London Gatwick Airspace Office 2024 Annual Report

This report covers the period 1st January – 31st December 2024

LONDON GATWICK

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Executive Summary

This comprehensive report provides essential insights into noise levels, track keeping, and airfield performance, offering a detailed overview of London Gatwick's operational landscape throughout 2024.

During the year there was an increase in air traffic movements across all four quarters compared to 2023. The most substantial growth was during the first quarter of 2024, with a 5.5% increase in movements compared to the same period in 2023. The year also saw increased consumer demand for travel and the addition of new routes across multiple airlines. The total number of air traffic movements at Gatwick in 2024 was 265,319 an increase from 256,831 in 2023 and 93.2% of air traffic movements in 2019.

Short-haul and long-haul travel continued to perform well in 2024 with passenger levels reaching 43.2 million, up 5.7% on the previous year. New long-haul routes to China, India and the introduction of a service to Singapore with Singapore Airlines assisted this growth. The Airbus A320 family continued to be the most common type of aircraft used, accounting for 74% of all aircraft operating at London Gatwick. There was also a notable increase in the use of newer generation aircraft such as the A350, B737 MAX, and B787 Dreamliner.

The Airspace Office had a full airline engagement program, meeting with a record 36 airlines over the year. The purpose of these meetings is to drive continuous improvement on the noise abatement procedures, including track keeping conformance and Continuous Descent Operations (CDO) performance. This has proven to be fruitful in 2024 with Air China's CDO performance improving from a low of 34% in Q1 to an outstanding 94% in Q4, Air Europa also saw some impressive improvements from 61% in Q1 to 89% in Q4.

In 2024, 11,884 noise complaints were received from 327 individuals, representing a 40% reduction of complainants, despite a 10% increase in complaints, compared to the previous year. 83% of the complaints were categorised as those received by people who reside under the arrival swathe, with a further 15% of total complaints received for those impacted by departure operations.

A total of 10,560 night flights were operated within core hours during the 2024 summer season, with the 2024/2025 winter season recording 1,202 flights to the end of the year. Both have remained within the seasonal limits as set by the Department of Transport.

The Airspace Office continued to carefully monitor all aircraft activity, complete the relevant noise abatement compliance reporting, record and monitor noise levels through our network of Noise Monitoring Terminals, provide responses to noise complaints and requests for information, and monitor and report compliance with the night flying restrictions applicable to the airport. In addition, the airport continued to implement its Section 106 obligations and selected actions from our Noise Action Plan and support the delivery of the Noise Management Board workplan.

A new addition to the 2024 Annual Report is a breakdown of the conformance of Route 4 (26LAM) compared to the previous year. This comparison can be viewed on page 24, starting from April 2023, with the introduction of the updated Noise Preferential Route (NPR) to the Noise and Track Keeping system to conform with the conventional Standard Instrument Departure (SID) routings as specified by the DfT. Overall, Route 4 conformance was better maintained during 2024, ranging between 64% and 81%, however there is an airspace change process in development to further improve this. Conformance across all other departure routes continue to be above 99%.

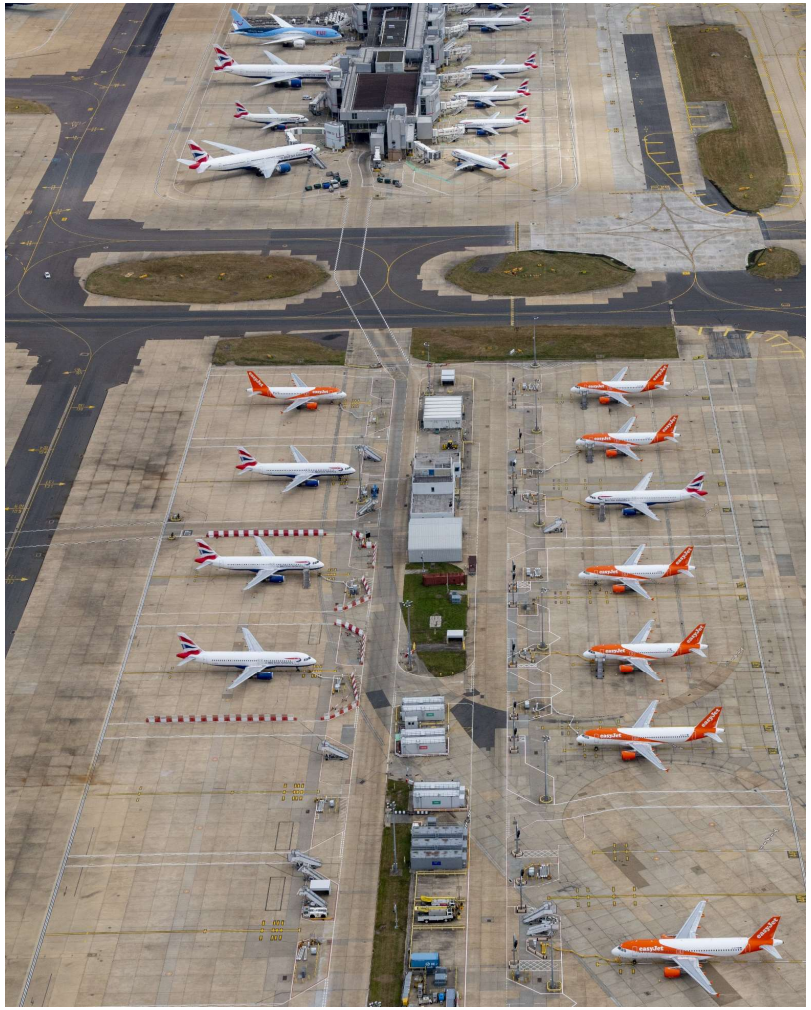
The introduction of the new Rapid Exit Taxiway (RET), completed in March 2023, has led to a 4% reduction in the 'slow to vacate' reason from the total causes of runway occupancy in 2024. December 2024 saw the highest number of go arounds mainly driven by an increase in windshear and weather caused by strong winds and low visibility. There was a reduction of 60% in movements on the Northern Runway during 2024, with an increase of the number of days in use during the summer months as essential maintenance is carried out on the Main Runway.

In addition to the routine reports and updates provided to the Noise and Track Monitoring Advisory Group (NaTMAG), and the Noise Management Board (NMB), we recently introduced a dynamic Airspace and Noise Performance Dashboard on our website. These dynamic reports not only showcase the Aircraft Noise Performance Tables (ANPT) featured in our standard reporting but also include dedicated dashboards for track keeping and Continuous Descent Operations. Users can delve into detailed data related to individual airline performance. This valuable resource enables members of the public to gain deeper insights into the aircraft activity at London Gatwick.

Airspace Office
London Gatwick

About This Report

This report is produced by the London Gatwick Airspace Office. This team is responsible for recording, investigating and responding to aircraft noise enquiries as well as monitoring airline compliance with the noise mitigation measures as detailed in the UK Aeronautical Information Publication (AIP). The team also actively engages with airlines to help improve their adherence to the stipulated noise mitigation measures and in addition manages the night-time flying restrictions at London Gatwick. This report contains detailed data on aircraft activity at London Gatwick including the adherence to the noise mitigation measures detailed in the UK AIP, an Airline Noise Performance Table, a report on night flying during the period, and an analysis of noise complaints received during the period. Footnotes are explained in the Annex and provide insight into the regulatory basis of the reported figures.



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Performance Summary
Gatwick Key Statistics 2024

- Total passengers: 43.2 million
- Aircraft movements: 265,319
- Total number of aircraft seats: 51.1 million
- Average load factor: 84.7%
- Biggest airline: EasyJet carrying 19.1m passengers
- Long haul passengers: 15%

Performance Summary

Key Performance Indicators

This section details how the airport is performing according to a suite of Key Performance Indicators (KPIs), the change in traffic numbers over the course of the year and provides information of the types of aircraft and airlines which operate at the airport. The KPIs are in line with the noise mitigation measures set out in the UK Aeronautical Information Publication (AIP).

KPIs	Q1 2024	Q1 2024 vs Q1 2023	Q2 2024	Q2 2024 vs Q2 2023	Q3 2024	Q3 2024 vs Q3 2023	Q4 2024	Q4 2024 vs Q4 2023
Total Aircraft Movements	53,523	↑ 5.89%	71,157	↑ 3.53%	78,684	↑ 1.92%	61,955	↑ 2.52%
Percentage of Chapter 14 Aircraft	62.28%	↓ -0.90%	66.50%	↑ 1.35%	66.02%	↑ 3.44%	65.43%	↑ 4.47%
Percentage of Chapter 4 Aircraft & Above	99.86%	- 0.01%	99.90%	↑ 0.05%	99.91%	↑ 0.02%	99.92%	- 0.00%
Percentage of Chapter 3 & Below Aircraft	0.03%	- 0.00%	0.01%	↓ -0.07%	0.01%	↓ -0.01%	0.02%	- 0.00%
Continuous Descent Operations (CDO) Performance	89.24%	↓ -0.56%	89.59%	↑ 0.37%	89.02%	↑ 0.81%	90.37%	↑ 1.98%
Track Keeping Conformance	91.28%	↓ -6.96%	90.18%	↓ -1.76%	88.39%	↑ 2.63%	92.76%	↑ 1.46%
Total Noise Infringements	0	0	0	0	0	0	0	0
Noise Complaints Received	2256	↑ 22.88%	3944	↑ 25.48%	3785	↓ -4.52%	1899	↓ -7.59%
Individual Complainants	81	- 0.00%	154	↓ -33.91%	172	↓ -45.91%	75	↓ -27.18%
Enquiry Response Performance Target is 95% Within 8 Days	100.00%	↑ 0.50%	99.72%	↑ 1.10%	99.80%	↑ 4.37%	99.47%	↑ 0.37%

Figure 1: Summary of KPIs

Performance Summary

Key Performance Indicators – five-year view

This KPI table shows the last 5 years of statistics in line with the noise mitigation measures of the UK Aeronautical Information Publication (AIP).

	12 Month Performance											
Parameter	2024	2024 vs 2023		2023	2023 vs 2022		2022	2022 vs 2021		2021	2021 vs 2020		2020
Track Keeping Conformance (% On Track)	90.47%	↓	-0.76%	91.17%	↓	-6.36%	97.36%	↓	-0.86%	98.20%	↓	-0.29%	98.49%
24hr CDO (% Achievement)	89.53%	↑	0.79%	88.83%	↑	0.25%	88.61%	↓	-2.51%	90.89%	↑	1.45%	89.59%
Day/Shoulder CDO (% Achievement)	89.48%	↑	0.49%	89.04%	↓	-0.17%	89.19%	↓	-1.92%	90.94%	↑	1.28%	89.79%
Core Night CDO (% Achievement)	90.09%	↑	3.42%	87.11%	↑	3.91%	83.83%	↓	-6.93%	90.07%	↑	5.05%	85.74%
1,000ft Infringements (No.)	2	↑	100.00%	1	↑	100.00%	0		N/A	0		N/A	0
Departure Noise Infringements	0		N/A	0		N/A	0		N/A	0		N/A	0
Individual Complainants	327	↓	-40.00%	545	↓	-17.92%	664	↑	161.42%	254	↓	-18.85%	313
Total Noise Complaints Received	11,884	↑	10.10%	10,794	↓	-34.31%	16,431	↑	224.21%	5,068	↓	-23.54%	6,628
Enquiry Response Performance Target is 95% Within 8 Days	99.70%	↑	2.05%	97.70%	↓	-1.41%	99.10%	↓	-0.88%	99.98%	↑	0.49%	99.49%
Percentage of Chapter 4 (or Equivalent) Aircraft %	99%	-	0.00%	99%	-	0.00%	99%	-	0.00%	99%	-	0.00%	99%
Percentage of Chapter 14 aircraft %	65%	↑	3.17%	63%	↑	1.61%	62%	↑	6.90%	58%	↓	-12.12%	66%
West/East Runway Split (%)	72/28		N/A	70/30		N/A	66/34		N/A	68/32		N/A	83/17
Total Air Traffic Movements	265,319	↑	3.30%	256,831	↑	18.07%	217,524	↑	293.89%	55,225	↓	-30.37%	79,310

Figure 2: Summary of Annual KPIs

Performance Summary
Comparison to Noise Action Plan 2016 Baseline

Parameter	+/-	12 Month Performance Averages[1] 2024	2023	2019	2016	2006
Track Keeping Conformance (% On Track)[2]	▼	90.47%	91.17%	98.42%	98.56%	98.17%[3]
24hr CDO (% Achievement)[4]	▲	89.53%	88.83%	89.58%	88.58%	80.79%
Day/Shoulder CDO (% Achievement)	▲	89.48%	89.04%	89.70%	88.18%	79.90%
Core Night CDO (% Achievement)	▲	90.09%	87.11%	88.27%	92.90%	89.60%
1,000ft Infringements (No.)	▲	2	1	0	0	11
Departure Noise Infringements (Day)	-	0	0	1	0	10
Departure Noise Infringements (Night/Shoulder)	-	0	0	0	1	2
Individual Complainants	▼	327	545	698	2,324	587
Total Noise Complaints Received[5]	▲	11,884	10,794	25,593	17,715	4,791
Enquiry Response Performance Target is 95% Within 8 Days	▲	99.70%	97.70%	77.63%	46.55%	-
West/East Runway Split (%)	-	72/28	70/30	68/32	67/33	68/32

Figure 3: Summary of 2024 and 2023 KPIs against the 2016 NAP Baseline

[1] The colour indicates the most recent 12-month performance compared to the 2016 NAP Baseline, with green showing improvement and red a decline in performance, the directional arrow indicating performance compared to the previous 12-month performance.

[2] Track keeping statistics measurement changed on the 26th May 2016 due to the Route 4 amendment, all SIDs are now included in the total figure.

[3] This figure did not include deviations from prop types or those due to weather.

[4] As a result of the Independent Review of Arrivals, it was recommended (Imm-05) that the CDO monitoring altitude be increased from 6,000ft to 7,000ft as of 1st August 2016.

[5] Complaints are recorded in line with our published Complaints Handling Policy. The revised policy, published in November 2014, advised that only one complaint per day is recorded per individual. On the 29th September 2016, there was a further revision to our Complaints Handling Policy which now allows individuals to make multiple complaints per day and these will each be recorded. It is important to note that, since January 2018, complaints which have been deleted from the NTK system are no longer counted in the complaint statistics when they had been previously. Complaints are only deleted if they contain abusive, obscene or threatening language.

Airline Noise Performance Table

In order to drive continuous improvement and to help showcase airline performance in relation to noise, London Gatwick issues a quarterly Airline Noise Performance Table (ANPT), comparing operators' performance against strategic and operational metrics. This report presents the ANPT for all of 2024. Carriers with an established base at London Gatwick are in **bold.**

Rank by ATMs	Airline name	Total movements	QC/Seat	Rank (QC)	CDO performance	Rank (CDO)	TK conformance	Rank (TK)
1	**EasyJet**	124,326	**0.00177**	10	95.32%	3	99.71%	17
2	**BA EuroFlyer**	23,439	**0.00191**	12	90.07%	7	99.59%	20
3	Vueling	18,031	**0.00191**	13	85.88%	14	99.64%	18
4	**TUI Airways**	14,237	**0.00242**	21	91.25%	5	99.44%	29
5	Norwegian	10,834	**0.00318**	30	89.07%	9	99.48%	23
6	**British Airways**	9,288	**0.00329**	31	88.43%	10	99.11%	34
7	Ryanair	7,786	**0.00256**	26	97.77%	2	99.95%	10
8	**WizzAir UK**	7,179	**0.00176**	8	93.37%	4	99.82%	14
9	Wizz Air Malta	5,930	**0.00171**	7	79.12%	21	99.44%	27
10	Aurigny	4,213	**0.00195**	15	78.97%	22	99.76%	16
11	**Norse Atlantic Airways**	2,574	**0.00217**	18	97.90%	1	99.34%	31
12	Turkish Airlines	2,491	**0.00217**	19	86.52%	12	99.44%	28
13	TAP Portugal	2,394	**0.00225**	20	73.27%	27	99.83%	12
14	Emirates	2,198	**0.00243**	22	72.79%	29	99.46%	26
15	Eastern Airways	1,811	**0.00192**	14	86.08%	13	99.77%	15
16	WizzAir Hungary	1,790	**0.00154**	4	76.20%	24	100.00%	1
17	SunExpress	1,564	**0.00317**	29	57.16%	32	100.00%	1
18	Air Europa	1,466	**0.0035**	33	78.58%	23	99.86%	11

Airlines are ranked by number of total movements. The ranking within each metric is presented. The threshold for inclusion is an average of 10 movements per week.

In the 2024 ANPT, there are an additional 4 airlines compared to the previous year. These are all new or returning airlines to the airport.

In total, the Airspace Office conducted 36 airline engagement meetings in 2024 (2023: 21). These meetings give the opportunity for the metrics included in this table to be discussed, as part of a wider conversation to help drive continuous improvement.

* Route 4 is excluded from TK conformance.

Figure 4a: Airline Noise Performance Table

Rank by ATMs	Airline name	Total movements	QC/Seat	Rank (QC)	CDO performance	Rank (CDO)	TK conformance	Rank (TK)
19	Air Baltic	1,436	0.00135	3	81.75%	17	99.51%	22
20	Iberia Airlines	1,409	0.00202	16	74.15%	25	99.43%	30
21	Air India	1,382	0.00246	24	80.90%	20	100.00%	1
22	Air Transat	1,354	0.00287	28	81.68%	18	99.82%	13
23	Qatar	1,272	0.00178	11	82.39%	16	100.00%	1
24	JetBlue	1,068	0.00269	27	85.77%	15	99.58%	21
25	China Eastern Airlines	1,030	0.00466	35	35.34%	35	99.32%	33
26	Air China	1,018	0.00246	23	73.08%	28	99.33%	32
27	Aer Lingus	752	0.00216	17	81.12%	19	100.00%	1
28	Royal Air Maroc	740	0.00333	32	74.05%	26	99.46%	24
29	Sky Express	732	0.0009	1	62.30%	30	100.00%	1
30	Air Mauritius	706	0.00177	9	39.38%	34	99.64%	19
31	Icelandair	654	0.00154	5	89.91%	8	100.00%	1
32	Swiss International Airlines	646	0.0016	6	56.35%	33	99.46%	24
33	Lufthansa	578	0.00249	25	60.21%	31	100.00%	1
34	Air Malta	565	0.00119	2	90.78%	6	98.15%	35
35	Jet 2	560	0.00417	34	87.50%	11	100.00%	1

* Route 4 excluded from TK conformance.

Figure 4b: Airline Noise Performance Table

Airline Noise Performance Table – Methodology Statement

This page describes the methodology used to calculate the three metrics that form the Airline Noise Performance Table (ANPT) and explains some of the key terms.

Noise Quota Count (QC) per Seat

This metric assesses the average Quota Count (QC) per seat per flight. Individual aircraft have a defined QC value for arrival and departure, which is determined by the Effective Perceived Noise Level (EPNdB) stated on its noise certificate and may be affected by the type of engines used, certified Maximum Take-Off Weight (MTOW) and any applicable noise modifications (e.g. landing gear plugs for B787). QC/seat is a strategic metric as it can only improve in the longer term when airlines change their fleet mix, introduce newer aircraft types, or modify existing aircraft to reduce their noise impact.

Airlines operating modern and quieter aircraft will have a lower QC/seat score. For example, a typical A320 has a QC value of 0.25 for arrival and 0.5 for departure and a typical number of seats would be around 180, although this may vary between airlines. Therefore, an A320 would normally have an average QC/seat score = (0.25 + 0.5) / (180 * 2) = **0.00208**, as each rotation of the aircraft requires one arrival and one departure. For comparison, an A320 NEO would typically have an arrival and departure QC equal to 0.125, which reflects the fact that it is much quieter than its predecessors within A320 family, but the number of seats is roughly the same. An A320 NEO's QC/seat score would therefore be = (0.125 + 0.125) / (180 * 2) = **0.00069**.

Continuous Descent Operations (CDO) Performance

CDO performance is the first operational metric in the ANPT and relates to the vertical profiles flown during arrival. CDO performance is equal to the proportion of arrivals that meet the criteria for CDO, i.e. no level segment longer than 2.5 nautical miles below the altitude of 7,000ft. Continuous Descent Operations reduce the noise impact because they require lower engine thrust and the aircraft stays higher for longer. The airport-wide CDO performance is also presented separately in this report.

