



# Dublin Airport

## Quarterly Noise and Flight Track Monitoring Report

April - June (Q2) 2025

---

- 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 the North Runway's planning permission.
- The report is split into three parts:
  - Part 1: Noise Monitoring – Permanent monitors
  - Part 2: Noise Monitoring – Temporary monitors
  - Part 3: Flight Track Monitoring
- Noise data is presented in this report in five different metrics - Lden, Lnight, Leq16h, Lmax and SEL.
- This report includes the 2024 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

---



# Parts 1 and 2: Contents

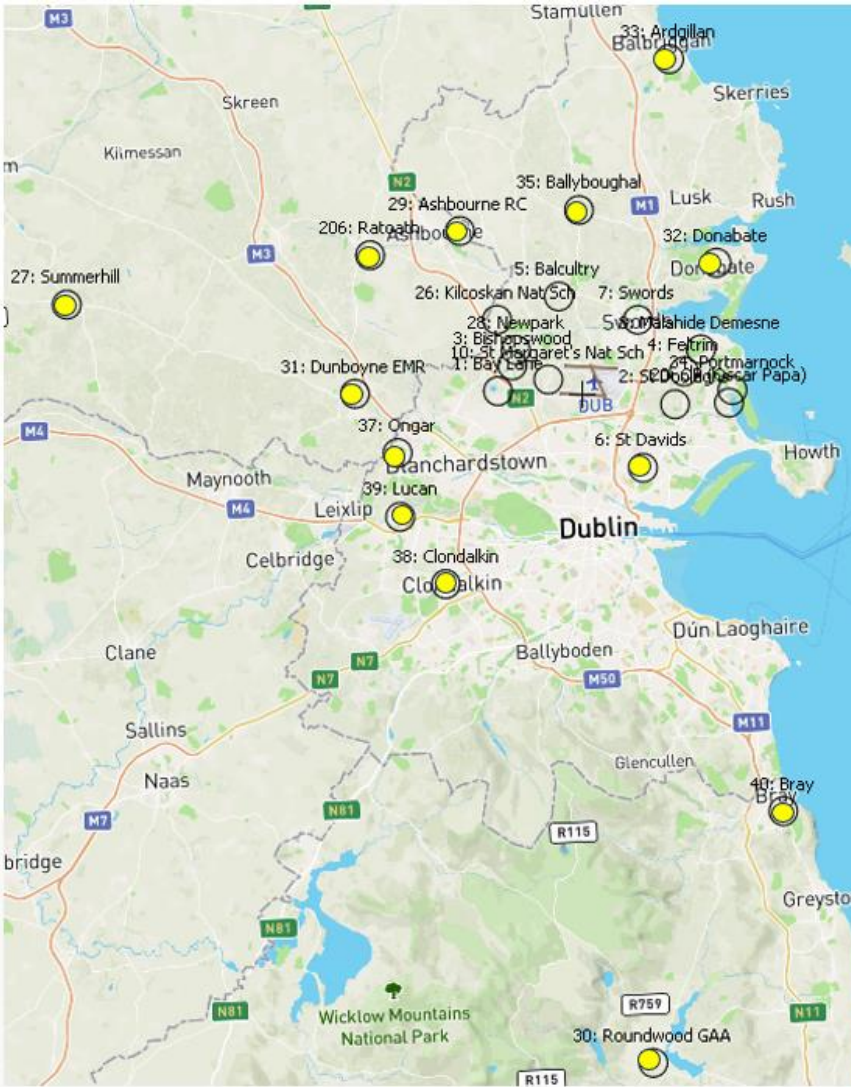
Page	Page Heading	Page Content
<b>5 &amp; 6</b>	Explanation of Terms	
<b>7</b>	Locations of Noise Monitoring Terminals (NMTs)	<ul style="list-style-type: none"> <li>• Maps indicating locations of active Dublin Airport NMTs</li> <li>• Installation dates of NMTs</li> </ul>
<b>8</b>	Modelled Lden Noise Contour Levels at NMT Locations	<ul style="list-style-type: none"> <li>• Map of 2024 Lden Annual Aircraft Noise Contours</li> <li>• 2023 and 2024 Lden noise levels at each NMT as indicated in the Noise Contour map.</li> </ul>
<b>9</b>	Modelled Lnight Noise Contour Levels at NMT Locations	<ul style="list-style-type: none"> <li>• Map of 2024 Lnight Annual Aircraft Noise Contours</li> <li>• 2023 and 2024 Lnight noise levels at each NMT as indicated in the Noise Contour map.</li> </ul>
<b>10</b>	NMT Operational Data and Number of Correlated Noise Events	<ul style="list-style-type: none"> <li>• Downtime (minutes) for each NMT each month</li> <li>• The number of correlated aircraft noise events at each NMT per month and in the quarter.</li> </ul>
<b>11</b>	NMT – Q2 Monthly and Quarterly Lden, Lnight and Leq16hr Data	For each month and over the quarter: <ul style="list-style-type: none"> <li>• Measured Aircraft Noise at each NMT displayed in Lden, Lnight and Leq16hr metrics.</li> </ul>
<b>12</b>	NMT – Q2 Aircraft Noise Event and Measured Lden/ Lnight Data	Chart showing correlated aircraft noise events and the measured Lden and Lnight data at each NMT
<b>13</b>	NMT – Modelled and Measured Lden, Lnight and Leq16hr Data	<ul style="list-style-type: none"> <li>• 2024 Lden and Lnight Modelled Contour levels at each NMT location</li> <li>• 2024 annual measured aircraft noise levels in Lden and Lnight metrics at each NMT</li> <li>• 2025 YTD measured aircraft noise levels in Lden, Lnight and Leq16hr metrics at each NMT</li> </ul>
<b>14</b>	NMT – Total Noise vs Aircraft Noise Q4 2024, Q1 and Q2 2025	<ul style="list-style-type: none"> <li>• Measured Total and the Aircraft Lden levels at each NMT.</li> </ul>
<b>15</b>	NMT – Q2 2025 Lmax and SEL (NA) Number Above (Daily Average)	Measured Single Event data at each NMT: <ul style="list-style-type: none"> <li>• Daily Average of the Number of Aircraft Events over each Lmax value 60 to 85 [N60 to N85].</li> <li>• Daily Average of the Number of Aircraft Events over each SEL value 70 to 95 [N(SEL)70 to N(SEL)95]</li> </ul>
<b>16</b>	NMT – Q2 2025 Lmax and SEL Percentages (3 months)	Measured Single Event data at each NMT: <ul style="list-style-type: none"> <li>• 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).</li> </ul>
<b>17</b>	NMT – Q2 2205 Lmax/SEL data divided by Day, Evening and Night	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>18-21</b>	Data from Temporary NMT installations	

Term	Definition
<b>Aircraft Noise</b>	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.)
<b>(Correlated) Aircraft Noise Event</b>	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.
<b>Downtime (minutes)</b>	The number of minutes during the period that each monitor was not operational.
<b>Lden</b>	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.
<b>Leq</b>	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.
<b>Leq16(hr)</b>	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.
<b>Leq8(hr)</b>	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.
<b>Lmax</b>	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.
<b>Lnight</b>	Lnight is the night-time (11pm-7am) Leq average noise indicator. Like Lden, in this document, Lnight is reported monthly, quarterly and annually.
<b>Measured noise levels</b>	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.
<b>Modelled noise levels</b>	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.

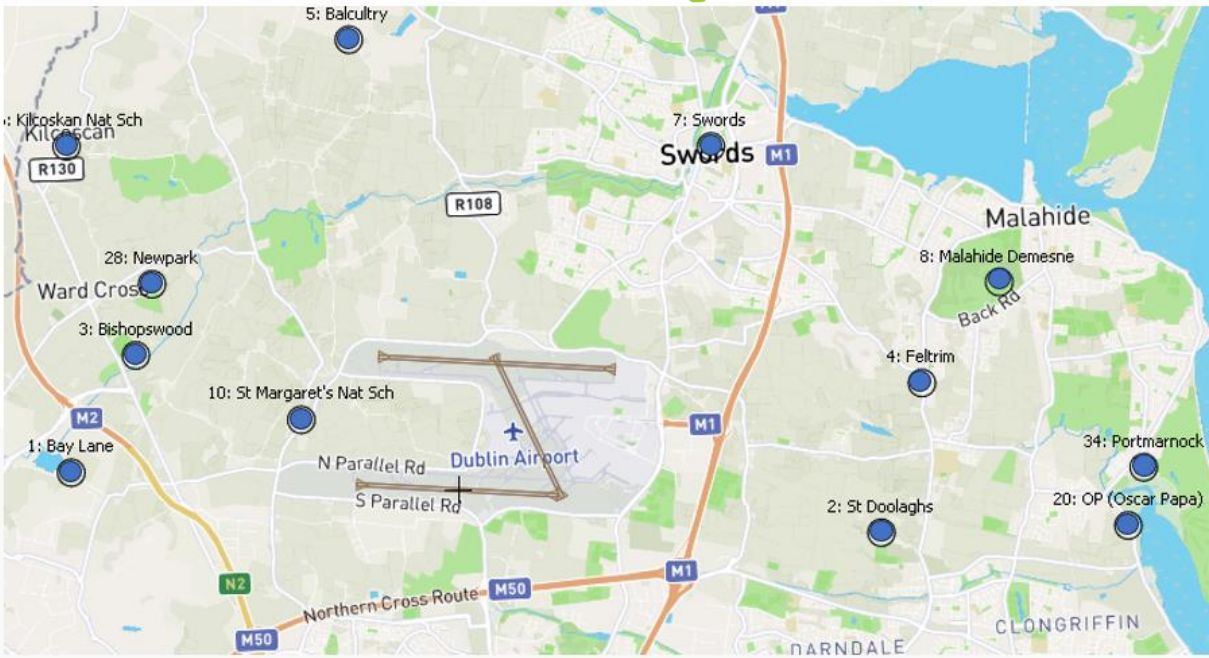
Term	Definition
<b>NMT</b>	NMT means Noise Monitoring Terminal. They are generally located in community areas. An NMT includes a high-quality, calibrated microphone and provides continuous noise level data at the location of the NMT.
<b>Noise Contours</b>	Contours are lines that join points of the same 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.
<b>Noise Event</b>	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.
<b>Number Above</b>	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.
<b>SEL</b>	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.
<b>Single Event noise metrics</b>	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.
<b>Time-Averaged noise levels</b>	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.
<b>Total Noise</b>	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.
<b>YTD</b>	Year to date



