

Annex E: Night flight dispensations review

In the government's [2017 night flight decision](#), it committed to carrying out further work to consider whether the current process for issuing dispensations is appropriate, including the guidance under which they are allowed. This commitment was given in response to concerns raised by community groups during the 2017 consultation about how airport operators apply dispensations.

The government has now undertaken the review. The objective of the review was to analyse airport dispensation reports provided by the designated airports over a three-year period (October 2016 - October 2019) to ensure that dispensations are being applied correctly and consistently. The review considered where improvements to the system can be made and makes proposals that can feed into this consultation process.

Dispensation Process

There are two separate mechanisms by which night flight movements can be disregarded from the government's night flight restrictions.

Under Section 78(4) of the Civil Aviation Act 1982, the Secretary of State (SofS) may specify in a notice the circumstances in which the operator of an aerodrome can disregard movements for the purposes of such restrictions. These notices are published twice a year by NATS in the form of the Aeronautical Information Publication Supplements (AIP), in advance of the subsequent International Air Transport Association summer and winter scheduling seasons.

The circumstances are also set out in guidance, which was last published in the government 2014 night flight decision document. A copy of this guidance is in Annex F. The guidance sets out the circumstances under which the operator of an aerodrome can decide that movements can be disregarded from an airport's allowance and makes provisions in relation to government dispensations.

The three types of circumstances covered by this guidance that allow operators of an aerodrome to dispense with movements are:

- Emergencies
- Widespread and Prolonged Air Traffic Disruption
- Delays as a Result of Disruption leading to Serious Hardship and Congestion at the Airfield of Terminal

Under Section 78(5)(f), the SofS can give notice for a movement or movements to be disregarded from the night flight requirements. Dispensations issued under Section 78(5)(f) are generally used in relation to state matters, where dispensations are required as a result of a government decision, or where the circumstances are a

matter of national interest (e.g. in the case of prolonged closure of the airport). This includes flights involving V.I.P.s (not business persons or "celebrities"), humanitarian relief flights, some military flights, flights resulting from government airspace decisions, and flights undertaken in exceptional circumstances.

Reporting of dispensations

In practice, the airlines themselves make a request to the airport operator if they believe a flight meets the criteria for dispensation. The airport operator then decides on whether to apply the dispensation request, and if so, advises government accordingly, retrospectively, within one week of the occasion occurring.

Whilst in most instances the reasons for dispensations being applied were clear, this was not always the case. For example, on occasion multiple reasons can be given. Further, it was not always clear if the issues were local or caused by factors abroad (i.e. weather). We have used returns from the designated airports and categorised each dispensation made. As a result, our assessment of dispensation reasons should be regarded as indicative rather than precise and the below findings may differ from the airports own assessment, if one was to be carried out.

Review of dispensation data

Heathrow

Heathrow is London's main hub airport and is used for both short-haul and long-haul services. In November 2017-October 2018, the airport's total annual movements were 475,229. Of these movements, 6,209 took place in the night quota period (NQP), representing 1.3% of the airport's total movements. The level of traffic throughout the year is high and without the seasonal variations that are prevalent at Gatwick and Stansted airports.

Seasonal trends (charts 1-2): The review period covers winter 2016-17 (October 2016 to March 2017: 176 dispensations), summer 2017 (March 2017 to October 2017: 248 dispensations), winter 2017-18 (October 2017 to March 2018: 197 dispensations), summer 2018 (March 2018 to October 2018: 481 dispensations), winter 2018-19 (October 2018 to March 2019: 128 dispensations), and summer 2019 (March 2018 to October 2018: 286 dispensations).

The primary reason for dispensations being granted throughout the review period at Heathrow is adverse weather, resulting in safety-related air traffic control (ATC) flow rate restrictions. Most winter seasons in the review period had adverse weather as the primary reason for dispensations. Adverse weather (including low visibility procedures (LVP)) constituted 46.6% of dispensations in winter 2016-17, 87.3% of dispensations in winter 2017/18 and 60.2% of the dispensations in winter 2018-19.

In the summer seasons, adverse weather conditions (including thunderstorms, high-winds, and low visibility) were the primary reason for dispensations being applied. During Summer 2017, adverse weather conditions formed 61% of dispensations. During summer 2018, adverse local weather conditions formed 71.1% of dispensations, and in summer 2019 formed 65% of dispensations.

In summer 2018, 11.7% of Heathrow's dispensations resulted from a NATS IT upgrade (ExCDS) that replaced a paper based flight processing process. Whilst this event was foreseeable, it was exceptional, and for this reason the government agreed in advance with Heathrow it could grant dispensations for a limited number of flights that were impacted by the upgrade.

The network capacity related dispensations were a relatively new trend for Heathrow in the summer of 2018, accounting for 10.6% of dispensations. They did not always have a cause that clearly fitted within the government’s dispensation criteria. As set out below, this same issue also affected Gatwick and Stansted, to an even greater extent than it affected Heathrow. A possible explanation for this is that as a proportion of total operations, Heathrow’s long-haul and short-haul services have longer on-stand turnaround times compared to services out of Gatwick and Stansted, as they are based on a low-cost model and have shorter turnaround times. The longer turnaround time at Heathrow may therefore allow for delays to be absorbed. Network capacity dispensations accounted for 13.6% of dispensations in summer 2019.

