkndi&adh=ukres47bigsurp&addet=inscardbrkndi-ukres47bigsurp&cadid=1m7GysSc7fJ&adver=lo71b&utm_source=mediaforceuk-kentmessenger-kentonline&plcid=1002829&adid=124763806&taboolaclickid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdH

UK Residents Born 1947-1979 With No Life Insurance Are In For A Big

Surprise!

FinanceDaily.Com

(http://clickster.io/api/visitors/57ac89e0a38746122f4af882/5b9aac1b4ca9ff765bdf2383/incoming?adi=inscardbrkndi&adh=ukres47bigsurp&addet=inscardbrkndi-ukres47bigsurp&cadid=1m7GysSc7fJ&adver=lo71b&utm_source=mediaforceuk-kentmessenger-kentonline&plcid=1002829&adid=124763806&taboolaclickid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdH
(http://www.talktechdaily.com/new-phone-system/uk/?t202id=866&h=45&ia=phone28-1&t202kw=ta-ph-d038-3&c1=mediaforceuk-kentmessenger-kentonline&c5=Phone+UK+Desk&eid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3YjESFmNvb

Here's Why Landlines Will Die, And Its Replacement Beats Cell Phones

Talk Tech Daily

(http://www.talktechdaily.com/new-phone-system/uk/?t202id=866&h=45&ia=phone28-1&t202kw=ta-ph-d038-3&c1=mediaforceuk-kentmessenger-kentonline&c5=Phone+UK+Desk&eid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3YjESFmNvb
(https://www.telegraph.co.uk/financial-services/retirement-solutions/er1/?source=TB&medium=T10&term=tmg-rll-native-desktop&utm_source=taboola&utm_medium=referral&WT.mc_id=tmgoff_taboola_equity-release?taboolaclickid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3YjESL3RoZXRlbGVncmFwaC1ma

Homeowner Over 63? Don't Fall For The Equity Release Myths

The Telegraph Equity Release

(https://www.telegraph.co.uk/financial-services/retirement-solutions/er1/?source=TB&medium=T10&term=tmg-rll-native-desktop&utm_source=taboola&utm_medium=referral&WT.mc_id=tmgoff_taboola_equity-release?taboolaclickid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3YjESL3RoZXRlbGVncmFwaC1ma
(https://trken.com/path/lp.php?trvid=10288&trvx=2e094b9d&taboolaclickid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3YjE
{campaign}&creaid=http%3A%2F%2Fcdn.taboola.com%2Flibtrc%2Fstatic%2Fthumbnails%2Faf9c215e2e9221fb0356cfd096f7357
kentmessenger-kentonline&titlex=Drive+Safe+at+Night+Thanks+To+These+Revolutionary+Glasses)

Drive Safe at Night Thanks To These Revolutionary Glasses

ClearView

(https://trken.com/path/lp.php?trvid=10288&trvx=2e094b9d&taboolaclickid=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3YjE
{campaign}&creaid=http%3A%2F%2Fcdn.taboola.com%2Flibtrc%2Fstatic%2Fthumbnails%2Faf9c215e2e9221fb0356cfd096f7357
kentmessenger-kentonline&titlex=Drive+Safe+at+Night+Thanks+To+These+Revolutionary+Glasses)
(http://adtopia.club/native/track.php?acid=14&acsrc=1&acacnt=Taboola1C&cid=1513439&crvid=134886446&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=Savvy+Brits+Are+Rushing+To+Get+%C2%A3200k+of+Life+Insurance+for+%C2%A310%2FMonth&platf

Savvy Brits Are Rushing To Get £200k of Life Insurance for £10/Month

The Coverage Guru

(http://adtopia.club/native/track.php?acid=14&acsrc=1&acacnt=Taboola1C&cid=1513439&crvid=134886446&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=Savvy+Brits+Are+Rushing+To+Get+%C2%A3200k+of+Life+Insurance+for+%C2%A310%2FMonth&platf

nline&utm_medium=referral&utm_content=thumbnails-d:Below Article Thumbnails:)

ıline&utm_medium=referral&utm_content=thumbnails-d:Below Article Thumbnails:) You May Like