# Permanent Noise Monitoring Terminal (NMT) Locations Q2 2025



#	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.Margarets NS	●	07/2022
20	Coast Rd (OP)	●	2015
26	Kilcoskan 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



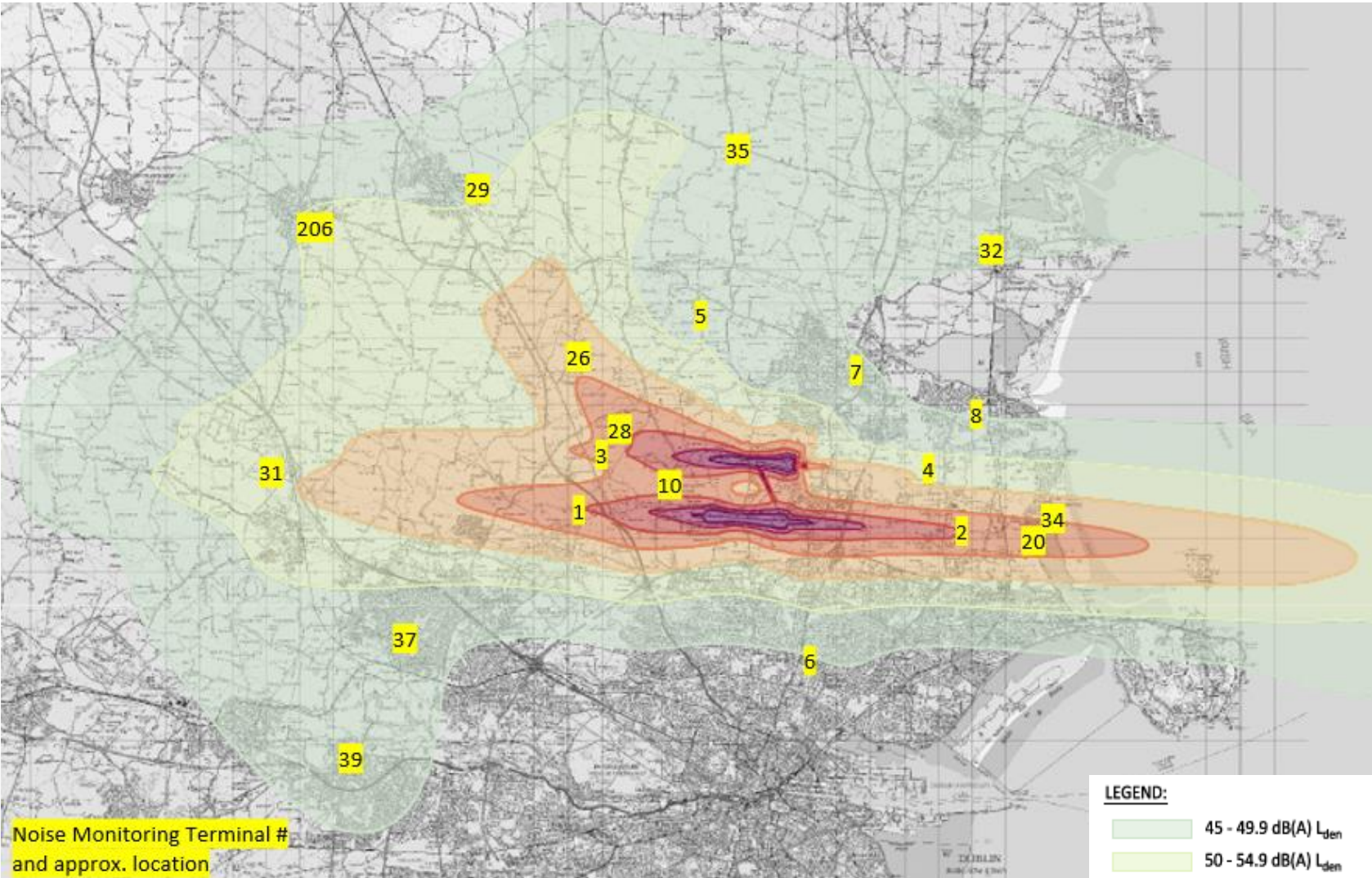
● = Permanent NMTs located near Dublin Airport

● = Permanent NMTs located further out from Dublin Airport



# Modelled Lden Noise Contour Levels at Permanent NMT Locations

#	NMT Name	Lden 2023	Lden 2024
1	Bay Lane	65	64.0
2	St. Doolaghs	65	64.8
3	Bishopswood	60	61.1
4	Feltrim	54	54.1
5	Balcultry	49	49.2
6	St.Davids	44	43.3
7	Swords	45	45.7
8	Malahide	46	46.3
10	St.Margarets NS	63	63.7
20	Coast Rd (OP)	63	62.7
26	Kilcoskan NS	58	59.5
27	Summerhill	38	35.8
28	Newpark	60	61.8
29	Ashbourne	49	50.0
30	Roundwood	36	37.7
31	Dunboyne	54	53.1
32	Donabate	45	45.1
33	Ardgillan	33	33.3
34	Portmarnock	54	58.2
35	Ballyboughal	47	49.0
37	Ongar		48.3
38	Clondalkin		43.4
39	Lucan		46.0
40	Bray		33.6
206	Ratoath	47	50.5



Map of 2024 Annual Lden Noise contours

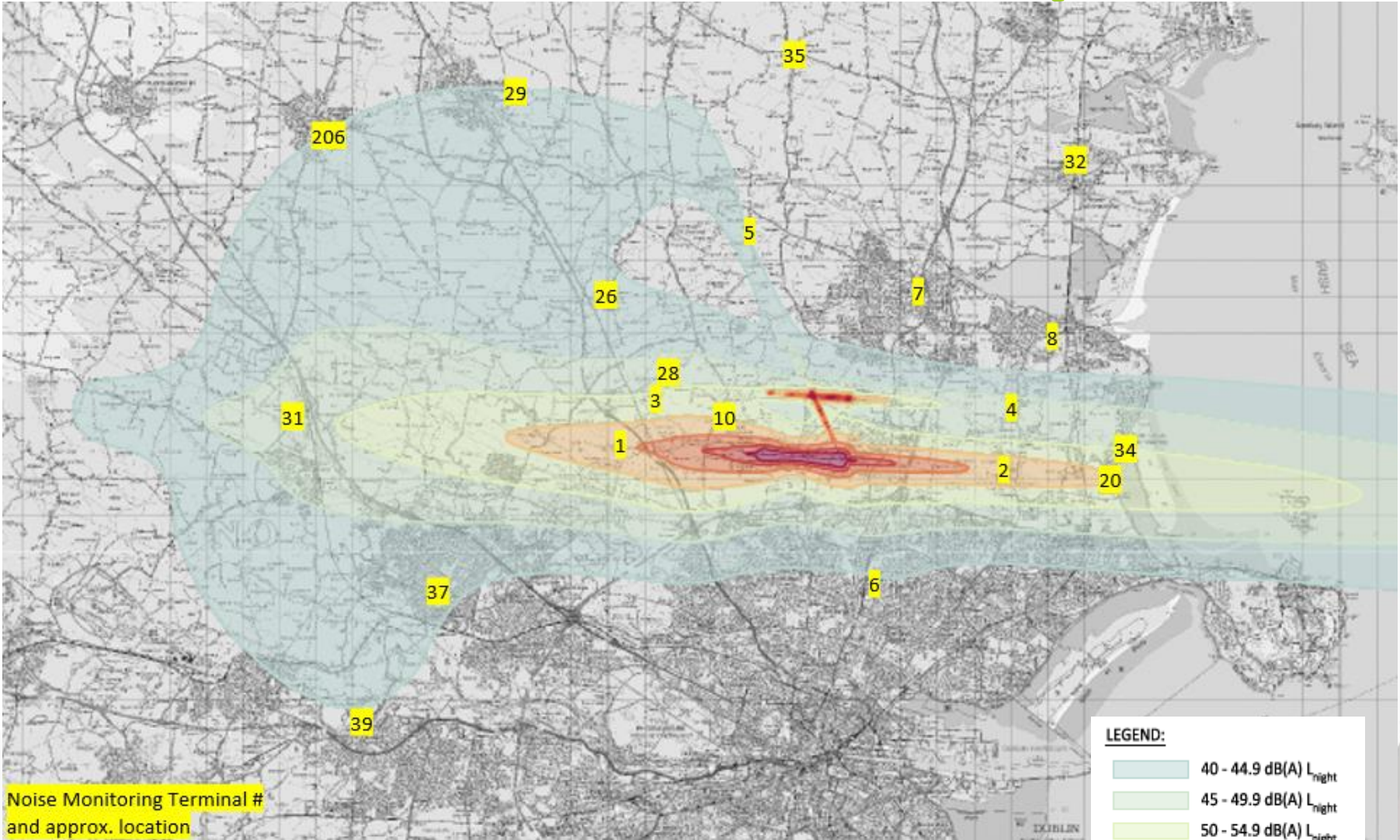
5 NMT (27, 30, 33, 38, 40) are located outside this map's boundaries

