



Dublin Airport

Quarterly Noise and Flight Track Monitoring Report

April to June (Q2) 2026

- This report presents data and information from Dublin Airport's Noise Monitoring Terminals (NMTs) and flight track monitoring system.
- The publication of this quarterly report is a requirement under Condition 10 of North Runway's planning permission.
- The report is split into two parts:
 - Part 1: Noise Monitoring – Permanent monitors
 - Part 2: Flight Track Monitoring
- Noise data is presented in this report in five different metrics - Lden, Lnight, Leq16h, Lmax and SEL.
- This report includes the 2025 Modelled Annual Noise Contours for the Lden and Lnight metrics and compares this data with the measured data at the 25 permanent NMT locations.
- The reporting of environmental noise from transport systems – airports, road and rail - is regulated by the EU Environmental Noise Directive (END).
- The END refers to the Lden and Lnight metrics to assess noise impact and to measure longer term improvements and goals.
- These two metrics are also used by the World Health Organization (WHO).
- Lmax and SEL are single event metrics and are not generally used on their own to assess noise impact by authorities. By including the number or frequency of events, they can provide a different way of representing the noise situation.
- This report demonstrates good correlation between the noise measurements obtained from NMTs and the modelled noise contours - this provides confidence in the accuracy of the contours. Noise contours cover the entire study area whereas noise monitors only report noise at the actual monitoring locations.

Part 1: Noise Monitoring Data Permanent NMT



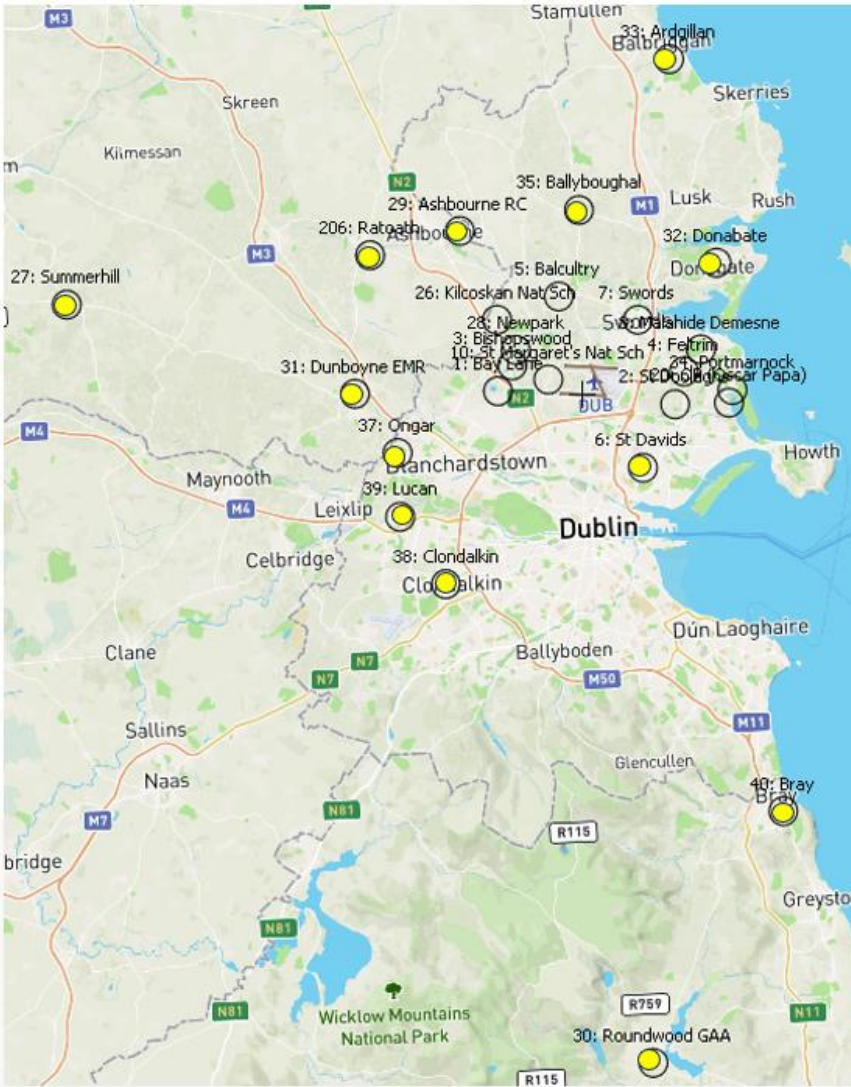
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14	NMT – Total Noise vs Aircraft Noise Q4 2025, Q1 and Q2 2026	• Measured Total and the Aircraft Lden levels at each NMT.
15	NMT – Q2 2026 Lmax and SEL (NA) Number Above (Daily Average)	Measured Single Event data at each NMT: • Daily Average of the Number of Aircraft Events over each Lmax value 60 to 85 [N60 to N85]. • Daily Average of the Number of Aircraft Events over each SEL value 70 to 95 [N(SEL)70 to N(SEL)95]
16	NMT – Q2 2026 Lmax and SEL Percentages (3 months)	Measured Single Event data at each NMT: • The distribution (%) of events over the quarter in each 5-decibel Lmax band (e.g. Lmax 60 - 65 dBA) and each SEL band (e.g. SEL 75 - 80 dBA).
17	NMT – Q2 2026 Lmax/SEL data divided by Day, Evening and Night	• Average of the Number of Aircraft Events over each Lmax value 60 to 85 [N60 to N85] – divided by the Day Evening and Night periods.

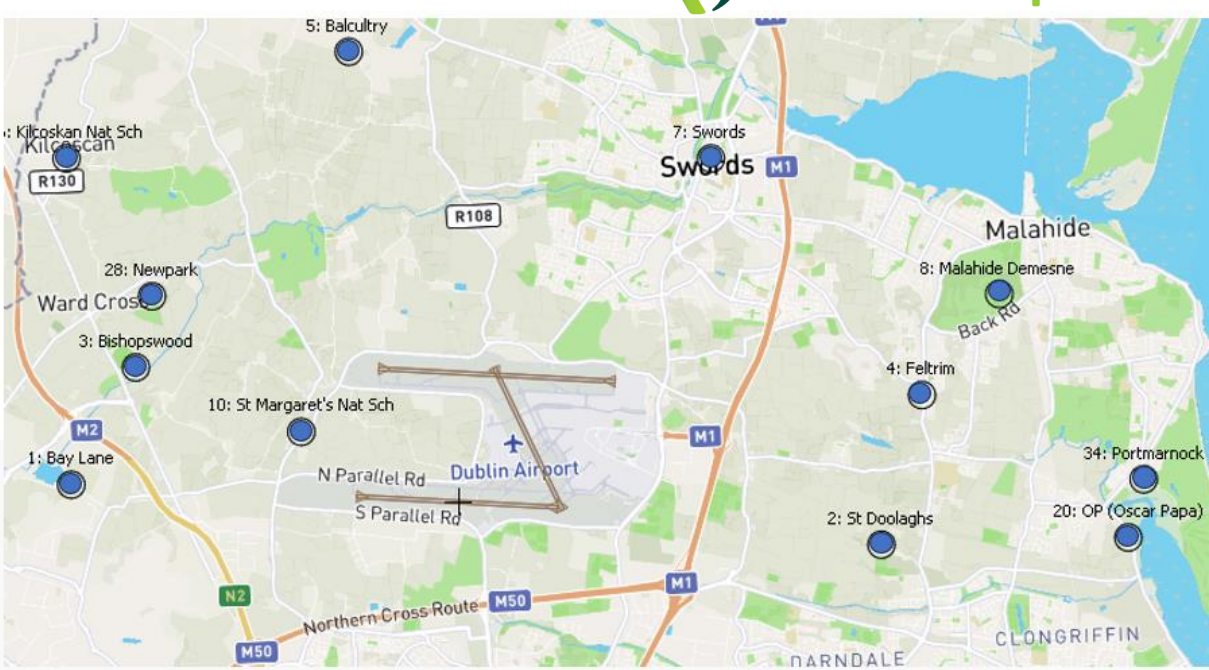
Term	Definition
Aircraft Noise	The noise generated by aircraft operating to or from Dublin Airport. For our noise monitors, this excludes aircraft not travelling to or from Dublin Airport and noise from local activity such as road traffic, wind, birds, dogs and community activity. (These other noise sources are included in the measured Total Noise.)
(Correlated) Aircraft Noise Event	This is a noise event that is matched to an aircraft flight near the location of the NMT and the time of the noise event. Only correlated aircraft noise events are used to calculate the measured aircraft noise (e.g. Lden, Lnight, Leq16) at the NMT location.
Downtime (minutes)	The number of minutes during the period that each monitor was not operational.
Lden	Lden is the day-evening-night level. It is a descriptor of noise level based on energy equivalent noise level (Leq) over a whole day or longer, with a penalty of 5 dBA for evening noise (19:00-23:00h or 7-11pm) and a penalty of 10 dBA for night-time noise (23:00-7:00h or 11pm-7am). The 5-decibel penalty means that an evening flight is treated as the equivalent of three daytime flights. The 10-decibel penalty means that a night flight is the equivalent of 10 daytime flights.
Leq	Leq is the Equivalent Continuous Sound Level and is the average sound level, over the given period, that has the same total energy as the actual time-varying noise.
Leq16(hr)	Leq16h is the Leq over the 16-hour day-time period (7am-11pm). The Summer Leq16hr covers the 92 days from mid-June to mid-September and, at Dublin airport, is used for assessing the Residential Noise Insulation Scheme.
Leq8(hr)	Leq8h is the Leq over the 8-hour night-time period (11pm-7am). The Summer Leq16hr covers the 92 days from mid-June to mid-September. Leq8h and Lnight cover the same period, so monthly and quarterly values are identical. If the summer period is busier, the Summer Leq8h would be higher than the Annual Lnight.
Lmax	Lmax is the maximum instantaneous noise level recorded at an NMT during a noise event. Leq1sec (approx. Lmax) is displayed at each NMT on the Dublin Airport WebTrak site however, it also <u>includes</u> non-aircraft noise.
Lnight	Lnight is the night-time (11pm-7am) Leq average noise indicator. Like Lden, in this document, Lnight is reported monthly, quarterly and annually.
Measured noise levels	This is the assessment of the noise level at an NMT derived from data from the NMT. Each measured noise level is only at the NMT point location.
Modelled noise levels	This is calculated using computer software which takes into account all Dublin Airport flight operational activity. It calculates the noise levels at thousands of points across the study area and is used to produce Noise Contours. The Modelled noise level can also be calculated at each NMT point location.
(Notes: Comparing Measured and Modelled Noise Levels)	Measured noise levels at each NMT location should be the same, or close to, the Modelled noise levels. Measured data may miss some less noisy aircraft noise events, especially if the NMT is far from the airport (the aircraft is higher) or if the aircraft track is far from the NMT. Modelled data includes all aircraft activity in the entire study area. This means that Measured data should be equal to, or slightly lower than, the Modelled data. Good agreement between the Measured and Modelled data gives confidence that the Modelled Noise Contours provide good information on actual noise levels, including at locations that do not have an NMT.