(http://adtopia.club/native/track.phpacid=171&acsrc=1&acacnt=TAB3PPISNTDR&cid=1869730&crvid=173669402&pubid=media
kentmessenger-kentonline&ts=2019-02-
18+13%3A16%3A00&title=Santander+Customer%3F+Lloyds+Refunding++%C2%A318+Billion+To+Customers+-
+Check+Your+Name&platform=Desktop&click_id=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q

Santander Customer? Lloyds Refunding £18 Billion To Customers - Check Your Name

The Claims Geek

(http://adtopia.club/native/track.phpacid=171&acsrc=1&acacnt=TAB3PPISNTDR&cid=1869730&crvid=173669402&pubid=media
kentmessenger-kentonline&ts=2019-02-
18+13%3A16%3A00&title=Santander+Customer%3F+Lloyds+Refunding++%C2%A318+Billion+To+Customers+-
+Check+Your+Name&platform=Desktop&click_id=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q
(http://native.flavourads.com/campaigns/path/lp.php?
trvid=10289&trvx=5de04564&brand=Littlewoods%20Catalogue%20Account&utm_source=taboola&utm_medium=mediaforceuk-
kentmessenger-
kentonline&utm_title=People+Who+Had+A+Littlewoods+Catalogue+Account+%E2%80%93+Read+This&utm_thumbnail=http%3A%

People Who Had A Littlewoods Catalogue Account – Read This

The PPI Finder

(http://native.flavourads.com/campaigns/path/lp.php?
trvid=10289&trvx=5de04564&brand=Littlewoods%20Catalogue%20Account&utm_source=taboola&utm_medium=mediaforceuk-
kentmessenger-
kentonline&utm_title=People+Who+Had+A+Littlewoods+Catalogue+Account+%E2%80%93+Read+This&utm_thumbnail=http%3A%
(http://weightlossgroove.com/celebrity-houses-exposed-who-bought-house-by-bank-loan-and-unbelievable-insurance-cost-t?
utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-
kentonline&utm_campaign=1857128&utm_term=Take+A+Look+Inside+Holly+Willoughby%60s+%C2%A33+Million+House)

Take A Look Inside Holly Willoughby`s £3 Million House

Weight Loss Groove

(http://weightlossgroove.com/celebrity-houses-exposed-who-bought-house-by-bank-loan-and-unbelievable-insurance-cost-t?
utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-
kentonline&utm_campaign=1857128&utm_term=Take+A+Look+Inside+Holly+Willoughby%60s+%C2%A33+Million+House)
(http://adtopia.club/native/track.php?
acid=141&acsrc=1&acacnt=TAB3LIFEUK&cid=1786978&crvid=163912209&pubid=mediaforceuk-kentmessenger-
kentonline&ts=2019-02-18+13%3A16%3A00&title=People+Born+Between+1937+%26+1985+-
+Get+Up+To+%C2%A3200%2C000+for+%C2%A310%2FMonth%21&platform=Desktop&click_id=CjBjYThiN2NjZi02NTJkLTRhZDItY

People Born Between 1937 & 1985 - Get Up To £200,000 for £10/Month!

The Coverage Guru

(http://adtopia.club/native/track.php?
acid=141&acsrc=1&acacnt=TAB3LIFEUK&cid=1786978&crvid=163912209&pubid=mediaforceuk-kentmessenger-
kentonline&ts=2019-02-18+13%3A16%3A00&title=People+Born+Between+1937+%26+1985+-
+Get+Up+To+%C2%A3200%2C000+for+%C2%A310%2FMonth%21&platform=Desktop&click_id=CjBjYThiN2NjZi02NTJkLTRhZDItY
(http://comparehearingaids.org/news/?
code=NATO&utm_source=Taboola&utm_medium=Native&utm_campaign=Taboola&utm_term=mediaforceuk-kentmessenger-
kentonline)

Kent: Don't Book Your Hearing Test Until You Read This

Compare Hearing Aids

(http://comparehearingaids.org/news/?code=NATO&utm_source=Taboola&utm_medium=Native&utm_campaign=Taboola&utm_term=mediaforceuk-kentmessenger-kentonline)
(https://www.solar-finder.co.uk/news/?source=taboola&a=162543464&utm_source=taboola&utm_medium=referral&utm_term=mediaforceuk-kentmessenger-kentonline&utm_campaign=desktop)

