DublinAirport

INFRASTRUCTURE

Annual Compliance Report 2024

Section 19

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Table 1: Document approval

Action	Role
Author(s)	Aviation Noise Team
Reviewer	Aviation Noise Lead
Quality Reviewer	Head of Quality
Final Approver	Head of Environment and Sustainable Infrastructure

Table 2: Periodic Review approval

Action	Role

Table 3: Document History Table

Revision	Change Made	Reason for Change

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1.0 Introduction

1.1 Compliance Report Requirements

This Compliance Report has been drafted by daa in accordance with the Aircraft Noise (Dublin Airport) Regulation Act 2019, Part 4, Section 19, for calendar year 2024 (1 January through 31 December).

The Act states "*that the airport authority shall, on or before each anniversary of the date of commencement of this section, prepare and adopt a report in writing in the specified form on the compliance of airport users with noise mitigation measures and operating restrictions.* "

Section 19(4) requires that the report includes the items in the table below which includes references to identify where each item is addressed in this report.

Table 1.1 – Compliance Report Requirements

S19	Description	Section
4a	Particulars of failures (if any) to comply with operating restrictions due to changes in flight procedures	9.7 and 10 - Compliance
4b	The general criteria applied when distributing and managing traffic at the airport to the extent that those criteria may relate to noise impact	9 – Noise Mitigation Measures
4c	The data collected by the noise measuring systems	7 – Noise Monitoring
4d	Particulars of failures by airport users to comply with noise mitigation measures and, in addition to the failures referred to in paragraph (a), other failures to comply with operating restrictions (including aircraft flying off track without being directed to do so by the Irish Aviation Authority),	9.7 and 10 - Compliance
4e	Proposals to avoid or reduce the failures referred to in paragraph (a) or (d), or both such failures, including the imposition of financial penalties	10 - Compliance
4f	A non-technical summary of the above	2 – Non-Technical Summary

1.2 Report Structure

This report contains nine main sections as follows:

Table 1.2 – Report Structure

Broad Topic	Section	Section Title
Introduction	1	Introduction
	2	Non-Technical Summary
Airport Operations and Noise Situation	3	Airport Operations
	4	Operational Measures and Procedures
	5	Noise Contours
	6	Noise Mitigation Schemes
	7	Noise and Flight Track Monitoring
Community Engagement	8	Community Engagement
Noise Mitigation Measures and Assessments	9	Noise Mitigation Measures and Objectives
	9	Compliance and Opportunities to Improve

2.0 Non-Technical Summary

This Non-Technical Summary outlines the key findings and actions from the 2024 Section 19 Annual Compliance Report for Dublin Airport, focusing on the operational and noise management of Dublin Airport as mandated under Section 19 of the Airport Noise Act 2019 and compliance by airport users with the Noise Mitigation Measures.

Overview of Airport Operations

In 2024, Dublin Airport experienced air traffic growth of 1.3% compared to 2023, with a 4% decrease in total night-time movements (23-07h).

Runway use complied with North Runway's Condition 3 regarding preferred runway requirements where, except during exceptional weather conditions or essential works on the South Runway (SR), the Cross Runway was not to be used, North Runway (NR) was not to operate between 2300 and 0700, and NR was not to be used for landings from the east or departures to the east .

Aircraft Noise Levels

The 2024 Annual aircraft noise contours showed some increase in area/size in line with increased operations. Night-time noise levels also increased but to a lesser degree. This increase was influenced by the fleet mix with the proportion of the quietest 737MAX aircraft decreasing while the 737-800 increased, a trend which has reversed in 2025.

Aircraft Noise and Flight Track Monitoring

By the end of 2024, Dublin Airport had a network of 25 permanent Noise Monitoring Terminals (NMTs) and two portable units. Quarterly Noise and Flight Track Monitoring Reports are published on daa's website, including both time-averaged and single event noise metrics and comparisons between the measured NMT data and the calculated noise levels from the Noise Contour model. (Airport Plans & Reports | Dublin Airport)

The results showed good correlation between the monitored (NMT) noise levels and the modelled noise contours.

The NMTs provide continuous data, capturing real-time noise levels generated by aircraft during take-off, landing, and overflight operations. This data was matched to flight tracks monitored by the system to ensure noise events from non-airport sources are excluded.

Flight track monitoring also includes assessment of adherence to the Environmental Corridors by departing jet aircraft and Continuous Descent Operations.

Community and Stakeholder Engagement

Dublin Airport maintained an active engagement programme with local communities and stakeholders throughout 2024. This included regular updates on airport operations, noise levels, and the North Runway's impact. Enhanced community engagement, additional residential meetings and

additional online noise information tools were part of the airport's commitment to foster transparency and address concerns.

Monthly reports have been substantially updated with numerical and graphical information on movements, runway use, wind direction, complaints and track keeping. Quarterly reports have been improved with expanded noise monitoring data, comparison with modelled flight tracks and the resulting noise contour data.

Complaint management has been greatly improved with an expanded noise management team providing more timely responses to complaints with more detailed data including maps of flight tracks and "gate analysis" charts relevant to the location of the complainant. The new system of automated transcription of complaints made by telephone has vastly improved our ability to efficiently manage voice message complaints .

Based on informal benchmarking and engagement with other airports, Dublin Airport is a leader in our efforts to engage and provide relevant information in the most accessible manner possible to keep our local communities updated and informed.

Noise Mitigation Measures and Operating Restrictions

The airport implemented a range of noise mitigation measures, including the use of preferred flight tracks and runway use, the North Runway night closure, and restrictions on certain aircraft types. The effectiveness of these measures was continuously reviewed, with adjustments made as necessary to ensure ongoing compliance with planning conditions.

Noise Insulation and Dwelling Purchase Schemes

Dublin Airport continues to implement schemes to acoustically insulate those households and schools most impacted by our operations, including offers to purchase homes in the highest noise contours. A two-yearly review of the schemes was conducted in 2024, based on 2023 noise levels and a forecast contour. Insulation and purchase offers were made to the owners of the homes and two schools brought into the schemes as a result of this review.

Compliance with Measures and Restrictions

Dublin Airport demonstrated a high level of compliance with the noise mitigation measures and operating restrictions mandated under the planning permission for the North Runway. Regular audits and monitoring confirmed adherence to these conditions, with only minor instances of non-compliance, which were promptly addressed.

Future Improvements

Looking ahead, Dublin Airport is committed to further enhancing its noise management and operational efficiency. Planned improvements include the deployment of advanced flight track analytics software to assist aircraft operators, noise monitoring technology, further refinement of flight tracks, additional online noise information, and ongoing community engagement initiatives. These efforts aim to ensure the sustainable development of the airport while minimising its environmental impact.

3.0 Operations

3.1 Traffic

daa's Annual Reports include data on the total aircraft traffic movements (ATMs) at Dublin Airport each year. The figures are not the same as those used for the Annual Noise Contour calculations as shown in the table below.

Table 3.1 – Aircraft Traffic Movements

	2018	2019	2020	2021	2022	2023	2024
Air Traffic Movements (daa)	233,185	238,998	87,893	92,119	212,449	241,595	244,511
Annual Noise Contours Model Movements							
Day (07-19h)				60,862	144,899	165,771	171,515
Evening (19-23h)				15,041	34,307	41,360	40,011
Night (23-07h)				16,143	31,284	33,507	32,193
Total Annual	232,338	238,002	87,205	91,047	210,490	240,638	243,719

The differences are generally attributable to several factors. The ATM figures contained in the Annual Report include helicopter and military aircraft movements, which are not included in the noise analysis. Additionally, some movements such as missed approach are not counted as official Air Traffic Movements but may be counted as equivalent to arrival and departing noise events.

Dublin Airport accommodated more than 34.6 million passengers in 2024, compared with 33.5 million in 2023, including transfer passengers and those not accessing the terminals.

Table 3.2 – Passenger Numbers

Month	2024 Passengers (millions)
January	2.17
February	2.16
March	2.70
April	2.86
May	3.27
June	3.35
July	3.51
August	3.63
September	3.23
October	3.00
November	2.36
December	2.39
Total	**34.6m**

The 92-day summer period of 16th June – 15th September is used for some noise assessments. Air traffic movements during the summers of 2023 to 2024, divided into the 16-hour day period and the 8-hour night period, were as follows.

Table 3.3 – Air Traffic Movement in Summer Period

Summer	Day (16hr) 07h-23h	Night (8hr) 23h-07h
2023	57,995	10,069
2024	60,065	9,574

Further operational data is provided in Appendices 2 to 6 including the following:

- Percentages of arrivals and departures each hour of the day
- The origin and destination airports of flights by percentage
- The usage of different departure routes out of the Dublin Airport area

3.2 Aircraft Fleet

A summary of the aircraft fleet operating at Dublin Airport during 2023 and 2024 as reported in the respective Annual Noise Contour reports is provided below.Table 3.4 – Aircraft Fleet

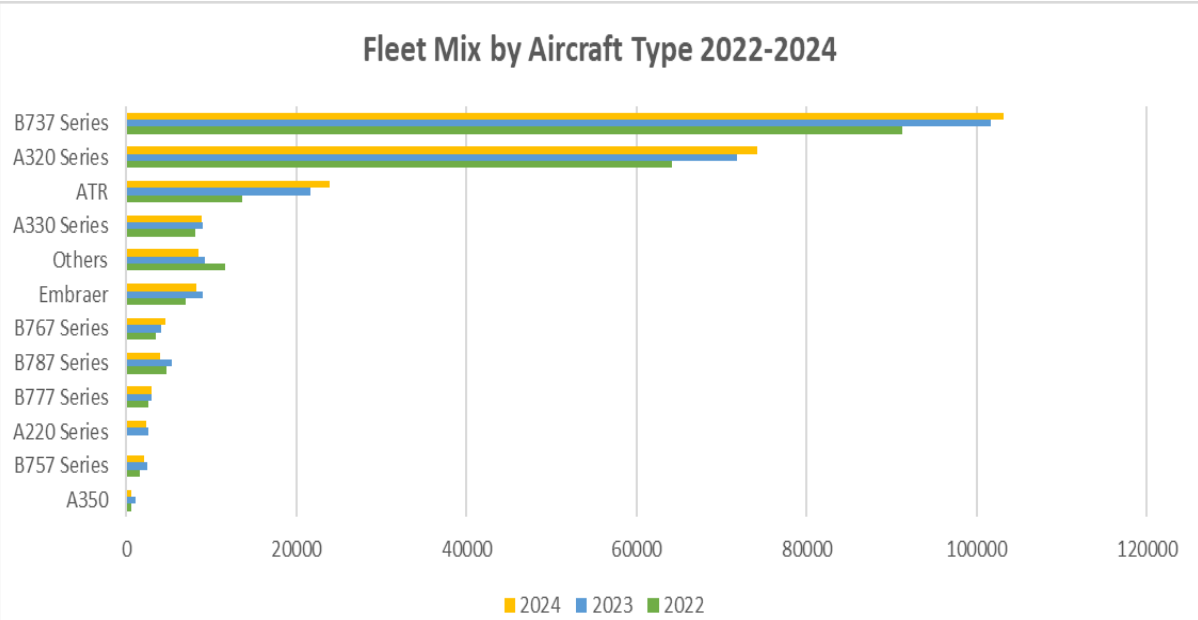
Aircraft	2023 Movements	2024 Movements
Airbus A220-100	544	128
Airbus A220-300	2,086	2,207
Airbus A306	108	126
Airbus A319	2,509	2,235
Airbus A320	49,390	46,777
Airbus A320neo	8,611	11,190
Airbus A321	3,323	3,842
Airbus A321neo	7,948	10,137
Airbus A330	8,953	8,830
Airbus A330neo	8	10
Airbus A350	1,007	581
ATR 42	166	16
ATR 72	21,442	23,837
Boeing 737-400	624	458
Boeing 737-700	359	594
Boeing 737-800	75,263	89,409
Boeing 737 MAX	25,420	12,706
Boeing 757	2,394	2,080
Boeing 767	4,138	4,580
Boeing 777	2,935	2,989
Boeing 787	5,324	3,931
Bombardier Dash 8	524	362
Embraer E190/195	7,448	6,407
Embraer E190-E2	946	1,198
Cessna 560XL	765	677
Embraer Phenom 300	527	670
Bombardier Global Express		420

Learjet 35/40/45	631	450
Other	6,751	6,872
Total	**240,638**	**243,719**

3.3 Fleet and Chapter Analysis

Figure 3.1 shows the distribution of aircraft type groups based on movements across 2022 and 2024. Only aircraft types with more than 200 movements are shown, to improve readability. As indicated, in both years the B737 and A320 were the most used aircraft types at the airport.

Figure 3.1 - Aircraft Type and Fleet Mix (2022 versus 2023)



A review was conducted of the schedule of operations for 2024, including the individual movements by aircraft type and registration. This schedule included noise certification data and registered maximum take-off weight (MTOW), as provided by the airport users in the latest Fleet Declaration Forms.

The results of the assessment, and those from the earlier assessments, are presented below in Table 3.5 and Table 3.6**.** The ICAO Annex 16 - Environmental Protection - Volume I - Aircraft Noise is used to designate the aircraft operating at Dublin Airport and allow reporting by relevant chapter. Of most relevance to Dublin Airport are Chapters 3, 4 and 14 which relate to subsonic jet aircraft and large propeller aircraft (over 8,618 kg). Aircraft of these general types undertake most of the operations at Dublin Airport.

The most recent standard for these aircraft types is given in ICAO Chapter 14, which is applicable to new aeroplane types submitted for certification on or after 31 December 2017, and on or after 31 December 2020 for aircraft less than 55 tonnes in mass. The previous equivalent standards were contained in ICAO Chapter 4 (applicable from 2006), and ICAO Chapter 3 (applicable from 1978). Chapter 14 represents the newest, quietest generation of aircraft including the B737Max, the B878 and the A320/321NEOs.

Table 3.5 - Chapter Assessment Comparison 2019–2024

Item		2019	2020	2021	2022	2023	2024
ICAO Noise Chapter Assessment using Certified MTOW	Chapter 4	73.8%	71.7%	72.5%	63.9%	60.5%	64.2%
	Chapter 14	21.8%	22.6%	21.5%	32.4%	36.6%	33.3%
	Total	95.6%	94.3%	94%	96.3%	97.1%	97.5%

Table 3.6 - International Civil Aviation Organisation Noise Chapter Assessment Results 2020-2024

Chapter	Percentage of Flights				
	2020	2021	2022	2023	2024
Chapter 3 Marginal	1.2%	0.2%	0.1%	0.2%	0.3%
Chapter 3	0.0%	0.0%	0.0%	0.0%	0.0%
Chapter 4	71.7%	72.5%	63.9%	60.5%	64.2%
Chapter 14	22.6%	21.5%	32.4%	36.6%	33.3%
Helicopter and Light Propeller Aircraft	1.9%	2.3%	0.9%	0.7%	0.6%
Unknown	2.7%	3.6%	2.7%	1.9%	1.6%

4.0 Operational Measures and Procedures

4.1 Overview

This section examines a range of Operations Measures listed below.

Table 4.1 – Operational Measures

Section	Item	Name	Content
4.2	PRU	Preferred Runway Use	Conditions 3 and 4 of the NR Planning Permission Essential Maintenance
4.3	IFP	Instrument Flight Procedures	
4.4	Arrival	Arrival Procedures	Continuous Descent Operations (CDO) Visual Approach Reverse Thrust (RT) Low-Power, Low-Drag (LPLD)
4.5	Departure	Departure Procedures	Noise Abatement Departure Procedures (NADP) Noise Preferential Routes (NPR) Continuous Climb Operations (CCO)
4.6	EGR	Ground Noise and Engine Ground Running	

4.2 Preferred Runway Use

Dublin Airport has three runways. The runway designations are based on the direction (or heading) an aircraft faces during an operation on that runway. Accordingly, 10 is facing east, 28 west, 34 north and 16 south. For the parallel NR and SR, the L or R indicates whether it is on the left or the right.

Table 4.2 - Runways

Runway	Designation	Notes
South Runway (**SR**)	10R - 28L	Opened in 1989
North Runway (**NR**)	10L - 28R	Planning Permission in 2007 Opened in 2022
Cross Runway	16 - 34	

Runway use for aircraft arrival and departure movements are mainly governed by two factors:

1. Wind direction and speed, and
2. Conditions 3 and 4 of the NR Planning Permission.

Aircraft must land and take-off facing into the wind (unless the wind is less than 10 knots when they can operate with a tail wind.) Operations will use the two parallel runways, oriented east-west, unless there is a strong north or south wind, when the Cross Runway might be used.

At Dublin Airport, winds are predominantly westerly, occurring 70 to 80% of the time (73% westerly in 2023, 76% in 2024). In westerlies, aircraft arrive from the east over the Irish Sea and depart towards the west on Runways 28R (NR day-time) and 28L (SR day and night-time). In easterly winds, aircraft arrive from the west (NR in the day and SR in the night) and take off towards the Irish Sea to the east (on SR) using Runway 10R.

In 2024, before the 2025 ACP NRRA Regulatory Decision, Conditions 3 and 4 defined the Preferred Runway Use requirement, summarised below:

- The parallel NR and SR should be used in preference to the Cross Runway except "essential use" for safety reasons. (c. 3a and c. 4)
- For westerly winds, arriving aircraft should use SR (Runway 28L) and departing aircraft either NR (28R) or SR (28L) (c. 3b)
- For easterly winds, arriving aircraft should use NR (10L) or SR (10R) and departing aircraft should use SR (10R). (c. 3c)
- NR is closed at night 2300 to 0700 hr (c. 3d)

The table below shows the actual runway use in 2024 to demonstrate compliance with the Preferred Runway Use requirement. At under 0.02%, the NR (10L) was barely used for easterly departures (c. 3c) and NR 28R was rarely used for westerly arrivals (0.74%) as per c. 3b. With 0.26% of all operations, the Cross Runway was only used during high northerly or southerly winds, usually during stormy conditions. (c. 3a and c. 4).

Table 4.3 – Runway Use in 2024

Runway	Heading (and Side)	Percentage of Arrivals	Percentage of Departures	Percentage of Total Operations
North RW	10L	18.0%	0.02%	9.0%
	28R	0.74%	65.4%	33.1%
South RW	10R	5.8%	24.1%	18.6%
	28L	75.2%	10.2%	46.8%
Cross RW	16	0.27%	0.23%	0.25%
	34	0.01%	0.01%	0.01%

Essential Maintenance

As per Condition 3d, the NR was not used at night (23-07h) except during essential SR maintenance. These instances, including maintenance operations listed below, occurred on the dates in Table 4.4.

- Rubber removal
- Grass cutting
- Quarterly visual inspection
- Paint markings
- Pavement and airfield ground lighting repairs.

Table 4.4 – SR Night Closures due to Planned Essential Maintenance

Q1	Q2	Q3	Q4
22/01/2024	16/05/2024	27/08/2024	22/10/2024
23/01/2024	17/05/2024	28/08/2024	23/10/2024
24/01/2024	18/05/2024	29/08/2024	23/10/2024
25/01/2024	19/05/2024	30/08/2024	24/10/2024
26/01/2024	23/05/2024		25/10/2024
29/02/2024	24/05/2024		26/10/2024
12/03/2024	25/05/2024		
13/03/2024	24/06/2024		
14/03/2024	25/06/2024		
15/03/2024	26/06/2024		
	27/06/2024		
	28/06/2024		

https://www.dublinairport.com/corporate/airport-development/north-runway/latest-news/1

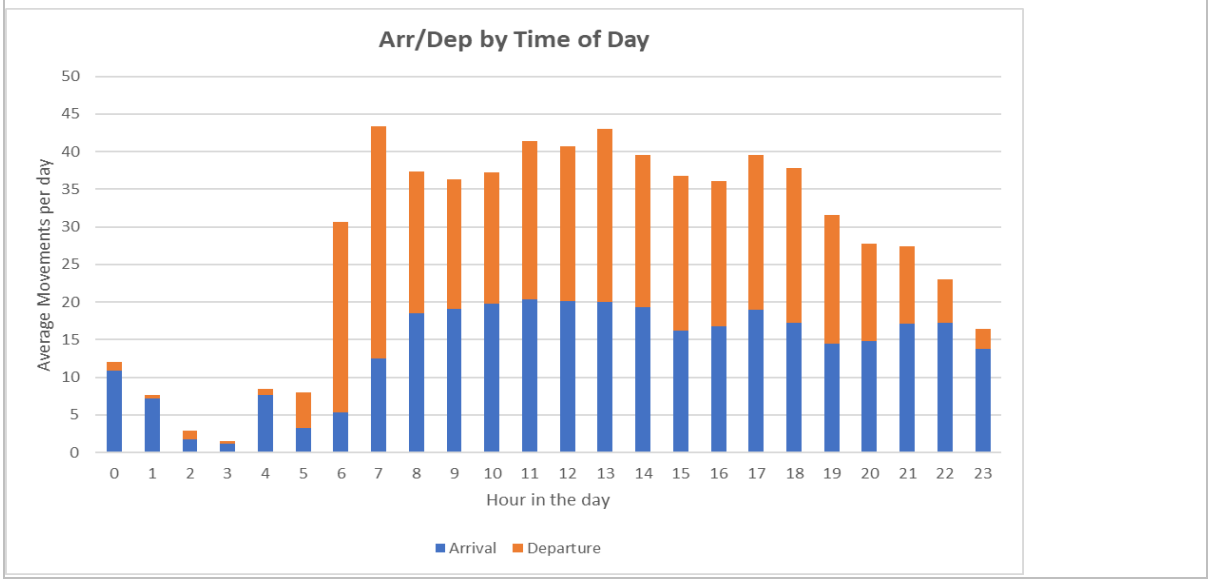
Other Circumstances

Date	Issue
23/07/24	Safety - lighting system failure on 28L necessitated a move to single mode runway operations on 28R until the issue was resolved
28/08/24	Safety - lighting system failure on 28L necessitated a move to single mode runway operations on 28R until the issue was resolved
18/09/24	Exceptional Air Traffic Conditions - the Garda Air Support Unit declared a priority search area around Howth, so RWY 10R/28L could not be used

Hourly Operational Data in 2024

Error! Reference source not found. Figure 4.1 below shows a chart of the arrivals and departures for each hour of the day during 2024. The vertical chart scale is presented as the Average Arrival and Departure movements per day for the year.

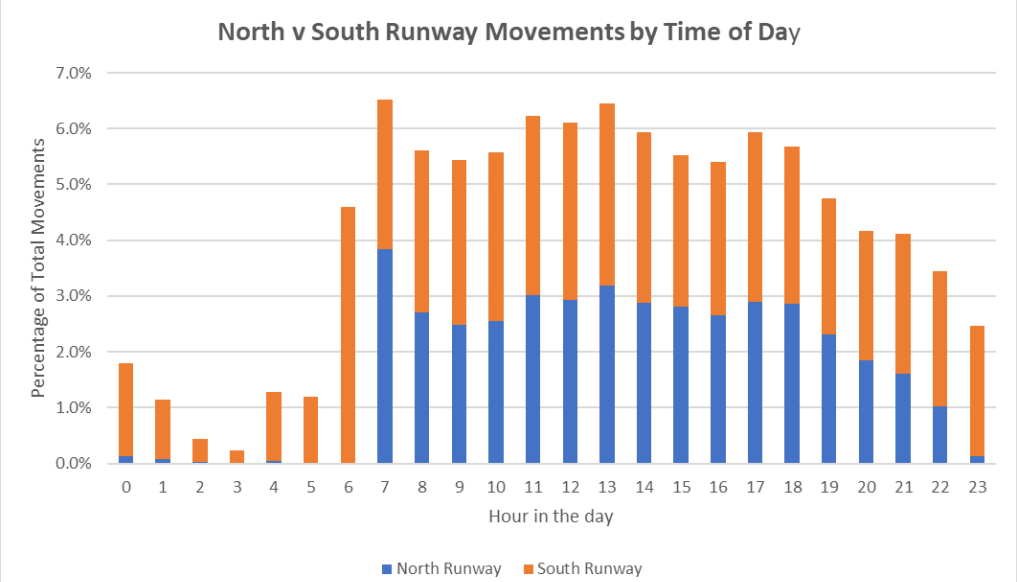
Figure 4.1 – Airport Operations by Hour of the Day



Runway Use Data in 2024

Figure 4.2 below shows the use of the North Runway versus South Runway for each hour of the day during 2024. The vertical chart scale is the percentage of total annual movements for the year. The total hourly movements are the same data as in Figure 4.1, presented on a different vertical scale. The relative heights of the columns in each figure are the same.

Figure 4.2 - Runway use by Runway and Hour



Night-time movements (23-07h) represent 8.5% of total annual movements. Night-time movements on the North Runway were 1,062 movements or 0.44% of total annual movements.

4.3 Instrument Flight Procedures

AirNav Ireland has responsibility under the Service Level Agreement (SLA) with daa for the maintenance, review and update of the Instrument Flight Procedures (IFPs) serving Dublin Airport.

While no updates to IFPs were made during 2024 or 2025 to date, work is nearing completion on an annual review of the procedures that will become effective in Q1-2026, to comply with regulatory requirements.

A broader review of IFPs and Airspace to be effective from 2028, that will take account of any developments that are necessary to comply with the PBN IR Reg. (EU) 2018/1048, is under consideration.

Regarding Incidents of Failure to Comply with Flight Procedure Change Leading to a Noise Event/Track Violation, it should be noted that the published SIDs and STARs for Dublin Airport are contained within the NPRs, but when flown by aircraft equipped with different avionics, slight variance, in actual flight tracks flown may occur. This is monitored by daa against the Noise Preferential Routes (NPRs) for reporting and further investigation of Aviation Noise events.

4.4 Arrival Procedures

Aircraft operators are instructed to ensure that aircraft are always operated in such a way as to cause the least noise disturbance practicable in areas surrounding the airport. The following subsections describe the specific noise abatement operating procedure measures.

4.4.1 Visual Approach Jet Aircraft

Jet aircraft (Category C/D) on visual approach to Runways 28L, 10R, 28R, 10L, 16, and 34 must join final approach no closer than 6NM from touchdown. Aircraft must follow a descent path that will not result at any time in being lower than the approach path which would otherwise be followed using the instrument landing system (ILS) glide path.

This procedure is hardly used at Dublin Airport and thus has no measurable or reportable impact on noise and should no longer be considered as a practicable noise mitigation measure.

4.4.2 Continuous Descent Operation

Continuous Descent Operation (CDO) is an arrival procedure where the pilot approaches the airport on a continuous downward slope, avoiding segments of level flight during the descent. This reduces noise at ground level in two ways. Firstly, as level flight requires engine thrust, during CDO the engines can remain at idle, the lowest operational and least noisy setting. Secondly, the aircraft remains at or close to the maximum height for as long as possible, maximising the distance between the noise source and any receptors at ground level.

At Dublin Airport, more than 70% of approach tracks occur over the Irish Sea and CDO procedures would not have any impact on arrival noise. However, during periods of easterly winds, CDO can have a beneficial impact. CDO also provides a benefit of reducing fuel burn and associated emissions.

4.4.3 Reverse Thrust

After an aircraft has touched down on a runway, reverse thrust is used to slow the aircraft in addition to the use of the brakes on the undercarriage wheels. Panels on the side of the engines open and direct some of the airflow forwards instead of backwards. The pilot applies engine thrust and, projected forward, this slows the aircraft. Reverse thrust can also be used in the event of a rejected take-off or certain other situations.

According to the procedures published in the AIP, reverse thrust should not be used during landing operations on any runway in the night-time hours between 23:00 and 07:00, except where operational or safety reasons dictate otherwise.

4.5 Departure Procedures

4.5.1 Noise Abatement Departure Procedure Climb Profile

Noise Abatement Departure Procedure (NADP) climb profiles are operating procedures that identify rates of climb to a standard speed. The procedures are intended to be beneficial for noise-sensitive areas either in proximity or more distant from the airport. There is no comment within the guidance that defines “in proximity” or “more distant”.

4.5.2 Noise Preferential Routes

A departing aircraft is required to follow a flight path called a Standard Instrument Departure (SID) designed by AirNav Ireland to facilitate the transition from take-off to the en-route phase of flight, while maintaining separation from other departing and arriving aircraft.

Noise Preferential Routes (NPRs), also known as Environmental Corridors, are defined based on close adherence to the SID flight track. Aircraft flying inside the NPRs are deemed to be flying on-track up to the end of the relevant NPR or on reaching the minimum required altitude (3,000ft for the South and Cross Runways and 4,000ft for the North Runway).

The NPRs at Dublin Airport are displayed in Appendix 4.

An aircraft may be instructed by Air Traffic Control onto a more direct heading to its destination, due to various reason including weather and congestion.

The NPR corridors are included in the Dublin Airport Noise and Flight Track Monitoring System (NFTMS), called ANOMS, which can monitor and report adherence to the NPR. Track Adherence refers to the jet aircraft departures that remain within the NPR until the required minimum height. Data on Track Adherence is reported in Dublin Airport's Quarterly Noise and Flight Track Monitoring Reports.

The NPRs do not apply to Category A/B aircraft (light aircraft, turboprop).

4.5.3 Continuous Climb Operations

Continuous Climb Operation (CCO) is a departure procedure where the aircraft climbs to cruising altitude avoiding segments of level flight. While this might require more thrust (and more engine noise), getting an aircraft higher sooner can have a noise benefit for receptors at ground level. There can also be a fuel burn benefit.

4.6 Engine Ground Running

Engine test runs are a normal part of operations at Dublin Airport. Engine test runs must be carried out after heavy maintenance on an aircraft to comply with international safety regulations. Strict conditions govern high-powered engine test runs that take place at the airport. While technological advances in aircraft engine design mean that modern aircraft have a lower noise impact than older aircraft, noise impacts still exist; therefore, there are strict controls for when engine test runs may be undertaken.

daa records engine ground running through its Airside Operations and Safety Officers (AOSOs) and the data is compiled in an operations log. In 2024, engine ground running was facilitated at Engine Test Site 1 and Runway 16/34 for high-power speed runs, while idle speed runs were completed on stand, as required. Operational logging of idle speed test runs is not ordinarily undertaken by the AOSOs.