Term	Definition
NMT	NMT means Noise Monitoring Terminal. They are generally located in community areas. An NMT includes a high-quality, calibrated microphone and provides continuous noise level data at the location of the NMT.
Noise Contours	Contours are lines that join points of the same modelled noise level covering a study area. All noise contours are modelled. Each year Dublin Airport publishes Annual Lden and Lnight contours and Summer Leq16h and Leq8h contours.
Noise Event	A noise event is detected at an NMT location when the noise level rises above and then falls below a pre-set threshold level. This can be caused by many different sources including aircraft, vehicles on a road, dogs barking, wind, sirens etc.
Number Above	Number Above is a single event metric unlike Lden or Lnight which are time-averaged noise metrics. N60 is the number of (aircraft noise) events with $L_{max} \geq 60$ dBA. N(SEL)70 is the number of (aircraft noise) events with $SEL \geq 70$ dBA. Note that N60 value includes the events in N65, N70 and higher.
SEL	SEL or Sound Exposure Level represents the total noise energy contained in a noise event, as if the same noise energy were compressed into a single second. For a short event (like a single dog bark) the SEL is approximately the same value as the L_{max} . For an aircraft noise event, usually 10 to 30 seconds, the SEL value is typically about 10 decibels higher than the L_{max} . The SEL values of the Correlated Aircraft Noise Events are added up and used to calculate average noise level metrics over longer periods, including annual or monthly Lden & Lnight, or monthly or summer Leq16 & Leq8.
Single Event noise metrics	Including L_{max} and SEL, these measure the noise of individual events. Along with the (daily or hourly) number of events at each noise level, these metrics provide a different perspective attempting to quantify the various experiences of individuals near flight paths.
Time-Averaged noise levels	Including Annual Lden and Lnight and Summer Leq16/8h, averaged noise levels allow the comparison of different locations around an airport, (and also other airports) where aircraft types, power settings, overflight frequency, operational time of day, and tracks heights vary. The EU and WHO uses Lden and Lnight to assess the total impact on communities for road, rail and air transport noise.
Total Noise	Total Noise is a measure of noise from all noise sources (including aircraft and non-aircraft activity) during the period. This means that Aircraft Noise cannot exceed Total Noise.
YTD	Year to date

Permanent Noise Monitoring Terminal (NMT) Locations Q2 2026



#	NMT Name		Since
1	Bay Lane	●	2015
2	St. Doolaghs	●	2015
3	Bishopswood	●	2015
4	Feltrim	●	2015
5	Balcultry	●	2015
6	St. Davids	●	2015
7	Swords	●	07/2022
8	Malahide	●	07/2022
10	St. Margaret's NS	●	07/2022
20	Coast Rd (OP)	●	2015
26	Kilcaskan NS	●	12/2022
27	Summerhill	●	09/2023
28	Newpark	●	09/2023
29	Ashbourne	●	09/2023
30	Roundwood	●	09/2023
31	Dunboyne	●	09/2023
32	Donabate	●	09/2023
33	Ardgillan	●	01/2024
34	Portmarnock	●	06/2024
35	Ballyboughal	●	06/2024
37	Ongar	●	08/2024
38	Clondalkin	●	08/2024
39	Lucan	●	08/2024
40	Bray	●	08/2024
206	Ratoath	●	03/2024

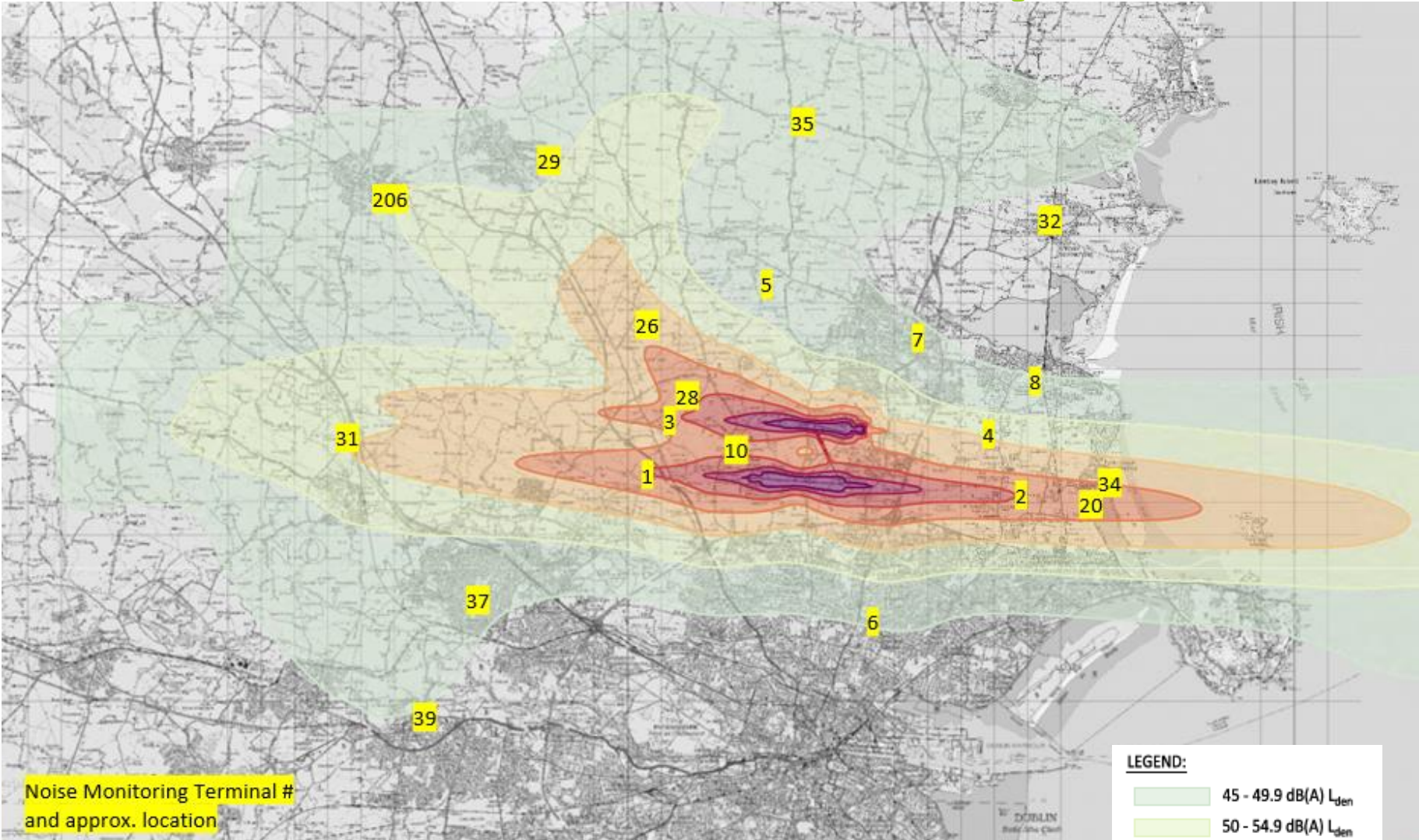


● = Permanent NMTs located near Dublin Airport

● = Permanent NMTs located further out from Dublin Airport

Modelled Lden Noise Contour Levels at Permanent NMT Locations

#	NMT Name	Lden 2024	Lden 2025
1	Bay Lane	64.0	64.1
2	St. Doolaghs	64.8	64.9
3	Bishopswood	61.1	62.0
4	Feltrim	54.1	54.6
5	Balcultry	49.2	48.1
6	St.Davids	43.3	43.9
7	Swords	45.7	45.9
8	Malahide	46.3	46.9
10	St.Margarets NS	63.7	64.0
20	Coast Rd (OP)	62.7	62.7
26	Kilcoskan NS	59.5	59.0
27	Summerhill	35.8	36.9
28	Newpark	61.8	60.6
29	Ashbourne	50.0	49.0
30	Roundwood	37.7	36.6
31	Dunboyne	53.1	53.1
32	Donabate	45.1	44.2
33	Ardgillan	33.3	33.2
34	Portmarnock	58.2	58.5
35	Ballyboughal	49.0	48.5
37	Ongar	48.3	47.2
38	Clondalkin	43.4	42.3
39	Lucan	46.0	44.9
40	Bray	33.6	34.3
206	Ratoath	50.5	49.4