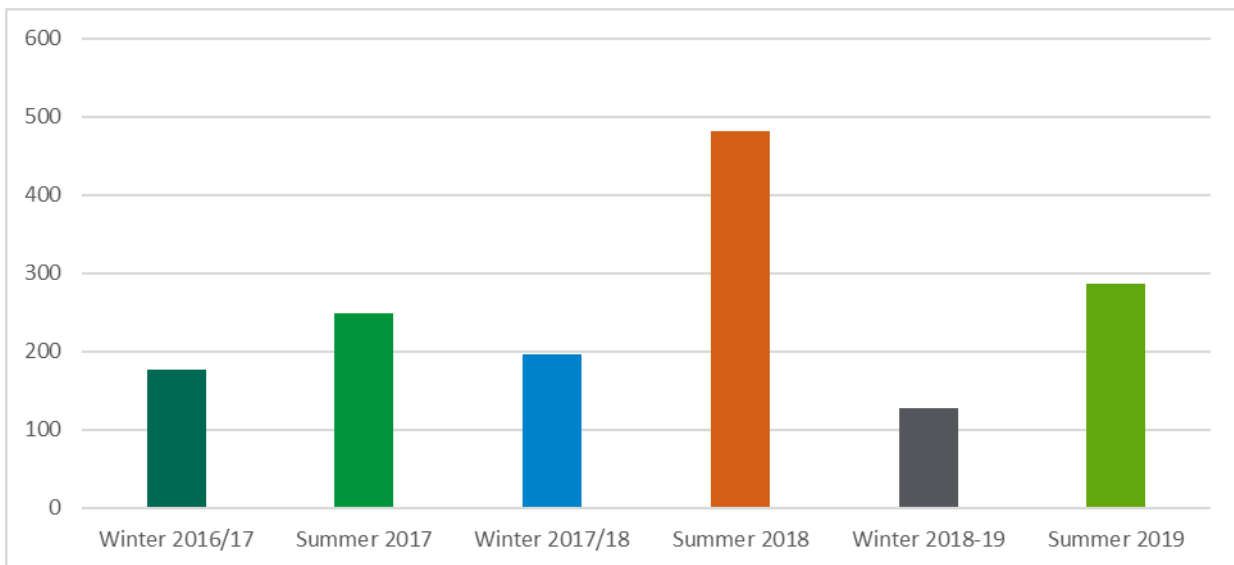


Chart 1: Heathrow - Number of dispensations, by season

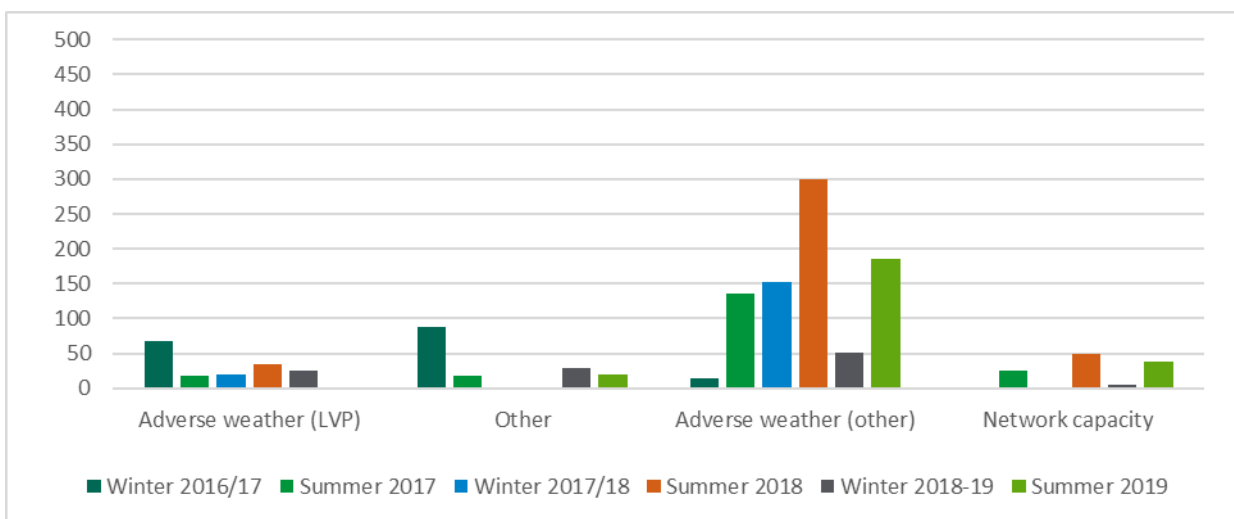


Chart 2: Heathrow - Reason for dispensation, by season

Time trends (chart 3): There are no services scheduled after 23:00 at Heathrow. This provides the airport with a short buffer for delayed flights before the NQP begins at 23:30. Whilst this provides some resilience, it is often not sufficient. This is illustrated by the fact that over the three-year review period, 65.8% of all Heathrow’s dispensations were granted for flights between 23:30 and 00:59.

Heathrow is the only designated airport to apply dispensations in the early morning period between 04:30 and 06:00. As the 06:00 to 07:00 period is one of the busiest for Heathrow, the airport lands flights earlier and in the NQP on adverse weather days to provide better resilience for the remainder of the day. On normal weather days, aircraft that arrive in UK airspace earlier than scheduled are held in stacks until their scheduled landing time. Over the review period, 26.7% of Heathrow’s dispensations were for flights which arrived between 05:30 and 05:59.

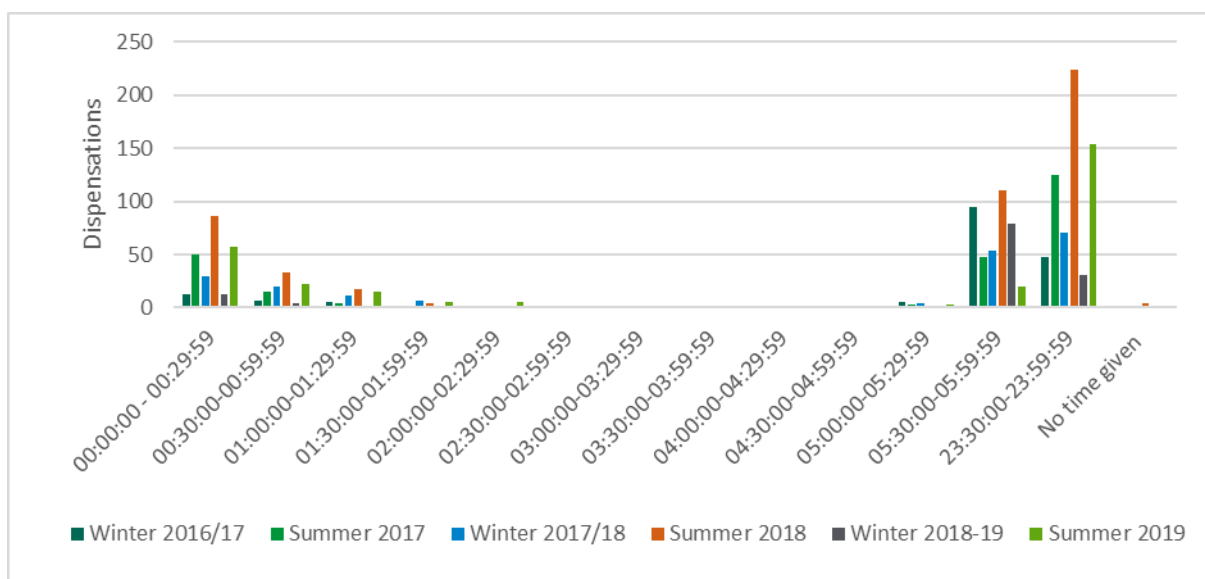


Chart 3: Heathrow - Frequency of dispensations granted by time category, by season

Airline trends (chart 4): British Airways (BA) is Heathrow’s largest airline, accounting for 60.1% of the airport’s scheduled night flights over 2018. Over Summer 2018 and Winter 2018/19, 60.5% of dispensations granted for movements at Heathrow were BA flights.

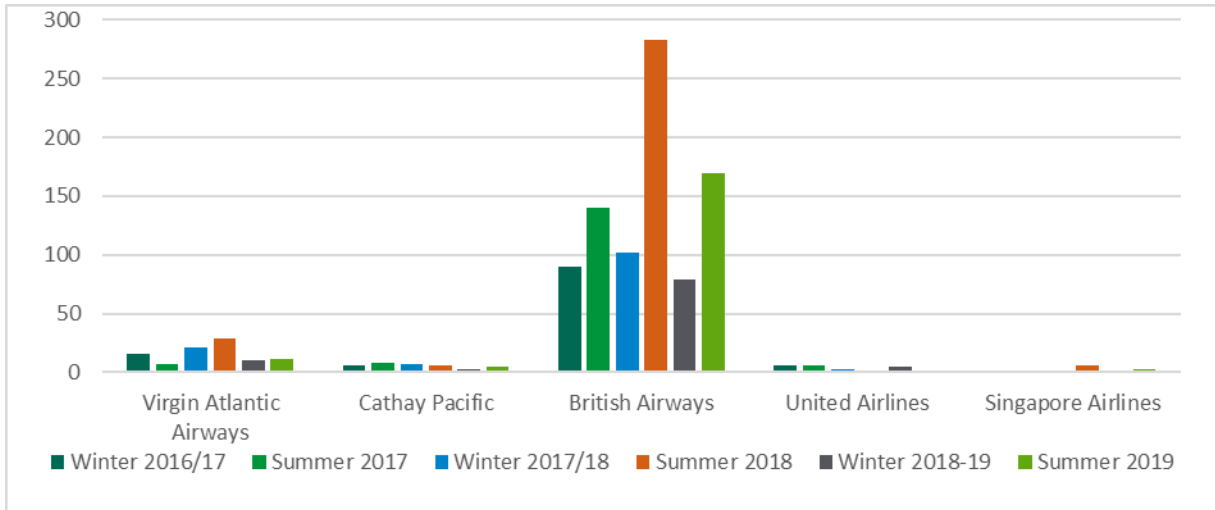


Chart 4: Heathrow - Frequency of dispensations by airline, by season

Long-term trends (chart 5-6): The number of dispensations granted by Heathrow has fluctuated over the last five years, but there was significant rise in summer 2018, which fell again in summer 2019. Dispensations accounted for 7.1% of total night movements during winter 2017-18 and 14.0% in summer 2018 seasons.