Including Permanent NMT installations



# Modelled Night Noise Contour Levels at Permanent NMT Locations

#	NMT Name	Lnight 2023	Lnight 2024
1	Bay Lane	58.5	58.4
2	St. Doolaghs	57.0	57.0
3	Bishopswood	49.1	49.4
4	Feltrim	46.4	47.3
5	Balcultry	39.0	40.5
6	St.Davids	36.0	36.3
7	Swords	36.7	36.9
8	Malahide	38.4	38.5
10	St.Margarets NS	55.2	55.7
20	Coast Rd (OP)	55.0	55.0
26	Kilcoskan NS	40.5	40.4
27	Summerhill	31.3	28.1
28	Newpark	44.6	44.9
29	Ashbourne	39.3	40.1
30	Roundwood	28.3	30.1
31	Dunboyne	47.0	47.2
32	Donabate	36.7	37.2
33	Ardgillan	23.8	23.4
34	Portmarnock		50.3
35	Ballyboughal		36.9
37	Ongar		42.3
38	Clondalkin		36.8
39	Lucan		39.7
40	Bray		24.9
206	Ratoath		40.5



Noise Monitoring Terminal #  
and approx. location

## Map of 2024 Annual Lnight 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

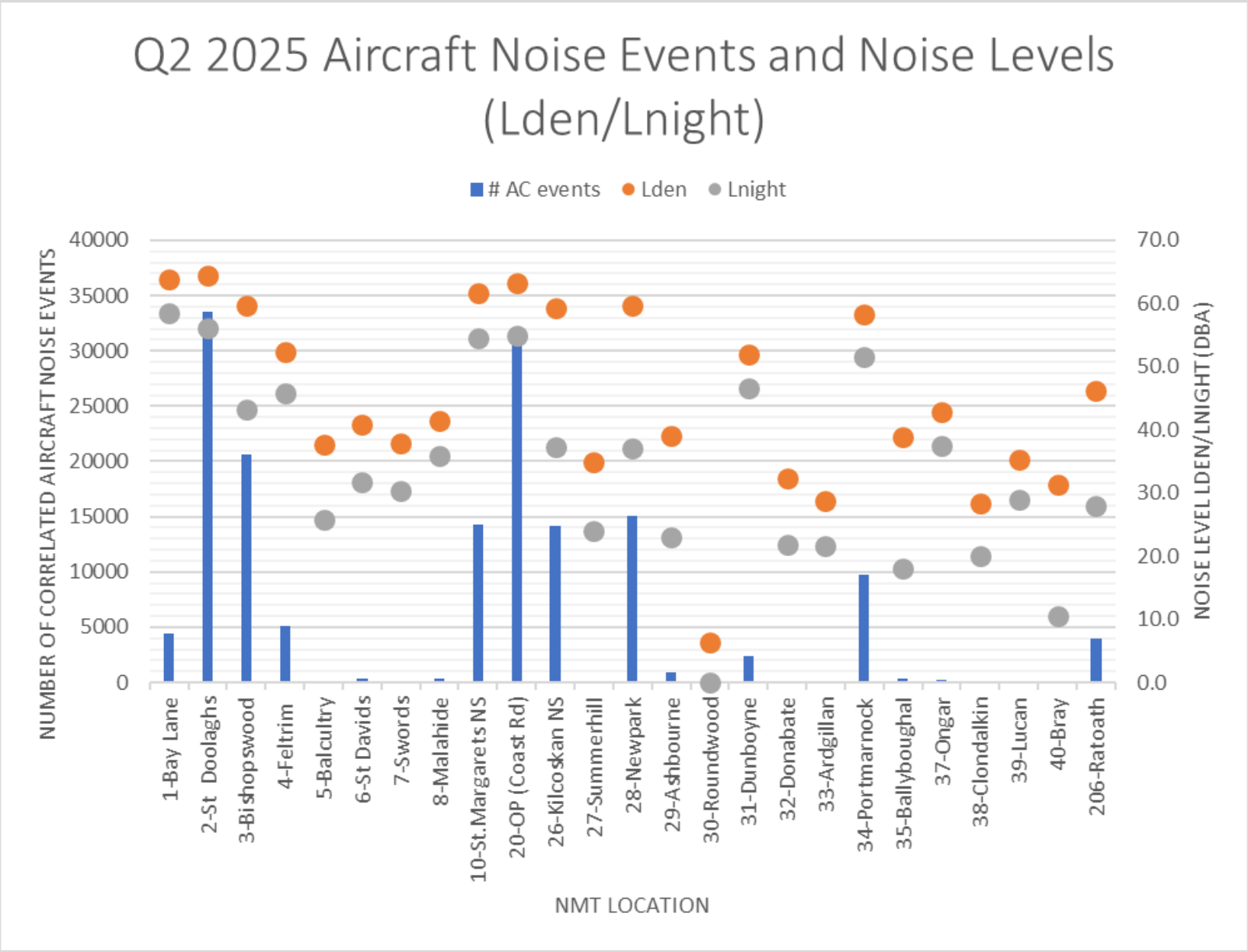
NMT	Location	April		May		June		Q2 2025
		Downtime (mins)	# Aircraft Events	Downtime (mins)	# Aircraft Events	Downtime (mins)	# Aircraft Events	# Aircraft Events
1	Bay Lane	4	1624	7	1429	6	1378	4431
2	St. Doolaghs	3	10426	6	11789	322	11336	33551
3	Bishopswood	9	7955	13	7804	13	4903	20662
4	Feltrim	2	2489	6	1561	51	1045	5095
5	Balcultry	2	36	15	24	133	15	75
6	St.Davids	1	122	2	149	1	59	330
7	Swords	17	20	49	15	184	13	48
8	Malahide	16	75	17	97	187	197	369
10	St.Margarets NS	48	3397	17	3930	215	6896	14223
20	Coast Rd (OP)	0	9119	0	10547	0	11076	30742
26	Kilcoskan NS	0	2724	0	3881	1	7525	14130
27	Summerhill	106	47	17	44	187	15	106
28	Newpark	16	3601	17	4074	300	7338	15013
29	Ashbourne	17	223	18	227	338	401	851
30	Roundwood	17	0	52	0	217	0	0
31	Dunboyne	17	990	17	801	211	547	2338
32	Donabate	48	9	17	10	187	13	32
33	Ardgillan	16	8	49	7	187	6	21
34	Portmarnock	17	3610	66	3761	228	2334	9705
35	Ballyboughal	66	62	68	91	244	185	338
37	Ongar	65	56	68	89	335	135	280
38	Clondalkin	97	11	68	10	233	14	35
39	Lucan	61	11	17	30	177	37	78
40	Bray	66	8	68	10	265	20	38
206	Ratoath	17	881	17	1077	184	2013	3971