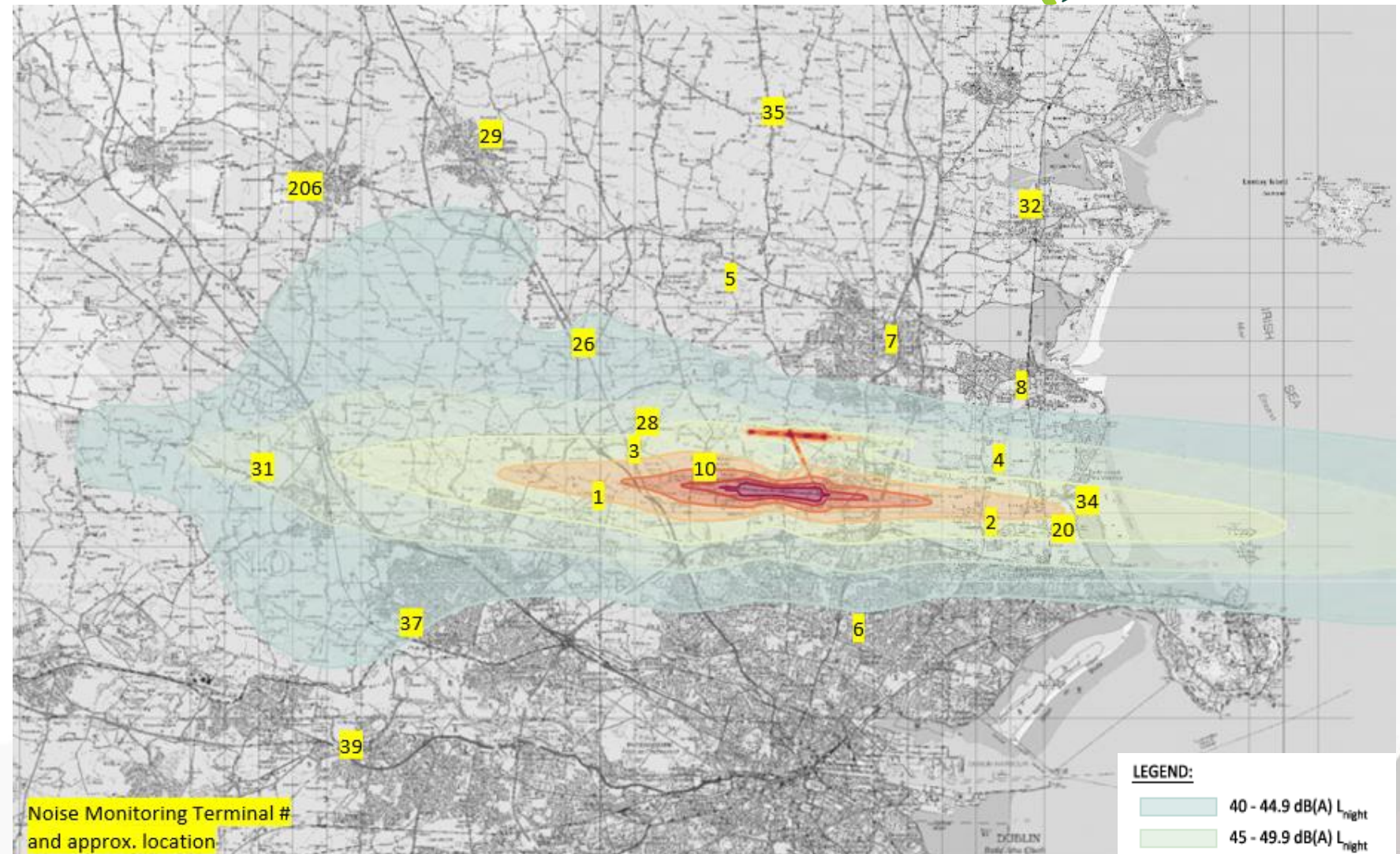
Map of 2025 Annual Lden Noise contours

5 NMT (27, 30, 33, 38, 40) are located outside this map's boundaries

Including Permanent NMT installations

Modelled Night Noise Contour Levels at Permanent NMT Locations

#	NMT Name	Lnight 2024	Lnight 2025
1	Bay Lane	58.4	58.8
2	St. Doolaghs	57.0	56.9
3	Bishopswood	49.4	49.4
4	Feltrim	47.3	47.4
5	Balcultry	40.5	38.7
6	St.Davids	36.3	36.7
7	Swords	36.9	37.0
8	Malahide	38.5	38.9
10	St.Margarets NS	55.7	56.7
20	Coast Rd (OP)	55.0	54.7
26	Kilcoskan NS	40.4	40.4
27	Summerhill	28.1	29.9
28	Newpark	44.9	44.8
29	Ashbourne	40.1	38.4
30	Roundwood	30.1	29.2
31	Dunboyne	47.2	47.4
32	Donabate	37.2	35.9
33	Ardgillan	23.4	22.8
34	Portmarnock	50.3	50.3
35	Ballyboughal	36.9	35.6
37	Ongar	42.3	41.3
38	Clondalkin	36.8	35.8
39	Lucan	39.7	38.6
40	Bray	24.9	25.9
206	Ratoath	40.5	38.8



Map of 2025 Annual Night Noise contours

5 NMT (27, 30, 33, 38, 40) are located outside this map's boundaries

Including Permanent NMT installations

NMT – Operational Downtime and Number of Correlated Aircraft Noise Events

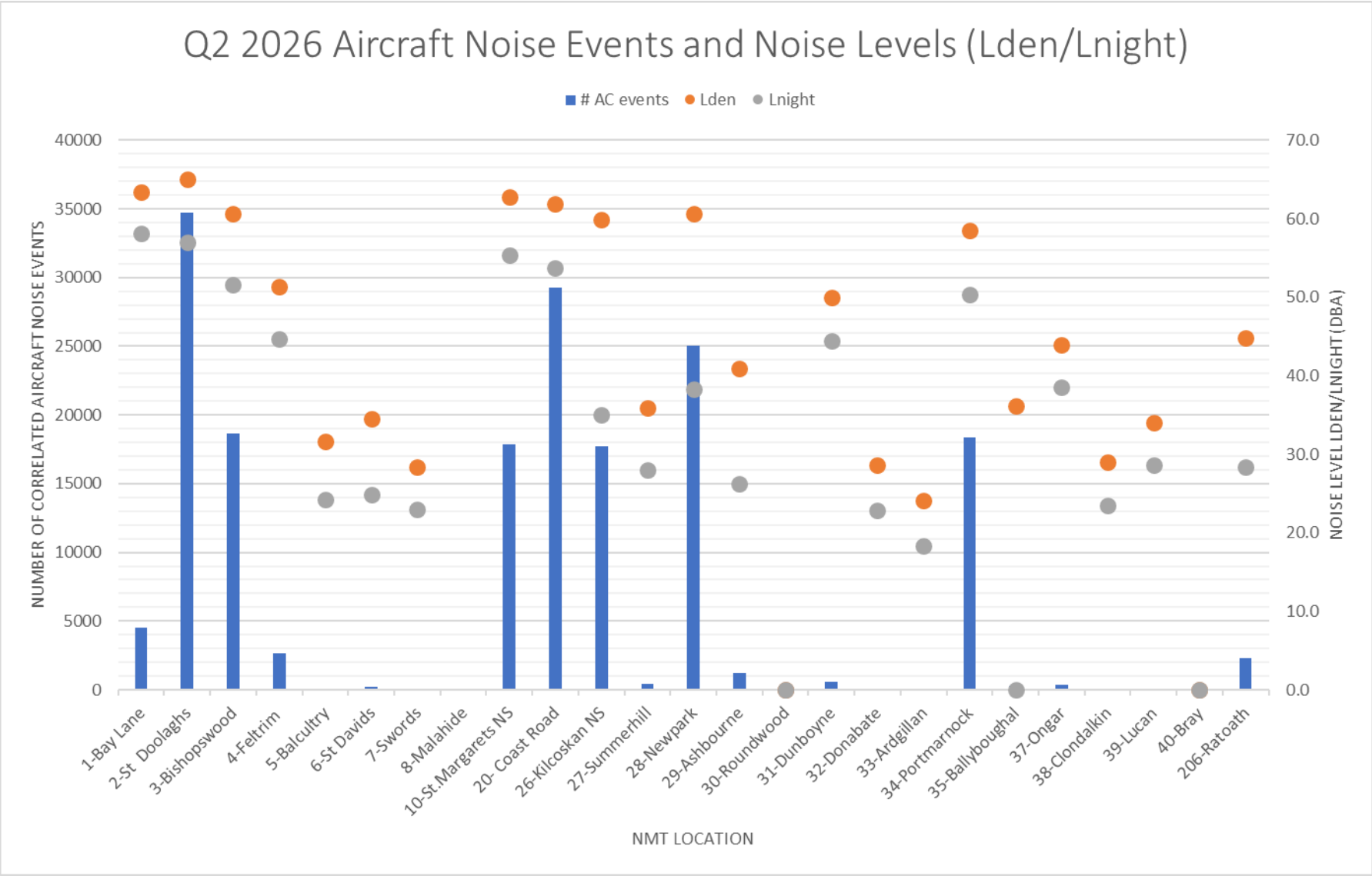
NMT	Location	April		May		June		Q2 2026
		Downtime (mins)	# Aircraft Events	Downtime (mins)	# Aircraft Events	Downtime (mins)	# Aircraft Events	# Aircraft Events
1	Bay Lane	24	1544	5	1758	3	1191	4493
2	St. Doolaghs	2	10945	35	11940	5	11816	34701
3	Bishopswood	12	6847	17	6258	13	5547	18652
4	Feltrim	5	1329	3	488	114	842	2659
5	Balcultry	1	23	3	19	594	31	73
6	St.Davids	2	80	1	68	1	41	189
7	Swords	86	13	99	1	92	10	24
8*	Malahide*							
10	St.Margarets NS	76	4506	89	5081	86	8249	17836
20	Coast Rd (OP)	0	8593	0	10253	0	10438	29284
26	Kilcoskan NS	20	4575	28	6212	40	6959	17746
27	Summerhill	67	251	68	143	67	66	460
28	Newpark	68	7651	71	8468	73	8880	24999
29	Ashbourne	106	348	145	433	88	468	1249
30	Roundwood	78	0	88	0	86	0	0
31	Dunboyne	76	739	116	1091	86	607	2437
32	Donabate	21	4	22	10	22	7	21
33	Ardgillan	77	2	88	4	86	2	8
34*	Portmarnock*	27939	1837	11743	5942	86	10600	18379
35	Ballyboughal	76	56	89	90	85	106	252
37	Ongar	77	81	89	137	86	129	347
38	Clondalkin	82	7	90	15	87	4	26
39	Lucan	76	15	89	33	86	28	76
40	Bray	76	0	89	0	86	0	0
206	Ratoath	79	484	89	933	86	847	2264

