UK Civil Aviation Authority

Aircraft movements, fleet mix and noise quota usage at Gatwick, Heathrow and Stansted

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Revision history

Edition 1 **July 2024**

CAP 3013 was first published to provide a summary of the numbers of aircraft movements, the aircraft fleet mix and noise quota usage at Gatwick, Heathrow and Stansted airports between 2019 and 2023.

Edition 2 **May 2025**

Updated to include information on aircraft movements for 2024. New Appendix C included to provide results in tabular format. Previous Appendix C (Glossary) moved to Appendix D. Minor editorial changes have also been incorporated throughout.

Edition 3 **June 2026**

Updated to include information on aircraft movements for 2025. Minor editorial changes have also been incorporated throughout.

Chapter 1
Introduction

1.1 This report provides a summary of the numbers of aircraft movements, the aircraft fleet mix and noise quota usage at Gatwick, Heathrow and Stansted airports between 2019 and 2025. The study was commissioned by the Department for Transport to understand and monitor trends in the aviation sector at the three London airports.

1.2 This report follows on from CAP 2128, which was published by the CAA to understand the impact of the Covid-19 pandemic on aircraft operations and the possible knock-on effect on noise around the airports.[1] Whereas CAP 2128 reported daily numbers of aircraft movements and related data for the period 2019 to 2022, this report provides summary results by calendar year and includes additional data for the period 2023 to 2025, with less focus on the immediate impacts of the pandemic.

1.3 Chapter 2 of this report describes the methodology used to determine and classify aircraft movements for the study. Chapters 3, 4 and 5 provide a summary of the results for Gatwick, Heathrow and Stansted, respectively, which can be read standalone for the airport of interest. An overall summary is provided in Chapter 6.

1.4 Appendix A provides details of the Quota Count (QC) scheme. Appendix B lists the aircraft type categories used in this report. Tabulated results for each airport are provided in Appendix C. A glossary of terms is provided in Appendix D.

1.5 For a wider review of the environmental performance of the UK aviation industry, readers are directed to the UK Aviaton Environmental Review 2025 which provides an objective account of the state of environmental protection relating to civil aviation in the UK.[2]

[1] CAP 2128, *Aircraft movements, fleet mix and noise quota usage at Gatwick, Heathrow and Stansted*, CAA, October 2023

[2] CAP 3198, *UK Aviation Environmental Review 2025*, CAA, December 2025

Chapter 2
Methodology

2.1 Aircraft movement information for this study was extracted from the Gatwick, Heathrow and Stansted Noise and Track-Keeping (NTK) systems. The airport NTK systems provide information such as aircraft type, registration (tail number) and airport of origin or destination for each movement. Quota Count (QC) classifications for aircraft operating during the night quota period (23:30–06:00) are also recorded by each airport. Appendix A provides further details of the QC scheme.

2.2 In this report, noise quota is defined as the sum of the QC classifications of all aircraft movements over a specified period. Although originally designed to regulate aircraft noise at night, the noise quota scheme is considered a useful proxy for the amount of noise made around an airport over any period of time since it takes account of both the numbers of movements and the noise levels of the operations. Calculating the average QC per movement can also demonstrate the extent to which aircraft fleets have become quieter over time.

2.3 For Heathrow, QC classifications for the overwhelming majority of aircraft operating outside of the night quota period are also recorded. However, QC classifications for a proportion of daytime operations at Gatwick and Stansted are not routinely determined. For such cases in this study it was necessary to estimate the QC classifications, either by using best judgement based on knowledge of the specific aircraft type or by calculating and applying average QC values based on similar aircraft types in the known fleet.

2.4 The distance flown for each movement was estimated from the great-circle distance to the origin or destination airport.[3] Aircraft that are flying further will generally be heavier because they are carrying more fuel and will therefore be lower, on average, over the ground after take-off (all other things being equal).[4]

2.5 The term ‘New Generation’ is used in this report to identify particular types of aircraft within an individual manufacturer's product range that incorporate the latest engine and/or airframe technologies designed to make aircraft quieter and typically more fuel efficient. Appendix B provides details of these aircraft.

[3] The great-circle distance (or direct route length) will be slightly shorter than the actual distance flown.

[4] For a long-range aircraft in particular, a substantial proportion of the mass is fuel, not passengers or cargo.

Chapter 3

Gatwick Airport

Aircraft movements and noise quota

3.1 Figures 1, 2 and 3 present the annual numbers of aircraft movements at Gatwick between 2019 and 2025 for the following periods, respectively:

- 16 hour day, 07:00–23:00
- 8 hour night, 23:00–07:00
- 6.5 hour night, 23:30–06:00

3.2 Also shown in each figure are the corresponding annual noise quotas and average QCs per movement calculated for each year. The results show a significant reduction in the numbers of movements and associated quota usage at Gatwick in 2020 and 2021 as a result of the Covid-19 pandemic.

3.3 In 2024, aircraft movements during the daytime period at Gatwick recovered to 93 percent of the level in 2019, then reduced slightly in 2025 to 92 percent of the pre-pandemic level. By comparison, the associated noise quota for 2025 reached 82 percent of the pre-pandemic level, indicating that the average movement at Gatwick during the daytime was slightly quieter in 2025 compared to 2019.[5] This is evident in Figure 1 by the slightly lower average QC per movement of 0.47 in 2025 compared to 0.52 in 2019. However, it is noted that the average QC per movement during the daytime reached a minimum in 2021 (0.41).

3.4 Conversely, night-time movements at Gatwick recovered to a greater extent compared to daytime by 2025. During the 8 hour night period (Figure 2), annual aircraft movements between 2023 and 2025 reached at least 98 percent of the pre-pandemic level. Moreover, during the 6.5 hour night period (Figure 3), aircraft movements in 2023, 2024 and 2025 exceeded those in 2019 by 11, 3 and 1 percent, respectively. Despite these exeedences, the total noise quota during the 6.5 hour night has remained below the pre-pandemic level due to quieter aircraft.

[5] All other things being equal, an 18 percent reduction in total noise quota is approximately equivalent to a 0.9 dB reduction in average noise exposure.

3.5 While the results in Figures 2 and 3 show an overall reduction in the average QC per movement at night since 2019, the average QC has been slightly increasing since 2022. Between 2019 and 2025 the average QC per movement during the night has, however, been consistently lower than during the day.

Figure 1 Annual movements at Gatwick, 16 hour day

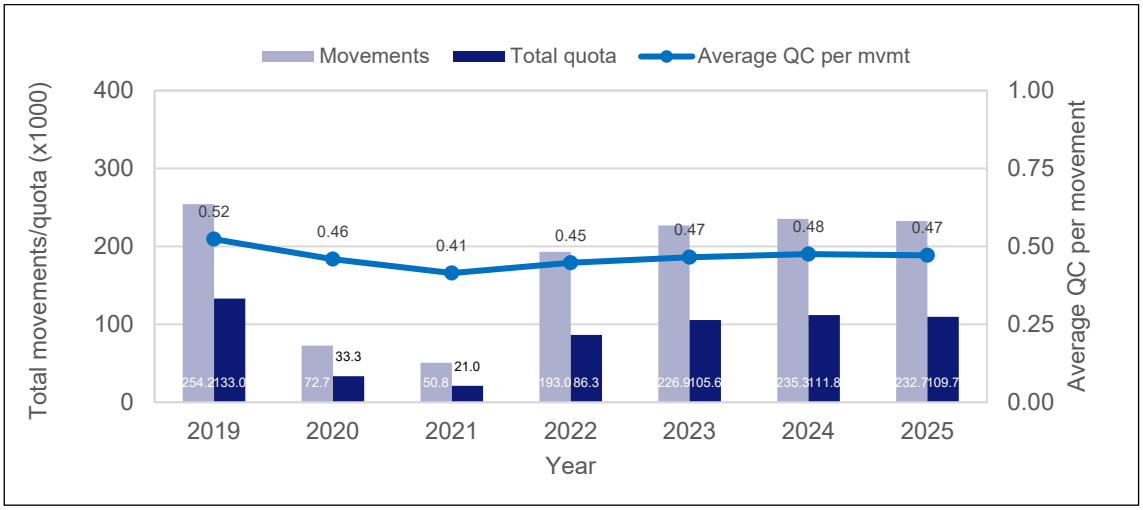


Figure 2 Annual movements at Gatwick, 8 hour night

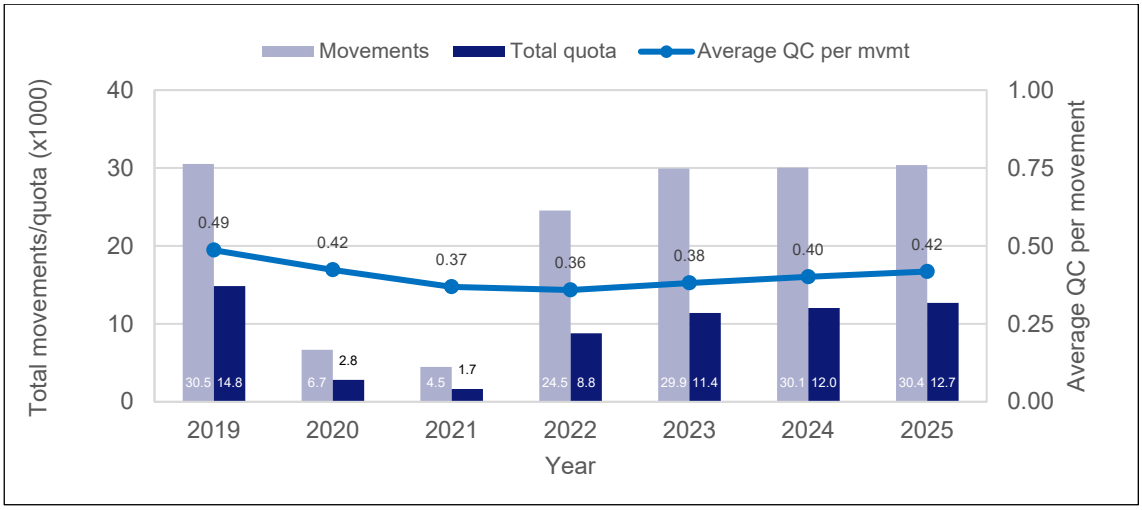
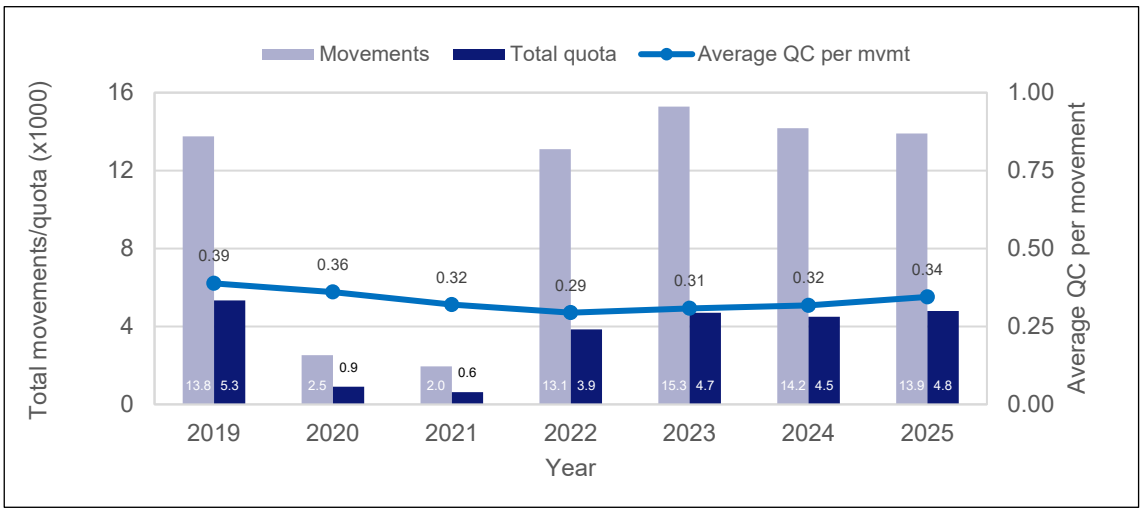


Figure 3 Annual movements at Gatwick, 6.5 hour night



Fleet mix

3.6 Figures 4, 5 and 6 show the percentages of different aircraft types operating at Gatwick between 2019 and 2025 during the 16 hour day, 8 hour night and 6.5 hour night periods, respectively. In each figure, aircraft movements have been grouped into the following broad categories of aircraft based on size and, where applicable, the level of aircraft noise reduction technology:

- Wide-body
- 'New Generation' Wide-body
- Narrow-body
- 'New Generation' Narrow-body
- Other

3.7 A summary of aircraft types covered by each category is provided in Appendix B. When reviewing the results in Figures 4 to 6, readers should also note the significant reductions in the numbers of movements that occurred during 2020 and 2021 (Figures 1 to 3).