Table 4.5 compares the 2020 through to 2024 total engine test runs with engine power 50% to 100%, and
Table 4.6 lists the engine test split by aircraft type. Table 4.7 presents the duration of the tests performed in 2024.

Table 4.5 - 2020 - 2024 Comparison – Total Engine Test Runs

Location	2020	2021	2022	2023	2024
Test Site 1 (high power)	184	94	98	99	59
Runway 16/34 (aircraft larger than code C/B757)	7	4	8	16	12
Test Site 4	N/A	2	0	1	0
Compass Swing (Rescue Helicopter)					1
Sierra					5
Total	**191**	**100**	**106**	**116**	**77**

Table 4.6 - Engine Test Run Split by Aircraft Type (incomplete data for Runway 16/34 data)

Aircraft Type	No. of Test Runs
737	29
738	
767	1
752	1
A319	
A320	20
A321	6
ATR72	16
787	
Other	4

*Table 4.7 - 2024 Engine Test Run Duration * No engine test runs were performed during night-time hours in 2024*

Duration of Engine Tests (mins)	No. of Test Runs
>0 – <=5	
> 5 – <=10	
10–15	2
15–20	4
20–25	4
25–30	
30–35	10
35–40	
40–45	8
45–50	7
50–55	
55–60	
60–65	33
65–70	
70–75	
75–80	1
80–85	
85–90	
90–95	5
95–120	1
120–200	2

The AIP requires that no engine test running is permitted before 07:00. There were 4 recorded pre-0700 engine runs recorded in 2024.

Date	Location	Start Time	Duration	Power
18.05.2024	Rwy 16/34	02:27	30	75%
01.07.2024	Test Site 1	03:28	30	Full
20.09.2024	Test Site 1	04:05	45	75%
13.06.2024	Rwy 16/34	05:15	40	Full

The testing of CAT C/D between 07:00-09:00 is also not permitted. There were 4 recorded CAT C (B737) tests in that period.

Date	Location	Start Time	Duration	Power
22.06.2024	Test Site 1	07:45	30	75%
20.06.2024	Test Site 1	07:50	30	75%
02.12.2024	Test Site 1	07:56	45	Full
29.12.2024	Test Site 1	08:40	40	Full

During the year there were 6 tests that ran after 20:00.

Date	Location	Start Time	Duration	Power
08.09.2024	Rwy 16/34	21:15	20	Full
06.09.2024	Sierra	22:00	30	Full
07.09.2024	Sierra	22:00	20	Full
14.08.2024	Test Site 1	22:05	15	Full
14.06.2024	Test Site 1	22:20	60	Full
04.07.2024	Test Site 1	22:29	90	50%

Night-time engine runs are invariably requested by the aircraft operators because after certain maintenance procedures an engine run is mandatory for safety reasons and no other aircraft is available for the first wave of departures. daa continue to liaise with the airlines to discourage and prevent these tests.

5.0 Noise Contours

Bickerdike Allen Partners (BAP) was retained by daa to produce the noise contours for 2024 based on the movements listed in Section 3.1 above. The data includes the metrics used by the EU Environmental Noise Directive, annual L_{den} and L_{night}, and the 92-day summer $L_{Aeq,16h}$ daytime (07-23h) and $L_{Aeq,8h}$ night-time (23-07h) (June 16 to September 15).

Tables 5.1 through 5.4 compare the contour areas for the years 2019 through 2024 of the annual L_{den} and L_{night}, and the summer $L_{Aeq,16h}$ and $L_{Aeq,8h}$ contour areas, respectively.

Table 5.1 - Annual Lden Contour Areas

Metric Value	Contour Area, km²					
dB L_{den}	2024	2023	2022	2021	2020	2019
≥ 45	680.3	630.2	476.3	290.6	237.2	745.7
≥ 50	266.2	250.4	171.3	111	90.3	218.7
≥ 55	110.3	105.0	79.0	45.8	36.5	88.3
≥ 60	40.8	39.8	29.1	16	12.5	35.6
≥ 65	13.5	13.0	9.3	5.6	4.4	12.2
≥ 70	4.2	4.1	3.0	2	1.6	4.4
≥ 75	1.5	1.5	1.0	0.8	0.7	1.7

Table 5.2 - Annual Lnight Contour Areas

Metric Value	Contour Area, km²					
dB L_{night}	2024	2023	2022	2021	2020	2019
≥ 40	344.2	312.0	228.5	172.3	138.7	328.4
≥ 45	135.7	129.7	98.8	75.3	59.8	122.2
≥ 50	57.6	55.6	39.4	28.3	21.7	52.3
≥ 55	19.1	18.6	13.1	9.8	7.5	18.6
≥ 60	6.1	6.0	4.2	3.5	2.7	6.4
≥ 65	2.0	2.0	1.4	1.3	1.0	2.5
≥ 70	0.7	0.7	0.5	0.6	0.4	1.0

Table 5.3 - Summer $L_{aeq,16h}$ Contour Areas

Metric Value	Contour Area, km²					
dB $L_{Aeq,16h}$	2024	2023	2022	2021	2020	2019
≥ 51	135.0	130.3	99.9	55.2	34.2	114.3
≥ 54	78.8	74.2	60.6	30.1	18.0	69.9
≥ 57	45.0	42.8	32.2	15.8	9.6	39.8
≥ 60	24.4	22.8	16.2	8.5	5.1	21.3
≥ 63	12.8	11.9	8.2	4.5	2.8	11.4
≥ 66	7.1	6.6	4.2	2.5	1.5	6.1
≥ 69	3.9	3.6	2.1	1.4	0.9	3.3

Table 5.4 - Summer $L_{aeq,8h}$ Contour Areas

Metric Value,	Contour Area, km²					
dB $L_{Aeq,8h}$	2024	2023	2022	2021	2020	2019
≥ 45	146.4	138.3	113.5	89.8	66.1	140.1
≥ 48	92.6	89.5	71.5	52.4	37.3	84.8
≥ 51	52.0	51.3	41.5	28.4	19.7	50.8
≥ 54	27.1	26.9	21.8	14.9	10.4	27.8
≥ 57	13.4	13.5	10.8	8	5.5	14.4
≥ 60	6.9	7.0	5.5	4.2	3.0	7.6
≥ 63	3.5	3.6	2.7	2.3	1.6	4.1

The individual 2024 noise contours, and comparisons with the annual noise contours since 2019, are presented in the figures below. Actual aircraft movements in 2024 and noise levels from the Dublin Airport NMTs were used to create the noise contours using a similar methodology to that used to produce the other annual contours.

Figure 5.1 - Comparison of Annual Lden Noise Contours 2019 to 2024

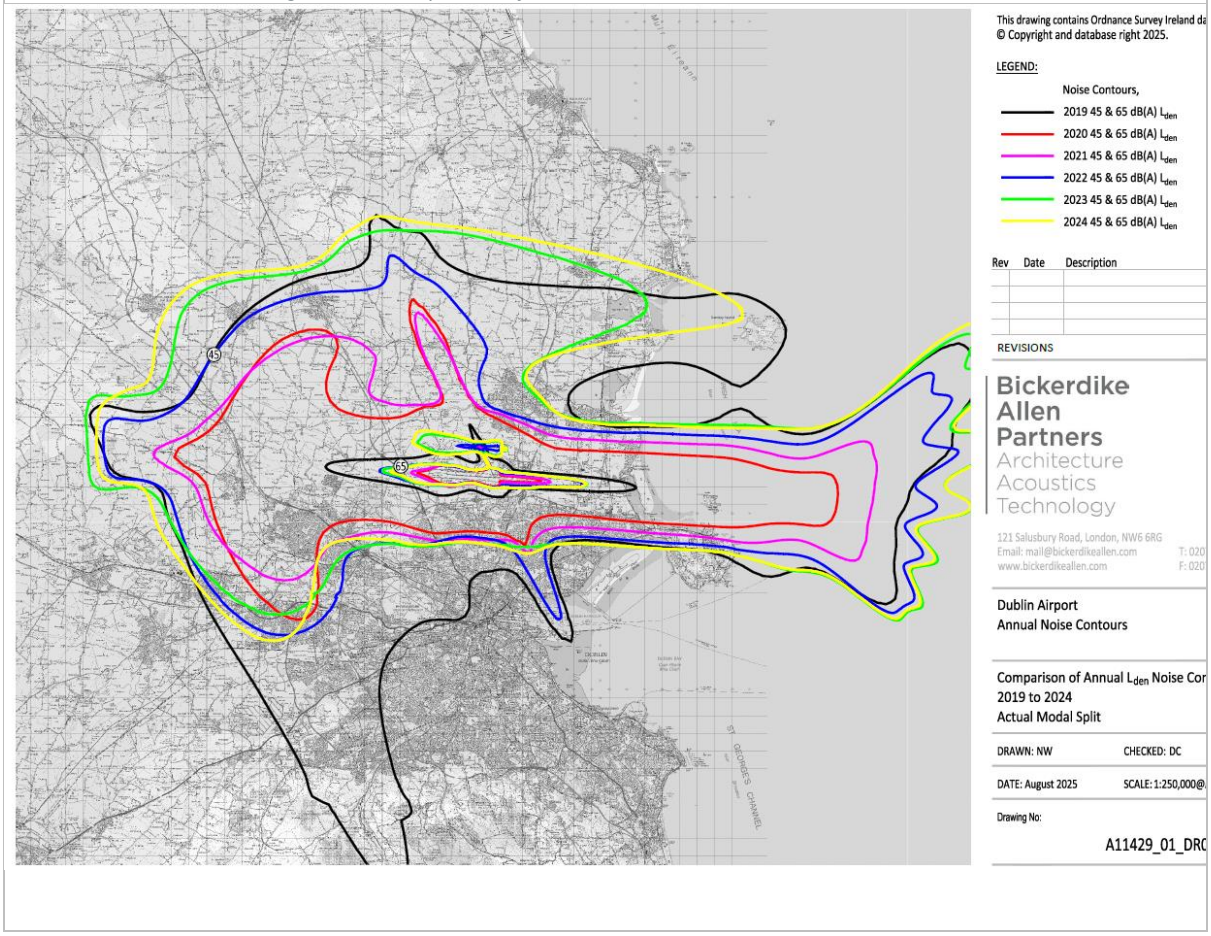


Figure 5.2 - Comparison of Annual Lnight Noise Contours 2019 to 2024

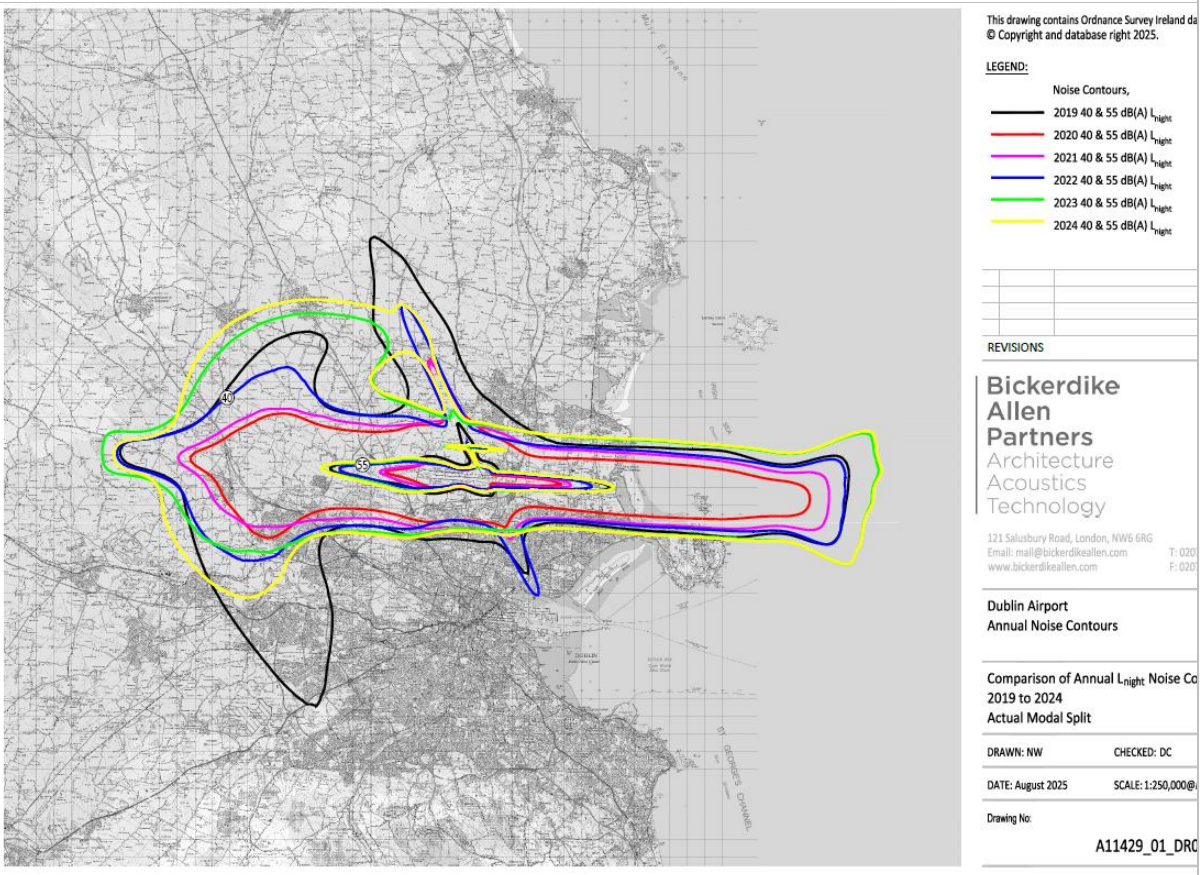


Figure 5.3 - 2024 Annual Lden contours (45 - 75+ dBA)

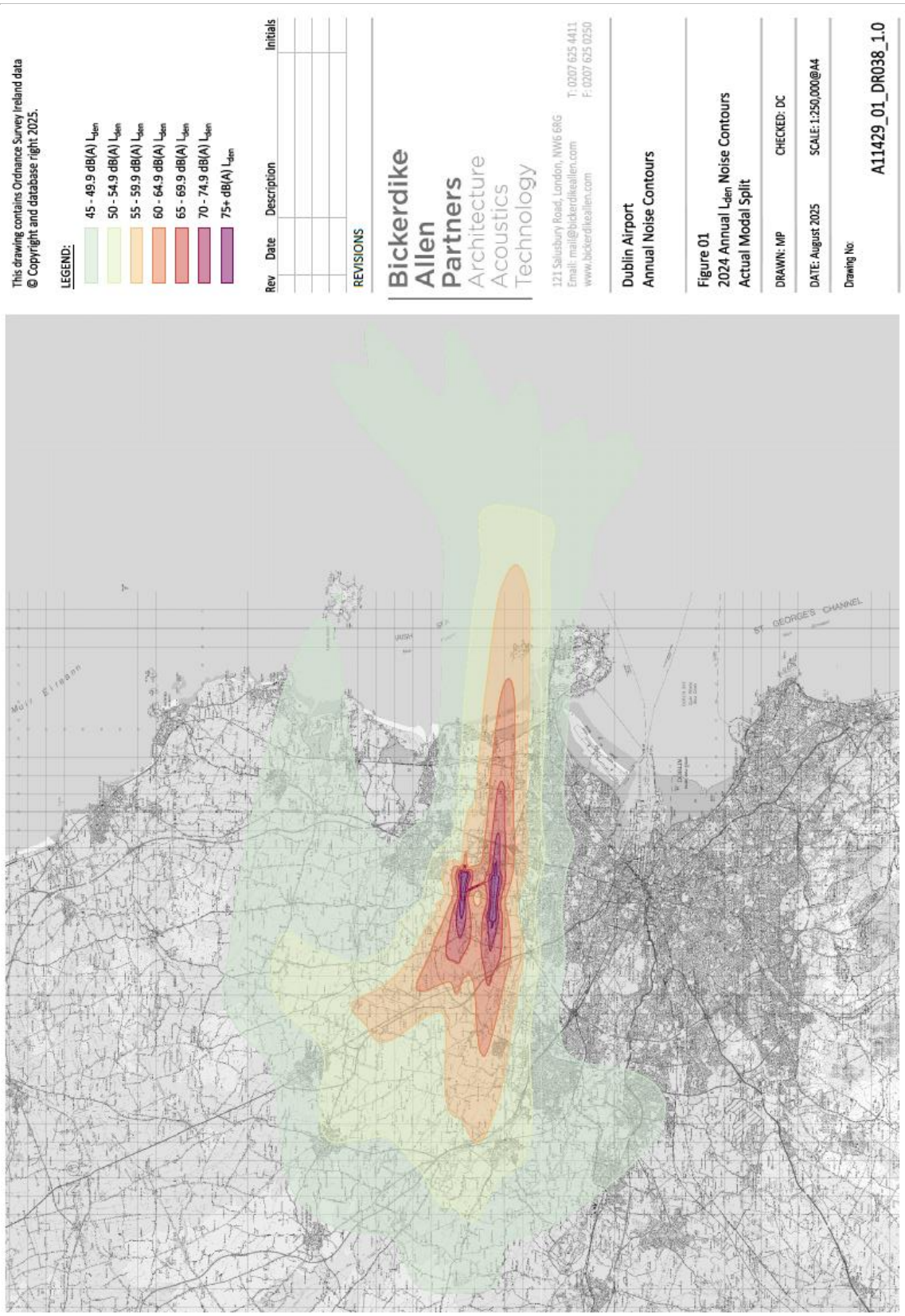


Figure 5.4 - 2024 Annual Lnight contours (40 - 70+ dBA)

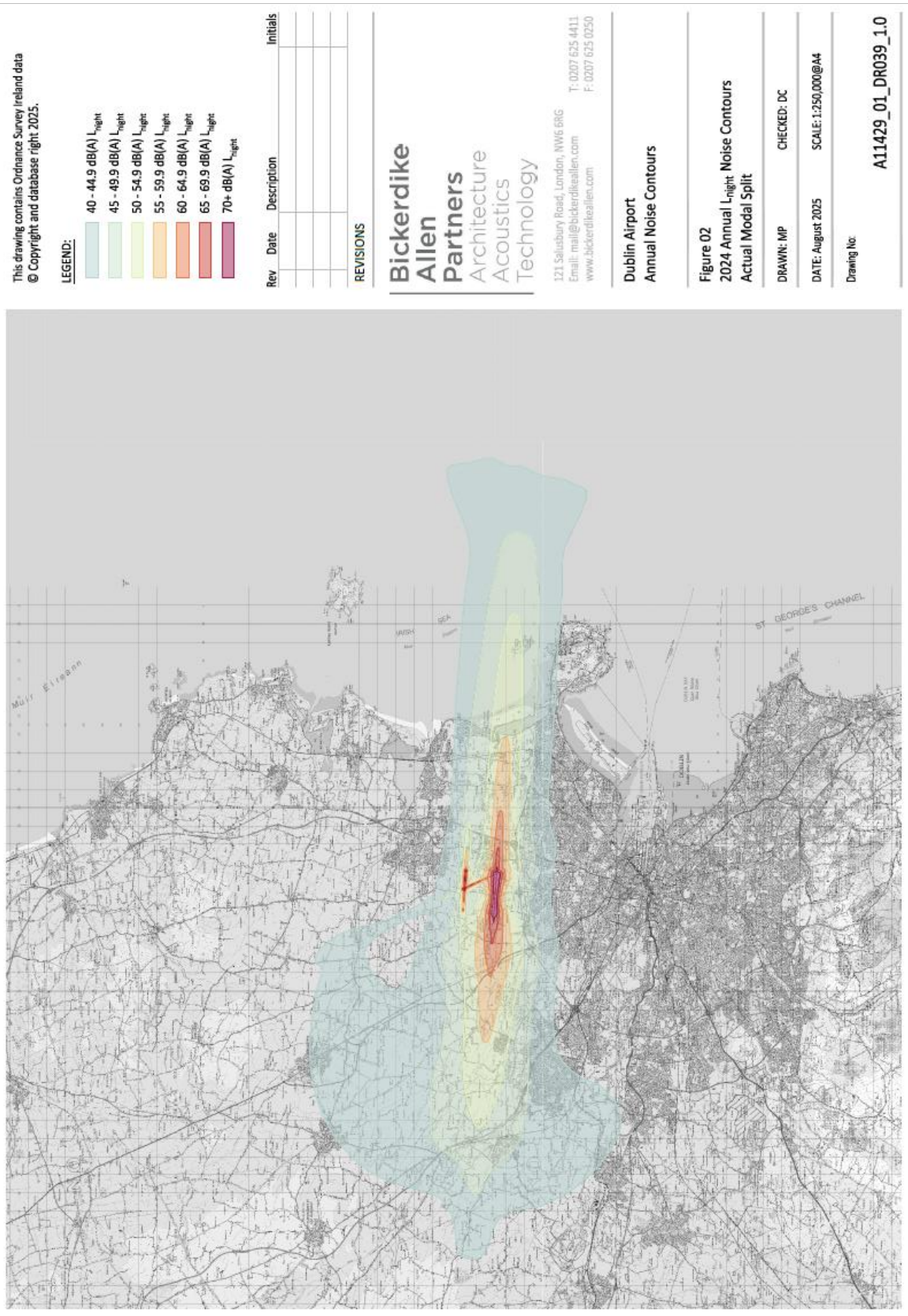


Figure 5.5 - 2024 Summer Day contours (Leq16h 51 - 69+ dBA)

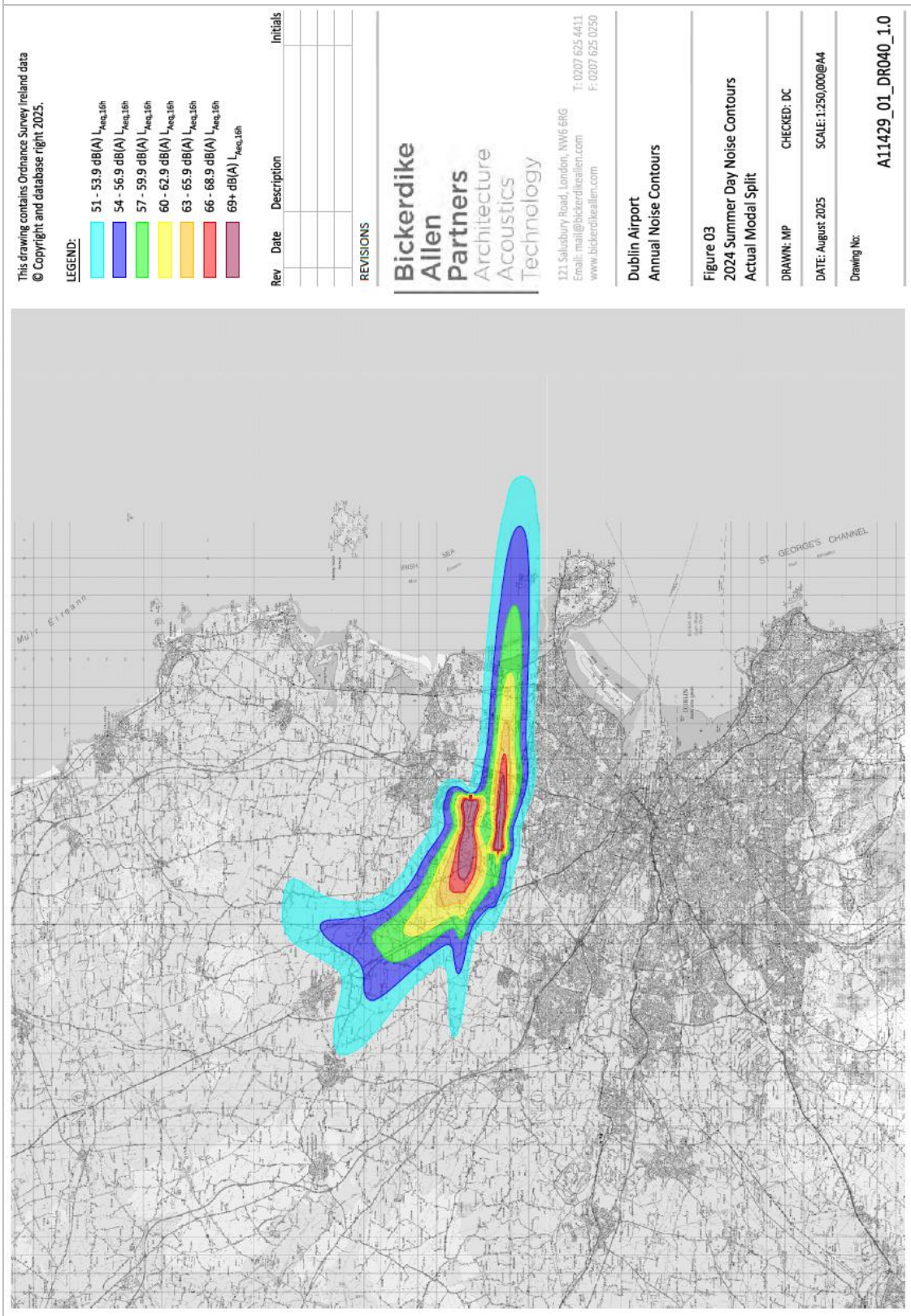
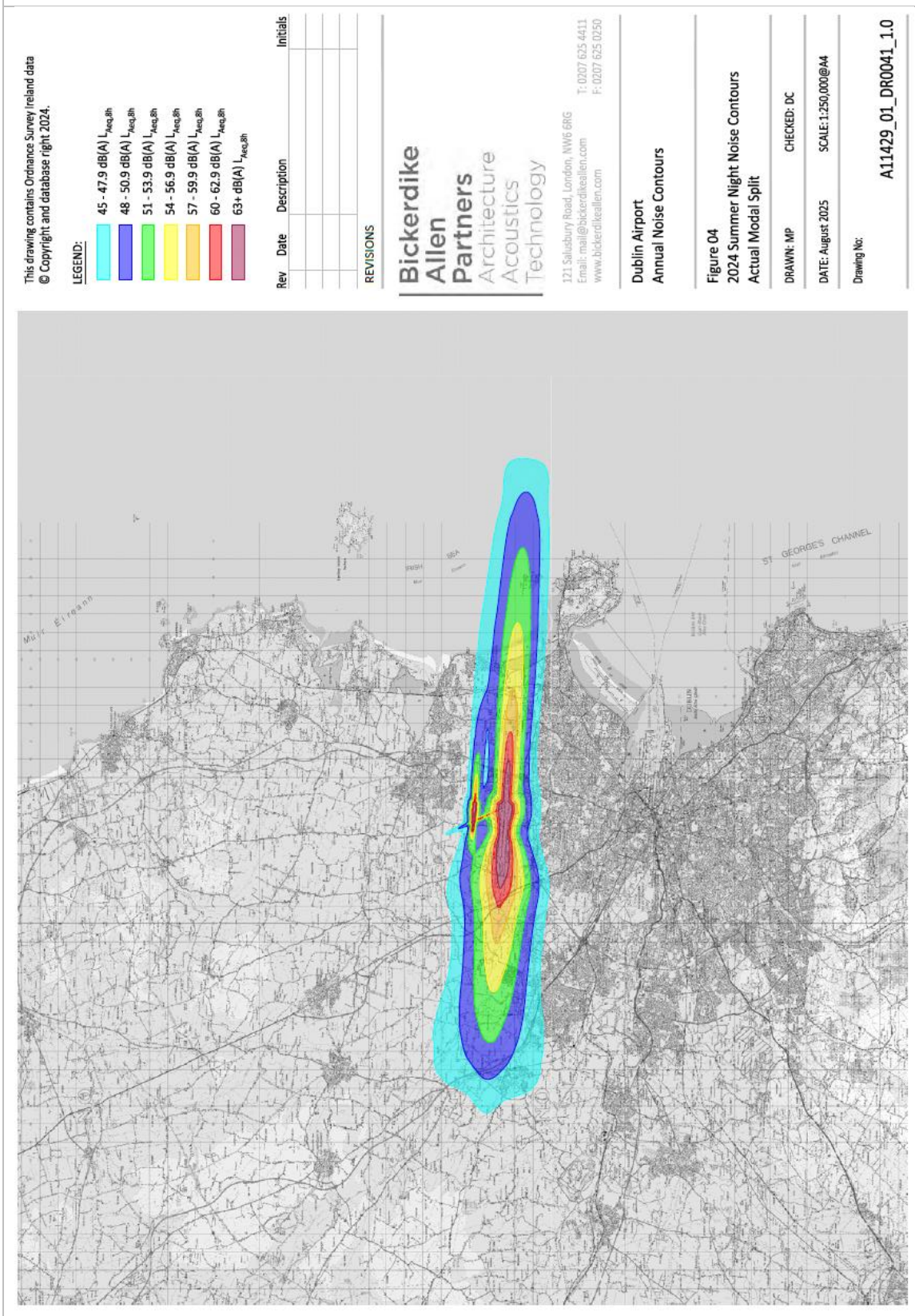


Figure 5.6 - 2024 Summer Night contours (Leq8h 45 - 63+ dBA)



6.0 Noise Insulation and Purchase Schemes

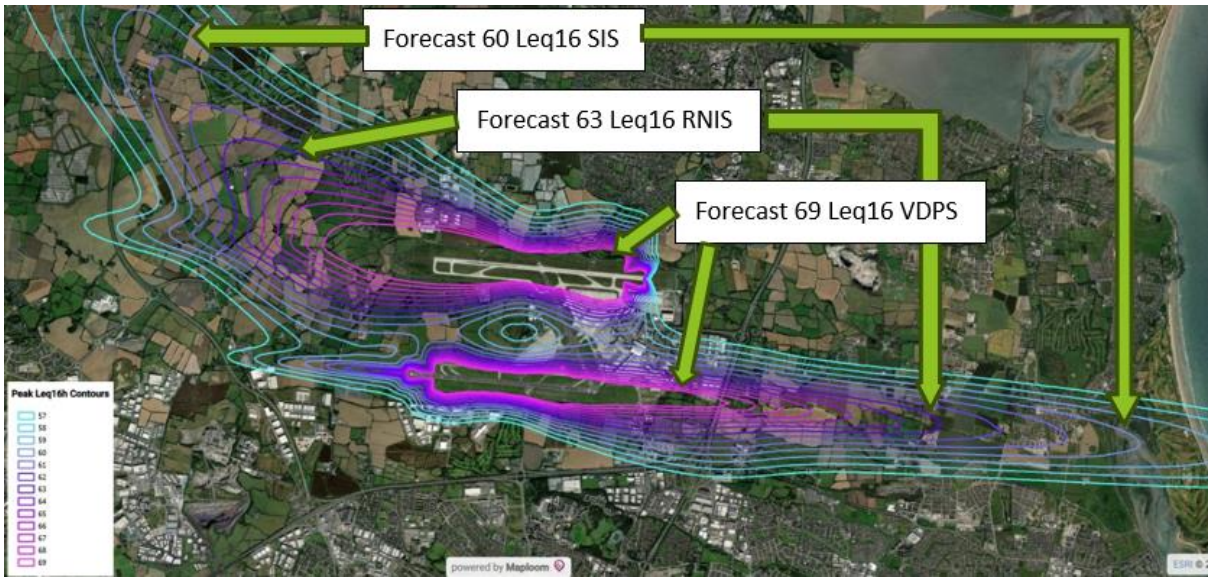
6.1 2024 Review and Forecast Contours

Three noise mitigation schemes were implemented at Dublin Airport as a result of North Runway's planning Conditions 6, 7 and 9, namely, the Schools Insulation Scheme (SIS), the Residential Noise Insulation Scheme (RNIS), and the Voluntary Dwelling Purchase Scheme (VDPS). Each was launched before the opening of the NR based on the then-forecast Leq16h 92-day summer day contours which were agreed with FCC in 2017 and are called the original Scheme Boundaries.