RAG definition: **Green ≥ 85%** **70% ≤ Amber < 85%** **Red < 70%**

Track Keeping (TK) Conformance

Track keeping conformance is the second operational metric in the ANPT and applies to the lateral departure track. All departures are required to stay within the Noise Preferential Routes (NPRs) defined by the Department for Transport to avoid more densely populated areas. Track keeping conformance is equal to proportion of departures that stay within the NPRs until they reach an altitude of 3,000ft or 4,000ft depending on the route. Note that the Route 4 NPR has been excluded from the ANPT statistics for the time being due to the more challenging flyability and its inclusion would unfairly penalise airlines with higher proportion of Route 4 departures. Track keeping conformance at airport level is also presented separately in this report.

RAG definition: **Green ≥ 95%** **90% ≤ Amber < 95%** **Red < 90%**

Airlines with CDO or Track keeping conformance in the red or amber range will be considered as priority for engagement and we will work with them to improve their operational conformance.

Airport and Runway Statistics

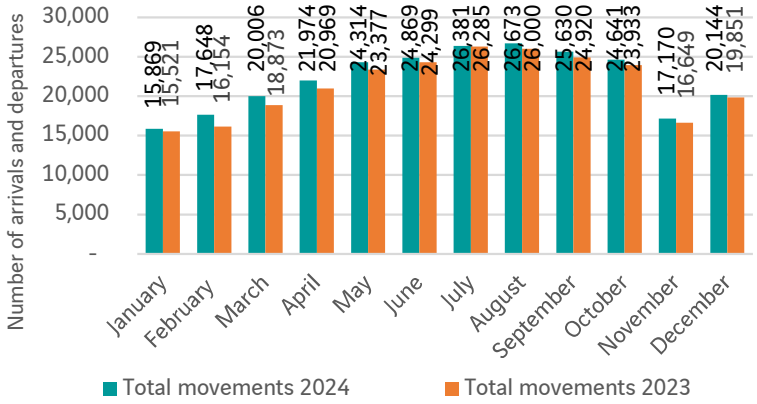

Figure 5: Comparison of arrival and departure numbers over the past two years

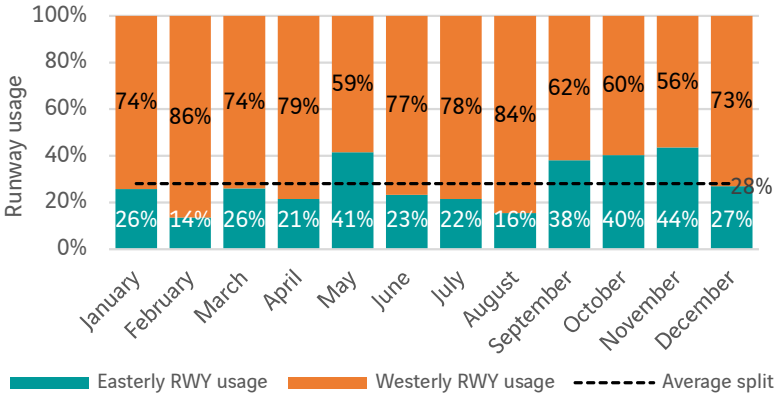

Figure 6: Comparison of easterly and westerly runway usage

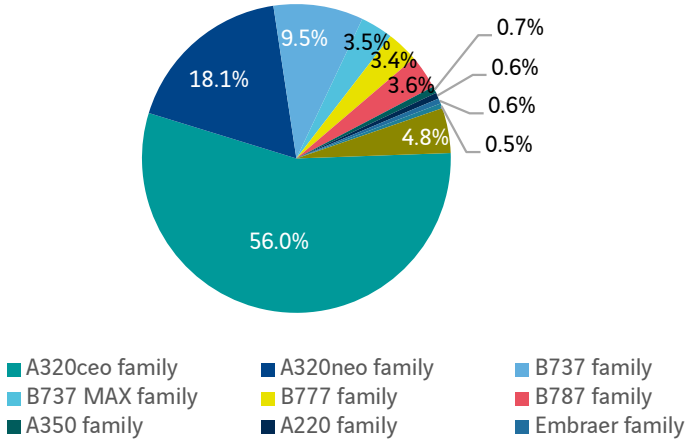

Figure 7: Aircraft fleet mix

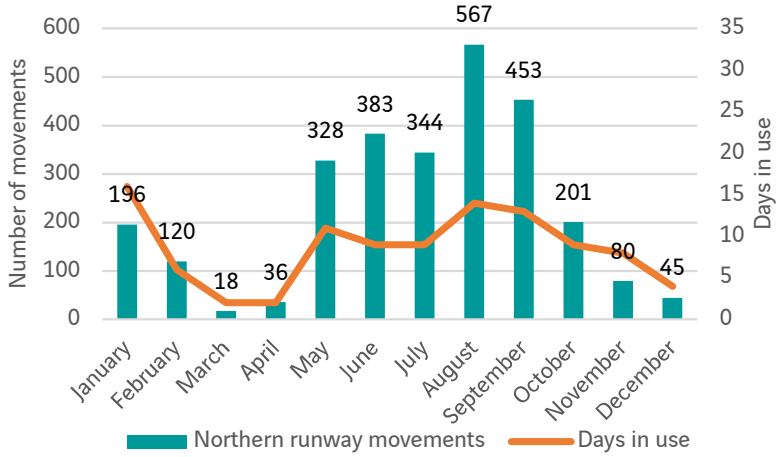

Figure 8: Northern Runway usage

Traffic movements increased steadily in 2024 with all quarters seeing increases against the respective quarters in 2023. Q1 2024 saw the largest year-on-year increase of 5.56%. Q2 also saw a healthy increase of 3.53% versus 2023 as consumer appetite for travel continued to increase, alongside the introduction of some new routes by several airlines. The total number of air traffic movements at London Gatwick in 2024 totalled 265,319 which reflects an increase of 3.2% versus the previous year. This also reflects 94% of total traffic movements in 2019, evidencing Gatwick's continued recovery towards pre-COVID-19 levels.

Prevailing winds at London Gatwick influence a more frequent westerly operation, with an average use of the westerly runways in 2024 of 71%, broadly in line with historical trends. Q3 2024 saw a slightly more easterly weighted operation than in 2023, mainly driven by localized storms. Several named storms brought particularly strong winds and heavy rainfall to the airport during the summer months.

Northern Runway movements were 60% lower than 2023. This decrease was fully driven by the completion of the Rapid Exit Taxiway (RET). The RET works required the Main Runway to be closed at certain times during the night period in 2023.

The Airbus A320 family of aircraft continued to be the most common type of aircraft used, accounting for 74% of all aircraft operating at Gatwick. The number of 320ceo aircraft decreased by 4%, and the number of 320Neo aircraft increased by 2% when compared to the aircraft fleet mix in 2023, as airlines are moving to more environmentally friendly fleets.

Movements by Aircraft Type

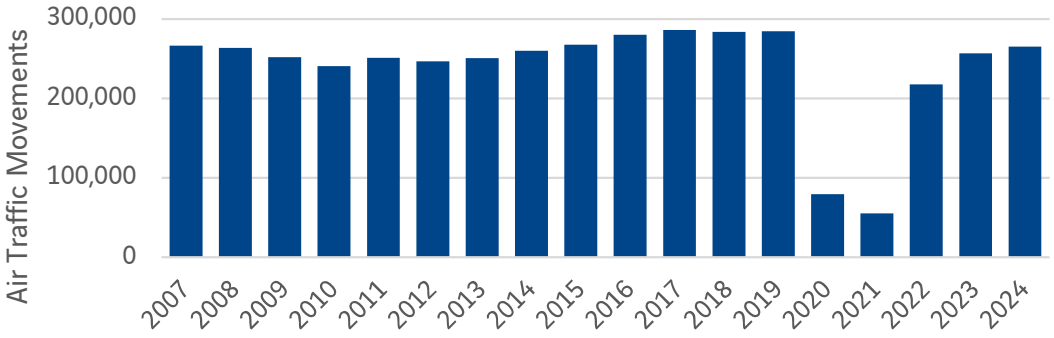

Figure 9: Annual Air Traffic Movements 2007-2024

Figure 9 shows the annual air traffic movements since 2007, whilst figure 10 shows a breakdown of aircraft types at London Gatwick for 2023 and 2024.

London Gatwick introduced new airlines, some introduced new aircraft, or temporarily adjusted their fleets. Aurigny introduced wetleased De Havilland Dash 8 aircraft to their fleet, whilst also phasing out the use of the Embraer 90 family of aircraft. SkyAlps commenced a once-a-week service to Bolzano, also using De Havilland Dash 8 aircraft. Air Mauritius operated wetleased A340 aircraft in March and April 2024 which explains the increase to 38 in 2024 from 2 in 2023. However, newer A350 and also A330neo aircraft were used for the remainder of 2024. A350 aircraft usage increased substantially in 2024 (1,879) versus 2023 (180), as airlines such as Air China replaced their noisier B777 fleet and the introduction of new airlines Air Mauritius, Singapore Airlines and Ethiopian Airways who all predominantly use A350 aircraft. Other newer generation aircraft, usage such as 737MAX and 787 Dreamliner, increased by 22% and 26% respectively. Whilst only a small number of older 757/767 aircraft operate at London Gatwick, their use reduced by 14.5% in 2024 vs 2023. London Gatwick's Airspace Office will continue to promote the use of greener, quieter fleets through their airline engagement programme.

Aircraft Type	2024	2023	Percent +/-
Airbus A220 (Bombardier C-Series)	1,706	1,565	9%
Airbus A310	0	6	-100%
Airbus A319	50,906	58,563	-13%
Airbus A320	83,097	82,774	0%
Airbus A320 Neo	19,374	17,644	10%
Airbus A321	14,460	12,316	17%
Airbus A321 Neo	28,623	24,027	19%
Airbus A330	1,072	942	14%
Airbus A330neo	346	53	553%
Airbus A340	38	2	1800%
Airbus A350	1,879	180	944%
Airbus A380	1,850	1,962	-6%
ATR 42/72	5,706	3,945	45%
BAe 146/Avro RJ	0	0	100%
Beech B200	2	10	-80%
Boeing 737	25,275	25,563	-1%
Being 737 MAX	9,190	7,540	22%
Boeing 747	0	0	0%
Boeing 757	46	132	-65%
Boeing 767	448	446	0%
Boeing 777	9,092	7,981	14%
Boeing 787	9,655	7,689	26%
Bombardier Learjet	110	36	206%
Cessna Citation/Challenger	92	86	7%
Dassault Falcon	20	48	-58%
De Havilland DH-4	432	4	10700%
De Havilland DH-8	14	0	100%
Embraer 135/145	24	52	-54%
Embraer 170/175	116	32	263%
Embraer 190/195	1,587	3,088	-49%
Embraer Phenom/Legacy	18	16	13%
Gulfstream	38	68	-44%
Saab 340	18	0	100%
Other Jet Aircraft	67	38	76%
Other Propeller Aircraft	18	23	-22%
Total	**265,319**	**256,831**	**3%**

Figure 10: Movements by Aircraft Type 2024 vs 2023

Westerly Operations

These charts depict aircraft tracks (Figure 11) and track density (Figure 12) on the busiest day of westerly operations in 2024. Westerly operations means that aircraft will depart towards the west and arrive from the east (see Annex F for more information on westerly operations).

The frequency and altitude of overflight over different locations depends on the weather, the destination/origin of the flights and the traffic volumes at the airport and the surrounding airspace. Flights to and from London Gatwick need to be integrated with traffic to and from other airports in the London Terminal Manoeuvring Area (LTMA).

During westerly operations, aircraft will arrive over East Sussex, Surrey and west Kent and depart over areas in Surrey, West Sussex and west Kent meaning that certain settlements in these areas will be overflown by London Gatwick traffic.

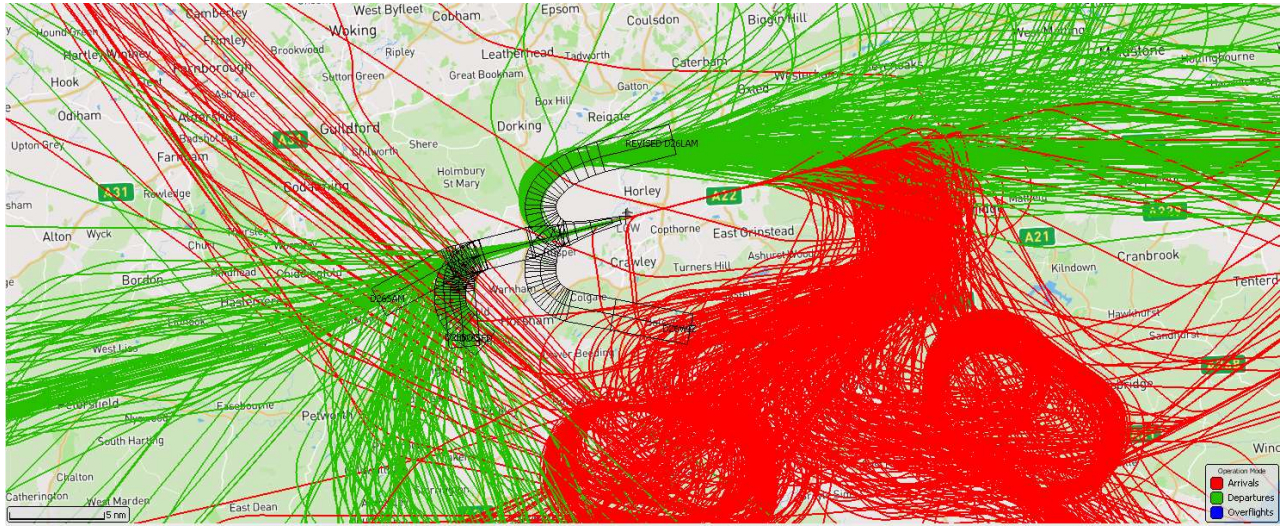

Figure 11: Westerly Operations Arrival and Departure Tracks

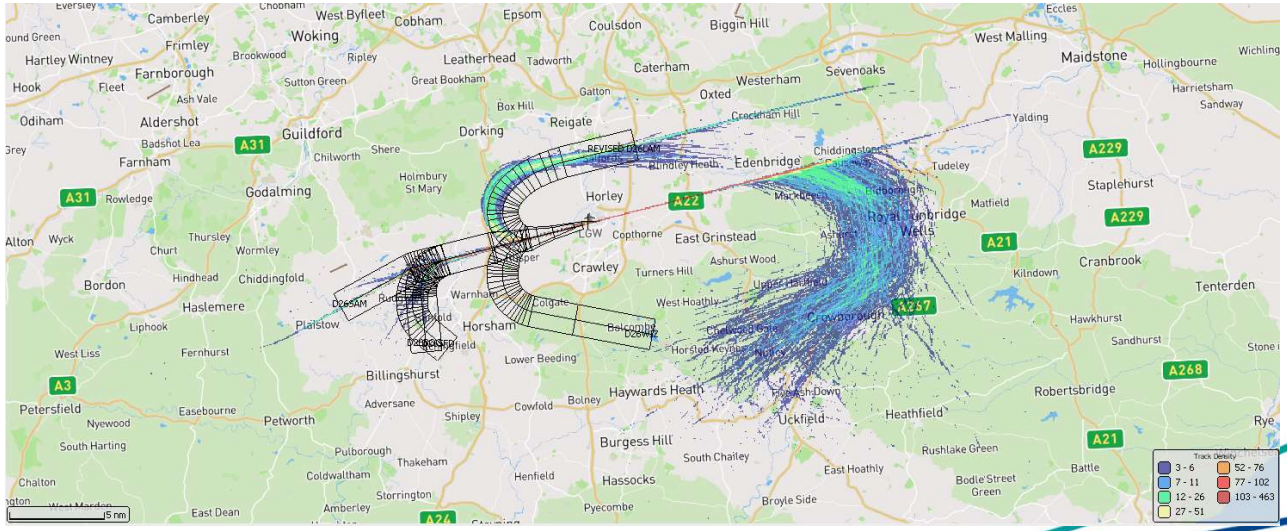

Figure 12: Westerly Operations Track Density

Easterly Operations

These charts depict aircraft tracks (Figure 13) and track density (Figure 14) on the busiest day of easterly operations in 2024. Easterly operations means that aircraft will depart towards the east and arrive from the west (see Annex F for more information on easterly operations).

The frequency and altitude of overflight over different locations depends on the weather, the destination/origin of the flights and the traffic volumes at the airport and the surrounding airspace. Flights to and from London Gatwick need to be integrated with traffic to and from other airports in the London Terminal Manoeuvring Area.

During easterly operations, aircraft will arrive over East and West Sussex, Surrey and west Kent and depart over areas in Surrey, East Sussex and west Kent meaning that certain settlements in these areas will be overflown by London Gatwick traffic.

Aircraft arriving from the north-west or south may be directed straight onto the final approach, leading to a less concentrated arrival swathe.

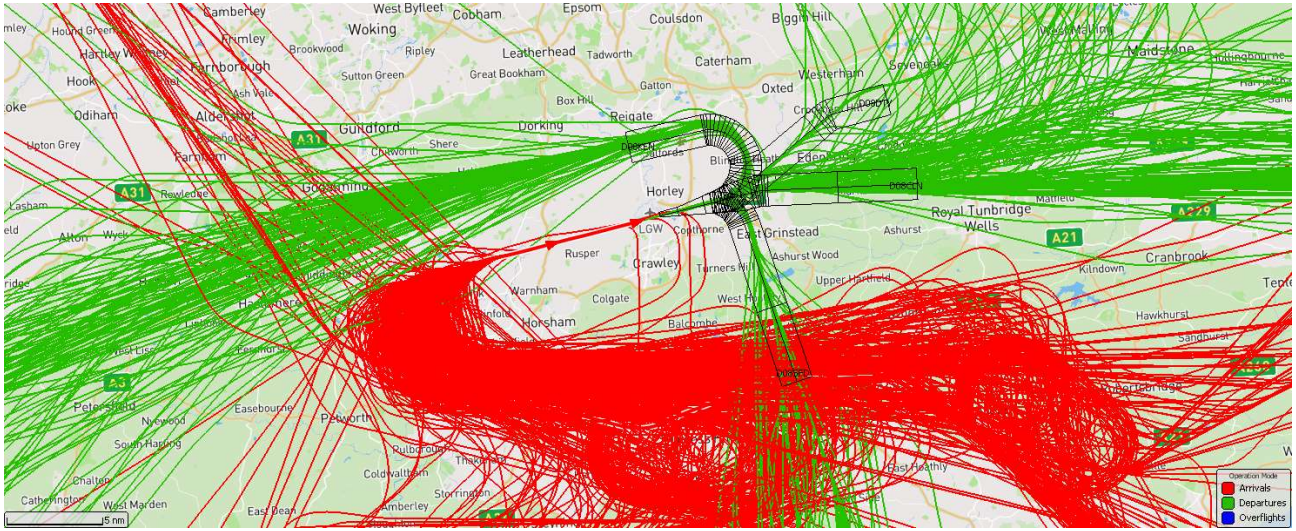

Figure 13: Easterly Operations Arrival and Departure Tracks

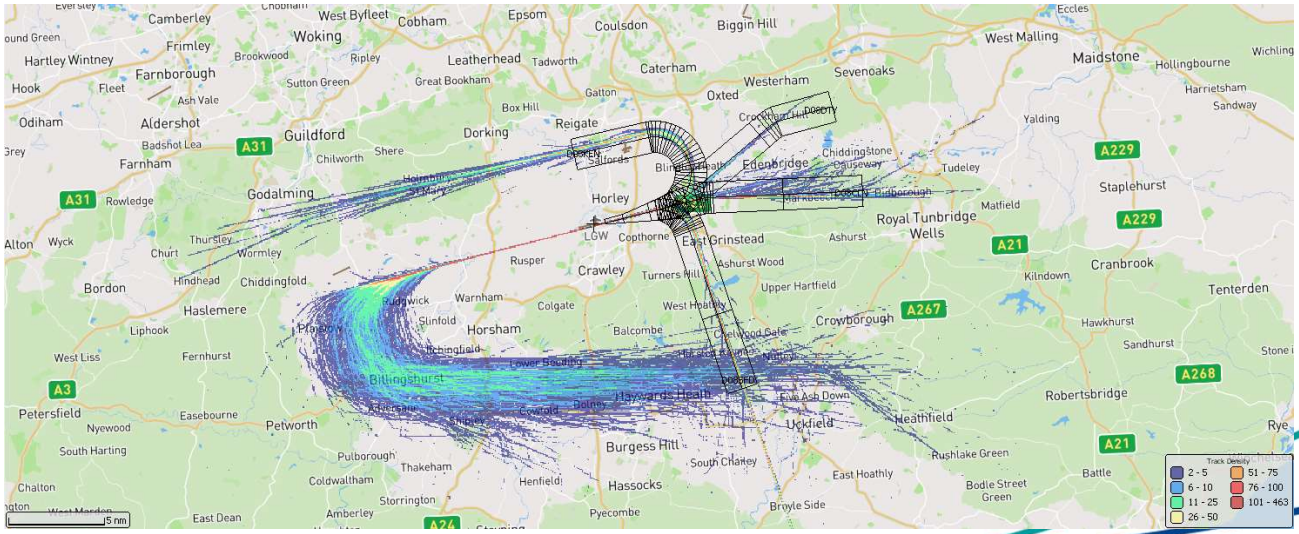

Figure 14: Easterly Operations Track Density

Arrivals Statistics – Continuous Descent Operations[1]