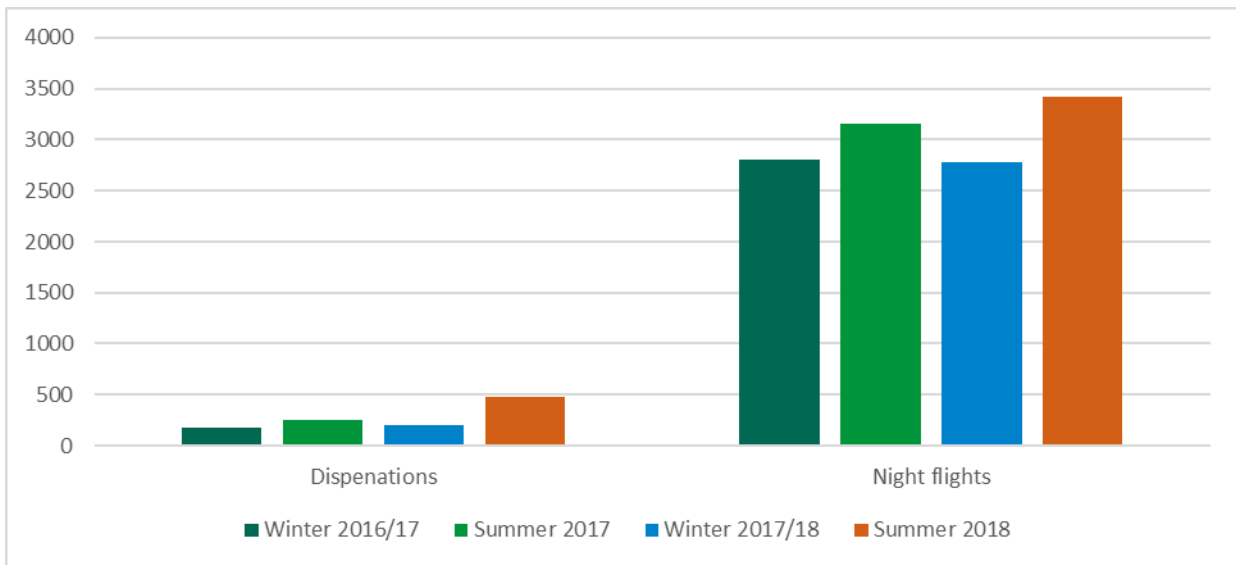


Chart 5: Heathrow - Total dispensations against total night flights

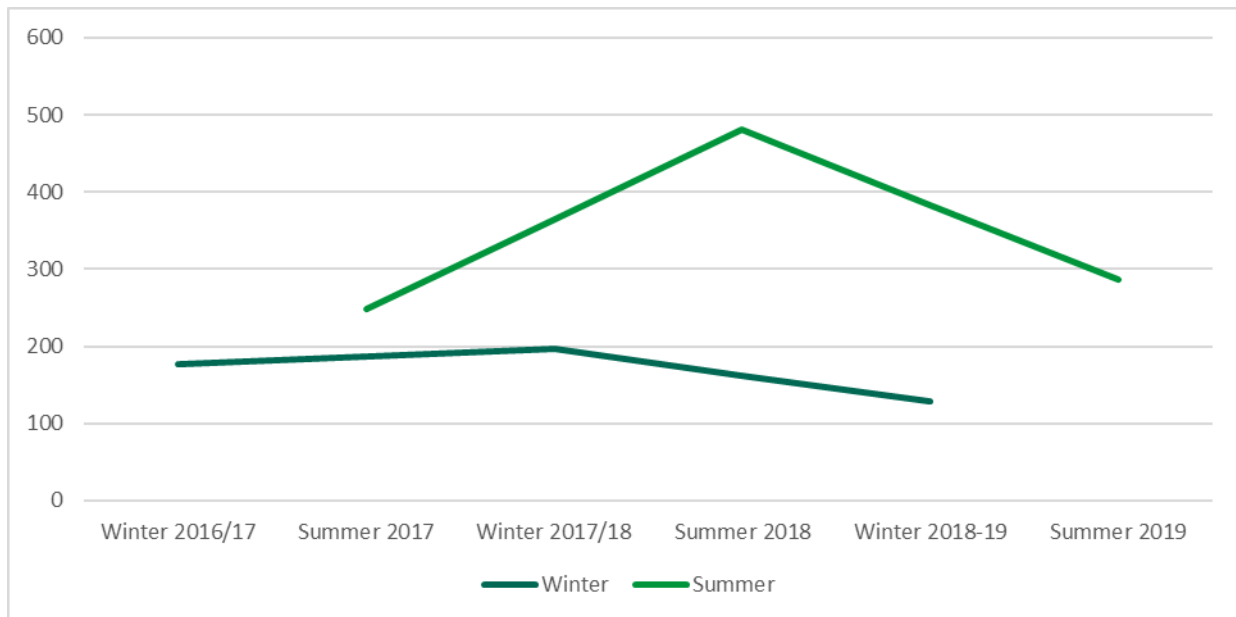


Chart 6: Heathrow - total numbers of dispensations by season, showing summer trends and winter trends

Gatwick

Gatwick is a single runway airport requiring mixed mode use. In November 2017 - October 2018, the airport's total annual movements were 279,145 with 13,610 of these taking place in the NQP, representing 4.9% of the airport's total movements.

Gatwick services a wide variety of airlines and aircraft operating different business models. It has a significant low-cost business model involving short and medium haul carriers conducting multiple rotations in a day, with flights scheduled up to the NQP at both ends of the day. It also has charter airlines operating at the airport. The airport's long-haul market is significantly smaller than at Heathrow.

Seasonal trends (charts 7-8): The review period covers four seasons – winter 2016-17 (October 2016 to March 2017: 236 dispensations), summer 2017 (March 2017 to October 2017: 421 dispensations), winter 2017-18 (October 2017 to March 2018: 63 dispensations), and summer 2018 (March 2018 to October 2018: 1003 dispensations), winter 2018-19 (October 2018 to March 2019: 135 dispensations), and summer 2019 (March 2019 to October 2019: 770 dispensations).

Gatwick's primary use of dispensations is for weather related disruptions. In winter 2016-17, 73.3% of Gatwick's dispensations were as a result of LVP conditions; these were almost entirely concentrated over a two-week period due to a spell of bad weather. French ATC strikes, which made up 12.7% of dispensations during this season, were also concentrated over a single week. In winter 2017-18, 100% of Gatwick's dispensations were because of thunderstorms that occurred over a three-day period.

In the summer of 2017, adverse weather (not including LVP conditions) was the main factor, accounting for 61.5% of all dispensations. Most of these were applied during the peak summer months (June – September). Gatwick was also impacted by an emergency runway inspection following a burst aircraft tyre which led to the closure of the runway. This caused delays and hardship at the terminal, resulting in 17.3% of the season's dispensations being applied in a single day.

However, in summer 2018, Gatwick also began applying dispensations for non-exceptional capacity related delays. These non-exceptional reasons did not have a core causation that clearly fitted within the dispensation criteria. These network capacity dispensations represented 48.4% of the season's total, replacing thunderstorms and strong winds (32.6%) as the primary contributor. 3.7% of dispensations were attributable to ExCDS.

In summer 2019, Gatwick's network capacity dispensations reduced significantly to 9.2% of dispensations for the season, and adverse weather (80.4%) was the main reason dispensations were applied.