NR Conditions 6, 7, 9 and 10 require that the schemes were reviewed in August 2024 based on the actual 2023 Leq16h summer day contours. This is called the 2024 Review Contour. This review is contained in a report that was delivered to FCC, the planning authority.

In late 2024, FCC requested that the review include a Forecast Contour, which had already been developed and was added to the report for resubmission. Although not based on a specific year, the forecast contours represent the noise from operations based on the most optimistic outcomes of the then-current planning processes, including the North Runway Relevant Action and the Infrastructure Application, along with a medium rate of fleet modernisation forecast. These are called the 2024 Forecast Contour and are shown in Figure 6.1 below. The impact on each of the three schemes is discussed further below.

Figure 6.1: 2024 Forecast Contours - Summer Leq16h



6.2 Residential Noise Insulation Scheme (RNIS) and HSIP

The RNIS Scheme Boundary, based on the 63dBA Leq16h contour agreed in 2017, incorporated 191 eligible homes, including the Home Sound Insulation Programme (HSIP) which pre-dated RNIS and was voluntarily introduced by daa to afford the same insulation measures to those houses that were then impacted by South Runway operations but would not be eligible for RNIS because noise levels would reduce at their households when NR became operational. Progress on the completion of noise insulation measures is summarised in the table below.

As required by the NRPP Condition 7, the RNIS was reviewed in August 2024 based on the actual 2023 63 dBA Leq16h summer day contour (the 2024 Review Contour). This contour brought a total of 10 homes into the RNIS based on the 2024 Review.

Based on the Forecast Contour discussed above, an additional 23 households were voluntarily brought into the Scheme by daa and were offered the full RNIS during 2024 and 2025. The 2024 Forecast Contour and information on the additional eligible homes were added to the report for resubmission.

Table 6.1 – RNIS

Phase/ Year	Eligible with Offers Made	Not Accepted	Accepted	Completed
RNIS/HSIP – Phases 1 and 2 up to end 2022	191	45	146	146 / 146
Phase 3: 2023 – August 2024 with 2023 Leq16h Summer Day Contour (2024 Review Contour)	10 new + previous 45	15	40	40 / 40
Phase 3A: August 2024 – April 2025 incorporating the Forecast Contour.	23 New	4	19	8 / 19
Total	**224**			**194**

6.3 Schools Insulation Scheme (SIS)

Two schools and two educational facilities were located in the original School Insulation Scheme Boundary based on the 60dBA Leq16h contour agreed in 2017. They were surveyed and offered acoustic treatment and ventilation, if required. Two schools (St. Margaret's National School and St. Nicholas of Myra National School) and one educational facility (Little Moo Moos Playschool) accepted their offers.

There were two other schools named in NRPP Condition 6 – Portmarnock Community School and Mary Queen of Ireland National School, Rivermeade. Noise assessments at both of these demonstrated that they were located far enough outside the 60dBA Leq16h noise contour that no acoustic treatment or upgrade of the building envelopes would be required to achieve the scheme design criteria for internal noise levels of "*45 dB LAeq 8 hours (a typical school day)*."

As required by NR Planning Permission Condition 10, the SIS was reviewed in August 2024 based on the actual 2023 60 dBA Leq16h summer day contour (the 2024 Review contour). No additional schools were identified as eligible for the SIS. The NZone education facility that did not accept the original SIS

offer was re-offered an appropriate insulation package as part of the 2024 review. This time the offer was accepted, and ventilation units were being installed in certain rooms during the summer of 2025.

The 60 dBA Leq16h contour in the 2024 Forecast brought Kilcoskan National School and Tippy Toes Preschool into the SIS. An offer to participate in the scheme was made and accepted by Kilcoskan National School, and works were completed in the summer of 2025. Engagement with Tippy Toes Preschool will take place in 2025.

In summary, by mid-August 2025, the following schools have been treated.

- St. Margaret's National School
- Saint Nicolas of Myra National School
- Little Moo Moos Playschool
- NZone (partially complete as per the school's direction)
- Kilcoskan National School

6.4 Voluntary Dwelling Purchase Scheme (VDPS)

The original Condition 9 Voluntary Dwelling Purchase Scheme (VDPS) Boundary was based on the 69dBA Leq16h contour agreed in 2017 and included five eligible properties. There were also a further 33 properties with historical correspondence regarding voluntary purchase that were also admitted to the VDPS with eligibility from the date of the scheme's launch to three years after the opening of North Runway.

At the time of launch in 2017, invitations to participate in the scheme were sent to the 38 eligible property owners. All eligible houses were also offered full insulation under the RNIS.

daa voluntarily extended the eligibility term of the scheme by one year to August 2026 for all homes that were located in the 2024 Review 69 dBA Leq16h Contour and those with historic correspondence referenced above. Houses located in the actual 69 dBA Leq16h contour are not subject to this cut off and VDPS offers will apply following biennial reviews.

The VDPS was reviewed in August 2024 based on the actual 2023 69 dBA Leq16h summer day contour (the 2024 Review). Three additional homes were identified as now being eligible, bringing the total to 41 and, as of August 2024, offers had been extended to the homeowners.

The Forecast Contour in the 2024 Review brought in six homes that had not been included in any previous VDPS contour. However, all six of these houses were among the 33 with historic offers mentioned above and so were already included in the VDPS.

As of August 2025, the status is as follows (which includes three additional houses that became eligible as a result of the 2024 review):

- 9 purchases have been completed
- 6 are in conveyancing
- 1 is at offer stage
- 2 are at valuation stage
- 7 offers have expired without take-up
- 16 households have not responded

Table 6.2: VDPS Summary

Phase/Year	Eligible Homes with Offers Made	Purchase Process
Historic offers of Voluntary Purchase	33	
VDPS Original Scheme Boundary (2017)	5	
VDPS 2024 Review (based on Actual 2023 Contour)	3	
VDPS 2024 Forecast Contour	6 (included in 33 above)	
Purchases in Process (as at August 2025)		**9**
Purchases Complete (as at August 2025)		**9**

7.0 Noise and Flight Track Monitoring

7.1 Noise Monitoring Terminals

Noise and Flight Track Monitoring (NFTM), including Noise Monitoring Terminals (NMT) and a monitoring system incorporating radar and flight plan data and quarterly and annual reporting, are required by NRPP Condition 10. The NFTM System is called ANOMS (Aircraft Noise Monitoring System) and is provided by Envirosuite, an internationally recognised company in this field.

The locations of permanent NMT units have been directed by ANCA over the past several years. Details about the system were given in the Compliance Report provided to FCC in 2024. This included step-by-step information on how the NMT and NFTM data is used to support the annual noise modelling that is used to calculate the Annual Contours and to re-evaluate the noise mitigation measures, especially the noise insulation and purchase schemes, which are also required by Condition 10.

By the end of 2024, there were 27 Noise Monitoring Terminals (NMT) in place, 25 permanent and two portable units. Figure Eight permanent NMTs were installed in 2024. The new locations were Ardgillan, Portmarnock, Ballyboughal, Ongar, Clondalkin, Lucan, Bray and Ratoath. Figure 7.1 below shows the locations of 20 of the 25 permanent NMT nearest the airport. daa also decided in 2024 to voluntarily provide an additional five temporary monitors, the locations and durations of which would be decided by the Community Liaison Group (2), the Dublin Airport Environmental Working Group (2), and daa (1). As of August 2025, all seven temporary monitors have been deployed.

Starting in 2024, a new format for the Quarterly Noise and Flight Track Monitoring Report was developed with more detailed data on the measured noise levels including monthly and quarterly averaged aircraft noise levels, Lden, Lnight and Leq16h, and with single event data using the "Number Above" metric for both Lmax and SEL. The Quarterly Reports, as well as the Monthly Operations Reports are available on Dublin Airport's website at www.dublinairport.com (Airport Plans & Reports | Dublin Airport).

7.2 Measured Noise Levels

7.2.1 Averaged Annual Noise Metrics – Lden and Lnight

This section reports the annual Lden and Lnight noise levels for 2024 as measured at each of the 25 permanent NMT in Table 7.1. These data points are compared to the calculated noise level obtained from the modelled noise contours using a point calculation at the location of each NMT.

Figures 7.1 and 7.2 show the 2024 Lden and Lnight contours (as presented in Section 5 above) with the locations of 20 of the 25 permanent NMT.

Single event Lmax data is presented in the subsequent sub-section.

Figure 7.1 - 2024 Lden Annual Noise Contours with approximate Permanent NMT locations

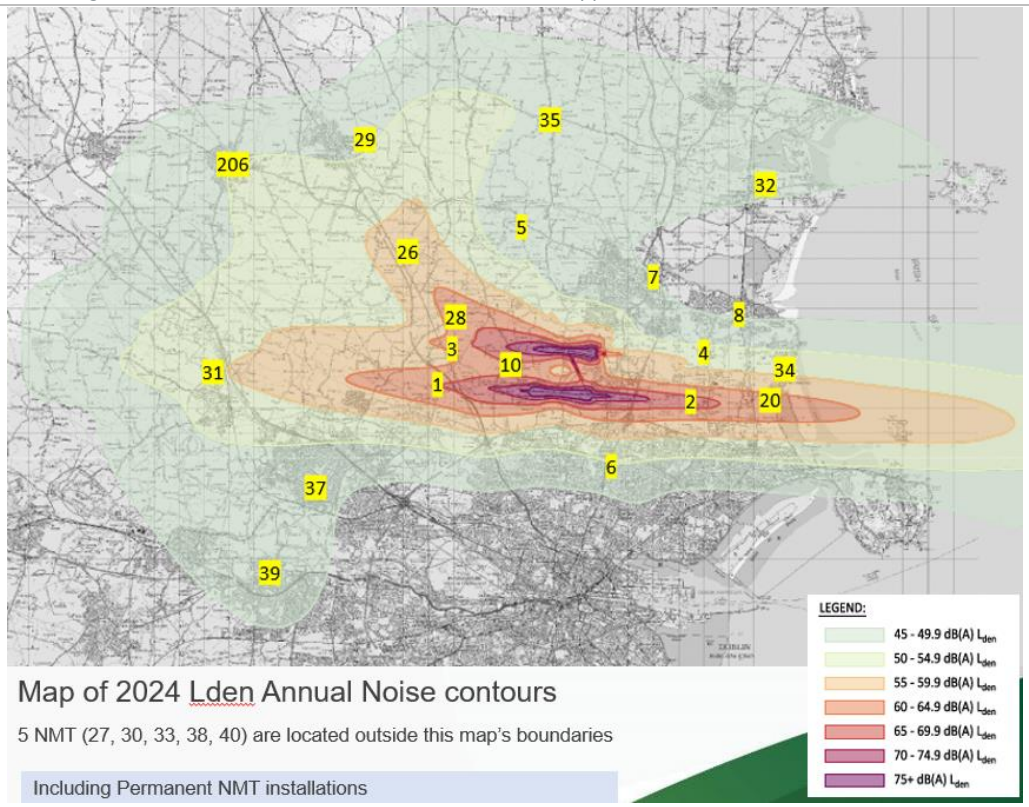


Figure 7.2 - 2024 Lnight Annual Noise Contours

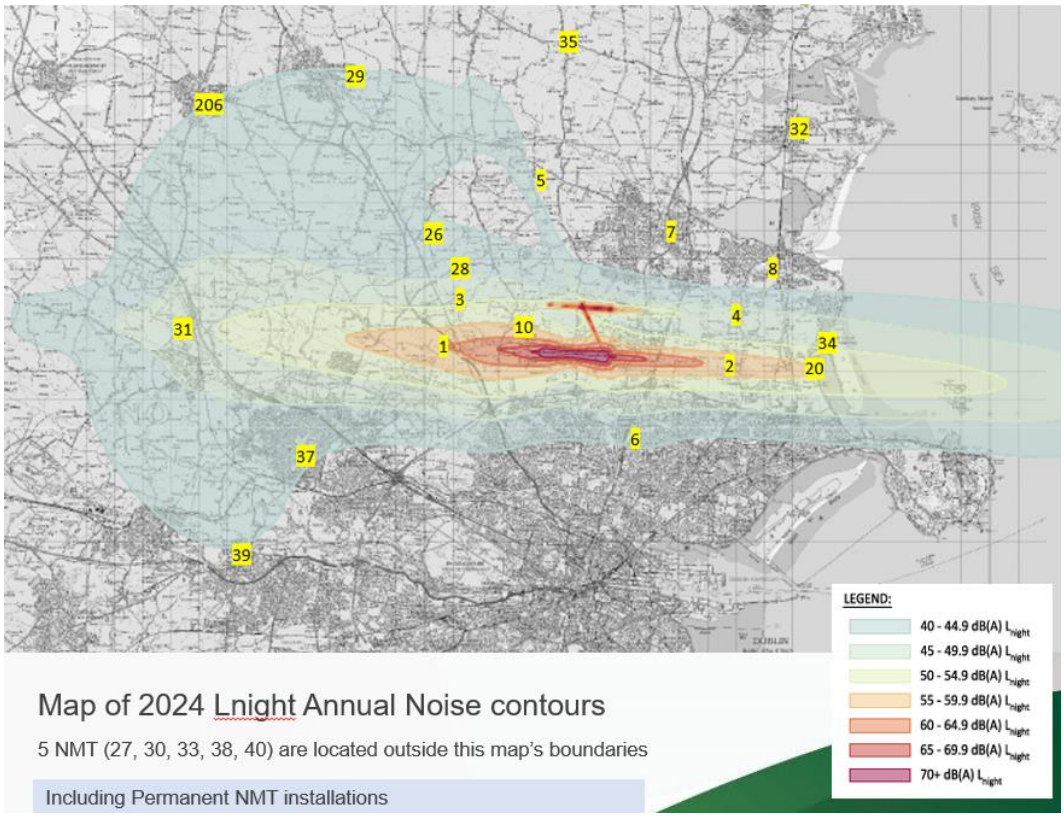


Table 7.1 – Time-Averaged Noise Levels

#	NMT Name	Measured Lden (dBA) from 2024 NMT	Modelled Lden (dBA) from 2024 Contours	Measured Lnight (dBA) from 2024 NMT	Modelled Lnight (dBA) from 2024 Contours
1	Bay Lane	63.4	64.0	57.8	58.4
2	St Doolagh's	64.3	64.8	56.5	57.0
3	Bishopswood	58.4	61.1	45.1	49.4
4	Feltrim	52.4	54.1	45.3	47.3
5	Balcultry	44.1	49.2	37.2	40.5
6	St David's	42.8	43.3	34.8	36.3
7	Swords	38.7	45.7	26.8	36.9
8	Malahide	38.9	46.3	32.0	38.5
10	St. Margaret's NS	63.4	63.7	56.1	55.7
20	Coast Road OP	62.7	62.7	54.7	55.0
26	Kilcoskan NS	60.4	59.5	36.0	40.4
27	Summerhill	33.8	35.8	23.3	28.1
28	Newpark	61.3	61.8	36.7	44.9
29	Ashbourne RC	39.7	50.0	23.4	40.1
30	Roundwood GAA	17.7	37.7	0.0	30.1
31	Dunboyne EMR	50.4	53.1	44.9	47.2
32	Donabate	32.7	45.1	21.6	37.2
33	Ardgillan	30.1	33.3	20.9	23.4
34	Portmarnock	54.8	58.2	46.9	50.3
35	Ballyboughal	38.3	49.0	24.1	36.9
37	Ongar	40.6 (Q4)	48.3	34.8 (Q4)	42.3
38	Clondalkin	37.8 (Q4)	43.4	24.5 (Q4)	36.8
39	Lucan	33.8 (Q4)	46.0	25.3 (Q4)	39.7
40	Bray	33.4 (Q4)	33.6	16.4 (Q4)	24.9
206	Ratoath	47.0	50.5	27.1	40.5

As described in greater detail in the Compliance Report to FCC, there are three key points to note when comparing the Measured and Modelled (Calculated) aircraft noise levels at each NMT:.

- Measured noise data is screened to include only aircraft noise, removing noise from other sources such as non-Dublin Airport air traffic, road vehicles, weather, voices, and animal noise. This is achieved by the ANOMS system that matches measured noise events with the time and location of aircraft flight tracks from the radar data.
- The reported Measured Aircraft Noise data includes only the aircraft noise events that exceeded the threshold setting and whose recorded flight track was within a certain distance (a few kilometres) of the NMT. In contrast, modelled noise levels include all aircraft events, even the low-level contributions from more distant events, although due to the logarithmic range of noise events, distant events only have a very small impact on the reported noise level. Close to the airport, this makes only a minor difference, but further from the airport, there are greater differences between the Measured and Modelled aircraft noise levels.
- Measured noise data only covers the limited number of locations – the 25 points where the NMT are installed. Modelled noise levels are calculated in a grid covering the entire study area and the noise level at any point in the area can be interpolated from these grid data.

Given the above, it should be expected that the Measured NMT noise levels should be equal to or less than the Modelled (Calculated) noise levels at each NMT. If the Measured levels were more than 1 or 2 decibels above the Modelled, this would raise concerns about the accuracy of the modelling. It is better that the Modelled levels in the contours are slightly conservative (leaning towards over-estimating "actual" levels) than the Measured. It is the Modelled contours that are used for conducting, for example, the impact assessments (such as assessing compliance with the Noise Abatement Objective) and for reviewing eligibility for the noise insulation and purchase schemes.

More data and discussion are also provided in the Quarterly Noise and Flight Track Monitoring Reports on the daa website, including comparisons of measured aircraft noise and total noise incident at each NMT. The Quarterly Reports include data from the portable NMTs installed at community-nominated locations, usually for several months at a time.

In the table above, in virtually all cases, the Measured NMT aircraft noise levels are equal to or slightly less than the Modelled (Contour) noise levels.

7.2.2 Single Event Data – Lmax

The noise data from individual aircraft noise events based on the Lmax metric are presented for each noise monitor in 2024. The table uses the Number Above metric, where N60, for example, is the average number of events per day with Lmax 60 dBA or greater. More detailed data, including SEL (Sound Exposure Level) data and percentage analysis, are provided in the Quarterly Reports available on Dublin Airport's website.

Table 7.2 – Daily Average Number of Aircraft Noise Events Above Lmax (dBA)

	NMT Name	Number Above Daily Average Number of Aircraft Noise Events Above Lmax (dBA) in 2024						Daily Average Number of Aircraft Noise Events in 2024	# NMT Days in Year
		N60	N65	N70	N75	N80	N85		
1	Bay Lane	50.5	50.5	49.3	36.9	10.5	0.2	50.5	366
2	St Doolagh's	313.9	313.8	295.2	145.9	4.0	0.2	313.9	366
3	Bishopswood	178.5	178.5	138.9	49.5	2.2	0.2	178.5	366
4	Feltrim	40.7	33.5	11.2	4.0	0.7	0.1	40.7	366
5	Balcultry	1.1	1.0	0.7	0.5	0.3	0.0	1.1	366
6	St David's	2.1	2.1	1.3	0.4	0.1	0.0	2.1	366
7	Swords	0.9	0.9	0.6	0.3	0.1	0.0	0.9	366
8	Malahide	1.8	0.8	0.2	0.1	0.0	0.0	3.4	366
10	St Margaret's NS	190.3	185.3	179.4	101.3	9.8	0.1	190.7	366
20	Coast Rd (OP)	285.2	285.2	259.6	35.2	1.5	0.1	285.2	311
26	Kilcoskan NS	191.4	188.1	175.5	96.3	8.9	0.1	191.4	366
27	Summerhill	0.7	0.5	0.1	0.0	0.0	0.0	0.7	366
28	Newpark	194.8	194.1	169.5	122.2	16.3	0.8	194.8	366
29	Ashbourne	9.2	8.2	2.0	0.2	0.0	0.0	9.2	366
30	Roundwood	0.0	0.0	0.0	0.0	0.0	0.0	0.0	366
31	Dunboyne	21.2	17.3	2.9	0.1	0.0	0.0	21.2	366
32	Donabate	0.3	0.3	0.2	0.1	0.0	0.0	0.3	366
33	Ardgillan	0.2	0.2	0.1	0.0	0.0	0.0	0.2	366
34	Portmarnock	82.0	73.2	43.2	4.1	0.2	0.0	71.3	275
35	Ballyboughal	2.5	2.5	2.5	0.4	0.0	0.0	2.2	275
37	Ongar	2.2	1.4	0.1	0.0	0.0	0.0	2.2	92
38	Clondalkin	0.1	0.0	0.0	0.0	0.0	0.0	0.2	92
39	Lucan	0.5	0.1	0.0	0.0	0.0	0.0	0.5	92
40	Bray	0.1	0.0	0.0	0.0	0.0	0.0	0.1	92
206	Ratoath	49.1	36.0	5.2	0.9	0.1	0.0	45.4	366

7.3 Continuous Descent Operations (CDO)

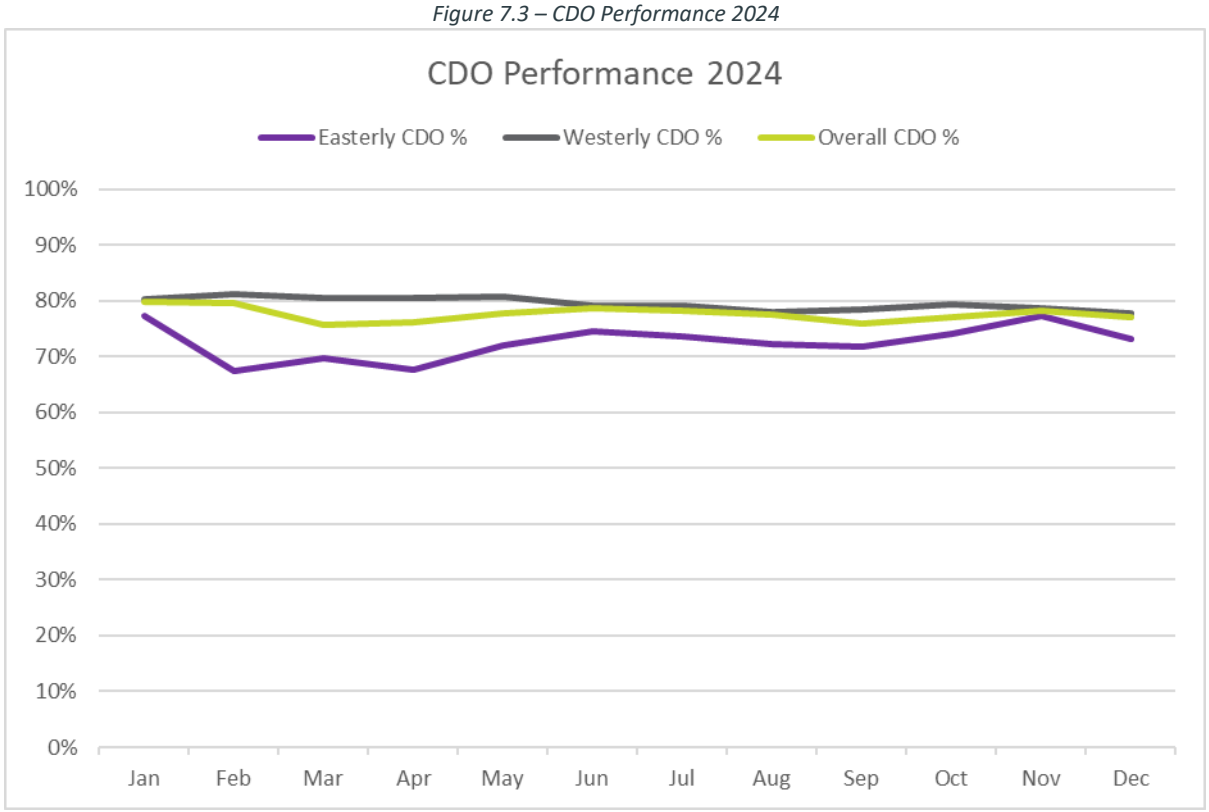
In a Continuous Descent Approach (CDO), an aircraft stays higher for longer and descends at a continuous rate to the runway threshold, therefore reducing periods of prolonged level flight at lower altitudes. Level flight requires more engine power than a steady descent with engines on idle. With CDO less fuel is burnt, less emissions are produced, but, most importantly, noise is reduced by avoiding the use of engine thrust required for level flight.

In Dublin, the ANOMS flight track monitoring system detects and measures descent profile and CDO from 5,500ft (above ground level) or below. An approach flight track descending to land which includes any section of level flight greater than 2.5 nautical miles in length, following descent from an altitude of 5,500ft, is considered as non-CDO. This is local shadow rule used on ANOMS; statutory monitoring and reporting of CDO is under remit of EUROCONTROL.

In 2024, the overall CDO achievement was 78%. On average, the five largest operators at Dublin Airport, based on air transport movements, achieved 83% CDO. One major Irish operator achieved a significantly higher performance of 96%, outperforming other operators.

The chart compares the level of CDO compliance by operating direction. Westerly CDO with approaches over the Irish Sea, consistently outperforms Easterly CDO.

Figure 7.3 – CDO Performance 2024



7.4 Flight Track Keeping

The NMTs are managed by software called ANOMS (Advance Noise Monitoring System) which includes data from the NMT and flight track radar and operational data from all movements into or out of Dublin Airport. The flight track data is required to ensure that the NMT data is screened to separate aircraft noise from non-aircraft noise data collected by the microphones. The track keeping can also assess certain operational parameters such as CDO discussed in the previous section.

ANOMS also assesses Flight Track performance against the Noise Preferential Routes (NPR), also known as Environmental Corridors. Appendix 12.4 contains explanations of the Standard Instrument Departures (SID) and their associated Noise Preferential Routes (NPR). Examples of departure tracks that deviate from the NPR are also presented for both the NR and the SR.

Flight track monitoring is included in the monthly Noise and Flight Track Monitoring Reports, available on the Dublin Airport website. Track Adherence refers to jet aircraft departures that remain within the NPR up to the minimum required heights.

The quarterly 2024 results are summarised in the table below. NR easterly (Runway 10L) and Cross Runway are used too seldom to report meaningful data.

Table 7.3 – Flight Track Keeping

Departure Runway	Q1	Q2	Q3	Q4	2024
10R (South Runway)	99.6%	99.9%	99.9%	99.9%	99.8%
28L (South Runway)	99.9%	99.3%	99.5%	99.9%	99.6%
28R (North Runway)	92.3%	94.1%	92.9%	91.5%	92.8%

Further data on NPR Track Adherence is provided in Appendix 9 including:

- NPR Track Deviations by Month and by Operational Runway
- NPR Track Deviations by Hour of the day, by Aircraft Type (Top 20) and by Airline (Top 20)
- Category C/D departure data on aircraft type, number of movements and number of track deviations

8.0 Stakeholder and Community Engagement

8.1 Stakeholder Engagement

The Dublin Airport Operations Planning Group (DAOPG) is a monthly forum that includes daa, AirNav Ireland and airline representatives. The topics covered by the group include operational issues such as changes and developments in airspace, airport and runway operations, procedures, infrastructure, and noise. The DAOPG reviews and provides feedback on noise related initiatives such as reporting, flight track monitoring, noise monitoring, noise abatement procedures and operational options.

8.2 Community Engagement Forums

Dublin Airport is committed to being a good and responsible neighbour to all of our communities. We actively listen and engage on matters of importance to our local residents, and have a track record spanning decades of meaningful collaboration through cooperation and partnership.

Like any large international airport, aviation noise is an issue of concern for local communities. In addition to the noise abatement measures that are in place to minimise aviation noise at source, we also take a practical approach to mitigating the impact of noise at community level through our insulation and purchase schemes described above.

daa has established multiple engagement channels and forums that have been and continue to be very successfully employed to communicate and engage with our neighbours in the most meaningful and effective manner.

8.2.1 Community Liaison Group

The independently chaired Community Liaison Group (CLG) was established in 2016 pursuant to An Bord Pleanála's NR Condition 28. This condition specifies that a CLG be established, involving representation from the St. Margaret's Community, Fingal County Council and daa.

The group meets bimonthly to discuss matters of interest to the local community, including current activities and plans for the area, airport operations, and environmental issues. When required or requested, experts attend the meetings to provide an opportunity for detailed discussion on a topic that is of particular importance to the group.

This forum facilitates information exchange between members and provides a solid platform for all representatives to communicate in an open and transparent manner. The CLG met six times in 2024, on 13 February (rescheduled), 19 March, 14 May, 16 July, 24 September (rescheduled) and 19 November. There was also a joint meeting of the CLG/DAEWG with daa's Chief Executive on 27 February 2024.

https://www.dublinairport.com/corporate/airport-development/north-runway/engagement/community-liaison-group

8.2.2 Dublin Airport Environmental Working Group

The independently chaired Dublin Airport Environmental Working Group (DAEWG) was established in 2005 and was then known as the "Dublin Airport Stakeholder Forum". Following various iterations and a renaming in 2015, this volunteer-based group comprises members from community groups in Saint Margaret's, The Ward, Santry, Swords, Malahide, and Portmarnock, and daa, Fingal County Council and AirNav Ireland.

