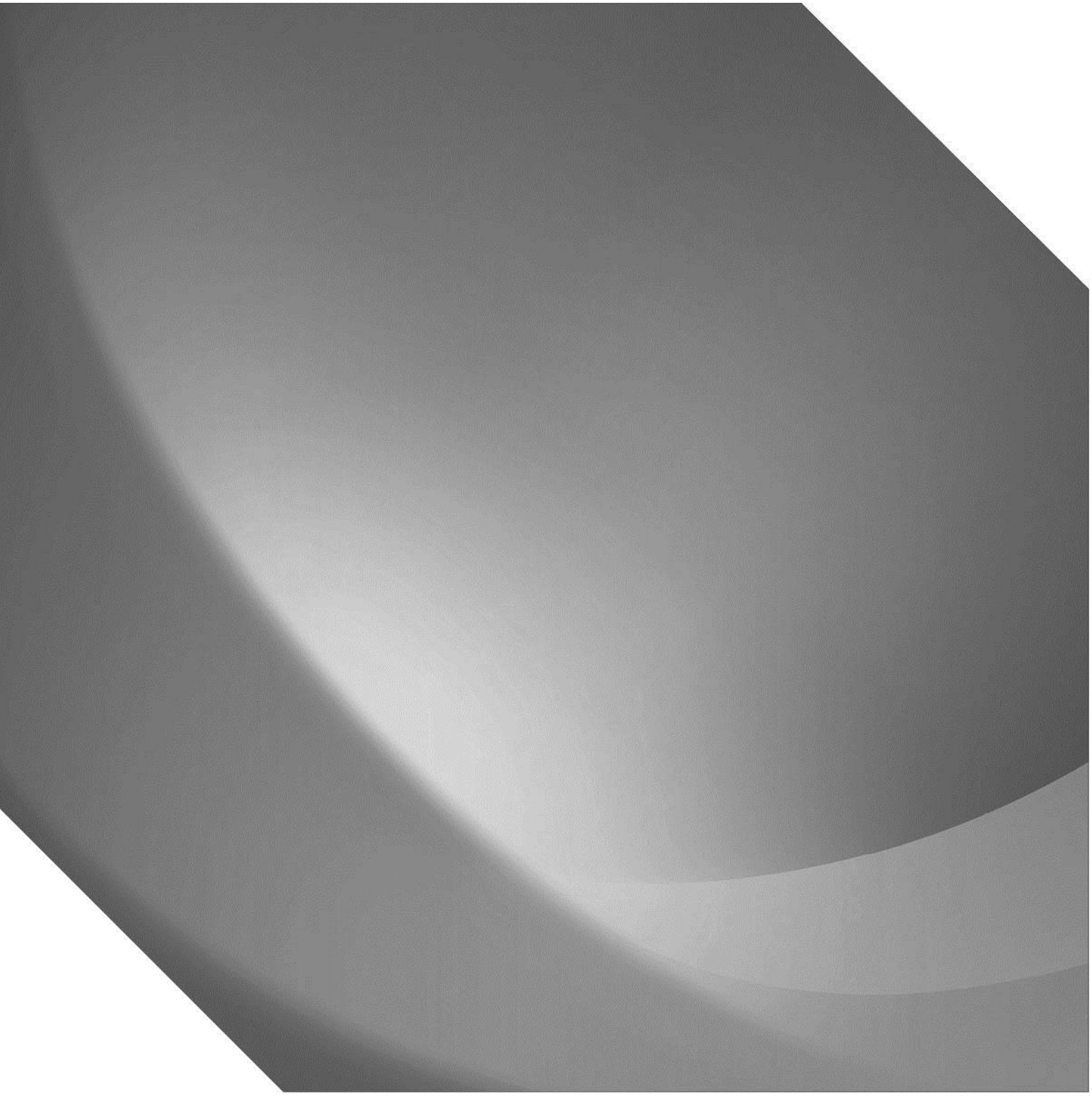
Operating resilience of the UK's aviation infrastructure and the consumer interest: additional consultation responses

CAP 1515b



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ABTA – The Travel Association - was founded in 1950 and is the largest travel trade association in the UK, with around 1,200 members and over 4,500 retail outlets and offices. Our Members range from small, specialist tour operators and independent travel agencies specialising in business and leisure travel, through to publicly listed companies and household names, from call centres to internet booking services to high street shops. ABTA's key focus is ensuring that Members can operate their businesses in a sustainable and successful manner, enabling their customers to travel with confidence.

The success of ABTA Members' businesses is directly reliant on the UK's aviation infrastructure; many of ABTA's larger Members are themselves part of groups that own airlines. ABTA Members provide 90% of the package holidays sold in the UK, with Members also selling millions of independent travel arrangements. Annually, ABTA Members' turnover is in excess of £32 billion. The business of our Members is the provision of quality, efficient and competitively priced passenger travel.

ABTA totally agrees that there is a shortage of airport capacity in the South East of England and that more routes and flights are needed to match passenger demand. The UK is a global leader in aviation. Our strategically important connectivity to all parts of the globe grows the UK economy and provides employment by facilitating trade in services, goods, tourism and investment.

How can the performance of the aviation network be improved or optimised?

ABTA believes that the CAA have correctly identified the complexity of the UK aviation market and its supporting infrastructure, and that individual service providers (airlines, airports, etc) should have resilience plans in place to enable them to address problems when they arise. However, we question whether any greater intervention than that would lead to any helpful solutions.

How effective is the current regime, and how are consumer interests represented?

ABTA believes that in general, the current regime is effective in ensuring that the majority of airspace users, and their customers, have an appropriate experience. We believe that the issues of overcrowding, whether in airspace or on the ground at airports, do ultimately need addressing, and this may involve fundamental reconsideration of airspace availability and usage – ranging from the implementation of a Single European Sky to considering the best use of airspace currently reserved for the military, as well as the overall expansion of airport capacity to recognise the continuing growth in demand for air travel.

The consultation identifies that different consumers have different interests at different points in their travel, and as such, there is no benefit in implementing any form of formalised consumer representation as the relevant areas of concern are all managed by appropriate experts, to which consumer representatives could add little value.

Resilience

Airports and airlines can and do suffer from cancellations and delays; these are nearly always beyond their control and are frequently as a result of weather conditions. However, these are a very small proportion of the airports' total Air Transport Movements.

Airports are already required by the CAA to have resilience plans which are reviewed annually. Airports and airlines have invested tens of millions of pounds in resilience projects for Gatwick and Heathrow, for example in snow clearing equipment. Both Gatwick and Heathrow, jointly with their Airline Operators Committees, have agreed mechanisms to scale back flight operations, when extenuating circumstances are known in advance, to avoid any more passenger disruption than necessary. Heathrow has Tactically Enhanced Arrival Measures (TEAM), where in certain circumstances, it can use both runways simultaneously for arrivals to clear major backlogs of flights waiting to land.

Slots

Slot coordination in the UK has been carried out very successfully for many years at the 'co-ordinated' airports by Airport Coordination Ltd. Whilst the CAA and DfT have no direct involvement in the slot allocation process, there is transparency as to how it operates. This is a very technical process which requires an in-depth understanding of airport operations and, in ABTA's view, would not be enhanced by consumer input. As the CAA points out, the airport and airline users should anyway maximise the use of the airport taking into account the levels of punctuality performance that are acceptable.

Thank you for taking our comments into consideration.

Further information

Susan Parsons, Manager, Trade Relations, ABTA – sparsons@abta.co.uk or 020 3117 0524

19 September 2016

Airport Operators Association response to the CAA request for information on operating resilience of the UK's aviation infrastructure

Introduction

1. Founded in 1934, the Airport Operators Association (AOA) is the national voice of UK airports. We are a trade association representing the interests of UK airports, and the principal such body engaging with the UK Government and regulatory authorities on airport matters. The AOA's members include over 50 airports and more than 160 Associate Members, made up of companies representing a wide range of suppliers in the aviation industry.

2. The AOA welcomes the opportunity to respond to the CAA's request for information on operating resilience of the UK's aviation infrastructure. In this consultation response, the AOA takes a view on some of the key issues arising from this Consultation. More specific issues related to operating resilience at specific airports will be dealt with by airports in their own responses.

3. The AOA welcomed the CAA's Strategic Plan for 2016 - 2021, including its commitment to thinking about how existing capacity can be planned and operated to meet stakeholders' expectations. While the AOA believes that further improving operational resilience can be no substitute for making the UK aviation system more efficient by implementing airspace modernisation and growing capacity, both of which are urgently needed. The AOA acknowledges implementation of a new airspace policy will take time and it will be at least 2025 before any new runway capacity in the South of East of England will be opened. The AOA is therefore committed to continuing its work with the CAA and other stakeholders to ensure that existing capacity operates as efficiently and resiliently as possible, meeting passenger demands in the process.

CAA/AOA Passenger welfare at times of major disruption guidance - (2014)

4. The AOA refers the CAA to its joint work of 2014, in which the CAA worked with the AOA to develop a set of key principles and recommended practices to assist airports ensure they have the right type of procedures and plans in place to deal with disruption, and provide useful suggestions and reassurance as to how airports can plan ahead.

5. The key principles in the guidance cover collaboration with other organisations operating at airports, identification and management of potential risks, planning and deploying contingency measures, communication with passengers so they know their rights and the latest situation, practising the procedures they have in place to make sure they are fit for purpose and learning lessons from past experiences.

Airport capacity and the consumer Interest

6. In this call for information, the CAA asks how consumers view the trade-offs between capacity, cost and service levels. The AOA reminds the CAA that airports differ markedly in

size, business approach, and their market. While all our airports take their responsibilities to the consumer (i.e. passenger) very seriously, airports are not and cannot be homogenous in their approach to consumer issues.

7. Furthermore, it is important to understand from a business development perspective that it is airlines rather than passengers that are the airports primary customer, with the passenger being primarily the customer of the airline. This means the emphasis for airports is in demonstrating to airlines what experience passengers will be receiving and what service standards can be expected. To this end, many airports are now entering into contracts with airlines which explicitly set out what services and experience the airport will be providing to passengers.

8. With regard to the service levels experienced by passengers, Airport Service Quality (ASQ) scores are a particularly important measure of passenger satisfaction for airports. The Airport Service Quality (ASQ) is a world-renowned and globally established global benchmarking programme measuring passengers' satisfaction across a spectrum of airport deliverables, providing management information to better understand passengers' views and what they want from an airport's products and services.

9. Many airports also run their own localised version of the ASQ in parallel, collecting and utilising additional data, often specific to the airport. New technologies have been a great enabler in this regard.

10. While passenger surveys and the gathering of data can assist in the smooth and efficient operation of an airport as well as increasing passenger satisfaction, one particular challenge for airports is in how they can deal with issues over which the airport has limited or no control. Furthermore, these are often issues which can have a significant impact on the efficiency of an airport operation and on passenger satisfaction. Examples of this include certain security regulations which can be an irritation for travelling passengers and can slow the security process, as well as issues around the UK Border such as long queues which can have a detrimental impact on both the airport operation and passenger experience.