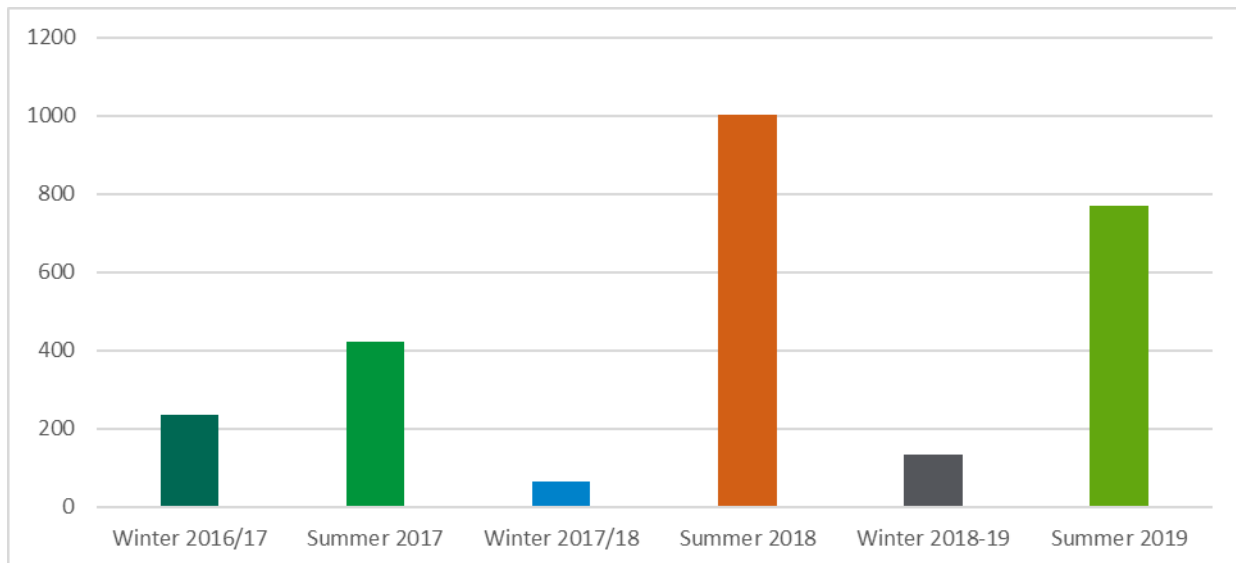


Chart 7: Gatwick - number of dispensations, by season

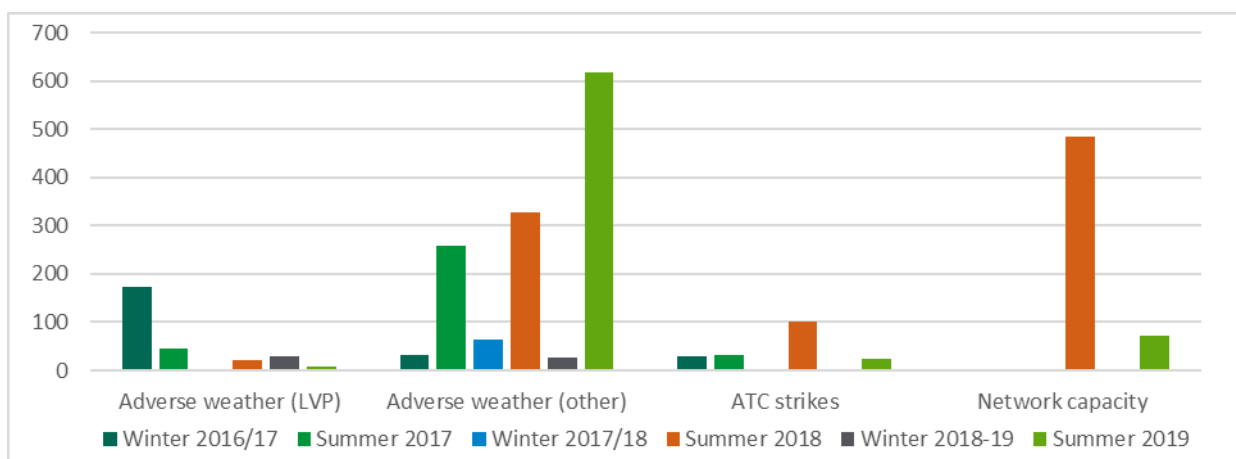


Chart 8: Gatwick - reason for dispensation, by season

Time trends (chart 9): Gatwick's busiest periods are the early morning (05:00-07:00) mostly for departures, and the late evening (21:00-22:00) predominantly for arrivals. These busy periods are compounded by capacity restraints at Gatwick, allowing for little resilience when disruptions occur during peak season. Any delays during the day, either at Gatwick, en-route, or at the outstations, have a residual impact. This

can have a knock-on effect, leading to the final rotation of the day being moved into the night quota period.

Across all seasons, 42.1% of dispensations were applied between 23:30 and 23:59, while 26.8% were applied between 00:00 and 00:29. A disproportionate amount of these were arrivals, with departures accounting for relatively few dispensations. Most of the remaining dispensations occurred between 00:30 and 02:29 (28.0%), with few dispensations being granted for flights between 02:30-05:59 (2.9%).

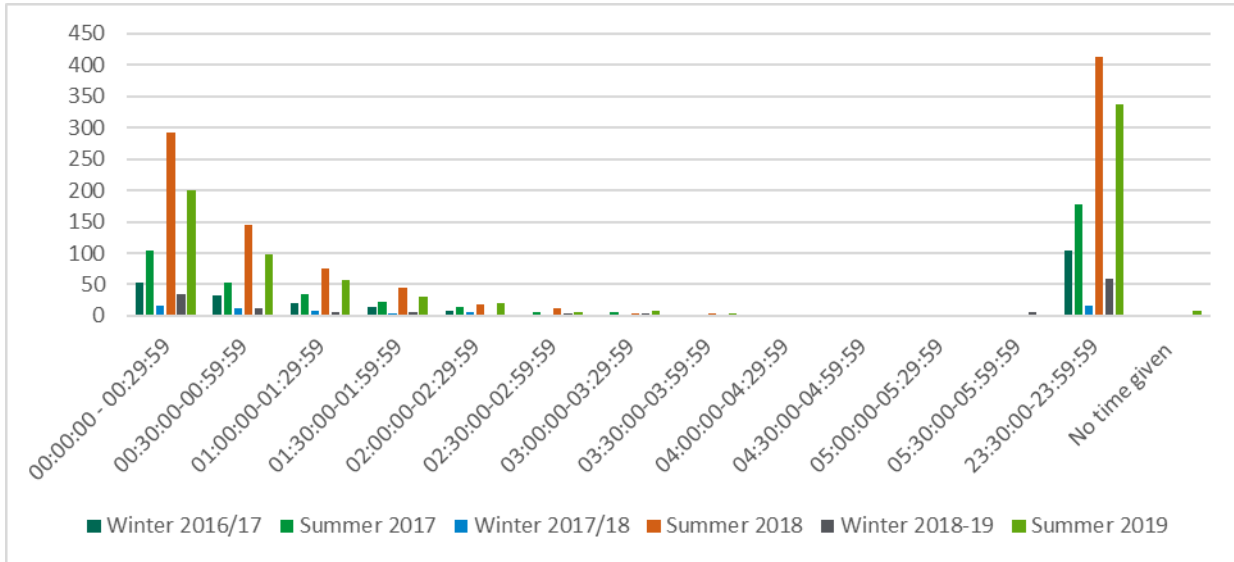


Chart 9: Gatwick - frequency of dispensations granted by time category, by season

Airline trends (chart 10): EasyJet is Gatwick’s main airline. Over the year 2018, easyJet had approximately 45% of the airport’s scheduled night flights and accounted for 60.2% of the airport’s total dispensations. Its use of dispensations was proportionately larger than its total scheduled flight operation. A possible explanation for this is that low cost carriers are more exposed to delays and knock-on impacts throughout the operating day due to their dependency on multiple rotations. These delays and impacts accumulate, resulting in unplanned NQP arrivals.