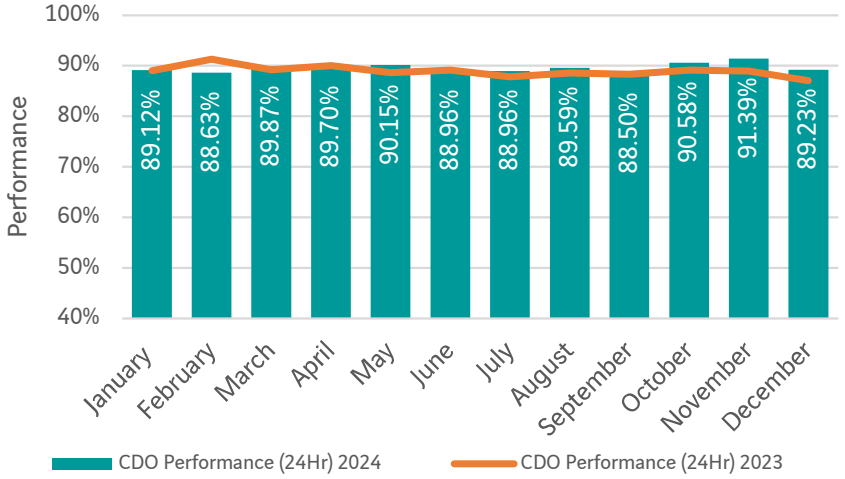

Figure 15: CDO performance (24 hours)

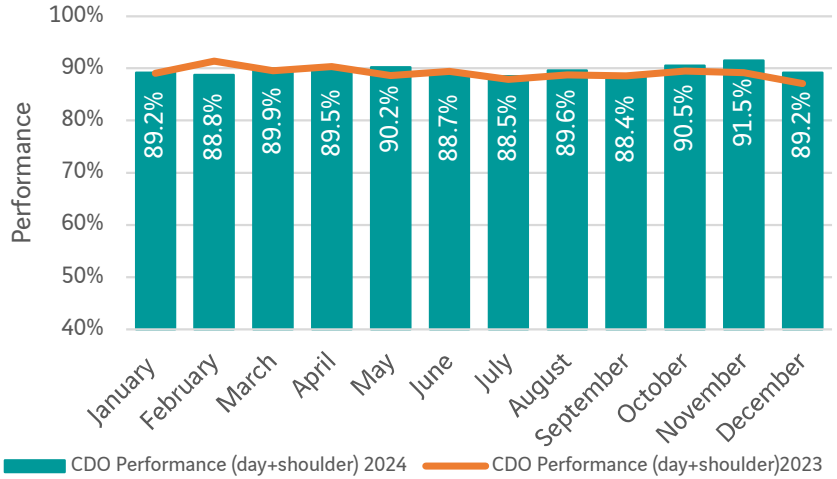

Figure 16: CDO performance (Day & Shoulder periods)

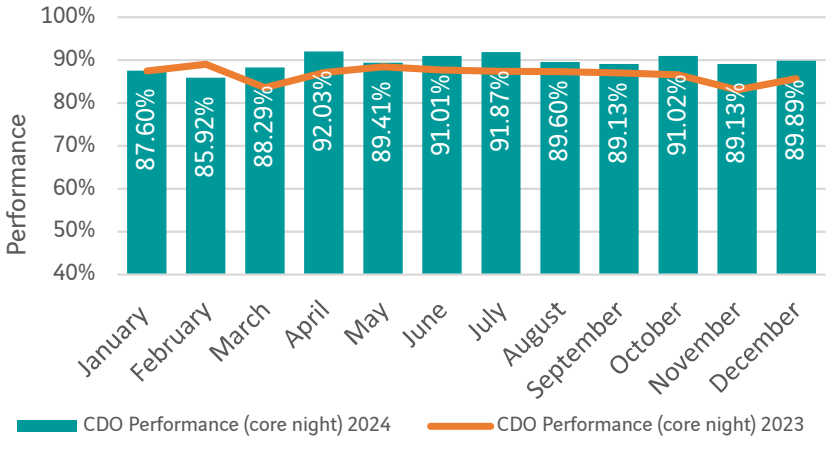

Figure 17: CDO performance (Core Night Period)

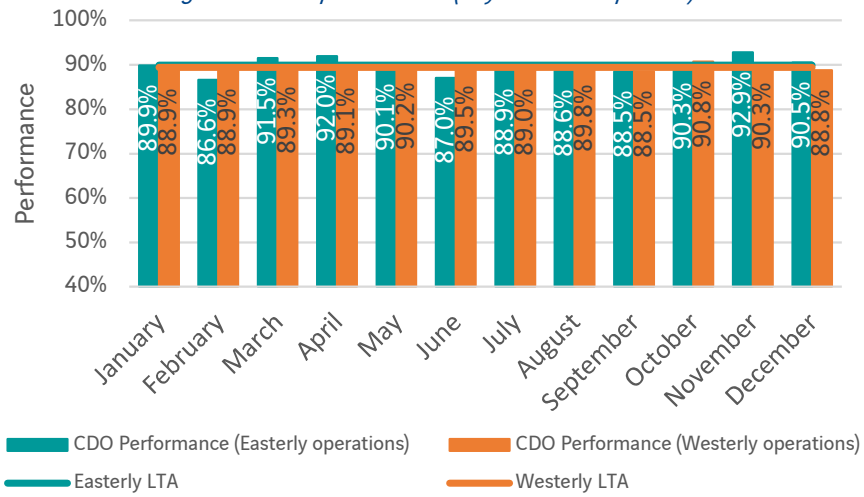

Figure 18: CDO performance per runway

Across the three periods depicted in Figures 15-17, CDO performance remained consistent with, or exceeded the levels observed in 2023, although February was an exception due to several named storms in Q1 2024. Notably, the 24-hour period in Q4 2024 demonstrated the most significant improvement compared to 2023 figures. November recorded the highest performance metrics for the 24-hour and day/shoulders, yet this was not mirrored during the core night period.

In summary, the performance during the core night period rose from 87.11% in 2023 to 90.09% in 2024. It is encouraging to note the continued improvement of the core night CDO, with five months achieving performance levels of 90% and above.

Both westerly and easterly performances were generally in line with their long-term averages (LTA). The easterly performance exhibited the widest range, fluctuating between 88.6% and 92.9%, while westerly percentages remained more consistent throughout the year.

Arrivals Statistics – Go-Arounds

A go-around is a safety procedure, adopted when an aircraft on final approach, aborts landing by applying take off power, and climbing away from the airport. It is a set procedure to be followed by the flight crew in the event of an aircraft being unable to land. The procedure is published so that ATC and Pilots can anticipate where the aircraft will go following the decision to go-around.
The standard missed approach procedure applicable to London Gatwick requires the affected aircraft to climb straight ahead to 3,000ft, then, on passing 2,000ft or 1DME (distance measuring equipment), whichever is later, turn heading 180. This may or may not result in aircraft overflying the town of Crawley or outlying areas. The number and reasons for go-arounds are routinely discussed at Flight Operations Performance & Safety Committee (FLOPSC) meetings, as they are performed to avoid potentially unsafe situations and maintain a safe separation between aircraft.

If a flight performs multiple go-arounds before landing, only one is recorded in the NTK (Noise and Track Keeping) system. If a flight diverts after multiple landing attempts, then a go-around is not recorded as the aircraft did not land at Gatwick.

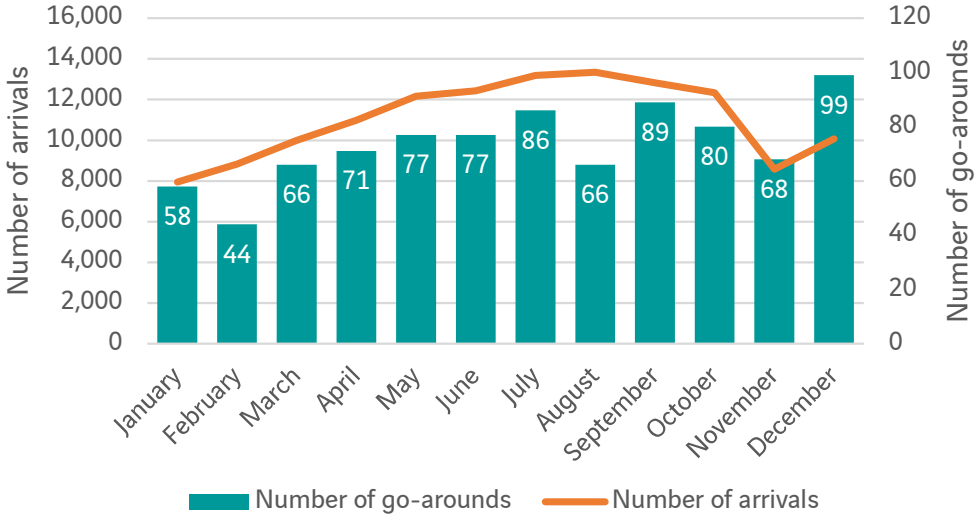

Figure 19: Number of arrivals and go-arounds

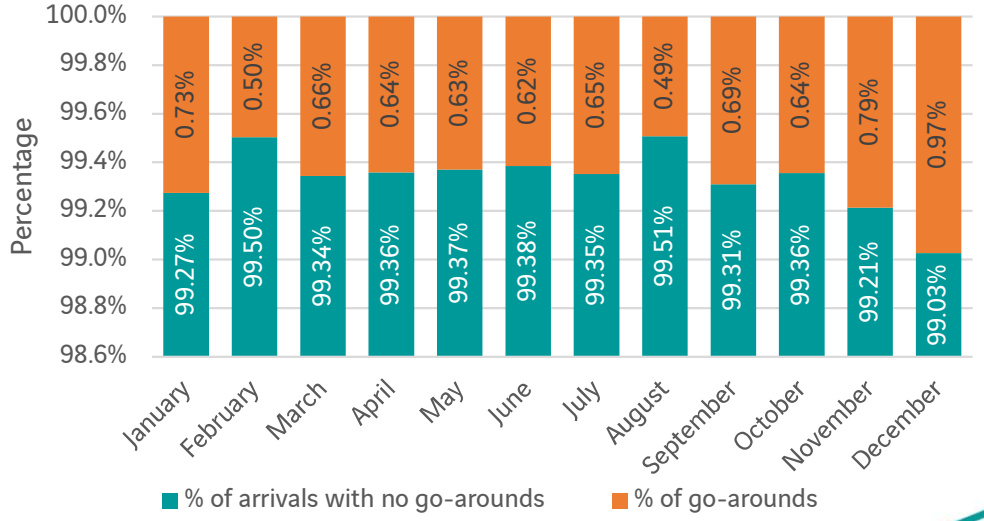

Figure 20: Ratio of go-arounds

Arrivals Statistics – Go-Arounds

The causes of go-arounds are recorded by controllers at the Air Navigation Service Provider (ANSP) at London Gatwick. They also provide an insight into the operational situations causing them to happen. In 2024, the top three causes as shown in Figure 21 (left) are Runway Occupied, Unstable Approach and Weather/Operational Reasons. An occupied runway can be caused by a number of situations, and these are broken down in Figure 21 (right). The number of go arounds generally increases in line with increased traffic movements. In 2024, May had the most go arounds driven by unstable approaches due to poor weather.

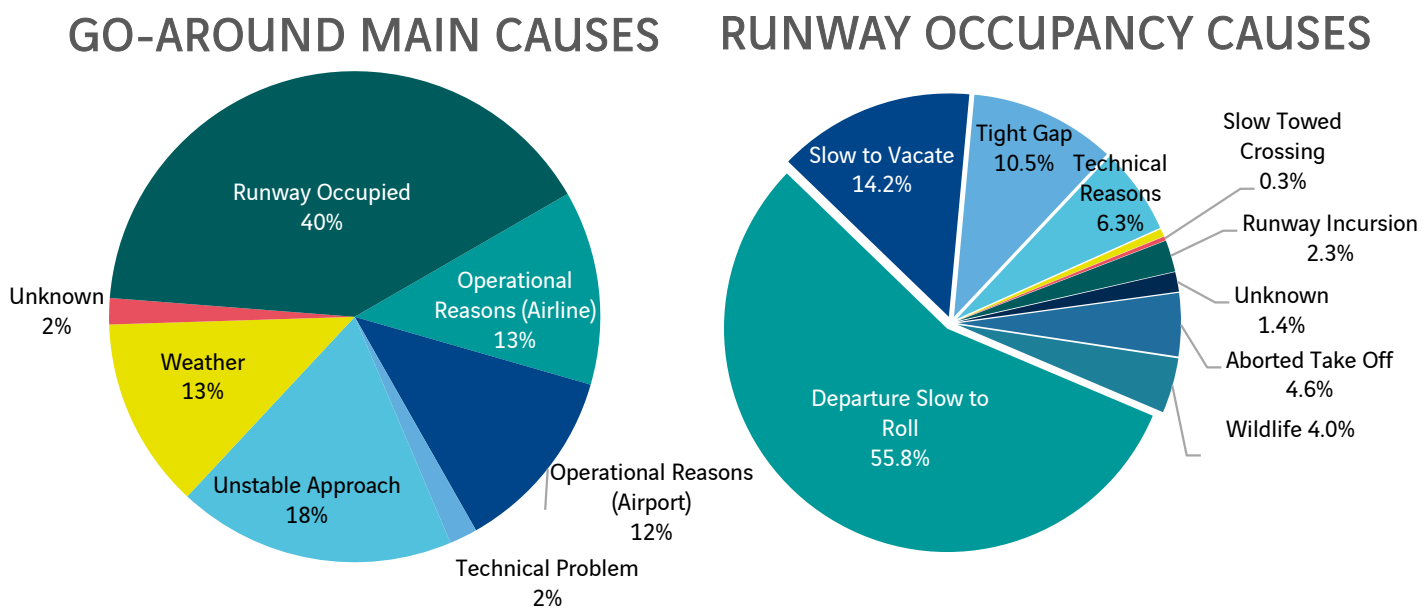

Figure 21: Reasons for go-arounds in 2024

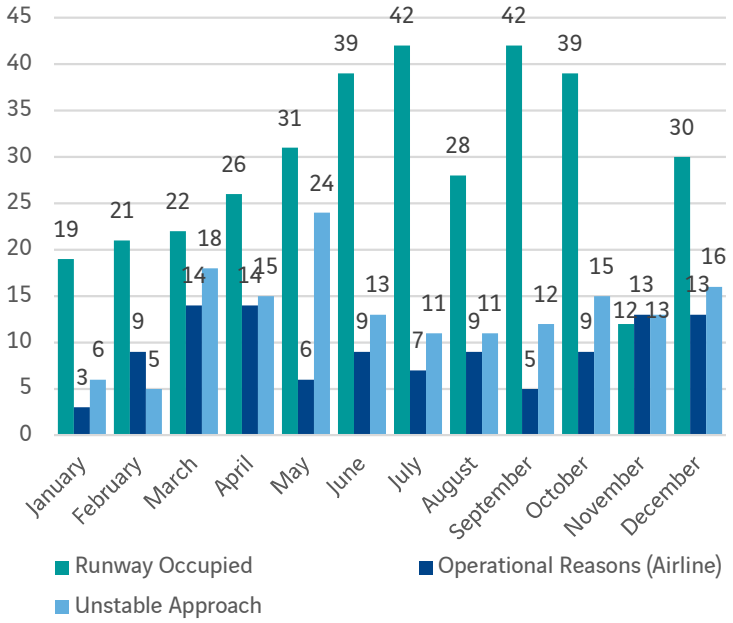

Figure 14: Ratio of main reasons for go-arounds per month

Arrivals Statistics – Joining Point

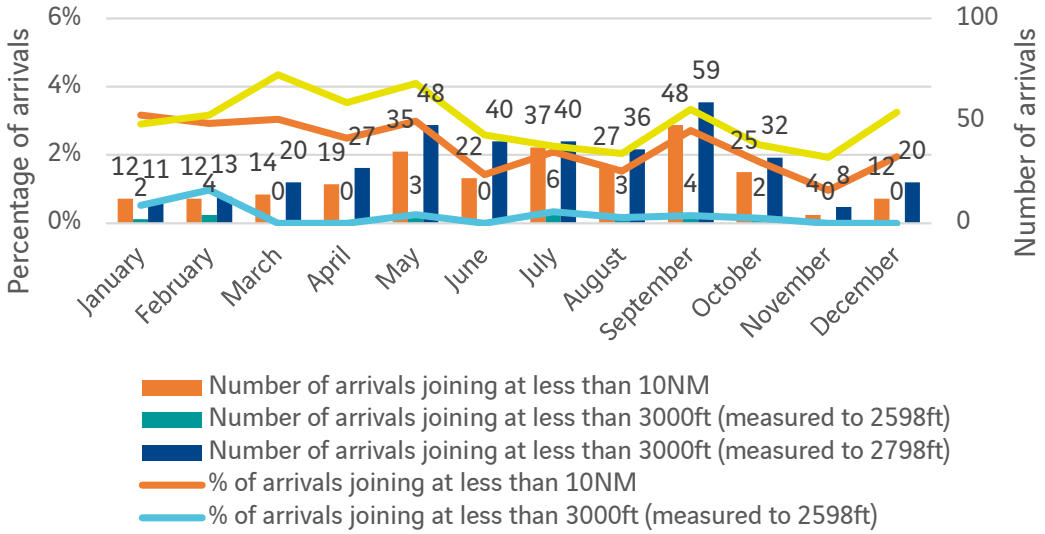

Figure 23: Night-time joining point violations[2]

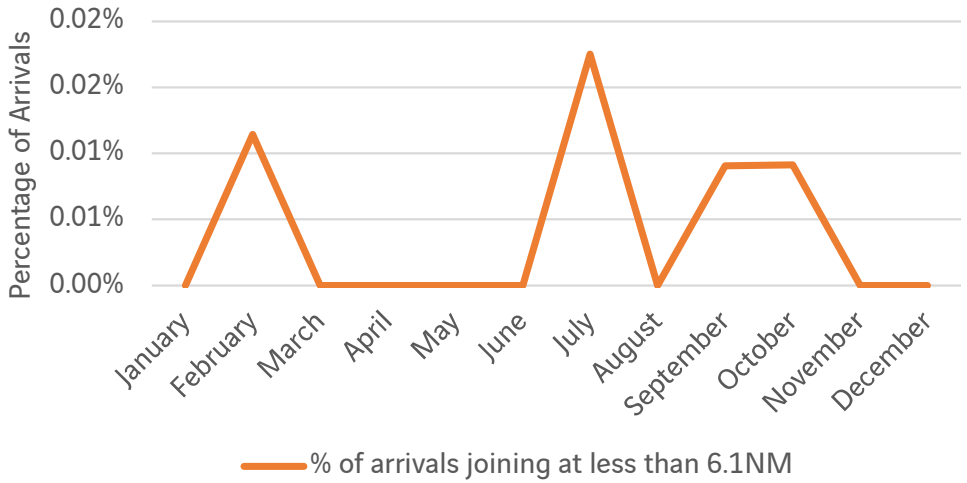

Figure 24: Day time joining point violations

As per the AIP rule, aircraft shall not join the ILS at less than 10NM from touchdown or below 3,000ft at night. Figure 23 shows the percentage of arrivals infringing this rule.

During the day, the DfT noise abatement procedures stipulate that arrivals shall not descend below 2,000ft before intercepting the ILS glidepath; this equates to 6.1NM from touchdown. We continually monitor this for conformance, as shown in Figure 24, and infringements are followed up with the airline and NATS for feedback on the event to prevent future infringements. Helicopters and calibration flights are excluded from this requirement. For detail on the monitoring of the arrivals swathe see Annex C.

Joining point distance is measured from the approximate touchdown point abeam the Precision Approach Path Indicator (PAPI) lights.

Joining point altitude is assessed through the Noise & Track Keeping system, see Annex B Note 2.