<u>Optimising performance</u>

11. The need for airspace modernisation is becoming critical and it is vital to improving efficiency and making better use of existing capacity across the full airways system in the UK. With no improvement, flight delays are likely to soar to 50 times what they are today, creating unnecessary additional noise and CO2 emissions as well as costing airlines over £1 billion per year, impacting the environment, local communities and the wider UK economy.

12. Airspace is an essential part of the UK's national infrastructure and there can be no substitute to addressing the urgent need to modernise airspace across the whole of the UK in order to handle the forecast levels of traffic growth without significant delays. Furthermore, modernised airspace will enable us to further improve continuous climbs and descents, reduce holding, and implement multiple routes which can also help minimise noise and meet environmental targets.

13. The CAA consultation document also recalls its submission to the Airports Commission by stating that consumers are already suffering from a shortage of capacity in the South East of

England. The AOA supports all airports that wish to grow and believes in making best use of existing capacity at UK airports. The AOA welcomed the completion of the Airports Commission's Final Report and continue to call for the Government to respond fully to the Airports Commission recommendations as quickly as possible, to maintain momentum, remove uncertainty and ensure the UK gets the additional capacity it so vitally needs as soon as possible.

14. Improving Surface Access to airports is another key issue which plays a role in making the best use of existing capacity. Limited or poor surface access to airports can constrain growth and can also adversely affect the passenger experience. Good surface links are therefore crucial to enabling airports to make best use of existing capacity, and play a vital role in enabling our members in all parts of the UK to attract new and more frequent routes.

15. Airports are working hard to forge closer relationships with Government, local authorities, LEPs, Network Rail, the Highways Agency and other partners in order to deliver improvements on the ground. However, in the coming years the strategic leadership that is required to really push this agenda forwards in future years needs to come from the Government. Current levels and adequacy of public transport infrastructure connecting UK airports needs to be assessed, identify where there are gaps in present and future demand, and move towards a more integrated transport policy and network to ensure surface access projects successfully align rail and road access with aviation.

16. With regard to winter resilience, UK Airports have taken significant steps in recent years and made major investments in, for example, specialist snow clearing equipment. AOA member airports have a high state of preparedness for winter periods with effective command and control procedures in place to respond to severe weather incidents. It should also be taken into consideration that some airports are running close to their capacity limits, meaning that even where vast sums of money are being spent on equipment to make the infrastructure more resilient, there is very little room for manoeuvre without disruption when something goes wrong.

17. Capacity constrained airports are also increasingly employing Strategic Airport Capacity Management (ACM), initiated by NATS, and which combines advanced modelling techniques to allow airports to better make sense of a huge amount of operational data. The analytical components that make up the toolset can be easily developed in a bespoke fashion for different airports, meaning any number of problems and constraints can be understood and tackled.

<u>Information provision</u>

11. Different airports will use different infrastructure and resources for delivering information during disruption. For example, at some airports Passenger Champions have been employed to focus on ensuring that passengers' needs are prioritised, while at other airports, back office staff will take on duties such as switchboard cover to enable frontline customer services team to focus on assisting with tasks such as repatriation of bags (in the case of cancelled flights), organising onward transport and face-to-face communications in the terminal. In sum, one size fits all solutions should be avoided in a diverse sector with businesses of different sizes.

12. In terms of winter resilience, airports have provision of outward facing information for air passengers whose flights may be disrupted, agreements with airlines for providing for on-site air passengers obliged to wait for a delayed flight and contingency arrangements in place with airlines, surface transport providers, hotels, emergency services, local and voluntary services, for ensuring the welfare of passengers whose flights have been delayed or cancelled.

13. The AOA stresses that the relationship between the airline and passenger is key and is primarily the responsibility of the airline. An airport will do its best to support passengers but it should not be providing financial assistance that may result in confusion between airlines and passengers, and may not be in line with the policies and procedures airlines have in place to determine the types and costs of provisions they are able to make.

For further information, please contact AOA Policy Manager Peter O'Broin on 020 7799 3171 or peterobroin@aoa.org.uk.

YOUR LONDON AIRPORT Gatwick

Operating resilience of the UK's aviation infrastructure: A request for information (CAP 1420)

Date of issue: 23 September 2016

Gatwick Response

Introduction

Gatwick Airport Limited (GAL) welcomes this opportunity to provide information to the CAA for its review of the Operating Resilience of UK aviation infrastructure. Over the past three years, we have become increasingly concerned about several elements in the aviation supply chain which impact upon the resilience of the services received by passengers travelling to and from Gatwick. In particular, we have seen a significant adverse impact from the inadequate air traffic control service provided at certain times and places in European airspace, and from perennial difficulties in the operation of the ground handling market at Gatwick and other airports. These issues are key drivers of delays and cancellations to flights, with resulting adverse impacts on passengers.

What is required to deliver resilient punctual flights?

Aviation is an industry characterised by a complex vertical value chain, some parts of which are subject to regulation, while others are left to competitive markets. The key elements of this value chain include airlines, airports, air traffic control, airspace and ground handling. To operate effectively, and maximise capacity, the industry relies on all of these elements delivering both efficiently and cost effectively. However, this outcome has not been achieved consistently in practice: the combination of under-performance by some organisations and the incentives faced by parties in

competitive markets has tended to undermine system resilience and/or hinder the release of valuable scares capacity and thereby act against the interests of passengers.

Party	Responsibility
Airline	*Scheduling:* Set a schedule optimised against criteria of deliverability and resource utilisation. *Sells tickets* to the end user with an expected departure (off block time) and expected on arrival (on block) time. *Resourcing:* Ensuring that enough staff and aircraft are available to deliver the schedule. *Ground Handling:* Contract with ground handling agents for (or self provides) the ground handling capability required to deliver the schedule.
Air Traffic Control (en-route and tower)	*Airspace capacity:* Makes airspace capacity available to industry. *Taxi times:* Provides guidance to airlines as to what allowance to make for taxi times at airports.
Airport	*Providing airport infrastructure:* The airport is responsible for making resilient infrastructure available to users in line with its conditions of use and for setting the charges for users to access the infrastructure. *Declares capacity:* Jointly with its airlines, the airport declares capacity based on modelling undertaken by the ANSP.

Achieving reliably punctual services is the product of the coordinated actions of a large number of parties. In planning and delivering services, organisations must take account of the relative performance of others, both at Gatwick and more widely in European airspace. Similarly, in assessing the performance of any one organisation in delivering a resilient service, due account should be taken of the constraints imposed by others, as some resilience challenges are too substantial for an individual market participant to address alone. They demand action by other participants to improve resilience for passengers in London and the South East. These factors include capacity and punctuality problems caused by European airspace delays, which need to be

factored into airline scheduling, the functioning of the ground handling market, and the provision of infrastructure.

In the subsequent paragraphs we explore these issues further, as well the drivers of resilience and punctuality.

Actions taken by Gatwick

The continuing constraints on airport capacity create a difficult environment for operational resilience. Airports operating nearer to capacity face a greater resilience challenge than those which do not. There remains, however a passenger interest in ensuring that capacity is to the greatest extent possible made available to meet increasing demand. Against this backdrop, airports can take steps to improve operational resilience within the capacity constraints that they face.

For several years Gatwick has been leading the way in innovating both to release additional capacity to serve demand for flights in the South East and to improve operation resilience. Actions taken include:

- innovations within GAL's charging structure to encourage growth in off-peak periods, thereby creating more effective capacity on the runway, and incentivising airlines to operate on time;
- introducing a new supplier to provide Terminal Air Navigation Services, opening up the previous monopoly position of NATS; and
- incentivising resilience in the Ground Handling operation and timely baggage delivery to passengers

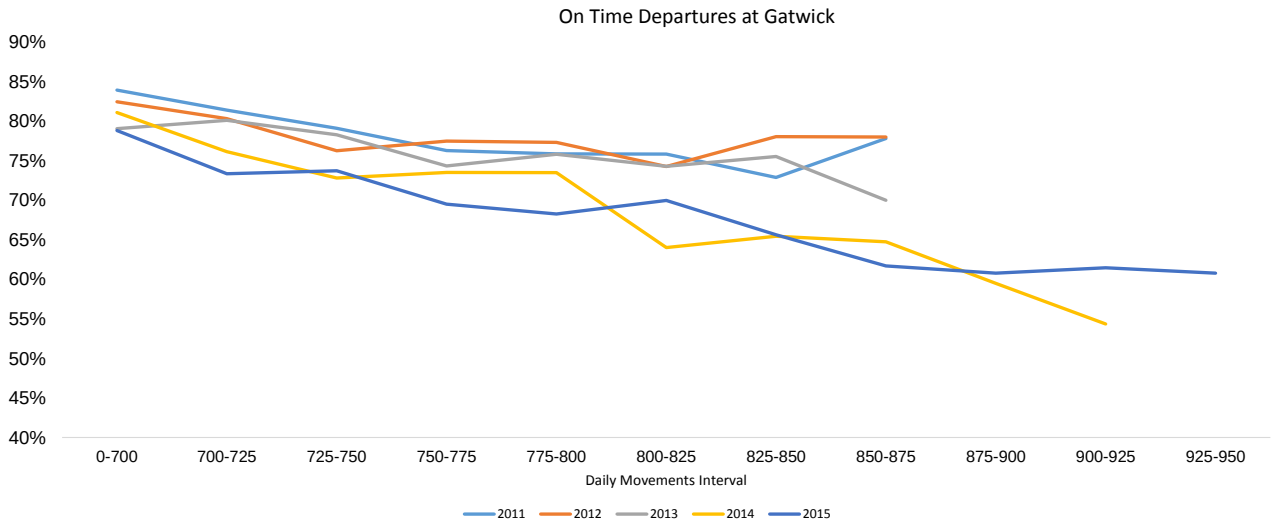
In addition to these steps, the introduction of ACDM55[1] has increased the level of coordination between the different parties at the airport. It has also created a much richer data environment within which the role of the various market participants and the root causes of issues can be analysed, and improvements identified.

Chart 1 shows how on time performance has evolved in relation to the number of movements in a day over the past five years. It illustrates that there is a limited correlation between the aggregate number of runway movements in a day (i.e. prima facie, the level of "congestion" at the airport) and the achieved on time departure performance. In 2011 and 2012, on time-performance on days handling between 800 and 900 movements per day ranged between 75% and 80%. In 2014 and 2015, on-time performance for similarly busy days was of the order of 60% to 65%. While

[1] Gatwick's ACDM55 (Airport Collaborative Decision-Making) project aims to increase operational capacity and reduce environmental impact simultaneously through the sharing of real-time information and objectives of all airport stakeholders.

performance deteriorated in 2014 and 2015, this analysis strongly suggests that the primary driver was not airfield congestion, but rather other factors.

Chart 1: Relationship between on time departure performance and number of daily movements



The primary role of the airport operator in the delivery of a resilient aviation service is to build and operate the airport facilities. The airport has no control over the schedules set by the airlines, and due to the ground handling regulations limited ability to influence the turnaround of an aircraft on the ground.