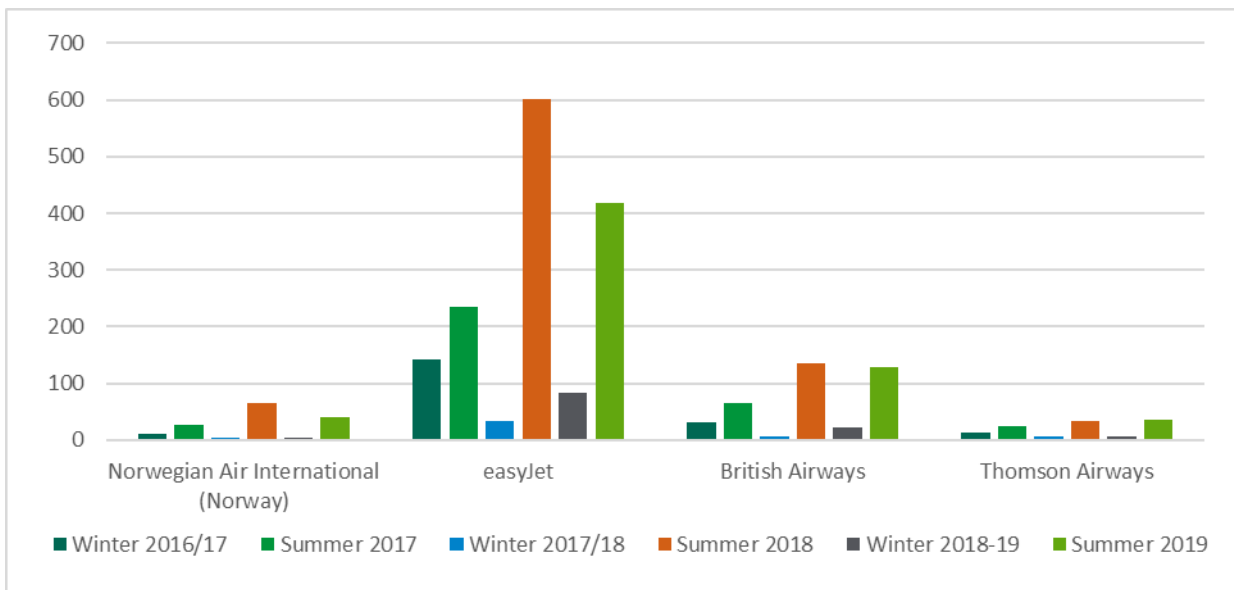


Chart 10: Gatwick - frequency of dispensations by airline, by season

Long-term trends (charts 11-12): Gatwick is more of a seasonal airport than Heathrow, with significantly more scheduled night services in the summer than in the winter. Dispensations accounted for 3.2% of total night movements during winter 2017-18 and 8.6% in summer 2018.

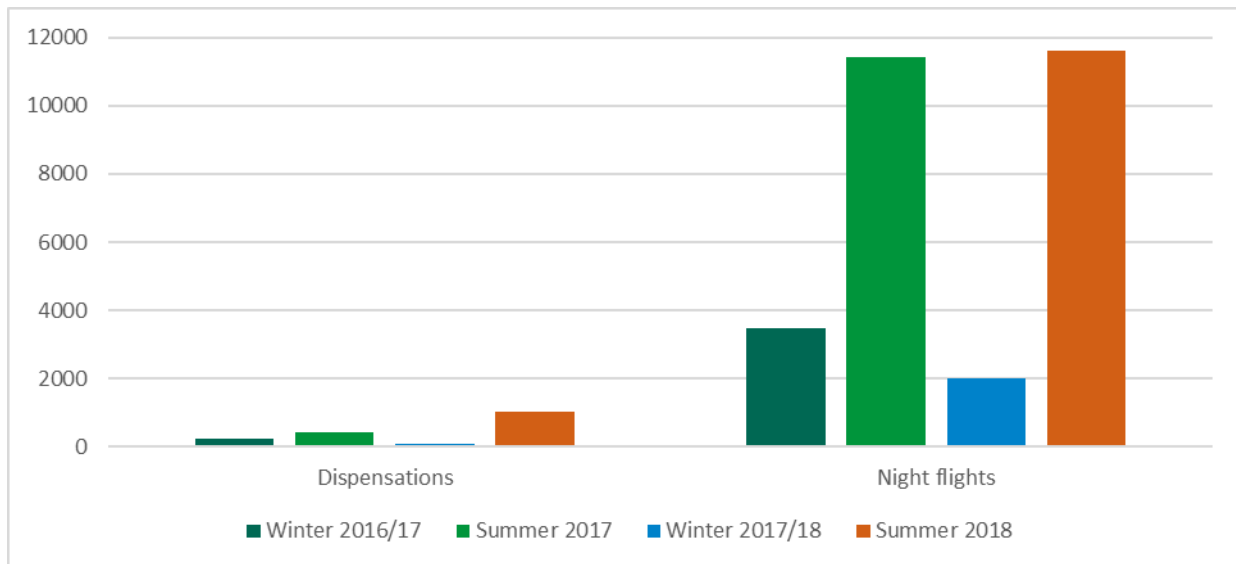


Chart 11: Gatwick - total dispensations against total night flights

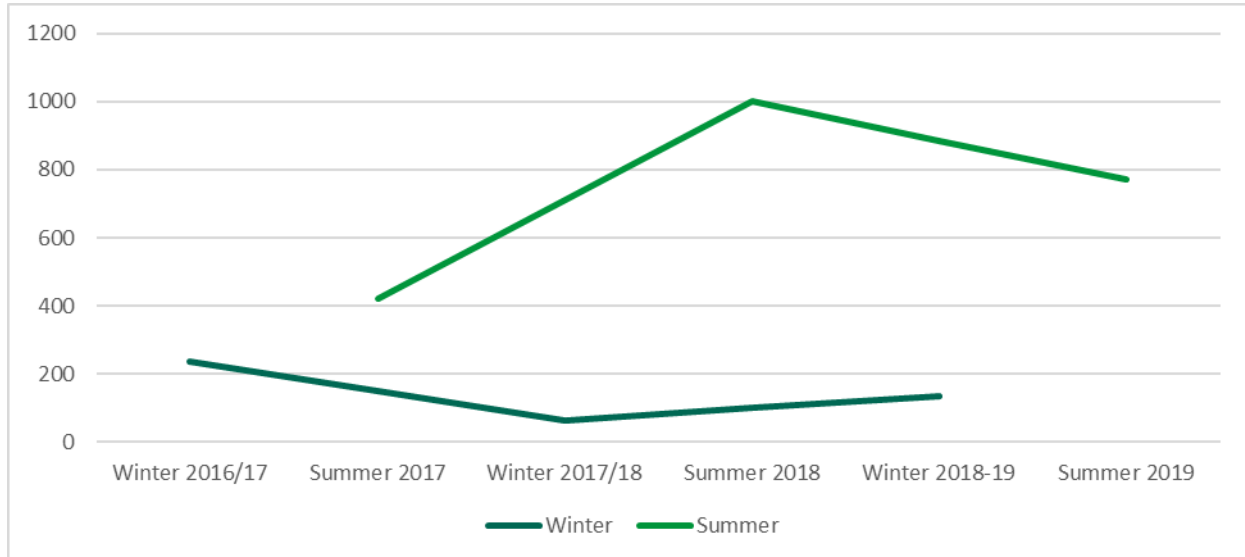


Chart 12: Gatwick - total numbers of dispensations by season, showing summer trends and winter trends

Stansted

Stansted is a single runway airport. In November 2017- October 2018, Stansted's total annual movements were 182,081 with 12,996 of these taking place in the NQP, representing 7.1% of the airport's total movements. The business model at Stansted involves short-haul carriers doing multiple rotations in a day, with flights operating at

both ends of the NQP, with a large number of early morning departures and late evening arrivals.

Seasonal trends (charts 13-14): The review period covers the winter of 2016-17 (October 2016 to March 2017: 0 dispensations), summer 2017 (March 2017 to October 2017: 470 dispensations), winter 2017-18 (October 2017 to March 2018: 0 dispensations), summer 2018 (March 2018 to October 2018: 1722 dispensations), winter 2018-19 (October 2018 to March 2019: 12 dispensations), and summer 2019 (March 2019 to October 2019: 379 dispensations).

Stansted has applied for few dispensations during the winter seasons and applied for no dispensations in winter 2016-17 and winter 2017-18. This is most likely attributable to greater capacity and an ability to absorb unscheduled night movements into its own seasonal quota. However, the airport is particularly prone to disruption and delay during summer seasons, possibly due to the low-cost business model that requires multiple rotations and which does not provide much resilience.

In the summer of 2017, 41% of delays were because of capacity related delays, many of which do not fit within the government's dispensation criteria. 45.3% of dispensations were due to adverse weather, such as thunderstorms and strong winds, while the remaining 13.6% comprised of issues such as runway maintenance, government dispensations for the failure of Monarch Airlines, a protest against forced deportations, ATC strikes, hardship to passengers and medical emergencies.