- **NMT 8 (Malahide)** was out of service in Q1 & Q2 of 2026 due to a lost windsock and access issues.
- **NMT 31 (Dunboyne)** was out of service in Q4 2025 and Q1 2026 due to a lost windsock and access issues. The windsock was restored at Dunboyne in March.
- **NMT 33 (Ardgillan)** was out of service due to a power failure at the school car park in January.
- **NMT 34 (Portmarnock)** was out of service for 28 days in Q2 due to issue with computer unit.

Including Permanent NMT installations only

NMT – Q2 2026 Monthly and Quarterly Lden, Lnight and Leq16hr

NMT	Location	# Correlated Aircraft Noise Events				Lden (dBA)				Lnight (=Leq 8h) (dBA)				Leq16h (dBA)			
		Apr	May	Jun	Q2	Apr	May	Jun	Q2	Apr	May	Jun	Q2	Apr	May	Jun	Q2
1	Bay Lane	1544	1758	1191	4493	63.5	64.0	62.7	63.5	58.1	58.7	57.5	58.1	47.9	45.8	37.2	45.4
2	St. Doolaghs	10945	11940	11816	34701	65.0	64.8	65.3	65.0	57.0	56.6	57.3	57.0	61.9	62.0	62.2	62.0
3	Bishopswood	6847	6258	5547	18652	61.5	60.2	60.2	60.6	52.1	50.6	51.9	51.6	59.7	58.5	57.8	58.8
4	Feltrim	1329	488	842	2659	51.0	44.1	54.2	51.4	43.2	36.1	48.0	44.6	47.6	41.9	45.0	45.4
5	Balcultry	23	19	31	73	32.1	30.7	32.1	31.7	25.3	22.6	24.5	24.3	27.4	28.8	29.0	28.5
6	St.Davids	80	68	41	189	36.2	33.3	33.8	34.6	27.1	17.5	25.4	24.8	35.6	34.5	32.1	34.3
7	Swords	13	1	10	24	31.2	12.4	28.7	28.3	25.9	6.9	23.3	23.0	0.0	0.0	17.4	12.7
8*	Malahide*																
10	St.Margarets NS	4506	5081	8249	17836	62.1	62.5	63.6	62.8	54.7	55.5	55.9	55.4	58.3	58.2	60.6	59.2
20	Coast Rd (OP)	8593	10253	10438	29284	61.6	61.7	62.5	61.9	53.2	53.3	54.4	53.7	59.0	59.3	59.8	59.4
26	Kilcoskan NS	4575	6212	6959	17746	58.7	60.1	60.8	59.9	32.0	30.9	38.3	35.0	59.2	60.7	61.2	60.4
27	Summerhill	251	143	66	460	38.0	33.9	34.8	35.9	30.0	23.1	28.6	28.0	35.6	33.8	29.4	33.6
28	Newpark	7651	8468	8880	24999	59.4	60.8	61.5	60.7	39.1	28.8	40.8	38.3	59.7	61.4	61.8	61.1
29	Ashbourne	348	433	468	1249	40.4	40.3	41.8	40.9	26.2	23.8	27.8	26.2	40.8	41.1	42.4	41.5
30	Roundwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Dunboyne	739	1091	607	2437	51.8	52.8	51.0	51.9	46.5	47.5	45.7	46.6	31.4	35.6	29.7	33.0
32	Donabate	4	10	7	21	19.8	32.6	24.0	28.6	9.6	27.1	15.7	22.8	19.8	20.3	22.2	20.9
33	Ardgillan		4	2	8		26.3	20.1	24.0		20.7	12.6	18.3		17.4	17.8	15.9
34*	Portmarnock*	1837	5942	10600	18379	56.5	56.6	57.5	58.5	48.2	48.2	49.7	50.3	54.2	54.3	54.6	56.0
35	Ballyboughal	56	90	106	252	34.5	36.3	37.1	36.1	0.0	0.0	0.0	0.0	35.4	37.3	38.6	37.3
37	Ongar	81	137	129	347	42.5	44.8	44.1	43.9	37.1	39.4	38.8	38.5	27.3	30.5	25.7	28.3
38	Clondalkin	7	15	4	26	28.2	31.5	24.6	29.0	22.3	26.1	19.3	23.5	19.5	19.1	9.9	17.8
39	Lucan	15	33	28	76	32.1	35.2	34.0	34.0	26.8	29.8	28.7	28.6	16.5	22.1	14.0	18.9
40	Bray	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
206	Ratoath	484	933	847	2264	42.7	45.8	45.3	44.8	24.2	30.2	28.6	28.3	43.7	46.4	46.0	45.5



2024-25 and Quarterly 2026 (YTD) Measured Lden, Lnight & Leq16hr



NMT	Location	Lden (dBA) [Modelled Contour and Measured]								Lnight (=Leq 8h) (dBA) [Modelled Contour and Measured]								Leq16h (dBA) [Measured]						
		'24 Model	'24 NMT	'25 NMT	Q1 2026	Q2 2026	Q3 2026	Q4 2026	2026	'24 Model	'24 NMT	'25 NMT	Q1 2026	Q2 2026	Q3 2026	Q4 2026	2026	'24 NMT	'25 NMT	Q1 2026	Q2 2026	Q3 2026	Q4 2026	2026
1	Bay Lane	64.0	63.4	63.9 ¹¹	64.0	63.5				58.4	57.8	58.5 ¹¹	58.3	58.1				51.6	46.8 ¹¹	52.7	45.4			
2	St. Doolaghs	64.8	64.3	64.3	64.3	65.0				57.0	56.5	56.3	56.3	57.0				61.0	61.4	61.3	62.0			
3	Bishopswood	61.1	58.4	59.1	60.0	60.6				49.4	45.1	46.0	49.8	51.6				58.4	58.8	58.9	58.8			
4	Feltrim	54.1	52.4	51.8	54.4	51.4				47.3	45.3	45.3	47.2	44.6				48.5	46.3	50.2	45.4			
5	Balcultry	49.2	44.1	38.4	33.9	31.7				40.5	37.2	25.4	28.1	24.3				37.8	38.7	24.3	28.5			
6	St.Davids	43.3	42.8	38.9	37.0	34.6				36.3	34.8	28.5	29.9	24.8				39.3	38.6	34.2	34.3			
7	Swords	45.7	38.7	34.9	23.5	28.3				36.9	26.8	25.4	18.1	23.0				37.2	33.5	8.9	12.7			
8*	Malahide*	46.3	38.9	39.5 ⁶						38.5	32.0	33.7 ⁶						32.6	30.1 ⁶					
10	St.Margarets	63.7	63.4	62.1	62.0	62.8				55.7	56.1	54.7	54.7	55.4				59.6	58.5	58.4	59.2			
20	Coast Rd (OP)	62.7	62.6	63.3	61.4	61.9				55.0	54.5	54.9	52.8	53.7				59.6	60.8	59.2	59.4			
26	Kilcoskan NS	59.5	60.4	59.8	58.9	59.9				40.4	36.0	36.3	40.6	35.0				61.1	60.4	59.5	60.4			
27	Summerhill	35.8	33.8	33.5	35.8	35.9				28.1	23.3	24.7	27.5	28.0				33.5	31.5	33.0	33.6			
28	Newpark	61.8	61.3	60.3	59.3	60.7				44.9	36.7	36.4	39.9	38.3				61.9	60.8	59.8	61.1			
29	Ashbourne	50.0	39.7	40.4	40.5	40.9				40.1	23.4	22.3	23.0	26.2				40.4	41.1	41.3	41.5			
30	Roundwood	37.7	17.7	12.4	0	0				30.1	0.0	0.0	0	0.0				19.2	13.1	0	0.0			
31	Dunboyne	53.1	50.4	51.3 ⁹	49.9 ¹	51.9				47.2	44.9	46.0 ⁹	44.5 ¹	46.6				38.3	32.4 ⁹	34.6 ¹	33.0			
32	Donabate	45.1	32.7	29.1	25.8	28.6				37.2	21.6	19.1	19.8	22.8				31.1	27.9	19.9	20.9			
33	Ardgillan	33.3	30.1	27.7	22.4 ²	24.0				23.4	20.9	20.3	16.9 ²	18.3				27.8	24.0	12.4 ²	15.9			
34	Portmarnock*	58.2	54.8 ⁸	56.6	56.7	58.5 ²				50.3	46.9 ⁸	49.3	48.9	50.3 ²				52.1 ⁸	53.0	53.8	56.0 ²			
35	Ballyboughal	49.0	38.3 ⁸	38.6	35.0	36.1				36.9	24.1 ⁸	21.1	15.2	0.0				38.7 ⁸	39.5	36.1	37.3			
37	Ongar	48.3	40.6 ³	41.9	41.4	43.9				42.3	34.8 ³	36.6	35.9	38.5				32.0 ³	27.1	27.8	28.3			
38	Clondalkin	43.4	37.8 ³	26.8	26.7	29.0				36.8	24.5 ³	20.0	20.6	23.5				38.6 ³	22.2	18.9	17.8			
39	Lucan	46.0	33.8 ³	33.9	31.9	34.0				39.7	25.3 ³	27.8	26.6	28.6				32.6 ³	24.3	11.1	18.9			
40	Bray	33.6	33.4 ³	26.4	0	0				24.9	16.4 ³	8.0	0	0.0				34.0 ³	26.2	0	0.0			
206	Ratoath	50.5	47.0 ¹⁰	45.2	41.5	44.8				40.5	27.1 ¹⁰	27.4	25.4	28.3				47.4 ¹⁰	45.9	42.5	45.5			