The group meets on a quarterly basis to discuss environmental issues and is provided with updates from daa on noise, air quality, water quality, and current/planned projects. When required or requested, experts attend the meetings to provide an opportunity for detailed discussion on a topic of particular importance to the group.

The DAEWG met four times in 2024 on 21 February, 26 June, 9 October and 4 December.

https://www.dublinairport.com/corporate/environmental-social-governance/community-engagement/dublin-airport-environmental-working-group

8.2.3 Other Engagement Channels

In 2024, daa's Community Engagement Team had over 120 face-to-face meetings with local residents and community groups. In addition, daa maintained a fully manned freephone and several email channels; updated websites to provide accurate and current information; issued advance notifications to community groups, residents and elected representatives regarding runway essential maintenance and operations; provided regular updates to over 1,000 subscribers to our update service; issued information via press releases and social media; and kept local elected representatives apprised of ongoing issues.

The publication of the Dublin Airport Newsletter was restarted in summer 2024 following feedback from the Community. It is now issued biannually, with summer and winter editions distributed to 50,000 homes in North County Dublin and East Meath.

8.3 Complaints Management

8.3.1 Management Procedures

Residents with concerns or comments on aircraft activity have four options to contact Dublin Airport.

- on WebTrak[1],
- online at Noise Complaints Procedure| Dublin Airport[2], or Dublin Airport Noise Complaint Form[3],
- by phone at 1800 200 034,
- by letter addressed to Noise & Flight Track Monitoring Team, daa plc, Three, The Green, Dublin Airport Central, Dublin Airport, Swords, Co Dublin, K67 X4X5.

[1] Link: WebTrak

[2] Link: https://www.dublinairport.com/corporate/corporate-social-responsibility/noise/complaints-procedure

[3] Link: https://viewpoint-app.emsbk.com/dub10/login

Dublin Airport has an automated telephone answering service that has allowed integration of the service into our digital complaint management system, ANOMS.

In addition, a new online registration service for complainants is now available and further upgrades were launched throughout 2024 which enables the general public to submit multiple comments and complaints as well as streamlining the process.

Our response system is designed to manage enquiries that are linked to specific aircraft movement events. Our near-live stream noise monitoring and flight tracking website, WebTrak, displays aircraft arriving, departing and overflying Dublin Airport. The system supports the provision of details including the flight number and height of an aircraft and facilitates linking a complaint to an aircraft flight. Our complaint form and the voice recognition telephone answering service can also link each comment or complaint to a specific aircraft movement event.

This means that we can utilise the specific flight information and its flight track for an investigation and provide the complainant a detailed response to their enquiry.

Our goal is to respond to all enquiries and comments on a monthly basis. We can only respond if the lodged submission has:

- asked a relevant question, or
- raised a noise issue which we can reasonably respond to, and
- provided contact information, including for telephone messages.

We cannot respond to comments on aircraft not operating in or out of Dublin Airport.

The submission of more than 15 enquiries from an individual, household or Eircode within a month may not receive individual correspondence for each submission. A single correspondence covering the totality of submissions made in one month will normally be provided.

In cases where we cannot provide new information that may enhance understanding on a repeated query, we will inform the complainant and may pause communication until new and useful informative updates are available, though we will continue to log multiple iterations of the same query.

If we believe that we have provided all of the information that we can with respect to a line of enquiry and the individual remains unsatisfied with our response, an invitation may be extended to visit the airport to engage with relevant teams to gain a deeper insight into specific concerns.

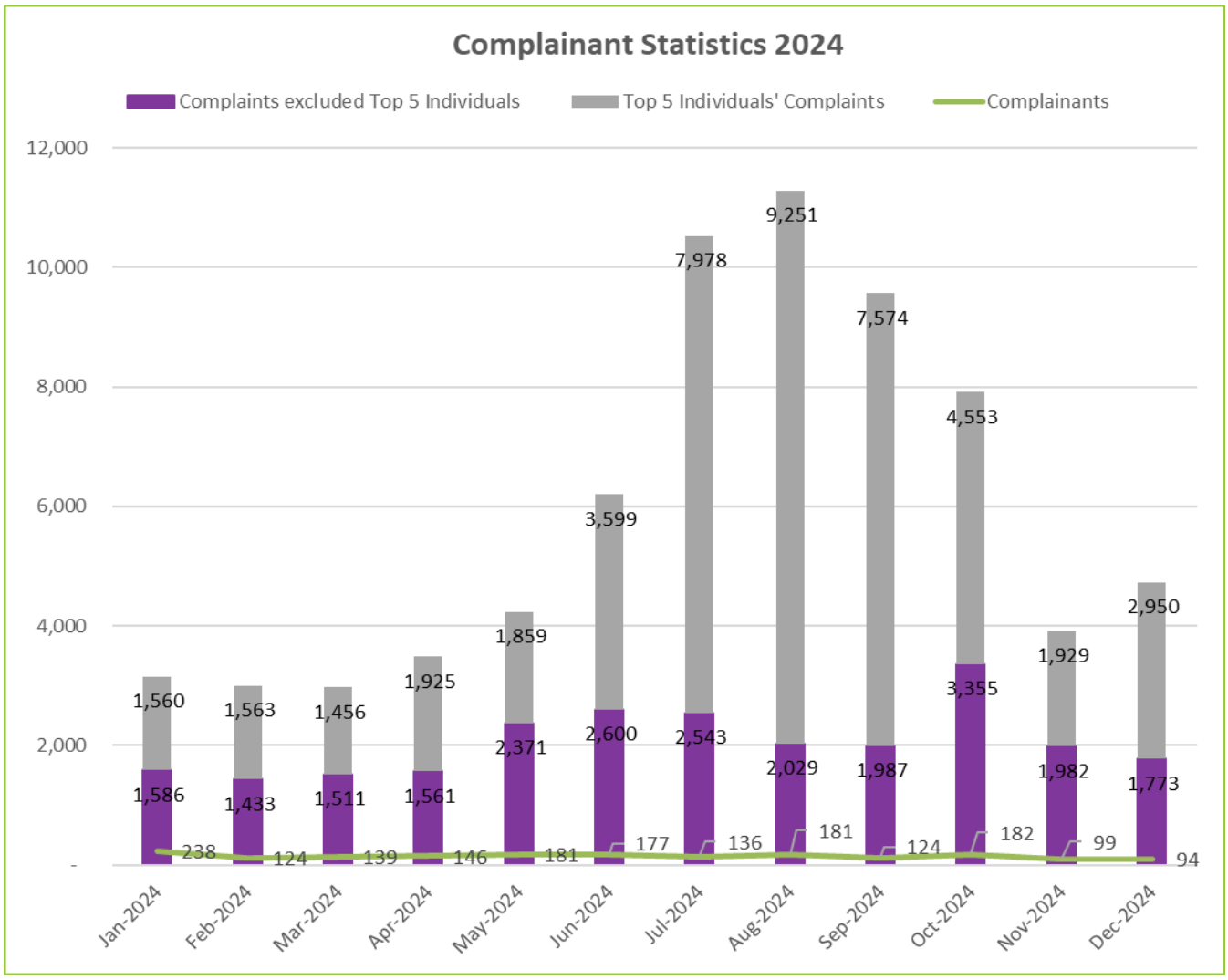
The noise complaint management procedure is documented in the Procedure Policy on Handling Aircraft Noise Complaints. This is available to view on the airport noise webpage.

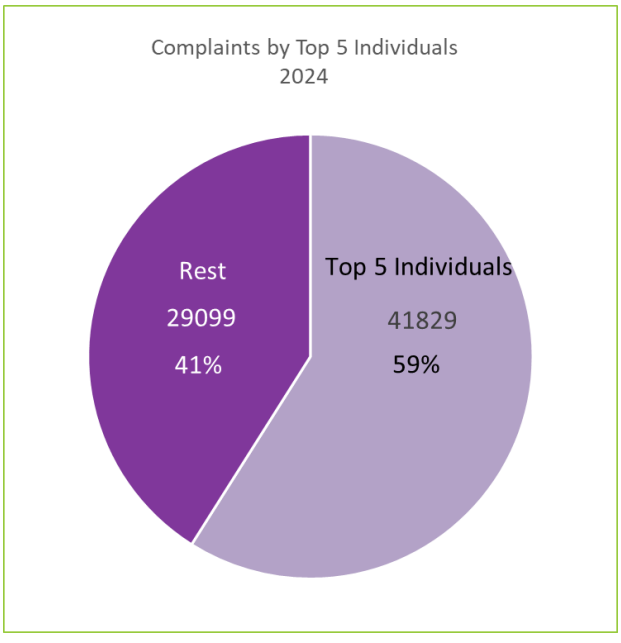
8.3.2 Complaints Data

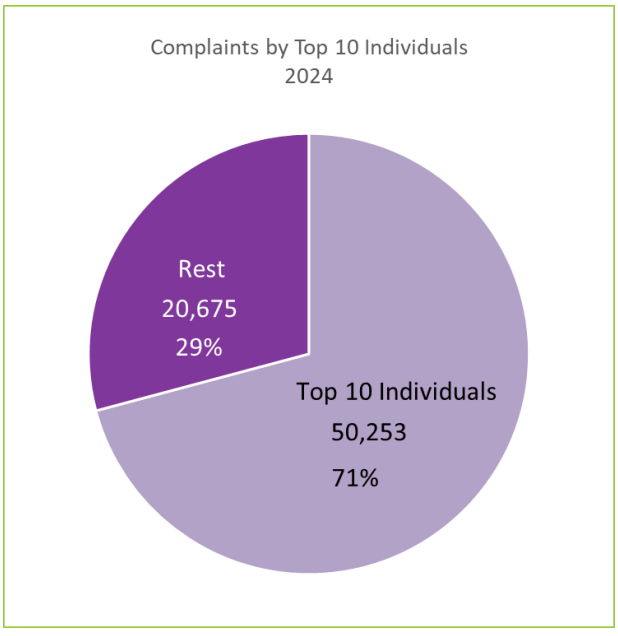
In 2024, a total of 70,928 aircraft noise complaints were lodged by 627 individuals; this is a 112% increase in complaints and a 65% decrease in the number of complainants compared to 2023.

Most complaints are primarily attributed to the opening of the North Runway in August 2022, as well as a small number of serial complainants who submitted a high percentage of complaints. Five complainants accounted for 59% of all complaints in 2024. One individual submitted over 22,000 complaints, representing 32% of the total.

Figure 8.1 – Complaint Statistics

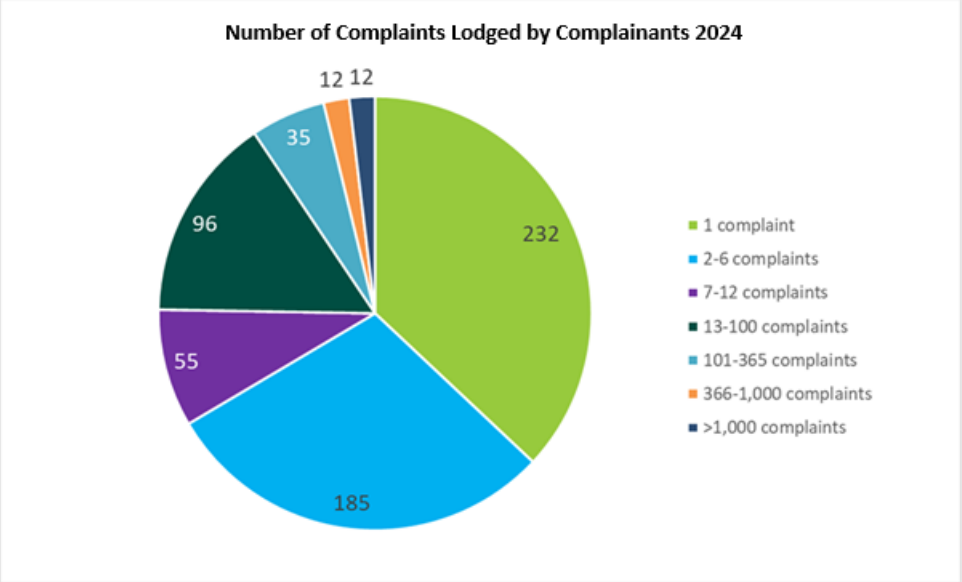






The pie chart below illustrates the distribution of complaints among these 627 individuals.

Figure 8.2 – Complainant Statistics



The ANOMS system links individual complaints to specific aircraft operations. In 2024, 83% of complaints were associated with aircraft using the North Runway, while 12% were linked to the South Runway. The remaining 5% were related to cross runway operations or were general noise complaints that did not specify a particular aircraft event.

Among the 627 complainants:

- 327 individuals raised noise concerns about aircraft using the North Runway
- 311 individuals raised noise concerns about aircraft using the South Runway
- 43 individuals raised noise concerns about aircraft using the Cross Runway

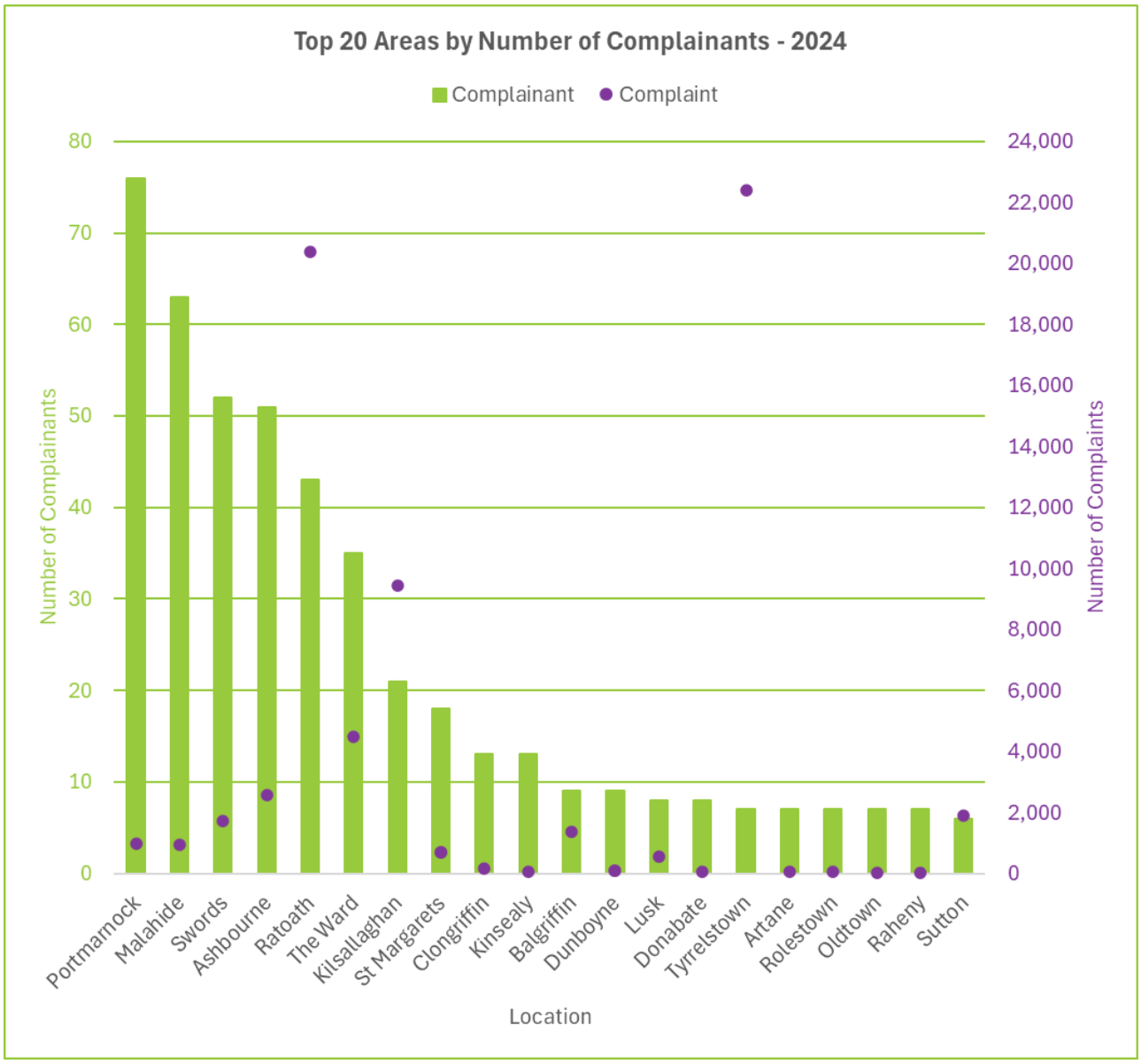
The above includes some individuals who submitted complaints related to more than one runway.

As explained in Section 4.5.2, category C/D departure aircraft are required to adhere to the NPR until the end of the corridor below 3,000ft for the South Runway and 4,000ft for the North Runway. Of the 70,928 complaints lodged in 2024, 3,442 complaints (5%) were correlated to non-adherence of the NPR movements. Some of these movements were air traffic managed by ATC for safe separation of aircraft in the airspace, weather avoidance, etc. In 2024, 95% of departure movements adhered to the NPR and the Standard Instrument Departure (SID) flightpath below the relevant 3,000ft or 4,000ft thresholds.

10% of complaints were related to aircraft movements occurring during the night period between 11:00 PM and 7:00 AM.

The figure below shows the top 20 areas and the number of complaints lodged.

Figure 8.3 – Complainant Location Statistics



Further information on the noise complaint statistics can be found on our Noise Information Portal – InsightFull[4].

[4] Link: https://aircraftnoise.dublinairport.com/

9.0 Noise Mitigation Measures – Compliance and Opportunities to Improve

9.1 The Balanced Approach

ICAO is the International Civil Aviation Organization, a United Nations body set up in 1946 to facilitate international civil aviation. It publishes standards and best practice documents including areas of civil aviation such as safety, security and the environment. In general, the EU transposes ICAO documents into European Law and Directives.

The Balanced Approach to Airport Noise Management document ("BA") provides guidance based on the following four pillars.

Reduction of Noise at Source

Refers to the continual improvement in aircraft technology to reduce aircraft noise emissions, as reflected in ICAO's Noise Certification processes which categorise newer generations of aircraft based on their improving noise performance. These are referred to as Chapter 2, 3, 4 and 14, rated from oldest and noisiest to newest and quietest.

In practice, airport operators can track the noise ratings of aircraft accessing the airport and rate the overall noise performance of the fleet. Incentives such as noise-related landing fees and league tables can encourage airlines to modernise their fleets and bring the best performing aircraft to the airport, as well as recognising good progress.

Land Use Planning

Land use planning is the domain of the local authority to identify areas impacted by aircraft noise and to ensure that only appropriate development is permitted. This can include the prevention of new residential units in the noisiest areas, requirements for enhanced noise insulation in areas with medium noise levels and notifications or warnings for people buying or building in noise impacted areas. The encroachment of noise-sensitive uses, particularly residential, can result in environmental pressure against airport operations and growth. In practice, most airport operators can only try to influence land use planning process and decisions.

Noise insulation schemes are the main proactive initiative that airport operators can implement to mitigate operational noise and improve indoor amenity of residents and schools.

Noise Abatement Operational Procedures

Operational procedures are used to ensure that aircraft are operated in the quietest manner and with the least impact possible. General procedures include preferential runway use and flight tracks placed over the least populated areas. Arrival procedures include Continuous Descent Operations.

Operating Restrictions

Operating Restrictions are measures that reduce or restrict access to an airport or the capacity of the airport. These can include movement caps, quota count limits and operational curfews. This pillar of the BA is only considered when the three above have been exhausted.

9.2 Roles and Responsibilities

The internationally recognised framework for airport noise management is the ICAO Balanced Approach to Airport Noise Management ("BA"). The BA has four pillars as listed in the table below noting that priority is given to the first three pillars ahead of Operating Restrictions. It is also widely accepted best practice to add a "fifth pillar" on Community Engagement, also included in the table below.

Not all the tasks in the BA are under the direct control or responsibility of the airport authority. Aviation stakeholders, including airport users and local government, also have important roles. The main roles and responsibilities are outlined below.

Table 9.1: Stakeholder Roles and Responsibilities

#	Pillar	Main Stakeholders	Role and Responsibility
1	Reduction of Noise at Source (NS)	Aircraft manufacturers	Continually develop aircraft and engine technology to minimise operational noise from aircraft.
		International Civil Aviation Organization (ICAO)	Continually update and revise its Aircraft Noise Certification Standards in line with technological progress.
		Airlines	Operate the most modern and noise optimised fleet at Dublin Airport.
		daa	Work with stakeholders to achieve the quietest aircraft operations including through using financial and other incentives.
2	Noise Abatement Operational Procedures (NAOP)	ICAO	Maintain Standards and Recommended Practice documentation on relevant noise reduction procedures and related matters.
		Air Navigation Service Provider/ Aviation Authority	Work with stakeholders to ensure best operational practice is achieved.
		Airlines / Pilots	Work with stakeholders to ensure best operational practice is achieved.
		daa	Work with stakeholders to ensure best operational practice is achieved, including monitoring, reporting and incentivisation schemes.
3	Land Use Planning (LUP)	Local government	Ensure planning regulations are in place and enforced to avoid encroachment by residential and noise-sensitive land use in noise impacted areas and report annually in line with the NAO report.
		daa	Fund and manage noise insulation and purchase schemes.

#	Pillar	Main Stakeholders	Role and Responsibility
4	Operating Restrictions (OR)	Aviation Noise Regulator/ National Government	Impose restrictions if they are required to meet noise objectives, following the EU process EU 598, but prioritising the first three pillars above.
		daa	Operate the airport within any requirements of any OR
5	Community Engagement	daa	daa holds community and aviation stakeholder engagement forums, regularly meets with individuals and community groups, provides current information on its website, issues advance operational notificaitons to individuals, community groups and elected representatives, monitors and reports on noise and operations, manages community complaints and queries.

9.3 The Measures and Objectives

The table below describes the noise mitigation measures and objectives (NMM) at Dublin Airport which have been published in the Dublin Airport Noise Mitigation Plan 2025-2028 on the Dublin Airport website. The mitigation measures align with the four pillars of the ICAO Balanced Approach with the addition of a "fifth pillar" – Community Engagement.

Table 9.2: daa Noise Mitigation Measures (NMM) 2025 Update

#	Item	Source	Comments / Outline	Tracking
Reduction of Noise at Source (NS)				
NS-1	Develop incentives for quieter aircraft types	daa	Promotion of quieter aircraft types, particularly at night, through incentives such as a "Fly Quiet" programme or environmental charges schemes should continue to be progressed.	Progress on incentives
Noise Abatement Operational Procedures (NA)				
NA-1	Develop incentives for quieter aircraft operations	daa	Promotion of quieter operational procedures through consultation and incentives, such as a "Fly Quiet" programme should continue to be progressed.	Progress on incentives
NA-2	Preferential Runway Use	NRPP Condition 3(a)-(c)	Adherence to North Runway Planning Permission NRPP (2007) Conditions 3a to 3c.	Report on compliance
NA-3	Noise Preferential Routes (NPRs) and Flight-Track Keeping	AIP	Promulgate rules and provide systems to assist ANI and airlines for monitoring, reporting and performance improvement.	Progress on performance improvement

#	Item	Source	Comments / Outline	Tracking
NA-4	Noise Abatement Operational Procedures	daa/AIP	Research noise impacts and potential benefits including Noise Abatement Departure Procedure (NADP).	Research and progress on improvement
NA-5	Continuous Climb Operations	daa	Update and promulgate rules and provide systems to assist ANI and airlines for monitoring, reporting and performance improvement.	Progress on performance improvement
NA-6	Continuous Descent Operations	daa	Update and promulgate rules and provide systems to assist ANI and airlines for monitoring, reporting and performance improvement.	Progress on performance improvement
NA-7	Reverse Thrust	AIP	Research impacts, potential monitoring and safety implications	Progress on management
NA-8	Engine Ground Running	AIP	Compliance with AIP requirements and limits	Compliance
NA-9	APU Usage	daa	Research potential APU monitoring and use reduction	Research
NA-10	Delayed Landing Gear Deployment	daa	Research potential options for Landing Gear Deployment noise reduction and monitoring	Research
Land Use Planning (LU)				
LU-1	Residential Noise Insulation Scheme (RNIS)	NRPP c7	Noise insulation for home in high noise areas.	Progress and compliance
LU-2	Voluntary Dwelling Purchase Scheme (VDPS)	NRPP c9	Purchase of homes in the highest noise areas.	Progress and compliance
LU-3	School Insulation Scheme (SIS)	NRPP c6	Noise insulation and ventilation of schools in high and moderate noise areas.	Progress and compliance
LU-4	Residential Sound Insulation Grant Scheme (RSIGS)	NRRA c6	Bedroom insulation scheme to reduce night-time noise exposure especially due to new night-time NR use.	Progress and compliance
LU-5	Encroachment	daa; NAP	Working with stakeholders, take a proactive role in the prevention of residential encroachment in the most noise impacted areas.	Progress on prevention and mitigation
Operating Restrictions (OR)				
OR-1	NR night-time closure	NRRA c4	Runway 10L-28R shall not be used for take-off or landing between 2400 hours and 0600 hours.	Compliance
OR-2	Quota Count Scheme	NRRA c3	Annual Quota Count limit of 16260 (2300-0700)	Compliance
OR-3	Night movement limit	NRRA c5	Annual night-time movement limit 35,672 (2300-0700)	Compliance

#	Item	Source	Comments / Outline	Tracking
Supplementary to ICAO Balanced Approach – Community Engagement				
CE-1	Aviation Stakeholder Engagement	daa	Continue and enhance engagement with stakeholders include AirNav Ireland, airlines, and aviation and local authorities.	On-going and innovative activity
CE-2	Community Engagement	daa	Continue and enhance engagement with community groups, representatives and individuals including one-to-one and group meetings, community forums, operational notifications, website updates, and webtools.	On-going and innovative activity
CE-3	Noise and Flight Track Monitoring	daa/ NRPP Condition 10	Continue and enhance systems for measuring noise and monitoring flight tracks.	Compliance and innovations
CE-4	Noise Complaint Management	daa	Continue and enhance systems and processes for receiving and responding to complaints.	On-going and innovative activity
CE-5	Monitoring and Reporting	daa / 2019 Act/ NRPP C. 10	Continue and enhance monthly, quarterly, and annual reporting on operations, noise, complaints, and compliance.	On-going and innovative activity including compliance
CE-6	Health and Quality of Life	daa	Monitor research and best practice on the impacts and benefits of airport operations on community health, quality of life and broader non-acoustic factors.	Develop new perspectives

The next section looks at each of these NMM items in detail and provides comments on compliance with each during 2024.

9.4 Measure and Objective Assessment

Table 9.3: NMM Summaries and Compliance Assessment

	NS-1	NA-1
Short Name	Fleet Incentives	Operations Incentives
Description	Develop incentives for quieter aircraft types	Develop incentives for quieter aircraft operations
Source	daa	daa
Method of Monitoring	ANOMS data used to generate Fleet and Chapter Analysis (Section 3.3 of this report).	ANOMS identifies CCO, CDO compliance and NPR deviations. Webtrak now indicates NPR deviations and data is reported in the Monthly Noise and Operations reports on the daa website.
Other Measurement/ Enforcement	Engagement with Airlines is undertaken via the monthly DAOPG and OAC meetings and in the annual consultations on aeronautical charges.	Noise update is included as standing item on monthly DAOPG meeting with relevant Airport Users and ANI.
Opinion On Compliance	Continual improvement	Continual improvement
Effectiveness/ Performance	Fleet improvement included increase in A320NEO and A321NEO flights, but 737 MAX movements decreased.	Monthly CDO is steady 76-79% NPR performance is consistently 99.7% on SR but 93% on NR.
Opportunity for Improvement	If progressive fleet improvement stalls, consideration could be given to reviewing the noise-related landing fee and an airline ranking system with a fleet modernisation component.	ANOMS Perform Track module is now in place for ANI and the four largest airlines plus regular reports for other airlines. Data and analysis can help and encourage airlines to improve.
Consultation Requirement	Airline	Airline and AirNav
Status	On-going	On-going
Expected Implementation	Noise-related landing fees are reviewed and consulted on every year.	On-going

	NA-2	NA-3	NA-4
Short Name	PRU	NPR Adherence	NAOP
Description	Preferential Runway Use	Noise Preferential Routes (NPR) and Flight Track Keeping	Noise Abatement Operational Procedures (NAOP)
Source	NR PP Conditions 3 (a), (b) and (c) and 4	daa NMP; AIP	daa NMP; AIP
Method of Monitoring	ANOMS Flight Track Keeping	ANOMS Flight Track Keeping	ANOMS and radar tracks studies
Other Measurement/ Enforcement	ATC procedures for implement PRU including closure of NR at night	ANOMS module Perform Track	NADP (Noise Abatement Departure Procedure) is mandated within the AIP. daa engages with Airport Users on implemented NADP
Opinion On Compliance	Compliance on-going	Continual improvement	Compliance on-going
Effectiveness/ Performance	2024 RW 16/34 = 0.26% of total movements 10L NR dep = 0.02% of dep 28R NR arr = 0.76% of arr NR Night = 0.38% of total annual movements	2024 SR 99.8% Adherence NR 92.8% Adherence	See CCO, CDO and NADP below.
Opportunity for Improvement	None – already standard operations	New ANOMS module, Perform Track, helps identify and manage NPR Track Deviations and label ATC directions. Airlines have access to data in (almost) real time to manage and improve performance.	NADP was undertaken in 2024. Potential development of ANOMS NADP identification capability.
Consultation Requirement		Consultation with AirNav Ireland and airlines to implement software and its use.	Airport users, ANI, daa Operations
Status		Consultation on-going	On-going
Expected Implementation		On-going	Medium term possibly 2-4 years

	NA-5	NA-6
Short Name	CCO	CDO
Description	Continuous Climb Operations	Continuous Descent Operations
Source	ANI	ANI
Method of Monitoring	ANOMS Flight Track Monitoring	ANOMS Flight Track Monitoring
Other Measurement/ Enforcement	Monitoring, tracking and performance measurement performed by Performance Review division of EUROCONTROL.	Monitoring, tracking and performance measurement performed by Performance Review division of EUROCONTROL.
Opinion On Compliance	Continual improvement	Continual improvement
Effectiveness/ Performance	EUROCONTROL CCO below FL100 2024: 99.7% 2023: 99.6% Draft CCO Performance- ANOMS 2024: 98% 2023: 98%	EUROCONTROL CDO below FL75 2024: 56% 2023: 55% Draft CDO Performance below 5,500ft - ANOMS 2024: 78% 2023: 77%
Opportunity for Improvement	Potential for development of local CCO/CDO procedures to better reflect procedures at Dublin Airport. Perform Track ANOMS module would incorporate CCO	Revise legacy rules with important input from AirNav and the airlines. Promote Perform Track and report to assist airline management and improvement.
Consultation Requirement	Consultation with AirNav Ireland on updating CCO rules and promulgation in AIP, and with airlines regarding Perform Track implementation.	Consultation with AirNav Ireland on updating CDO rules and promulgation in AIP, and with airlines regarding Perform Track implementation.
Status	Shadow rule implementation within the ANOMS is completed. Reporting to commence pending completion of stakeholder consultation and deployment of Perform Track.	Shadow rule implementation within the ANOMS is completed. AIP promulgation in process.
Expected Implementation	CCO Perform Track – 1-2 years	On-going

	NA-7	NA-8
Description	Reverse Thrust	Engine Ground Running
Source	daa NMP; AIP	daa NMP; AIP
Method of Monitoring	Monitoring remains a research area; some current work involves trialling the use of noise monitoring to detect reverse thrust (RT) and power level.	Monitoring completed by daa Airside Management Unit and compiled in local operations log.
Other Measurement/ Enforcement	ANOMS/Ground radar may provide data on deceleration rates.	Requirement within Aerodrome Manual Direction 6.10 and mandated within the AIP.
Opinion On Compliance	Research started.	Disimprovement on 2023
Effectiveness/ Performance	Research starts with investigating current noise impacts and thus potential improvements. Then monitoring options can be considered.	10 tests 20:00-07:00 4 tests 07:00-09:00 CAT C
Opportunity for Improvement	Reducing RT noise will also be a safety issue and always the decision of the pilot. Reliable measurement will need to proceed options to reduce.	Introduce standing item in the DAOPG. Improve noise monitoring to confirm and track engine testing.
Consultation Requirement	Airlines, pilots and ANI.	Airlines
Status	Studies and trials at other airports continue and could potentially be conducted at Dublin.	On going
Expected Implementation	TBA pending technical feasibility confirmation.	