Capacity related delays became a more severe issue in the summer of 2018, resulting in 83.2% of the season's dispensations. Stansted is the most affected of the three designated airports by this issue, potentially due to its strong recent growth. Alongside this, Luton Airport, which shares large proportions of domestic airspace and routes into mainland Europe with Stansted, has also experienced growth in recent years. Together, these play a part in the airspace capacity issues in the region. ATC issues in mainland Europe, including ATC staffing levels abroad, are believed to be the primary driving force behind the delays, however, domestic ATC staffing issues may also be a factor.

Stansted and its based operators, in particular Ryanair, have made particular efforts to address this issue by improving ground-service. This can be seen in summer 19 data which shows capacity-related dispensations have reduced to 45.9%.

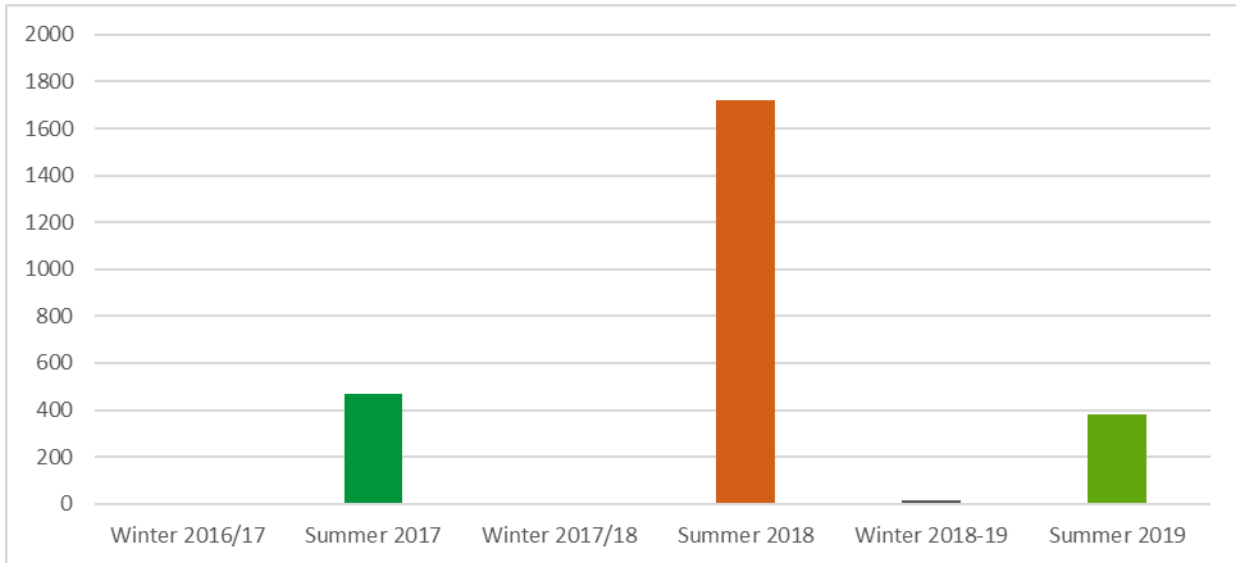


Chart 13: Stansted - number of dispensations, by season

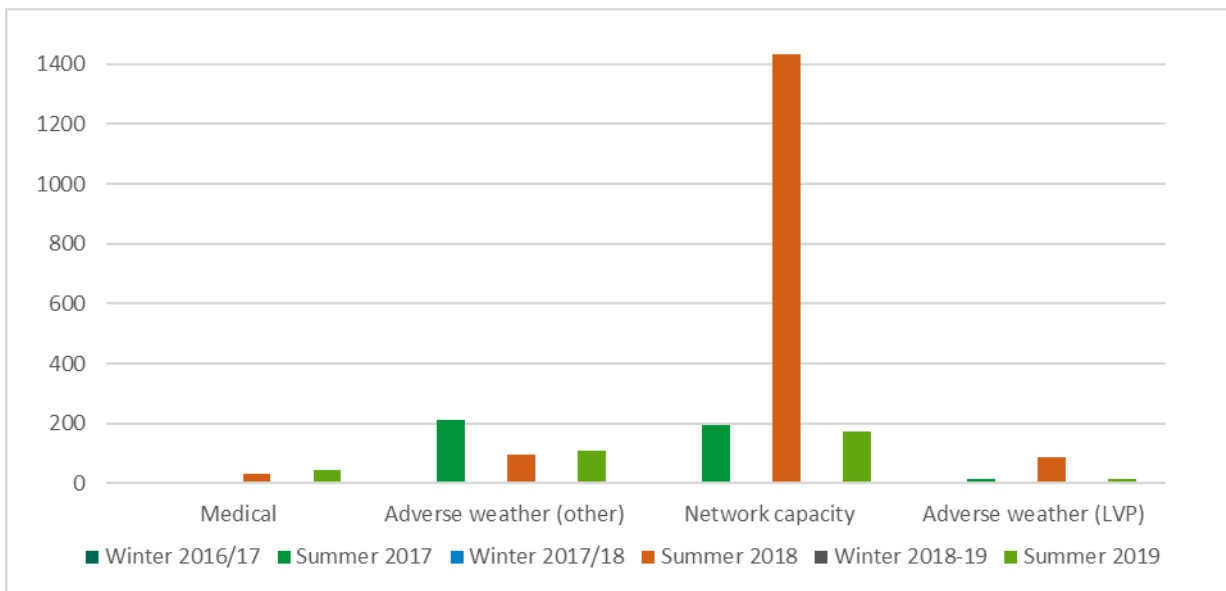


Chart 14: Stansted - reason for dispensation, by season

Time trends (chart 15): Like Gatwick, Stansted’s busiest periods are the early morning (05:00-07:00), mostly for departures, and late evening (21:00-22:00) predominantly for arrivals. As with Gatwick, this allows for little resilience against disruption during the peak season, whether at Stansted, en-route, or at the destinations overseas, often leading to the final flight of a rotation landing during the NQP.

Across all seasons, the trend of dispensations during the late hours is consistent, with 37.8% of dispensations being applied for between 23:30 and 23:59, and 27.1% between 00:00 and 00:29. These dispensations are heavily skewed towards arrivals, with departures accounting for a disproportionately small amount of them. 30.4% of dispensations, again mostly arrivals, occurred between 00:30 and 02:29.

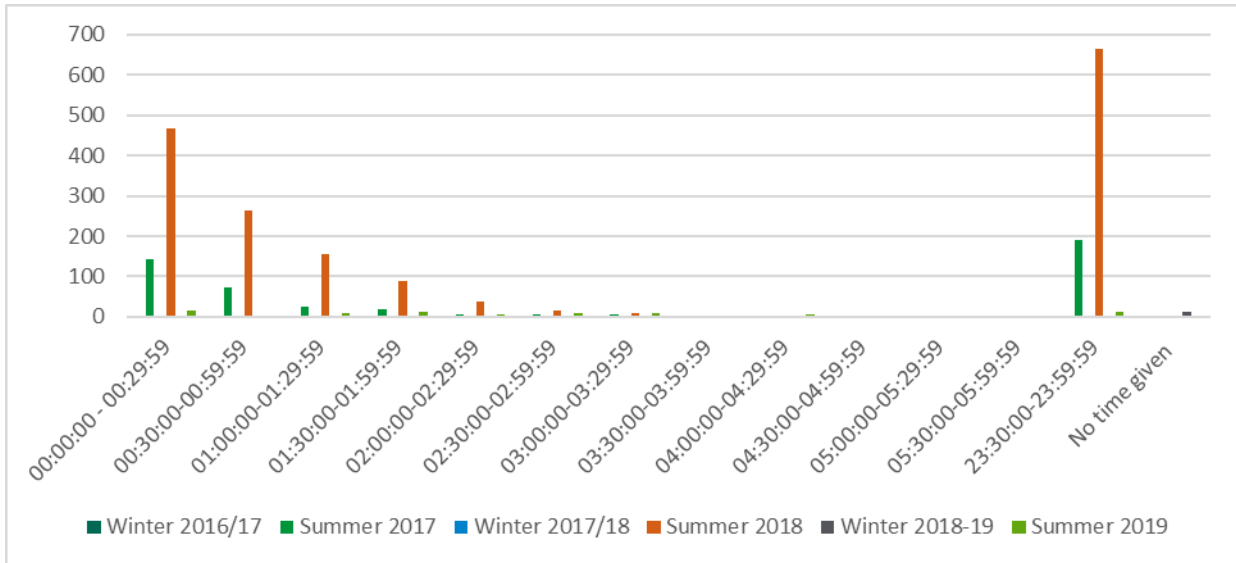


Chart 15: Stansted - frequency of dispensations granted by time category, by season

Airline trends (chart 16): Ryanair is Stansted's dominant airline, holding 48.6% of the airports scheduled night flights in 2018. As is the case with Gatwick, those budget carriers whose business model depends on multiple rotations, with the final one often taking place close to the NQP, account for a disproportionate number of dispensations. Over 2018, Ryanair was granted 88.4% of dispensations, with other airlines accounting for the remaining 11.6%.