Total Noise versus Aircraft Noise Q4 2025, Q1 & Q2 2026

NMT	Location	Lden Q4 2025			Lden Q1 2026			Lden Q2 2026		
		Total Noise (dBA)	Aircraft Noise (dBA)	# Aircraft Noise Events	Total Noise (dBA)	Aircraft Noise (dBA)	# Aircraft Noise Events	Total Noise (dBA)	Aircraft Noise (dBA)	# Aircraft Noise Events
1	Bay Lane	67.4	63.3	4075	68.3	64.0	5233	66.0	63.5	4493
2	St. Doolaghs	65.6	64.7	30687	65.5	64.3	27215	65.8	65.0	34701
3	Bishopswood	64.8	59.7	15611	65.1	60.0	15615	64.0	60.6	18652
4	Feltrim	61.9	51.9	2908	62.1	54.4	4829	59.4	51.4	2659
5	Balcultry	58.6	37.3	92	60.3	33.9	86	57.1	31.7	73
6	St.Davids	62.1	35.5	153	61.2	37.0	167	58.6	34.6	189
7	Swords	66.2	27.5	7	64.3	23.5	7	61.3	28.3	24
8*	Malahide*									
10	St.Margarets NS	67.2	62.3	14634	67.5	62.0	12991	67.0	62.8	17836
20	Coast Rd (OP)	67.4	62.9	27256	67.0	61.4	23272	65.4	61.9	29284
26	Kilcoskan NS	64.6	60.1	17754	64.5	58.9	11778	63.4	59.9	17746
27	Summerhill	58.6	34.2	351	58.1	35.8	339	58.3	35.9	460
28	Newpark	63.1	60.3	23723	62.9	59.3	19718	62.3	60.7	24999
29	Ashbourne	58.9	41.7	1588	58.8	40.5	1037	58.4	40.9	1249
30	Roundwood	58.0	17.5	2	57.9	0	0	55.9	0	0
31	Dunboyne				62.7*	49.9*	584*	60.2	51.9	2437
32	Donabate	56.9	25.0	15	57.2	25.8	19	55.4	28.6	21
33	Ardgillan	57.3	26.6	11	57.3*	22.4*	6*	53.7	24.0	8
34*	Portmarnock*	60.4	56.6	16502	61.2	56.7	15965	61.1	58.5	18379
35	Ballyboughal	62.5	38.1	308	62.7	35.0	187	61.2	36.1	252
37	Ongar	61.1	42.4	305	62.0	41.4	257	60.4	43.9	347
38	Clondalkin	60.1	27.5	24	59.6	26.7	23	58.7	29.0	26
39	Lucan	56.3	32.3	55	56.3	31.9	47	54.8	34.0	76
40	Bray	58.8	0	0	58.5	0	0	56.5	0	0
206	Ratoath	57.3	43.3	1577	57.6	41.5	1041	55.6	44.8	2264

- **Total Noise** includes all noise sources detected at the NMT.
- **Aircraft Noise** only includes noise events that are correlated with the flight radar and time of aircraft operational events – i.e. arrivals and departures at Dublin Airport.

Q2 2026 Lmax and SEL Number Above (NA) data (Daily Average)



NMT	Location	Average Number of Aircraft Noise Events per DAY Above Lmax (dBA) [e.g. N60 = Number of events above Lmax 60dBA]						# Aircraft N Events / DAY	Average Number of Aircraft Noise Events per DAY Above SEL [e.g. N(SEL)70 = Number of events above SEL 70dBA]						# Aircraft N Events
		N60	N65	N70	N75	N80	N85	(Av day Q2)	N(SEL)70	N(SEL)75	N(SEL)80	N(SEL)85	N(SEL)90	N(SEL)95	(Total in Q2)
1	Bay Lane	49.4	49.4	47.8	31.4	5.6	0.2	49.4	49.4	49.1	45.8	29.5	2.1	0.1	4493
2	St. Doolaghs	381.5	380.7	357.3	154.6	6.8	0.1	381.5	381.5	380.3	353.8	108.7	5.1	0.1	34701
3	Bishopswood	203.6	192.4	162.7	77.2	1.9	0.0	205.0	204.1	200.0	161.8	41.6	1.7	0.0	18652
4	Feltrim	29.1	23.1	7.3	2.1	0.0		29.2	29.1	23.3	8.4	1.4	0.0		2659
5	Balcultry	0.8	0.6	0.2	0.0			0.8	0.8	0.5	0.1	0.0			73
6	St.Davids	2.1	2.0	1.0				2.1	2.1	2.0	0.5				189
7	Swords	0.2	0.1					0.3	0.2	0.1					24
8*	Malahide*														
10	St.Margarets NS	194.7	185.0	164.1	83.8	9.0	0.2	196.0	194.5	186.0	160.7	68.0	5.1	0.0	17836
20	Coast Rd (OP)	321.8	321.8	271.5	27.2	1.0	0.1	321.8	321.8	321.8	266.0	26.6	0.5		29284
26	Kilcoskan NS	195.2	193.2	177.0	79.5	8.2	0.0	195.2	195.2	193.6	179.8	77.7	6.2		17746
27	Summerhill	4.6	1.6	0.2	0.0			5.1	4.2	1.5	0.2				460
28	Newpark	274.3	213.7	156.7	87.4	12.5	0.6	274.7	274.1	207.2	160.6	92.6	10.9	0.1	24999
29	Ashbourne	13.7	11.6	2.6	0.2			13.7	13.7	9.1	2.0	0.1			1249
30	Roundwood							0							0
31	Dunboyne	26.8	17.3	2.7	0.1	0.0		26.8	26.2	16.8	2.9	0.1			2437
32	Donabate	0.2	0.1	0.1				0.2	0.2	0.1	0.1				21
33	Ardgillan	0.1	0.1	0.0				0.1	0.1	0.1	0.0				8
34*	Portmarnock*	206.0	129.6	33.0	3.8	0.0		292.0	146.4	80.1	25.0	2.7	0.1		18379
35	Ballyboughal	2.8	2.8	2.8	0.3	0.0		2.8	2.8	2.8	1.4	0.0			252
37	Ongar	3.6	1.8	0.1				3.8	3.7	2.8	0.7	0.0			347
38	Clondalkin	0.3	0.1	0.0				0.3	0.3	0.1	0.0				26
39	Lucan	0.8	0.2	0.0				0.8	0.8	0.3	0.0				76
40	Bray							0							0
206	Ratoath	24.9	23.7	6.7	0.9	0.1		24.9	24.9	20.8	6.2	0.3			2264

Q2 2026 Lmax and SEL Percentages in 5-decibel bands (3 months)



NMT	Location	Percentage of Aircraft Noise Events in each Lmax Range (dBA)						# Aircraft Noise Events /DAY	Percentage of Aircraft Noise Events in each SEL Range (dBA)						# Aircraft Noise Events
		60-64.9	65-69.9	70-74.9	75-79.9	80-84.9	85-89.9	(Av day Q2)	70-74.9	75-79.9	80-84.9	85-89.9	90-94.9	95-99.9	(Total in Q2)
1	Bay Lane		3%	33%	52%	11%	0%	49.4	0%	7%	33%	55%	4%	0%	4493
2	St. Doolaghs	0%	6%	53%	39%	2%	0%	381.5	0%	7%	64%	27%	1%	0%	34701
3	Bishopswood	5%	14%	42%	37%	1%	0%	205.0	2%	19%	59%	19%	1%	0%	18652
4	Feltrim	21%	54%	18%	7%	0%		29.2	20%	51%	24%	5%	0%		2659
5	Balcultry	23%	45%	25%	1%			0.8	34%	45%	14%	1%			73
6	St.Davids	3%	50%	47%				2.1	5%	72%	22%				189
7	Swords	48%	32%					0.3	48%	28%					24
8*	Malahide*														
10	St.Margarets NS	5%	11%	41%	38%	4%	0%	196.0	4%	13%	47%	32%	3%	0%	17836
20	Coast Rd (OP)		16%	76%	8%	0%	0%	321.8		17%	74%	8%	0%		29284
26	Kilcoskan NS	1%	8%	50%	36%	4%	0%	195.2	1%	7%	52%	37%	3%		17746
27	Summerhill	60%	28%	3%	0%			5.1	53%	27%	3%				460
28	Newpark	22%	21%	25%	27%	4%	0%	274.7	24%	17%	25%	30%	4%	0%	24999
29	Ashbourne	15%	66%	18%	1%			13.7	34%	52%	13%	1%			1249
30	Roundwood							0							0
31	Dunboyne	35%	55%	10%	0%	0%		26.8	35%	52%	10%	0%			2437
32	Donabate	43%	33%	24%				0.2	33%	19%	29%				21
33	Ardgillan	33%	33%	22%				0.1	33%	44%	11%				8
34*	Portmarnock*	37%	46%	14%	2%	0%		292.0	37%	39%	18%	2%	0%		18379
35	Ballyboughal			89%	9%	1%		2.8	0%	50%	48%	1%			252
37	Ongar	48%	43%	3%				3.8	24%	54%	19%	0%			347
38	Clondalkin	59%	26%	4%				0.3	48%	37%	4%				26
39	Lucan	74%	25%	1%				0.8	65%	32%	1%				76
40	Bray							0							0
206	Ratoath	5%	68%	23%	3%	0%		24.9	16%	59%	24%	1%			2264