Arrivals Statistics – Joining Point

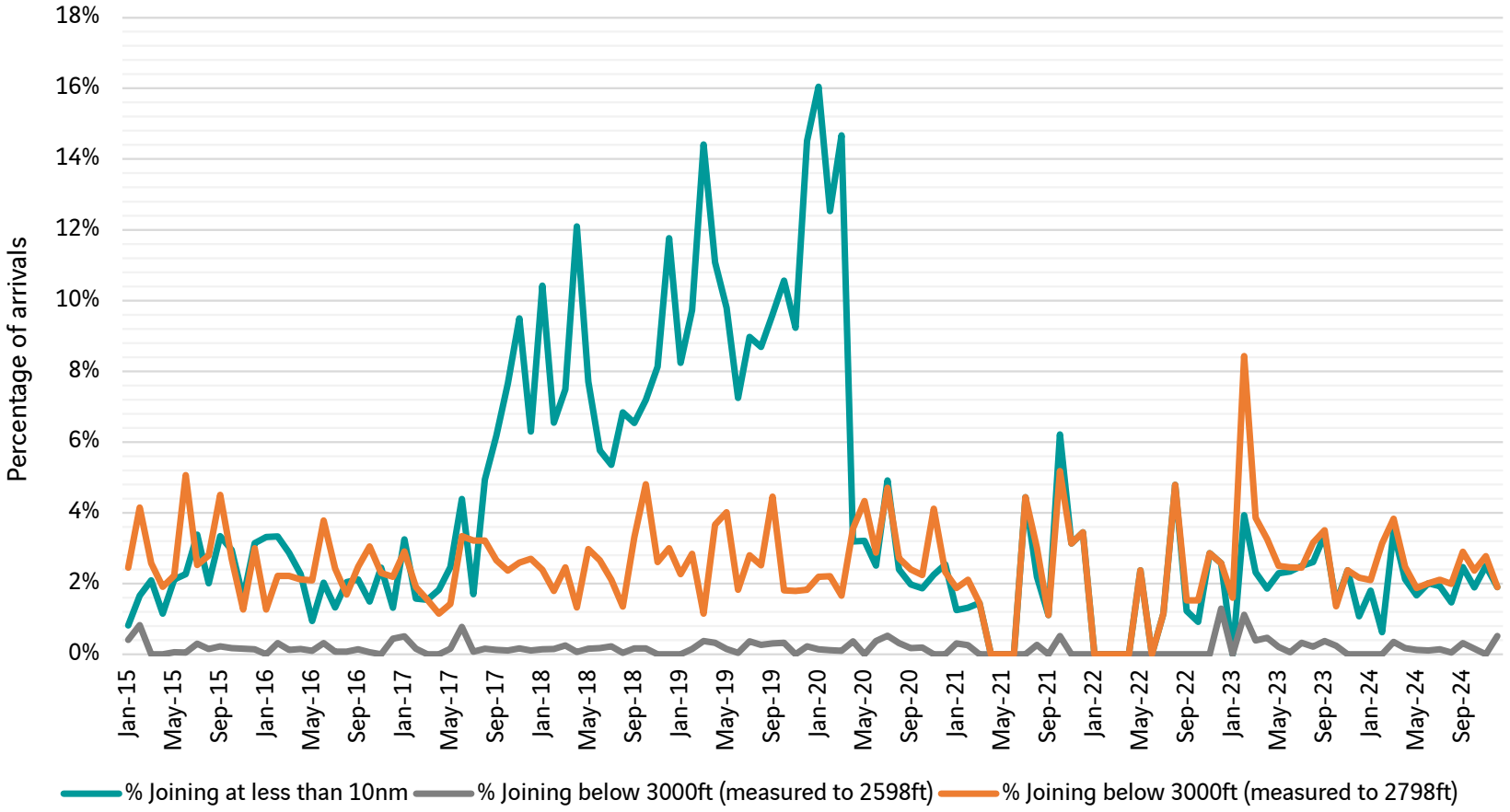

Figure 25: Night-time joining point violations (past 10 years)

Figure 25 shows the last 10 years of ILS joining point data for night arrivals.

The daytime joining point was altered in August 2016 which meant that aircraft could join between 8NM and 14NM, allowing for a wider distribution of arrivals. As a knock-on effect, more arrivals at night joined at just inside 10NM.

Upon upgrading the NTK system in April 2019, the analytic process was updated and independently verified, leading to the observed decline in Figure 25.

The Airspace Office continues to monitor this data and are in regular contact with NATS to identify reasons for infringements.

Arrivals Statistics – Overflight

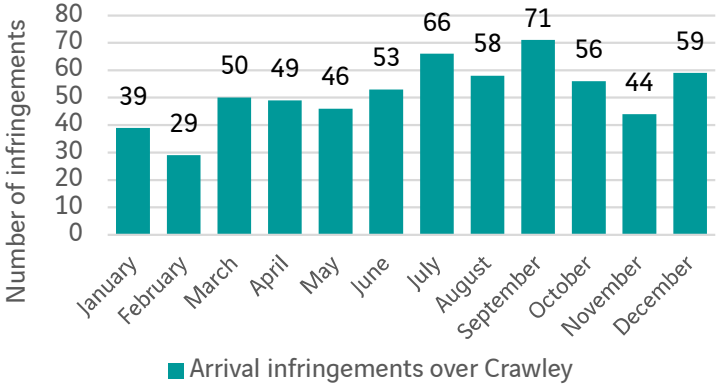

Figure 26: Arrival infringements over Crawley

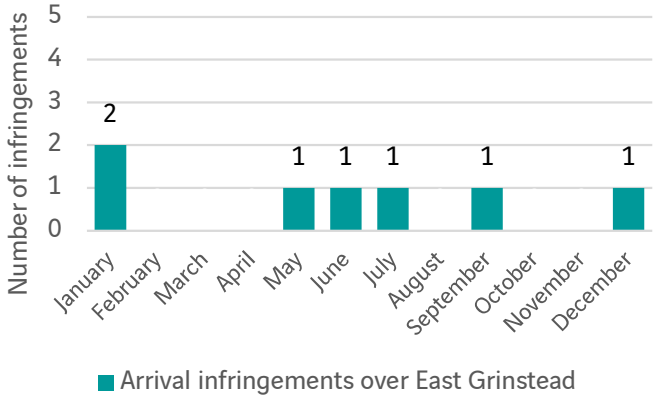

Figure 27 Arrival infringements over East Grinstead

The London Gatwick AIP does not allow arriving aircraft to pass over the congested areas of Crawley, East Grinstead, Horley or Horsham below the altitude of 3,000ft QNH or Lingfield below 2,000ft QNH.

The infringements shown in Figures 26, 27 and 29 were all caused by go-arounds.

The infringements in Figure 30 were all caused by pilot error and were followed up with the airlines concerned when they occurred.

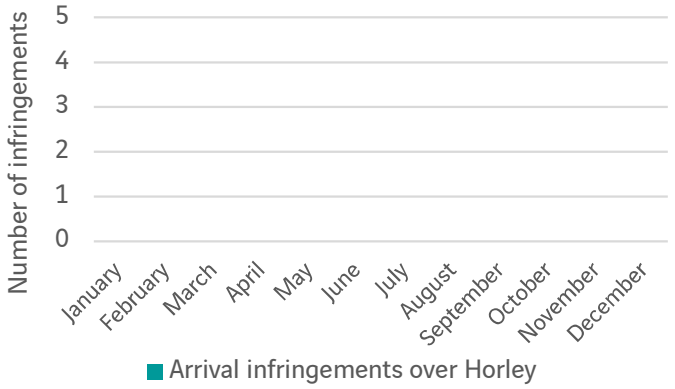

Figure 28: Arrival infringements over Horley

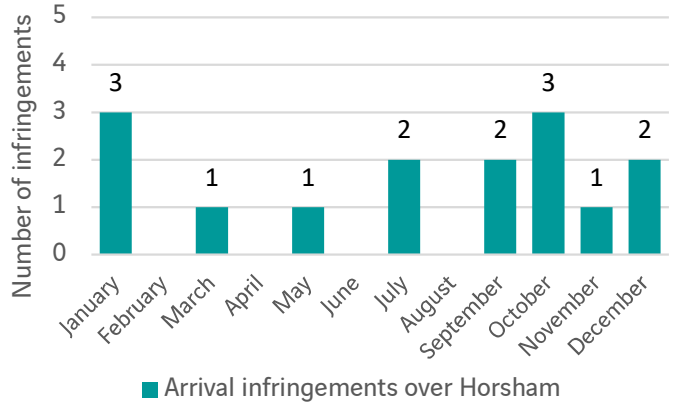

Figure 29: Arrival infringements over Horsham

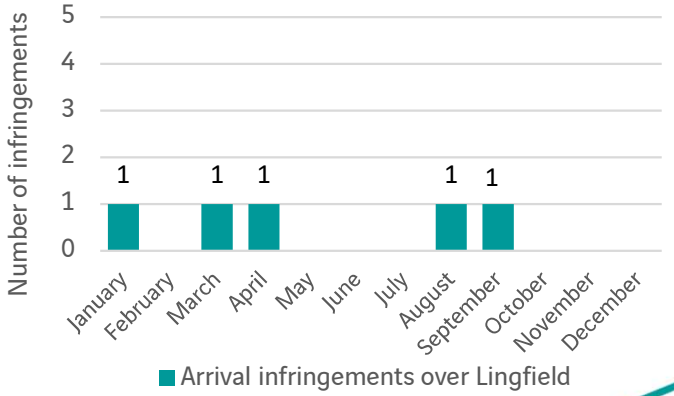

Figure 30: Arrival infringements over Lingfield

Departures

Noise Preferential Routes (NPRs)

Aircraft departing London Gatwick are required to follow specific departure flight paths for the initial stages of flight called Noise Preferential Routes (NPRs). The nine NPRs at London Gatwick were designed and set by the DfT to avoid overflight of built-up areas where possible. NPRs provide volumes of pre-defined airspace within which Standard Instrument Departure (SID) routes are established where aircraft must follow on departure from an aerodrome and so provide certainty as to which areas will be exposed to aircraft activity.

An NPR consists of a 'centreline', where SIDs follow, and an associated conformance monitoring swathe, which is 3km wide, i.e. 1.5km either side of the NPR centreline. These NPRs are mapped in Figure 34, together with minimum vectoring altitudes. As long as aircraft remain within the corridor boundaries up to the minimum vectoring altitude, they are deemed to be on-track. A map illustrating the Noise Preferential Routes is also available from https://webtrak.emsbk.com/lgw2

Air Traffic Control (ATC) is responsible for the routeing of aircraft once they are airborne and each departure will be assigned a route to follow, however once aircraft reach a minimum vectoring altitude of 4,000ft (or 3,000ft dependent on departure route and time) at any point along an NPR, they may be vectored off the route by ATC onto more direct headings to their destinations.

There are also occasions when ATC direct aircraft off from NPRs for safety reasons, such as to avoid adverse weather conditions along the intended route or to maintain safe separation from other traffic.

Aircraft that leave the NPR below the required minimum altitude are classified as track deviations. Track keeping conformance at London Gatwick is generally very good, however the westerly wrap around route designated as 26LAM / Route 4 consistently presents a challenge for modern aircraft to fly; this tight turn was designed in 1968 when very different types of aircraft types were in operation. Flights off-track below the required height are automatically flagged to the Airspace Office and details are sent to the airline for investigation. Our Flight Operations Performance & Safety Committee (FLOPSC) regularly reviews track keeping conformance. Our track keeping conformance is detailed on the following pages.

Departure Statistics – Track Keeping

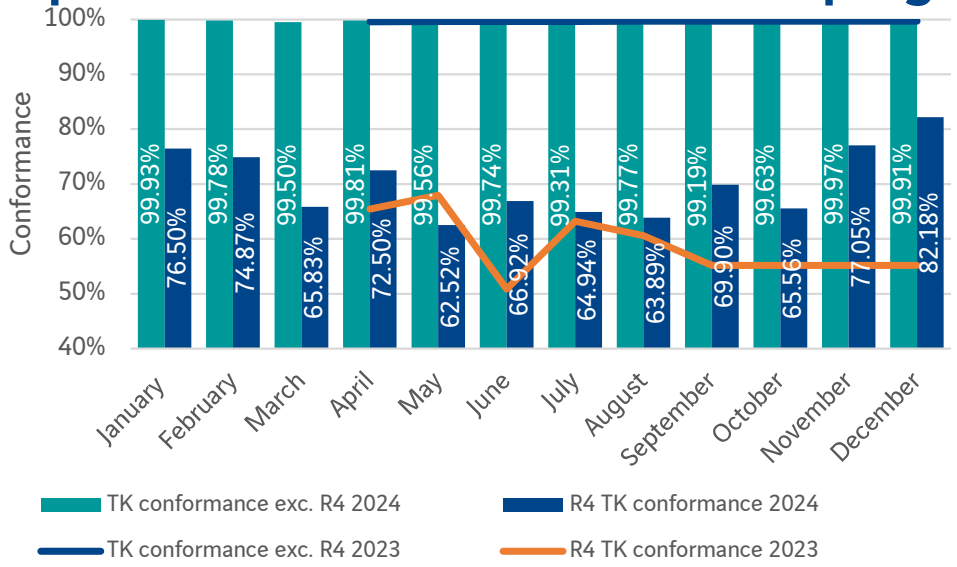

Figure 31: TK conformance (24 hours)

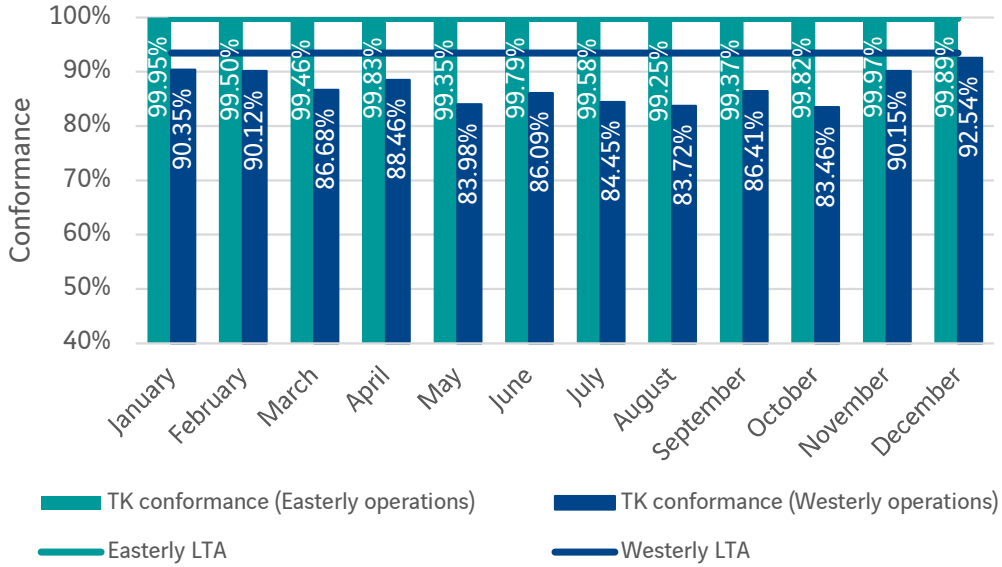

Figure 32: TK conformance per runway

From 1 April 2023, the Noise Preferential Route for Route 4 (26LAM) on westerly operations was updated in the Noise and Track Keeping system to conform with the conventional SID routings as specified by the DfT. This has only changed how track keeping conformance is monitored in the system and has had no effect on flight tracks over the ground.

Track keeping conformance remained above 99% throughout 2024 for all departure routes except Route 4 (D26LAM). Route 4 conformance hit a low of 62.5% in May 2024 mainly due to the increased traffic levels as the summer season got underway. Route 4 conformance improved in September 2024 as the peak of the summer ended, before decreasing in October mainly driven by the effects of named storms which brought high winds and notable rainfall.

Departure Statistics – Track Keeping in 2024

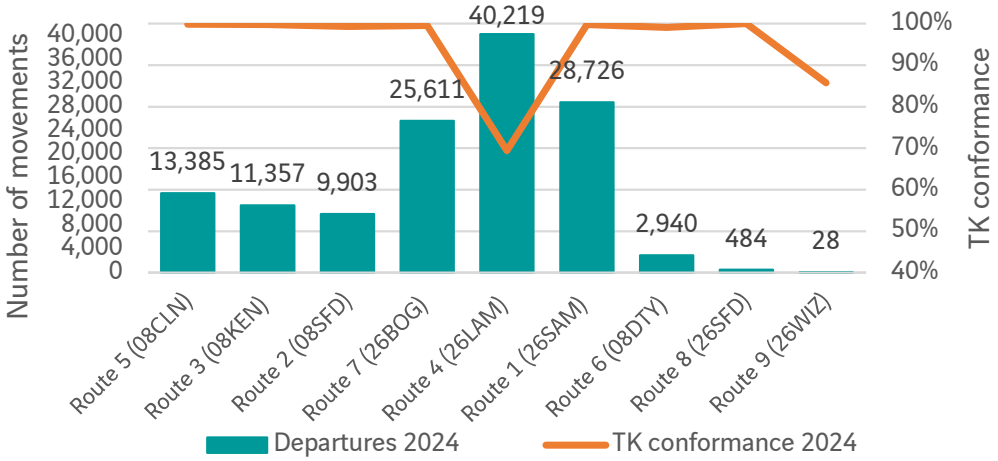

Figure 33: Track keeping and route usage

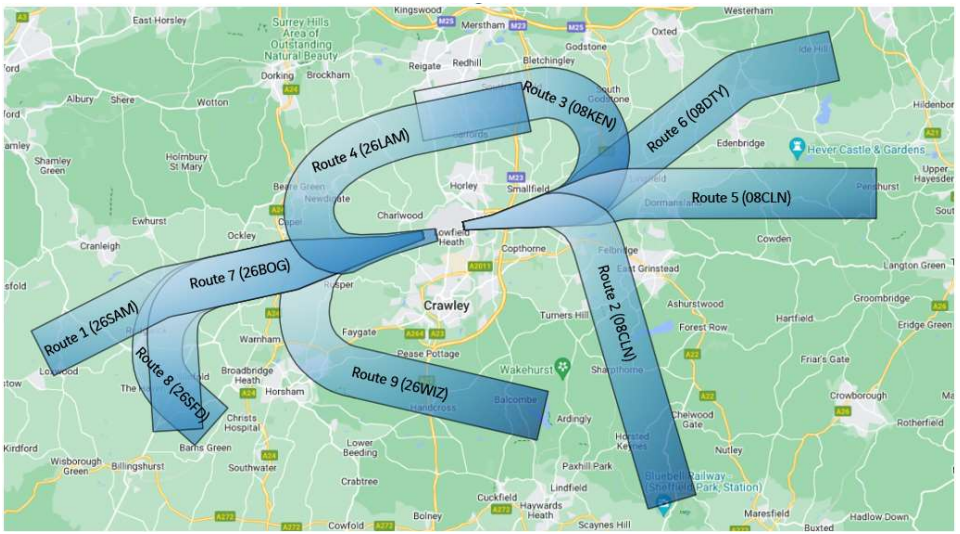

Figure 34: Noise Preferential Routes for departures

Figure 33 shows that the most frequently utilised routes during 2024 were 26LAM / Route 4, 26SAM / Route 1 and 26BOG / Route 7. Track keeping was above 99% for all routes, except Route 4 (69.4%) and Route 9 (85.7%), although only 28 departures used Route 9, most of which were due to weather avoidance.

Figure 34 shows a map of all nine Noise Preferential Routes for departures in use at London Gatwick. The table to the right lists the altitudes up to which aircraft are required to remain within the conformance monitoring swathe of the respective Noise Preferential Route. Once above the minimum vectoring altitude, Air Traffic Control may give them vectors to direct them onto a more direct path towards their destination.

Although Figure 33 shows relatively low usage of 26WIZ / Route 9, especially compared to other departure routes at London Gatwick, it is important to note this route option still exists as a tactical offload route and increased future usage of this route would not be atypical or a change to the airport's existing operation.

Route	Minimum vectoring altitude
Route 1 (26SAM)	3,000 ft
Route 2 (08SFD)	4,000 ft
Route 3 (08KEN)	3,000 ft
Route 4 (26LAM)	4,000 ft
Route 5 (08CLN)	3,000 ft
Route 6 (08DTY)	3,000 ft
Route 7 (26BOG)	4,000 ft
Route 8 (26SFD)	3,000 ft
Route 9 (26WIZ)	4,000 ft

Departure Statistics – Noise, Climb and Overflight

There were no departure noise infringements in 2024.