Including Permanent NMT installations only

# NMT – Q2 2025 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	1624	1429	1378	4431	64.6	63.7	63.0	63.8	59.3	58.5	57.7	58.6	44.7	40.9	40.9	42.5
2	St. Doolaghs	10426	11789	11336	33551	63.7	64.5	64.7	64.3	55.1	56.3	56.7	56.1	61.5	61.9	61.7	61.7
3	Bishopswood	7955	7804	4903	20662	61.1	59.8	57.4	59.7	45.4	39.2	43.2	43.3	61.1	60.1	57.5	59.8
4	Feltrim	2489	1561	1045	5095	51.0	50.7	54.5	52.4	42.6	43.9	48.7	45.9	49.0	46.3	45.8	47.2
5	Balcultry	36	24	15	75	38.6	39.3	32.6	37.7	0.0	30.1	20.2	25.8	39.6	36.2	30.4	36.8
6	St.Davids	122	149	59	330	42.2	41.7	37.1	40.9	35.3	27.8	27.4	31.7	38.6	42.0	36.4	39.7
7	Swords	20	15	13	48	38.2	40.0	32.1	37.8	31.0	32.5	22.1	30.3	33.5	36.7	32.1	34.5
8	Malahide	75	97	197	369	41.5	34.7	43.9	41.4	36.0	28.3	38.6	35.9	29.9	29.7	26.0	28.9
10	St.Margarets NS	3397	3930	6896	14223	60.2	61.0	63.3	61.7	53.2	54.0	55.7	54.4	55.9	56.7	60.0	57.9
20	Coast Rd (OP)	9119	10547	11076	30742	62.3	63.3	64.1	63.3	53.4	55.0	55.9	54.9	60.3	60.7	61.5	60.9
26	Kilcoskan NS	2724	3881	7525	14130	57.0	58.6	61.4	59.4	29.7	38.3	39.3	37.4	57.6	59.2	62.0	60.0
27	Summerhill	47	44	15	106	35.8	36.7	28.7	34.9	26.7	21.3	22.0	24.0	34.8	34.7	24.3	33.2
28	Newpark	3601	4074	7338	15013	57.6	58.8	61.7	59.7	32.3	36.5	39.4	37.0	58.3	59.3	62.2	60.2
29	Ashbourne	223	227	401	851	37.7	38.5	40.6	39.1	15.4	25.0	24.0	23.0	38.9	38.8	41.2	39.8
30	Roundwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Dunboyne	990	801	547	2338	53.1	52.2	49.9	51.9	47.8	46.9	44.6	46.7	30.0	26.5	28.6	28.6
32	Donabate	9	10	13	32	33.3	31.2	32.3	32.3	0.0	25.4	19.9	21.8	33.1	23.7	31.8	31.0
33	Ardgillan	8	7	6	21	28.4	29.3	28.2	28.7	20.6	21.5	22.6	21.7	26.4	25.5	19.7	24.7
34	Portmarnock	3610	3761	2334	9705	61.3	55.9	54.4	58.3	55.2	47.0	46.5	51.5	54.4	54.1	51.4	53.5
35	Ballyboughal	62	91	185	338	36.9	37.6	40.9	38.8	0.0	0.0	22.8	18.1	38.2	39.0	41.8	39.9
37	Ongar	56	89	135	280	41.3	42.0	44.4	42.8	36.0	36.7	39.0	37.4	21.7	27.1	29.3	27.0
38	Clondalkin	11	10	14	35	24.6	30.3	28.2	28.3	17.5	19.8	21.9	20.1	19.3	30.3	23.0	26.6
39	Lucan	11	30	37	78	32.5	36.9	35.4	35.3	27.3	28.7	30.1	28.9	0.0	32.2	20.2	27.8
40	Bray	8	10	20	38	29.5	27.4	34.3	31.4	15.1	0.0	0.0	10.6	27.2	29.2	34.2	31.2
206	Ratoath	881	1077	2013	3971	44.2	45.1	48.4	46.3	25.0	30.9	25.2	28.0	44.7	45.4	49.2	46.9





NMT	Location	Lden (dBA) [Modelled Contour and Measured]							Lnight (=Leq 8h) (dBA) [Modelled Contour and Measured]							Leq16h (dBA) [Measured]					
		'24 Model	'24 NMT	Q1 2025	Q2 2025	Q3 2025	Q4 2025	2025	'24 Model	'24 NMT	Q1 2025	Q2 2025	Q3 2025	Q4 2025	2025	'24 NMT	Q1 2025	Q2 2025	Q3 2025	Q4 2025	2025
1	Bay Lane	64.0	63.4	63.7	63.8				58.4	57.8	58.2	58.6				51.6	50.6	42.5			
2	St. Doolaghs	64.8	64.3	63.4	64.3				57.0	56.5	55.4	56.1				61.0	60.5	61.7			
3	Bishopswood	61.1	58.4	58.6	59.7				49.4	45.1	44.0	43.3				58.4	58.7	59.8			
4	Feltrim	54.1	52.4	51.5	52.4				47.3	45.3	44.0	45.9				48.5	48.3	47.2			
5	Balcultry	49.2	44.1	40.9	37.7				40.5	37.2	27.1	25.8				37.8	41.4	36.8			
6	St.Davids	43.3	42.8	40.6	40.9				36.3	34.8	28.8	31.7				39.3	40.8	39.7			
7	Swords	45.7	38.7	37.3	37.8				36.9	26.8	18.6	30.3				37.2	37.9	34.5			
8	Malahide	46.3	38.9	35.8	41.4				38.5	32.0	28.9	35.9				32.6	31.0	28.9			
10	St.Margarets	63.7	63.4	61.8	61.7				55.7	56.1	54.6	54.4				59.6	57.9	57.9			
20	Coast Rd (OP)	62.7	62.6	62.6	63.3				55.0	54.5	54.1	54.9				59.6	60.3	60.9			
26	Kilcoskan NS	59.5	60.4	58.7	59.4				40.4	36.0	35.0	37.4				61.1	59.4	60.0			
27	Summerhill	35.8	33.8	31.3	34.9				28.1	23.3	24.0	24.0				33.5	27.7	33.2			
28	Newpark	61.8	61.3	59.0	59.7				44.9	36.7	34.3	37.0				61.9	59.6	60.2			
29	Ashbourne	50.0	39.7	38.7	39.1				40.1	23.4	19.8	23.0				40.4	39.4	39.8			
30	Roundwood	37.7	17.7	0	0				30.1	0.0	0.0	0.0				19.2	0.0	0.0			
31	Dunboyne	53.1	50.4	50.6	51.9				47.2	44.9	45.1	46.7				38.3	35.2	28.6			
32	Donabate	45.1	32.7	29.8	32.3				37.2	21.6	18.4	21.8				31.1	29.3	31.0			
33	Ardgillan	33.3	30.1	28.5	28.7				23.4	20.9	11.8	21.7				27.8	28.1	24.7			
34	Portmarnock	58.2	54.8 <sup>8</sup>	54.6	58.3				50.3	46.9 <sup>8</sup>	47.0	51.5				52.1	51.6	53.5			
35	Ballyboughal	49.0	38.3 <sup>8</sup>	38.1	38.8				36.9	24.1 <sup>8</sup>	24.9	18.1				38.7	38.6	39.9			
37	Ongar	48.3	40.6 <sup>3</sup>	39.9	42.8				42.3	34.8 <sup>3</sup>	34.4	37.4					27.5	27.0			
38	Clondalkin	43.4	37.8 <sup>3</sup>	22.9	28.3				36.8	24.5 <sup>3</sup>	16.8	20.1					16.6	26.6			
39	Lucan	46.0	33.8 <sup>3</sup>	30.6	35.3				39.7	25.3 <sup>3</sup>	22.6	28.9					24.8	27.8			
40	Bray	33.6	33.4 <sup>3</sup>	24.7	31.4				24.9	16.4 <sup>3</sup>	10.6	10.6					24.9	31.2			
206	Ratoath	50.5	47.0 <sup>10</sup>	44.3	46.3				40.5	27.1 <sup>10</sup>	28.4	28.0					45.0	46.9			

# Total Noise versus Aircraft Noise Q4 2024, Q1 & Q2 2025

NMT	Location	Lden Q4 2024			Lden Q1 2025			Lden Q2 2025		
		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	66.1	62.8	3377	68.7	63.7	3817	65.6	63.8	4431
2	St. Doolaghs	65.5	64.0	25115	65.0	63.4	24307	65.0	64.3	33551
3	Bishopswood	65.0	58.4	14878	64.8	58.6	14535	63.5	59.7	20662
4	Feltrim	66.5	53.0	4035	66.2	51.5	5115	59.7	52.5	5095
5	Balcultry	63.6	44.9	75	63.2	40.9	99	69.1	37.6	75
6	St.Davids	64.5	44.4	216	64.2	40.6	283	55.1	40.8	330
7	Swords	69.8	35.7	74	68.6	37.3	98	60.8	37.7	48
8	Malahide	61.9	36.0	221	63.9	35.8	254	61.8	41.5	369
10	St.Margarets NS	66.9	62.7	15528	67.0	61.8	12310	66.0	61.7	14223
20	Coast Rd (OP)	69.2	63.2	23236	68.3	62.6	23282	66.3	63.3	30742
26	Kilcoskan NS	63.7	59.9	15218	66.6	58.7	11690	62.5	59.4	14130
27	Summerhill	58.0	31.9	82	61.2	31.3	106	58.9	34.9	106
28	Newpark	65.3	60.3	15713	67.2	59.0	13189	61.5	59.7	15013
29	Ashbourne	61.8	39.5	872	62.7	38.7	827	57.1	39.1	851
30	Roundwood	64.0	6.4	0	57.6	6.4	0	55.0	6.4	0
31	Dunboyne	63.0	50.2	1445	61.1	50.6	1733	59.0	51.9	2338
32	Donabate	57.9	31.2	32	58.5	29.8	34	54.7	32.4	32
33	Ardgillan	56.4	28.5	31	58.1	28.5	38	53.2	28.6	21
34	Portmarnock	60.3	54.6	6543	60.2	54.6	6758	60.8	58.3	9705
35	Ballyboughal	62.4	38.0	224	64.0	38.1	224	62.3	38.8	338
37	Ongar	62.4	41.0	247	65.3	39.9	201	60.1	42.8	280
38	Clondalkin	62.0	39.1	866	65.8	22.9	859	58.0	28.2	35
39	Lucan	56.1	34.5	180	57.4	30.6	308	54.7	35.3	78
40	Bray	60.3	30.9	42	59.3	24.7	108	58.1	31.5	38
206	Ratoath	59.6	46.3	3635	60.1	44.3	2541	55.3	46.3	3971