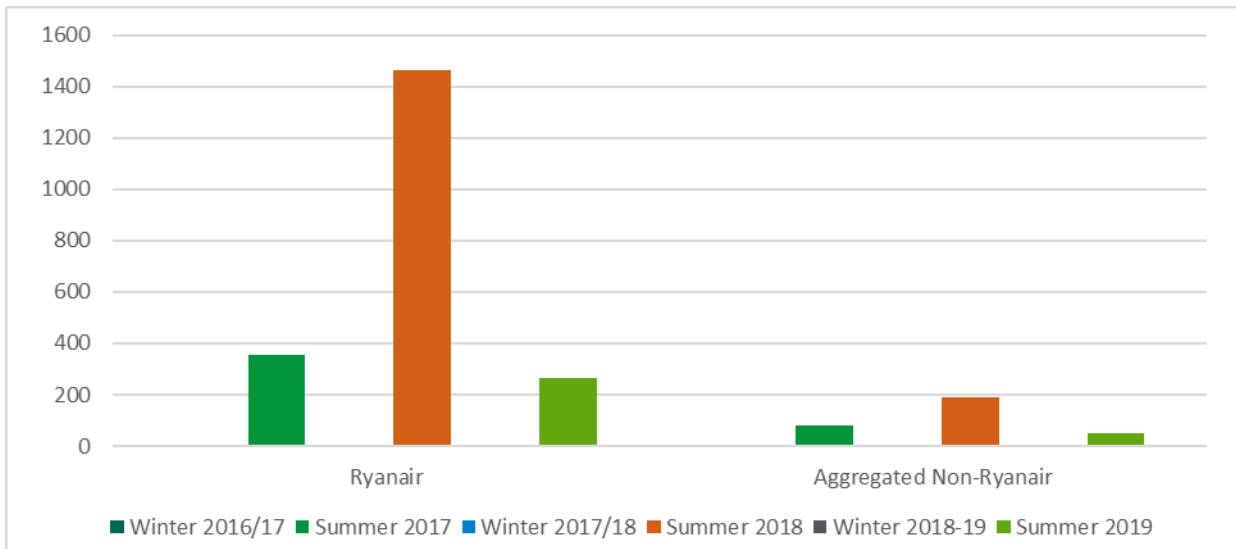


Chart 16: Stansted - frequency of dispensations by airline, by season

Long-term trends (charts 17-18): Over the last five years, Stansted has seen an increase in the number of dispensations being applied in the summer period, from zero in the summer of 2014, to 379 in the summer of 2019, peaking in summer 2018 with 1722 dispensations applied. The first winter in the review period for which

Stansted granted dispensations was winter 2018-19, with 12 dispensations. Part of the increase at Stansted could be because historically, the airport did not always grant dispensations for movements that met the dispensation criteria, as it has sufficient capacity to absorb the flights within its quota allocation.

In winter 2017-18, 0% of flights were dispensed, and in summer 2018 dispensations constituted 17.9% of the airports total night movements.

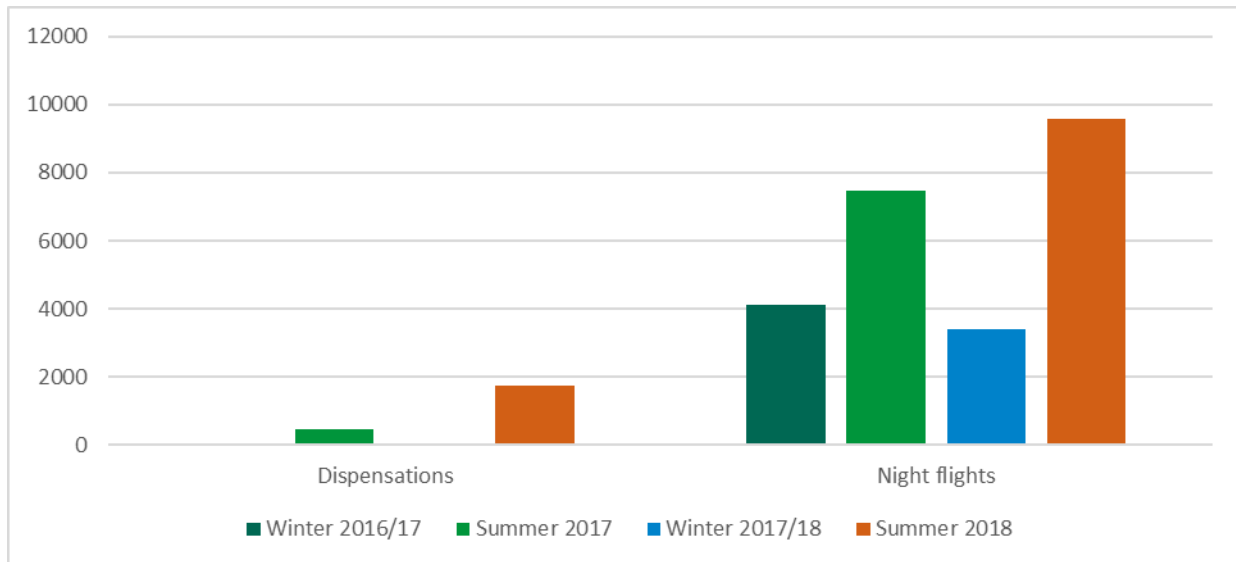


Chart 17: Stansted - total dispensations against total night flights

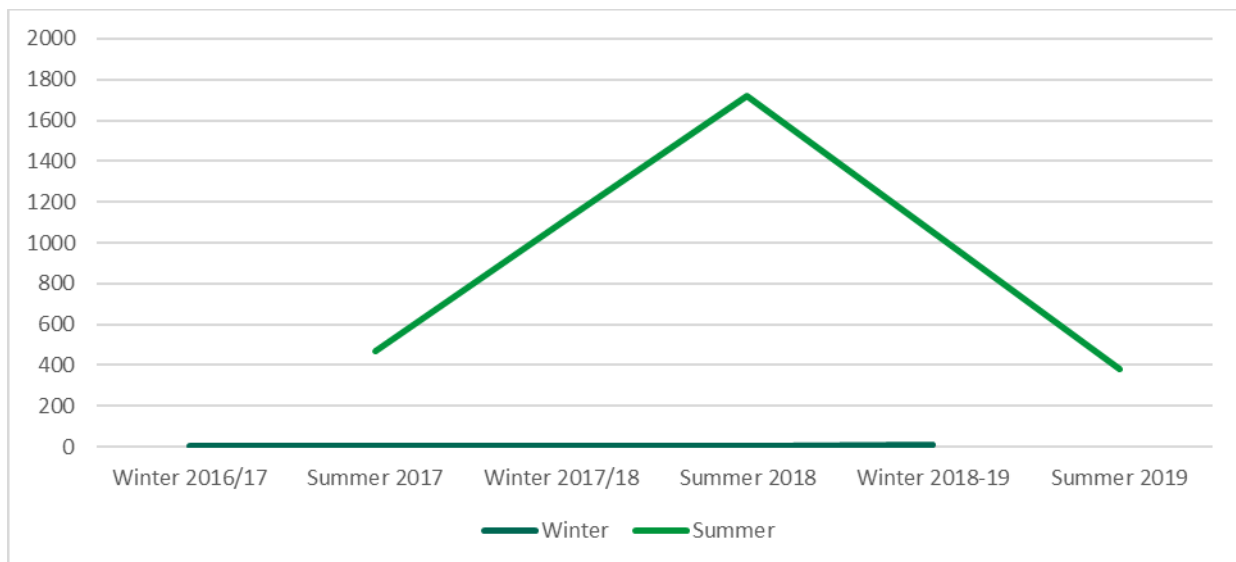


Chart 18: Stansted - total numbers of dispensations by season, showing summer trends and winter trends

Government Dispensations

Over the review period (winter 2016/2017 to summer 2019), the designated airports applied 109 dispensations under Section 78(5)(f) after the government agreed to grant a dispensation. This is a very small proportion when measured against the total of 6,727 dispensations at the designated airports over the review period, which is

equivalent to 1.6%. The majority of these government dispensations (66) were due to the 2018 Gatwick drone incident. Other dispensations resulted from the government repatriation flights after the failures of Monarch Airlines and Thomas Cook, or comprised V.I.P. flights.