European Airspace delays and Scheduling

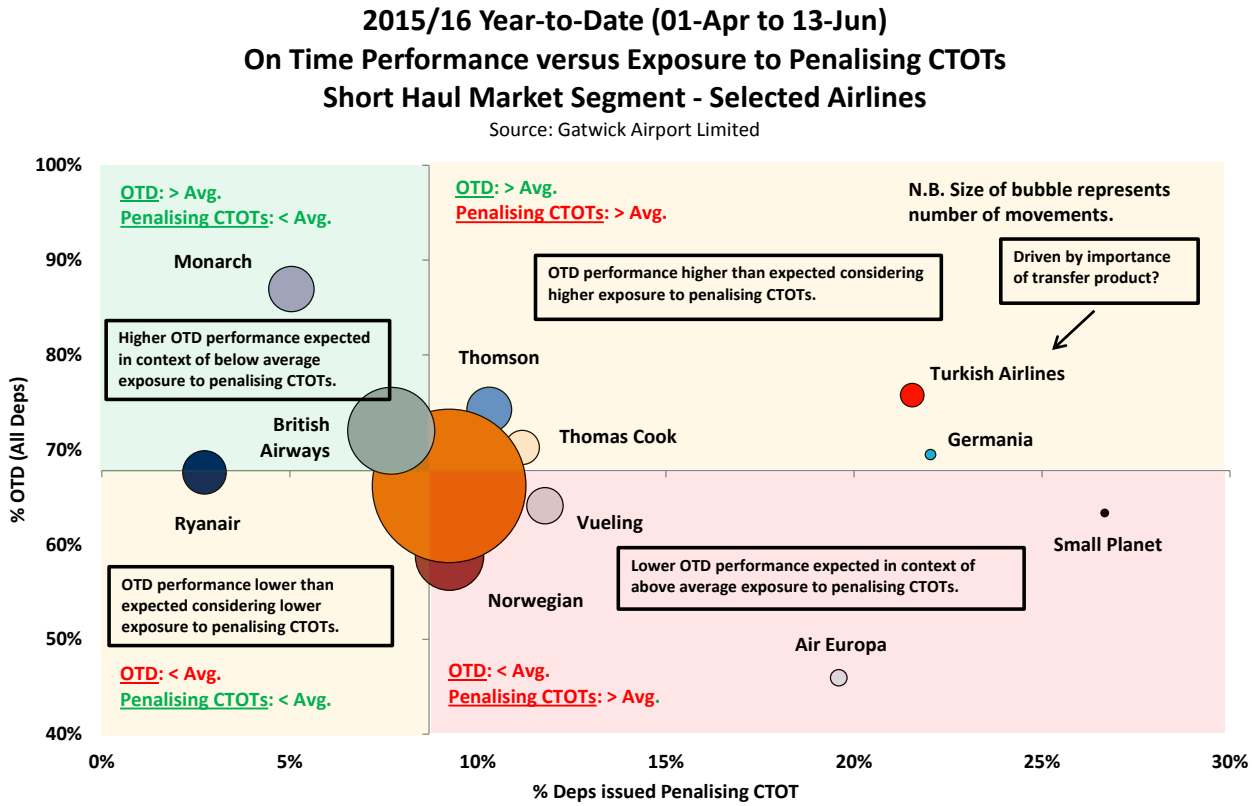
European airspace delays have a major impact on flights between the UK and many destinations on the European continent. Reducing the overall number of flights to and from airports in the South East of England would not mitigate this problem, as any resulting airspace capacity would simply be filled by flights on the continent. There would be significant detriment to UK passengers as fewer would fly, but still face the same delays.

There is clearly work to be done by national authorities working together and through Eurocontrol and EU mechanisms to improve matters. However, this is likely to take some time. In the meantime the constraints imposed by the current situation need to be managed better through a more sophisticated and integrated approach to capacity planning and scheduling.

Airline schedules need better to recognise and manage the risk of European airspace delays through taking the risk and probability of delay into account when schedules are set. The underpinning analysis needs to consider both historical experience and the guidance provided by managing bodies such as Eurocontrol. Our analysis indicates that given a certain exposure to airspace delays (represented here by the tactical rescheduling of a take-off by air traffic control through the imposition of a frequency of Calculated Take off Times (CTOTs)), some airlines still manage to operate a significantly more resilient schedule than others. For example, chart 2 illustrates how Turkish Airlines manages to achieve a more resilient schedule than easyJet, despite a higher exposure to airspace

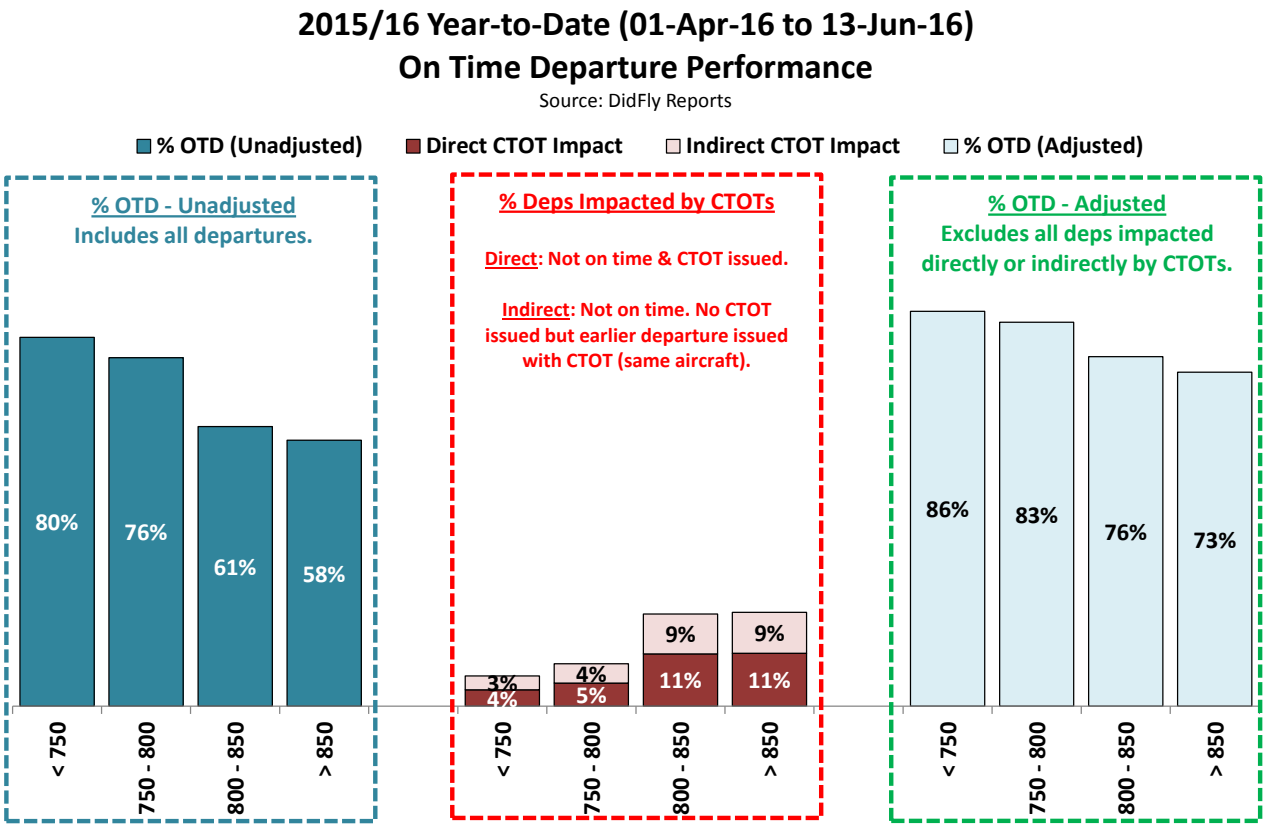
constraints. Similarly, Thomson manages to achieve a more resilient schedule than Norwegian Air Shuttle at a similar level of exposure to airspace congestion.

Chart 3: On Time Departure performance vs Departures issued with CTOT



We have extended our analysis further to examine how airspace delays relate to the number of movements at the airport. This analysis is illustrated in Chart 4.

Chart 4: On time departures impacted by CTOTs vs movements per day.



This analysis suggests that once the impact of departures affected by CTOTs (both directly and indirectly) has been corrected for, then the net impact on On-Time Departure performance of the number of movements at an airport is less variable.

Ground handling operations and turn achievement

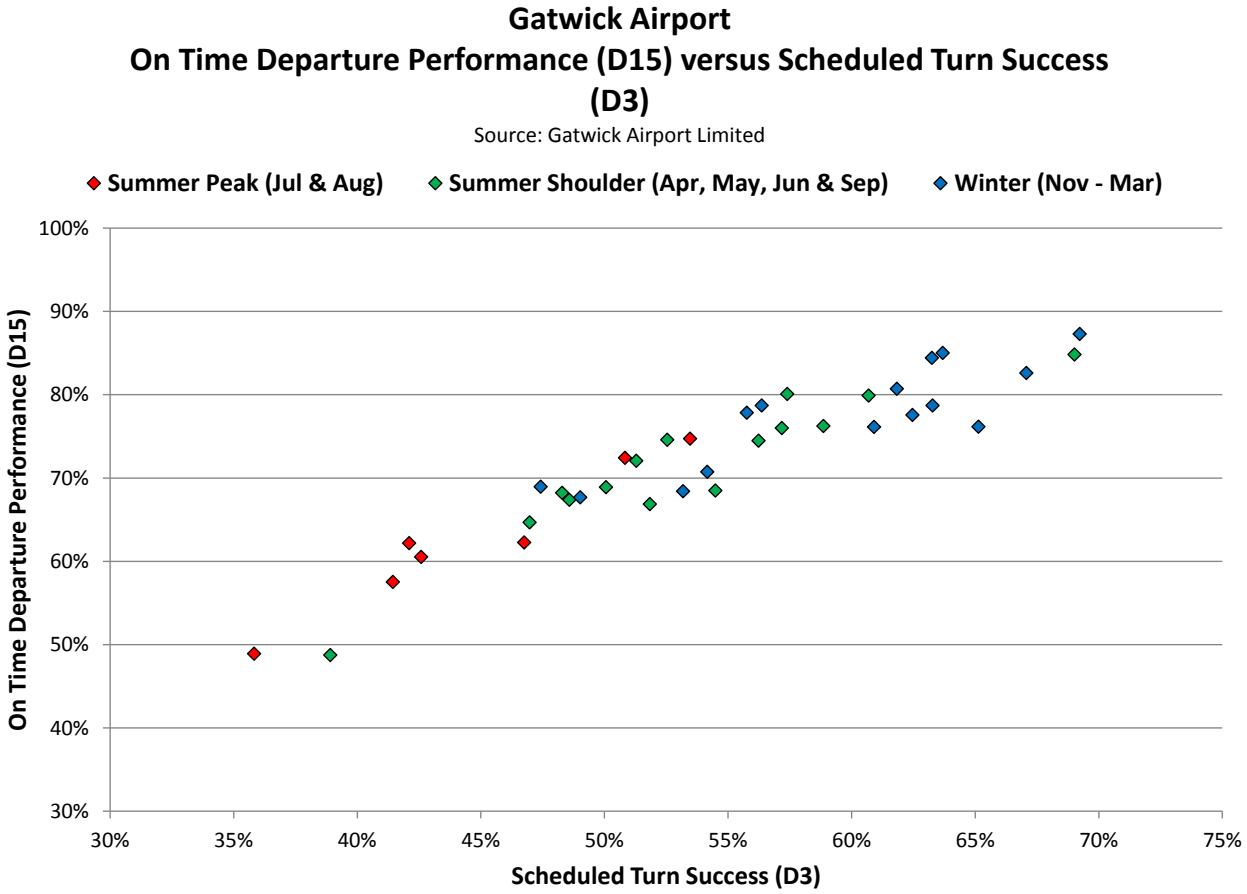
The main way through which the ground handling operation can impact on the resilience of the system is through the ability of an airline to process (or "turn") the aircraft on the ground in the

timescales anticipated by the airline schedule. If an aircraft is not turned on time, then it is also likely to depart later than scheduled. The turn of an aircraft is more important for short-haul flights as they:

- have a shorter turn time (from 30 minutes) relative to several hours for a long-haul flight;
- typically do three turns in a day; and
- fly shorter sectors, i.e. each fight will have less opportunity to "catch up" than a long haul aircraft.