- **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 2025 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	48.6	48.6	47.1	33.5	6.5	0.1	50	48.6	48.4	45.5	31.8	2.6	0.0	4421
2	St. Doolaghs	368.9	368.7	341.3	134.6	6.5	0.2	381	368.9	366.8	331.1	89.1	4.3	0.0	33567
3	Bishopswood	227.0	227.0	195.4	91.6	3.0	0.1	235	227.0	224.7	181.6	45.2	3.1	0.1	20657
4	Feltrim	56.1	40.8	11.6	3.4	0.2	0.0	58	55.7	34.2	10.9	1.8	0.1	0.0	5102
5	Balcultry	0.8	0.8	0.6	0.3	0.1	0.0	1	0.8	0.8	0.5	0.3	0.1	0.0	75
6	St.Davids	3.6	3.6	2.0	0.3	0.2	0.0	4	3.6	3.4	1.1	0.3	0.1	0.0	330
7	Swords	0.5	0.5	0.3	0.2	0.1	0.0	1	0.5	0.4	0.3	0.2	0.1	0.0	48
8	Malahide	2.0	0.8	0.3	0.1	0.0	0.0	4	2.4	0.8	0.3	0.1	0.0	0.0	368
10	St.Margarets NS	155.6	145.6	138.5	71.5	7.1	0.1	162	153.9	145.8	124.8	50.2	3.8	0.0	14239
20	Coast Rd (OP)	337.8	337.8	303.9	53.2	2.4	0.1	349	337.8	337.8	305.8	57.3	1.3	0.0	30737
26	Kilcoskan NS	155.3	153.3	144.1	74.3	7.8	0.1	161	155.1	153.0	144.8	72.6	8.1	0.1	14130
27	Summerhill	1.1	0.8	0.2	0.0	0.0	0.0	2	1.0	0.6	0.1	0.0	0.0	0.0	101
28	Newpark	165.0	163.1	134.9	78.9	10.8	0.4	171	164.7	152.5	133.0	80.9	9.3	0.1	15015
29	Ashbourne	9.4	8.5	2.1	0.1	0.0	0.0	10	9.3	5.9	1.3	0.1	0.0	0.0	851
30	Roundwood	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0
31	Dunboyne	25.7	16.1	2.6	0.1	0.0	0.0	27	25.3	16.1	2.7	0.1	0.0	0.0	2341
32	Donabate	0.4	0.3	0.2	0.1	0.0	0.0	1	0.3	0.2	0.2	0.1	0.0	0.0	32
33	Ardgillan	0.2	0.2	0.0	0.0	0.0	0.0	0	0.2	0.2	0.0	0.0	0.0	0.0	22
34	Portmarnock	106.7	99.9	61.2	6.8	0.0	0.0	110	106.6	100.9	65.1	8.2	0.2	0.0	9710
35	Ballyboughal	3.6	3.6	3.6	0.4	0.0	0.0	4	3.6	3.6	2.2	0.2	0.0	0.0	329
37	Ongar	2.8	1.5	0.1	0.0	0.0	0.0	3	2.9	2.2	0.5	0.0	0.0	0.0	277
38	Clondalkin	0.3	0.1	0.0	0.0	0.0	0.0	11	0.3	0.1	0.0	0.0	0.0	0.0	35
39	Lucan	0.9	0.2	0.0	0.0	0.0	0.0	8	0.8	0.4	0.1	0.0	0.0	0.0	80
40	Bray	0.4	0.2	0.1	0.1	0.0	0.0	2	0.4	0.2	0.1	0.1	0.0	0.0	37
206	Ratoath	43.5	29.2	5.1	0.7	0.1	0.0	45	41.4	29.3	5.7	0.6	0.1	0.0	3955

This data shows Lmax and SEL distributions of correlated aircraft noise events each day averaged over Q2 2025.  
For example, N60 = number of daily events over Lmax 60 dBA.

# Q2 2025 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%	28%	56%	13%	0%	50	0%	6%	28%	60%	5%	0%	4434
2	St. Doolaghs	0%	7%	56%	35%	2%	0%	381	1%	10%	66%	23%	1%	0%	33553
3	Bishopswood		14%	46%	39%	1%	0%	235	1%	19%	60%	19%	1%	0%	20672
4	Feltrim	27%	52%	15%	6%	0%	0%	58	38%	42%	16%	3%	0%		5096
5	Balcultry	3%	27%	37%	21%	12%		1	8%	33%	23%	25%	11%		88
6	St.Davids	1%	43%	48%	4%	4%	1%	4	5%	64%	23%	4%	3%		350
7	Swords	10%	25%	31%	19%	13%	2%	1	21%	19%	25%	17%	15%		53
8	Malahide	30%	13%	5%	2%	0%		4	40%	10%	6%	2%			381
10	St.Margarets NS	6%	5%	43%	41%	4%	0%	162	5%	13%	48%	30%	2%	0%	14229
20	Coast Rd (OP)		10%	74%	15%	1%	0%	349		9%	74%	17%	0%	0%	30745
26	Kilcoskan NS	1%	6%	45%	43%	5%	0%	161	1%	5%	46%	42%	5%	0%	14132
27	Summerhill	30%	52%	13%	2%		1%	2	37%	44%	5%	2%	2%		166
28	Newpark	1%	17%	34%	41%	6%	0%	171	7%	12%	32%	43%	6%	0%	15013
29	Ashbourne	9%	68%	22%	1%			10	36%	49%	13%	1%			852
30	Roundwood							0							0
31	Dunboyne	37%	53%	10%	0%			27	36%	52%	10%	0%			2341
32	Donabate	19%	38%	22%	19%	3%		1	31%	16%	31%	16%	3%		46
33	Ardgillan	23%	59%	9%	9%			0	18%	59%	5%	9%			29
34	Portmarnock	6%	36%	51%	6%	0%		110	5%	34%	53%	7%	0%	0%	9706
35	Ballyboughal			89%	10%	1%		4	0%	40%	53%	6%	0%		362
37	Ongar	44%	48%	2%				3	24%	57%	15%				301
38	Clondalkin	49%	14%	3%		3%		11	37%	20%	6%		3%		995
39	Lucan	78%	18%	3%	1%	1%		8	51%	38%	4%	1%	1%		661
40	Bray	62%	14%	11%	11%	3%		2	46%	30%	5%	14%	3%		148
206	Ratoath	33%	55%	10%	2%	0%	0%	45	28%	54%	12%	1%	0%		3975

Including Permanent NMT installations only

# Q2 2025 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	4.1	4.1	3.5	1.3	0.1	0.0	0.8	0.8	0.7	0.6	0.1	0.0	43.7	43.7	42.9	31.7	6.3	0.1
2	St. Doolaghs	261.9	261.8	241.3	94.2	5.9	0.1	63.2	63.2	58.3	23.3	0.3	0.0	43.8	43.7	41.7	17.0	0.4	0.0
3	Bishopswood	179.5	179.5	156.4	73.3	2.8	0.1	42.0	42.0	36.7	17.7	0.3	0.0	5.5	5.5	2.2	0.6	0.0	0.0
4	Feltrim	40.0	31.0	7.5	1.0	0.1	0.0	8.9	4.8	0.8	0.3	0.0	0.0	7.1	5.0	3.2	2.0	0.0	0.0
5	Balcultry	0.6	0.6	0.5	0.2	0.1	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
6	St.Davids	3.3	3.2	1.8	0.2	0.2	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0
7	Swords	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
8	Malahide	0.9	0.4	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	1.0	0.3	0.2	0.1	0.0	0.0
10	St.Margarets NS	97.2	97.2	96.8	50.4	6.3	0.1	23.8	23.8	20.7	8.7	0.1	0.0	34.7	24.7	21.0	12.4	0.6	0.0
20	Coast Rd (OP)	239.3	239.3	216.6	41.6	2.0	0.0	58.1	58.1	50.9	5.4	0.1	0.0	40.4	40.4	36.4	6.2	0.2	0.0
26	Kilcoskan NS	130.1	128.4	120.7	63.4	7.6	0.1	24.5	24.3	23.0	10.8	0.2	0.0	0.7	0.6	0.4	0.1	0.0	0.0
27	Summerhill	0.6	0.6	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0
28	Newpark	137.5	136.9	112.8	67.8	10.3	0.4	25.8	25.7	21.8	11.0	0.5	0.0	1.7	0.5	0.3	0.1	0.0	0.0
29	Ashbourne	7.8	7.7	2.1	0.1	0.0	0.0	1.4	0.7	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0
30	Roundwood	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	Dunboyne	0.3	0.3	0.1	0.0	0.0	0.0	0.6	0.3	0.0	0.0	0.0	0.0	24.8	15.5	2.5	0.1	0.0	0.0
32	Donabate	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
33	Ardgillan	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
34	Portmarnock	67.3	67.3	48.8	6.8	0.0	0.0	19.2	17.3	8.7	0.0	0.0	0.0	20.2	15.3	3.7	0.0	0.0	0.0
35	Ballyboughal	3.3	3.3	3.3	0.4	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Ongar	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.4	0.0	0.0	0.0	0.0
38	Clondalkin	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
39	Lucan	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.1	0.0	0.0	0.0	0.0
40	Bray	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
206	Ratoath	36.6	24.9	4.9	0.7	0.1	0.0	6.5	4.2	0.2	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.0