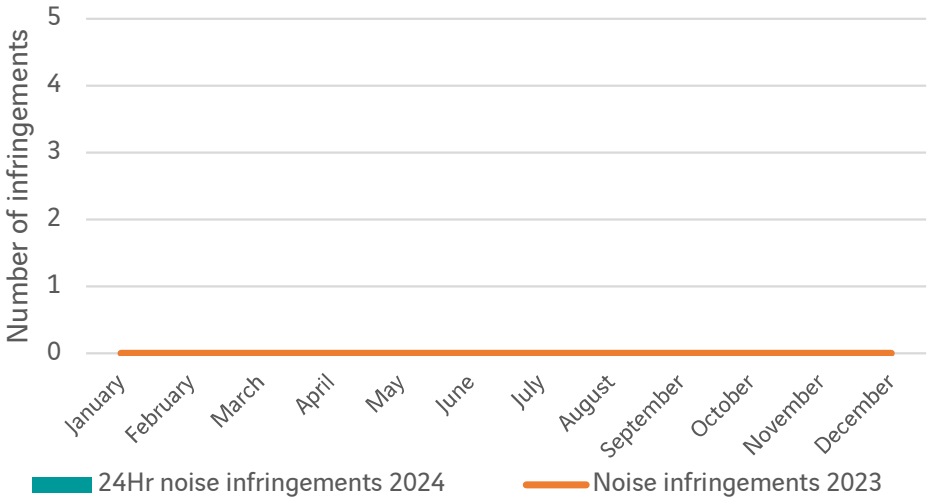

Figure 35: H24 noise infringements

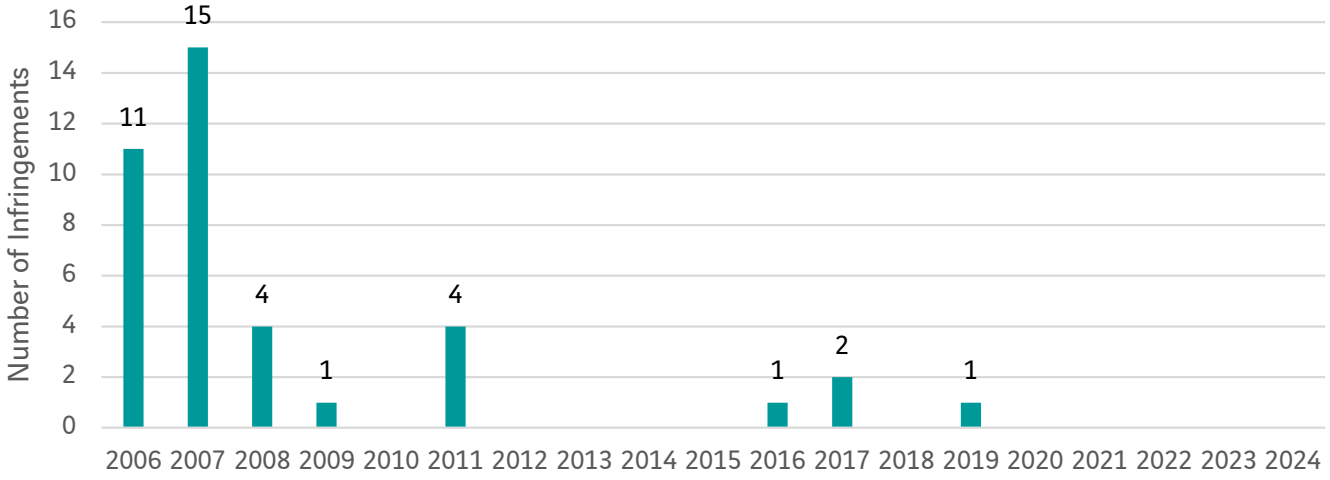

Figure 36: Historic Noise Infringements[5]

Departure Statistics – Noise, Climb and Overflight

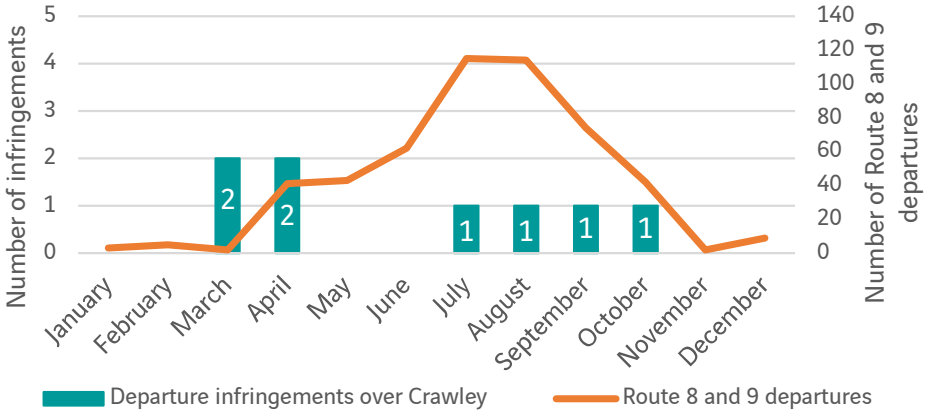

Figure 37: Departure overflight infringements over Crawley[4]

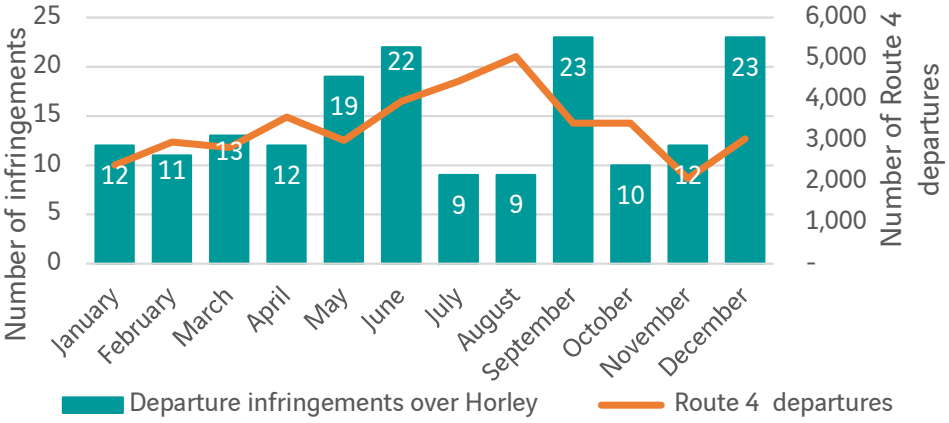

Figure 38: Departure overflight infringement over Horley[4]

The departure infringements over Crawley in 2024 (Figure 37) were all due to weather avoidance; this is a safety procedure.

Figure 38 shows the number of departures overflying Horley in 2024. Although the number of these occurrences are relatively low compared to the number of departures using Routes 3 and 4, the Airspace Office continues to work closely with NATS to further reduce the number of these infringements over the town.

Figure 39 shows that there two 1000ft departure infringements during 2024. The first was due to a technical issue which was promptly rectified during the initial climb of the aircraft. The second occurrence was by a wet-leased operator which was followed up with by the airline they were operating on behalf of.

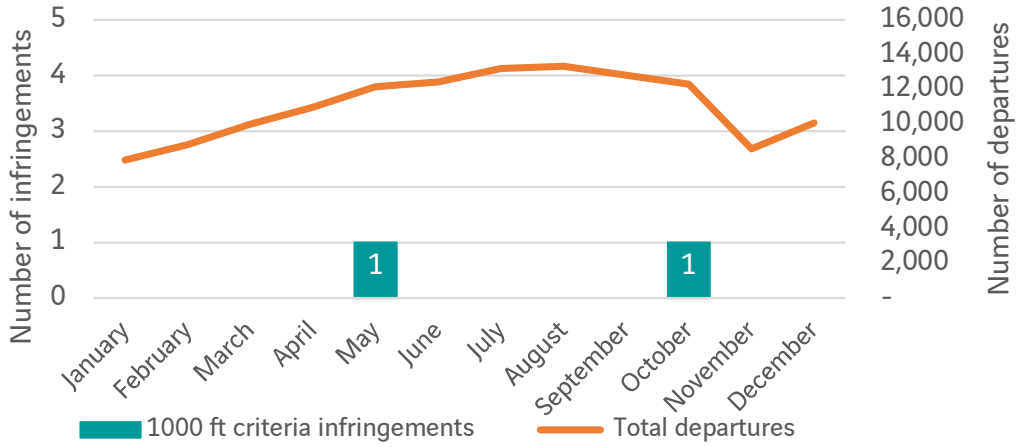

Figure 39: Number of aircraft not meeting the required climb performance[5]

Night Operations – Summer Season

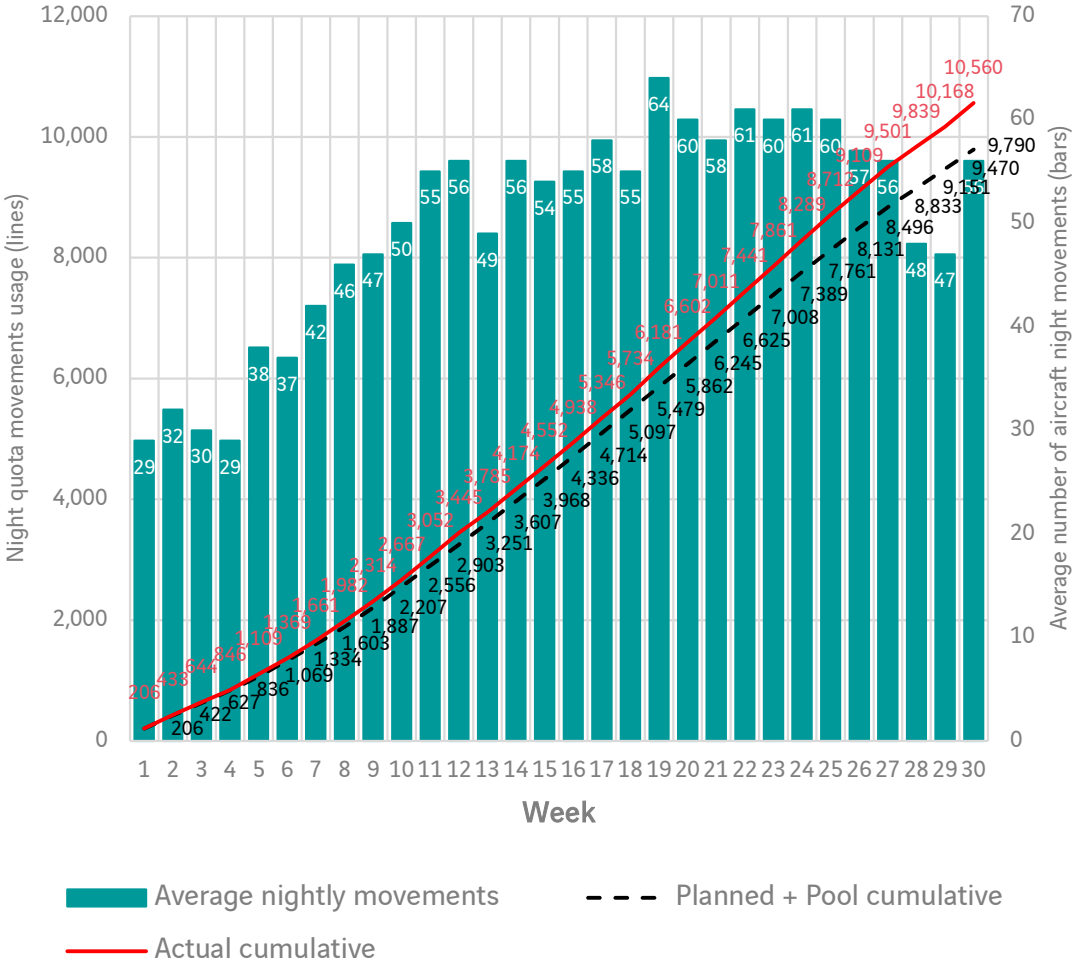

Figure 40: Night flight movements in Summer

The Summer 2024 season began on 31st March (0100hrs local) and ended on 27th October 2024 (0159hrs local). Figure 40 depicts the planned and actual usage of the night flight movement and quota limits for the summer season.

Figure 41 provides a breakdown of the number of flights either avoiding the night quota period (avoided) or using unplanned quota usage (non-dispensed). GAL was granted 1,069 dispensations for the summer 2024 season, with the majority due to thunderstorms and strong winds across European and London airspace. Other reasons include ATC staffing issues in France, a runway closure at London Gatwick resulting from an aircraft technical problem and a global IT outage. There were also 5 Government granted dispensations relating to the Champions League Final in June.

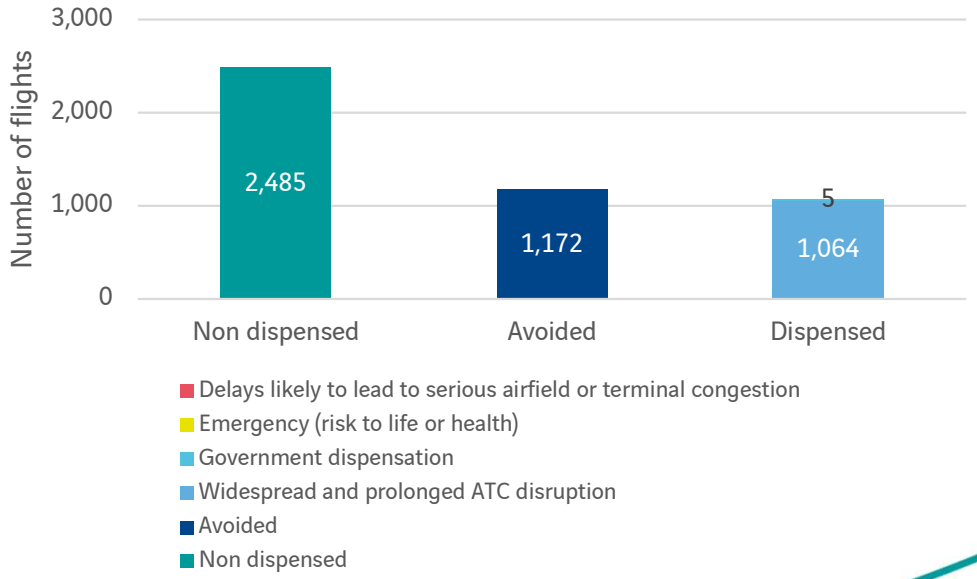

Figure 41: Number of non-dispensed, avoided and dispensed flights

Night Operations – Winter Season

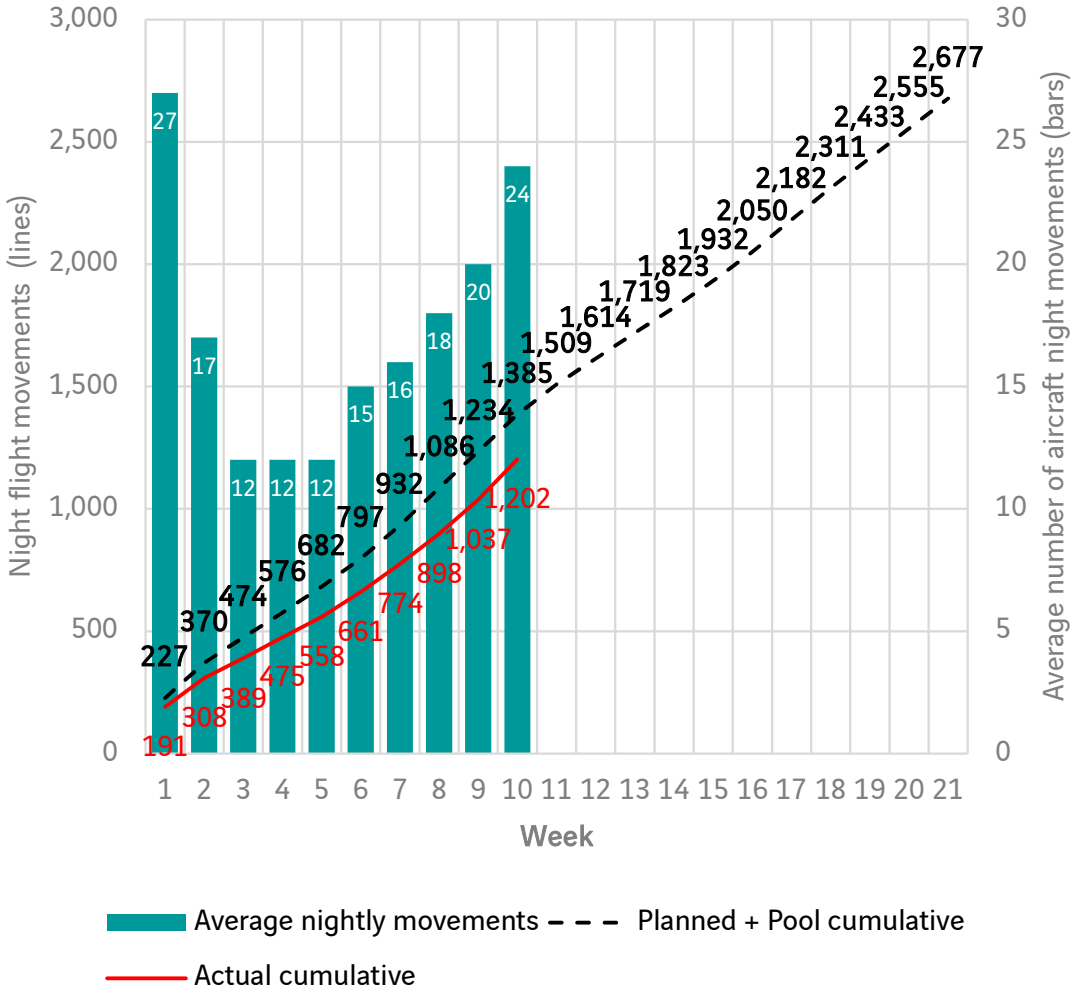

Figure 42: Night flight movements in winter

The Winter 2024/2025 season began on 27th October (0100hrs local) and will end on 30th March 2025 (0159hrs local). Figure 43 depicts the planned and actual usage of the night flight movement and quota limits for the winter season so far.

Figure 43 provides a breakdown of the number of flights either avoiding the night quota period (avoided) or using unplanned quota usage (non-dispensed). GAL has been granted 137 dispensations (to the end of Q4) for the winter season in total. 132 were due to low visibility and thunderstorms in UK airspace. The remaining 5 were granted due to a security incident in the South Terminal which led to its closure for a number of hours for safety reasons.

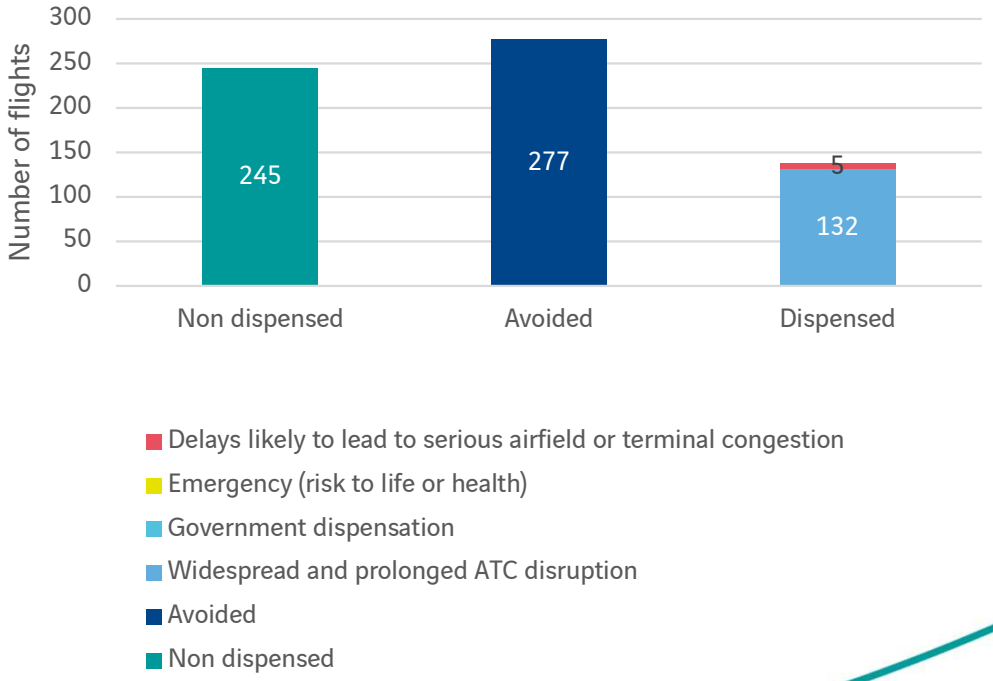

Figure 43: Number of non-dispensed, avoided and dispensed flights

Night Operations – Historic Usage in Summer

London Gatwick operates as a Public Licensed Aerodrome for 24 hours each day, offering great flexibility for passengers and airlines. However, in order to try to balance the interests of local communities and those of airport users, there are stringent restrictions and rules in place governing how the airport manages flights at night.