3.8 It is evident from the results that narrow-body aircraft in general dominate the fleet at Gatwick, typically accounting for around 90 percent of all aircraft movements. The results also show that since 2020, New Generation narrow-body aircraft (such as the A320neo) have accounted for a greater proportion of the overall narrow-body fleet, particularly during the night period. This proportion is expected to increase further over the coming years as airlines continue to replace older aircraft in their fleets with newer, quieter designs.

3.9 For example, easyJet is the dominant operator at Gatwick, with a fleet of Airbus A320 and A320neo family aircraft that account for more than 40 percent of all operations at the airport. As of April 2026, newer A320neo family aircraft made up approximately one-third of easyJet's UK-registered fleet.[6] In December 2023 easyJet confirmed a new order for 157 additional A320neo family aircraft as part of its ongoing fleet replacement programme, comprising of 56 A320neo and 101 A321neo aircraft to be delivered between FY29 and FY34. In addition, 35 A320neo aircraft ordered previously would now be converted into larger A321neos.[7]

[6] https://www.caa.co.uk/aircraft-register/g-info/

[7] https://www.easyjet.com/en/news/story/easyjet-confirms-order-for-157-airbus-aircraft

Figure 4 Aircraft type categories at Gatwick, 16 hour day

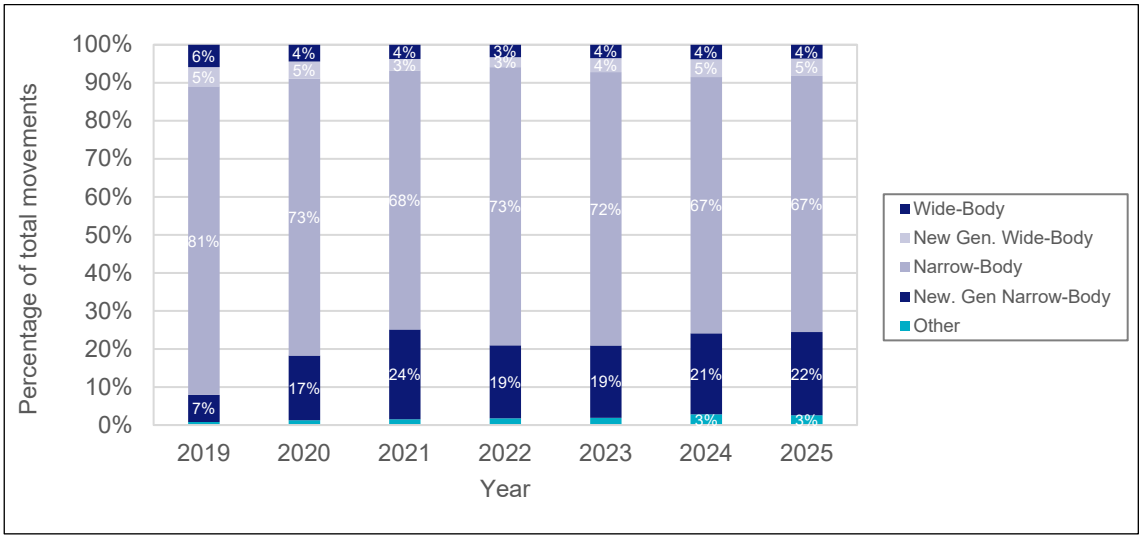


Figure 5 Aircraft type categories at Gatwick, 8 hour night

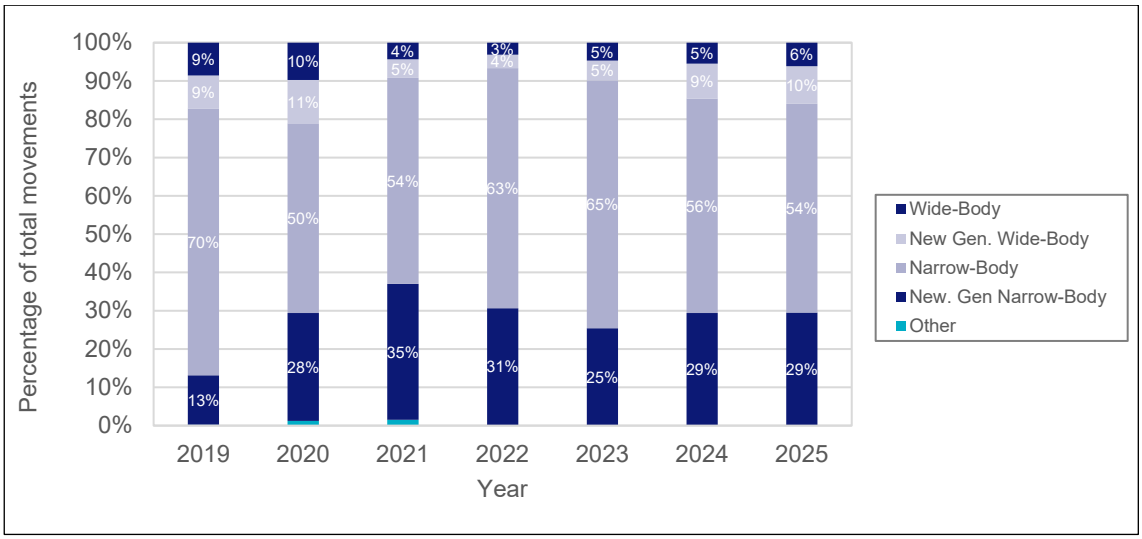
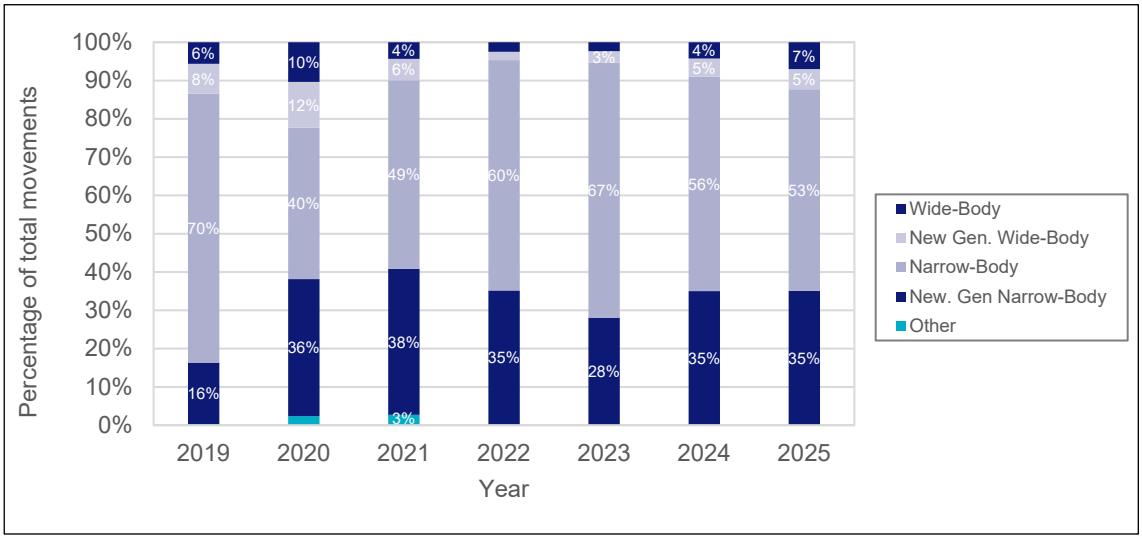


Figure 6 Aircraft type categories at Gatwick, 6.5 hour night



Note: Values less than 3% are not labelled. Percentages may not sum to 100% due to rounding.

Distance flown

3.11 To provide insight on the distances flown by aircraft operating from Gatwick, Figures 7, 8 and 9 show the percentages of different route categories flown between 2019 and 2025 during the 16 hour day, 8 hour night and 6.5 hour night, respectively. In each figure, aircraft movements have been grouped as follows:

- Short-haul flights under 1,500 km (<810 NM)
- Medium-haul flights between 1,500 and 3,500 km (810–1,890 NM)
- Long-haul flights over 3,500 km (>1,890 NM)

3.12 While the results vary somewhat between the day and night periods, the overall trend within each period has been relatively consistent since 2019.

3.13 During the 16 hour day, the majority of aircraft at Gatwick operated on short-haul routes, followed by a smaller proportion of aircraft flying medium-haul routes (with a minority flying long-haul). However, during the 8 hour night approximately half of all aircraft at Gatwick (largely comprised of narrow-body types) tended to operate on medium-haul routes, with a smaller proportion flying short-haul. Since 2019, the proportion of medium-haul aircraft has been consistently higher during the 6.5 hour night compared to the 8 hour night.