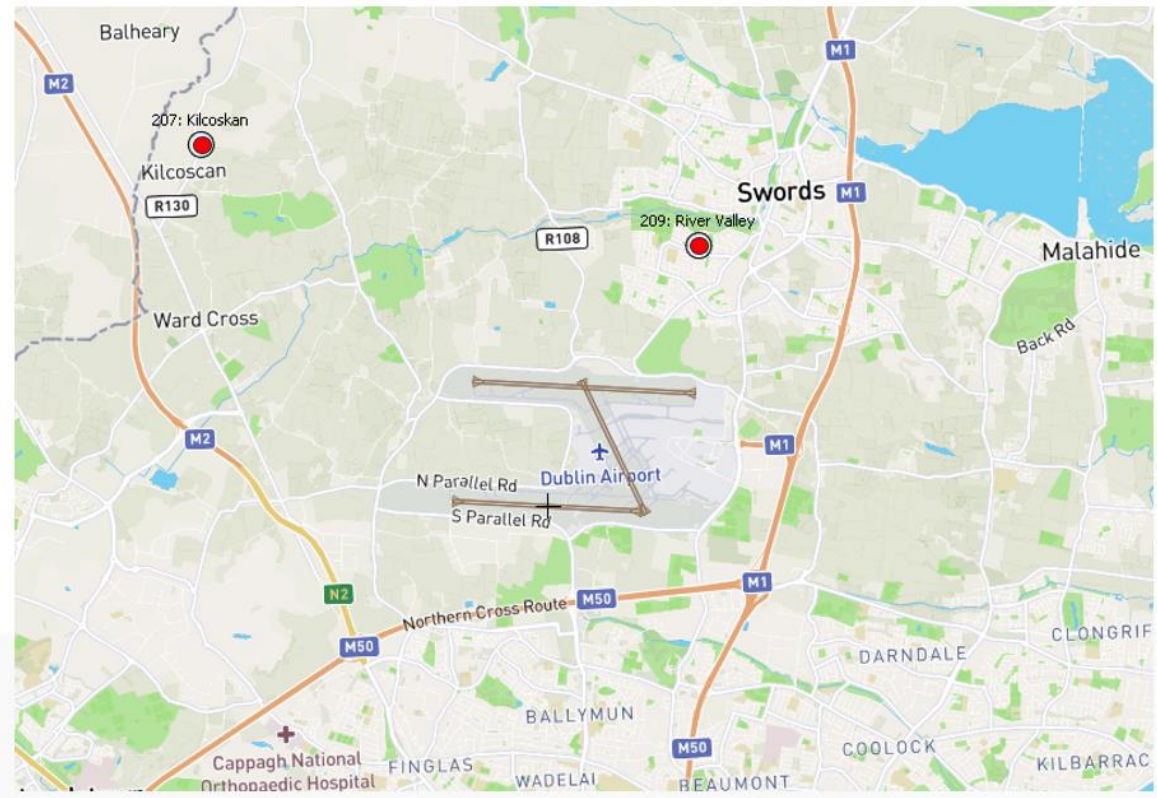
This data shows Lmax events during day, evening and night periods, averaged over Q1 2025.  
For example, N60 = number of events over Lmax 60 dBA (in this case the figure is the daily average over the quarter.)



## Part 2: Noise Monitoring Data Temporary NMT



# Part 2: Portable Noise Monitoring Terminal (NMT) Locations Q2 2025



- Mobile Noise Monitoring Terminals (NMT) are installed at locations around Dublin Airport based on requests from the two community forums – St. Margaret's Community Liaison Group and Dublin Airport Environmental Working Group.
- Data from the NMT at Millhead and Boroimhe are reported in the Q2 2024 Noise and Flight Track Monitoring Report.

#	Mobile NMT	From	Until	Quarterly Report
204	Milhead	Oct 2023	June 2024	Q2 2024
205	Boroimhe	Mar 2024	July 2024	Q2 2024
207	Kilcoscan	Jul 2024		Q2 2025 (this report)
208	Lusk	Aug 2024	Sept 2024	Q3 2024
209	Rivervalley	Feb 2025	June 2025	Q2 2025 (this report)

# Portable Temporary NMT - #207 Kilcoskan



		Aug 2024	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Av 11 mon
	Correlated Aircraft Noise Events	5259	3021	3493	2978	3238	3029	1619	2508	1639	2117	4285	
NMT Noise Levels	Total Lden (dBA)	60.7	58.5	59.5	59.1	61.7	62.6	57.8	58.2	56.9	57.5	60.4	59.5
	Aircraft Lden (dBA)	57.6	55.1	56.0	55.3	56.3	55.6	52.8	54.5	52.8	53.8	56.9	55.3
	Aircraft Lnight (dBA)	35.4	24.9	37.4	23.3	27.4	34.3	27.8	32.8	25.5	35.9	36.6	34.2
	Aircraft Leq16h (dBA)	57.8	55.4	56.2	55.8	57.0	55.9	53.4	54.8	53.1	53.9	57.0	55.5
Daily Number of Aircraft Noise Events Above Lmax values	NA Lmax 60	170	101	113	100	104	98	58	81	55	68	143	99
	NA Lmax 65	170	101	113	100	104	98	58	81	55	68	143	99
	NA Lmax 70	163	96	109	96	101	95	56	79	53	66	138	96
	NA Lmax 75	45	18	26	26	27	30	19	23	15	19	41	26
	NA Lmax 80	1.0	0.2	0.5	0.7	0.7	0	1	1	0	0	1	1
	NA Lmax 85	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0
Daily Number of Aircraft Noise Events Above SEL values	NA SEL 65	170	101	113	100	104	98	58	81	55	68	143	99
	NA SEL 70	170	101	113	100	104	98	58	81	55	68	143	99
	NA SEL 75	169	100	112	100	104	98	58	81	55	68	143	99
	NA SEL 80	142	83	95	85	86	84	49	68	45	55	113	82
	NA SEL 85	22	12	17	19	17	19	9	13	9	11	23	16
	NA SEL 90	0.2	0.0	0.1	0.2	0.1	0	0	0	0	0	0	0
	NA SEL 95	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0



# Portable Temporary NMT - #209 River Valley

		Feb 2025 (22d)	Mar 2025	Apr 2025	May 2025	Jun 2025	4.7 Month Average
	Correlated Aircraft Noise Events	15	39	17	23	16	
NMT Noise Levels	Total Lden (dBA)	55.3	54.3	54.5	53.9	53.8	54.3
	Aircraft Lden (dBA)	34.7	37.4	36.2	40.5	32.9	37.3
	Aircraft Lnight (dBA)	18.3	0.0	28.7	34.8	20.6	29.2
	Aircraft Leq16h (dBA)	36.1	38.1	30.9	32.5	33.2	34.9
Daily Number of Aircraft Noise Events Above Lmax values	NA Lmax 60	0.6	1.2	0.5	0.6	0.4	0.6
	NA Lmax 65	0.6	1.2	0.5	0.6	0.4	0.6
	NA Lmax 70	0.4	0.8	0.3	0.3	0.2	0.4
	NA Lmax 75	0.3	0.4	0.1	0.2	0.1	0.2
	NA Lmax 80	0.1	0.2	0.0	0.1	0.0	0.1
	NA Lmax 85	0.0	0.0	0.0	0.0	0.0	0.0
Daily Number of Aircraft Noise Events Above SEL values	NA SEL 65	0.3	1.2	0.5	0.7	0.4	0.6
	NA SEL 70	0.3	1.2	0.5	0.7	0.4	0.6
	NA SEL 75	0.2	1.0	0.4	0.6	0.4	0.6
	NA SEL 80	0.1	0.8	0.3	0.3	0.1	0.4
	NA SEL 85	0.1	0.5	0.1	0.2	0.0	0.2
	NA SEL 90	0.0	0.0	0.0	0.1	0.0	0.0
	NA SEL 95	0.0	0.0	0.0	0.0	0.0	0.0