We explore the relationship between punctuality and ground handler performance though turn achievement in Chart 5 below.

Chart 5: Relationship between turn achievement and On Time Departure Performance



Our analysis suggests that to achieve a resilient punctuality performance of 80%, airlines need to ensure that their handlers can achieve a successful turn for 60-65% of flights (as illustrated in chart 5)[2]. This can be achieved either through working to resource the ground handling operation, or

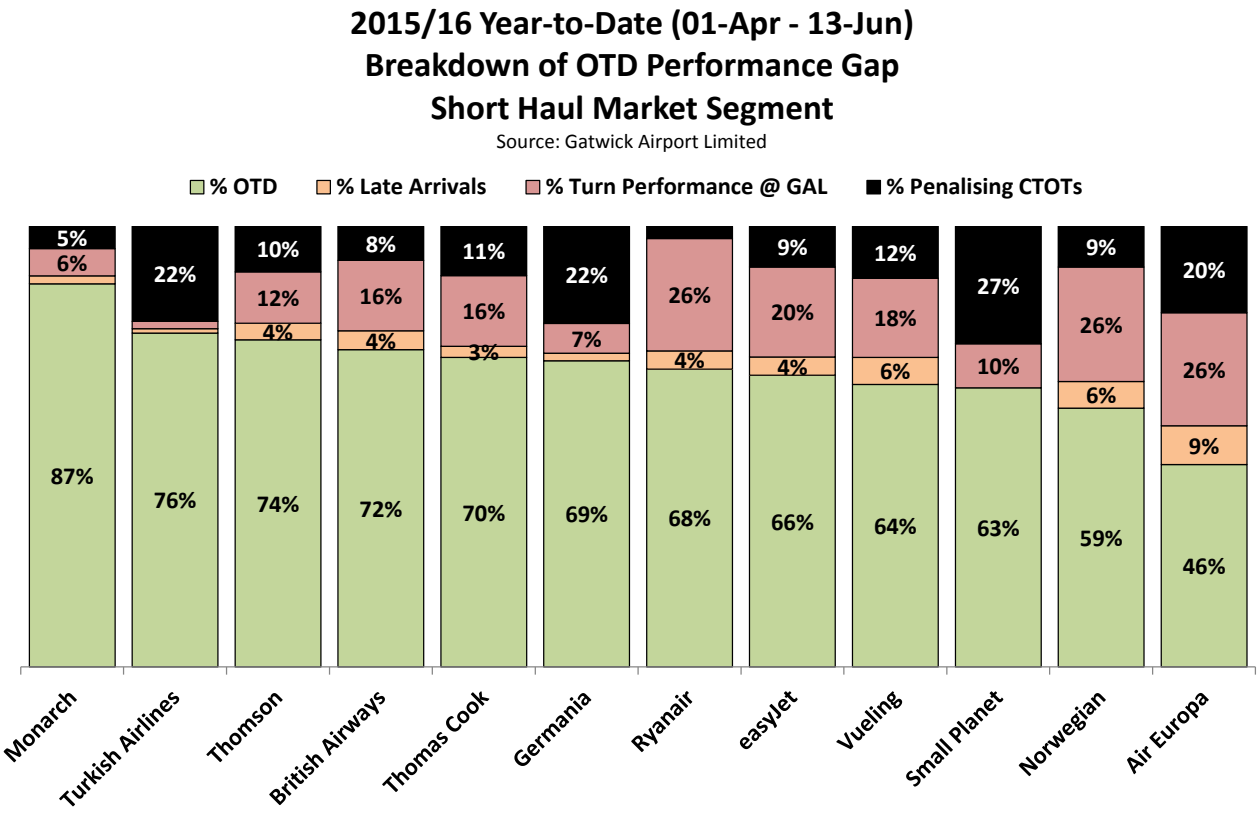
[2] A successful turn is defined here as a turn being completed within 3 minutes of the planned amount of time to turn the aircraft.

setting achievable targets for the turn of aircraft. In a constrained airport environment, insufficient ground handling resources deployed by one airline can have the effect of not just reducing punctuality performance of that airline but also adversely affecting the ability of other airlines operating at the airport from achieving their own schedules on time. The proper resourcing of ground handling operations is particularly crucial in a constrained airport environment and requires a holistic view by an airline of the value of ground handling to its service, rather than a one-dimensional cost-driven view.

Conclusions

We have analysed how the different root causes of delays vary across the different short haul airlines at Gatwick. The analysis outlined in chart 6 below reveals that both the performance and the root causes of delays vary significantly across the different airlines. For example, Monarch outperforms the other airlines by adopting a resilient schedule to help differentiate themselves from other carriers. Similarly, BA appears to achieve a better punctuality than easyJet by achieving a better turn success. As noted above, Turkish Airlines achieves among the best On Time performance despite some of the greatest exposure to airspace delays. This may signify an importance which the airline attaches to punctuality in order to support connecting services in Istanbul.

Chart 6: Breakdown of Punctuality performance Gap at Gatwick (short haul)



This analysis suggests that there remains significant scope to improve resilience of operations by both improving scheduling and investment in a resilient ground handling activity, largely to compensate for the recent increase in European Air Traffic Control delays. Such changes may entail

greater investment by airlines in their aircraft fleet and their ground handling operations, the costs of which would ultimately be borne by passengers via air fares.

It is possible that the development of facilities at airports may help facilitate resilience in airlines' own operations. In particular, additional remote stands to be made available for "push and hold" and "arrive and hold" operations of aircraft could help by enabling pier-served facilities to be freed up by departing aircraft which are subsequently held on the ground rather than in the air, in line with ACDM best practice. It is however important to note that any increase in airspace delays would, on its own, not necessarily motivate investment in terminal or pier infrastructure, as the volume of demand and throughput for these assets would remain the same.

It is clear that the ground handling market is not delivering outcomes in passengers' interests. Normal competitive pressures in the airline market may not resolve this in passengers' favour. In the presence of airport capacity constraints, incumbent airlines which have control of limited and valuable runway slots may face reduced incentives to compete on the service that their ground handling contractors deliver to passengers. This is because the threat from new entrants is reduced. Given this market structure, airlines appear to face stronger incentives towards cost reduction than service resilience.

Looking at the aviation value chain as a whole, we consider that the CAA could provide leadership on addressing a fundamental point of how to balance the potentially conflicting passengers' interests between the number of flights and the resilience of flight schedules and operations. A key element in enabling the improvements we have identified above would be to establish what an appropriate level of resilience there should be in the system: i.e. what level of punctuality should the aviation industry aim for in the absence of major external events, and what sort of event should the system be able to recover from without cancelling passenger journeys?

Answers to Specific Questions

This section provides specific comments to the consultation questions raised. They should be read in conjunction to overall response provided above.

Consumer interest

1. *Do those that plan the use of aviation infrastructure (Airports, Airlines, Air Traffic Control, and ACL) understand consumer interests when balancing capacity and resilience decisions?*

We believe that the balance between resilience and capacity in aviation could be explored further. Our own research recently explored passenger understanding of punctuality in aviation.

Gatwick values a number of performance indicators with respect to consumers' interests. Principally, with a stated goal of 'competing to grow to be London's airport of choice', Gatwick focuses upon measures of satisfaction and advocacy amongst its passengers and the relative advocacy vs. other London's airports.

We have recently undertaken passenger research to help inform our decision making. This reveals that, from a consumer point of view, when asked how they chose flights, passengers stressed the importance of cost of flight tickets; ease of access to the airport via public transport; together with which airport is preferred (based upon previous experience). In view of the importance of their travel plans to the airport, passengers are increasingly demanding full up to date information about all their travel options – on each public transport mode and also level of free traffic movement on roads.

Many other factors are either important only amongst smaller subsets of passengers or judged to be not important at all when choosing a flight. One such factor our research indicated, is 'On time performance' – the results indicated that consumers neither fully understand On Time Performance concept, nor do they currently consider it when making travel plans.

When prompted, most passengers consider OTP to relate to delay at departure: however, arrival time is considered to be important too, and most would accept being delayed at departure, if it could be assured that they would still arrive at their destination on time. This was true irrespective of a passenger's purpose of journey.

The direct question of how to value possible trade-offs between capacity and resilience however remains challenging to answer. The significant negative reactions to the recent attempt by

Southern Rail to increase the resilience of their operations by reducing the number of services suggests that this difficulty is not unique to aviation. Our analysis however suggests that due to the current main drivers of punctuality being airspace and ground handling related, at Gatwick there is only a very limited trade-off at this stage between capacity and resilience.

Overall we consider that our approach to assessing passenger interests is strong. Through our Commitments Gatwick introduced a reinforced voice for our passengers through the increased mandate of our Passenger Advisory Group (PAG). This represented a significant improvement and innovation relative to the previous Q5 regime. This includes, but is not limited to, PAG participating in the annual consultation process for our Capital Investment Plan on equal terms to our airline customers and participation in the Operational Consultation Forum which is the consultative body for resilience issues at Gatwick. PAG are active and welcome participants in both these forums and gives a direct voice to the interest of passengers in both the planning of capital and of operational resilience at Gatwick.

In addition to this both Gatwick and the airlines undertaken passenger research to help inform business decisions and longer term planning. This includes:

- At Gatwick we have put the passenger's wants at the centre of our long-term planning, as evinced by the YouGov research referenced in our Business Plan (Feb 2013). Furthermore, we undertake a wide range of regular customer satisfaction surveys (one of which feeds into the Core Service Standards regime); a profiling & behaviour survey and forward-facing research eliciting what facilities, products & services passengers want as they travel to and through Gatwick.
- Gatwick also review what passengers want based upon suggested improvements elicited through the CAA Passenger Survey, for Gatwick.
- In addition to these surveys, identifying claimed behaviour, Gatwick has other data streams showing how passengers have revealed their actual preferences by consumption of various services at the airport (e.g. EPOS data; Wi-Fi & website usage; CRM data).
- Gatwick also conscientiously monitors all available direct passenger feedback channels; feedback from airport staff and also from the Passenger Advisory Group (PAG).