Q2 2026 Lmax data (Day, Evening & Night averages over the 3 months)

NMT	Location	Average Number of Day time Events over each Lmax Level (Day Period is 12 hours, 7am to 7pm)						Average Number of Evening time Events over each Lmax Level (Evening Period is 4 hrs, 7pm to 11pm)						Average Number of Night time Events over each Lmax Level (Night Period is 8 hours 11pm to 7am)					
		N60	N65	N70	N75	N80	N85	N60	N65	N70	N75	N80	N85	N60	N65	N70	N75	N80	N85
1	Bay Lane	5.5	5.5	4.8	2.3	0.3	0.0	1.9	1.9	1.8	1.2	0.2	0.0	42.1	42.1	41.2	27.9	5.0	0.1
2	St. Doolaghs	266.7	266.4	248.5	106.6	5.9	0.1	66.2	66.1	62.4	26.8	0.4	0.0	48.5	48.3	46.4	21.2	0.5	0.0
3	Bishopswood	135.1	135.0	126.2	60.9	1.7	0.0	30.1	30.1	27.9	14.0	0.2		38.4	27.2	8.6	2.3	0.1	
4	Feltrim	15.4	14.1	3.1	0.1	0.0		4.6	4.2	2.2	0.7			9.1	4.7	2.0	1.2		
5	Balcultry	0.4	0.4	0.2	0.0			0.1	0.1	0.0				0.3	0.1				
6	St.Davids	1.9	1.9	0.9				0.0	0.0	0.0				0.1	0.1	0.0			
7	Swords	0.0	0.0											0.2	0.1				
8*	Malahide*																		
10	St.Margarets NS	123.2	122.9	112.4	58.3	7.7	0.2	31.9	31.8	27.5	11.3	0.4	0.0	39.5	30.3	24.3	14.2	0.9	
20	Coast Rd (OP)	224.4	224.4	192.1	22.1	0.9	0.0	56.5	56.5	45.0	2.3	0.1	0.0	40.9	40.9	34.4	2.9	0.1	
26	Kilcoskan NS	160.2	158.4	145.3	66.9	8.1	0.0	34.4	34.3	31.5	12.4	0.1		0.6	0.5	0.2	0.1	0.0	
27	Summerhill	3.7	1.4	0.2	0.0			0.3	0.1	0.0				0.7	0.1	0.0			
28	Newpark	218.8	174.3	127.5	73.4	11.8	0.6	51.0	38.4	29.1	13.9	0.6	0.0	4.4	1.0	0.2	0.1		
29	Ashbourne	11.5	10.3	2.6	0.2			1.8	1.2	0.1				0.4	0.1				
30	Roundwood																		
31	Dunboyne	1.7	0.8	0.1				1.1	0.7	0.0				24.0	15.8	2.6	0.1	0.0	
32	Donabate	0.1	0.1	0.0				0.0	0.0					0.1	0.0	0.0			
33	Ardgillan	0.0	0.0	0.0										0.1	0.0				
34*	Portmarnock*	200.7	138.4	38.6	5.5	0.0		49.0	26.0	5.6	0.0			50.2	24.7	4.2	0.0		
35	Ballyboughal	2.6	2.6	2.6	0.3	0.0		0.2	0.2	0.2	0.0								
37	Ongar	0.4	0.1	0.0				0.2	0.1					3.0	1.6	0.1			
38	Clondalkin	0.1	0.0	0.0				0.0	0.0					0.2	0.1				
39	Lucan	0.1	0.0	0.0				0.0	0.0					0.7	0.1				
40	Bray																		
206	Ratoath	21.1	20.4	6.5	0.9	0.0		3.2	3.0	0.3	0.0	0.0		0.6	0.3				

* See notes on page 10

This data shows Lmax events during day, evening and night periods, averaged over the quarter. For example, N60 = number of events over Lmax 60 dBA (in this case the figure is the daily average over the quarter.)

Part 2: Flight Track Monitoring



Page	Page Heading	Page Content
20	Explanation of Terms	
21	Standard Instrument Departures (SID) North Runway	• AirNav Ireland maps displaying the departure SIDs from North Runway towards the West and the East.
22	Standard Instrument Departures (SID) South Runway	• AirNav Ireland maps displaying the departure SIDs from South Runway towards the West and the East.
23	Busy day Flight Tracks - Westerly and Easterly Operations	Examples of a typical 'busy day' flight pattern
24	Noise Contour Modelling (1) – Core Flight Tracks	Explanation of how noise contours are modelled using core flight tracks
25	Noise Contour Modelling (2) – Dispersed Flight Tracks	Explanation of how noise contours are modelled using dispersed flight tracks
26	Conclusion	

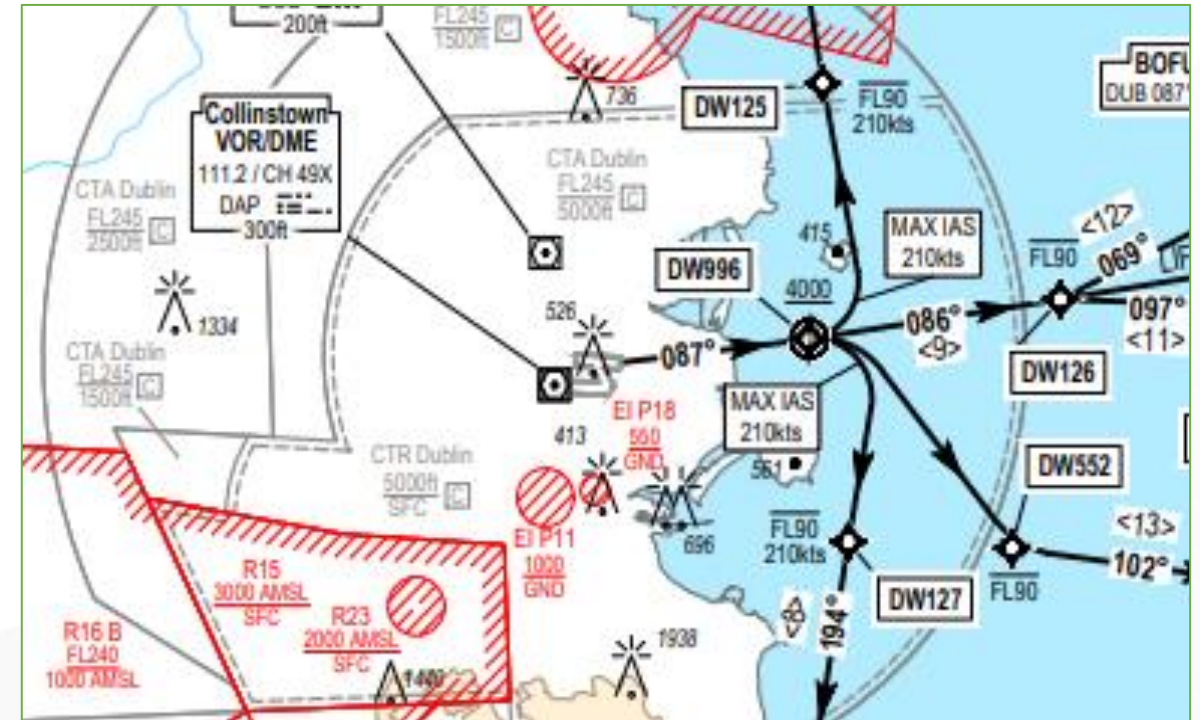
Term	Definition/ Explanation
Arrival Tracks	Arriving aircraft must fly in a straight line for at least the final 11km of their approach before landing on the runway. Aircraft approach the airport at a precise downward angle of 3 degrees, which means that they are at a height of 1,800ft when they join the final approach at the 11km point.
Departure Tracks	Departing jet aircraft are required to follow procedures defined by the SID and to stay within the Environmental Corridor, also called the Noise Preferential Route (NPR), below 3000ft for the South Runway and below 4000ft for the North Runway, unless directed by Air Traffic Control.
Easterly vs Westerly Operations	In general, aircraft land and take-off facing into the wind. If the wind is easterly (blowing from the east), aircraft land from the west and take-off towards the east. If the wind is westerly (blowing from the west), aircraft land from the east (over the Irish Sea) and take-off towards the west. A moderate cross-wind component can be tolerated, but a strong north or south wind will require the use of the Crosswind Runway.
Standard Instrument Departure (SID)	Depending on the departure runway and final destination, departing aircraft follow routes called Standard Instrument Departures (SID). SIDs allow aircraft to safely depart an airspace following pre-defined routes. (See Pages 20 and 21)
Flight Track	A flight track is the actual path flown by an aircraft (as opposed to a route or SID which indicate where an aircraft should go.) Flight track monitoring is based on flight radar data that is incorporated into the Noise and Flight Track Monitoring System.
Noise Modelling	A computer program is used to model airport operations and calculate the noise contours. Input data include all aircraft operations, aircraft types, runway use, time of day and flight tracks.
Modelled Flight Track	Arrival noise is dominated by the straight final approach which is relatively easy to model for the noise contour calculations. Departing aircraft generally follow the SID
Track Dispersion	In practice there is a spread or dispersion of actual tracks flown to either side of a main central track. This is modelled using a central flight track and secondary (dispersed) flight tracks to either side and the operations area divided between these tracks using a normal distribution.