Figure 7 Route categories flown at Gatwick, 16 hour day

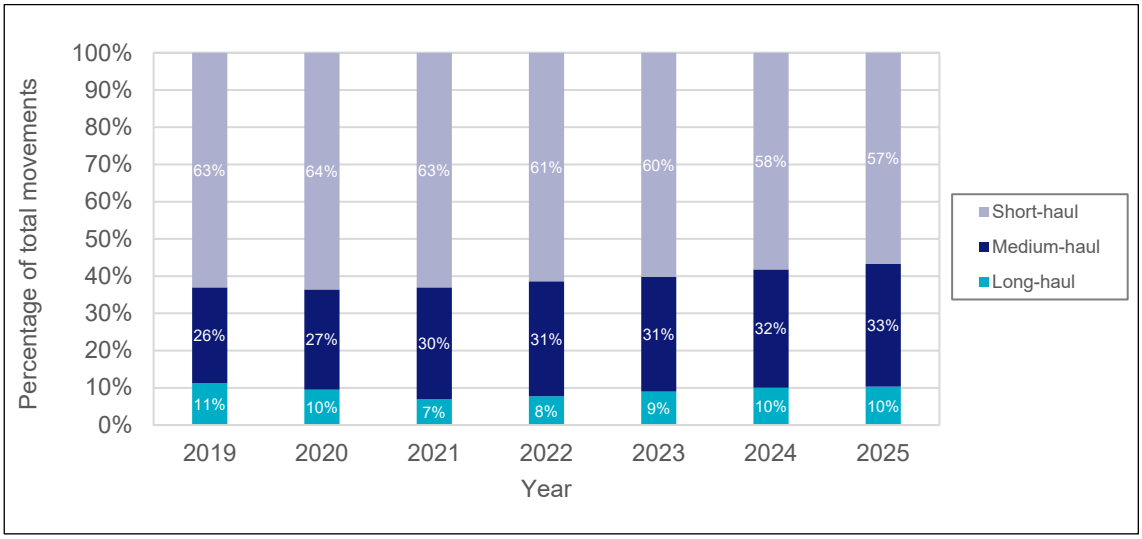


Figure 8 Route categories flown at Gatwick, 8 hour night

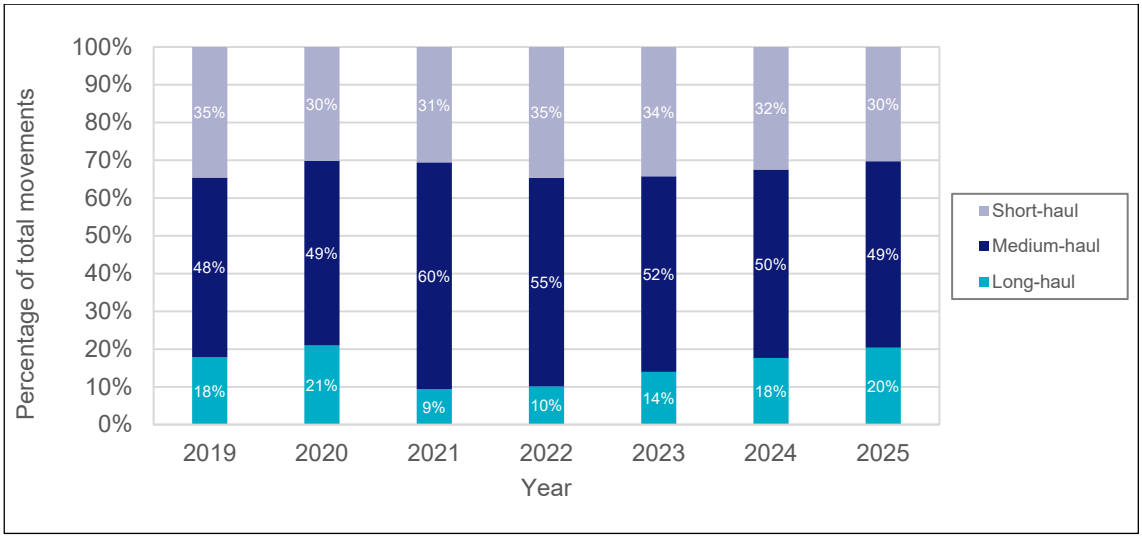
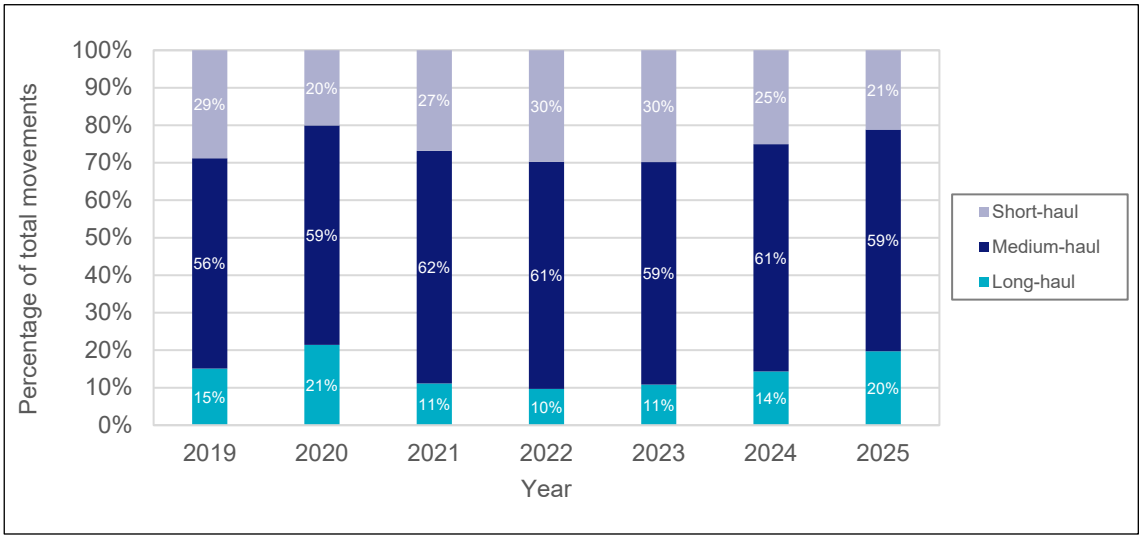


Figure 9 Route categories flown at Gatwick, 6.5 hour night



Note: Percentages may not sum to 100% due to rounding.

Chapter 4

Heathrow Airport

Aircraft movements and noise quota

4.1 Figures 10, 11 and 12 present the annual numbers of aircraft movements at Heathrow between 2019 and 2025 for the following periods, respectively:

- 16 hour day, 07:00–23:00
- 8 hour night, 23:00–07:00
- 6.5 hour night, 23:30–06:00

4.2 Also shown in each figure are the corresponding annual noise quotas and average QCs per movement calculated for each year. The results show a significant reduction in the numbers of movements and associated quota usage at Heathrow in 2020 and 2021 as a result of the Covid-19 pandemic.

4.3 In 2025, aircraft movements during the daytime period at Heathrow recovered to the pre-pandemic level. By comparison, the associated noise quota for 2025 reached 79 percent of the pre-pandemic level, indicating that the average movement at Heathrow during the daytime was slightly quieter in 2025 compared to 2019.[8] This is evident from the overall reduction in average QC per movement between 2019 (0.68) and 2025 (0.53) shown in Figure 10.

4.4 Aircraft movements during the 8 hour night period at Heathrow in 2024 and 2025 slightly exceeded movement numbers in 2019 (Figure 11). However, the associated noise quota in 2024 and 2025 only reached 71 and 69 percent of the pre-pandemic level, respectively. During the 6.5 hour night period (Figure 12), aircraft movements in 2024 and 2025 reached nearly 100 percent of the level in 2019, whereas the associated noise quota remained below 70 percent of the pre-pandemic level.

4.5 In terms of average QC per movement, the night-time results in Figures 11 and 12 show a similar trend to the daytime results, with overall reductions in average QC per movement since 2019 (due to the gradual replacement of older aircraft with newer, quieter types), although a slight increase is observed in 2025 during the 6.5 hour night period.

[8] All other things being equal, a 21 percent reduction in total noise quota is approximately equivalent to a 1 dB reduction in average noise exposure.

Figure 10 Annual movements at Heathrow, 16 hour day

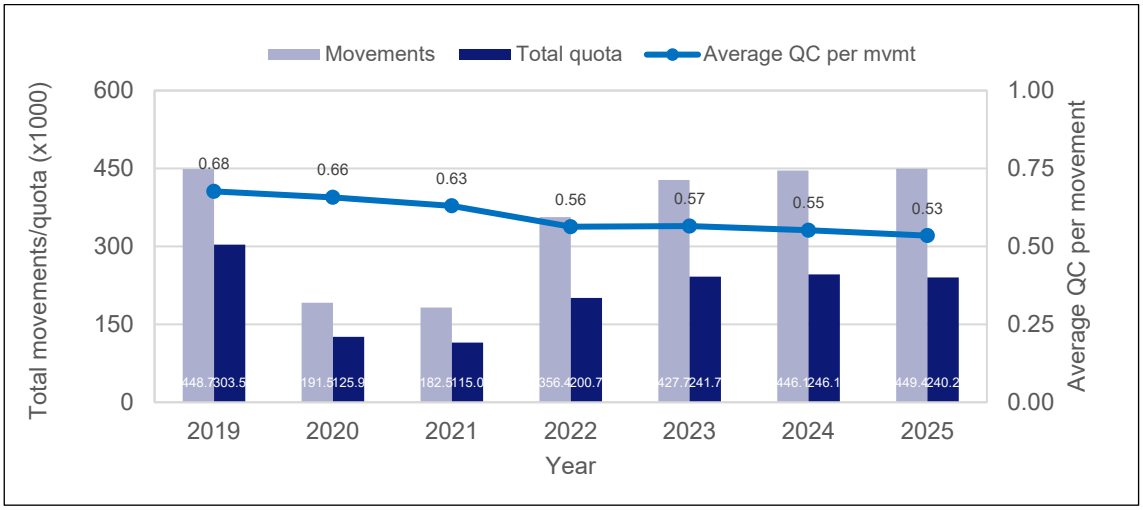


Figure 11 Annual movements at Heathrow, 8 hour night

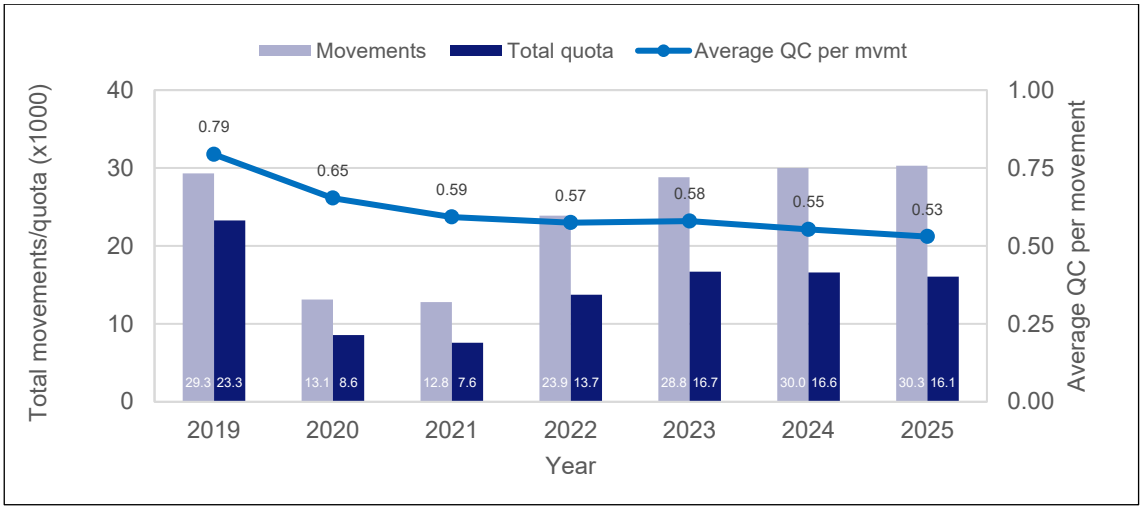
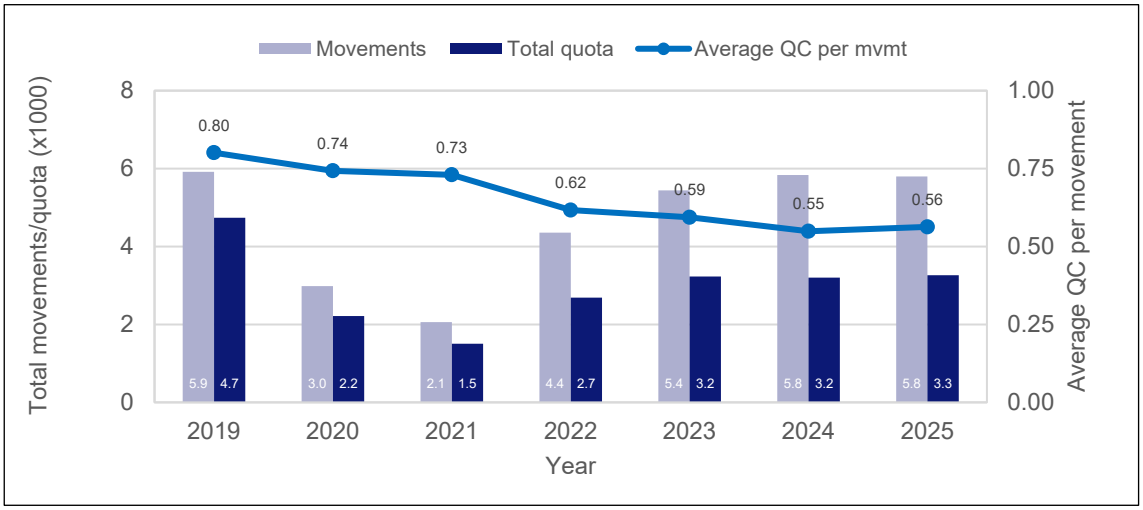


Figure 12 Annual movements at Heathrow, 6.5 hour night



Fleet mix

4.6 Figures 13, 14 and 15 show the percentages of different aircraft types operating at Heathrow between 2019 and 2025 during the 16 hour day, 8 hour night and 6.5 hour night periods, respectively. In each figure, aircraft movements have been grouped into the following broad categories of aircraft based on size and, where applicable, the level of aircraft noise reduction technology:

- Wide-body
- 'New Generation' Wide-body
- Narrow-body
- 'New Generation' Narrow-body
- Other

4.7 A summary of aircraft types covered by each category is provided in Appendix B. When reviewing the results in Figures 13 to 15, readers should also note the significant reductions in the numbers of movements that occurred during 2020 and 2021 (Figures 10 to 12).