## Part 3: Flight Track Monitoring

---



Page	Page Heading	Page Content
24	Explanation of Terms	
25	Standard Instrument Departures (SID) North Runway	<ul style="list-style-type: none"><li>• AirNav Ireland maps displaying the departure SIDs from North Runway towards the West and the East.</li></ul>
26	Standard Instrument Departures (SID) South Runway	<ul style="list-style-type: none"><li>• AirNav Ireland maps displaying the departure SIDs from South Runway towards the West and the East.</li></ul>
27	Busy day Flight Tracks - Westerly and Easterly Operations	Examples of a typical 'busy day' flight pattern
28	Noise Contour Modelling (1) – Core Flight Tracks	Explanation of how noise contours are modelled using core flight tracks
29	Noise Contour Modelling (2) – Dispersed Flight Tracks	Explanation of how noise contours are modelled using dispersed flight tracks
30	Conclusion	



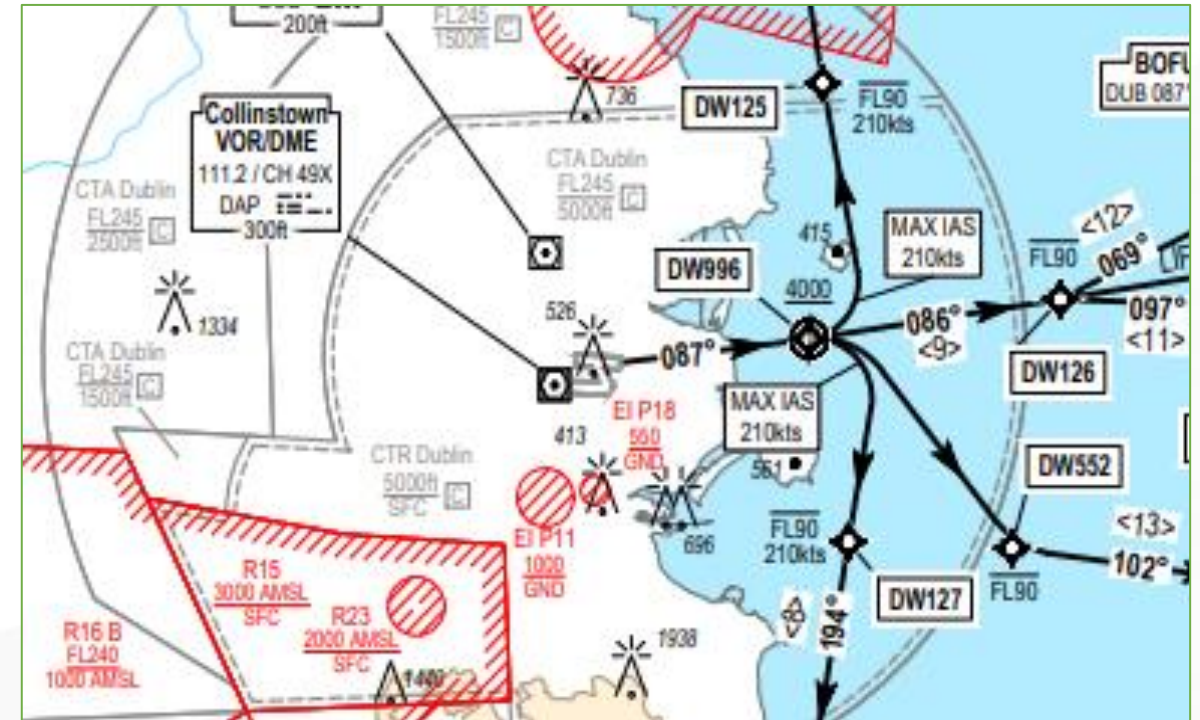
Term	Definition/ Explanation
<b>Arrival Tracks</b>	Arriving aircraft must fly in a straight line for at least the final 11km of their approach before landing on the runway. Aircraft approach the airport at a precise downward angle of 3 degrees, which means that they are at a height of 1,800ft when they join the final approach at the 11km point.
<b>Departure Tracks</b>	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.
<b>Easterly vs Westerly Operations</b>	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.
<b>Standard Instrument Departure (SID)</b>	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)
<b>Flight Track</b>	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.
<b>Noise Modelling</b>	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.
<b>Modelled Flight Track</b>	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
<b>Track Dispersion</b>	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)*

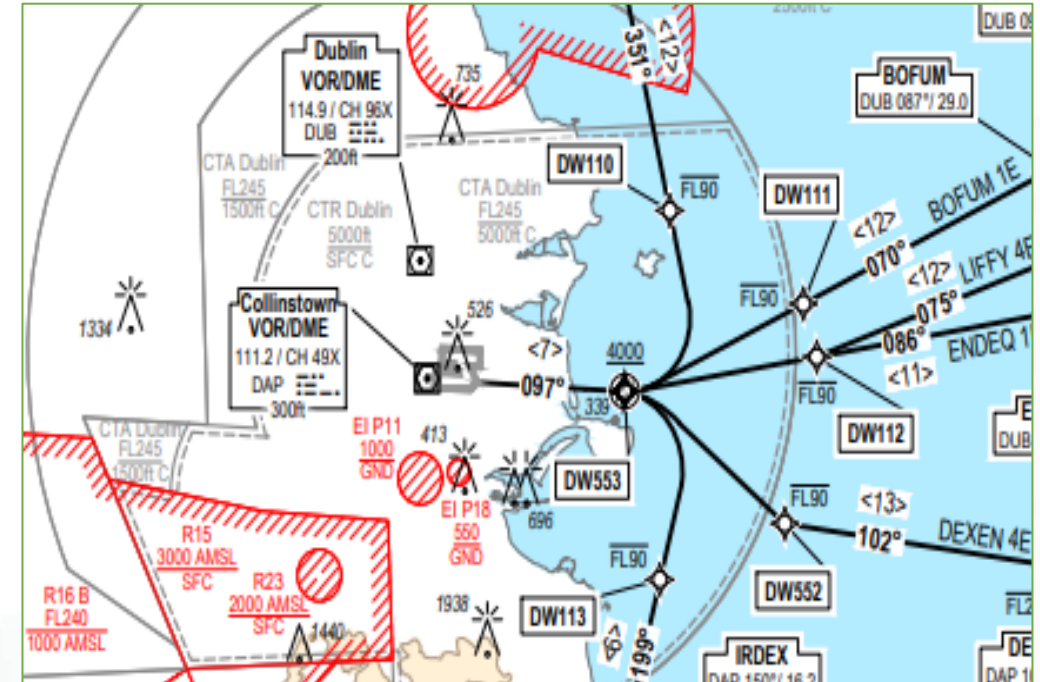
*Note: This is only used during periods when the South Runway is closed.*

# Standard Instrument Departures (SID) South Runway

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



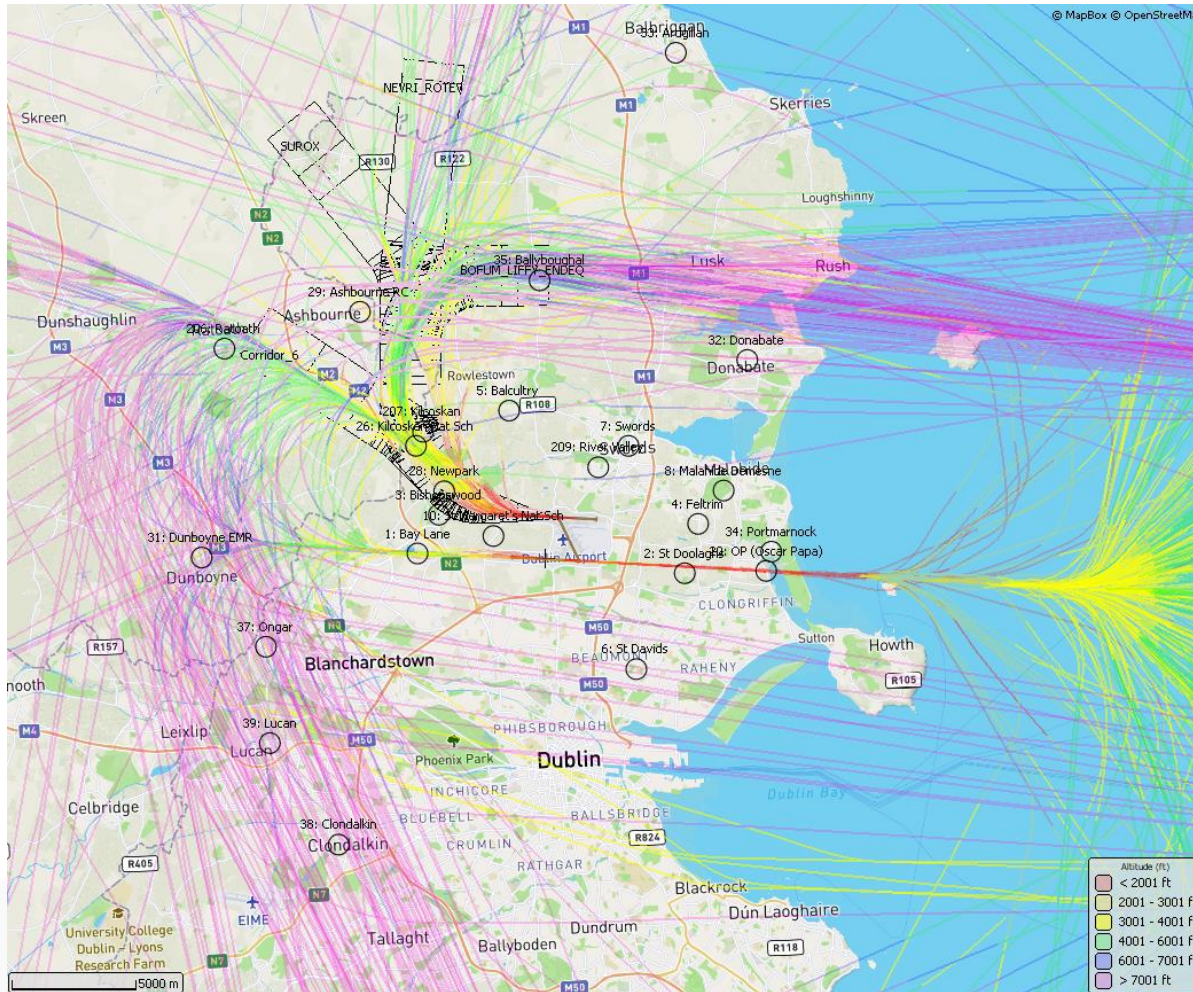
*SID for South Runway (28L) Departures to the west (Westerly operations in westerly winds)*