Gatwick has, especially since independence from BAA, used insights from these various sources to help inform the continuous improvement in infrastructure, processes, services & passenger experience development (and its airline business development) that will help it achieve its stated objective "to compete to grow to become London's airport of choice"

2. *How well do these parties understand consumer interests?*

While Gatwick cannot speak directly to the passenger research undertaken by Air Traffic Control, airlines or ACL. However we believe that as parties not directly involved with passengers, they may not have, (or feel a need to have), as great an understanding of consumer interests.

Anecdotally we believe that airlines are starting to receive feedback from their passengers about the importance of resilience. We are also seeing signs that several are responding to recent event and have started taking actions, including in adjusting schedules and exploring ways to increase the resilience of the turn. Where this has been done significant improvements can be readily observed.

Understanding passenger interests is a continuous process. As identified in our response to Q1 we have a number of ways in which we keep in close touch with evolving consumer views. This is an important aspect of the more competitive market within which we operate following the breakup of BAA. We also believe that the convergence of business models in the short haul sector is in part due to an increased understanding of the balance between price and quality in the airline market.

3. *What evidence do these parties have and what does this evidence indicate?*

Airlines and airports will have their own catalogues of research evidence.

When prompted, most passengers consider On Time Performance to relate to delay at departure: however, arrival time is considered to be important too, and most would accept being delayed at departure, if it could be assured that they would still arrive at their destination on time. This was true irrespective of a passenger's purpose of journey.

4. *How is this evidence or understanding taken into account in the planning and decision making process in order to ensure an optimum balance is achieved?*

The main criteria currently used to achieve a balance between airport capacity and resilience is the simulated holding time, which simulates whether capacity can be released without causing additional delays.

- The runway holding time criteria is used to balance the release of capacity with service provision in line with industry standards of 10 minute runway holding and 20 minute departures taxi time which enables airlines to plan block times accordingly.
- When making this assessment, a Busy Day schedule is used, reflective of demand during the peak 6 weeks of the season. During other periods the demand is significantly reduced, with consequent reductions in anticipated holding and taxi times. This ensures that the Gatwick runway capacity limitations alone contribute little to poor OTP.

In addition to the runway constraints we also assess against passenger infrastructure requirements. Infrastructure is planned so as to ensure that the modelled levels of queueing and congestion experienced within the Terminal on a Busy Day comply with IATA C minimum levels of service and provide sufficient infrastructure to meet our service commitments to our customers as monitored through the CSS regime. Results from the ASQ and QSM suggest that we have been relatively successful in recent years in meeting passenger expectations and demands.

Airport capacity declaration and scheduling

5. *Who is responsible for making airport capacity declaration and scheduling decisions and how are different interests balanced?*

GAL is responsible for making the capacity declaration after consultation with the Coordination Committee. This is done on the basis of modelling carried out by ANS (GAL's ATC service provider).

The Coordination Committee comprises airline representatives from the Scheduling Committee, the ATC service provider (ANS and NERL), the coordinator ACL and Gatwick airport. A detailed description of the approach used for assessing demand requirements and determining the extent to which capacity can be increased to meet them has been included in a separate report provided to the CAA.

ACL is responsible for coordinating the schedule within the declared limits on behalf of the airport and the Gatwick airlines. The proposed methods of capacity assessment and the Local Rules applied to coordinating the Gatwick schedule are also agreed by the Coordination Committee and where a decision needs to be put to the vote, the airlines hold 80% of the vote and the other 20% is shared between the airport and the ATC provider.

6. *Do the mechanics of decision making work well?*

Generally there has been little dispute over proposed declaration limits at Gatwick airport.

Each airline has its own vested interest in the output given that they compete with each other for slots. However, ACL manage the allocation of slots to the airlines in an impartial manner following strict guidelines as laid out in the Coordination Committee Constitution.

7. *How could the consumer voice be strengthened and embedded in the governance process?*

The scheduling process is a mechanical, rule governed process, rather than one characterised by 'judgements'. As such we believe that the most important way user interest can be enhanced in the process is by the process taking into account the factors which matter to users. Historically we believe that holding time modelling has represented a good proxy for passenger interests. However, as new challenges have emerged as a result of poor European Airspace performance, and issues in the ground handling market we believe this process could be enhanced to ensure the passenger interests are considered.

An element which is currently outside the process is the ability of the airlines to adhere to the schedule they plan to fly, the implied risk profile faced by the schedule, and the ability of the system to recover from events. This is important as the scheduling process currently focuses on the ability of the airport to deliver the throughput requested by the airlines (subject to stress tests). In particular the scheduling process does not assess:

- Can a schedule actually be flown (i.e. is there enough time for individual aircraft to complete their sectors and turn around at the away base?)
- Whether the schedule includes correct taxi time assumptions at Gatwick

- Has an appropriate allowance been made in the schedule for risk factors such as whether or air traffic control delays (whether general or sector specific)?
- Is the turnaround time at Gatwick and the away bases achievable and aligned to the airlines agreement with their ground handling agent?

We believe all of these factors highly are relevant and important to ensure that the impact on the service received by users is properly understood. The assessment can then be used to inform discussions around the cost of providing appropriate additional resilience through for example en-route airspace or stand capacity.

8. *At an individual airport level, how are consumer benefits and disbenefits weighed against each other? For example, additional slots balanced against the potential disbenefits of these slots (e.g. from increased delay) to existing airlines and their passengers?*

Yes, such an assessment is carried out in respect of airport capacity as set out in response to question 4 above. We do however note that they could be enhanced to also address systemic issues as identified in our cover note and in response to question 7.

9. *What key parameters are used and assumptions made, and how are these decided, agreed or checked?*

The key parameters of the current process are:

- Demand modelled within defined capacity limits – based on a Busy Day (traditionally 3rd Friday in August) which is developed by ACL on the basis of airline submissions for the following season.
- Runway separation times and sequencing capability - determined by ATC on the basis of observed performance and reflected in the AirTOp runway simulation model
- Modelled runway holding times – based on the industry standard of 10 mins and 20 min departure taxi time.

10. *To what extent should the underlying rationale for these decisions be made public?*

As currently modelled these decisions are mechanistic in nature. We do however consider that if the process is enhanced to consider the overall resilience of the system, then it may be appropriate for some or all of the results of the process to be subject to greater public scrutiny.

11. *Are wider impacts considered e.g. the impact of one airport's decisions and interactions with others in the system?*

This does not currently form part of the scheduling analysis. It relies on schedules and data being submitted by potential customers, each of which designs their own schedules taking into account their appetite for risk.

We believe this is a weakness of the system and as indicated in our response to question 7 above we believe it can be enhanced.

12. *What relevant lessons have you learnt or best practice have you developed in the capacity declaration and scheduling process?*

We believe we have enhanced the process significantly over the past period to increase the sophistication of the modelling of airport demand.

- The hourly limits must be flexible to changing demand characteristics year on year, increasing where capacity is required and reducing where it is unlikely to be utilised effectively. In this way firebreaks in the schedule can be provided at times where there is a natural break in scheduled demand without the risk of back-filling by ad-hoc services.
- Sufficient flexibility in scheduling parameters should be provided so as to accommodate different demand characteristics by day of week and to facilitate coordination.
- Sub-constraints serve to manage the mix of demand and its delivery to the runway so as to maximise throughput rates.

13. *What potential changes to the process may be justified?*

Please see the answer to question 7 above.

Optimising performance

14. *What aspects of the current regime (e.g. law, regulation, operational, commercial, other) may lead to sub-optimal decisions being made?*

We believe that there are a number of elements of the current regime which may lead to sub-optimal decisions being made.

Airlines typically plan their block times based on historical performance over the prior three years. While this approach has some merit, it fails to recognize any En-Route and Arrival Airport delays that are new to the current season (i.e. the delays did not exist over the prior three years). Equally, it fails to recognise any reduction in block time that may be possible where multi-year changes that have caused delays have been completed.

There appears to be a lack of consistency in how airlines plan block times (a range of percentiles are chosen) – in essence a defect rate (one minus chosen percentile) is already planned into the block times that Airlines schedule. In effect this means that airlines plan their block times using a pre-selected risk appetite. This may not be appropriate in a capacity constrained situation where such choices can also impact on others' ability to use the same asset.

Eurocontrol publish a Network Operations Plan (NOP) covering a five year period (current publication covers the period 2015-2019). This document contains all known changes (e.g. Airspace changes, ATC system changes) that are planned within that five year period for each of the 64 Area Control Centres within Eurocontrol's 41 member states. Each documented change within the five year Network Operations Plan is assessed in terms of potential delay minutes that may be incurred for any aircraft traversing that airspace. We believe the planning of more accurate Block Times that recognise not only historical performance, but that are augmented with a forward looking view of anticipated known delays based on Eurocontrol's NOP would improve On Time Arrival and On Time Departure performance at Gatwick and more broadly across the network

As an ACL Coordinated Airport, Gatwick is heldto strict evidential standards in regard to its capability to deliver its proposed Declared Capacity as part of the Capacity Declaration process. We believe that, in a capacity constrained world, a similarly independent level of rigour should inform assessment ofthe Airlines' capability to Turn Aircraft as per their proposed Scheduled Turn Times and be included within the seasonal planning process. Gatwick believes this would be

beneficial in ensuring all Airlines plan a demonstrably realistic schedule, with a well understood risk profile.

A further limitation of the current slot allocation process is that it does not allow ACL to allocate slots with due consideration for Standard Instrument departures (SIDs) routes which operators may fly, potentially resulting in a sub-optimal plan. This could be mitigated through a more integrated approach with consideration of load balancing.

15. *What are the major challenges facing operational performance now and over the next 10 years? How could these be best tackled?*

There are two major operational challenges for Gatwick Airfield operations: (1) European Airspace Congestion (2) The operation of the Ground Handling market.

Eurocontrol's forecast growth predictions over the coming 20 years represent both major challenges and opportunities for the European aviation industry and for the UK and European economies. Eurocontrol handled about 10 million flights across its 41 member states in 2015. This is forecast to rise to 14 million flights per year by 2035, with much of that growth forecast to come from India and the Far East. The limitations and constraints of current European Airport infrastructure and Airspace Management means that about 2 million of those flights cannot be accommodated.

We believe that European Airspace congestion must be addressed as a matter of urgency. NATS CEO Martin Rolfe has warned of increased delays, especially during the peak summer months if nothing is done to modernize UK airspace. "Airspace is our invisible infrastructure: we might not be able to see it, but it is as important as our roads, our railways and our runways," he said. "Today's airspace was designed more than 50 years ago and for a different age, when aircraft like the VC-10, the Vanguard and the Hawker Siddeley Trident ruled the skies, not the A380s and Boeing 777s of today."