	NA-9	NA-10
Short Name	APU Usage	Gear Down
Description	APU Usage	Delayed Landing Gear Deployment
Source	AIP	Research
Method of Monitoring	Research topic. No reliable monitoring method exists.	Research topic – possibly with camera and image recognition
Other Measurement/ Enforcement	Provision of FEGP, Local air quality monitoring	ANOMS developing module options.
Opinion On Compliance	Research is on-going. Trials being conducted at Schiphol and Gatwick.	Research on data collection is commencing. Trials being conducted at Heathrow.
Effectiveness/ Performance	Research	Research
Opportunity for Improvement	First step is investigating data collection options.	First step is investigating data collection options.
Consultation Requirement	Airline	Airline and pilots. This can be a safety issue as gear can be used to slow the plane and could also be an issue regarding the task load on pilots during final approach.
Status	Research starting on monitoring options	Research starting on monitoring options
Expected Implementation	Medium term – 2 to 4 years	Medium term – 2 to 4 years

	LU-1	LU-2	LU-3
Short Name	RNIS	VDPS	SIS
Description	Residential Noise Insulation Scheme (RNIS)	Voluntary Dwelling Purchase Scheme (VDPS)	School Insulation Scheme (SIS)
Source	Condition 7 of NR Planning Permission	Condition 9 of NR Planning Permission	Condition 6 of NR Planning Permission
Method of Monitoring	Community Engagement Department	Community Engagement Department	Community Engagement Department
Other Measurement/ Enforcement			
Opinion On Compliance	Compliant	Compliant	Compliant
Effectiveness/ Performance	2024 Review and Forecast contours added 33 homes. Homes completed in 2024/25 194/224 eligible	More offers than scheme requirements. 9 completed, 9 in process.	Five eligible schools (in Forecast Contour) completed or in process.
Opportunity for Improvement	2024 graphical information package for RNIS with homes, scheme boundaries and noise contours, update and improved.	Active engagement with homeowners continues; daa voluntarily extended term of the Scheme by one year; new public online tool for checking eligiblity	One new pre-school has been identified in the Forecast Contour
Consultation Requirement	Inform ANCA	Community	Inform ANCA
Status	Proceeding	Proceeding	Proceeding
Expected Implementation		Current and on-going	2025

	LU-4	LU-5
Short Name	RSIGS	Encroachment
Description	Residential Sound Insulation Grant Scheme (RSIGS)	Engagement in the local planning processes to avoid residential and noise sensitive encroachment
Source	NR Relevant Action Condition 6	daa
Method of Monitoring	Community Engagement Department	daa Planning
Other Measurement/ Enforcement		ANCA is also conducting NAP Encroachment Study
Opinion On Compliance	Pre-launch started Q1 2025	Residential intensification continues in noise impacted areas east and west of the airport.
Effectiveness/ Performance	Scheme was launched voluntarily in early 2025 ahead of a NRRA decision.	Safeguarding reviews of planning applications has started.
Opportunity for Improvement		Improvement engagement on the FCC FDP and its noise zone and implementation of insulation requirement.
Consultation Requirement	ANCA may require a Discharge Document	FCC on its FDP and LDP
Status	Proceeding	On-going
Expected Implementation	2025 - 2027	On-going

	OR-1	OR-2	OR-2
Short Name	NR Night Closure	Quota Count Scheme	Night ATM Cap
Description	NR closure between 2400 - 0600 hours	Annual Quota Count limit of 16260 2300-0700	Annual night-time movement limit 35,672
Source	NRRA Condition 3	NRRA Condition 4	NRRA Condition 5
Method of Monitoring	ANOMS; AOS	ANOMS and AOS	ANOMS and AOS
Other Measurement/ Enforcement	Standard ATC procedures	ACP Decision with ANCA engagement	
Opinion On Compliance	In 2024, the old NRPP Condition 3(d) NR closure 23-07h was complied with.	In 2024, the night QC usage was 14,459 (without implementation of any dispensations)	In 2024, the night ATM count was 32,200 (without implementation of any dispensations)
Effectiveness/ Performance	Night-time NR movements (only during SR closures) were 898 movements or 0.38% of total annual movements.	Corrections and clarifications to the ACP NRRA Regulatory Decision required.	Corrections and clarifications to the ACP NRRA Regulatory Decision required.

	CE-1	CE-2
Description	Aviation Stakeholder Engagement	Community Engagement
Source	daa NMP	daa NMP
Method of Monitoring	DAOPG and AOC monthly meetings	Community Engagement Department, Group Sustainability and Community
Other Measurement/ Enforcement	Dublin Airport Operations, APOC, Direct discussion	Condition 28 of NR Planning Permission.
Opinion On Compliance	Compliant	Compliant
Effectiveness/ Performance	DAOPG well established and attended. Noise included as standing item.	CLG and DAEWG well established and attended, in addition to community outreach programme.
	Airline and ANI engagement is on-going and new software modules are being implemented to help manage and improve Track Performance.	CLG meet bimonthly and DAEWG meet quarterly.
Opportunity for Improvement	Continual improvement.	Continual website upgrades that include location specific overflight and noise data - a new portal providing Eircode-specific operational, overflights and noise information
Consultation Requirement	Airline and AirNav	Internal and community
Status	In process	In process
Expected Implementation	2025 and beyond	2025 and beyond

	CE-3	CE-4
Short Name	NFTM	Complaints
Description	Noise & Flight Track Monitoring	Noise Complaint Management
Source	daa NMP; NR PP c10	daa NMP
Method of Monitoring	ANOMS - collation of data on movements and NMT data.	Process and respond to all aviation related noise complaints in a timely manner
Other Measurement/ Enforcement	Quarterly Noise and Flight Track Monitoring reports and Annual reports Parallel tracking on Power BI	WebTrak, various
Opinion On Compliance	Compliant	Compliant
Effectiveness/ Performance	Expanded daa team for N&FT data curation and management. Improved investigation of anomalies and correlation with daa operations database (AOS). Expanding NMT network including new portable units.	Expanded daa team. 70,928 complaints logged from 627 complainants in 2024. 5% of these complaints were correlated to non-adherence of NPR movements. Voice recognition of telephone messages plus other avenues used (Customer Experience Portal and reception desk etc). Responses timely and enhanced with data, tracks and gate diagrams, as appropriate. No backlog of complaints since early 2024.
Opportunity for Improvement	Continual improvements of data management and reporting.	Continual improvement of data in response letters, Track Deviation management and reporting.
Consultation Requirement	Airlines, ANI and ANCA	AirNav
Status	On going	On going
Expected Implementation	Continual	Continual through 2025

	CE-5	CE-6
Short Name	Monitoring and Reporting	Health and Quality of Life (QOL)
Description	Continue and enhance monthly, quarterly, and annual reporting on operations, noise, complaints, and compliance.	Monitor research and best practice on the impacts and benefits of airport operations on community health, quality of life and broader non-acoustic factors.
Source	daa NMP	daa NMP;
Method of Monitoring	ANOMS and AOS/Power BI	Tracking research globally and development local studies
Other Measurement/ Enforcement	Statutory Quarterly NFTM and Annual s19 Compliance Report	
Opinion On Compliance	Compliant	Research
Effectiveness/ Performance	Substantial upgrades to Monthly Operations and Quarterly NFTM report. Noise Portal on website with Eircode, overflight, NMT and Complaint dashboards. Expanded Webtrak data – weather, contours, notices, NPR deviations	Engage consultant Stephen Turner. Reviewing Quality of Life metrics.
Opportunity for Improvement	Continual improvement and reports and response to queries.	On-going research. Research on Quality of Life and potential applicability. Balance impact studies with benefits. Respond to misunderstandings, mis-information, hearsay evidence.
Consultation Requirement	Internal consultation	Internal and community teams
Status	On-going	On-going
Expected Implementation	On-going	On-going

9.5 Previous 2023 NMM Items

The Noise Management Plan 2025-2028 was developed after the FCC Dublin Airport NAP 2024-2028 was published in December 2024 and includes an updated NMM list detailed in Sections 9.3 and 9.5 above. The previous 2023 Section 19 Compliance Report was based on an older NMM list and below is an update on the older NMM items that are not in the updated NMM. These changes are also laid out in Appendix 1 of the NMP 2025-2028.

Old NS-1 and NS-2

Both of these old items referred to incentives for quieter aircraft types and have now been combined into a new NS-1 on the same, specifically including references to incentives such as landing fees and airline ranking options. These measures are addressed Section 9.4 above.

Olde NA-4 – Visual Approach (Cat C and D)

This item is not applicable at Dublin Airport and has been dropped from the NMM list.

Old NA-9 Monitor and Report

This is not a Noise Abatement Operation Procedure and is not referred to in this section of the ICAO Balanced Approach. It has been moved to Community Engagement.

Old PC-1 and PC-2 – NR night use and Night ATM limit

As of the ACP North Runway Relevant Action (NRRA) Regulatory Decision in July 2025, these Planning Conditions have been deleted and replaced by the new OR-1, OR-2 and OR-3, listed in the NMM above. Notwithstanding both the possibility of a Judicial Review of the ACP Decision and the legal requirements regarding the notification to the European Commission and the 8-month lead in period before implementation of new airport Operating Restrictions, the NMP 2025-2028 and thus the above compliance section of this report is based on the new NRRA Operating Restrictions.

The old PC (Planning Condition) NMM items are addressed here:

In 2024, the airport was operated under the PC-1 (NRPP Condition 3d) night-time closure of the North Runway between 23-07h and continues to be so at the time of writing this report. This is also referred to with an assessment of compliance in Section 9.5 above.

The old PC-2 refers to NRPP Condition 5, the airport night-time movement limit. As described in the 2023 Section 19 Compliance Report, this condition was, at the time, subject to both the then-ABP review of the FCC NR Relevant Action Regulatory Decision (Ref. F20A/0668; ABP Ref. F20A/0668), and ongoing High Court Proceedings brought by daa bearing the Record Number: 2023 / 916 JR in which Fingal County Council is the Respondent. Due to those proceedings, the previous Compliance Report provided no comment on PC-2.

Old CE-1, CE-2, CE-3 and CE-4 – Community Engagement

These items have been slightly reworded, but the essence of each item has been retained and are addressed in Section 9.4 above.

9.6 NR Planning Conditions

The relevant planning conditions in the 2007 NR Planning Permission (NRPP) and, as indicated, the 2025 ACP Decision on the NR Relevant Action (NRRA), are tabulated below with cross references to items in the above Noise Mitigation Measures and other reports. As all that have references are addressed here or elsewhere, these will not be directly addressed further.

Table 5 9.4 – (NRPP and NRRA) Planning Conditions

NRPP Condition	Short Title	Status or Reference in this Report
1	Documents Reference	Subject of separate "Condition 10" report to FCC
2	Development Period	N/A
3 (a) – (c)	Mode of Operations (Noise Preferential Runways)	NA-3 and CE-3 in NMM
3 (d)	~~NR Night Closure (23-07h)~~	Old PC-1 in NMM Replaced by NRRA c3
NRRA c3	NR Night Closure (24-06h)	New OR-1
4	Cross Runway use	NA-2 in NMM
~~5~~	~~Night-time movement limit~~	Old PC-2 in NMM Replaced by NRRA c4 and c5
NRRA c4	Quota Count Scheme	New OR-2
NRRA c5	Night ATM Annual Limit	New OR-3
6	School Insulation Scheme (SIS)	LU-3 in NMM
7	Residential Noise Insulation Scheme (RNIS)	LU-1 in NMM
8	SIS and RNIS implementation	Items 11 and 13 (LU-1 and 3) in NMM
9	Voluntary Dwelling Purchase Scheme (VDPS)	LU-2 in NMM
NRRA c6	Residential Sound Insulation Grant Scheme (RSIGS)	LU-4 in NMM
10		Subject of separate "Condition 10" report to FCC and below:
10a	Noise and Flight Track Monitoring	NA-3 and CE-3 in NMM
10b	Annual Noise Contour report	NA-2, CE-3 and CE-5 in NMM
10c	Quarterly Noise and Flight Track Monitoring Reports	CE-3 in NMM
10d	Noise Impact and Mitigation Revaluation (2 yearly)	Subject of separate (C10/C7) report to FCC and LU-1 to 4 in NMM
11	Relocation of Ground Run site	Completed 2022

9.7 Operating Restrictions and Flight Procedures

Item 4a of Section 19 refers to "particulars of failures (if any) to comply with operating restrictions due to changes in flight procedures."

According to the Airport Noise Regulation Act (s29 and s30) a Noise Mitigation Measure is a condition that reduces the impact of a noise problem at the airport. An Operating Restriction is a condition that limits access to or reduces the operational capacity at the airport.

This means that of the Noise Mitigation Measures tabulated in Section 9.3, only OR-1, OR-2 and OR-3 are Operating Restrictions.

In general, changes to flight procedures such as those covered in Section 4 may provide some reduction in noise but they are not Operating Restrictions. Old NRPP Condition 3d and new NRRA Conditions 3, 4 and 5 which halt access to the North Runway at night (except under certain circumstances) and limit total annual night-time operations, are not changes to flight procedures and are indeed an Operating Restrictions.

Section 19.4.d of the Act refers to "operating restrictions (including aircraft flying off track without being directed to do so by the Irish Aviation Authority)." This seems to refer to requirements to operate within the Noise Preferential Routes, as described above in Section 4 of this report, and under the Balanced Approach these are Noise Abatement Operational Procedures and not Operating Restrictions.

9.8 Further Details on Projects

Table 9.5 6 – Opportunities for Improvement on Projects

Short Name	Opportunities for Improvement
Perform Track	This ANOMS module provides detailed information on flights that deviate from NPR, CDO and CCO, with near live flight track and altitude profile to assist both airlines and AirNav Ireland to improve performance. Internal reporting should be expanded for smaller airlines.
Maploom	This is a graphical information interface that provides eligibility information relating to the various Noise Insulation and Purchase schemes, both internally for daa and with public facing components. There may be opportunities to expand its data capabilities.
Reporting Improvements	New format Monthly Operations and Complaints reports and Quarterly Noise and Flight Track Keeping reports have been launched. Continued opportunities for improvements especially in response to public and regulator comments will be implemented.
InsightFull	This ANOMS module will provide a website portal to provide Eircode-based noise-related information, operational data including flight numbers, heights, noise levels, as well as more detailed explanatory information, videos and graphics. Monthly information dashboard will be available on operations, noise monitoring, runway use, track compliance and complaints.
Complaints	The above modules will be able to assist and improve response to complaints, investigations of NPR Track Deviations including improved and streamlined input from AirNav Ireland.
Mitigation Research	Airports and noise management service providers are conducting various research project on operational monitoring and potential noise

	mitigation including the use of reverse thrust on landing, the use of ground power alternatives to aircraft APU (Auxiliary Power Units), and the delayed deployment on landing gear to reduce airframe noise on approach.

10.0 Glossary of Terms

A/B category aircraft	Category of smaller aircraft, containing propeller aircraft, turboprop aircraft, Whisperjets and other small general aviation aircraft powered by jets engines. (Also, CAT A & B)
ABP	An Bord Pleanála
ACP	An Coimisiún Pleanála (formerly ABP)
AIP	Aeronautical Information Publication
ANCA	Aircraft Noise Competent Authority
ANI	AirNav Ireland, the Irish ANSP (formerly part of CAR)
ANSP	Air Navigation Service Provider
ANOMS	Airport Noise Monitoring System
AOSO	Airside Operations and Safety Officers
APU	Auxiliary Power Unit
ATM	Air Transport Movement
ATSU	Air Traffic Service Unit
ATC	Air Traffic Control
BA	(ICAO) The Balanced Approach to Airport Noise Management
BAP	Bickerdike Allen Partners
CAR	Civil Aviation Regulator (now the IAA and ANI)
C/D category aircraft	Jet aircraft, such as Airbus and Boeing aircraft, Bombardier Canadair Regional Jet series, business jets, and Embraer aircraft (Also CAT C & D)
CCO	Continuous Climb Operation
CDA	Continuous Descent Approach (same as CDO)
CDO	Continuous Descent Operation (same as CDA)
Chapter	Aircraft noise rating based on ICAO Annex 16 Volume 1
CLG	Community Liaison Group
daa	Dublin airport authority
DAOPG	Dublin Airport Operations Planning Group
DAEWG	Dublin Airport Environmental Working Group
dB	Decibels, a unit of sound pressure
EGR	Engine Ground Run
END	(EU) Environmental Noise Directive
Environmental Corridor	Same as a Noise Preferential Route (NPR)
EIDW	Dublin International Airport, Dublin, Ireland
EU	European Union
FCC NAP	Fingal County Council Noise Action Plan
HSIP	Home Sound Insulation Programme
IAA	Irish Aviation Authority (formerly part of CAR)
IFP	Instrument Flight Procedure
ILS	Instrument Landing System
ICAO	International Civil Aviation Organisation
LAeq	Equivalent average sound level (Also Leq and L_{eq})

LAmax	Maximum value the A-weighted sound pressure level reaches during a measurement period. (Also, LASmax and Lmax)
LAP	Local Area Plan
Lden	Weighted average of the yearly individual noise level during daytime, evening, and night-time periods
Lnight	Weighted average of the yearly individual noise level specifically during the night-time period (23:00 – 07:00)
MTOW	Maximum Take-Off Weight (or Mass in kg)
NA	Number Above metric for single events. N80 is the number of daily events over Lmax 80 dBA.
NAP	Noise Action Plan developed by Fingal County Council
NADP	Noise Abatement Departure Procedure
NFTMS	Noise and Flight Track Monitoring System (ANOMS)
NM	Nautical Mile
NMM	Noise Mitigation Measure
NMP	Noise Management Plan
NMT	Noise Monitoring Terminal
NPR	Noise Preferential Route
NR	North Runway (10L-28R)
PP	Planning Permission
PRU	Preferred Runway use
QC	Quota Count
(NR)RA	(North Runway) Relevant Action
Reverse thrust (RT)	Using the engine of the aircraft for braking after landing on the runway.
RNIS	Residential Noise Insulation Scheme
SEL	Sound Exposure Level is the total energy contained in a noise event
SID	Standard Instrument Departure
SR	South Runway (10R-28L)
STAR	Standard Terminal Arrival Route
Vector	ATC approved deviation from NPR or route. It is a heading instructed by ATC for direct routing of aircraft, weather avoidance (thunderstorm) or safe separation of aircraft.

11.0 Documents Referenced

Short Title	Document Name	Source
AIP	Airport Information Publication	ANI
Aerodrome Manual	ICOA Aerodrome Manual	ICAO
Balanced Approach (BA)	International Civil Aviation Organization (ICAO) Balanced Approach to Airport Noise Management	ICAO
EU 598	Regulation EU 598/2014 of the European Parliament	EU
Environmental Noise Directive (END)	EU Environmental Noise Directive EU2002/29/EC	EU
Noise Action Plan (NAP)	FCC Dublin Airport Noise Action Plan 2024-2028	FCC
Noise Mitigation Plan	Dublin Airport Noise Mitigation Plan 2025-2028	daa
2023 Section 19 Report	Dublin Airport 2023 Annual Section 19 Compliance Report	daa/ANCA
The (Airport Noise) Act 2019	The Aircraft Noise (Dublin Airport) Regulation Act 2019,	Irish act
Annual Report	The daa Annual Report 2024 (www.dublinairport.com)	daa
Annual Noise Contour Report	Annual Noise Contour Report	daa
ICAO Annex 16 Vol 1	ICAO Annex 16 - Environmental Protection - Volume 1 - Aircraft Noise	ICAO

12.0 Appendices

App 1 NR Planning Permission Conditions 3 and 4

NRPP Condition 3

On completion of construction of the runway hereby permitted, the runways at the airport shall be operated in accordance with the mode of operation – Option 7b – as detailed in the Environmental Impact Statement Addendum, Section 16 as received by the planning authority on the 9th day of August, 2005 and shall provide that –

(a) the parallel runways (10R-28L and 10L-28R) shall be used in preference to the cross runway, 16-34,

(b) when winds are westerly, Runway 28L shall be preferred for arriving aircraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control,

(c) when winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft, and

~~(d) Runway 10L-28R shall not be used for take-off or landing between 2300 hours and 0700 hours, except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports.~~

NRRA Condition 4

Amends above Condition 3(d) to read as follows:

3(d) Runway 10L/28R shall not be used for take-off or landing between 00:00 and 06:00 (local time) except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports or where Runway 10L/28R length is required for a specific aircraft type.

NRPP Condition 4

The crosswind runway (16-34) shall be restricted to essential occasional use on completion of the new runway in accordance with Objective DA03 of the Fingal County Development Plan, 2005-2011. 'Essential' use shall be interpreted as use when required by international regulations for safety reasons.

App 2 Arrivals and Departures by Hour 2024

Hour	Arrivals	Departures
0	3.3%	0.3%
1	2.2%	0.1%
2	0.5%	0.4%
3	0.4%	0.1%
4	2.3%	0.3%
5	1.0%	1.4%
6	1.6%	7.6%
7	3.7%	9.3%
8	5.5%	5.7%
9	5.7%	5.1%
10	5.9%	5.2%
11	6.1%	6.3%
12	6.0%	6.2%
13	6.0%	6.9%
14	5.8%	6.1%
15	4.9%	6.2%
16	5.0%	5.8%
17	5.7%	6.2%
18	5.2%	6.2%
19	4.4%	5.1%
20	4.4%	3.9%
21	5.1%	3.1%
22	5.2%	1.7%
23	4.1%	0.8%
Total	100%	100%

App 3 Origin and Destinations of Flights 2024

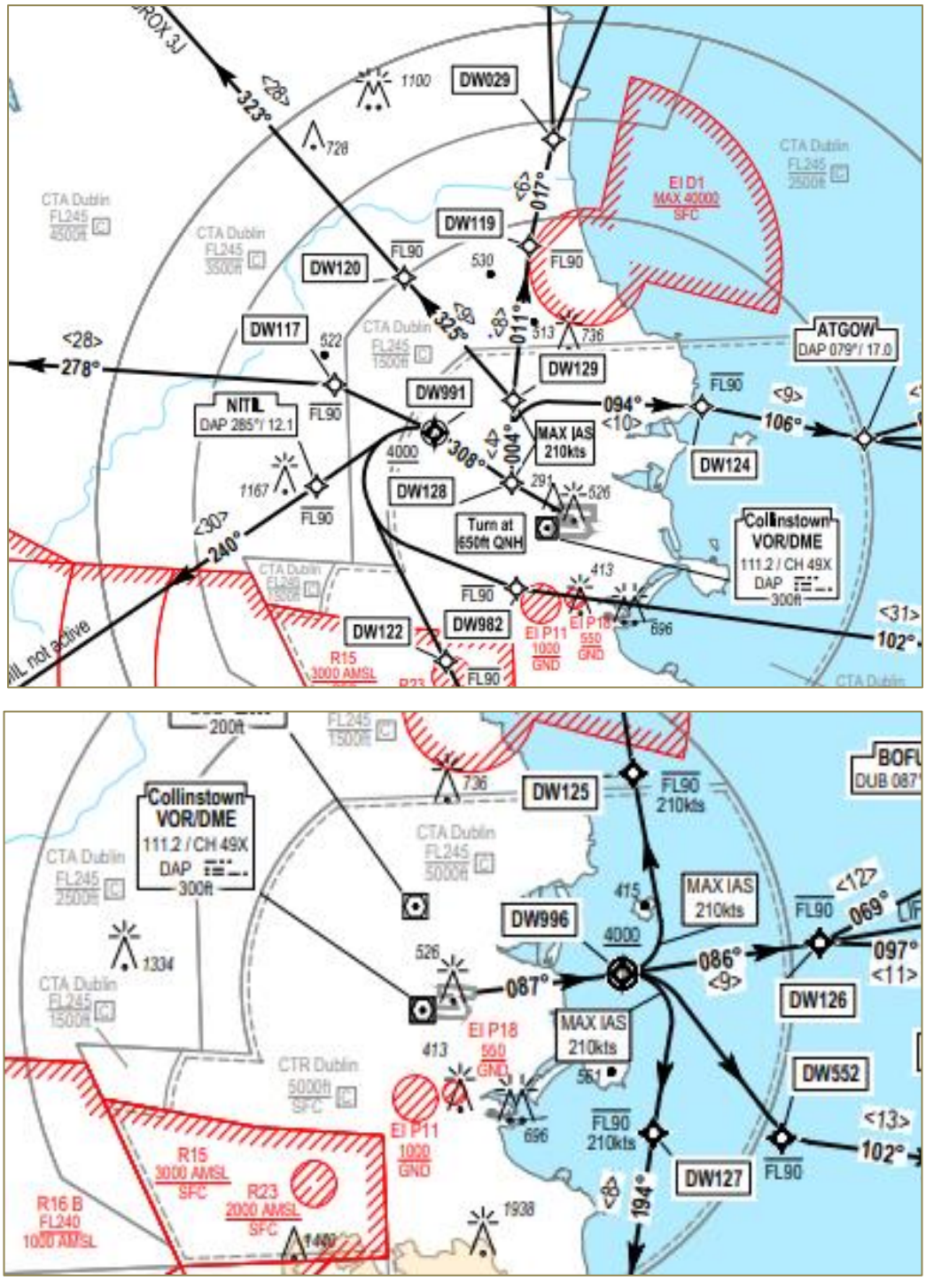
Rank	Origin/ Destination	Percentage of Arrivals	Percentage of Departures
1	EGLL	5.30%	5.31%
2	EHAM	3.79%	3.87%
3	EGCC	3.50%	3.49%
4	EGBB	3.07%	2.67%
5	EGPH	2.83%	2.85%
6	EGSS	2.72%	2.85%
7	EGKK	2.77%	2.78%
8	LFPG	2.28%	2.33%
9	EGPF	2.10%	2.10%
10	LEMG	1.87%	1.87%
11	EGGP	1.82%	1.82%
12	LEBL	1.79%	1.78%
13	EGGD	1.67%	1.67%
14	EDDF	1.54%	1.75%
15	LPFR	1.59%	1.59%
16	LPPT	1.56%	1.56%
17	LEMD	1.48%	1.49%
18	EBBR	1.44%	1.51%
19	EGNM	1.41%	1.43%
20	EGLC	1.37%	1.37%
21	LIRF	1.26%	1.25%
22	GCRR	1.14%	1.16%
23	EGGW	1.14%	1.15%
24	EDDB	1.09%	1.10%
25	KJFK	1.06%	1.06%
26	LSZH	1.05%	1.05%
27	EDDM	1.03%	1.04%
28	KBOS	0.96%	0.95%
29	CYYZ	0.84%	0.84%
30	KORD	0.84%	0.80%
Sum of Top 30		**56.3%**	**56.5%**