Standard Instrument Departures (SID) North Runway

- Jet aircraft departures are required to follow these Standard Instrument Departures (SID).
- SID's are developed taking into account various safety, operational and environmental considerations amongst others.



SID for North Runway (28R) departures to the west (westerly operations in westerly winds)



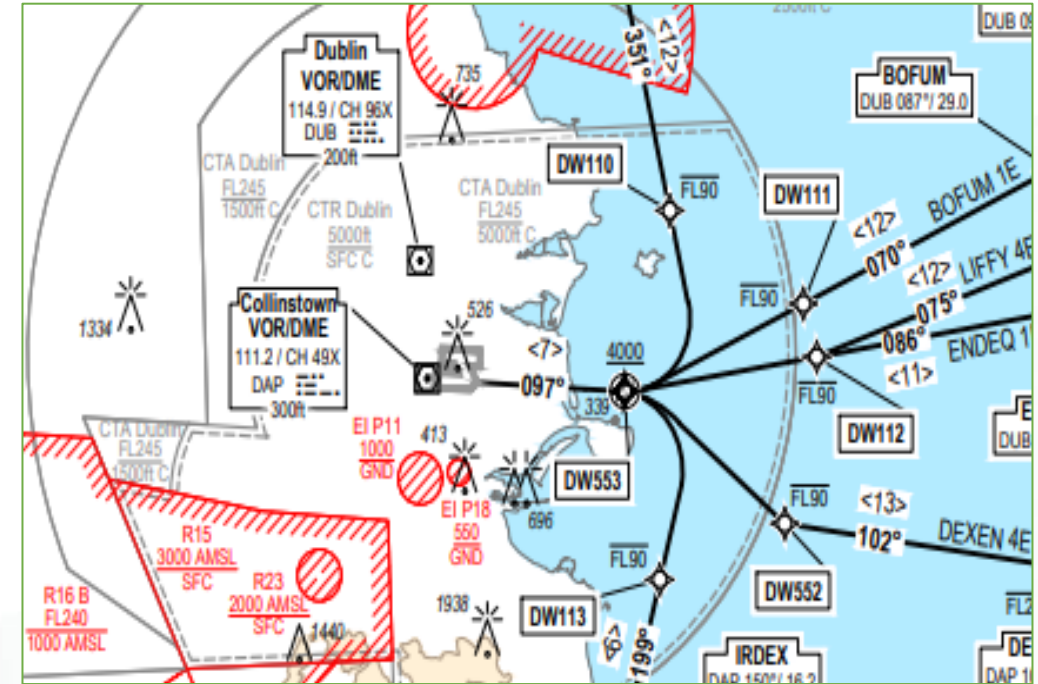
SID for North Runway (10L) departures to the east (easterly operations in easterly winds)

Note: This is only used during periods when the South Runway is closed.

- Jet aircraft departures are required to follow Standard Instrument Departures (SID)



SID for South Runway (28L) Departures to the west (Westerly operations in westerly winds)

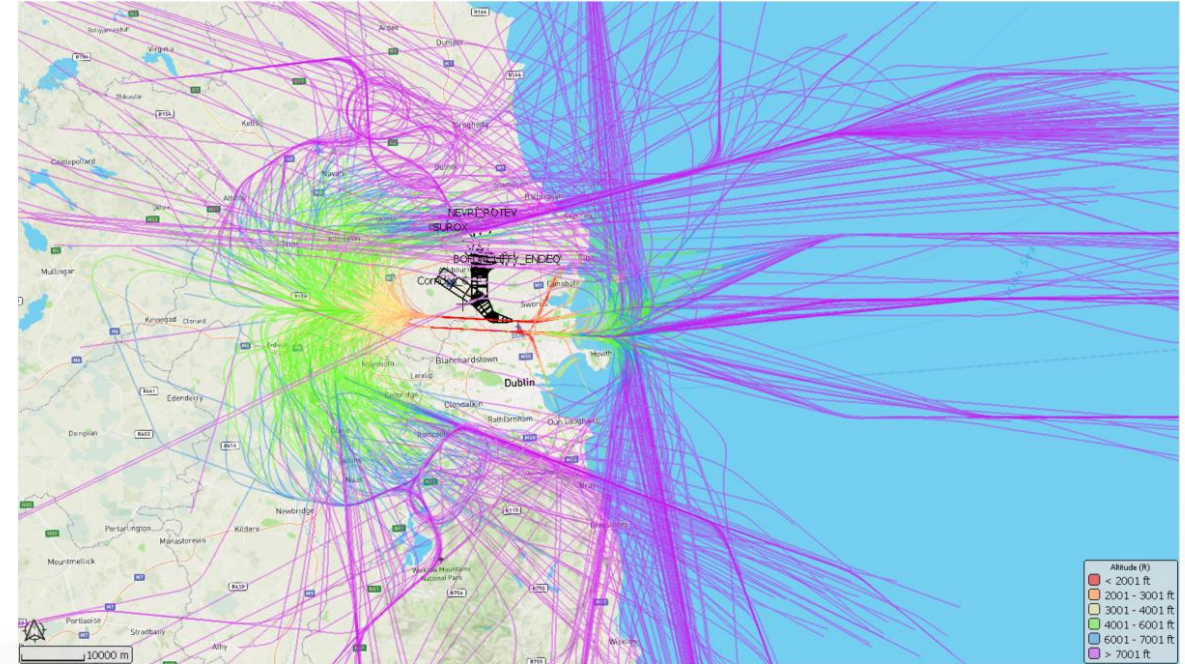


SID for South Runway (10R) Departures to the east (Easterly operations in easterly winds)



Operations on 7th June 2026

- 844 movements, westerly conditions
- Colours indicate aircraft height

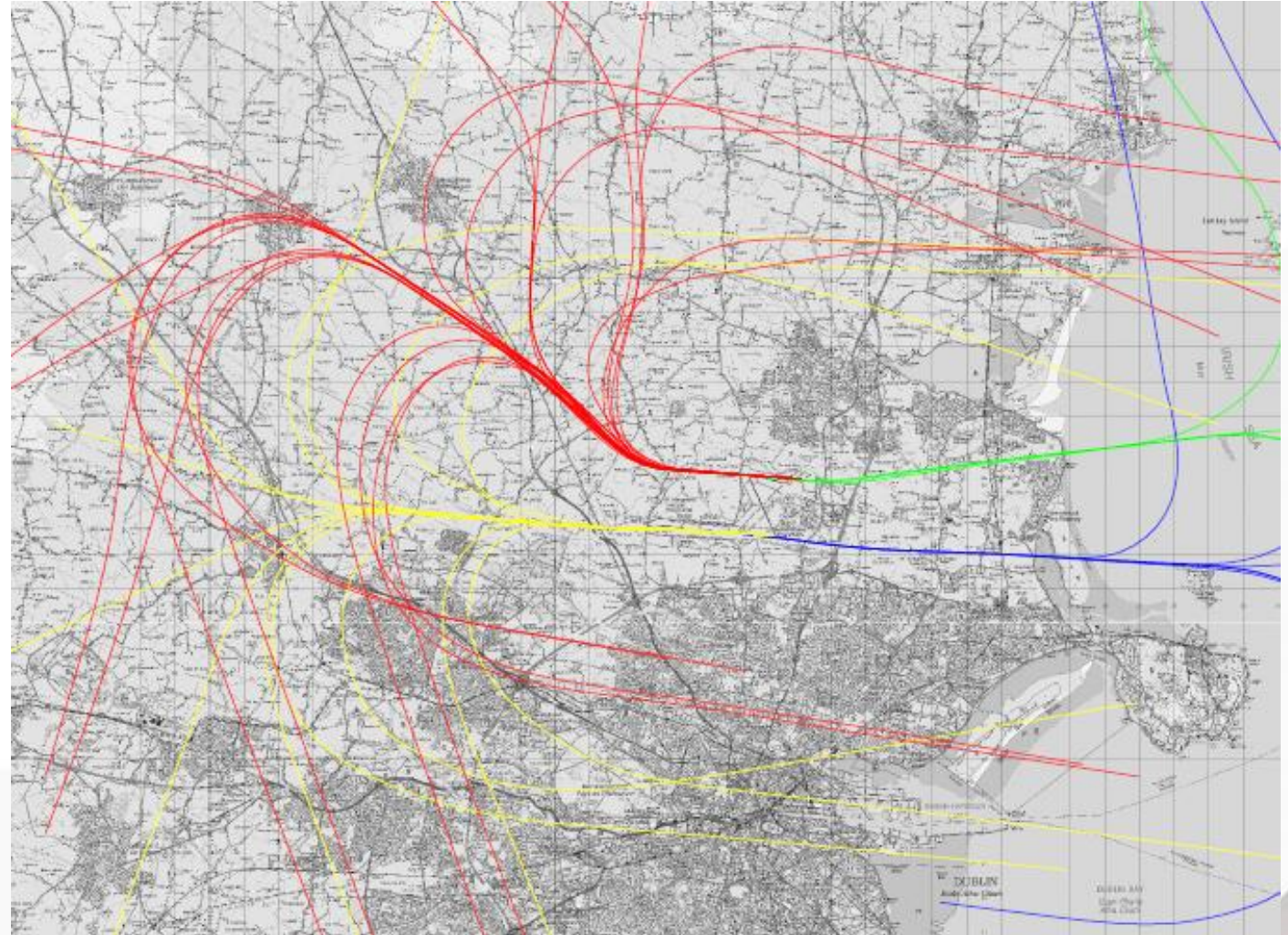


Operations on 25th June 2026

- 825 movements, easterly conditions
- Colours indicate aircraft height

Noise contours are calculated by a computer model based on input of the aircraft operations at the airport. This process includes certain steps :