Why The Government Is Paying Kent Residents To Go Solar

Solar Finder Solar Quotes

(https://www.solar-finder.co.uk/news/?source=taboola&a=162543464&utm_source=taboola&utm_medium=referral&utm_term=mediaforceuk-kentmessenger-kentonline&utm_campaign=desktop)
(http://militarybud.com/trending/celebrity-children-look-just-like-parents-grandparents-gem?utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_campaign=1457364&utm_term=Elvis%27+Only+Grandson+Is+25+Now+%26+He+Is+An+Absolute+Copy+Of+His+

Elvis' Only Grandson Is 25 Now & He Is An Absolute Copy Of His Legendary Grandpa

MilitaryBud

(http://militarybud.com/trending/celebrity-children-look-just-like-parents-grandparents-gem?utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_campaign=1457364&utm_term=Elvis%27+Only+Grandson+Is+25+Now+%26+He+Is+An+Absolute+Copy+Of+His+
(http://info.expertmarket.com/top-offers-for-seniors?cid=5c46fd68703f1&utm_campaign=Listicle-D&utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_term=10+Offers+Kent+Seniors+Get+Only+If+They+Know&utm_content=https%3A%2F%2Fconsole.brax-cdn.com%2Fcreatives%2F44dd7285-cd6a-4a0f-9085-8137587509a3%2FEXzIv0c_1000x600_fc2413c7a2b5c4b883ca4189ff982621.png)

10 Offers Kent Seniors Get Only If They Know

Expert Market

(http://info.expertmarket.com/top-offers-for-seniors?cid=5c46fd68703f1&utm_campaign=Listicle-D&utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_term=10+Offers+Kent+Seniors+Get+Only+If+They+Know&utm_content=https%3A%2F%2Fconsole.brax-cdn.com%2Fcreatives%2F44dd7285-cd6a-4a0f-9085-8137587509a3%2FEXzIv0c_1000x600_fc2413c7a2b5c4b883ca4189ff982621.png)
(https://www.worldcampus.psu.edu/penn-state-online-request-program-information?utm_source=content&utm_medium=banner&utm_campaign=BRAND+17-18&utm_content=taboola-desktop&cid=BNNR30600)

Earn A Penn State Degree – Ranked In The Top 10 For Online Programs

Penn State Online

(https://www.worldcampus.psu.edu/penn-state-online-request-program-information?utm_source=content&utm_medium=banner&utm_campaign=BRAND+17-18&utm_content=taboola-desktop&cid=BNNR30600)

Follow us

(https://www.facebook.com/KnowledgeMadeEasy) (https://twitter.com/KMEasy_online) (https://www.instagram.com/km_online/) (https://www.linkedin.com/company/km-group)

Like Us on Facebook

105K

Like

Share

Most popular

Read Commented Watched



Tickets given to cars abandoned in snow

(https://www.kentonline.co.uk/medway/news/tickets-given-to-cars-abandoned-in-snow-198153/)



Snow causes travel chaos

(https://www.kentonline.co.uk/kent/news/snow-causes-travel-chaos-198123/)



Snow mainly misses Kent... again

(https://www.kentonline.co.uk/maidstone/news/snow-mainly-misses-kent-again-198056/)



'Questions need to be asked over snow chaos'

(https://www.kentonline.co.uk/medway/news/questions-need-to-be-asked-over-snow-chaos-198135/)



Overturned car left abandoned in road

(https://www.kentonline.co.uk/medway/news/overturned-car-left-abandoned-in-road-198155/)

Kent Travel News

18/02/19 11:51

M25 - Dartford Crossing

> TRAVEL: Traffic's queuing on the #M25 (https://twitter.com/hashtag/M25?src=hash&ref_src=twsrc%5Etfw) clockwise due to an earlier police incident on the QEII Bridge at #Dartford (https://twitter.com/hashtag/Dartford?src=hash&ref_src=twsrc%5Etfw) - all lanes have been reopened #kmfmtravel (https://twitter.com/hashtag/kmfmtravel?src=hash&ref_src=twsrc%5Etfw) pic.twitter.com/dZ8Mp6fe6T (https://t.co/dZ8Mp6fe6T)
>
> **— kmfm News (@kmfmnews) February 18, 2019 (https://twitter.com/kmfmnews/status/1097463363255394305?ref_src=twsrc%5Etfw)**