App 4 SID and NPR

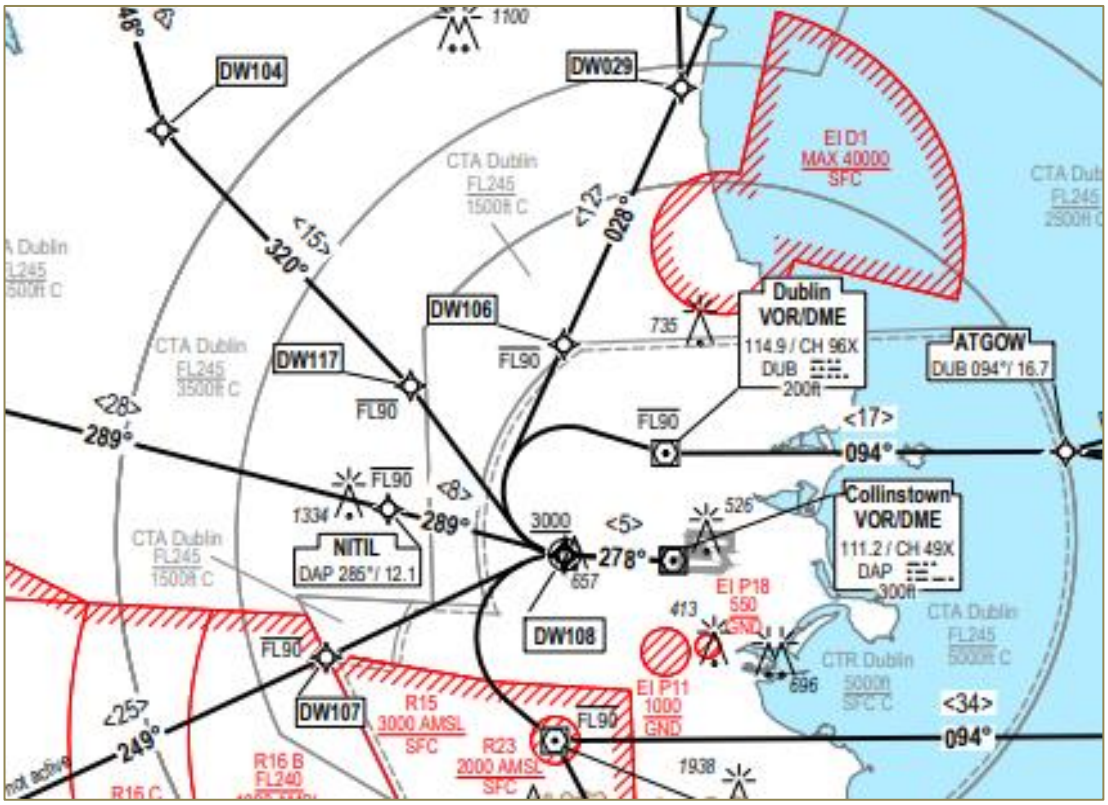
Standard Instrument Departures

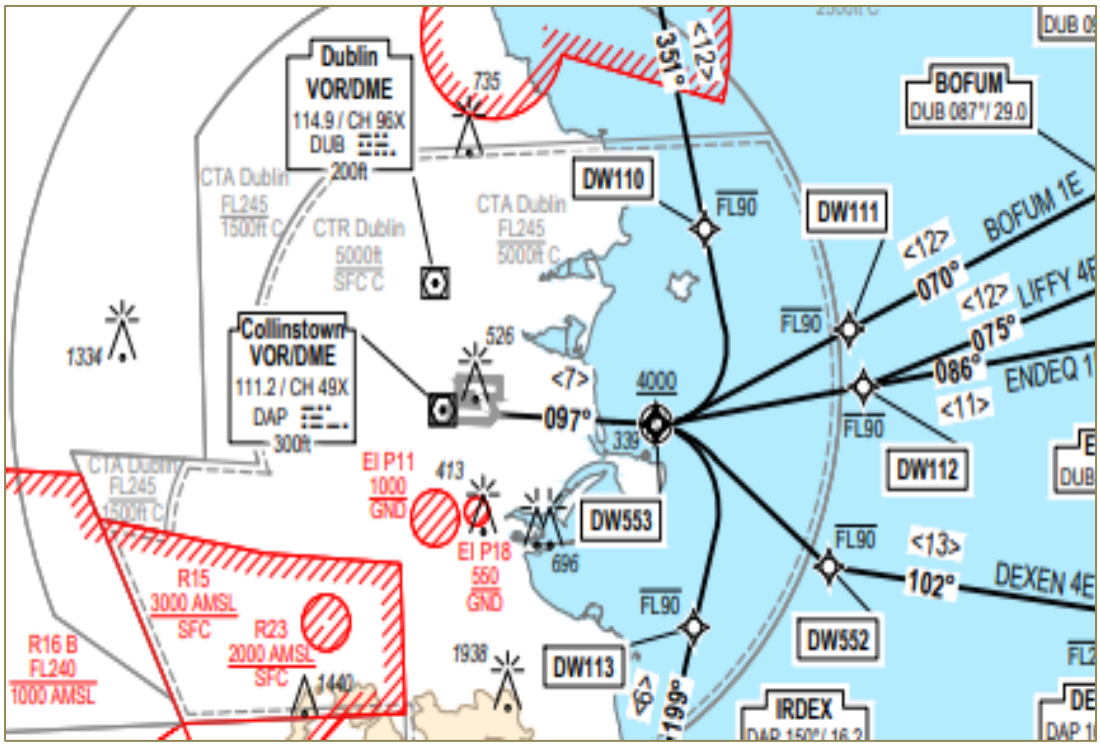
Depending on the departure runway and destination, departing aircraft follow routes called Standard Instrument Departures (SID). SIDs allow aircraft to safely depart an airspace following a pre-defined route. SID's are developed and published in AirNav Ireland's document the Aeronautical Information Package (AIP).

North Runway – Category C and D SID



South Runway – Category C and D SID



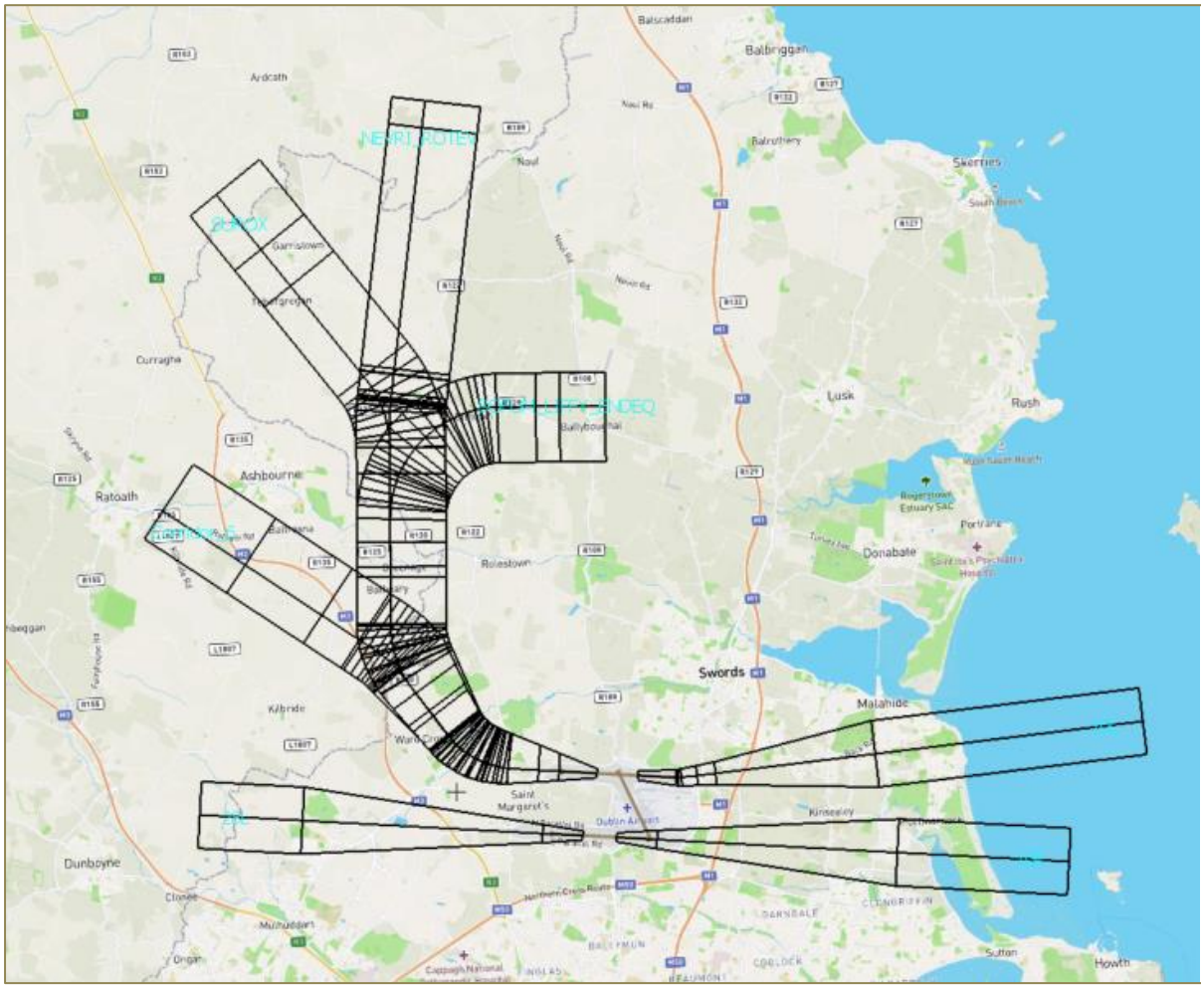


Noise Preferential Routes

Noise Preferential Routes (NPR) are passageways or corridors defined to either side of each SID path. An NPR is also called an Environmental Corridor. These only apply to the departures of jet (Category C and D) aircraft which are the larger aircraft.

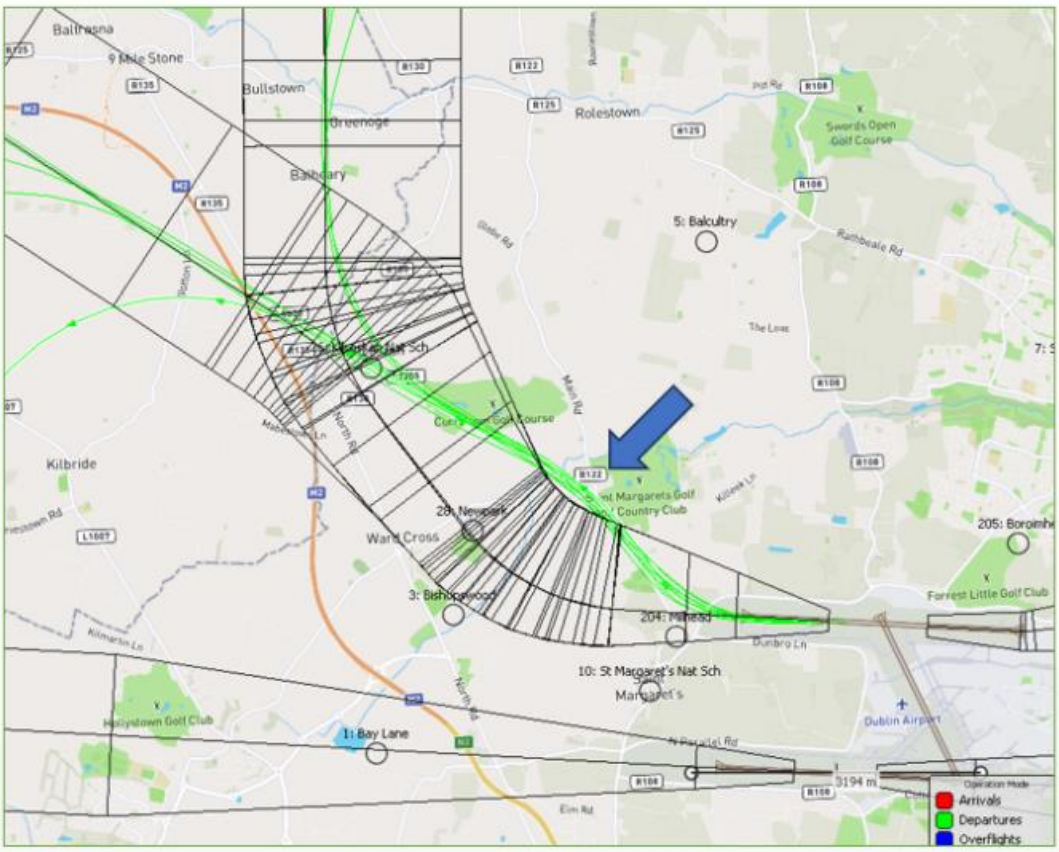
From South Runway, aircraft should not deviate from the NPR until reaching an altitude of 3,000ft. From North Runway, aircraft should not deviate from the NPR until reaching an altitude of 4,000ft.

NPR from each end of the parallel North and South Runways

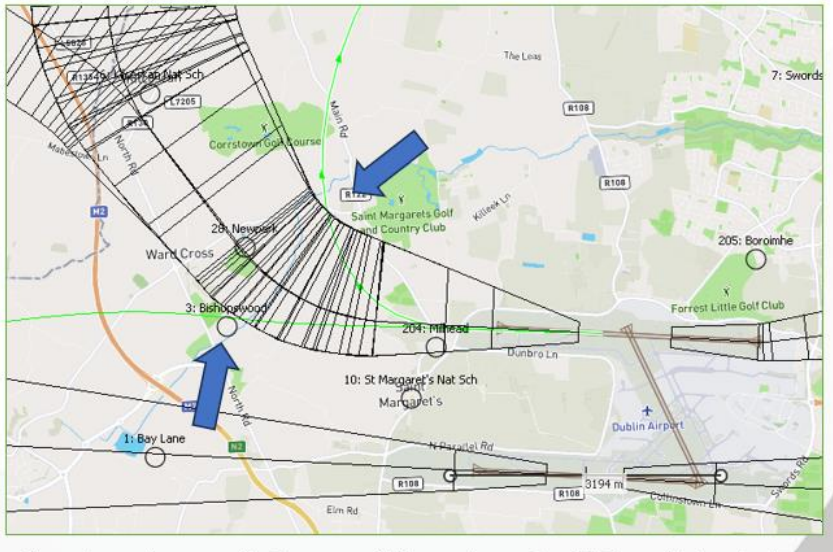


NPR Deviation Examples

Track NPR Deviation Examples – North Runway (RW 28R)

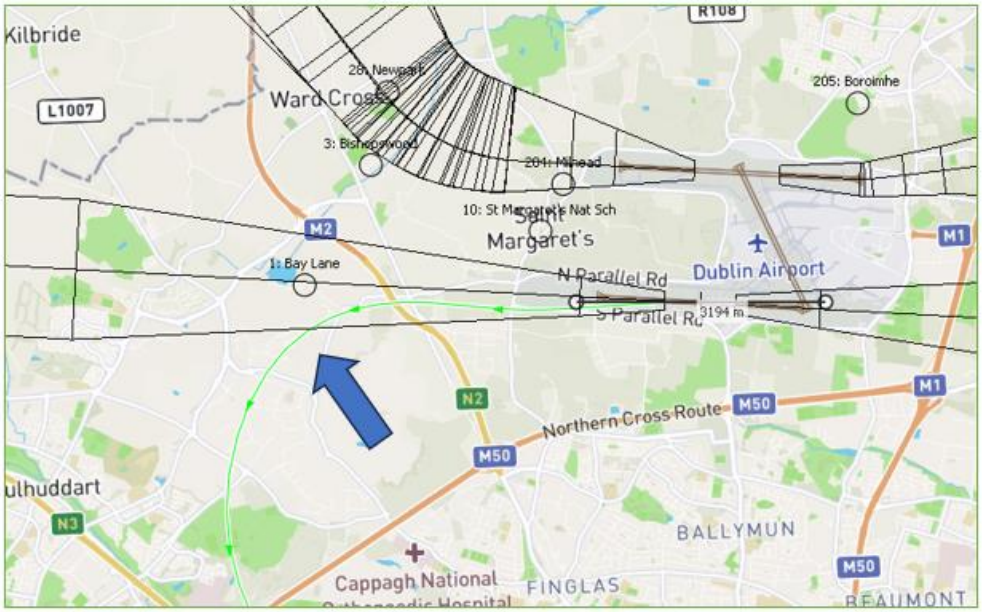


The above diagram displays a number flights which exited the North Runway NPR and then re-entered the NPR. This is a known issue for a small percentage of aircraft and Dublin Airport is working with the airlines and the aircraft manufacturer on resolving it.

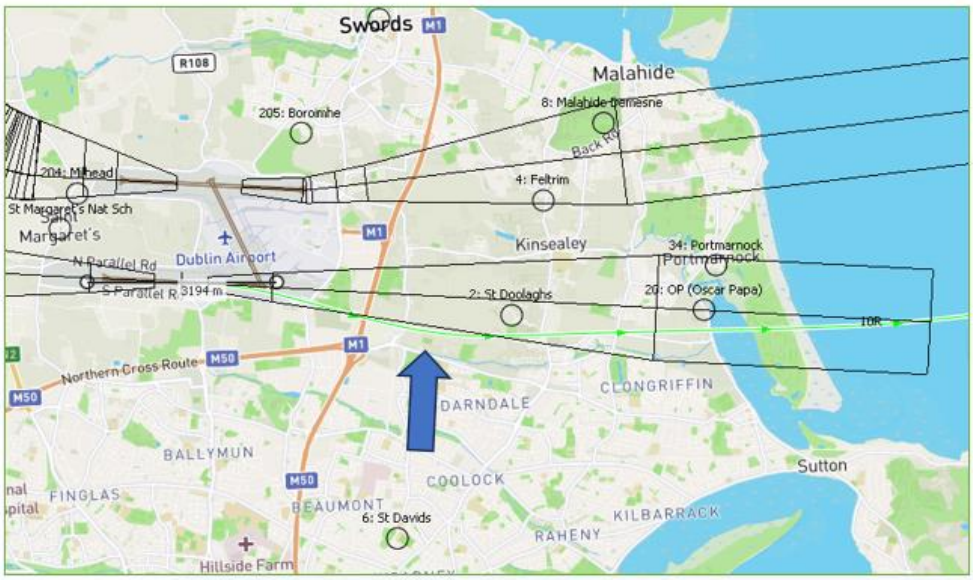


The above diagram displays two different departing flights which exited the North Runway NPR before they would have reached 4,000 ft altitude.

Track NPR Deviation Examples – South Runway



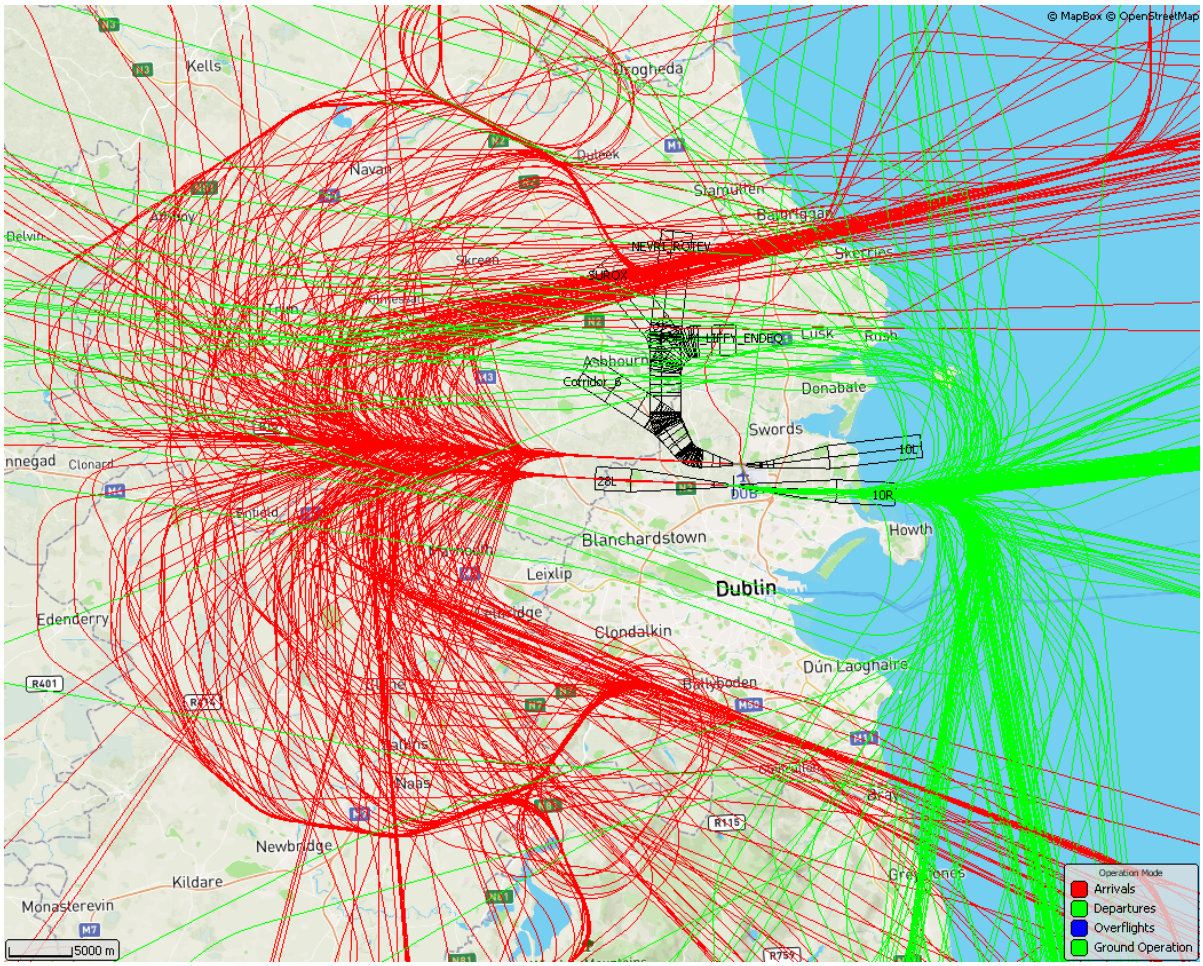
A jet aircraft departed the South Runway heading west and then turned left (southward) not far after the M2 motorway before reaching 3,000ft.



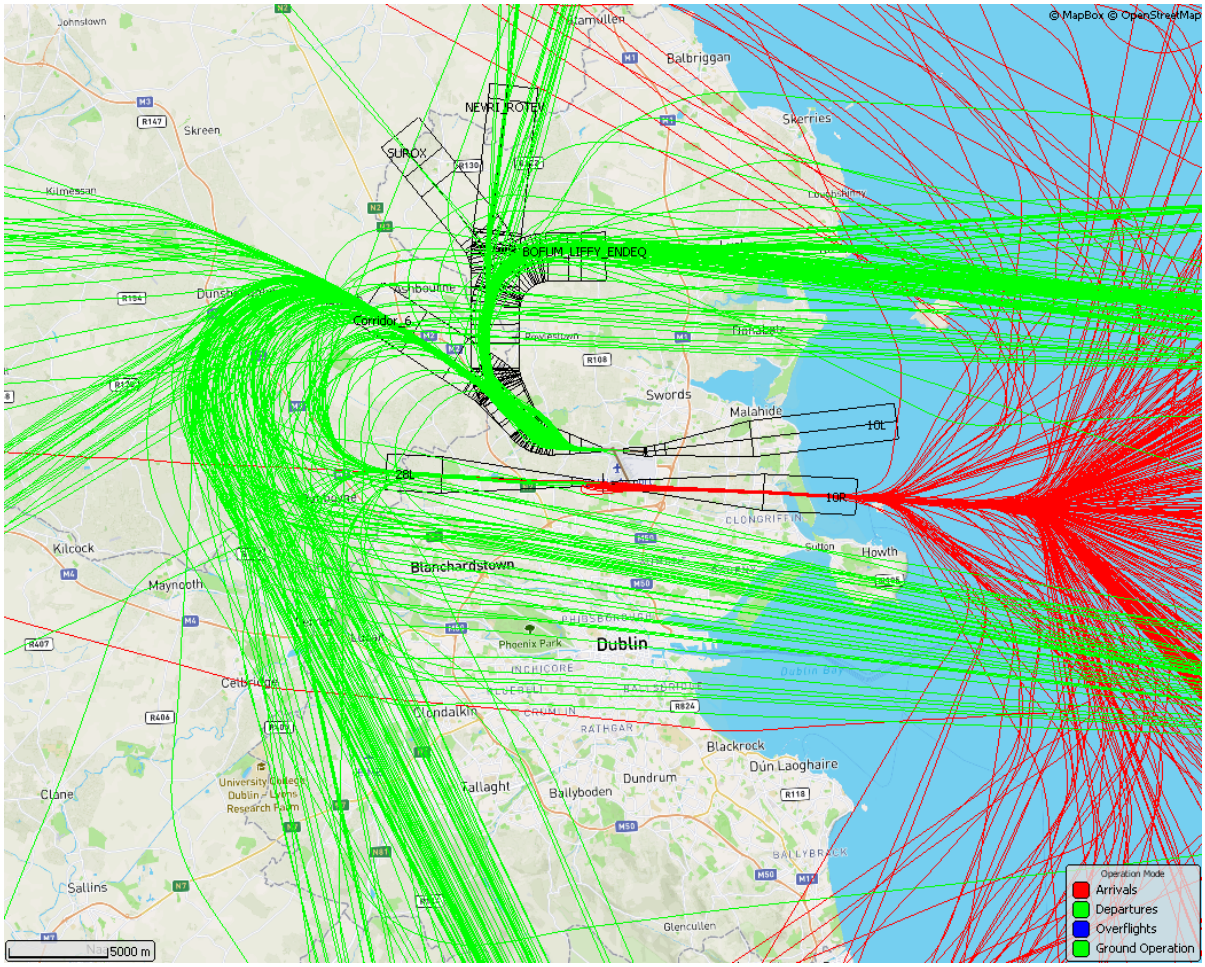
This jet aircraft departed the South Runway heading east. It deviated from the NPR for a short distance and then returned to the corridor, to continue on the correct path.

App 5 Arrival and Departure Tracks with NPR

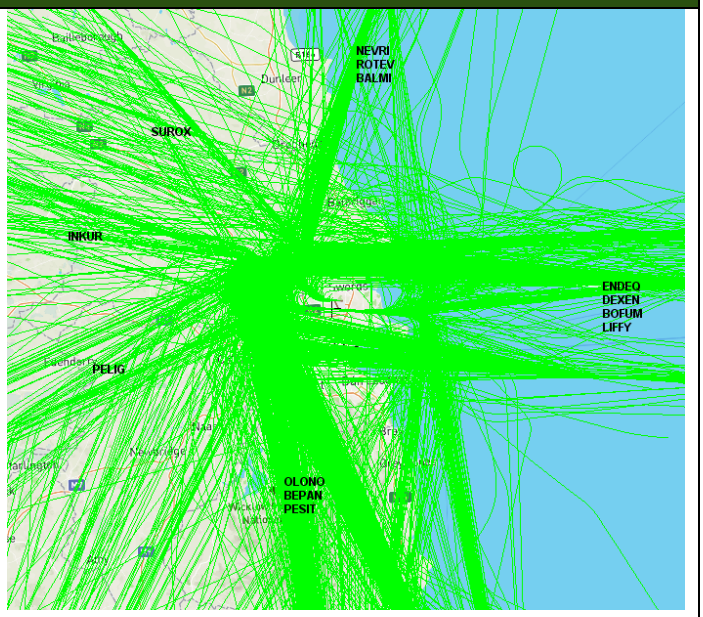
Category C and D (jet) aircraft easterly arrival and departure tracks with environmental corridors (NPRs) on one busy day 6 September 2024.



Category C and D (jet) aircraft westerly arrival and departure tracks with environmental corridors (NPRs) on one busy day 8 September 2024.