4.8 The results show that while narrow-body aircraft at Heathrow tend to dominate the fleet during the 16 hour day (accounting for around 60 percent of movements), the fleet is dominated by wide-body aircraft during the night. The results also show that New Generation aircraft are increasingly accounting for a greater proportion of the fleet. This trend is expected to continue over the coming years at Heathrow, as airlines continue to replace older aircraft in their fleets with newer, quieter designs.

4.9 For example, British Airways (Heathrow's largest operator) has taken delivery of 18 new A350-1000s since 2019 and over the same period Virgin Atlantic has taken delivery of 12 new A350-1000s.[9] Virgin Atlantic currently operates eight A330neos with a further four to be delivered by the end of 2026 and seven more by Q1 2028.[10]

4.10 In addition, British Airways currently has 12 B787-8s, 18 B787-9s and 12 B787-10s in its fleet (with six additional B787-10s expected to be delivered by the end of 2026). In 2025, IAG (the parent company of British Airways) also placed a new order for a further 32 Boeing 787-10 aircraft for British Airways, to be delivered between 2028 and 2033.[11]

[9] https://www.caa.co.uk/aircraft-register/g-info/

[10] https://corporate.virginatlantic.com/gb/en/media/press-releases/virgin-atlantic-completes-fleet-transformation.html

[11] IAG Annual Report And Accounts 2025

4.11 The most notable new-generation aircraft type expected to enter service in the next few years is the wide-body Boeing 777X (B777-8 and B777-9 models). Several airlines at Heathrow currently have orders for the new aircraft, including British Airways, Emirates, Singapore Airlines and Qatar Airways. While originally anticipated to enter worldwide airline service in 2020, delays to the B777X certification test program have pushed its expected entry into worldwide commercial service to 2027.[12] IAG has reported that British Airways will receive its 24 B777-9 deliveries from 2027 to 2030.[11]

4.12 Finally, it is also noted that between 2022 and 2024, there was a slightly greater percentage of narrow-body aircraft in the fleet during the 6.5 hour night period at Heathrow compared to previous years (Figure 15). This was due largely to an increase in late running daytime flights arriving or departing after 23:30. However, some of the increase in the percentage of New Generation narrow-body aircraft was due to the introduction in 2022 of a new scheduled A321neo service by JetBlue.[13]

[12] The Boeing Company 2025 Annual Report

[13] In August 2022, JetBlue introduced a daily A321neo service between Heathrow and Boston. During the winter seasons, up to and including winter 2024-25, its arrival into Heathrow was scheduled during the night quota period (before 06:00 local time).

Figure 13 Aircraft type categories at Heathrow, 16 hour day

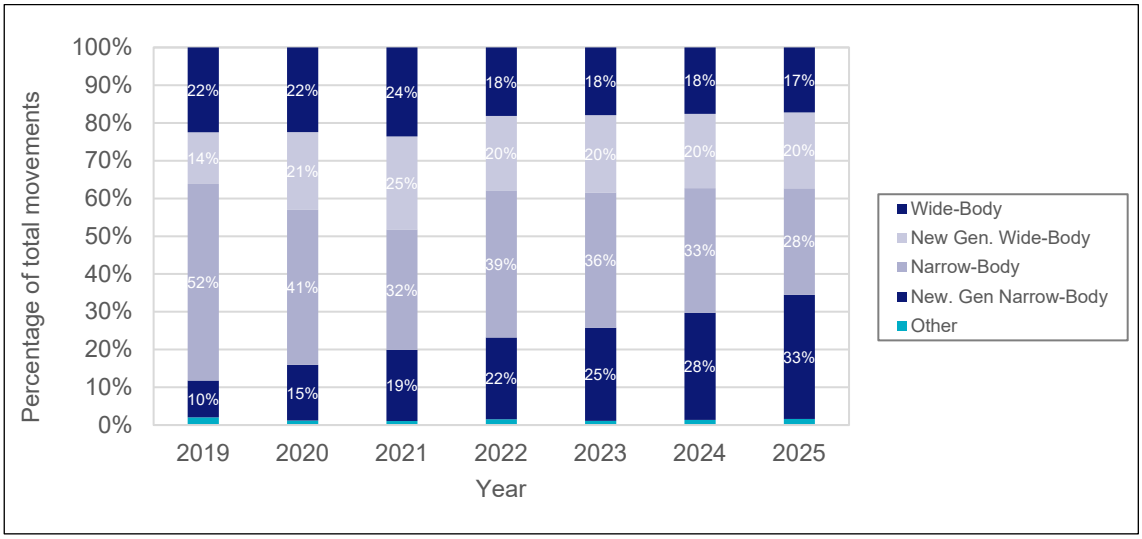


Figure 14 Aircraft type categories at Heathrow, 8 hour night

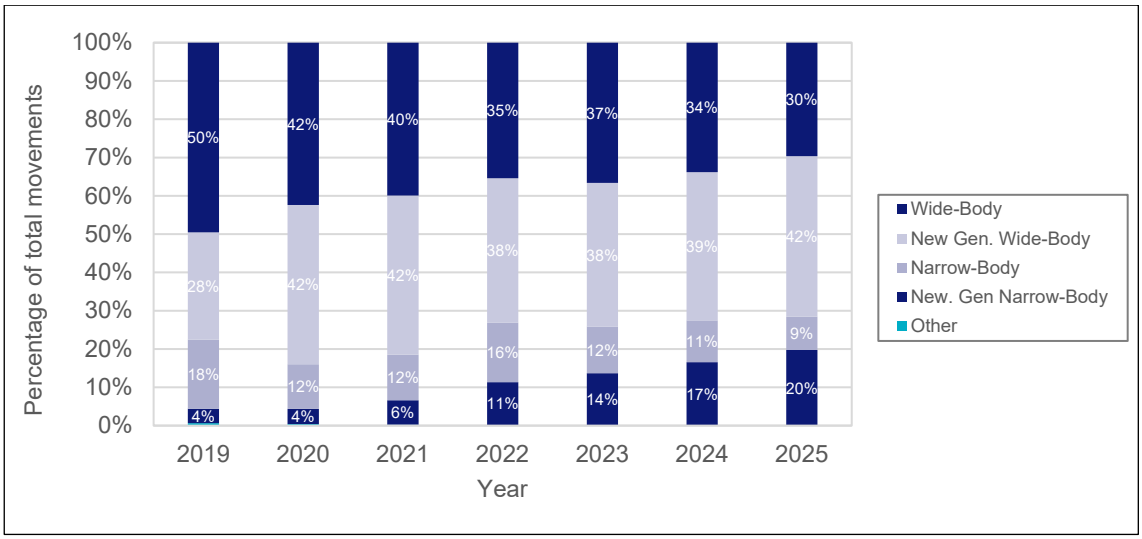
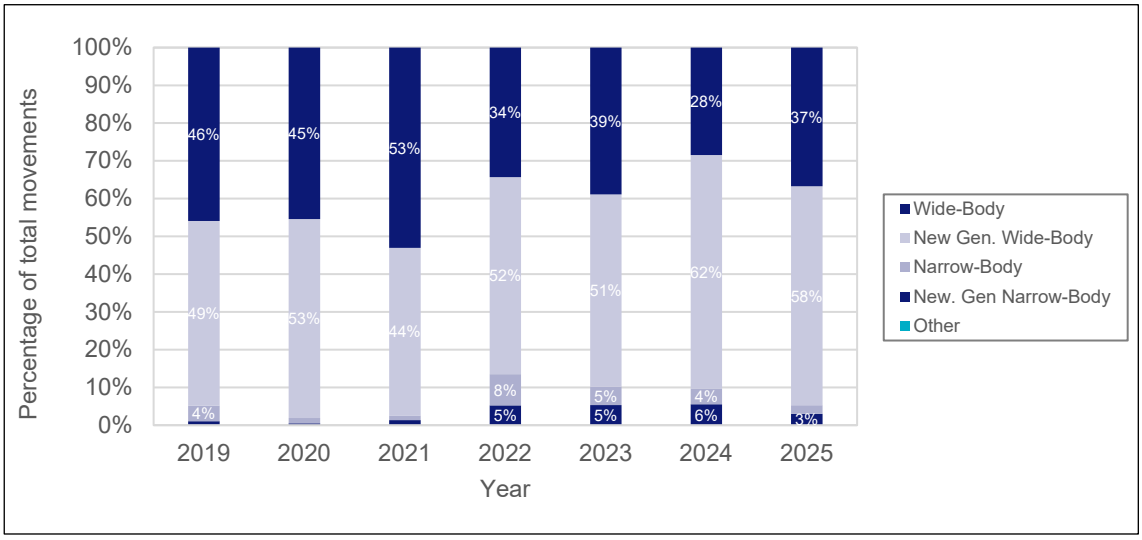


Figure 15 Aircraft type categories at Heathrow, 6.5 hour night



Note: Values less than 3% are not labelled. Percentages may not sum to 100% due to rounding.

Distance flown

4.13 To provide insight on the distances flown by aircraft operating from Heathrow, Figures 16, 17 and 18 show the percentages of different route categories flown between 2019 and 2025 during the 16 hour day, 8 hour night and 6.5 hour night, respectively. In each figure, aircraft movements have been grouped as follows:

- Short-haul flights under 1,500 km (<810 NM)
- Medium-haul flights between 1,500 and 3,500 km (810–1,890 NM)
- Long-haul flights over 3,500 km (>1,890 NM)

4.14 While the results vary somewhat between the day and night periods, the overall trend within each period has been relatively consistent since 2019.

4.15 During the 16 hour day, approximately 50 percent of aircraft at Heathrow operated on short-haul routes, followed by a smaller proportion of aircraft flying long-haul routes (with a minority flying medium-haul). However, during the 8 hour and 6.5 hour night periods, the significant majority of aircraft at Heathrow operated on long-haul routes (which were largely comprised of wide-body types).