The SESAR Joint Undertaking Research & Innovation effort has delivered some notable validated capabilities to improve airport capacity and resilience e.g. Time Based Separation (TBS) and Ground Based Augmentation of Satellite Navigations Systems (GBAS). As the SESAR program transitions from SESAR 1 (2010-2016) to SESAR2020 (2016-2020), the industrialization of

validated capabilities must be significantly accelerated to deliver benefits. Of the 63 research projects included within the SESAR Solutions Catalogue [see attached], only 26 are classified by SESAR as being "ready for industrialization or implementation has already started."

In addition to this the ground handling market is not delivering outcomes in the passengers interest, and it is important for the CAA to recognise that the in the presence of airport capacity constraints, incumbent airlines may not have sufficient incentive to compete on the service their ground handling contractors deliver to passengers. At economically regulated and capacity constrained airports excess demand feeds straight into higher airline yields. This creates a powerful incentive for incumbent airlines to prevent additional capacity from being released as under the slot regulations such capacity would be allocated to new entrants.

We believe that absent constraints to airport capacity the market incentives on airlines to compete on reliability and resilience of flights will be strengthened.

16. *What performance indicators do different parties (consumers, airlines, airports, ATC) value and why? What can be done to increase their visibility?*

Please see the response to question 1 for an overview of what performance indicators are valued by consumers.

Different parties value different performance data at different times – e.g. a consumer is not interested in the Target Start Approval Time of the Aircraft, but ATC, the Flight Deck and Eurocontrol are. Similarly, Eurocontrol are not interested in when the consumer is called to the gate to board their aircraft. However, all parties are interested in the Scheduled Off Block Time – for the consumer, this is the time printed on their Ticket, for the Airline & Airport, this is when the Aircraft is due to depart the gate. And this time is important for determining On Time Departure performance as failure to leave within 15 minutes & 59 seconds means the flight is considered to be late.

Through ACDM the degree of data transparency for operational data has increased significantly. Gatwick was the 15th European Airport to become ACDM Accredited and values the sharing of data to achieve a common situational awareness for all key stakeholders (Consumers, Airlines,

Ground Handlers, Airports, Air Traffic Control – local Tower, Swanwick & Eurocontrol). As part of implementing the ACDM program, Gatwick introduced a number of systems to achieve a "single version of the truth" available to all Stakeholders through common data access tools such as our ACDM Portal, and CASPER, our visual situation awareness map. Further enhancements to CASPER were made as part of the CHRONOS II project at Gatwick.

The aviation industry today is a highly data rich environment. It will become ever more so in the future as it better utilises digitalisation and virtualisation capabilities and techniques. It's important that all stakeholder data requirements are fully understood and delivered.

17. *What further opportunities are there to increase the benefits of capacity and/or reduce the costs of delay to passengers?*

Please see our cover note.

18. *Are there any lessons to be learned elsewhere that could be applied in the UK?*

We share SESAR's view that "Airports represent one of the best opportunities for systemic improvement in relation to the Air Traffic Management domain". We see, and completely support, the value of fully integrating airports as nodes into the ATM network, to allow for more seamless, data enriched transaction processes with collaborative decision making at their heart.

The FAA's NextGen program and Eurocontrol's SESAR program have very similar objectives and offer opportunities for shared learning, collaboration and mutual benefit.

The SESAR1 Pilot Common Project (PCP) brings a number of leading edge solutions to market. The focus now should be on shared solutions deployment with fast followers providing implementation learning opportunities for others.

Information provision

19. *How well do parties share relevant operational information at present? What improvements are needed?*

Overall, given current technology capabilities and constraints, we believe day-to-day operational information sharing between aviation stakeholders is generally good.

That said, we believe 1st Wave & Turn Performance management – major factors impacting OTD performance at Gatwick, would significantly benefit if access to all Aircrafts' on-board computer systems (e.g. ACARS) could be provided by Airlines to their Ground Handlers and to the Airport on a real time basis.

Aircraft onboard systems (such as ACARS) are able to provide a rich array of data on Aircraft turn performance (e.g. timestamps for Cabin & Cargo Door Opening and Closing Times), but currently these systems are not configured to provide real time access to this information. Rather, they are configured to provide this data on a "batch burst" basis once the Aircraft has departed from the stand following its Turn. Reconfiguring the ACARS (or equivalent systems) to provide this data on a real-time basis while the Aircraft is on the ground being Turned would enable stakeholders to stage any required interventions to recover &/or accelerate the Turn activities to ensure OTD (e.g. requesting additional refuelling resources).

20. *Is all the information relevant to improve network performance (not just at individual airport level) shared effectively?*

ACDM has significantly improved information sharing between ACDM accredited airports and Eurocontrol (e.g. Departure Planning Information). This has, without doubt, provided greater ATM accuracy & predictability to NMOC in support of overall network performance improvements (e.g. Departing Aircraft ATOT vs TTOT accuracy (+/- 5mins) at an ACDM Airport, compared to ATOT vs EOBT accuracy (+/- 15mins) at a non-ACDM airport).

We would like to see a similar focus & drive from Eurocontrol on Arrival Planning Information as this would provide an enhanced level of accuracy & predictability on Arrival traffic movements for Airports. This enables improved Airport operations through better integrated Arrival Management (AMAN), Extended Arrival Management (XMAN) and Departure Management (DMAN) systems, especially when fully integrated with an Airport's own Ground Management (GMAN) systems.

Gatwick fully supports the implementation of SWIM (System Wide Information Management) – essentially an information management architecture to improve operational efficiency and

effectiveness across the entire network. However, we see potentially different SWIM standards & protocols being developed between the FAA & Eurocontrol. Any differences need to be resolved to ensure that a fully standardised set of global operating protocols can be established to maximize the interoperability benefits that SWIM potentially offers.

We expect to see a growing number of SWIM enabled services being industrialized over the next 5 years.

21. *What information could be published to encourage performance improvements? Who is best placed to publish or provide this information?*

In the current highly competitive aviation market, a variety of information could be published to encourage performance improvements across the Aviation stakeholder community and Gatwick has been leading the way in this area through the information provisions in our commitments framework.

In addition to this we believe there is additional information which could be made available:

- Security Waiting Times at UK Airports, by Airport
- OTD at UK Airports, by Airport, First Wave & Full Day (based on Actual not Estimated Off Block Times)
- OTA at UK Airports, by Airport, First Wave & Full Day (based on Actual not Estimated In Block Times)
- Block Times (Planned versus Actual) by Destination, by Airline
- On Time Arrival by Destination, by Airline Operator
- Runway Occupancy Times by Wake Vortex Category
- Turn Achievement, by Airline, by Ground Handler

22. *What are the most important information gaps that may currently exist for consumers?*

Our research suggests that consumers, when prompted, stress their need for access to up to date information on all modes of transport, in order to ensure they can arrive at their chosen airport in time to enjoy the facilities of the airport in advance of their fights. Whilst such data are available via a number of websites and apps, passengers would like to access them all in one place so they

can make any appropriate trade-off decisions. This is particularly true at the present time, for Gatwick passengers in view of the recent performance of train operating company on the GTR franchise.

With an increasing number of passengers buying non-flexible tickets, there is also an increased desire for up to date information to plan on-airport movement – e.g. bus transfer times from car parks; current processing times at check-in/ bag-drop or security; accurate time to walk to specific departure gates; and similar information on the arrivals route – walk-time from gates; waiting time at Immigration; baggage delivery time & onward travel information, for all modes.

Airport Consultative Committee – Gatwick Airport (ACC)

Jonathan Sharratt
Civil Aviation Authority
CAA House
45-59 Kingsway
London WC2B 6TE

7th September 2016

Dear Jonathan

Planning for Operational resilience at Gatwick

The Gatwick ACC welcomes the CAA's review of operational resilience in the UK's aviation infrastructure as outlined in CAP1420. The ACC airlines welcome the opportunity to engage in the review and will seek to provide the necessary supporting evidence on an individual airline by airline basis. The Gatwick ACC has provided comment on some specific issues below where a multi-lateral response is considered appropriate.

The Gatwick ACC airlines are keen to ensure that airport operators and airlines are able to provide benefits to the consumer of maximising capacity whilst also delivering an acceptable level of performance. It is the view of LGW ACC that the effects of increased traffic, both in London airports and in European Airspace, now requires greater resilience to be created in the airport operation. Over the past two years the congestion caused by increasing capacity has had a negative impact on operational performance at Gatwick such that this has been of net detriment to consumers. As stated in CAP 1420, CAA research has shown that as airports approach their capacity limit there is an optimum point of capacity utilisation beyond which the increased cost of congestion outweighs the benefits of additional flights and that this point may be significantly below the airport's technical capacity. It is the view of the Gatwick ACC that the volume of movements at Gatwick are beyond this point for the current infrastructure, particularly when taking into account the increased congestion in surrounding airspace (London and France) in peak summer months. Capacity panning seems to assume 100% On Time Performance (OTP) which is unrealistic as a consequence there are then more off schedule departures and this causes further delay.

You will see from the performance reports provided by Gatwick Airport Limited that there is a strong suggestion that poor performance is driven by poor ground handling and airline schedules. The LGW ACC does not subscribe to all conclusions in these reports as they do not reflect that this is a deeply systemic issue that affects the vast majority of operators (with different business models and schedule features) across the airport. The airport operation is a complex system in which airspace, airport air traffic, airport ground operation, terminal operation, airline schedules and ground handling all play a critical part. It is overly simplistic to point out some aspects of failing performance that can easily be measured. However, this is often a measure of effect and is not sufficient to identify the root cause of failing performance. The Gatwick ACC supports the CAA proposal to undertake an independent review to specifically identify the root causes of deteriorating performance at Gatwick as a critical input to the resilience review. This review should also seek to properly understand the complex connections between the various factors that affect performance at Gatwick and how these factors are taken into account in the planning process.

It is proposed that this review should include the following:

1. Identify the factors, which cause delay, which are foreseeable but outside the control of Gatwick airport and airlines, including;
a. En-route Air Traffic Control restrictions
b. Weather
c. Aircraft technical failures
It would also be helpful to predict the future trends. This should establish the factors that affect performance that, whilst outside the control of the airport or airlines need to be taken into account in the planning process.

2. Identify the root cause of delays relating to airport operation. In particular, the impact of the following factors:
a. The flow of passengers through the airport terminal and the impact on passengers arriving late to the departure gate
b. Aircraft arriving late into Gatwick due to airborne holding (or extended block time due to traffic) inbound to Gatwick
c. Aircraft arriving late due to CTOTs inbound to Gatwick being applied because of flow restrictions caused by Gatwick capacity or weather
d. ATC delays causing congestion on stands and taxiways creating knock on delays to other aircraft
e. Airport runway movement capacity not taking into account direction of departures and associated timing interval required due to airspace capacity
f. Aircraft being towed late onto stand from remote parking due to taxiway or stand congestion and causing knock on delay to subsequent departure
g. Local ATC capacity to manage flow of push back and departures due to congestion of radio frequency, taxiway capacity or total volume of movements per controller

3. Identify the root cause of delays relating to airline schedule. In particular, the impact of the following factors:
a. The ability to operate consistently to meet the planned sector block times
b. Whether the planned ground time is consistent with the operational capability of the airport and ground handling operation

4. Identify the root cause of delays relating to ground handling. In particular, the impact of the following factors:
a. Lack of resourcing of key roles and the impact on on-time departures
b. Lack of equipment affecting the ability to meet scheduled ground time
c. Impact of non-GHA generated off line activity on required ground handling resource
d. Challenge of seasonal workforce, full local employment and length pass application process

The Gatwick ACC airlines will be happy to support the CAA's review with appropriate input and data to assess the above factors.