18/02/19 10:38

Eurostar

> TRAVEL: There's a chance of disruption on Eurostar trains at #Ebbsfleet (https://twitter.com/hashtag/Ebbsfleet?src=hash&ref_src=twsrc%5Etfw) and #Ashford (https://twitter.com/hashtag/Ashford?src=hash&ref_src=twsrc%5Etfw) - electronic boards at stations are not listing any departures but there are no problems on the track #kmfmtravel (https://twitter.com/hashtag/kmfmtravel?

See all Kent Travel News > (/news/live-news/)

n=referral&utm_content=thumbnails-rr2:Right Rail Thumbnails:)
n=referral&utm_content=thumbnails-rr2:Right Rail Thumbnails:)
You May Like

(http://psychicmonday.com/mind-mental/ncis-cast-then-and-now-find-out-who-is-still-ruling-the-silver-screen-and-who-is-suffering-from-mental-health-issues/?utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_campaign=1772004&utm_term=Remember+Pauley+Perrette%3F+Try+Not+To+Smile+When+You+See+Her+Now&u
02-04+16%3A27%3A52)

Remember Pauley Perrette? Try Not To Smile When You See Her Now

PsychicMonday

(http://psychicmonday.com/mind-mental/ncis-cast-then-and-now-find-out-who-is-still-ruling-the-silver-screen-and-who-is-suffering-

from-mental-health-issues/?utm_source=taboola&utm_medium=mediaforceuk-kentmessenger-kentonline&utm_campaign=1772004&utm_term=Remember+Pauley+Perrette%3F+Try+Not+To+Smile+When+You+See+Her+Now&t
02-04+16%3A27%3A52)
(http://adtopia.club/native/track.php?acid=170&acsrc=1&acacnt=TAB3PPIRBS&cid=1770654&crvid=161848671&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=RBS+Is+Refunding+%C2%A35+Billion+To+Customers+%28Check+For+Your+Name%29&platform=Deskt

RBS Is Refunding £5 Billion To Customers (Check For Your Name)

The Claims Geeks

(http://adtopia.club/native/track.php?acid=170&acsrc=1&acacnt=TAB3PPIRBS&cid=1770654&crvid=161848671&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-04+16%3A27%3A52&title=RBS+Is+Refunding+%C2%A35+Billion+To+Customers+%28Check+For+Your+Name%29&platform=Deskt
(http://bwelltime.com/2018/06/13/i-suffered-severe-pain-serious-enough-i-couldnt-work-i-discovered-device/?a=Taboola&t=pains_that_began)

“I Suffered from a Severe Pain, Then I Discovered This Device”

B-Cure Laser

(http://bwelltime.com/2018/06/13/i-suffered-severe-pain-serious-enough-i-couldnt-work-i-discovered-device/?a=Taboola&t=pains_that_began)

You May Like

(http://adtopia.club/native/track.php?acid=142&acsrc=1&acacnt=TAB3PPIPCR&cid=1869373&crvid=173648729&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-18+13%3A16%3A00&title=Barclays+Customer%3F+Lloyds+Refunding++%C2%A318+Billion+To+Customers+-+Check+Your+Name&platform=Desktop&click_id=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3Y

Barclays Customer? Lloyds Refunding £18 Billion To Customers - Check Your Name

The Claims Geek

(http://adtopia.club/native/track.php?acid=142&acsrc=1&acacnt=TAB3PPIPCR&cid=1869373&crvid=173648729&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-18+13%3A16%3A00&title=Barclays+Customer%3F+Lloyds+Refunding++%C2%A318+Billion+To+Customers+-+Check+Your+Name&platform=Desktop&click_id=CjBjYThiN2NjZi02NTJkLTRhZDItYTNhMS1kNWE0OTdlZTljYWUtdHVjdDE2M2Q3Y
(http://adtopia.club/native/track.php?acid=14&acsrc=1&acacnt=Taboola1C&cid=1484220&crvid=173700299&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-18+13%3A16%3A00&title=Over+30%3F+Get+%C2%A3200k+of+Life+Insurance+for+%C2%A310%2FMonth+%28Before+Increase%2