Figure 16 Route categories flown at Heathrow, 16 hour day

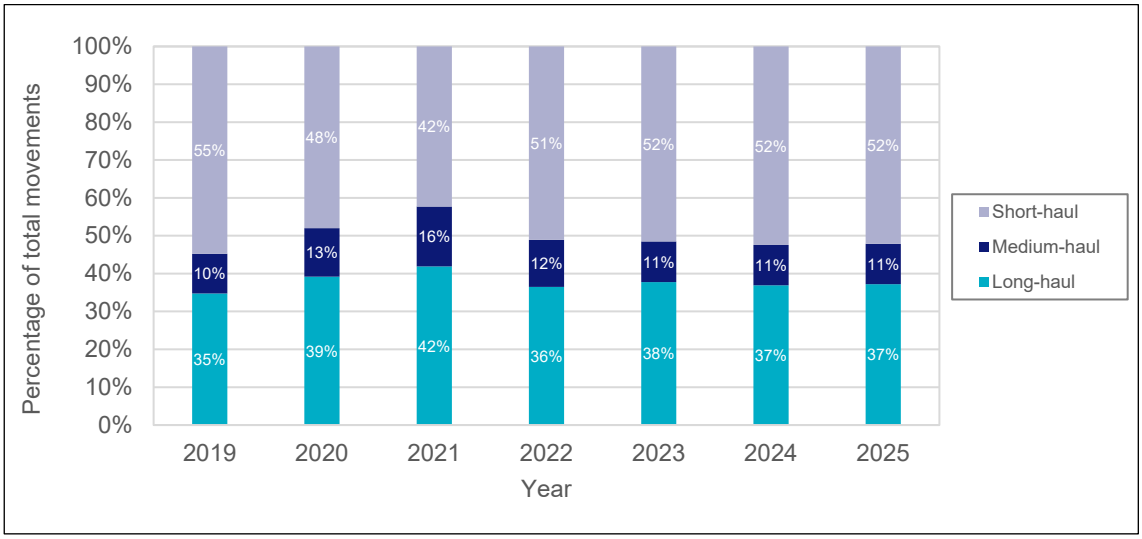


Figure 17 Route categories flown at Heathrow, 8 hour night

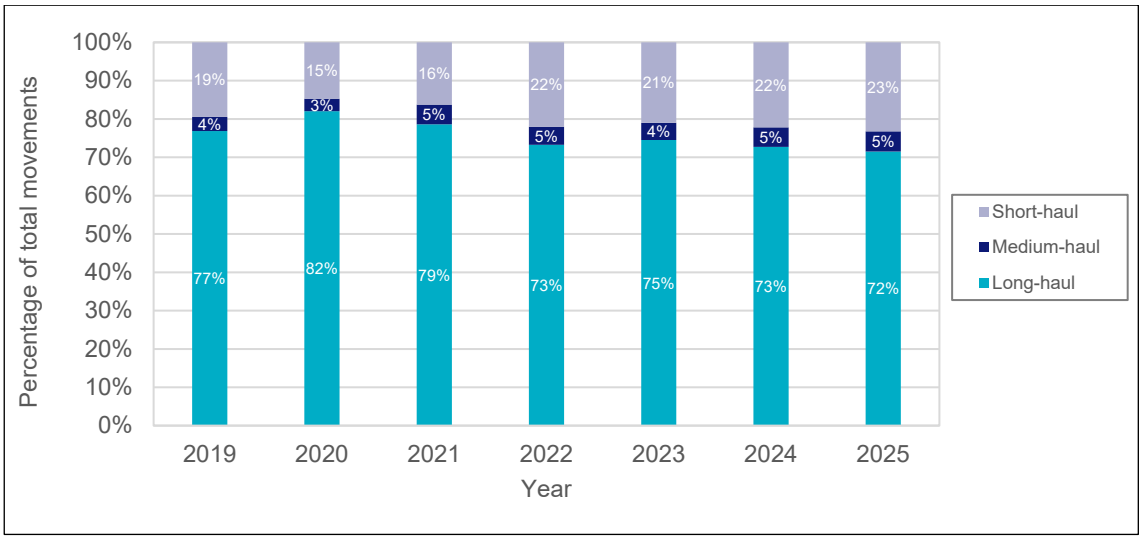
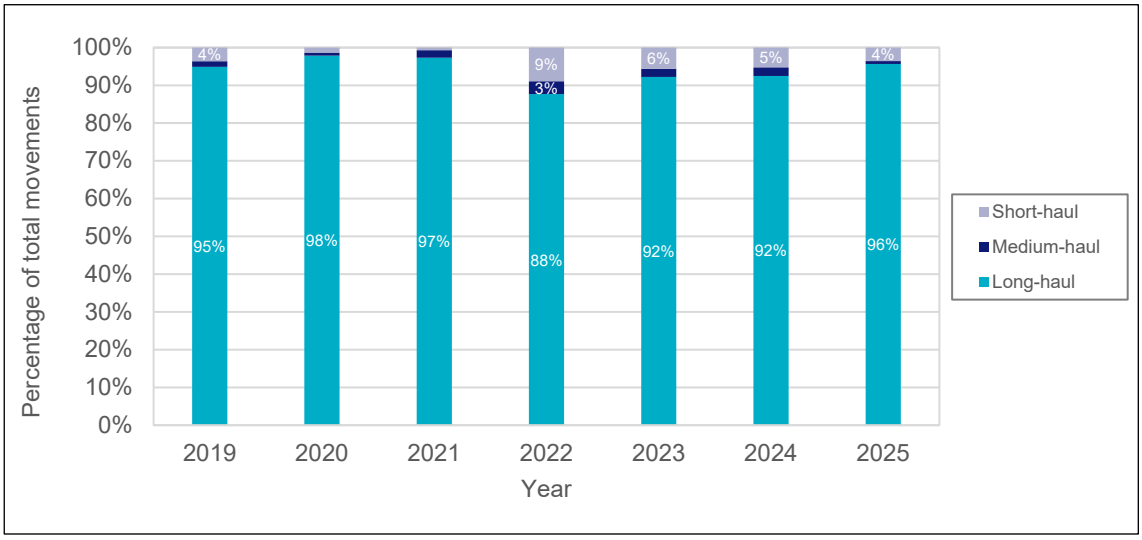


Figure 18 Route categories flown at Heathrow, 6.5 hour night



Note: Values less than 3% are not labelled. Percentages may not sum to 100% due to rounding.

Chapter 5

Stansted Airport

Aircraft movements and noise quota

5.1 Figures 19, 20 and 21 present the annual numbers of aircraft movements at Stansted between 2019 and 2025 for the following periods, respectively:

- 16 hour day, 07:00–23:00
- 8 hour night, 23:00–07:00
- 6.5 hour night, 23:30–06:00

5.2 Also shown in each figure are the corresponding annual noise quotas and average QCs per movement calculated for each year. The results show a significant reduction in the numbers of movements and associated quota usage at Stansted in 2020 and 2021 as a result of the Covid-19 pandemic.

5.3 The results also show that in 2020, the average QC per movement during the day and night periods temporarily increased. This was due to the significant reduction in the numbers of quieter narrow-body types at Stansted following the initial UK lockdown in March 2020, resulting in a temporary increase in the proportion of larger (and relatively noisier) wide-body types in the remaining fleet, the majority of which were freighter aircraft.

5.4 In 2024 and 2025, aircraft movements during the daytime at Stansted slightly exceeded movement numbers in 2019. By comparison, the associated noise quota for 2024 and 2025 reached 93 and 91 percent, respectively, of the pre-pandemic level, indicating that the average movement at Stansted during the daytime is now slightly quieter compared to 2019.[14] This is evident in Figure 19 by the slightly lower average QC per movement of 0.47 in 2025 compared to 0.52 in 2019.

5.5 Figures 20 and 21 show that since 2022, annual night-time movements at Stansted have exceeded movement numbers in 2019. During the 6.5 hour night period in particular (Figure 21), annual aircraft movements in 2024 exceeded those in 2019 by 14 percent. The average QCs per movement during the night periods between 2022 and 2025 were, however, slightly lower than in 2019.

[14] All other things being equal, a 9 percent reduction in total noise quota is approximately equivalent to a 0.4 dB reduction in average noise exposure.

Figure 19 Annual movements at Stansted, 16 hour day

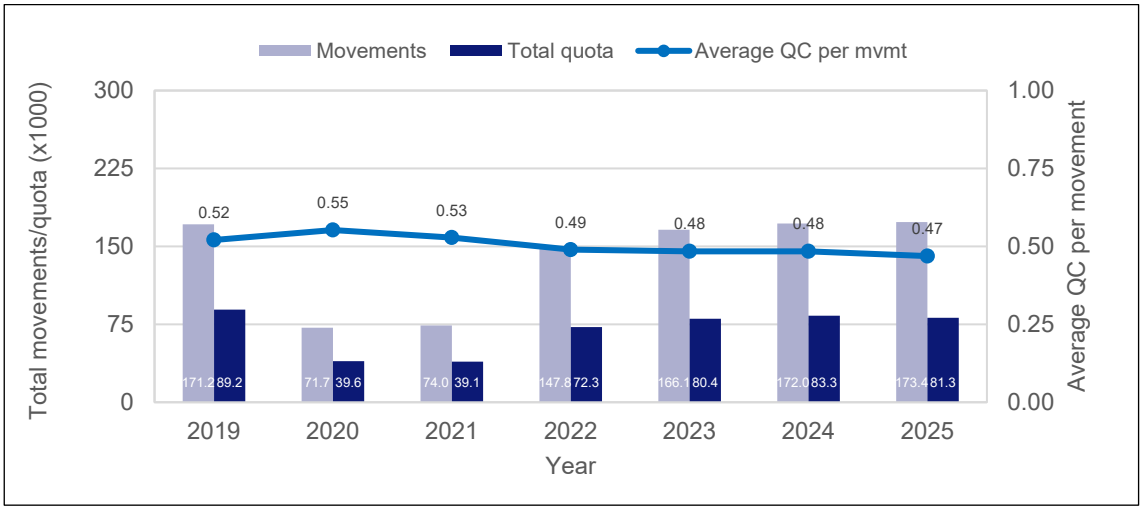


Figure 20 Annual movements at Stansted, 8 hour night

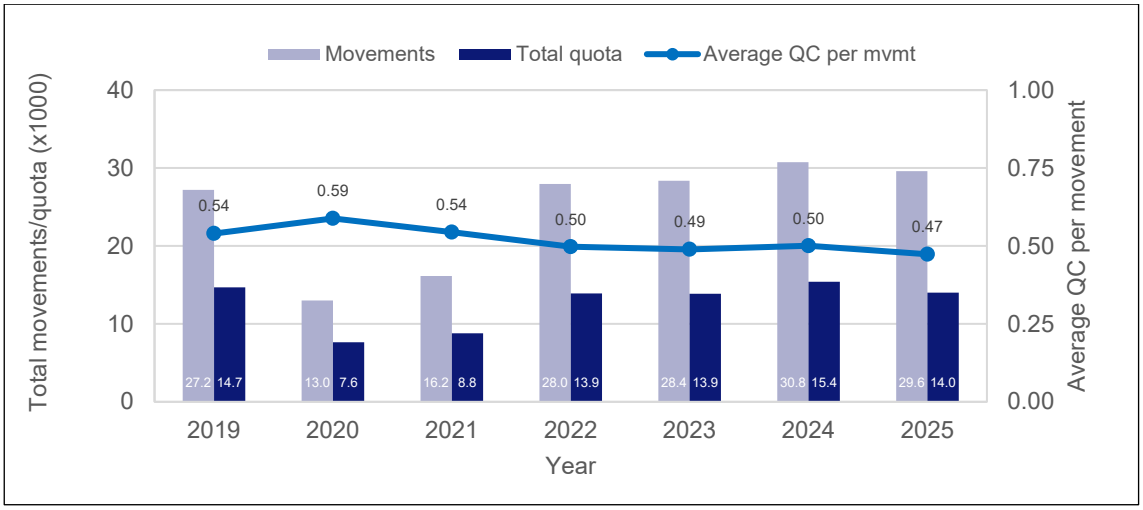
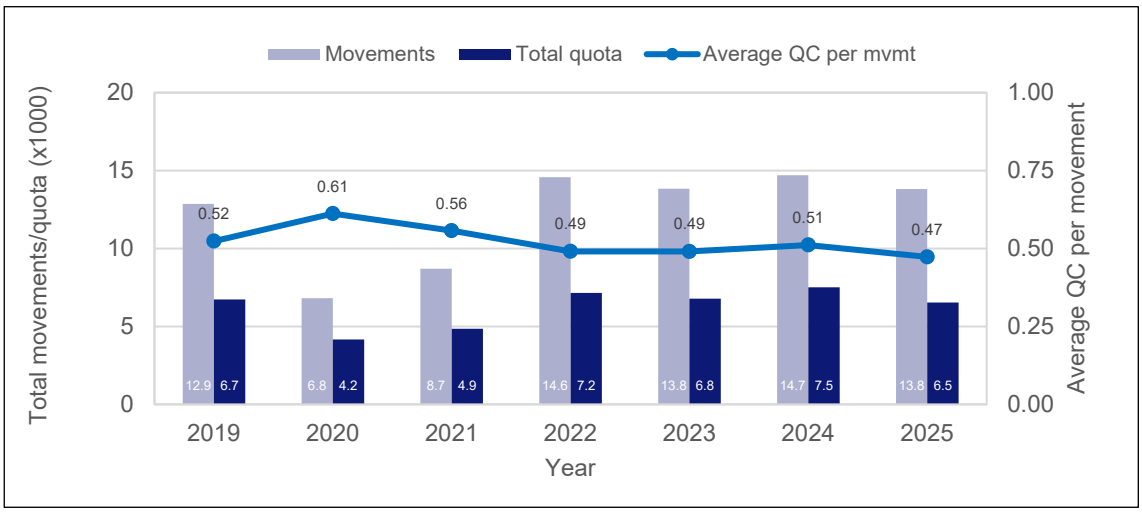


Figure 21 Annual movements at Stansted, 6.5 hour night



Fleet mix

5.6 Figures 22, 23 and 24 show the percentages of different aircraft types operating at Stansted between 2019 and 2025 during the 16 hour day, 8 hour night and 6.5 hour night periods, respectively. In each figure, aircraft movements have been grouped into the following broad categories of aircraft based on size and, where applicable, the level of aircraft noise reduction technology:

- Wide-body
- 'New Generation' Wide-body
- Narrow-body
- 'New Generation' Narrow-body
- Other

5.7 A summary of aircraft types covered by each category is provided in Appendix B. When reviewing the results in Figures 22 to 24, readers should also note the significant reductions in the numbers of movements that occurred during 2020 and 2021 (Figures 19 to 21).