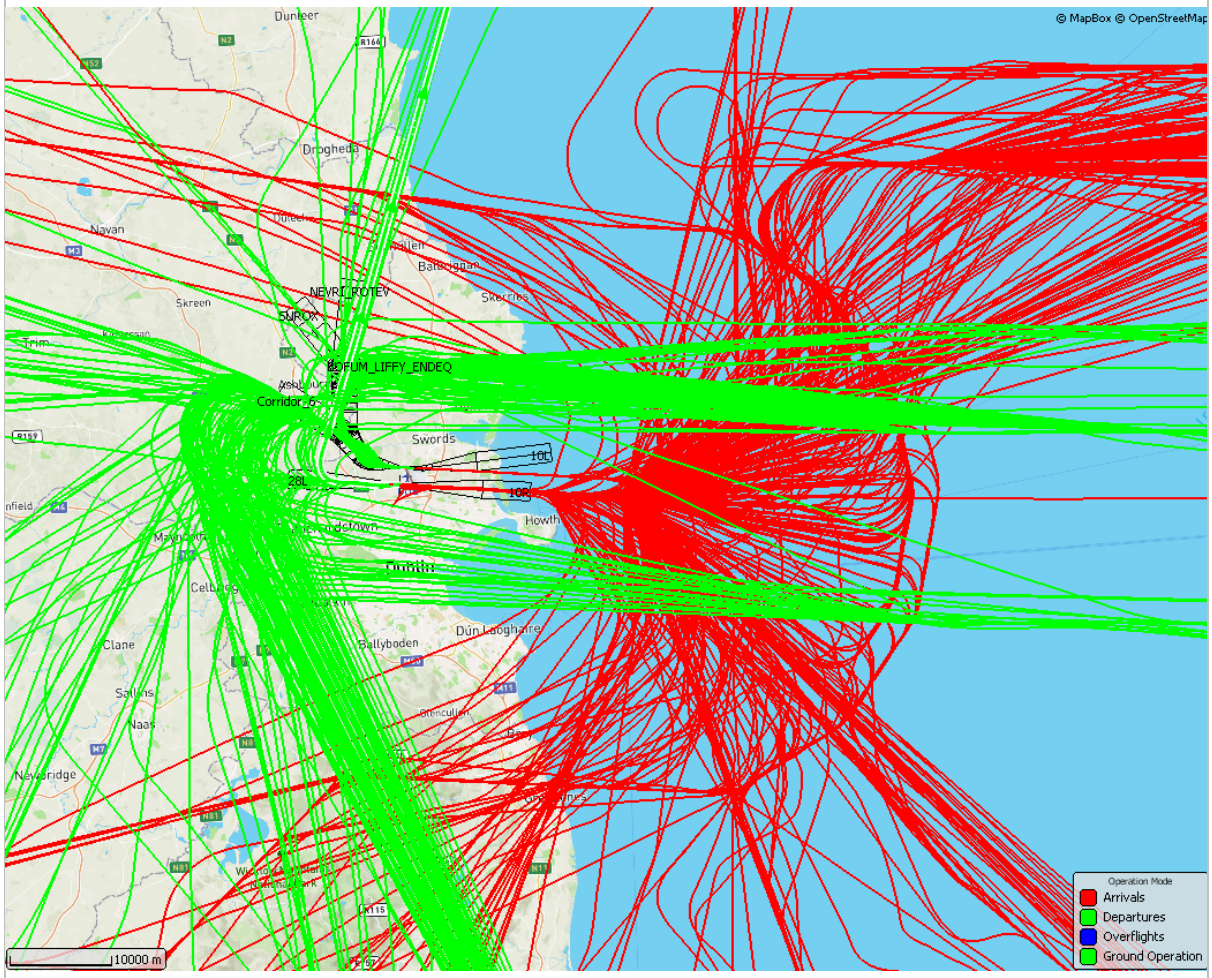
App 6 Departure Route Usage 2024

Rank	Departure Route	Percentage of Departures	Map
1	ENDEQ	36.4%	
2	PESIT	19.2%	
3	ROTEV	7.4%	
4	BOFUM	7.1%	
5	DEXEN	6.4%	
6	BEPAN	4.9%	
7	INKUR	4.1%	
8	PELIG	4.0%	
9	SUROX	3.0%	
10	OLONO	2.8%	
11	TE10R	2.1%	
12	NEVRI	1.2%	
13	ROTAV	0.5%	
14	BAMLI	0.4%	
15	TE28L	0.3%	
16	ABIDO	0.2%	

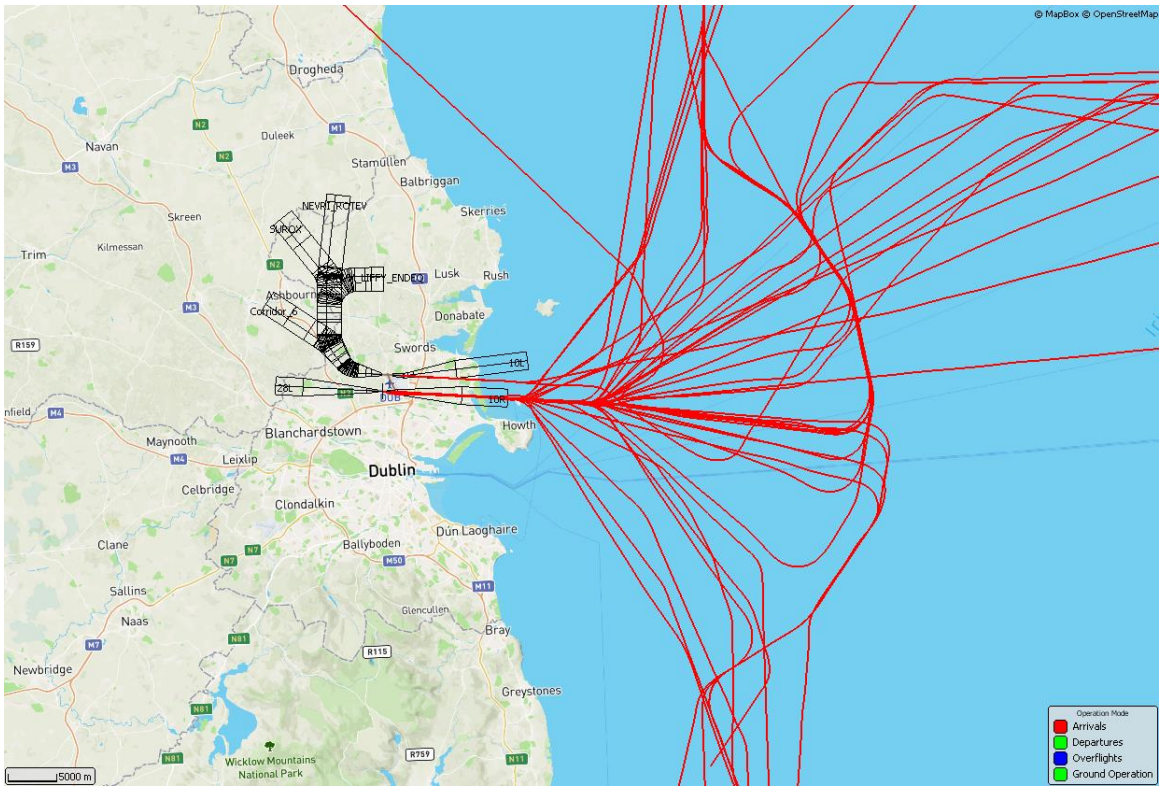
App 7 Busiest Day Tracks

Tracks of Busiest Day Overall – 23 May 2024

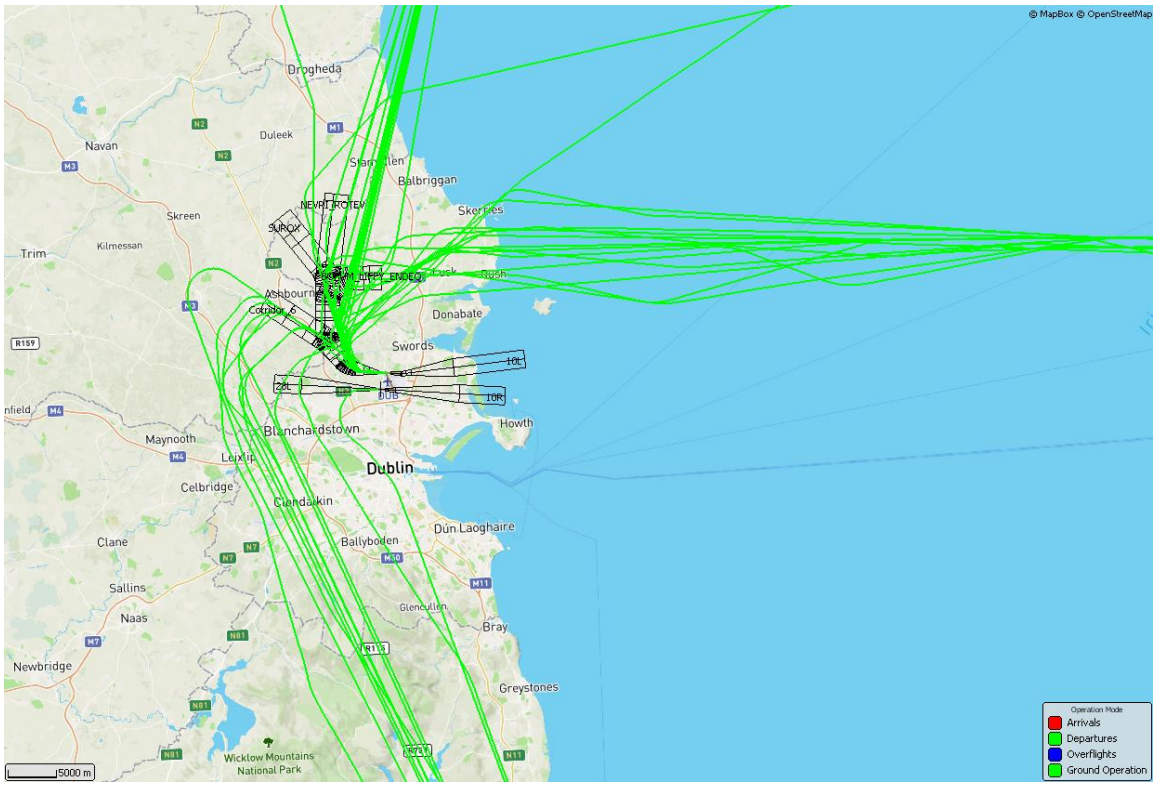
829 Movements - Day after UEFA Cup in Dublin with SR closure from 2300



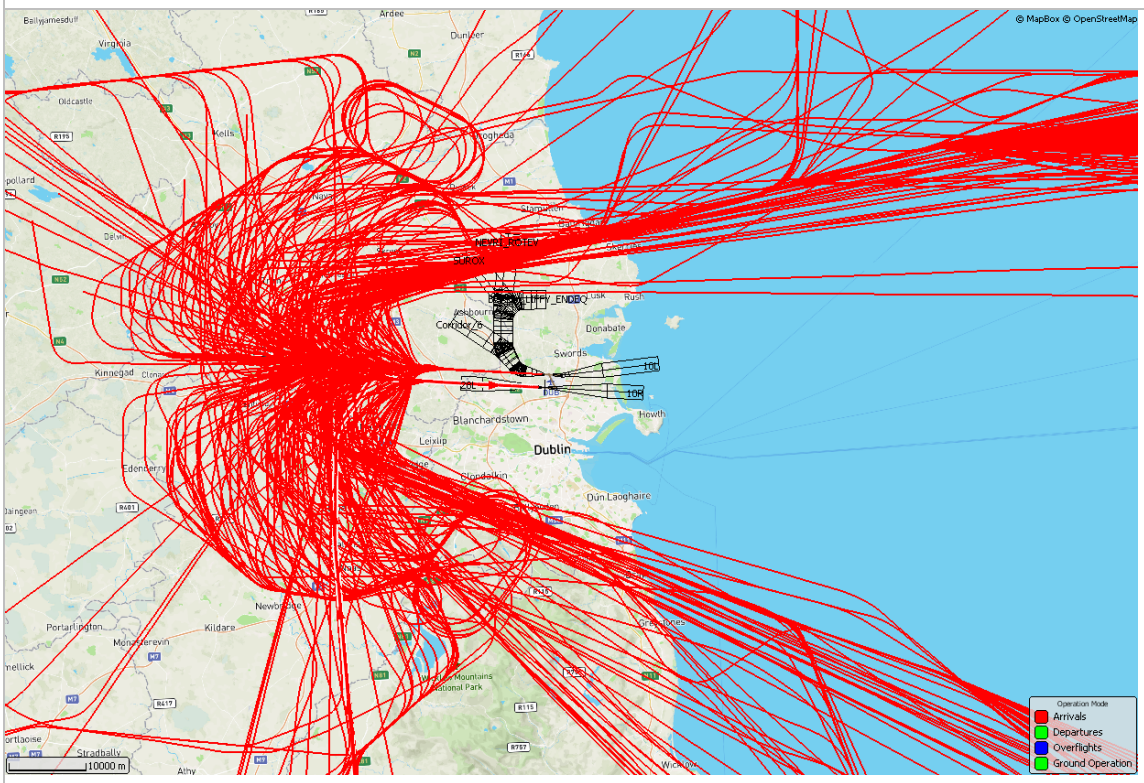
CAT AB Busiest Day Arrivals 23 May 2024



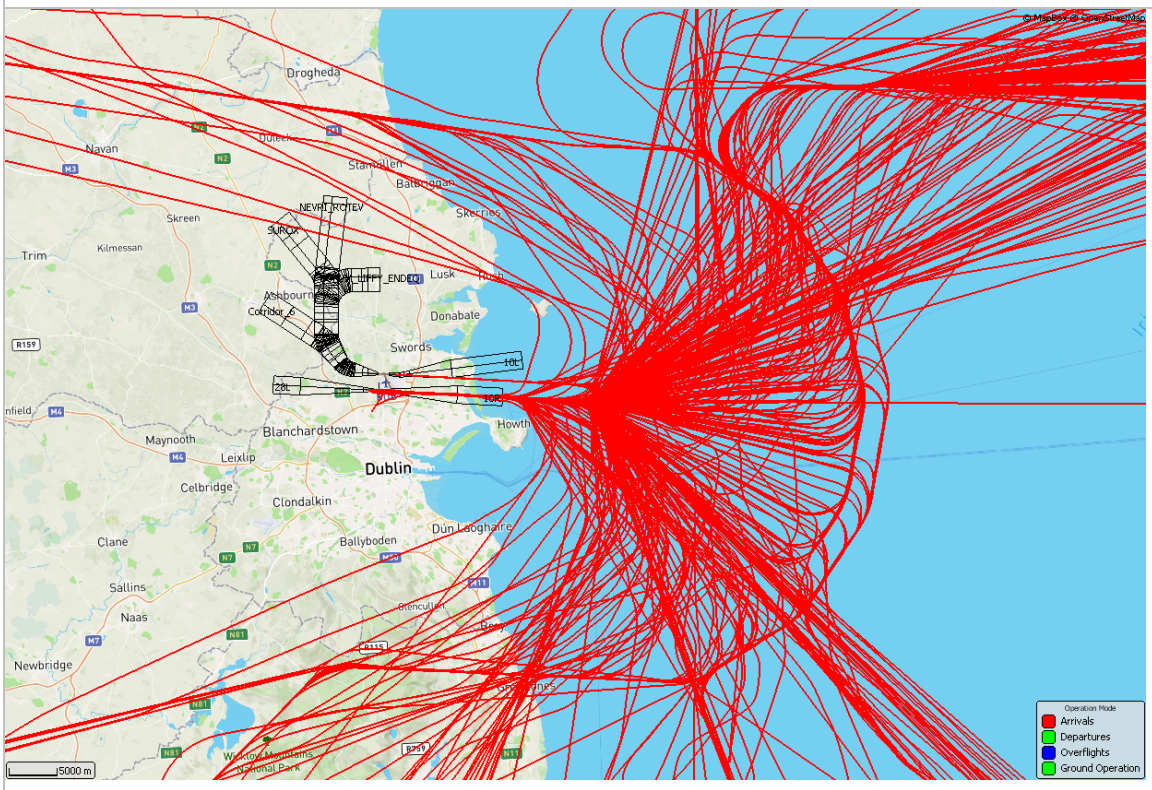
CAT AB Busiest Day Departures 23 May 2024



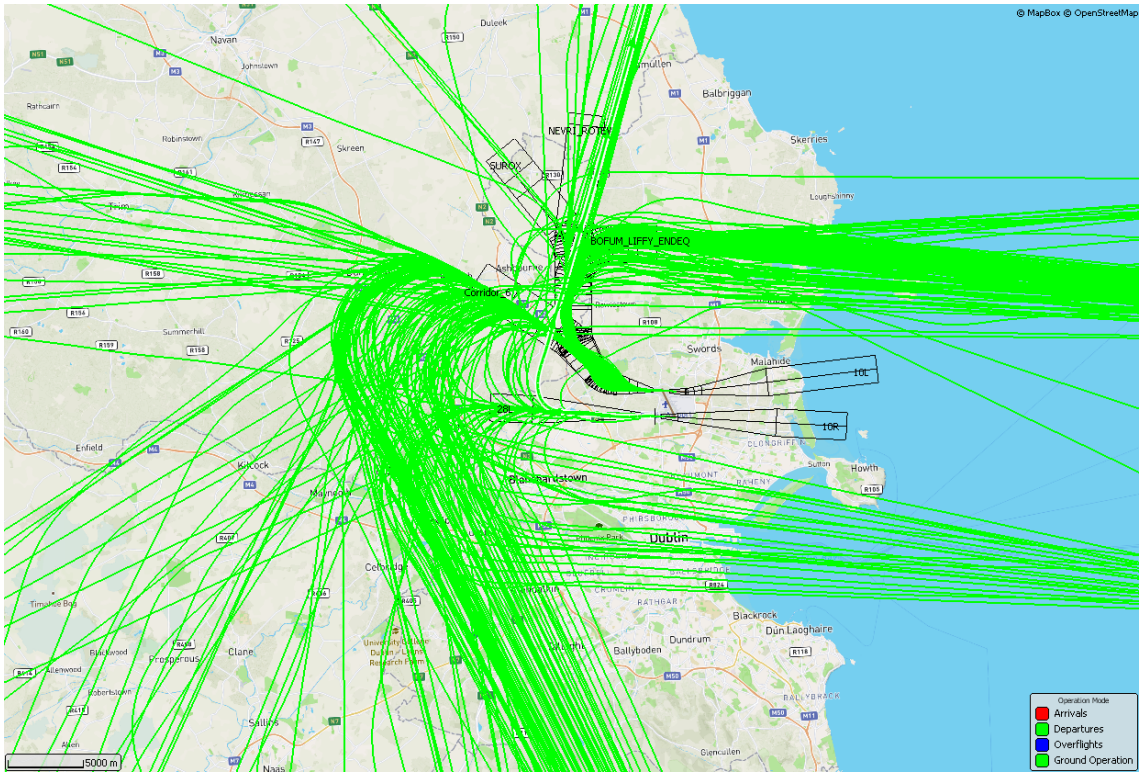
CAT CD Busiest Day Arrivals at Dublin Airport on Easterly Operations – 6 September 2024



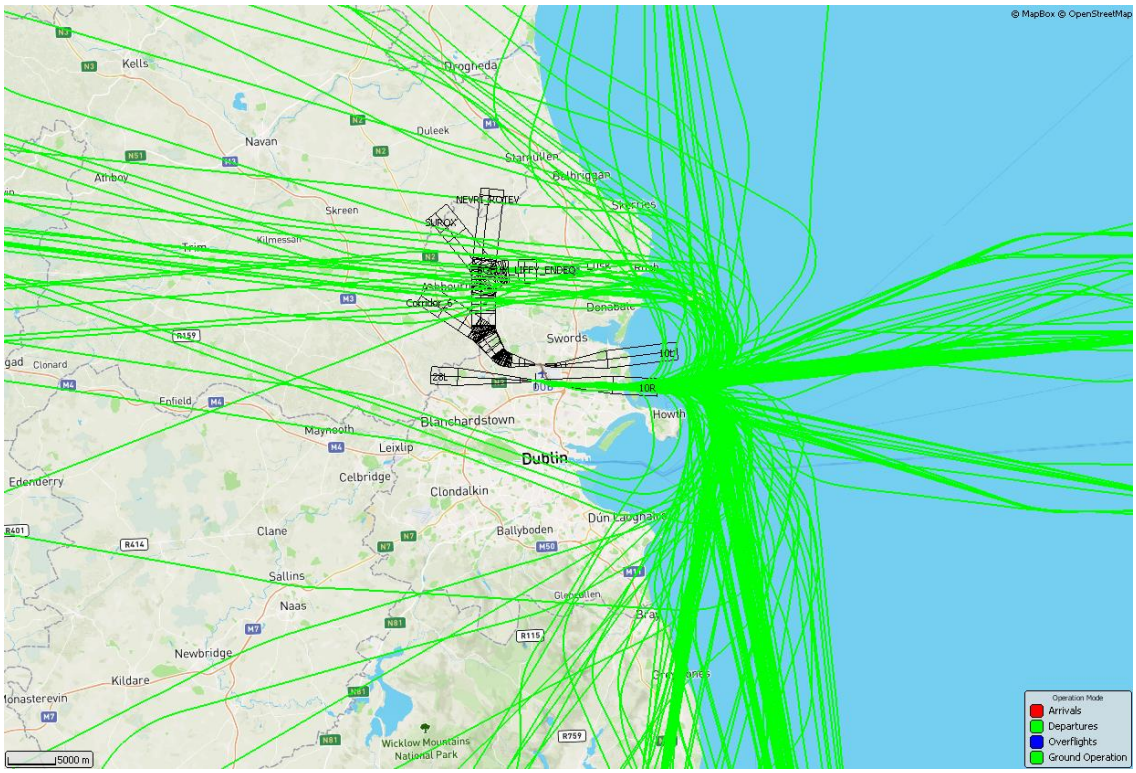
CAT CD Busiest Day Arrivals at Dublin Airport on Westerly operations – 23 May 2024



CAT CD Busiest Day Departures at Dublin Airport on Westerly Operations – 23 May 2024



CAT AB Busiest Day Departures at Dublin Airport for Easterly Operations 6 September 2024



App 8 Busiest Day Overlays

This Appendix shows the annual aircraft noise contours of Lden and Lnight as well as the Summer Day and Summer Night contours, against the typical busiest day aircraft tracks. The distribution of aircraft operations is related directly to the modelled noise impact. Green tracks are departures and Red are arrivals.

Figure	Base Contours		Operations Shown	Wind Mode
A8.1	Annual	Lden	Dep	East
A8.2	Annual	Lden	Dep	West
A8.3	Annual	Lden	Arr	East
A8.4	Annual	Lden	Arr	West
A8.5	Annual	Lnight	Arr/Dep	East
A8.6	Annual	Lnight	Arr/Dep	West
A8.7	Summer Day	Leq16	Arr/Dep	West
A8.8	Summer Night	Leq8	Arr/Dep	West