Whilst airports inform the department of dispensations after the event, government dispensations are often granted in advance. Most movements granted a government dispensation do occur, however the airports are not required to inform the department if the movement was no longer required. As a result, there may have been instances where dispensations have been granted but not used.

On an event-by-event basis the government also informed airports that for certain foreseeable but exceptional events, for instance the NATS IT upgrade (which did not impact Stansted), they were permitted to grant dispensations for a limited number of flights under Section 78 (4), informing the department of the details after the events. Heathrow and Gatwick appear to have categorised some of these dispensations differently, with Heathrow regarding them as government dispensations, when technically this was not always the case.

Conclusions

The objective of this review was to consider if dispensations have been applied correctly and consistently across the designated airports and to explore how the process could be made more transparent.

There was some evidence that the interpretation of the guidance by some designated airports has meant some movements that may not meet the criteria for dispensations were granted dispensations. As a result, the government may want to refine our guidance to give greater clarity in the following areas:

- *Weather related delays:* The guidance allows for dispensations for disruption caused by strong winds, snow and ice, and fog resulting in low visibility procedures. However, it also says problems arising from snow and ice should not in themselves constitute sufficient reason for dispensations, especially for departures, when the likelihood of adverse weather should be taken into account in operational planning.

What is not clear from the guidance is where the threshold for wide-spread and prolonged weather disruption is. In most instances, airports have applied dispensations for local adverse weather events, some of which can last for several hours or even days, and which clearly meet the criteria for dispensations. There is, however, evidence of dispensations being applied for weather events abroad that whilst potentially having a widespread and prolonged impact at a foreign airport, appeared to have very limited impact to the UK airport. These may not therefore strictly meet the criteria. On the other hand, dispensations have also been made for major non-local weather events, such as Atlantic hurricanes. These can understandably have a more significant impact on UK airport operations, delaying a number of flights into the NQP and then justifying dispensations. However, these can fall within a grey area when trying to understand if the impacts were “widespread and prolonged”.

Strikes: All the designated airports have applied dispensations for air traffic control (ATC) strikes abroad, which then affect their own operations. These do

meet the current criteria for dispensations and the application of such is therefore not an issue of concern. The guidance is silent on delays caused by airport or airline staff strikes, indicating they do not qualify for dispensations. Whilst we do not condone strike action as it unfairly penalises consumers, there is evidence to suggest strikes in the aviation industry can be expected to occur at least on an annual basis. Therefore, there is an argument that this should be taken into consideration by airport operators during operational planning.

- *Network capacity delays:* Each of the designated airports have applied dispensations for capacity-related delays that do not have a root causation as detailed in the current guidance document. In most instances, these delays resulted from restrictions, imposed by air traffic control (ATC), on particularly busy ATC sectors due to high volumes of traffic, and staffing levels to safely transit aircraft through the sector. The government wrote to each designated airport in summer 2018 to state that airspace capacity related delays, without an underlying cause that is exceptional, do not meet this dispensation criterion. Since that time, each airport has taken steps to reduce the risk of unscheduled capacity-related night movements. Whilst there are still instances of flights being granted dispensations for capacity-related delays, significant improvements have been made. We continue to work with the industry through the Industry Resilience Group night-flight sub group to ensure further improvements are made.
- *Delays caused by serious criminal or terrorist activity affecting multiple flights:* Criminal activity, such as the drone incident that occurred at Gatwick in December 2018, has caused widespread and prolonged disruption. During such incidents, the SofS has granted dispensations. The government is introducing tough rules and restrictions against the unauthorised use of drones and we do not expect drone incursions or other criminal or terrorist activity to become more frequent. However, such incidents may warrant more explicit inclusion. This would allow airport operators to make the decision without reference to central government.
- *Cumulative delays:* Delays caused during the first or subsequent flights of an aircraft during the day for reasons that would meet the dispensation criteria (e.g. fog), or for multiple delay reasons incurred throughout a day, can often cause knock-on effects that lead to the last flight rotation landing in the NQP. By this point, the circumstance that led to the delay may no longer be ongoing, but airport operators have granted a dispensation for the last movement on the basis of the circumstances that led to the initial delay.
- *Emergencies:* The emergencies criteria state “flights involving emergencies where there is an immediate danger to life or health, whether human or animal”.

Clearly, safety is always paramount. Any airborne aircraft that encounters an emergency situation, be it medical, aircraft-related, or due to a disruptive passenger, should land as soon as safely possible. That movement should then rightly be granted a dispensation if it lands in the NQP.

However, there is evidence of both medical and disruptive passenger-related emergencies on the ground delaying flights, leading them to eventually depart

in the NQP after the emergency has passed. The guidance does not currently strictly provide for this, but it maybe something that would warrant more explicit inclusion.

Separately, we are aware of emergency service aircraft, and aircraft that are medical transport flights, that have encountered difficulty when operating during the night period when attempting to reposition (not on an active emergency). We therefore might want to explicitly permit dispensations for these movements, as failure to reposition could mean an aircraft is not in the optimum position to respond to future emergencies.

- *Pre-emptive dispensations:* Heathrow is the only designated airport that allows pre-emptive dispensations in order to land flights early on poor weather days. Heathrow adopts this practice to reduce the risk of delays during the airport's early morning busy hours, which could then have knock-on effects throughout the day, and possibly into the night period. The dispensation guidance does not explicitly permit this, and there is not currently sufficient evidence to conclude whether the benefits of this approach outweigh its negative effects.
- *Applied consistently:* Given the above considerations, there is evidence to suggest the dispensation guidance has not always been applied in an entirely consistent manner by the three designated airports. However, the inconsistencies are not significant and could be addressed in the short-term through discussion with the airports, and formalised in the longer term by revising the guidance document, and aeronautical information publication.
- *Transparency:* The level of dispensation data easily publicly available on airport websites is limited, although in some cases information is available at consultative committees, or noise and track keeping sub-committees.
- *Government dispensations:* These dispensations are a valuable tool that remove potential barriers to government operations or business. Alongside this, they ensure that airports are not penalised for flights that result from government decisions. There is no evidence to suggest that government dispensations have not been applied in line with the government's own guidance.

Proposals

The government does not have significant concerns relating to how airports have used their powers to grant dispensations. However, it believes the interpretation of the guidance by some designated airports has meant that the granting of some movement dispensations may not meet the criteria. As a result, it is proposed that the government refines the guidance, and future Aeronautical Information Publications (AIP), to provide better clarity.

It is also proposed that the guidance clarifies the process by which an airport's decision to grant a dispensation can be rejected by the SofS, in instances where the dispensation does not meet the criteria.

In relation to transparency, given airport noise and track keeping groups already consider airports' compliance with other noise controls, the government proposes to:

- Make the dispensation process more transparent and be given greater scrutiny at each airport's noise and track keeping group.
- provide guidance to airports on the information we expect them to share with the public, including a proposal that they publish this data on their website.
- implement periodical reviews of night flight dispensations, to assess compliance as well as opportunities to further improve the process. This could be commissioned from the Independent Commission on Civil Aviation Noise or the Civil Aviation Authority.