ACC Office, 3rd Floor, South Terminal, Gatwick Airport, West Sussex. RH6 0DW
Tel: +44 (0) 1293 501872 Mb: +44 **(0)**7855 521825 or email: Jorettie@mac.com

With regard to the questions raised in CAP 1420, the Gatwick ACC would comment as follows:

Questions 1-4:
The ACC believe that there is insufficient understanding of consumers interests in all parties, the ACC reference the letter and work that the ACC have asked the CAA to undertake on resilience at Gatwick.

The airlines will be responding on these questions bi-laterally as it is believed that they have a far more detailed understanding of their consumers, and how best to deliver the service.

Questions 5-13:
The process of capacity declaration currently is demand and not operationally led, the LGW ACC believe that a greater account is needed to ensure that both demand and operations are not compromised. Individual airlines will respond on their thoughts regarding their own capacity declaration issues.

The ACC believe that when looking at key parameters and assumptions for capacity declaration, the declarations and capacity are currently determined based on 100% On Time Departures (OTD), when in practice LGW operates well below this level, in effect reducing available capacity. Historic performance should be considered as part of this process with assumptions based on a more realistic OTD performance level. The ACC believe that an independent body should check key parameters.

Questions 14-18:
As stated in our letter the airlines at Gatwick believe that the current regime shows bias towards some elements; we believe that there needs to be a more balanced view, taking into account, OTD, Pier Service Levels (PSL) and airport infrastructure issues.

In the current regulation settlement process there is no weight given to operational performance. The current regime does not recognize the principal of optimum capacity. The ACC believe that capacity and operational performance should both be taken into account.

ACC Office, 3rd Floor, South Terminal, Gatwick Airport, West Sussex. RH6 0DW
Tel: +44 (0) 1293 501872 Mb: +44 **(0)**7855 521825 or email: Jorettie@mac.com

Questions 19-23:

Currently the airport publishes the Core Service Standard (CSS) scores on their website, however the ACC believe that these scores are not a particularly balanced view of consumer interests. Gatwick Airport also publish airlines data but they do not compare this versus other airports, therefore it lacks any comparisons for consumers to put scores into context.

Yours Sincerely

PP:

Chris Hope
ACC Chairman
CC. Jamie Hobbs (ACC Deputy Chairman)

ACC Office, 3rd Floor, South Terminal, Gatwick Airport, West Sussex. RH6 0DW
Tel: +44 (0) 1293 501872 Mb: +44 **(0)**7855 521825 or email: Jorettie@mac.com

London Luton Airport Response to CAP 1420

Operating resilience of the UK's aviation Infrastructure: A request for information

Date

20th October 2016

Introduction

This document seeks to provide the relevant information requested by the CAA in relation to CAP1420.

Questions 1-4 (Chapter 3) are aimed at industry parties who plan how to use the UK's aviation infrastructure and in particular how they understand and balance aviation capacity and resilience trade-offs on behalf of passengers.

Response to Chapter 3.

London Luton Airport monitors performance of all of the consumer touch points in order to understand how the actual performance compares to the consumer expectations. This is done by monitoring the actual performance with technological solutions e.g. processing times and wait times, whilst gaining consumer feedback from a variety of methods; these include face to face customer satisfaction surveys, market research studies and real time satisfaction feedback. All of this information allows us to analyse our operation in detail and balance the consumer requirements with the existing capacity.

The evidence shows that basic airport processes are invisible to consumers until you get them wrong (eg check-in, security, boarding, baggage reclaim). Diverting and comforting factors, such as free wi-fi, business lounges, etc will only ever influence consumer choice as long as you get the basic airport processes right, which is why it is important to ensure that capacity is utilised efficiently whilst maintaining the correct levels of resilience so as not to disrupt the operation significantly.

5) Who is responsible for making airport capacity declaration and scheduling decisions and how are different interests balanced?

Ultimately the airport is responsible for its capacity declaration but it would be unwise for any airport to do this in isolation from its customer airlines, hence airports hold a co-ordination committee at which all operating airlines and key agencies using the airport (NATS, UKBF) are members.

Ultimately scheduling decisions are made by the slot coordinator who is required to act in an independent and neutral capacity; there is no input from the airport or the airlines in the slot allocation process.

The interests of the airport and the airlines are reconciled by the slot coordinator and any conflict of interest is resolved according to the IATA scheduling guidelines.

6) Do the mechanics of decision making work well?
Yes it works well in reconciling the needs of carriers as closely as possible with the capability of the airport for the ultimate benefit of the consumer. This does not imply that airlines always get the slots they want or that the capability of the airport is always maximised.

7) How could the consumer voice be strengthened and embedded in the governance process?
It would be a simple matter to include consumer representation on the coordination committee however the underlying process is complex and to be a meaningful contributor such representation would require a degree of understanding and expertise. Without such expertise any representation would just be a façade.

8) At an individual airport level, how are consumer benefits and disbenefits weighed against each other? For example, additional slots balanced against the potential disbenefits of these slots (e.g. from increased delay) to existing airlines and their passengers?
The object of the whole declaration process is to maximise the use of capacity while preventing over scheduling, this translates to extending the benefit of capacity to the maximum number of consumers while ensuring that no consumer experiences the dis-benefit of excessive congestion.

9) What key parameters are used and assumptions made, and how are these decided, agreed or checked?
Passenger and aircraft flow through each airport processing subsystem is modelled individually; results and rationale are presented to the coordination committee for discussion and agreement.

10) To what extent should the underlying rationale for these decisions be made public?
Capacity declarations are already made public; we do not believe that the underlying rationale would be of benefit to anyone other than academics.

11) Are wider impacts considered e.g. the impact of one airport's decisions and interactions with others in the system?
No, this is a weakness in the present system; airports declare capacity unilaterally without reference to each other, with Air Traffic Service capability as a whole or with wider (outside of the airports immediate environs) surface transport networks and infrastructure. Likewise Air Traffic Service providers place flow restrictions on airports without any consideration of the

traffic actually being generated by those airports and surface transport infrastructure can be disrupted without consideration of the dis-benefits to air travel consumers.

12) What relevant lessons have you learnt or best practice have you developed in the capacity declaration and scheduling process?

This is an on-going learning process which is too complex to detail here except to say that the expertise of the slot coordinator in an advisory capacity is of huge benefit.

13) What potential changes to the process may be justified?

On the whole the system, as it exists, works well and does not require interference. The extension to incorporate system wide/ multi-airport capacity issues does need to be addressed but only in a way that will not dis-benefit consumers at one airport relative to another.

Response to Chapter 4

14) What aspects of the current regime (e.g. law, regulation, operational, commercial, other) may lead to sub-optimal decisions being made?

There's a tension between commercial requirements and operational performance measures, particularly in the case of airline scheduling. For example an operator may favour filing 5 slots on the hour and accept that 2 of these slots may take a delay rather than filing 2 of the slots 10 minutes later and take no delay.

The current measure of punctuality does not always reflect the true operational efficiency of an airline or an airport. An airport that suffers from a large amount of late inbound aircraft may be deemed an efficient airport although the reason for the lack of efficiency is as a result of factors beyond its control. The same can be said for airports that are situated in a location where the same piece of airspace is shared by multiple airports, simultaneous departures are not possible and therefore one airport is penalised over another for factors beyond its control.

15) What are the major challenges facing operational performance now and over the next 10 years? How could these be best tackled?

The major challenges facing operational performance lie in 2 areas;

- Ground handling services. Airline operators continue to drive down the cost of ground handling services significantly and expect unrealistic service levels for those costs which ultimately result in delay. There needs to be more regulation on ground handling services that ensures a baseline is created.
- Current airspace capacity is currently creating the biggest challenge for operational performance. Whilst we continue to operate in a sub-optimal airspace structure delay will continue to be mainly absorbed on the ground, this causes airports to be deemed in efficient, and affects airport capacity. Addressing the issue with airspace to create more free flow departures through a systemised airspace will allow airports to function much more efficiently and make use of their full capacity.

16) What performance indicators do different parties (consumers, airlines, airports, ATC) value and why? What can be done to increase their visibility?

Consumers value an on time arrival; most consumers when booking a flight are mainly interested in the time at which they are going to reach their destination, for business travellers it's to ensure that they reach a meeting on time, for leisure travellers it's a balance

between getting up for an early departure time versus the amount of time they may lose on the first day at their destination versus cost.

Airlines main performance indicator is its punctuality although a better indicator could be the percentage of aircraft turnarounds within the minimum time; this makes allowances for the inefficiencies of other stations/service providers.

Airports main performance indicator is also punctuality but again a measure of departures within 15 minutes does not always reflect the true performance of an airport, particularly for airports where the base airlines are low cost operators that value high aircraft utilisation and fast turnaround times.

ATC main performance indicators are linked to delay and environmental impact and it is very difficult to balance the two.

Increasing the visibility may be difficult to achieve as poor performers are less likely to shout about what matters. Altering the measures to what is more relevant may encourage parties to be more vocal.

17) What further opportunities are there to increase the benefits of capacity and/or reduce the costs of delay to passengers?
As mentioned above addressing the issue with airspace capacity now rather than later should be a key priority and is essential to unlocking the full capacity benefits at every airport which will reduce delay.

19) How well do parties share relevant operational information at present? What improvements are needed?
Some parties are better at sharing information than others, some of this is due to resource issue, and some is due to commercial sensitivities. Sharing of information is key to making informed, timely decisions to the benefit of the entire operation.

20) Is all the information relevant to improve network performance (not just at individual airport level) shared effectively?
No, in the case of the air traffic network, demand is shared regularly although capacity is not, without an understanding of capacity the impact of demand is unknown to many users.

21) What information could be published to encourage performance improvements? Who is best placed to publish or provide this information?
There is a vast amount of published information currently in the public domain and whilst many of these publications claim to provide the same measurements many of them are using different metrics or incomplete data sets that do not reflect the true performance.

In the case of an airport, the measurement of performance needs to be altered in order to truly reflect the airport performance i.e the current measure of performance (punctuality) is more a measure of an airlines performance at the airport and not necessarily the airports performance.