Over 30? Get £200k of Life Insurance for £10/Month (Before Increase)

The Coverage Guru

(http://adtopia.club/native/track.php?
acid=14&acsrc=1&acacnt=Taboola1C&cid=1484220&crvid=173700299&pubid=mediaforceuk-kentmessenger-kentonline&ts=2019-02-
18+13%3A16%3A00&title=Over+30%3F+Get+%C2%A3200k+of+Life+Insurance+for+%C2%A310%2FMonth+%28Before+Increase%2
(https://www.netmums.com/life/kate-and-meghan-who-wore-it-better?utm_source=tabo&utm_medium=cpc&utm_campaign=Tabo-NM-Photos-UK-Desktop-kate-vs-meghan&utm_content=mediaforceuk-kentmessenger-kentonline)

Kate vs Meghan: who wore it better?

Netmums

(https://www.netmums.com/life/kate-and-meghan-who-wore-it-better?utm_source=tabo&utm_medium=cpc&utm_campaign=Tabo-NM-Photos-UK-Desktop-kate-vs-meghan&utm_content=mediaforceuk-kentmessenger-kentonline)

com/en/?template=colorbox&utm_source=mediaforceuk-kentmessenger-kentonline&utm_medium=referral&utm_content=thumbnails-rr2:Right Rail Thumbnails:)

com/en/?template=colorbox&utm_source=mediaforceuk-kentmessenger-kentonline&utm_medium=referral&utm_content=thumbnails-rr2:Right Rail Thumbnails:)



Win a year's family membership to Kent Life in Maidstone
(/whats-on/kent-life-2019/)

P&O Ferries - Enter this month’s competition and experience a daytrip with a real difference!
(/features/p-o-ferries/)

HELPFUL LINKS

Book an Ad (https://www.kmclassifieds.co.uk/)

Contact Us and KM offices (http://www.kentonline.co.uk/contact-us/)

RSS feeds (/rss-feeds/)

Send us your story (http://www.kentonline.co.uk/submit-a-story/)

Sitemap (/sitemap/)

Terms and conditions (http://www.kentonline.co.uk/terms/)

Consent Preferences (EU user only)

What's On (http://www.kentonline.co.uk/whats-on/)

Buy a Photo (https://kentmessenger.newsprints.co.uk/)

Privacy Policy (http://www.kentonline.co.uk/terms/privacy-policy/)

KentOnline (http://www.kentonline.co.uk/)

Kent Business (http://www.kentonline.co.uk/kent-business/)

KMTV (http://www.kmtv.co.uk/)

My Kent Family (https://www.mykentfamily.co.uk/)

Kent Wedding Day (https://www.kentweddingday.co.uk/)

Destination Kent (http://www.destinationkent.co.uk)

KMFM (http://www.kmfm.co.uk/)

Kent Jobs (http://www.kentjobs.co.uk)

Kent Homes (http://www.kenthomes.co.uk)

Cars from Kent (https://carsfromkent.com/)

Fresh Start Dating (http://www.freshstart.dating/)

Local Businesses (http://www.kentonline.co.uk/local-businesses/)

KM Create (http://www.kmcreate.co.uk/)

KM Digital Solutions (http://kmdigitalsolutions.co.uk/)

KM Media Group (http://www.kmmediagroup.co.uk)

LOCAL NEWS

Ashford (/ashford/)

Canterbury (/canterbury/)

Dartford (/dartford/)

Deal (/deal/)

Dover (/dover/)

Faversham (/faversham/)

Folkestone (/folkestone/)

Gravesend (/gravesend/)

Herne Bay (/herne-bay/)

Hythe (/hythe/)

Maidstone (/maidstone/)

Malling (/malling/)

Medway (/medway/)

Romney Marsh (/romney-marsh/)

Sandwich (/sandwich/)

Sevenoaks (/sevenoaks/)

Isle of Sheppey (/sheerness/)

Sittingbourne (/sittingbourne/)

Tenterden (/tenterden/)

Thanet (/thanet/)

Tonbridge (/tonbridge/)