5.8 It is evident from the results that narrow-body aircraft in general dominate the fleet at Stansted, typically accounting for around 90 percent of all aircraft movements. Ryanair is the dominant operator at Stansted and operates a fleet of Boeing 737 (narrow-body) aircraft, typically accounting for about two thirds of all operations at the airport.

5.9 The results show a marked increase in the numbers of New Generation narrow-body aircraft at Stansted since 2021, largely as a result of the entry into service of Ryanair's new Boeing 737 MAX aircraft.[15] This proportion is expected to increase further over the coming years as more older aircraft are replaced with newer, quieter designs.

5.10 After taking delivery of its final new Boeing 737 MAX 8200 aircraft in February 2026, Ryanair now has 210 new 737 MAX aircraft in its fleet.[16] In May 2023 Ryanair placed a firm order for 150 new 737 MAX 10 aircraft (with options for 150 more) for delivery between 2027 and 2033.[17]

[15] https://corporate.ryanair.com/news/ryanair-orders-75-boeing-max-8200-aircraft-210-in-total/

[16] https://www.boeing.com/

[17] https://corporate.ryanair.com/news/ryanair-orders-300-boeing-737-max-10-aircraft-worth-40bn/

Figure 22 Aircraft type categories at Stansted, 16 hour day

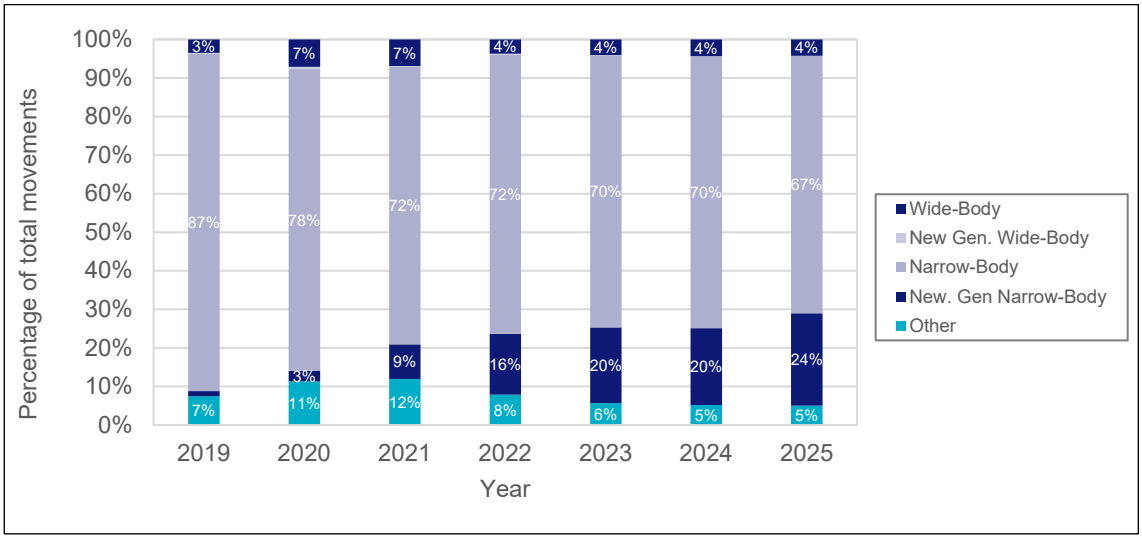


Figure 23 Aircraft type categories at Stansted, 8 hour night

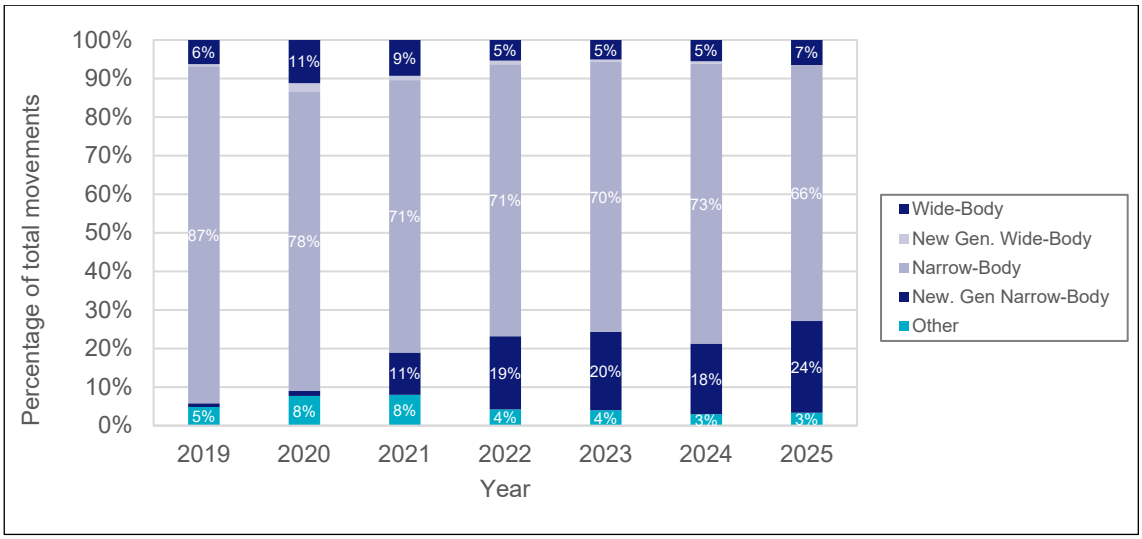
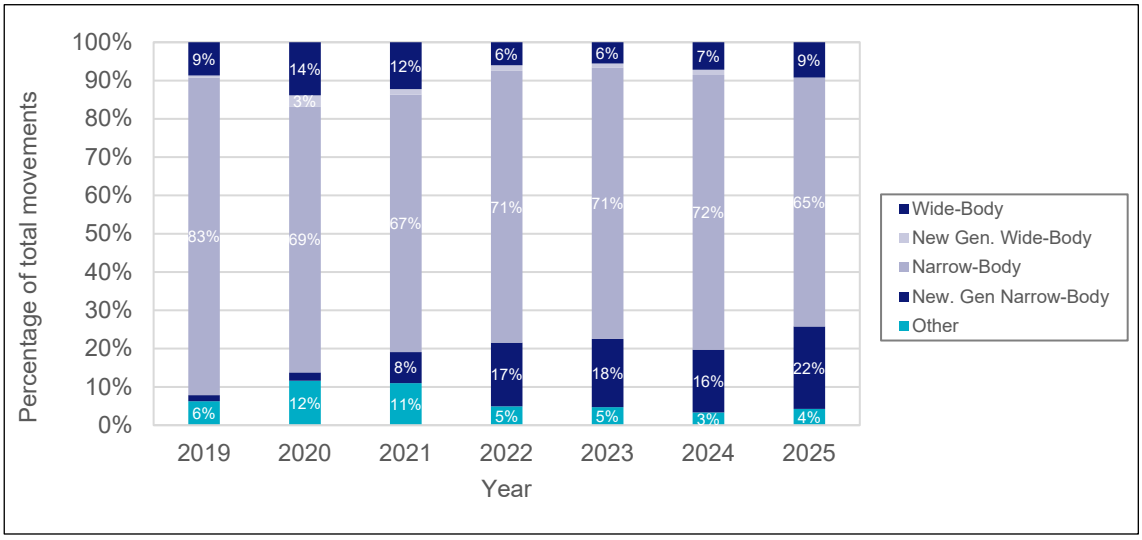


Figure 24 Aircraft type categories at Stansted, 6.5 hour night



Note: Values less than 3% are not labelled. Percentages may not sum to 100% due to rounding.

Distance flown

5.11 To provide insight on the distances flown by aircraft operating from Stansted, Figures 25, 26 and 27 show the percentages of different route categories flown between 2019 and 2025 during the 16 hour day, 8 hour night and 6.5 hour night, respectively. In each figure, aircraft movements have been grouped as follows:

- Short-haul flights under 1,500 km (<810 NM)
- Medium-haul flights between 1,500 and 3,500 km (810–1,890 NM)
- Long-haul flights over 3,500 km (>1,890 NM)

5.12 The overall trend within each of the time periods at Stansted has been relatively consistent since 2019, with short-haul flights accounting for the majority of movements. However, the results for daytime show that since 2020, there has been a slightly smaller percentage of short-haul flights each year compared to 2019.

5.13 The results also show a slightly smaller percentage of short-haul flights (with a slightly greater percentage of medium-haul flights) at night compared to the daytime for each year.