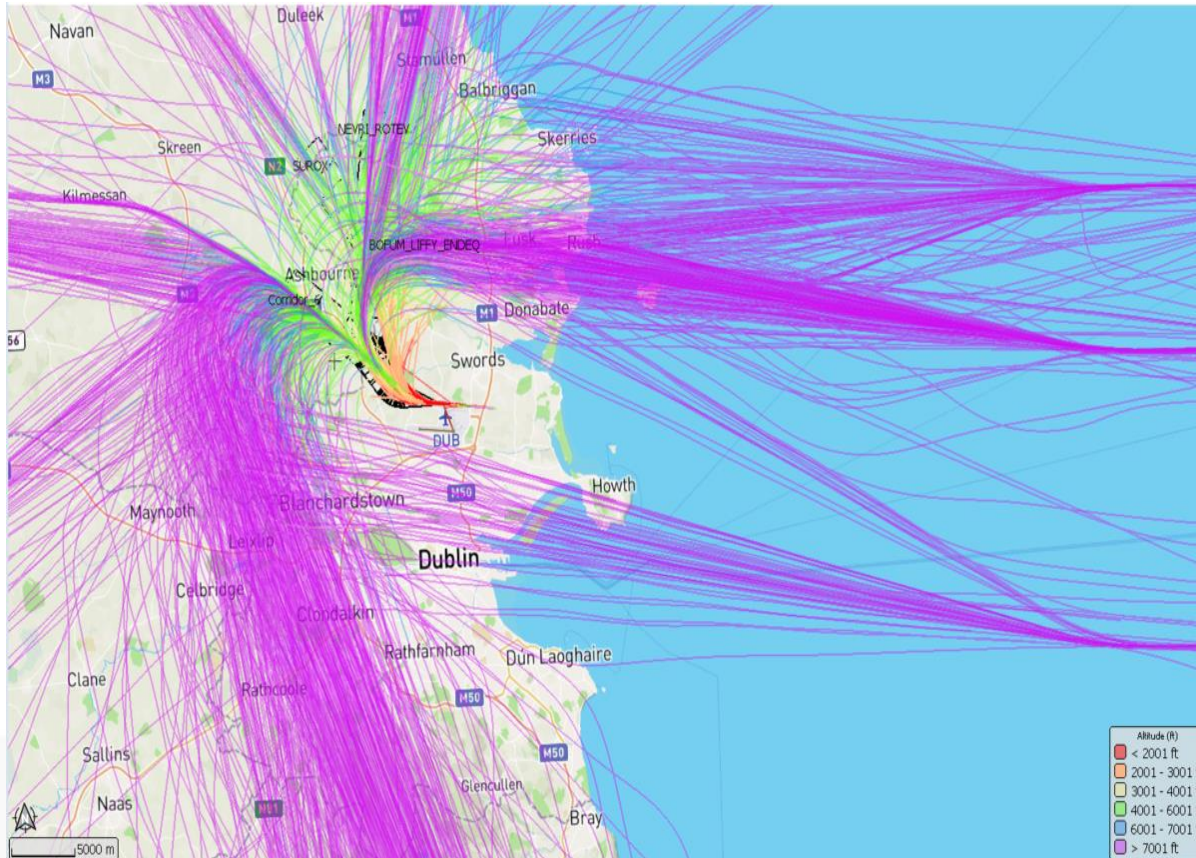
- Flight track data is extracted from the airport's Noise and Flight Track Monitoring system.
- Typical flight tracks are identified for each of the runways (as depicted here)
- Dispersed tracks are created either side of the central lines to reflect actual operations (see next page)
- A grid array of noise calculation points is used to develop the noise contours for each metric.



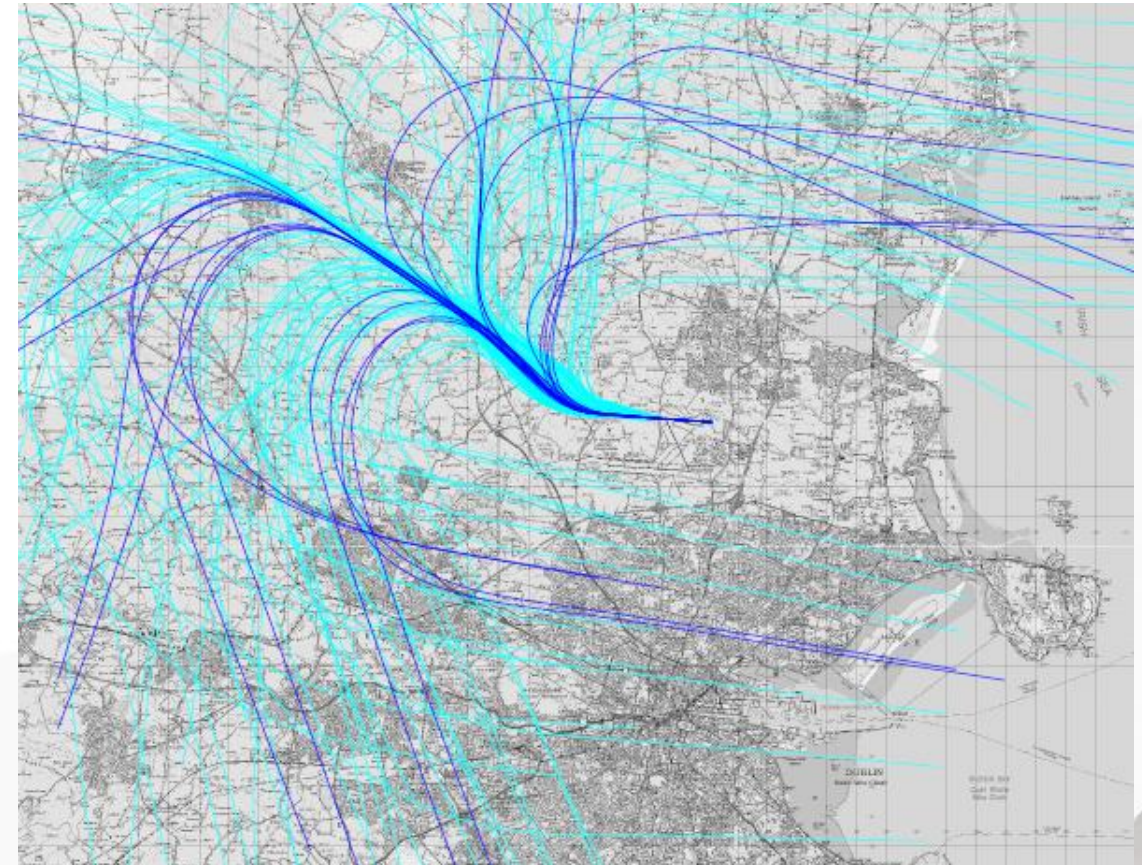
Main departure flight paths in calculation model for the two main runways – easterly and westerly departures

Noise Contour Modelling (2) – Dispersed Flight Tracks

In practice, the spread or scatter of actual flight tracks is modelled by creating dispersed tracks either side of the central or main track as shown.



Actual (Monitored) Flight Paths:
North Runway (28R) – westerly departures
10-17 June 2026



Modelled Departure Flight Paths:
North Runway (28R) – westerly operations
Dark blue = centreline flight paths
Light blue = dispersion flight paths

Noise Monitoring

- Dublin Airport had a network of 25 permanent Noise Monitoring Terminals (NMT) covering the entire Q2 2026 period, at locations ranging from less than 1 km to over 40 km from the runways.
- NMT locations are selected across a wide area to cover the region including the nearest, most-impacted residences, heavily populated areas and less-impacted, further-out locations.
- Measured aircraft noise data is presented in both time-averaged and single-event noise metrics.

Flight Track Monitoring

- Flight track data is used to positively identify aircraft noise from the NMT data and filter out non-aircraft noise.
- Monitored flight tracks are also used to ensure that the operations in the noise contour model are representative of actual airport activity.
- Airline track adherence is reported in Dublin Airport's monthly operations reports.

Noise Contour Validation

- There is good correlation between the Measured and Modelled aircraft noise levels.
- This demonstrates that the noise modelling is sufficiently representative of the totality of aircraft operations at Dublin Airport and thus that the Modelled noise levels accurately represent community noise exposure levels.
- This means that the contours can be used to assess the noise at locations which do not have an NMT in the immediate vicinity.
- In general, noise impact assessment and mitigations at the airport including Noise Insulation and Dwelling Purchase Schemes are based on the modelled noise contours, so the Noise and Flight Track Monitoring, presented herein, provides support to the assessment and mitigation work at the airport.

End

**For further information, please visit
our website:**

www.dublinairport.com