Tunbridge Wells (/tunbridge-wells/)

Weald (/weald/)

Whitstable (/whitstable/)

© KM Group 2019

More



Ramsgate on the Isle of Thanet is a seaside resort in the south East of England. Once a major holiday destination it has become run down because of a failure to move with the times. Once a place for a wonderful holiday experience now blighted by 11 years of dereliction on the seafront and a failure of governance from Thanet District Council. This blog has been set up to give Ramsgate people a voice and to campaign for change #Truthwillout

Monday, 14 November 2016

Tony Freudmann

All the many amateur detectives putting in their Voluntary hours to try and dissect the many faceted business portfolio of Ann Gloag really ought to take a look at the Bona Fides of the man fronting Riveroaks bid for Manston. Next time he is in town ask him a few questions.

Besides being struck off as a Solicitor for 23 counts of "misappropriation" of client funds and having to resign as leader of Shropshire Council he has led a challenging life as an assett-stripper by leveraging going concerns, making people redundant and selling the assets. An extremely immoral but legal business practice. Here is his recent CV.



"Tony Freudmann, Director of RiverOak and their front man here in the UK for the Manston caper, has spent an awful lot of energy over the last twenty years acquiring; trying to acquire; and failing to develop old military airports. This glorious run of complete failure is topped and tailed by Manston. Here's a very brief summary:

1994 – Freudmann joins Wiggins, a property development company. He gives Wiggins the idea of buying up old military airports for development and is made responsible for airport acquisition. Wiggins' focus is on buying: "former military bases with ample availability of surrounding land which can be developed using the real estate experience of Wiggins." Sound familiar?
1999 – Wiggins buys Manston Airport.

2000 – Freudmann and Wiggins go on a buying spree. Wiggins acquires Odense airport in Denmark in a joint venture (JV) with the local authority. As part of the deal Wiggins will get "exclusive development rights over 400 acres of land." Potentially very lucrative, no? The JV is later ended by the local authority because the rent hadn't been paid by Wiggins. A chunky financial settlement is agreed against Wiggins in 2005.

2000 – Wiggins acquires a 25 year lease for Smyrna Airport, Tennessee, USA. The plan is to develop the airport and have it as Wiggins' corporate HQ. Wiggins said at the time that 14 more airports would be acquired in 2000. Yes, 14. In 2003 Wiggins surrenders the lease for Smyrna.

2001 – Wiggins takes a lease from the Czech MoD for Pilsen airport. A deal is made with BAE to redevelop the airport. Nothing much happens. When Wiggins (by then called Planestation) goes belly up in 2005, Pilsen is sold.

2001 – Wiggins acquires 80% of Lahr airport, Germany. During Wiggins' ownership, redevelopment plans come to nothing. Lahr is sold to Babcock & Brown in 2005 when Planestation goes under.

2001 – Wiggins acquires Schwerin Parchim airport in Northern Germany alongside a nice EU grant to develop it. There are issues (again) with non-payment of rent. The agreement is terminated in 2005 and Wiggins settles for 3m Euro.

2001 – Wiggins takes a 43% stake in Cuneo-Levaldigi airport, Italy. Wiggins withdraws in 2004 having made heavy losses despite serious investment by the Italian Government.

2001 – Wiggins agrees a deal to build and operate an international airport in Ajman, UAE. An $800m plan to redevelop the airport comes to nothing and is abandoned in 2003.

2001 – The Financial Reporting Review Panel criticises Wiggins for five years of over-positive reporting of its financial results. When the accounts are redrawn, it's clear that Wiggins is operating at a significant loss. This is a long time before EUJet is even dreamed of. It's a popular myth that EUJet broke Planestation. EUJet didn't help, that's true, but Wiggins/Planestation was mired in debt well before EUJet came along. And Freudmann had a big part to play in the Planestation demise because he was out snapping up unsuccessful airports.

2003 – Trading in Wiggins shares is suspended to give the company a chance to sort itself out.