The Department for Transport (DfT) is responsible for defining these restrictions. The current rules apply between 23:30 to 06:00 with a set movement and quota count (QC) limit. QC is based on how noisy a particular aircraft is, with the noisier the aircraft type, the higher the points allocated. This is designed to encourage the use of the quietest aircraft types within a limited number of movements.

Figure 44 depicts the usage of the night quota period since the year 2000. While the movement limit has remained at 11,200 movements, the QC limit has been repeatedly lowered and is now at 5,150 as shown by the black trend line. The limits in winter are lower at 3,250 movements and 1,785 QC points and are generally not utilised fully.

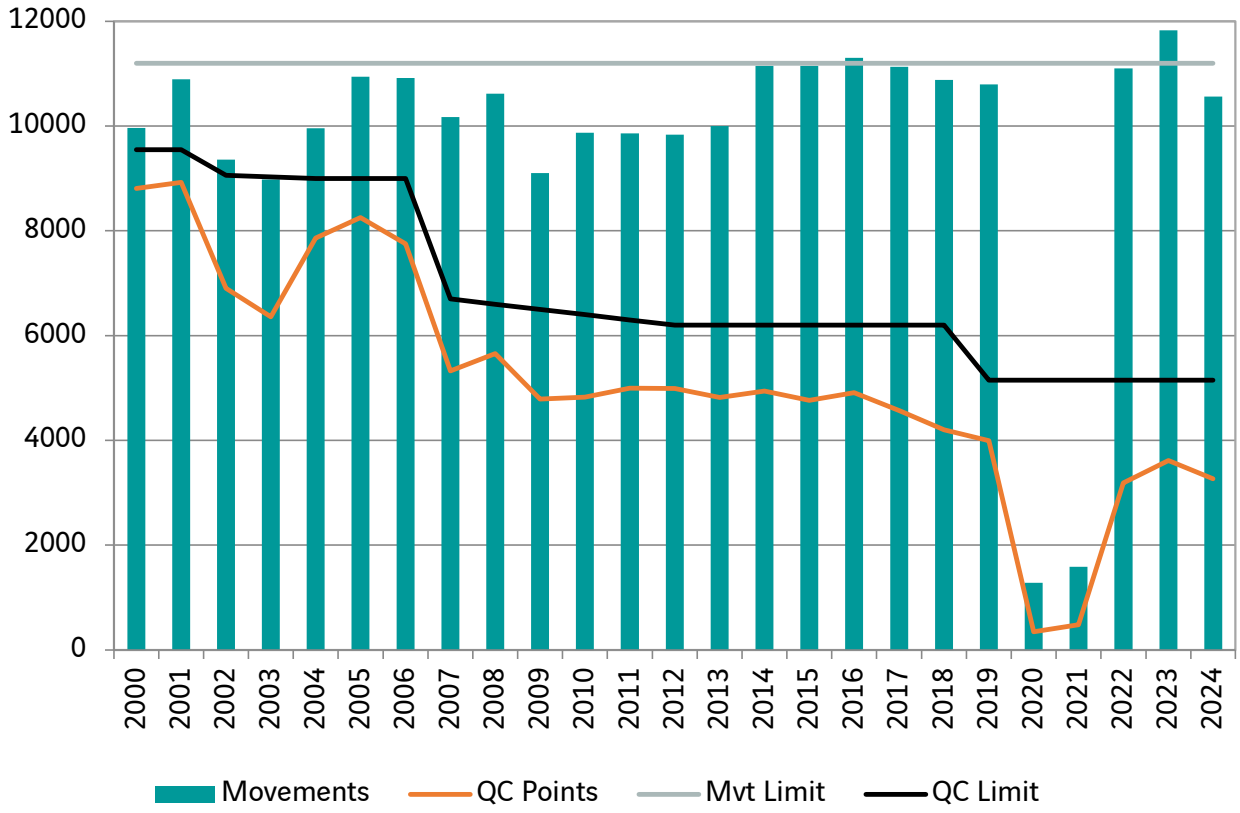

Figure 44: Night flight usage in Summer since 2000

Noise Monitoring

London Gatwick has a local noise monitoring system this consists of a number of 'monitoring stations'. Each station includes a microphone, recording device and transmitter to send the data back to our servers.

The monitor records noise from both aircraft and background sources such as road traffic or the wind in the trees. The active monitoring of noise allows us to track aircraft noise levels, evaluate trends and make comparisons between the noise environments.

Noise monitoring is useful as it gives a better understanding of the levels of aircraft noise and how it may affect communities surrounding the airport. It is especially important during trial periods where new routes or procedures may be under review.

The Gatwick Noise Monitoring Group (GNMG) is responsible for suggesting the location of noise monitors and has an established process to follow.

Figure 45: Location of current and historical noise monitors and NPRs

Complaints

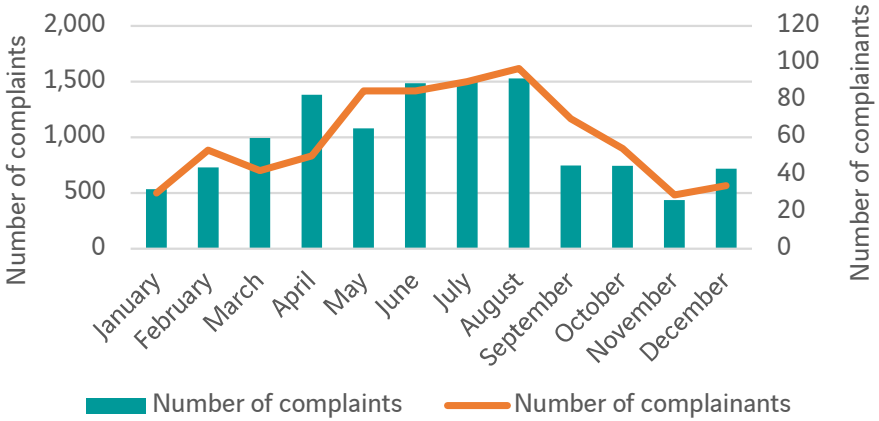

Figure 46: Number of complaints and complainants

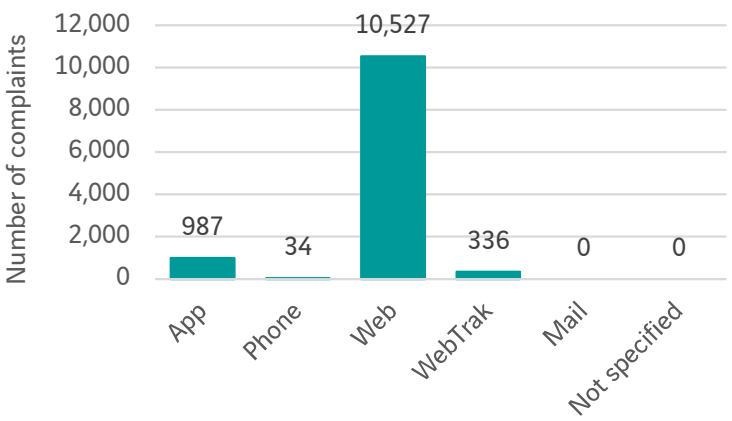

Figure 47: Complaints submission methods (whole year)

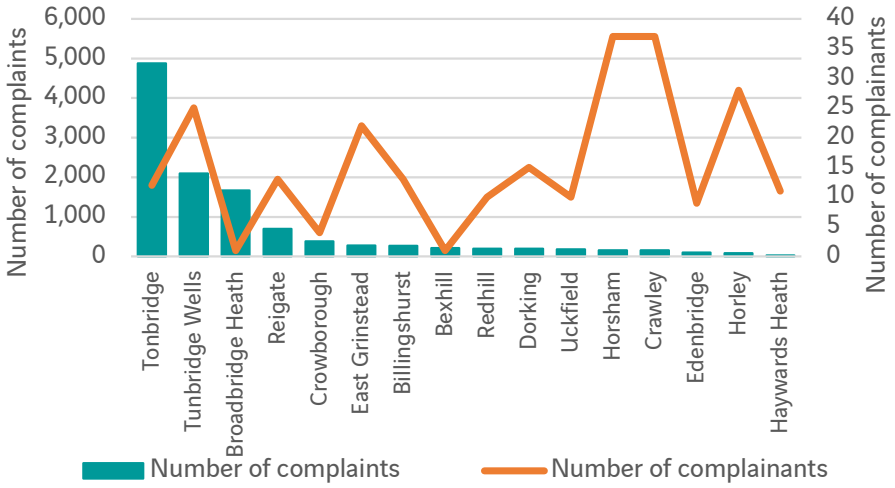

Figure 48: Areas with most complaints (whole year)

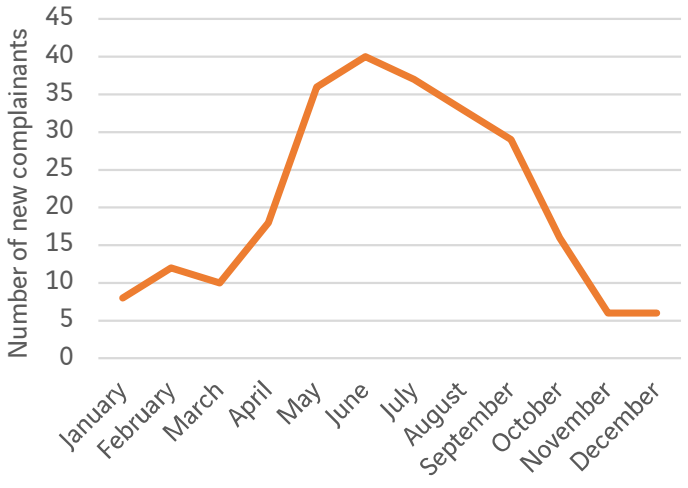

Figure 49: New complainants

March and April 2024 experienced an increase in complaints coinciding with the Easter school holidays, however the number of complainants decreased compared to February. Following this, both complaints and number of complainants increased to the highest levels seen in 2024 during June – August with the increase in summer seasonal traffic. These then decreased to levels seen in the first quarter of the year.

The online webform remains the most used channel for submitting complaints, it accounts for 88% of the 2024 total followed by the app at 8%.

Tonbridge, Tunbridge Wells and Broadbridge Heath (Horsham) received the most complaints in 2024. It is important to note that all Broadbridge Heath complaints are from a single individual. The highest concentration of complainants are in areas to the south of the airport including Crawley and Horsham

The number of new complainants follows the seasonal increases and decreases in traffic levels during the year.

Complaint Categories

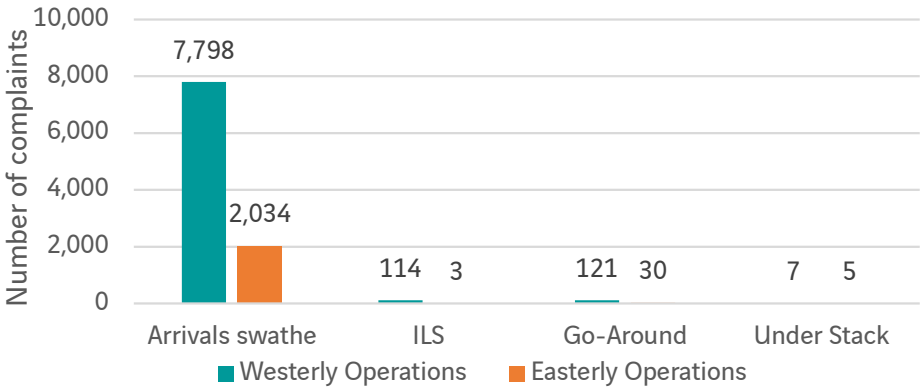

Figure 50: Complaint categories during arrival operations

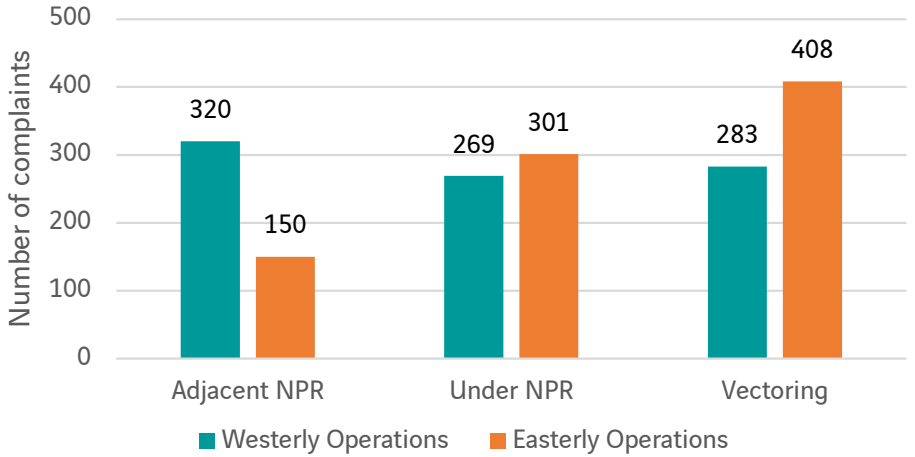

Figure 51: Complaint categories during departure operations

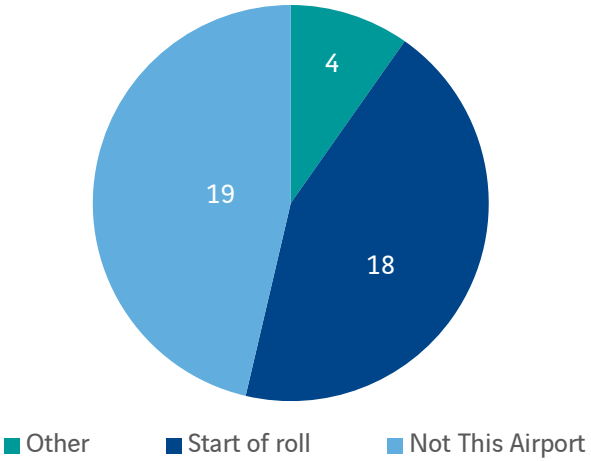

Figure 52: Other complaint categories

97% of the complaints received for arrivals in 2024 were under the arrival swathe, with 79.3% being in the westerly direction. This is consistent with the predominance of the westerly operations at the airport throughout the year.

Figure 51 shows that complaints were more frequent for NPR and vectoring during easterly departures. The number of complaints for westerly adjacent NPR departures was more than double compared to easterly operations. Overall, vectoring received the highest number of complaints, making up 40% of the total complaints for departure operations.

As shown in Figure 52, of the remaining other complaint categories, 'Not This Airport' complaints make up 46.3% of the total. These complainants are redirected to other airports for further information and to log a complaint directly with them. Start of roll complaints (43.9% of total) are categorised as complaints that have mentioned engine noise or runway take-off noise and who are not directly overflown and reside close to the airport.

Complaints

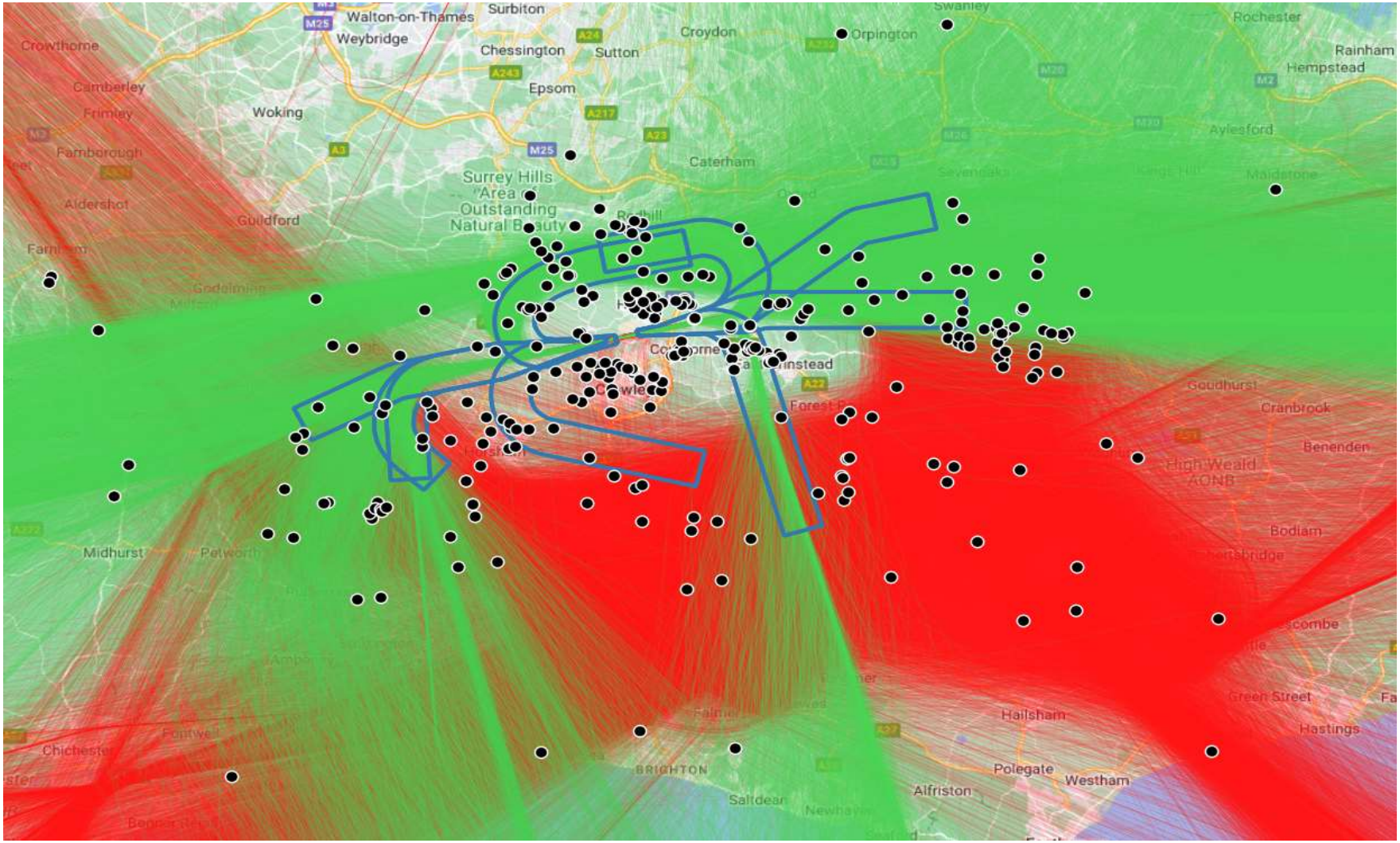

Figure 53a shows the distribution of individual complainants throughout 2024, as well as the tracks of all movements in Q4 for representative purposes.