Figure 25 Route categories flown at Stansted, 16 hour day

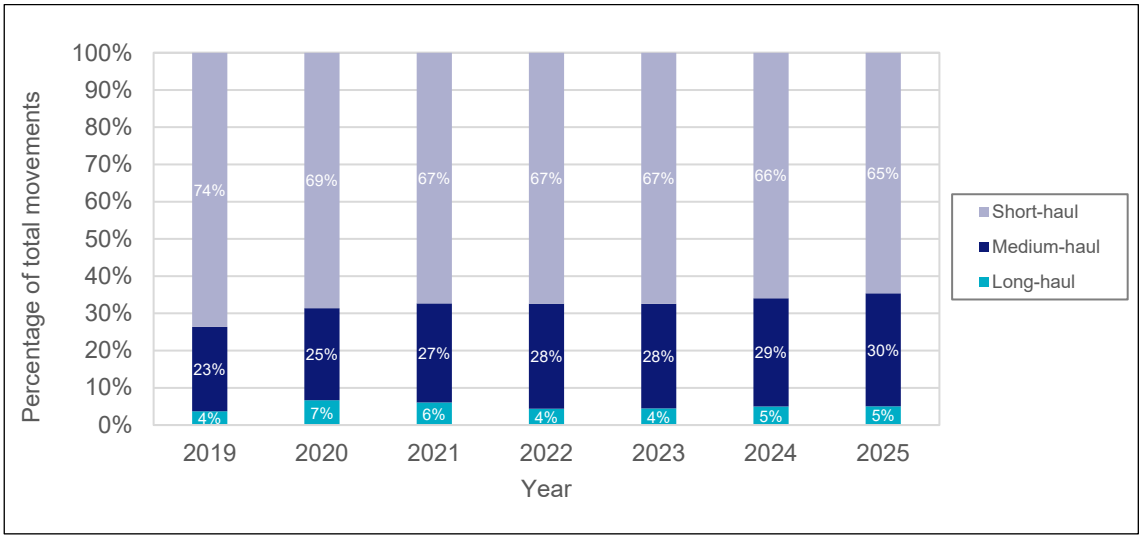


Figure 26 Route categories flown at Stansted, 8 hour night

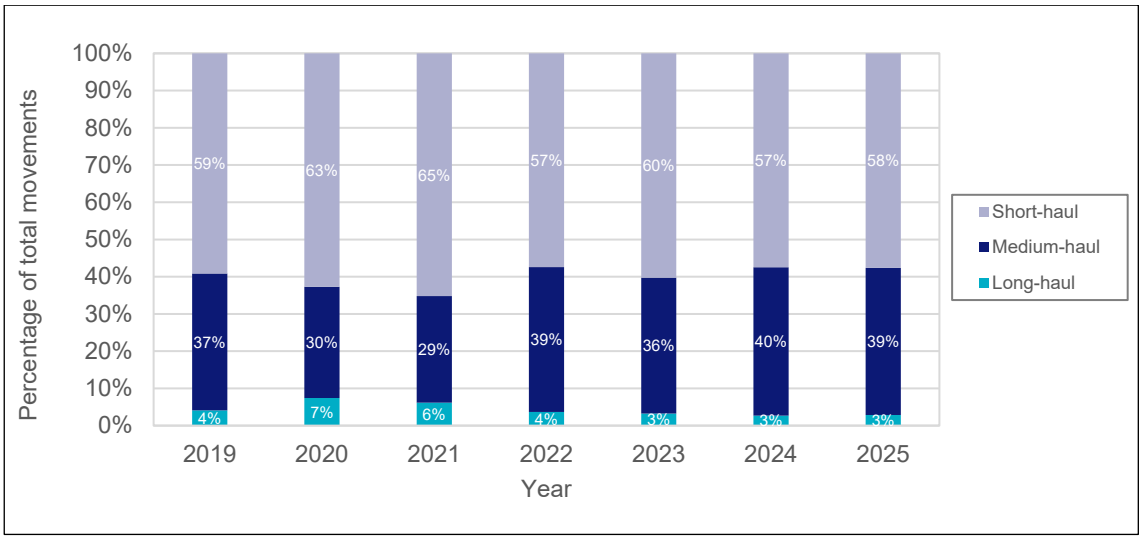
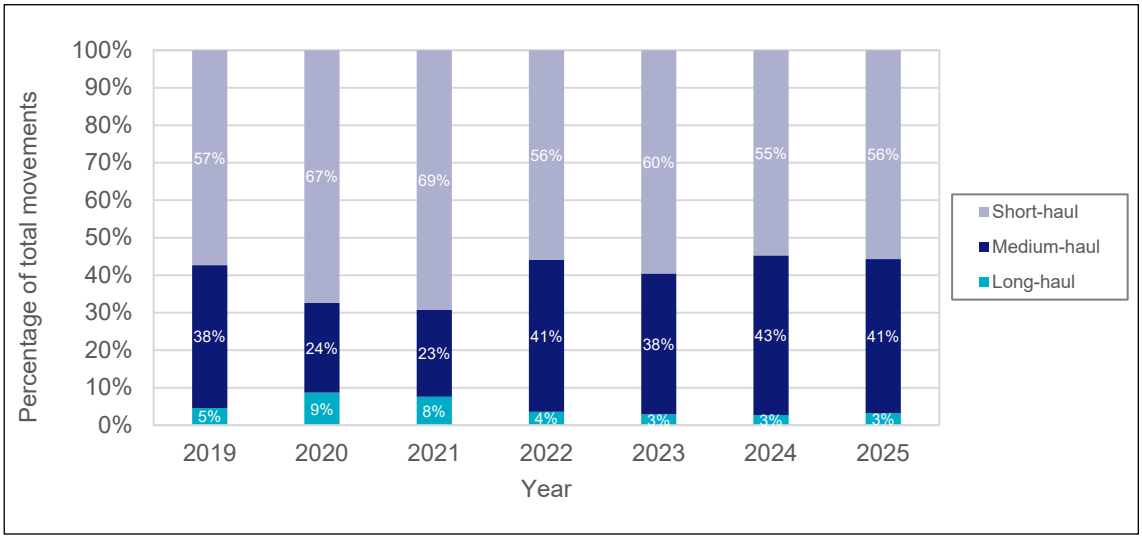


Figure 27 Route categories flown at Stansted, 6.5 hour night



Note: Percentages may not sum to 100% due to rounding

Chapter 6
Summary

6.1 This study provides a summary of aircraft movements, fleet mix and noise quota usage at Gatwick, Heathrow and Stansted airports between 2019 and 2025. The results for all three airports show a significant reduction in the numbers of movements and associated quota usage in 2020 and 2021 as a result of the Covid-19 pandemic.

6.2 In 2024, daytime movements at Gatwick recovered to 93 percent of the level in 2019, then reducing slightly in 2025 to 92 percent of the pre-pandemic level. Night-time movements at Gatwick recovered to a greater extent, reaching at least 98 percent of the pre-pandemic level during the 8 hour night between 2023 and 2025. During the 6.5 hour night, movements at Gatwick in 2023, 2024 and 2025 exceeded those in 2019 by 11, 3 and 1 percent, respectively.

6.3 At Heathrow, daytime movements recovered to the pre-pandemic level in 2025, with movements during the 8 hour night slightly exceeding the pre-pandemic level. During the 6.5 hour night period, movements at Heathrow in 2024 and 2025 reached nearly 100 percent of the level in 2019.

6.4 In 2024 and 2025, daytime movements at Stansted slightly exceeded movement numbers in 2019. Since 2022, annual night-time movements at Stansted have also exceeded movement numbers in 2019. During the 6.5 hour night in particular, movements at Stansted in 2024 exceeded those in 2019 by 14 percent.

6.5 Across all three airports, there was an overall reduction in the average QC per movement between 2019 and 2025, indicating that aircraft fleets are gradually becoming quieter over time.

6.6 The results show that with the exception of the night period at Heathrow (which is dominated by wide-body aircraft), narrow-body aircraft in general dominate the fleets at all three airports. The results also show that since 2019, New Generation aircraft have accounted for a greater proportion of the overall fleets. This proportion is expected to increase further over the coming years as airlines continue to replace older aircraft in their fleets with newer designs.

APPENDIX A

The Quota Count (QC) system

A1. The Night Flying Restrictions at Gatwick, Heathrow and Stansted airports specify a night period (23:00–07:00 hours) during which the noisiest types of aircraft may not be scheduled to land or take off. In addition, between 23:30 and 06:00 hours (the night quota period) aircraft movements are restricted by movement limits and noise quotas that are set by the Department for Transport (DfT) for each summer and winter season.

A2. The noise quotas are designed to encourage the use of quieter aircraft. Movements at each airport count against the airport's noise quota according to their Quota Count (QC) classifications. The movement limits and noise quotas are set out in a Notice which is published each season in a Supplement to the UK Aeronautical Information Publication (AIP), which gives effect to the night restrictions.[18]

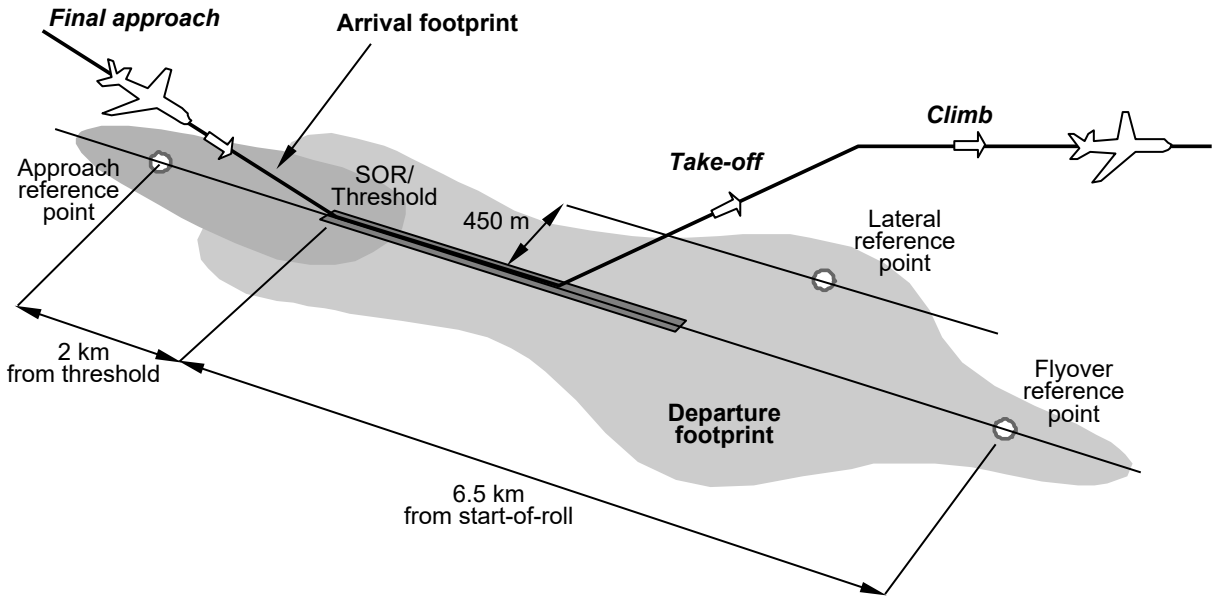
A3. The QC classifications are intended to indicate each aircraft's relative contribution to the total impact of aircraft noise on the airport surroundings. Noisier aircraft types carry a higher QC classification. The classification of aircraft for this purpose is based on their ICAO certificated noise levels and each aircraft type is classified separately for arrival and departure.

A4. The certification procedure, specified in Chapter 3 of ICAO Annex 16, requires the determination of arrival and departure EPNLs, see Figure A1. Three reference measurement points are specified: *approach*, under a 3-degree descent path 2 km from the runway threshold; *lateral*, 450 m to the side of the initial climb after take-off, at the longitudinal position where noise is greatest; and *flyover*, under the departure climb path, 6.5 km from start-of-roll (SOR).[19]

[18] NATS UK | AIP Supplements (ead-it.com)

[19] Annex 16 – Environmental Protection, Volume I – Aircraft Noise, ICAO, Eighth Edition, July 2017

Figure A1 Aircraft noise reference points (in relation to illustrative noise footprints)



A5. Classifications for departures are based on the average of the lateral and flyover EPNLs, and for arrivals after subtracting 9 EPNdB from the approach EPNL. Further technical details can be found in ERCD Report 0204.[20]

A6. The aircraft QC classifications were, as a matter of policy, based on official certificated noise levels because these are (i) generally considered to be reliable indicators of aircraft noise performance, (ii) available for practically every civil transport aircraft in current operation, (iii) openly published and therefore readily applied by administrators of the scheme, and (iv) correlated with noise footprint areas, which were taken to be appropriate measures of 'noise impact'.

A7. The central feature of the classification system is that each aircraft is given a QC rating, which increases by a multiple of two in step with the 3-decibel (dB) doubling of noise energy principle (e.g. QC/1, QC/2, QC/4, etc.). The underlying principle of the scheme is to encourage the use of quieter aircraft by making each movement of a noisier type use more of the total available quota set for each airport. All other things being equal, a 50 percent reduction in total noise quota is equivalent to a 3 dB reduction in average noise exposure.