Total Pageviews

792,128

My Blog List

thanetonlin
Old Ramsgat
and Broadsta
etc
17 hours ago

Manston D
Technical sub
DCO Examin
1 week ago

Ramsgate H
Southwood
Ramsgate's c
6 months ago

The Thanet
Our new hom
11 months ag

The Truth A
Pleasurama
Timeline
1 year ago

2004 – Wiggins takes a lease to operate the international side of Melbourne Airport, USA. It says that Melbourne will replace Smyrna airport in the Wiggins portfolio. The project is just starting when Planestation goes under in 2005.

2004 – Wiggins takes on Borgond Airport, Hungary, in a JV withthe local authority. Work had not begun when Planestation went under in 2005.

2004 – Wiggins becomes Planestation.

2004 (May) – Wiggins buys 30% of EUJet.

2004 – Turnaround expert brought in to rescue Planestation. He says:

"When I first came here we were spending money to no particular end. Last year we spent £11 million maintaining dormant airports. The previous year £13.5 million."

He says that Planestation will no longer be "an acquirer of assets and a stealer of ideas".

Others say: "… Planestation has been one of the most woeful ventures ever to grace the London Stock Exchange. Over the past ten years the group, previously known as Wiggins, has raised more money, north of around £115 million than its actual market valuation. With this cash it built up an international chain of seven (hitherto largely dormant) airports and an assortment of property interests and assets in the UK. Apart from property disposals, it has generated little in the way of revenues, milked its investor base for all they were worth and produced gargantuan annual losses".

Take a bow for your part in this "woeful" adventure, Mr Freudmann.

2004 (Dec) – Planestation buys the rest of EUJet.

2005 (Feb) – Tony Freudmann is "let go" from Planestation and goes into the travel industry, following the lead of his parents and his brother.

2005 (July) – Planestation goes into administration. Infratil buys Manston airport from the administrator.

2005 to 2009 – Tony Freudmann bills Kent County Council for almost £176,000 in consultancy fees, including a £50,000 feasibility report into starting up flights from Manston to Virginia.

2006 – KCC invests £289,000 in Freudmann's Manston to Virginia plan. Not a single plane takes off.

2011 – Local authority in Germany puts the running of Lahr Airport out to tender again following Babcock & Brown's failure to develop it successfully.

2012 – Infratil puts Manston on the global market.

2012 – Tony Freudmann takes over Lahr Airport for Integeral Investments Ltd. Integeral was established in May 2008 by Sanjeev Joshi and Daryn Soards. Douglas Maggs is also involved.

2012 – Local Press at Lahr comment that the airport's workers are not being paid. Tony Freudmann says he has no comment to make as it is a "private matter".

2012 – High Court hearing for Integeral to be placed into administration or wound up. Court hears evidence that Integeral was insolvent from late 2011, i.e. before Freudmann used Integeral to bid to run Lahr Airport. Integeral is then wound up. Oddly, Tony Freudmann doesn't mention this in conversation with the Lahr Press when he is interviewed a couple of days later.

2013 – The local authority puts the running of Lahr back out to tender again. Tony Freudmann tries to get hold of it a third time, using his brand-new company, Annax Aviation. PWC (running the bidding process for the Lahr contract) does not think that any of the three bidders, including Annax, is suitable.

2013 – TF introduces Ann Gloag to the Prestwick and Manston sale opportunities.

2013 – Ann Gloag buys Manston for £1 plus the airport's running costs until the deal closes.

2014 (Jan) – Tony Freudmann fronts a bid to buy the airport from Ann Gloag. At the same time he goes to TDC to ask about the possibility of putting 1,000 houses on the Northern Grass. Never doubt, airport lovers, that this is the main game here for Freudmann and for RiverOak. Take a look at that HUGE industrial estate in the RiverOak drawing (not really a plan) released for the non-statutory consultations. We bet you any money you like that the real "plan" is to develop that land, the Northern Grass, for a quick return and then to run the airport on a shoestring until it fails yet again.

2014 – Consortium including Tony Freudmann makes Ann Gloag an offer for Manston and is rejected.

2014 – Tony Freudmann pals up with RiverOak to try yet again to get hold of Manston.

Now, can you honestly read that catalogue of disasters and believe for one second that Tony Freudmann and RiverOak could ever run a successful airport at Manston? Seriously? In fact, does anyone really believe that Tony Freudmann wants the land this time around so that he can run an airport when he has spent twenty years trying to acquire former military airports because they have lots of development land attached to them"



It isn't surprising that people have been taken in however where Riveroak comes into this mess is anyone's guess. Now wait it isn't that surprising seeing as they are a Real Estate Investment company just like Wiggins.