Figure 53a: A graphical representation of 2024's individual complainants, with an overlay of Q4 arrivals & departure tracks and NPRs

Complaints

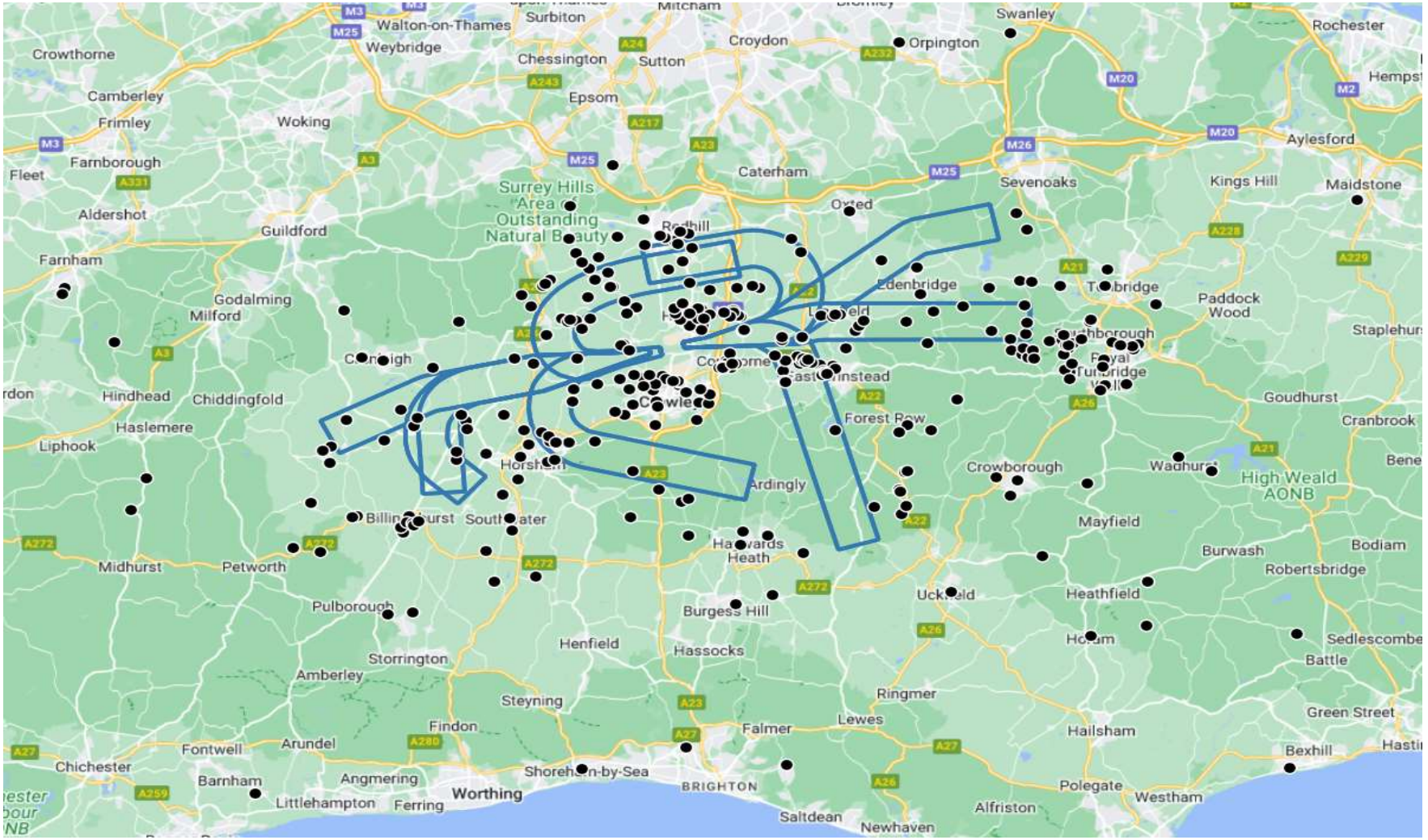

Figure 53b shows the distribution of individual complainants throughout 2024.

Figure 53b: A graphical representation of 2024's individual complainants and NPRs

Complaints

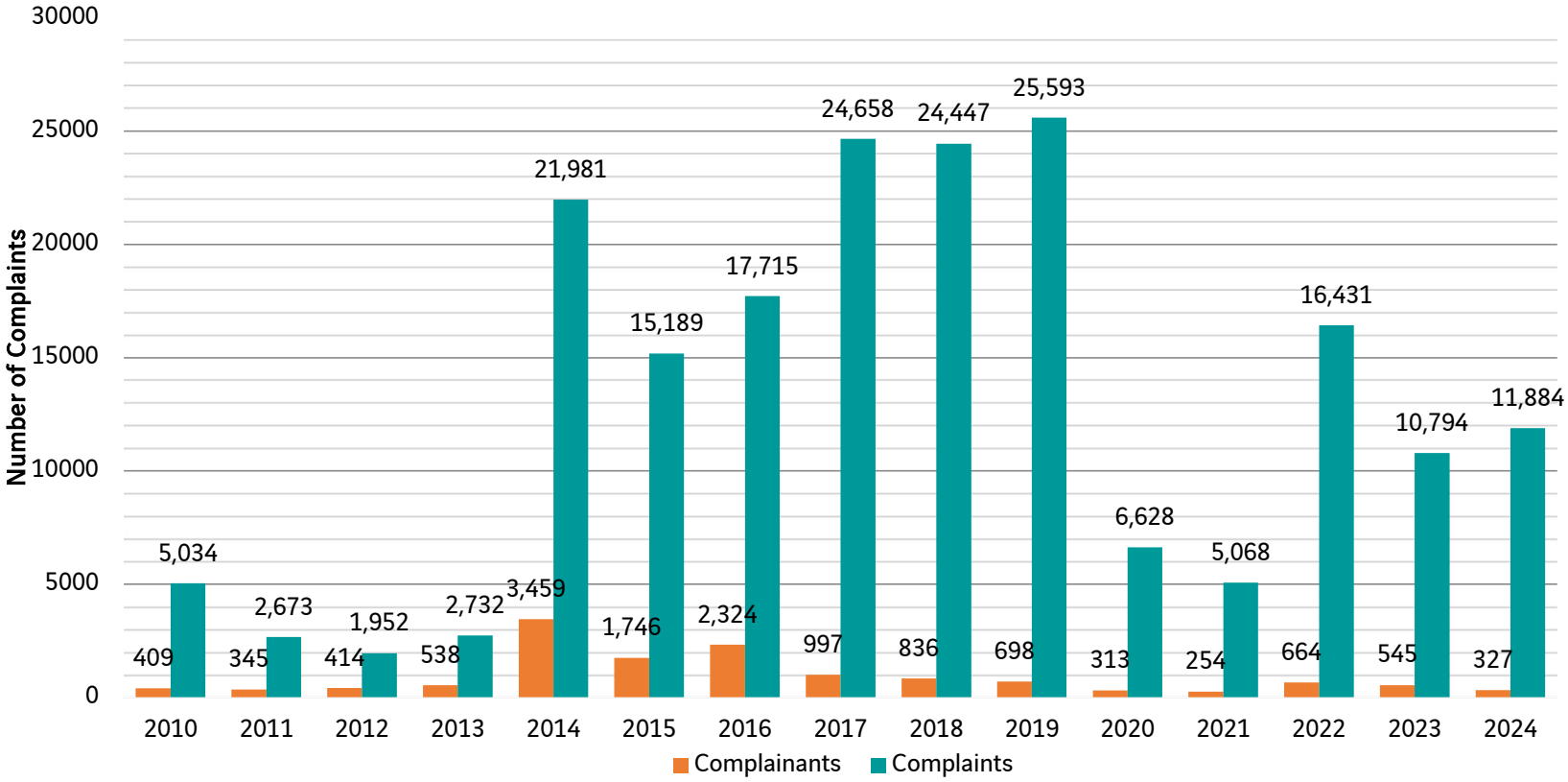

Figure 54: Number of individual complainants and complaints 2010-2024

Figure 54 shows how the total number of complaints and the number of individual complainants have varied since 2010.

In 2024, there was an increase of 10.1% in the number of complainants but a decrease of 40% in the number of complainants when compared to 2023.

These figures are remained significantly lower than those received in 2019.

Ground Noise

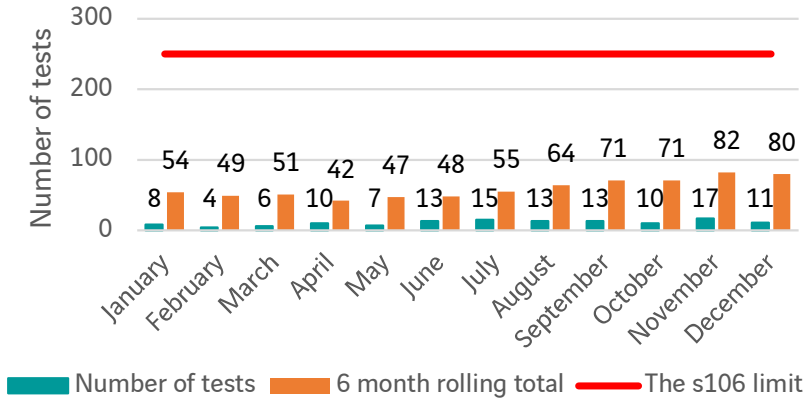

Figure 55: Engine runs

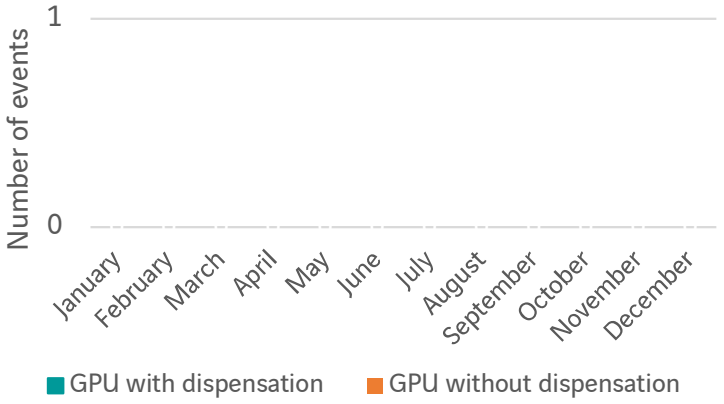

Figure 56: GPU usage

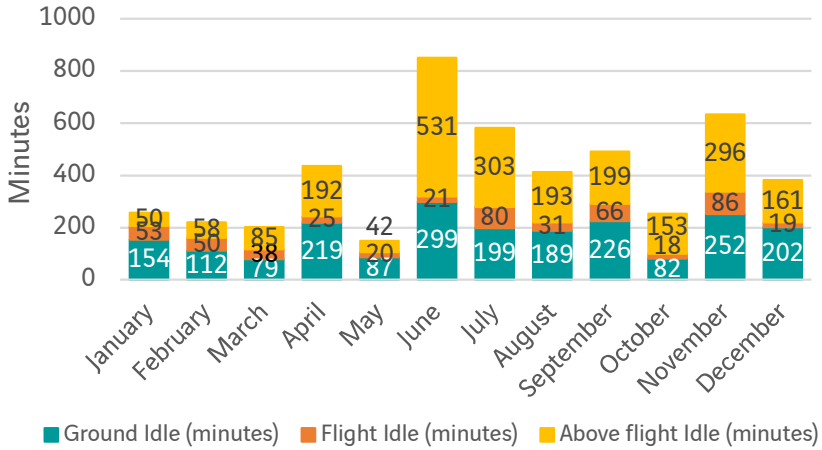

Figure 57: Cumulative minutes of engine tests

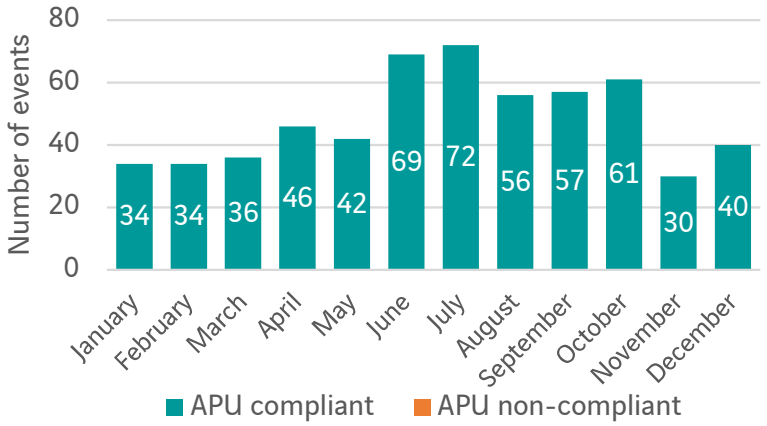

Figure 58: APU usage

Figure 55 shows that the number of engine tests conducted over the year remained fewer than the Section 106 legal limit of 250 in a six-month period in 2024.

There were no recorded uses of Ground Power Units (GPU) with dispensation in 2024 as shown in Figure 56.

From June to September 2024, 40% of the total minutes of engine runs occurred, with more aircraft on the airfield during the peak summer months.

Figure 58 shows that in 2024, there were no non-compliant Auxiliary Power Unit (APU) usages.

Further details on ground noise can be found in Annex F.

Annex A – Additional Statistics

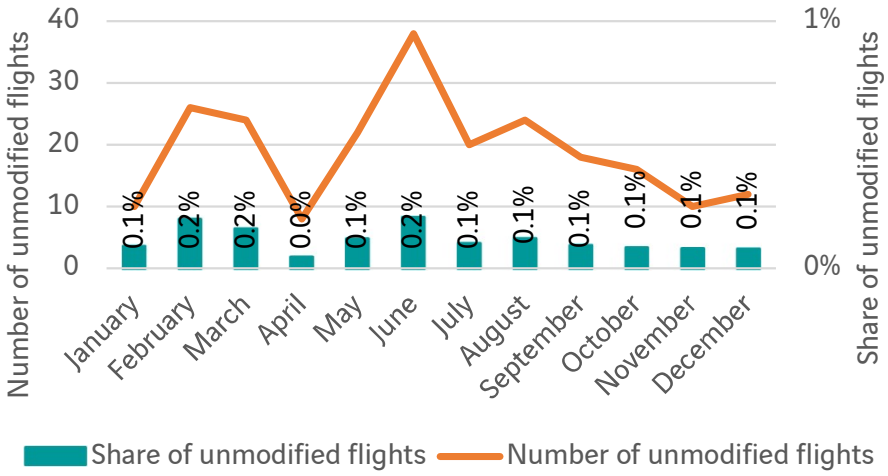

Figure A-1: Number and share of flights by unmodified A320 family aircraft

The number of flights operated by unmodified Airbus A320 family aircraft, which have not had Fuel Over-Pressure Protector modification (FOPP) installed, has continues to remain very low.

London Gatwick has been applying an additional noise charge to unmodified A320 aircraft since the 1st January 2018. The number of these flights has been reduced by 95% since then and represents less than 0.1% of all A320 traffic in 2024.

Annex A – Additional Statistics

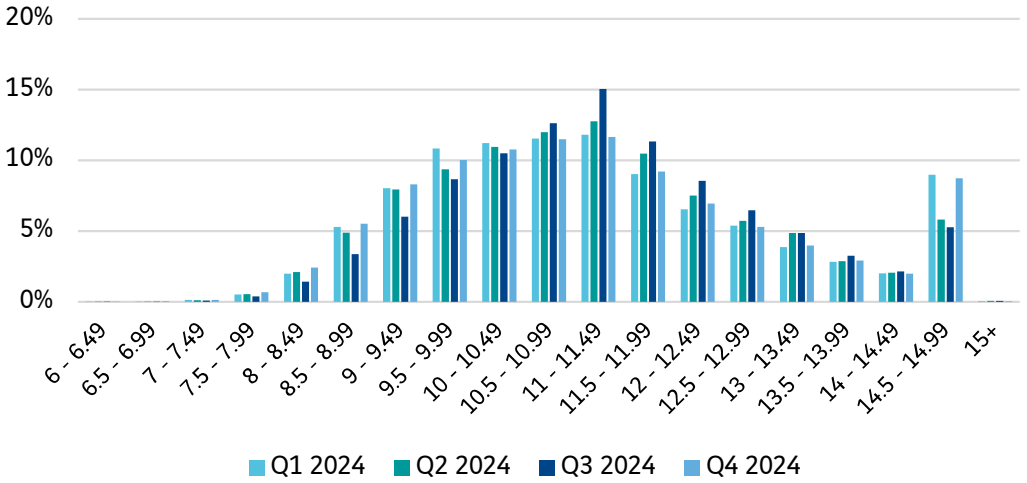

Figure A-2: Traffic Joining ILS per quarter – Runway 26 Only (westerly)

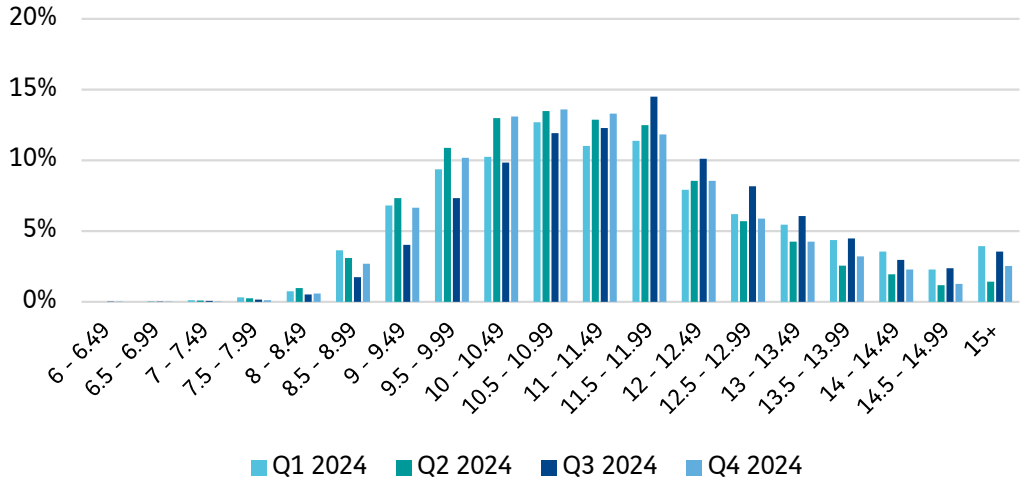

Figure A-3: Traffic Joining ILS per quarter – Runway 08 Only (easterly)

In 2024, approximately 90% of westerly arrivals joined the Instrument Landing System (ILS) between 8 nautical miles (NM) and 14NM, while 92% of easterly arrivals did the same.

During the third quarter of 2024, there was an increase in arrivals joining the ILS between 10.5NM and 13.99NM in the westerly direction, and between 11.5NM and 14.99NM in easterly operations. However, both the second and third quarters of 2024 experienced a decrease in arrivals joining the ILS between 14.5NM and 14.99NM compared to the first and fourth quarters for Runway 26.

In 2024, there was an increase in arrivals joining the Instrument Landing System (ILS) beyond 15 NM for easterly operations. This trend was more pronounced in the first, third, and fourth quarters due to less congested airspace compared to the peak summer season, allowing more aircraft to perform a straight-in approach

This is monitored as a result of Recommendation Imm-10 of the 2016 Independent Arrivals Review (IAR). Please refer to Annex C for the full background and rationale for continuous monitoring.

Annex B
Noise Abatement Procedures referred to by figures in this report

1 AIP, EGKK AD 2.21 NOISE ABATEMENT PROCEDURES, Sub-paragraph 10

Where the aircraft is approaching the aerodrome to land it shall, commensurate with its ATC clearance, minimise noise disturbance by the use of continuous descent and low power, low drag operating procedures.

2 AIP, EGKK AD 2.21 NOISE ABATEMENT PROCEDURES, Sub-paragraph 14

Aircraft which land at Gatwick Airport - London between the hours of 2330 (2230) and 0600 (0500), whether or not making use of the ILS localiser and irrespective of weight or type of approach, shall not join the centre-line: below 3,000 FT or closer than 10 NM from touchdown.

Note on altitude tolerances:
3,000 ft (Gatwick QNH) – 202 ft (airfield elevation) = 2,798 ft
2,798 ft – 200ft ATC radar tolerance = 2,598 ft
These values are used to assess compliance within the Airport Noise & Track-Keeping system.

3 AIP, EGKK AD 2.21 NOISE ABATEMENT PROCEDURES, Sub-paragraph 11

Before landing at the aerodrome the aircraft shall maintain as high an altitude as practicable and shall not fly over the congested areas of Crawley, East Grinstead, Horley and Horsham at an altitude of less than 3000 FT (Gatwick QNH) nor over the congested area of Lingfield at an altitude of less than 2000 FT (Gatwick QNH).

4 AIP, EGKK AD 2.21 NOISE ABATEMENT PROCEDURES, Sub-paragraph 9

After taking off the aircraft shall avoid flying over the congested areas of Horley and Crawley.

5 AIP, EGKK AD 2.21 NOISE ABATEMENT PROCEDURES, Sub-paragraph 1

After take-off the aircraft shall be operated in such a way that it is at a height of not less than 1,000 FT AAL at 6.5 KM from start of roll as measured along the departure track of that aircraft.

6 AIP, EGKK AD 2.21 NOISE ABATEMENT PROCEDURES, Section 3 and section 4

Any aircraft shall, after take-off, be operated in such a way that it will not cause more than 94 dBA Lmax by day (from 0700 (0600) to 2300 (2200) hours) as measured at any noise monitoring terminal at any of the sites referred to in sub-paragraph (2).

Any aircraft shall, after take-off, be operated in such a way that it will not cause more than 89 dBA Lmax by night (from 2300 (2200) to 0700 (0600) hours) and that it will not cause more than 87 dBA Lmax during the night quota period (from 2330 (2230) to 0600 (0500) hours) as measured at any noise monitoring terminal at any of the sites referred to in sub-paragraph (2).

7 Agreement in relation to Gatwick Airport Under Section 106 of the Town and Country Planning Act 1990 and other powers

Full version:
www.gatwickairport.com/globalassets/company/sustainability/s106/s106-legal-agreement.pdf

8 AIP, EGKK AD 2.20 LOCAL AERODROME REGULATIONS, 1 AIRPORT REGULATIONS, Sub-paragraph l

Fixed Electrical Ground Power must be used when available and serviceable. Use of aircraft Auxiliary Power Units (APUs) and Ground Power Units (GPUs) are strictly controlled to minimise environmental impact. APUs must be shut down after arrival and only restarted before departure according to the timescales described in detail in published Gatwick Airport Instructions and Directives. Regular audits take place to ensure compliance with the regulations.