Monarch Airlines Limited
Prospect House, Prospect Way
London Luton Airport
Luton, LU2 9NU
United Kingdom

Switchboard: +44 (0)333 003 0100
Contact centre: +44 (0)333 003 0700

www.monarch.co.uk

Jonathan Sharratt
Civil Aviation Authority
CAA House
45-59 Kingsway
London WC2B 6TE

Planning for Operational resilience at Gatwick (CAP 1420)

19th September 2016

Dear Jonathan

Monarch Airlines Ltd (MAL) welcomes the CAA's review of operational resilience in the UK's aviation infrastructure as outlined in CAP1420. We welcome the opportunity to engage in the review and will seek to provide the necessary supporting evidence as an airline operating in the UK.

MAL agrees with the comments that have been provided by the airlines' Community via the ACC. However, we want to highlight and clarify few points that we feel need to be addressed the operations issue in the UK as a whole and the south east of England with Gatwick specifically.

As the most efficient operator in Gatwick, we feel Monarch has demonstrated the possibility to maximising capacity whilst also delivering a good level of performance. Monarch shares the view of LGW ACC that the effects of increased traffic, both in London airports and in European Airspace, now requires greater resilience to be created in the airport operation. Over the past two years the congestion caused by increasing capacity has had a negative impact on operational performance at Gatwick such that this has been of net detriment to consumers. As stated in CAP 1420 (Pt 2.1 & 2.5), CAA research has shown that as airports approach their capacity limit there is an optimum point of capacity utilisation beyond which the increased cost of congestion outweighs the benefits of additional flights and that this point may be significantly below the airport's technical capacity. We disagree with the pt 2.1 from the document as we feel that the volume of movements at Gatwick is already operating

at its maximum capacity now and is already beyond this point for the current infrastructure, particularly when taking into account the increased congestion in surrounding airspace (London and France) in peak summer months. MAL considers that the Airport has huge responsibilities in this when GAL seems to assume an OTP of 100% in its capacity planning proposition to the ACL, which is unrealistic as the airport in reality hasn't ever been closed to this level. This has a serious impact on the operation as clearly this increases off scheduled departures and additional delays.

It would be interesting to ask the airport to show the increase in capacity and the decline on OTP in the same document, we are confident that the graph would speak for itself showing the 2 clearly linked together.

As you describe in your 1st question (pt 3.4), there are a lot of parties that share responsibilities in these issues, not to exclude the regulator as well. The Airlines Community has already acknowledge its part and Monarch will support this. Ground Handlers have often been pointed out as the main responsible party in the past and it seems that the Airport is still blaming others (Airlines, Ground Handling…) and doesn't seems to be willing to engage constructively on the matter. You can see this from the performance reports provided by Gatwick Airport Limited, strongly suggesting that poor performance is driven by poor ground handling and airline schedules.

Therefore, Monarch Airlines Ltd strongly support, along with the community, the CAA proposal to undertake an independent review to specifically identify the root causes of deteriorating performance at Gatwick as a critical input to the resilience review. This review should also seek to properly understand the complex connections between the various factors that affect performance at Gatwick and how these factors are taken into account in the planning process.

As presented by the ACC group, it is proposed that this review should include the following:

1. Identify the factors, which cause delay, which are foreseeable but outside the control of Gatwick airport and airlines, including;
    a. En-route Air Traffic Control restrictions
    b. Weather
    c. Aircraft technical failures

It would also be helpful to predict the future trends. Again, LGW can't just assume a 100% OTD rate to build up its planning and must implement firebreaks periods each day (to be determined from historical data). This should establish the factors that affect performance that, whilst outside the control of the airport or airlines, need to be taken into account in the planning process.
The airport should also deliver on time Capital Investment projects which provide new facilities and ease operations in priority over retails and commercials projects.

2. Identify the root cause of delays relating to airport operation. In particular, the impact of the following factors:

a. The flow of passengers through the airport terminal and the impact on passengers arriving late to the departure gate
b. Aircraft arriving late into Gatwick due to airborne holding (or extended block time due to traffic) inbound to Gatwick
c. Aircraft arriving late due to CTOTs inbound to Gatwick being applied because of flow restrictions caused by Gatwick capacity or weather
d. ATC delays causing congestion on stands and taxiways creating knock on delays to other aircraft
e. Airport runway movement capacity not taking into account direction of departures and associated timing interval required due to airspace capacity
f. Aircraft being towed late onto stand from remote parking due to taxiway or stand congestion and causing knock on delay to subsequent departure

g. Local ATC capacity to manage flow of push back and departures due to congestion of radio frequency, taxiway capacity or total volume of movements per controller

⇨ *By increasing volume Year-on-Year, and by assuming 100% OTD, the airport consequently increase the volume of off-scheduled flights at night because of the delay for which they are now creating a new tax. This new cost is not going to deliver any positive outcome to the issue but might certainly develop GAL's revenues.*

3. Identify the root cause of delays relating to airline schedule. In particular, the impact of the following factors:

a. The ability to operate consistently to meet the planned sector block times
b. Whether the planned ground time is consistent with the operational capability of the airport and ground handling operation

⇨ *This would probably mean for airlines to increase their turn time (and Taxiway) to more realistic figures, even if this in itself wouldn't resolve the issue as taxiway and stands will still be congested.*

4. Identify the root cause of delays relating to ground handling. In particular, the impact of the following factors:

a. Lack of resourcing of key roles and the impact on on-time departures – thereto, the airlines would have to consider the right cost for an estimated minimum level of services.
b. Lack of equipment affecting the ability to meet scheduled ground time.
c. Impact of non-GHA generated off line activity on required ground handling resource
d. Challenge of seasonal workforce, full local employment and length pass application process.

⇨ *These would probably mean an increase in the turn cost. The Handlers may have to increase the minimum wages in order to be more attractive and to compete with less demanding jobs to get the appropriate level of staff.*

Monarch Airlines Ltd would be happy to support the CAA's review with appropriate input and data to assess the above factors.

With regard to the questions raised in CAP 1420, please see Monarch's comments below:

Questions 1-4:
Monarch believes to understand consumer's interests and build its strategy towards it but can't comment on other parts of the industry. We saw that the Airport and Ground Handler have obvious say on the topic but we also consider that the regulator has it parts to play as well, just by enforcing current regulation for example.

Questions 5-13:
The process of capacity declaration currently is demand and not operationally led, we also believe that a greater account is needed to ensure that both demand and operations are not compromised.

The ACC believe that when looking at key parameters and assumptions for capacity declaration, the declarations and capacity are currently determined based on 100% On Time Departures (OTD), when in practice LGW operates well below this level, in effect reducing available capacity.
Historic performance should be considered as part of this process with assumptions based on a more realistic OTD performance level. MAL believes as well that an independent body should check key parameters.

5. If we refer to LGW Capacity declaration process issued on 09 June 2016, the Coordination Committee meets twice a year to agree the following season's scheduling limits, and at intervals throughout the year as necessary to agree any changes which require further consultation outside the capacity declaration meetings.
At the Coordination Committee Annual General Meeting there is a formal review of the capacity declaration process, parameters and Local Rules which are used to coordinate the flight schedule. In addition to the annual review, the Coordination Committee may meet at other times throughout the year to look at improvements to the existing capacity declaration process. These may be formally voted on when there is not unanimous support behind any changes.

NATS/ANS (ATC) is responsible for compiling the runway performance data and conducting the simulation modelling of expected holding times. ACL is responsible for compiling the wish list demand from airlines and providing it to NATS to undertake the modelling. GAL is responsible for administering the capacity declaration process and presenting the proposed scheduling limits to the Coordination Committee along with the analysis which supports it.
The subsequent processes for slots are described in the IATA WSG (World Scheduling Guidelines). Monarch Airlines is adhering to these guidelines but believe this is not the case throughout. We propose that frequent & deliberate slot violators should be sanctioned more than they are now. Maybe slots taking away from an airlines should *not* be *all* given to another airline to freed infrastructure.

6. From the point of view of Monarch Airlines the capacity declaration process has proven to be working well in the past. Subsequent slot monitoring has the right framework, so that slot violators can be sanctioned and historic slots can be lost by underperformance. We feel this may have not been implemented enough when we see the constant increase of off schedule/night flights request year on year.

7. Consumer interest is met by the airline by facilitating the best schedule for its customers. Only the best schedule guarantees for the best commercial performance. Therefore the consumer interest, in theory, is inherent in the governance process but others factors in place to prevent this. For example, we have been presented the result of a GAL's survey on consumer's preference recently (7th September 2016). One of the key outcome from it was the clear expectation from passenger to use contact stands which is the best level of service in their eye, way more than buses on remote's stand (worst option) or pier with long walks.

8. This question cannot be answered by the airline as a whole.

9. Key parameters include the capacity for the runway (links to NATS modelling), the terminal, stand / parking availability and can include other parameters as defined by local rules. The process is set out in the OATA WSG (World Scheduling Guidelines) and is adhered to worldwide.

10. The capacity parameters are publically available on the coordinators website.

11. A strong focus is given to the NATS (ATC) modelling which compiles information from many airports and coordinates the aircraft flow within the airspace.

12. To ensure consumer benefits Monarch Airlines has implemented a range of measures, implemented as part of the scheduling process.
These include realistic turnaround time, resilient block times that can compensate for disruptions / delays, schedule resilience through "buffer-zones" in the middle of the day, provision of standby aircraft as well as avoiding too many departures at the same time. In addition customer research allows for preferences in departure times.

13. We are not sure if changes to the process are necessary from the point of view of Monarch Airlines. A change in the process might endanger competitiveness as it might discriminate against individual airlines, however, we do believe that we should see stronger governance on current rules and expects from the authorities to be more engaged on policing the regulations.

Questions 14-18:
As stated in the ACC's letter, the airlines at Gatwick believe that the current regime shows bias towards some elements; we believe that there needs to encompass a wider and balanced approach, taking into account, OTD, Pier Service Levels (PSL) and airport infrastructure issues.

In the current regulation settlement process there is no weight given to operational performance. The current regime does not recognize the principal of optimum capacity. The ACC believe that capacity and operational performance should both be taken into account.

Questions 19-23:
Currently the airport publishes the Core Service Standard (CSS) scores on their website, however, as per the ACC's view, we believe that these scores are not a particularly balanced view of consumer interests. Gatwick Airport also publishes airlines data but they do not compare this versus other airports, therefore it lacks any comparisons for consumers to put scores into context.

Again, MAL welcomes the CAA's review of operational resilience in the UK's aviation infrastructure as outlined in CAP1420. We welcome the opportunity to engage in the review and stay at the CAA's disposal to respond to any question it may have.

We believe that we can see a good level of performance in Gatwick but this will depend on the regulator's outcome of this consultation, the implementation of a greater resilience in airports' operation and the full engagement from the Airport, the Airlines and the Handlers, without excluding the regulator and all parties involved in the operations in the South East of England.
Congestion has been caused by increasing capacity which had a negative impact on operational performance at Gatwick such that this has been of net detriment to consumers. Unfortunately, for now, Strategies on all sides are led by demand and not operational capacity, which make us believe that a greater account is needed to ensure that both demand and operations are not compromised.

Thank you.

Monarch Airlines Ltd
Matthieu Glasson
Procurement Manager – DOC
matthieu.glasson@monarch.co.uk
Tel: +44 (0)7880 042 887