Figure A8.1 – Annual Lden Contour

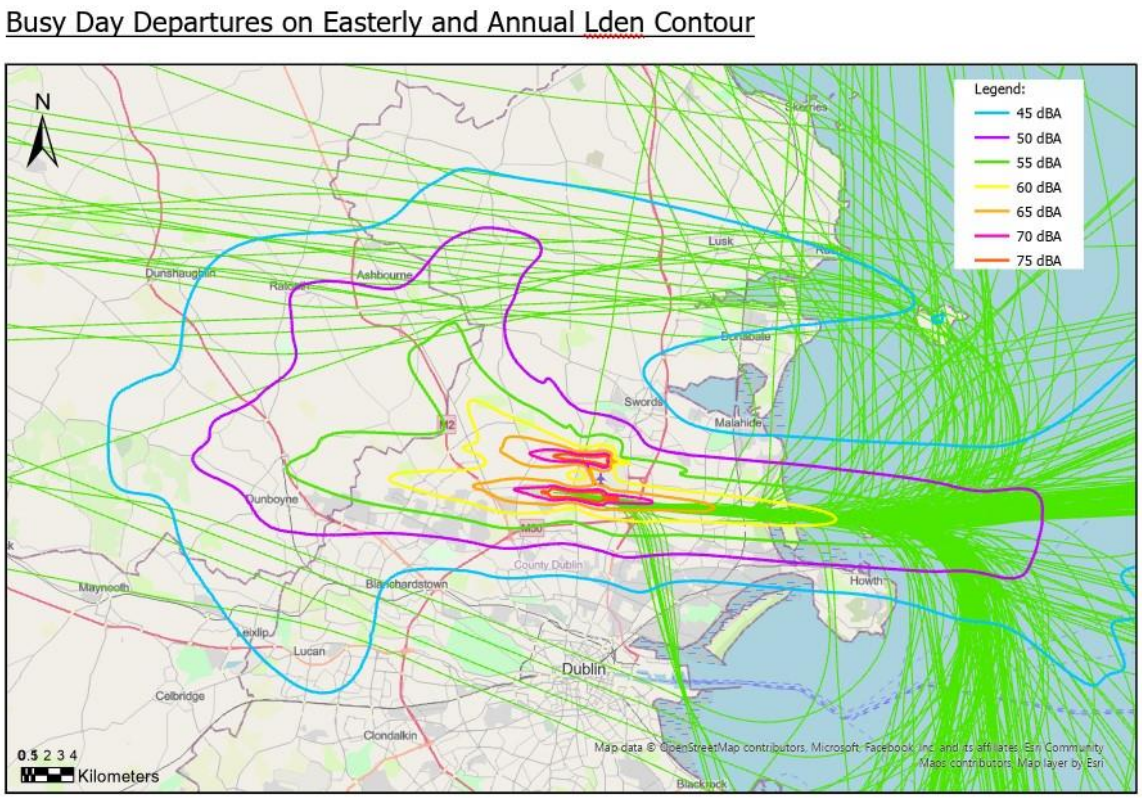


Figure A8.2 – Annual Lden Contour

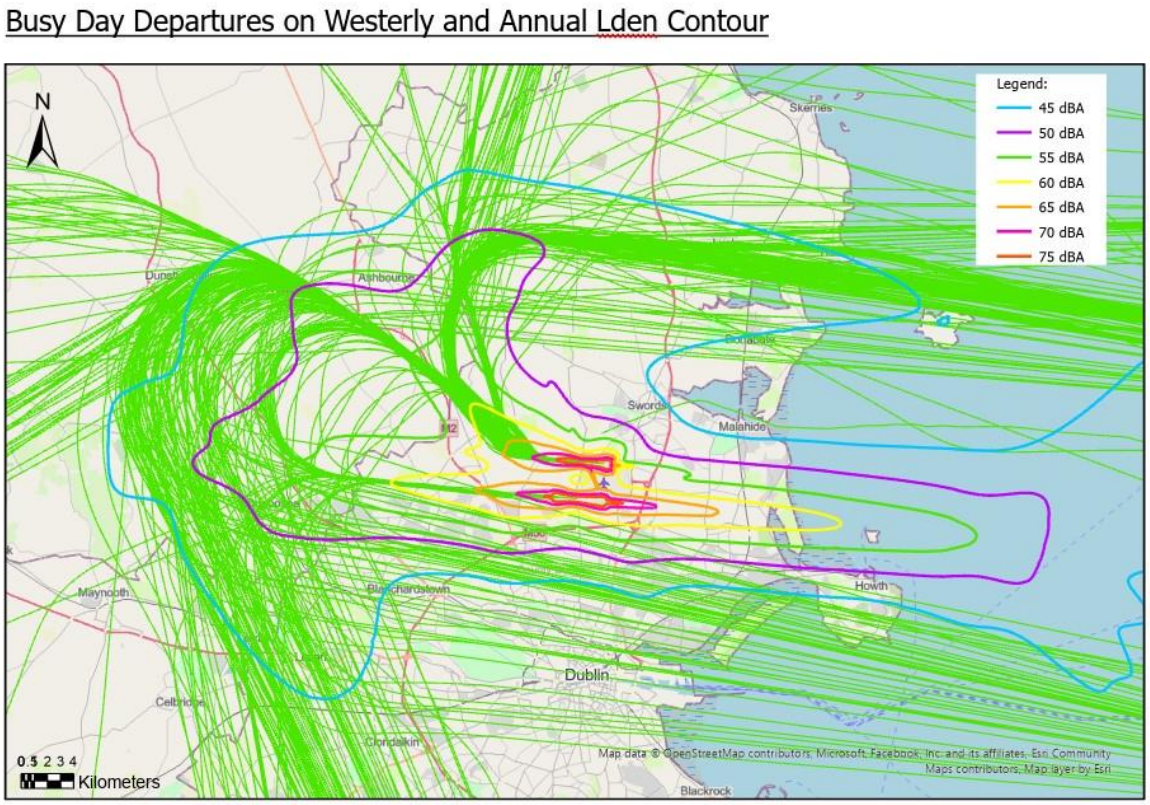


Figure A8.3 – Annual Lden Contour

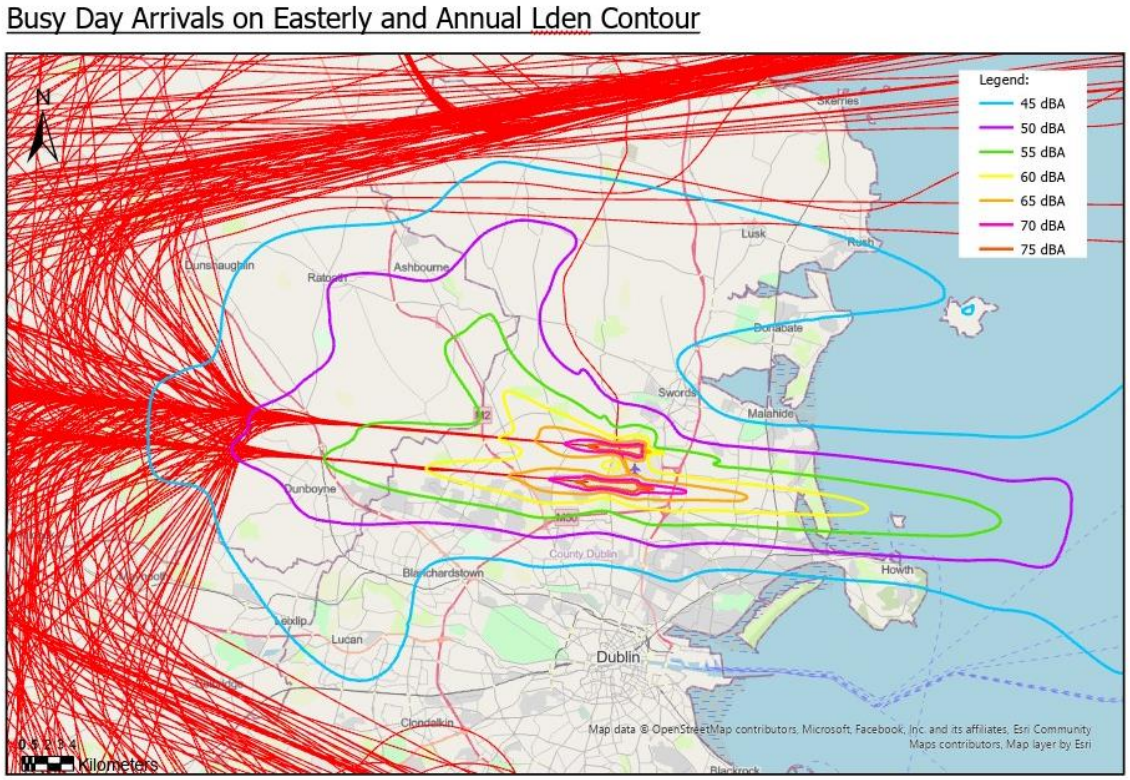


Figure A8.4 – Annual Lden Contour

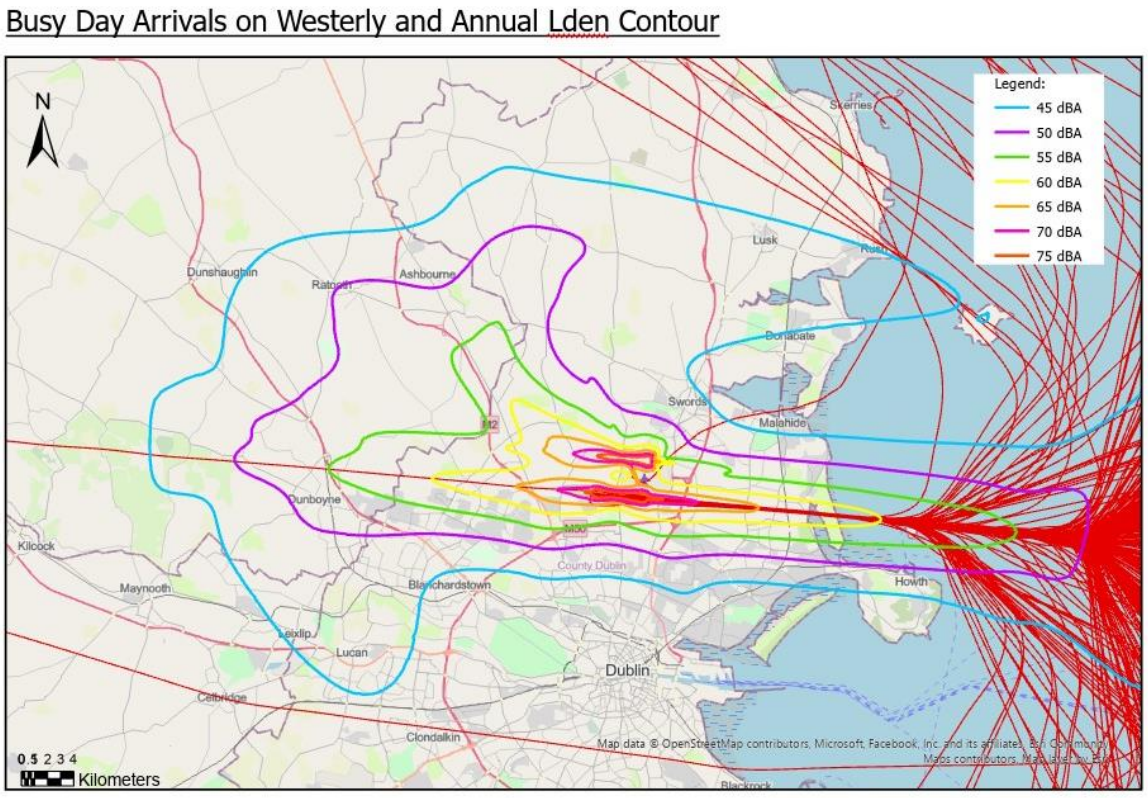


Figure A8.5 – Annual Lnight Contour

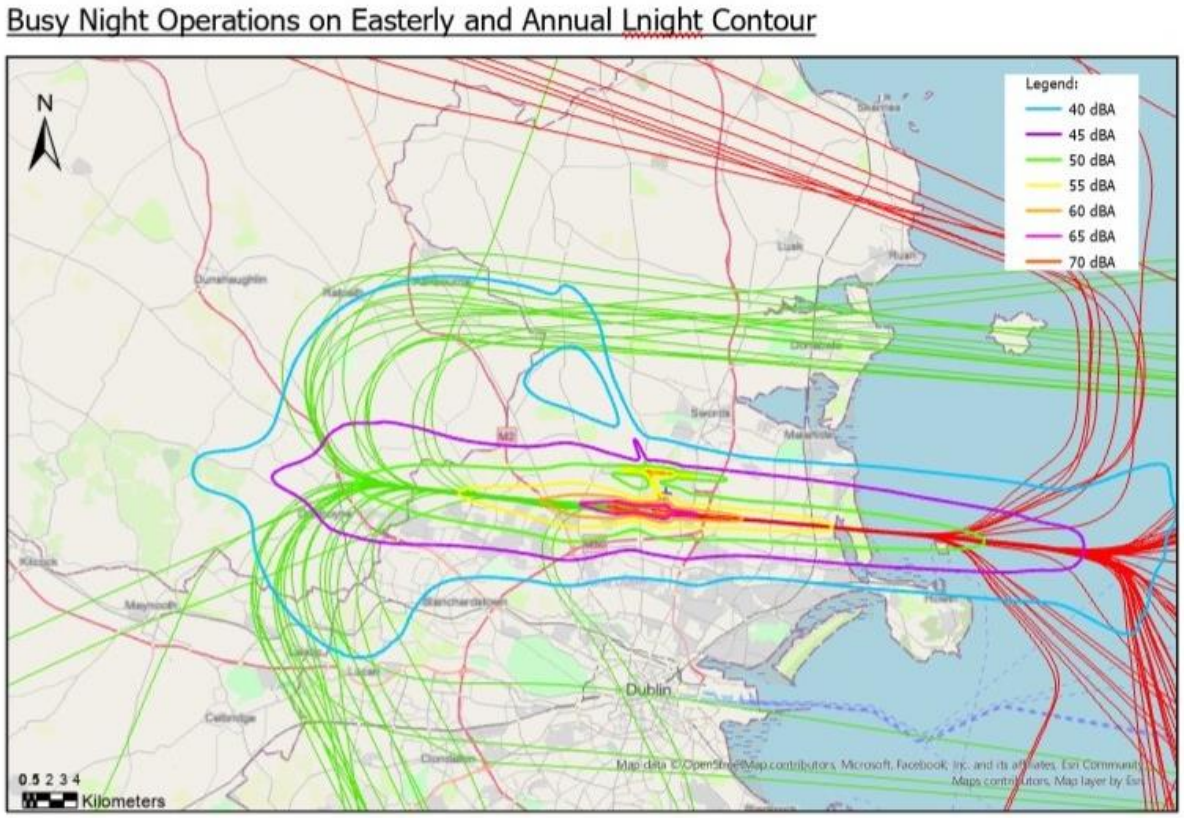


Figure A8.6 – Annual Lnight Contour

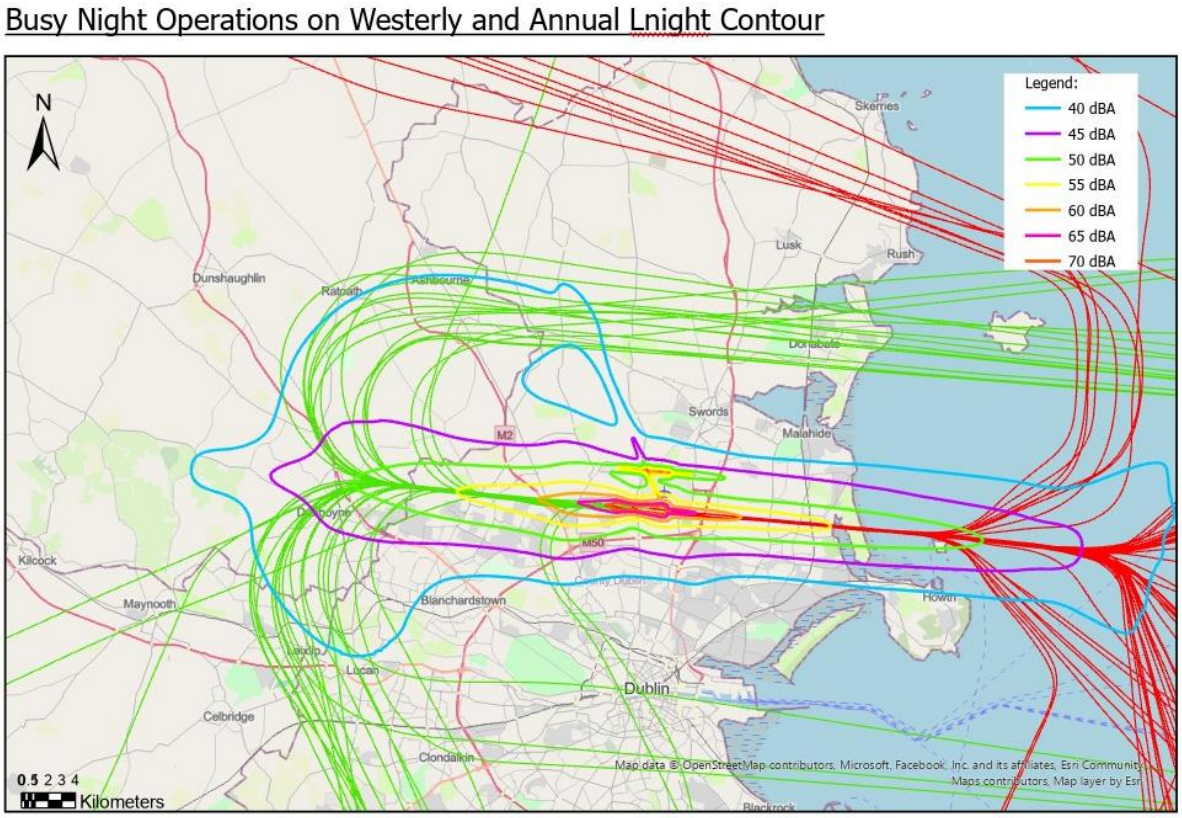


Figure A8.7 - Summer Day Contour (Leq16h 07-23h 16 June – 15 September 2024)

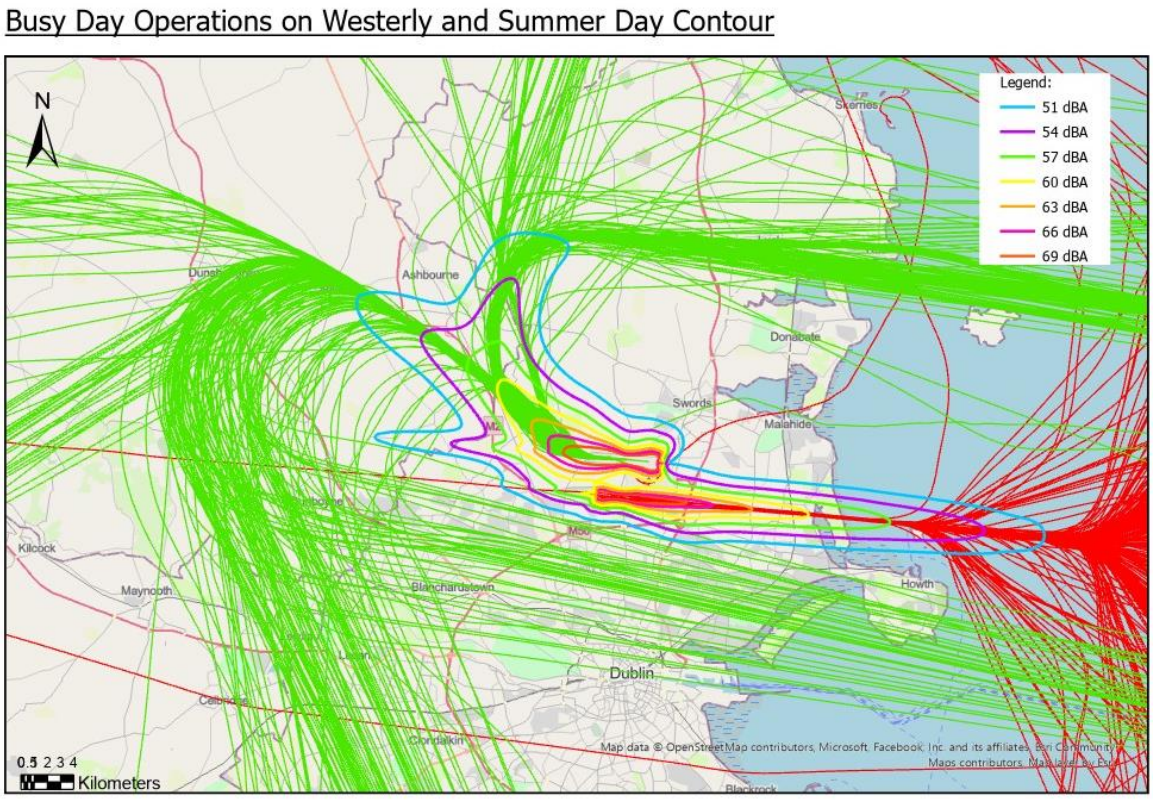
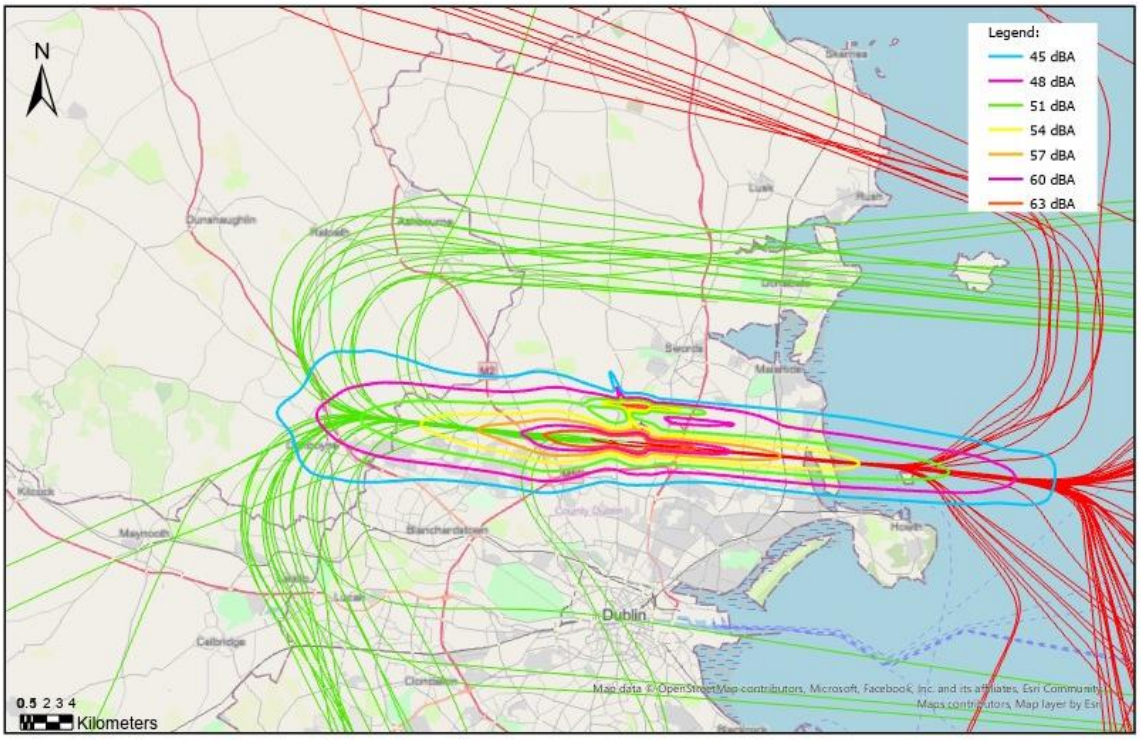


Figure A8.8 – Summer Night Contour (Leq8h 23-07h 16 June – 15 September 2024)



App 9 Track Adherence and Deviation Data

Track Deviations by Month and by Operational Runway

Month	SR 10R	SR 28L	NR 10L	NR 28R	Total
1	0.02%	0%	0%	8.4%	8.4%
2	0.1%	0.02%	0%	8.0%	8.1%
3	0.5%	0.03%	0%	5.2%	5.7%
4	0.1%	0.2%	0%	6.8%	7.1%
5	0.2%	0.1%	0%	6.0%	6.2%
6	0.1%	0.2%	0%	9.0%	9.3%
7	0.1%	0.1%	0%	8.8%	8.9%
8	0.1%	0.1%	0%	12.3%	12.5%
9	0.2%	0.1%	0%	7.7%	8.0%
10	0.1%	0%	0%	7.9%	8.0%
11	0.1%	0.3%	0%	7.2%	7.5%
12	0.03%	0.03%	0%	10.2%	10.2%
Total	1.3%	1.1%	0%	97.6%	100%

2024 Track Deviations by Aircraft Type (Top 20)

Rank	Aircraft Type	% of All Track Deviations
1	A20N	54.2%
2	A320	17.6%
3	A21N	7.3%
4	A319	5.6%
5	A321	5.1%
6	B738	2.5%
7	A333	1.9%
8	B38M	0.7%
9	B752	0.6%
10	A332	0.5%
11	B763	0.5%
12	E195	0.4%
13	E190	0.3%
14	A359	0.3%
15	BCS3	0.2%
16	B789	0.2%
17	B788	0.2%
18	A318	0.2%
19	LJ45	0.1%
20	B772	0.1%
Total		98.5%

2024 Track Deviations by Airline (Top 20)

Rank	Airline	% of All Track Deviations
1	EIN	43.6%
2	BAW	16.3%
3	DLH	9.4%
4	SAS	7.7%
5	VLG	3.9%
6	RYR	2.7%
7	SZS	2.2%
8	AFR	1.6%
9	BCS	1.4%
10	SWR	1.3%
11	IBS	0.9%
12	EWG	0.8%
13	UAL	0.6%
14	TAP	0.6%
15	DAL	0.5%
16	AEE	0.4%
17	EFW	0.4%
18	LYX	0.4%
19	GWI	0.3%
20	AAL	0.3%
Total		95.4%

2024 Track Deviations by Hour

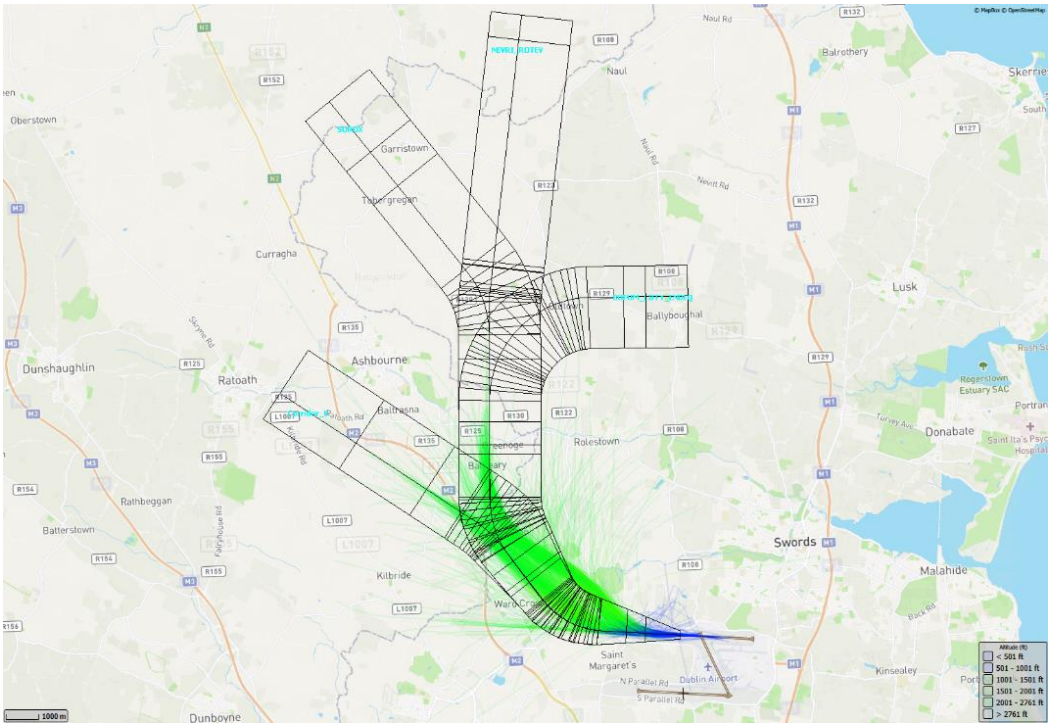
Hour	Track Deviations
0	0.1%
1	0.0%
2	0.2%
3	0.03%
4	0.02%
5	0.2%
6	0.6%
7	6.6%
8	3.8%
9	9.0%
10	7.5%
11	9.0%
12	10.5%
13	7.7%
14	6.2%
15	4.0%
16	6.1%
17	4.2%
18	7.8%
19	5.9%
20	6.3%
21	3.9%
22	0.5%
23	0.03%
Total	100%

Cat C/D Departures vs Track Adherence

AC type	% of All Track Deviations	2024 Departure Movements	2024 Track Deviations
A20N	54.2%	5,594	3,276
A320	17.6%	23,392	1,061
A21N	7.3%	5,068	442
A319	5.6%	1,117	337
A321	5.1%	1,921	308
B738	2.5%	44,707	149
A333	1.9%	3,419	113
B38M	0.7%	6,290	44
B752	0.6%	1,029	33
A332	0.5%	996	31
B763	0.5%	1,814	27
E195	0.4%	452	26
E190	0.3%	2,752	16
A359	0.3%	252	15
BCS3	0.2%	1,104	13
B789	0.2%	912	13
B788	0.2%	962	12
A318	0.2%	15	11
LJ45	0.1%	178	9
B772	0.1%	505	9

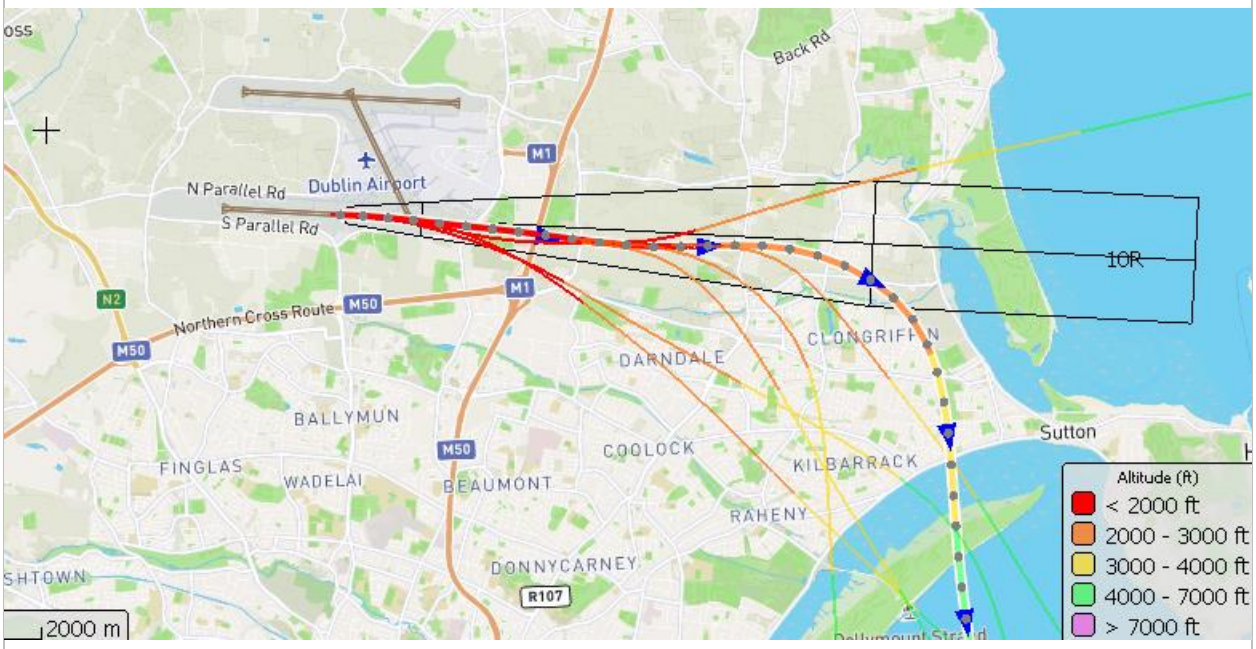
App 11 2024 Deviation locations

28R Deviations – Day



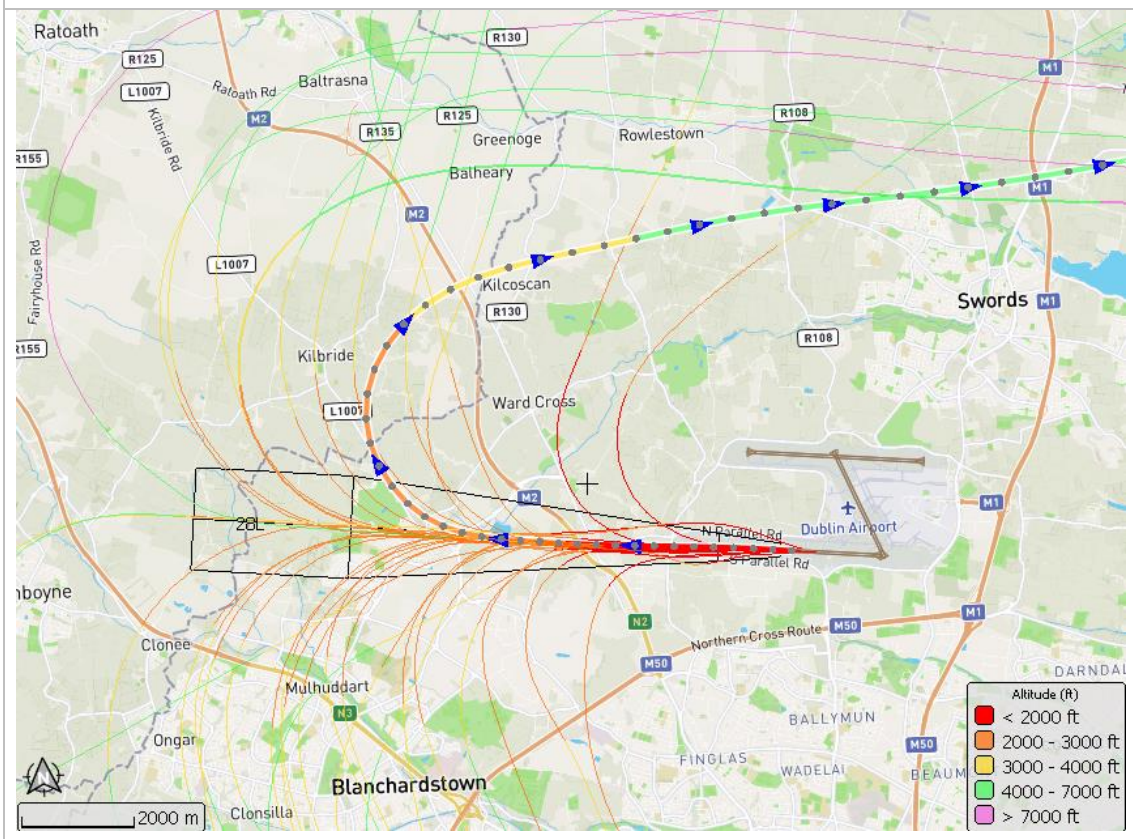
App 12 2024 NPR Deviations - Day and night

10R Deviations - Day

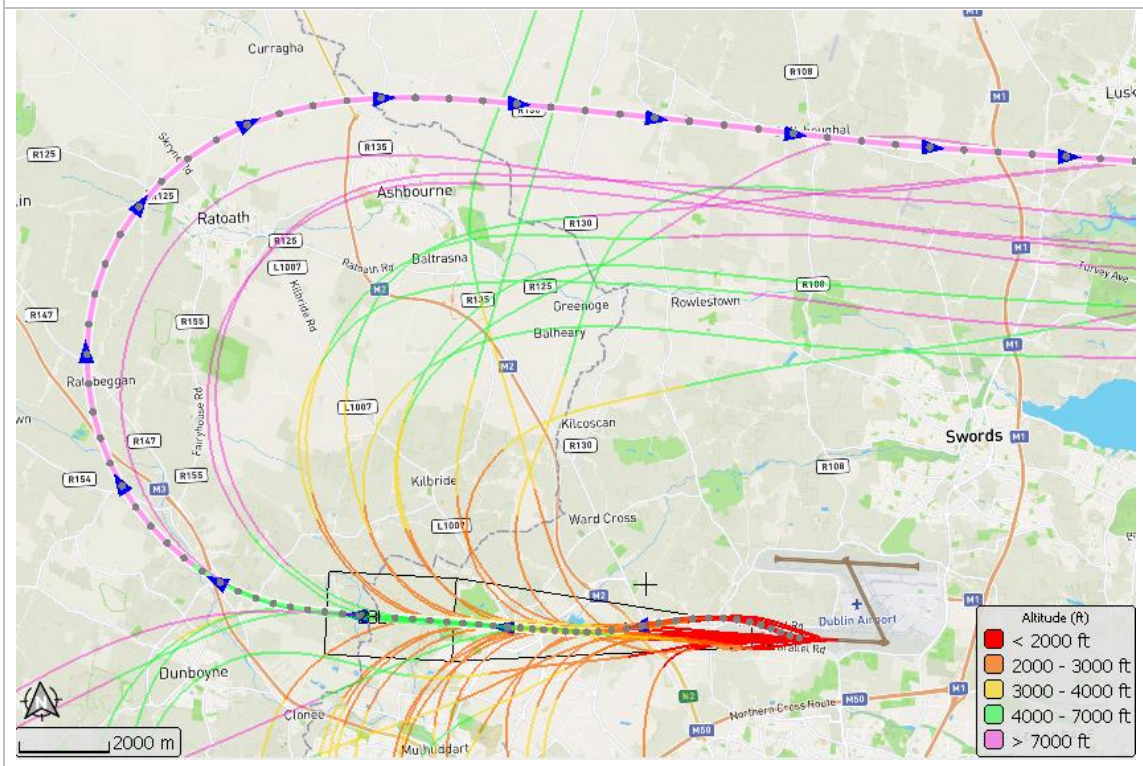


10R Deviations - Night

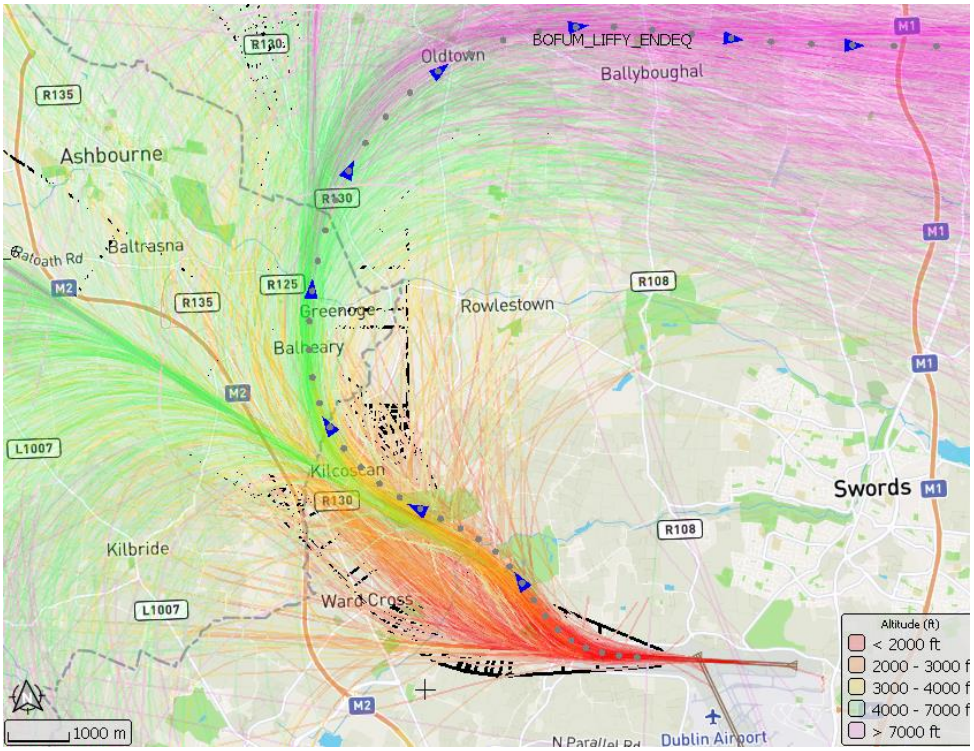
28L Deviations – Day



28L Deviations – Night



28R Deviations - Day



28R Deviations - Night