Annex C
ILS Joining Point – Background and Rationale for Monitoring

Background
Joining point data is monitored as a result of Recommendation Imm-10 of the 2016 Independent Arrivals Review (IAR). The recommendation proposed to alter a safety feature - the ILS minimum joining point - applied by air traffic controllers to help pilots ensure a fully stabilised final approach to the runway. The objective was to safely increase geographical dispersal of arrivals to more closely emulate the operations prior to a change in 2013 when the ILS minimum joining point had been increased from 7NM to 10NM. Specifically, the recommendation proposed extending the arrival swathe by reducing the ILS minimum joining point from 10NM to 8NM from touchdown. Hence the arrival swathe would extend from a minimum of 8NM to 14NM, with aircraft joining on a straight in approach when traffic permits.

Following the publication of the Action Plan, GAL working closely with NATS, progressed the implementation of the recommendation into an operational evaluation supported by detailed analysis. The evaluation commenced on the 15 August 2016. GAL & NATS have closely monitored use of the ILS since the implementation of the evaluation. In early January 2017, in anticipation of the need to conduct a thorough assessment of the results from the evaluation period and in order to avoid a temporary reversion to the pre-August 2016 minimum joining point, GAL made a request to CAA for a 3-month extension of the use of the reduced ILS minimum joining point.

Over the entire evaluation period the joining points between 8NM to 10NM was used by, on average, almost 20% of arrivals. As the evaluation progressed, the number of aircraft making use of joining points between 8NM and 10NM increased, reaching a peak of 31% in January 2017. The increased use of these joining points closer to touch down had increased the geographical dispersal of the arrivals swathe. With the agreement of the CAA and NATS at Noise Management Board (NMB) 5 it was decided that the 8NM minimum ILS joining point would be transitioned to a permanent procedure on the 15 May 2017.

Rationale for Continuous Monitoring
Following the adoption of the change as a permanent procedure, reporting continued to the NMB on a regular basis to provide transparency of the traffic dispersal achieved. The reporting and monitoring function was subsequently transferred to NaTMAG, as reporting became part of routine operational monitoring. In Q4 2020, ILS joining point distance statistics were absorbed into the new Airspace Office Quarterly and Annual reporting.

Communities continue to express concerns regarding flights that join the ILS inside 8NM during the day due to their noise impact. When the proportion of such flights becomes noticeably higher than the long-term average, the Airspace Office informs NATS (providing supporting data) and refers this to Gatwick's Flight Operations Performance and Safety Committee (FLOPSC) for further investigation. Whilst it is understood that vectoring practice by air traffic controllers has noise impacts, the rationale for taking action through FLOPSC - instead of NaTMAG - is that the 8NM ILS minimum joining point is a safety procedure, rather than a noise abatement procedure, relating to the stabilised approach of aircraft to the runway. FLOPSC is the competent safety body.

Annex D
Roles and Responsibilities

Gatwick Airport Limited
GAL is the licensed operator of London Gatwick. It is not directly responsible for aircraft operations but is responsible for the control of ground noise at the airport and the implementation and monitoring of DfT policy.

Airspace Office
Gatwick's Airspace Office is responsible for recording, investigating and responding to aircraft noise enquiries as well as to monitor and report airline conformance to noise mitigation measures as detailed in the UK AIP. The Airspace Office can also, if requested, provide information regarding flight paths and arrival routes, for example to prospective homebuyers. The Airspace Office also manages the airport Noise and Track Keeping system 'ANOMS' and a number of fixed and mobile noise monitors within the local area. They are regularly relocated, the data analysed, and the findings reported.

Air Traffic Control
NATS is the main Air Navigation Service Provider in the United Kingdom and provide guidance to flights in the vicinity of London Gatwick. NATS' en-route business is regulated and operated under licence from the Civil Aviation Authority (CAA). The terms of the licence require NATS to be capable of meeting on a continuous basis any reasonable level of overall demand. They are charged with permitting access to airspace on the part of all users, whilst making the most efficient overall use of airspace.

The London Gatwick Air Traffic Control Tower is operated by NATS, who oversee the runway and ground operations.

NATS
NATS is responsible for aerodrome Air Traffic Control at London Gatwick from when the aircraft leaves its stand to when it reaches 4,000ft in the air. NATS also manages air traffic engineering services, emergency and alerting services, and meteorological services.

Department for Transport
The DfT is responsible for the formulation of noise abatement policy, the location of Noise Preferential Routes (NPRs) for departing aircraft and night flight regulations.

Civil Aviation Authority
As the UK's independent specialist aviation regulator, the CAA has responsibility for regulating airspace over the UK. This includes the new and established air traffic routes and areas which commercial aircraft use to fly into and out of airports, and the airspace used by military and General Aviation flights.

An organisation proposing a change to the design of UK airspace must follow the CAA's airspace change process. The CAA has a duty to consider a range of factors set out by government in deciding whether or not to approve the change. One set of factors is the environmental objectives set for the CAA by the Secretary of State – including consideration of noise impacts.

Annex E
Gatwick's Framework for Noise Management

Noise and Track Keeping system (NTK)

The NTK system combines radar input from ATC with data from our fleet of fixed and mobile monitors placed around the airport. The system monitors all aircraft traffic within a 50 miles radius of the airport, up to 40,000 feet, and automatically records any infringements of the departure noise limits, deviations from the departure flightpaths, as well as other noise mitigation measures. Since April 2019, London Gatwick uses ANOMS provided by Envirosuite, which is linked to our webservices WebTrak and InsightFull. The airport invests over £300,000 a year in noise monitoring.

Flight Operations Performance and Safety Committee (FLOPSC)

FLOPSC is made up of representatives from the airport's operations team, the Airspace Office, our airlines, the DfT, CAA and NATS. It meets on a bi-monthly basis throughout the year to review operational performance, adherence to noise and track keeping rules and to share best practice.

Noise Management Board (NMB)

The role of the NMB is to develop, agree, oversee and maintain a co-ordinated noise management vision and subsequent strategies for Gatwick, on behalf of all stakeholders, with an aim to reduce the impact of noise on the local community.

The governance structure includes a number of community action groups and local elected representatives. The NMB recently ended it's second term and began it's third term during 2024.

Noise and Track Monitoring Advisory Group (NaTMAG)

This committee includes representatives from the airport's Consultative Committee, local councils, the DfT, NATS, airlines and the airport. It meets every quarter to discuss the airport's performance against the range of rules and regulations pertaining to aircraft operations. It gives an opportunity for representatives of local communities to scrutinise the airport's reports and to discuss issues that may be a cause of concern.

Sustainable Aviation

Gatwick Airport Limited is a member of Sustainable Aviation, whose long-term strategy sets out the collective approach of UK aviation to tackling the challenge of ensuring a sustainable future for our industry. Sustainable Aviation brings together the main players from UK airlines, airports, manufacturers and air navigation service providers. The group produced a Noise Road-Map, which outlines the future aspirations of the industry. For more information visit: www.sustainableaviation.co.uk.

Gatwick Noise Monitoring Group (GNMG)

London Gatwick funds and co-ordinates a community noise monitoring programme in conjunction with local Environmental Health Officers and the airport's Consultative Committee. Noise monitors are located throughout local communities in Sussex, Surrey and Kent in order to develop an understanding of the noise environment and assess the impact of aircraft noise on those areas.

Annex F
Wind and Runway Direction

It is important for the safe operation of aircraft that they both land and take-off into wind. On take-off, this will increase airspeed and the amount of lift produced and, on landing, it will again assist with the creation of lift (required until touchdown) and also help to control airspeed. It is important that aircraft are travelling at the appropriate speeds specified during these critical stages of flight necessary for safety. A tailwind could increase the airspeed and may make an approach too fast and unsafe, therefore direction of operation is something which is considered carefully by ATC.

The wind direction and speed on the ground at the aerodrome can vary from what you may experience locally. In addition to wind on the ground, wind direction and speed are also assessed at 1,000ft and 2,000ft. Generally speaking, the wind speed increases considerably with altitude and may also have a significantly different direction. It is important to take these conditions into account, as they will affect flight during the initial stages of flight directly after take-off and during the final stages of the approach just before landing.

In recent years the annual average has approximately been a third of aircraft operations taking place in an easterly direction and two thirds in a westerly direction. The direction in which the runway is operated is determined purely by the prevailing wind direction, during the summer this typically results in a long period of time operating in an easterly direction. However, this split will vary from year to year and month to month and there is no correlation between the same months in different years.

Figure F-1: Easterly Runway Directions

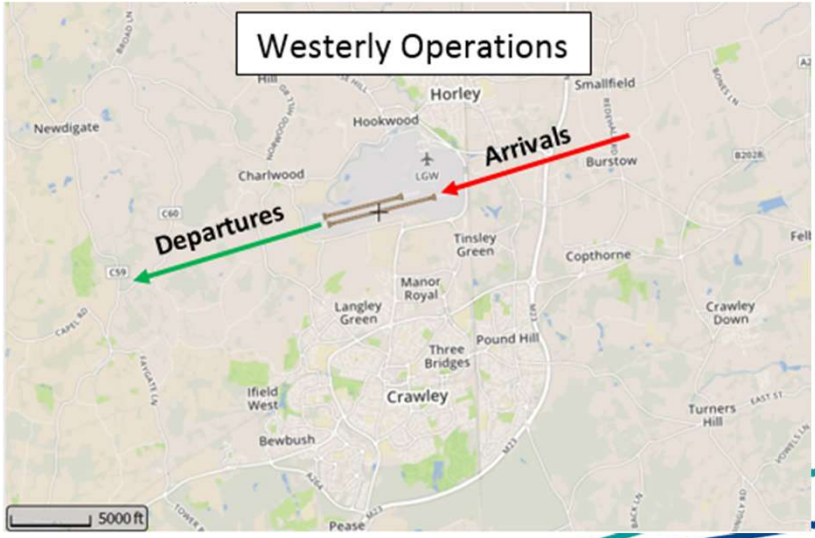

Figure F-2: Westerly Runway Directions

Annex G
Ground Noise – Background

London Gatwick is committed to mitigating and reducing noise disturbance caused by aircraft operating on the ground. Gatwick is a signatory to the Departure Code of Practice published in association with Sustainable Aviation. There are four key elements to this code:

1. **Reducing noise on the ground**
2. **Reducing noise and fuel emissions in the taxi stage**
3. **Airport Collaborative Decision Making (A-CDM)**
4. **Continuous Climb Operations**

There are a number of procedures aimed at mitigating ground noise.

Firstly, usage of Auxiliary Power Units (APU), small jet engines which generate electrical power for the aircraft on the ground, is restricted to a minimum to avoid unnecessary noise. Instead, electrical power is being supplied through Fixed Electrical Ground Power (FEGP) or – in case this cannot be utilised or is unavailable – by using a Ground Power Unit (GPU), which is a small diesel generator. The usage of GPUs is strictly controlled.

Secondly, there are limits in place concerning the maximum number of engine tests that can be conducted at the airport and there are strict regulations regarding when and where testing can be conducted in accordance with the S106 legal agreement. All testing must be authorised in advance by the Airfield Operations Team and there is a ban on testing during the night-time. Engine runs are an essential activity for maintenance and servicing work conducted at Gatwick.

Lastly, A-CDM in conjunction with reduced engine taxiing ensures that aircraft only use the minimum amount of thrust whilst on the ground, and only start their engines shortly before their departure. It also helps reduce the queueing time near the runway.

Annex H
Night Flights – Definition and Quota Count

The night period at London Gatwick spans from 23:00 to 07:00 and during this time the loudest aircraft (QC8 & QC16) are not allowed to operate. Stricter restrictions apply during the night quota period (or core night: 23:30 - 06:00) when there is a limit on the number of movements and the sum of quota count (QC). Furthermore, QC4-rated movements are not allowed to be scheduled during this period.

The noise quota of an individual aircraft is based on its official noise certification data, with separate classifications for take-off and landing in the form of QC values. As shown below, the smaller or newer the aircraft, the lower its QC value will be. As the QC is summed up over all movements, this incentivises the use of quieter aircraft in order to avoid being constrained by the QC limit.

Certificated noise level (EPNdB)	Quota count	Example aircraft (arrival)	Example aircraft (departure)
Less than 81	0	Bombardier Global Express	Bombardier Learjet 45
81 to 83.9	0.125	Airbus A320neo	Airbus A320neo
84 to 86.9	0.25	Airbus A319	Airbus A220-300
87 to 89.9	0.5	Airbus A330-200	Boeing 737-300
90 to 92.9	1	Boeing 737-300	Boeing 737-900
93 to 95.9	2	Boeing 747-400	Airbus A330-200
96 to 98.9	4	Douglas DC-10	Boeing 747-400
99 to 101.9	8	Ilyushin IL-76T	Douglas DC-10
Greater than 101.9	16	-	Antonov An-225

Figure H-1: Aircraft Noise Certifications

Annex I
Night Flights – Limits and Dispensations

The latest restrictions set by the DfT for all the London airports on night flying came into force in October 2017 and will remain in place until 2025. These allow 11,200 movements in the Summer season (quota limit 5,150) and 3,250 movements in Winter (quota limit 1,785). Any unused allowance (up to 10% of the total limit) from a preceding season can be carried over to next to allow some additional usage.

Every scheduled night flight movement that operates during the night quota period counts towards the allowance. Unscheduled night flight movements will generally count towards the allowance as well but may be granted a dispensation based on DfT guidelines. Examples of the extraordinary circumstances justifying a dispensation are:

- Medical emergencies
- Humanitarian flights
- Aircraft carrying heads of state or royal families
- Non-scheduled movements as a result of major Air Traffic disruption
- To alleviate serious hardship and congestion at the airfield or terminal
- Government requested dispensations

The number of potential dispensations per night is calculated as the difference between the number of unscheduled night flight movements and the number of flights that avoided the night quota period, i.e. those that were scheduled to operate at night but did not. The number of dispensations may only be as high as the “surplus” of unplanned movements.

Annex J
Departure Noise Limits

Departure noise limits are based on the assumption that the noise monitors are exactly 6.5km from the start of roll point on the runway and at the same elevation as the airfield. To judge the recorded noise levels in practice, adjustments are made to the limits to account for any variances in the monitor position.

There is also a margin of error taken into account for the microphone of +0.7dB. Details of the limits that apply to departing aircraft are shown below. In light of the more noise sensitive period, lower noise limits apply during the night and shoulder periods.

Site	Adjustments specific to monitoring sites			Adjusted Limit values at monitoring sites		
	Positional	Equipment	Total	Day	Shoulder	Night
101 Russ Hill	+5.0	+0.7	+5.7	99.7	94.7	92.7
103 Orltons	+1.9	+0.7	+2.6	96.6	91.6	89.6
105 Oaklands Farm	+1.9	+0.7	+2.6	96.6	91.6	89.6
104 Moat House	0.0	+0.7	+0.7	94.7	89.7	87.7
106 Bellwood	-0.2	+0.7	+0.5	94.5	89.5	87.5

Figure J-1: Departure noise limit adjustments

Financial penalties are applied to aircraft that exceed the noise monitor levels on departure (monitored at 6.5km from the start of roll). A minimum penalty of £500 will be applied for any departing flight that exceeds the above noise limits.

For any departure that exceeds the limit by 3 decibels or more, a fine of £1,000 is applied. All proceeds from noise fines are passed to the independently run Gatwick Airport Community Trust (GACT). Details of the work carried out by the GACT are available at www.gact.org.uk.

Glossary of Terms (1)

AAL	Above Aerodrome Level	The height of an aircraft above the elevation of the referenced aerodrome.
AIP	Aeronautical Information Publication	Essential air navigation information published by NATS on behalf of the CAA, detailing regulations applicable to the operation of aircraft, e.g. at specific aerodromes.
ANPT	Airline Noise Performance Table	A programme that ranks airlines flying into and from London Gatwick in relation to their overall noise performance.
APU	Auxiliary Power Unit	A small combustion engine on an aircraft that provides energy for functions like lighting or heating/cooling when the main engines are switched off.
ATC	Air Traffic Control	An entity responsible for a safe and expedite air traffic flow. To this end they monitor aircraft and issue instructions to the flight crew, either from the airport control tower or a radar centre.
ATM	Air Traffic Movement	An aircraft operation on the airport's runway, i.e. either a departure or an arrival.
CAA	Civil Aviation Authority	The UK independent civil aviation regulator
CDO	Continuous Descent Operations	An optimised descent profile utilised to reduce noise impact and fuel consumption by avoiding prolonged periods of level flight below 7,000ft. 'For monitoring purposes, a descent will be deemed to have been continuous provided that no segment of level flight longer than 2.5 Nautical Miles (NM) occurs below 7,000ft QNH and 'level flight' is interpreted as any segment of flight having a height change of not more than 50ft over a track distance of 2nm or more, as recorded in the airport Noise and Track Keeping system.'
DfT	Department for Transport	The government department providing policy & guidance for air traffic through their work with airlines, airports, the Civil Aviation Authority and NATS.

Glossary of Terms (2)

DME	Distance Measuring Equipment	DME is a fixed radio beacon which provides information to aircraft about their distance from its position. "1 DME" denotes 1 nautical mile from the selected ground station. The distance is measured as a slant range, not as distance over ground.
EGKK	(ICAO-code for London Gatwick)	These four-letter airport codes are used in the AIP and other aeronautical documents. This code is unique to London Gatwick.
EPNdB	Effective Perceived Noise in decibels	A noise metric aimed to measure the relative noisiness of an individual aircraft flying by and can be calculated from the certified noise levels. It is used for the quota count classification.
FEGP	Fixed Electrical Ground Power	FEGP provides aircraft with the necessary power to operate its electrical and air conditioning systems.
FLOPSC	Flight Operations Performance & Safety Committee	An engagement committee at London Gatwick ensuring the development of best practice by airline operators using Gatwick. It is made up of representatives of London Gatwick, the DfT, ATC service providers and airlines operating at the airport.
GACT	Gatwick Airport Community Trust	An independent charity which awards grants annually to local community schemes which benefit parts of East and West Sussex, Surrey and Kent.
GAL	Gatwick Airport Limited	-
GNMG	Gatwick Noise Monitoring Group	The GNMG consists of Environmental Health Officers and associated noise professionals from the local authorities surrounding London Gatwick. The GNMG evaluates and discusses the data collected from the fixed and mobile noise monitors surrounding London Gatwick.
GPU	Ground Power Unit	An either fixed or mobile unit (usually a diesel powered generator) which can supply electrical power to the electrical system of an aircraft while on the ground.
IAR	Independent Arrivals Review	Gatwick commissioned an independent review of air traffic around the airport in. The final report has been published in 2016. Click here for more information.

Glossary of Terms (3)

ILS	Instrument Landing System	Is a precision runway approach aid based on two radio beams which together provide pilots with both vertical and horizontal guidance during an approach to land.
KPI	Key Performance Indicator	A set of metrics or values by which performance is measured and monitored.
MOTW	Maximum Take-Off Weight	The certified maximum total weight of an aircraft during take-off.
NaTMAG	Noise and Track Monitoring Advisory Group	NaTMAG brings together representatives from the DfT, NATS, airlines, London Gatwick and local authorities. The group discusses a wide range of noise and track-keeping issues.
NATS	National Air Traffic Service	NATS is the main Air Navigation Service Provider in the United Kingdom and the service provider operating the control tower at Gatwick from 09th October 2022.
NMB	Noise Management Board	The Noise Management Board (NMB) is a unique body, bringing together representatives from all stakeholders in the management and mitigation of aircraft noise.
NPR	Noise Preferential Route	Departure flight paths that avoid densely populated areas and therefore reduce the noise.
NTK	Noise & Track-Keeping (System)	System used to assess flight performance and noise data, constituted by radar surveillance, noise monitoring terminals and software to process data.
QC	Quota Count	The QC is the noise quota assigned to an aircraft and is calculated on the basis of the EPNdB of that aircraft on take-off or landing. The QC is used for night flight restrictions at Gatwick, for which there is a set quota limit each season in addition to the movement limit.
QNH	(no acronym)	When set to QNH, an altimeter reads the altitude above mean sea level.
RAG	Red-Amber-Green	A tier system used to rate and categorise performance.
S106	Section 106	Refers to Section 106 the Town and Country Planning Act 1990.
TK	Track Keeping	A departure is defined as on-track if it does not deviate from the used NPR corridor before reaching the applicable minimum altitude.

LONDON GATWICK

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