Posted by Barry James at 21:38

Labels: Freudmann, Manston, Riveroak, TDC

7 comments:

Anonymous 14 November 2016 at 21:57

Barry the first Consortium wasn't rejected,the buyer pulled out for 'legal reasons'remember?sir Roger Gale put that out into the press with no comments.

Reply

Barry James 15 November 2016 at 09:48

Which consortium there are so many. Be specific

Reply

Anonymous 15 November 2016 at 15:29

BBC news 25th March 2014:Manston airpot:Roger Gale says'Potential buyer' Found.
BBC news 27th March 2014:Manston airport purchase offer letter sent to owner.
BBC news 2nd April 2014: Manston airport bidder withdraws purchase offer.
Airportwatch 2nd April: Gale says the reason for pulling the bid on the airport is for 'Legal reasons',with no comments on who the consortium were.It was Annex Aviation Gib.

Reply

Anonymous 9 April 2017 at 12:53

Surely out of all of his airport acquisitions he must have had some success? they can't be ALL failures can they?

Reply

Replies

Barry James 10 April 2017 at 17:45

Not one sorry

Reply

Anonymous 26 April 2017 at 03:10

The grants, the investments, just follow the money...

Reply

northwalesman 14 May 2017 at 11:54

It is a fact that Mr Freudmann is the cousin of Ms Jo Gideon, District Councillor for Thanet from 2003-2015.

Reply

Enter your comment...

Comment as: Google Accour

Publish Preview

Newer Post Home Older Post

Subscribe to: Post Comments (Atom)

Blog Archive

- ► 2018 (9)
- ► 2017 (9)
- ▼ 2016 (29)
  - ► December (3)
  - ▼ November (5)
    - Herd mentality
    - Tony Freudmann
    - SP05 Manston Airport site
    - Put up or just shut up
    - Ramsgate Royal Harbour and Port
  - ► October (1)
  - ► August (2)
  - ► July (1)
  - ► June (1)
  - ► May (2)
  - ► April (2)
  - ► March (2)
  - ► February (6)
  - ► January (4)
- ► 2015 (33)
- ► 2014 (11)
- ► 2013 (11)

About Me



Barry James

Follow 15

View my complete profile

Simple theme. Powered by Blogger.

STONE HILL PARK
LIVE WORK PLAY

(/)



OUR PLANS

Stone Hill Park is the team behind exciting mixed-use proposals for the former Manston Airport site. Our proposed new settlement will not only answer Thanet's growing housing needs, but deliver thousands of jobs and put Manston on the map as a regional sports and leisure destination. From a new country park to an improved aviation heritage component, our proposals will open a successful new chapter for Manston and a prosperous one for Thanet.

LIVE

WORK

PLAY

HERITAGE

LOCATION

This iconic site is perfectly located at the heart of Thanet, with excellent road connections allowing fast transit to the rest of Kent and beyond. London is less than two hours away by car. Most parts of the site will be a five minute drive (or 20 minute walk) from a proposed Thanet Parkway railway station, offering high speed services to and from the capital, as well as stations to Dover.



NEWS UPDATES

VIEW ALL (/NEWS)

Stone Hill Park shares update on the way ahead

Sep 2018

Read more (/stone-hill-park-shares-update-on-way-ahead)

Response to PINS decision to examine DCO application

Aug 2018

Read more (/response-to-pins-decision-to-examine-dco-application)

Altitude Aviation Advisory report submitted to Thanet Council

Jun 2018

Read more (/altitude-aviation-advisory-report-submitted-to-thanet-council)

Stone Hill Park announce partnership with Optivo to deliver first 400 homes

May 2018

Read more (/stone-hill-park-announce-partnership-with-optivo-to-deliver-first-400-homes)



@StoneHillPark_ (https://twitter.com/stonehillpark_) Stone Hill Park (https://www.facebook.com/StoneHillPark/)

Copyright © 2015 Stone Hill Park. Privacy Policy & Cookies (/privacy-policy). Terms & Conditions (/terms)