[20] ERCD Report 0204, *Review of the Quota Count (QC) System: Re-analysis of the Differences between Arrivals and Departures*, CAA, November 2002

A8. Under the current scheme, aircraft are assigned Quota Counts based on their certificated noise levels as shown in Table A1. The QC classifications for aircraft on take-off and landing are available in the databases of approved aircraft noise configurations published by the CAA.[21]

Table A1 Quota Count classifications

Noise Classification, EPNdB	Quota Count
Below 81	0
81 – 83.9	0.125
84 – 86.9	0.25
87 – 89.9	0.5
90 – 92.9	1
93 – 95.9	2
96 – 98.9	4
99 – 101.9	8
Greater than 101.9	16

[21] Aircraft noise certificate | UK Civil Aviation Authority

APPENDIX B

Aircraft type categories (not exhaustive)

Wide-body

- Airbus A300
- Airbus A310
- Airbus A330
- Airbus A340
- Boeing 747-200/-400
- Boeing 767
- Boeing 777
- MD-11F

New Generation Wide-body

- Airbus A330neo
- Airbus A350
- Airbus A380
- Boeing 747-8
- Boeing 787

Narrow-body

- Airbus A318/A319/A320/A321
- Boeing 737 NG
- Boeing 757
- Embraer ERJ-170/-190

New Generation Narrow-body

- Airbus A220
- Airbus A319neo/A320neo/A321neo
- Boeing 737 MAX
- Embraer E-190 E2/-195 E2

Other (including Business and Regional Jets)

- Business Jets
- BAe 146/Avro RJ
- Embraer ERJ-135/-145
- Small/Large Propeller

APPENDIX C

Tabulated results

Table C1 Annual movements at Gatwick, 16 hour day

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	254.2	133.0	0.52
2020	72.7	33.3	0.46
2021	50.8	21.0	0.41
2022	193.0	86.3	0.45
2023	226.9	105.6	0.47
2024	235.3	111.8	0.48
2025	232.7	109.7	0.47

Table C2 Annual movements at Gatwick, 8 hour night

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	30.5	14.8	0.49
2020	6.7	2.8	0.42
2021	4.5	1.7	0.37
2022	24.5	8.8	0.36
2023	29.9	11.4	0.38
2024	30.1	12.0	0.40
2025	30.4	12.7	0.42

Table C3 Annual movements at Gatwick, 6.5 hour night

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	13.8	5.3	0.39
2020	2.5	0.9	0.36
2021	2.0	0.6	0.32
2022	13.1	3.9	0.29
2023	15.3	4.7	0.31
2024	14.2	4.5	0.32
2025	13.9	4.8	0.34

Table C4 Aircraft type categories at Gatwick, 16 hour day

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	6%	5%	81%	7%	1%
2020	4%	5%	73%	17%	1%
2021	4%	3%	68%	24%	2%
2022	3%	3%	73%	19%	2%
2023	4%	4%	72%	19%	2%
2024	4%	5%	67%	21%	3%
2025	4%	5%	67%	22%	3%

Note: Percentages may not sum to 100% due to rounding.

Table C5 Aircraft type categories at Gatwick, 8 hour night

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	9%	9%	70%	13%	0%
2020	10%	11%	50%	28%	1%
2021	4%	5%	54%	35%	2%
2022	3%	4%	63%	31%	0%
2023	5%	5%	65%	25%	0%
2024	5%	9%	56%	29%	0%
2025	6%	10%	54%	29%	0%

Table C6 Aircraft type categories at Gatwick, 6.5 hour night

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	6%	8%	70%	16%	0%
2020	10%	12%	40%	36%	2%
2021	4%	6%	49%	38%	3%
2022	2%	2%	60%	35%	0%
2023	2%	3%	67%	28%	0%
2024	4%	5%	56%	35%	0%
2025	7%	5%	53%	35%	0%

Note: Percentages may not sum to 100% due to rounding.

Table C7 Route categories flown at Gatwick, 16 hour day

Year	Long-haul	Medium-haul	Short-haul
2019	11%	26%	63%
2020	10%	27%	64%
2021	7%	30%	63%
2022	8%	31%	61%
2023	9%	31%	60%
2024	10%	32%	58%
2025	10%	33%	57%

Table C8 Route categories flown at Gatwick, 8 hour night

Year	Long-haul	Medium-haul	Short-haul
2019	18%	48%	35%
2020	21%	49%	30%
2021	9%	60%	31%
2022	10%	55%	35%
2023	14%	52%	34%
2024	18%	50%	32%
2025	20%	49%	30%

Note: Percentages may not sum to 100% due to rounding.

Table C9 Route categories flown at Gatwick, 6.5 hour night

Year	Long-haul	Medium-haul	Short-haul
2019	15%	56%	29%
2020	21%	59%	20%
2021	11%	62%	27%
2022	10%	61%	30%
2023	11%	59%	30%
2024	14%	61%	25%
2025	20%	59%	21%

Table C10 Annual movements at Heathrow, 16 hour day

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	448.7	303.5	0.68
2020	191.5	125.9	0.66
2021	182.5	115.0	0.63
2022	356.4	200.7	0.56
2023	427.7	241.7	0.57
2024	446.1	246.1	0.55
2025	449.4	240.2	0.53

Note: Percentages may not sum to 100% due to rounding.

Table C11 Annual movements at Heathrow, 8 hour night

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	29.3	23.3	0.79
2020	13.1	8.6	0.65
2021	12.8	7.6	0.59
2022	23.9	13.7	0.57
2023	28.8	16.7	0.58
2024	30.0	16.6	0.55
2025	30.3	16.1	0.53

Table C12 Annual movements at Heathrow, 6.5 hour night

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	5.9	4.7	0.80
2020	3.0	2.2	0.74
2021	2.1	1.5	0.73
2022	4.4	2.7	0.62
2023	5.4	3.2	0.59
2024	5.8	3.2	0.55
2025	5.8	3.3	0.56

Table C13 Aircraft type categories at Heathrow, 16 hour day

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	22%	14%	52%	10%	2%
2020	22%	21%	41%	15%	1%
2021	24%	25%	32%	19%	1%
2022	18%	20%	39%	22%	2%
2023	18%	20%	36%	25%	1%
2024	18%	20%	33%	28%	1%
2025	17%	20%	28%	33%	2%

Table C14 Aircraft type categories at Heathrow, 8 hour night

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	50%	28%	18%	4%	1%
2020	42%	42%	12%	4%	0%
2021	40%	42%	12%	6%	0%
2022	35%	38%	16%	11%	0%
2023	37%	38%	12%	14%	0%
2024	34%	39%	11%	17%	0%
2025	30%	42%	9%	20%	0%

Note: Percentages may not sum to 100% due to rounding.

Table C15 Aircraft type categories at Heathrow, 6.5 hour night

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	46%	49%	4%	1%	0%
2020	45%	53%	1%	1%	0%
2021	53%	44%	1%	1%	0%
2022	34%	52%	8%	5%	0%
2023	39%	51%	5%	5%	0%
2024	28%	62%	4%	6%	0%
2025	37%	58%	2%	3%	0%

Table C16 Route categories flown at Heathrow, 16 hour day

Year	Long-haul	Medium-haul	Short-haul
2019	35%	10%	55%
2020	39%	13%	48%
2021	42%	16%	42%
2022	36%	12%	51%
2023	38%	11%	52%
2024	37%	11%	52%
2025	37%	11%	52%

Note: Percentages may not sum to 100% due to rounding.

Table C17 Route categories flown at Heathrow, 8 hour night

Year	Long-haul	Medium-haul	Short-haul
2019	77%	4%	19%
2020	82%	3%	15%
2021	79%	5%	16%
2022	73%	5%	22%
2023	75%	4%	21%
2024	73%	5%	22%
2025	72%	5%	23%

Table C18 Route categories flown at Heathrow, 6.5 hour night

Year	Long-haul	Medium-haul	Short-haul
2019	95%	1%	4%
2020	98%	1%	1%
2021	97%	2%	1%
2022	88%	3%	9%
2023	92%	2%	6%
2024	92%	2%	5%
2025	96%	1%	4%

Note: Percentages may not sum to 100% due to rounding.

Table C19 Annual movements at Stansted, 16 hour day

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	171.2	89.2	0.52
2020	71.7	39.6	0.55
2021	74.0	39.1	0.53
2022	147.8	72.3	0.49
2023	166.1	80.4	0.48
2024	172.0	83.3	0.48
2025	173.4	81.3	0.47

Table C20 Annual movements at Stansted, 8 hour night

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	27.2	14.7	0.54
2020	13.0	7.6	0.59
2021	16.2	8.8	0.54
2022	28.0	13.9	0.50
2023	28.4	13.9	0.49
2024	30.8	15.4	0.50
2025	29.6	14.0	0.47

Table C21 Annual movements at Stansted, 6.5 hour night

Year	Movements (thousands)	Total quota (thousands)	Average QC per movement
2019	12.9	6.7	0.52
2020	6.8	4.2	0.61
2021	8.7	4.9	0.56
2022	14.6	7.2	0.49
2023	13.8	6.8	0.49
2024	14.7	7.5	0.51
2025	13.8	6.5	0.47

Table C22 Aircraft type categories at Stansted, 16 hour day

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	3%	0%	87%	1%	7%
2020	7%	0%	78%	3%	11%
2021	7%	0%	72%	9%	12%
2022	4%	0%	72%	16%	8%
2023	4%	0%	70%	20%	6%
2024	4%	0%	70%	20%	5%
2025	4%	0%	67%	24%	5%

Note: Percentages may not sum to 100% due to rounding.

Table C23 Aircraft type categories at Stansted, 8 hour night

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	6%	1%	87%	1%	5%
2020	11%	2%	78%	1%	8%
2021	9%	1%	71%	11%	8%
2022	5%	1%	71%	19%	4%
2023	5%	1%	70%	20%	4%
2024	5%	1%	73%	18%	3%
2025	7%	0%	66%	24%	3%

Table C24 Aircraft type categories at Stansted, 6.5 hour night

Year	Wide-Body	New Gen. Wide-Body	Narrow-Body	New. Gen Narrow-Body	Other
2019	9%	1%	83%	2%	6%
2020	14%	3%	69%	2%	12%
2021	12%	1%	67%	8%	11%
2022	6%	1%	71%	17%	5%
2023	6%	1%	71%	18%	5%
2024	7%	1%	72%	16%	3%
2025	9%	0%	65%	22%	4%

Note: Percentages may not sum to 100% due to rounding.

Table C25 Route categories flown at Stansted, 16 hour day

Year	Long-haul	Medium-haul	Short-haul
2019	4%	23%	74%
2020	7%	25%	69%
2021	6%	27%	67%
2022	4%	28%	67%
2023	4%	28%	67%
2024	5%	29%	66%
2025	5%	30%	65%

Table C26 Route categories flown at Stansted, 8 hour night

Year	Long-haul	Medium-haul	Short-haul
2019	4%	37%	59%
2020	7%	30%	63%
2021	6%	29%	65%
2022	4%	39%	57%
2023	3%	36%	60%
2024	3%	40%	57%
2025	3%	39%	58%

Note: Percentages may not sum to 100% due to rounding.

Table C27 Route categories flown at Stansted, 6.5 hour night

Year	Long-haul	Medium-haul	Short-haul
2019	5%	38%	57%
2020	9%	24%	67%
2021	8%	23%	69%
2022	4%	41%	56%
2023	3%	38%	60%
2024	3%	43%	55%
2025	3%	41%	56%

Note: Percentages may not sum to 100% due to rounding.

APPENDIX D

Glossary

AIP	UK Integrated Aeronautical Information Publication. A manual containing thorough details of regulations, procedures and other information pertinent to flying aircraft in the UK.
Aircraft movement	Any aircraft take-off or landing at an airport. These could be either commercial or non-commercial flights. For airport traffic purposes one arrival and one departure are counted as two movements.
ICAO	International Civil Aviation Organization.
NTK	Noise and Track-Keeping monitoring system. The NTK system associates air traffic control radar data with related data from noise monitors at prescribed positions on the ground.
QC	Quota Count. The basis of the London airports' night flying restrictions regime. Noisier aircraft types carry a higher QC classification. The classifications are based on ICAO certificated noise levels and each aircraft type is classified separately for arrival and departure.