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

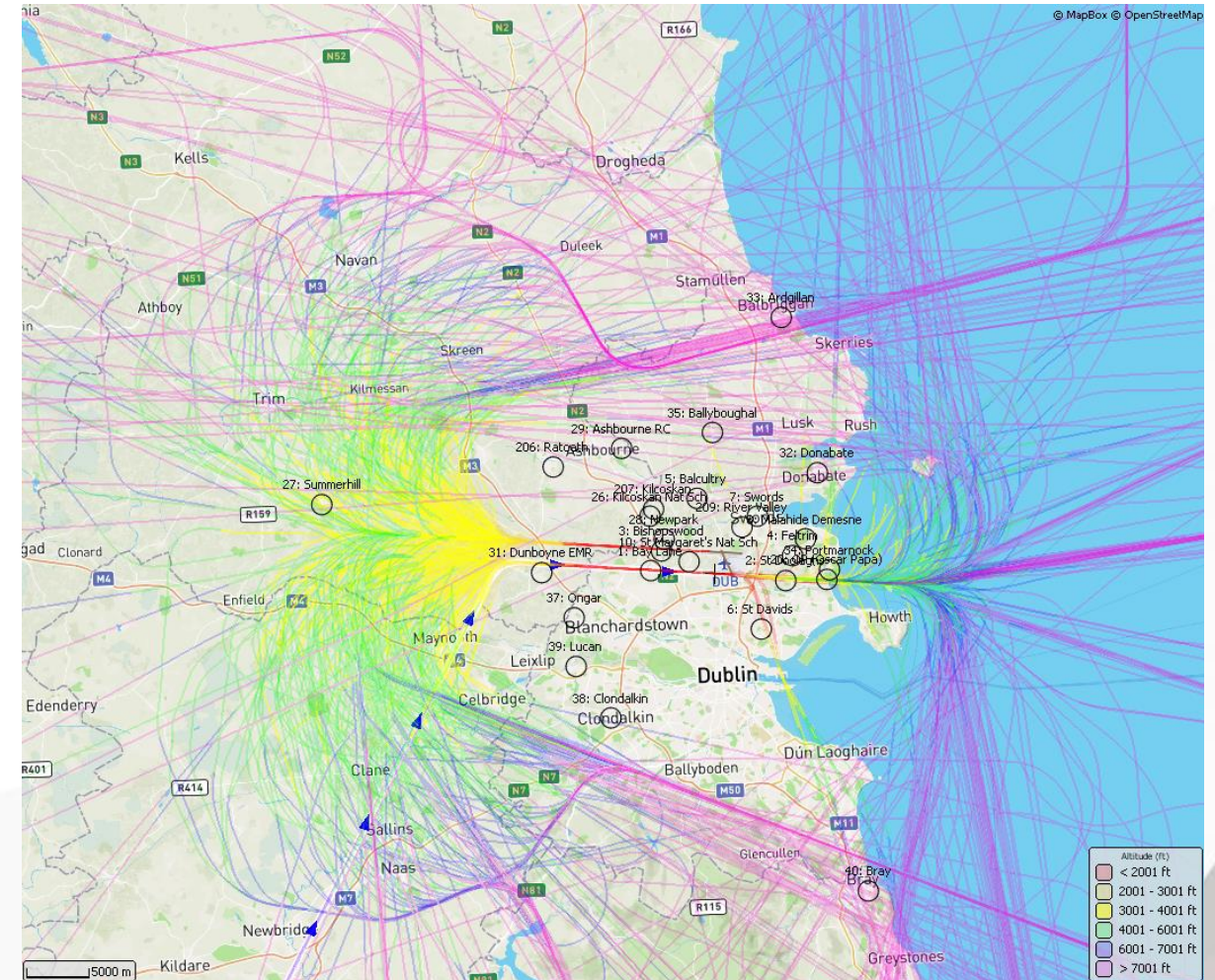


# Busy Day Flight Tracks



## Operations on 29 May 2025

- 815 movements, westerly conditions
- Colours indicate aircraft height



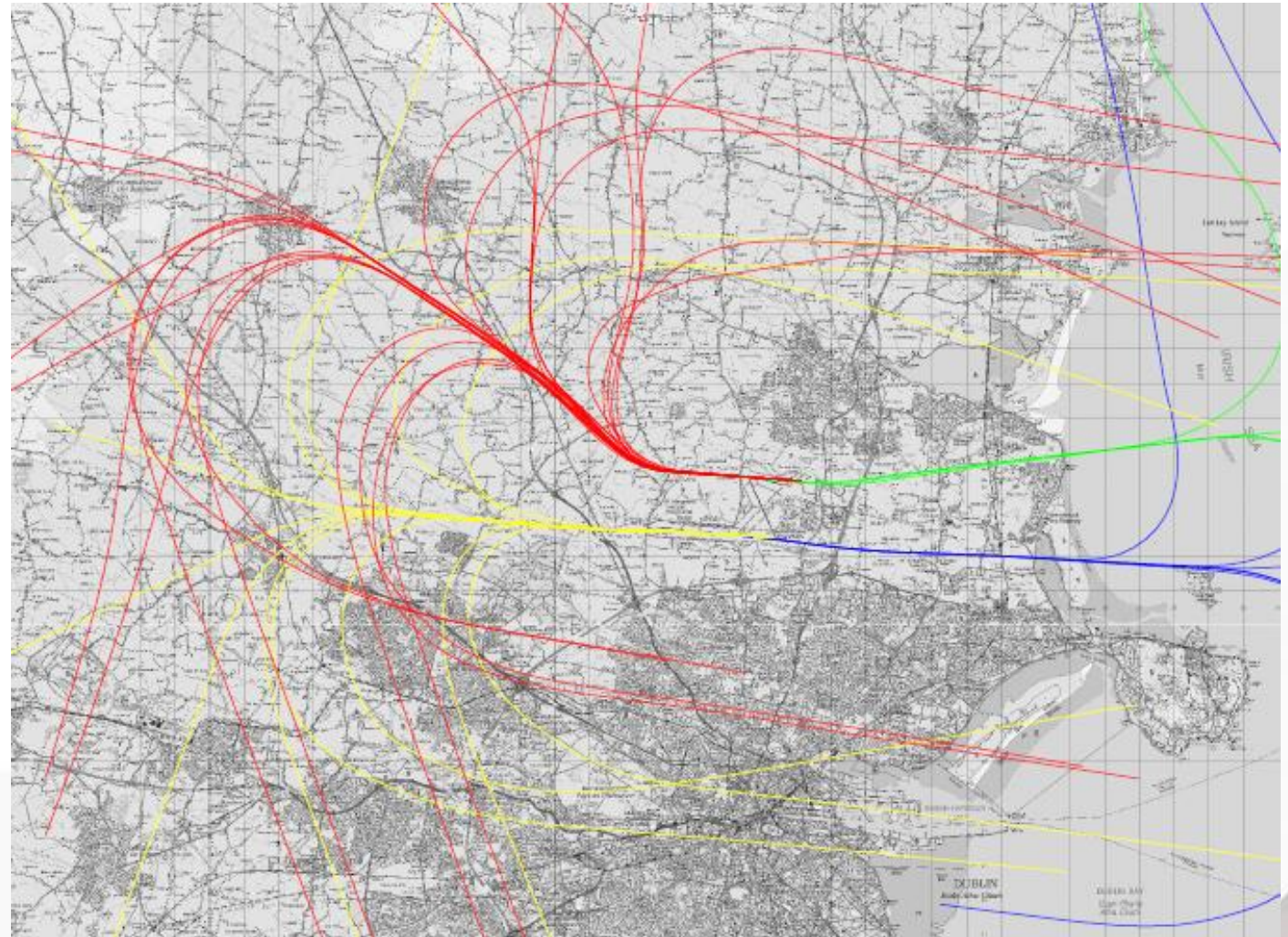
## Operations on 11 June 2025

- 780 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 including:

- 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 then created either side of the central lines to reflect actual operations (as depicted in the next page)

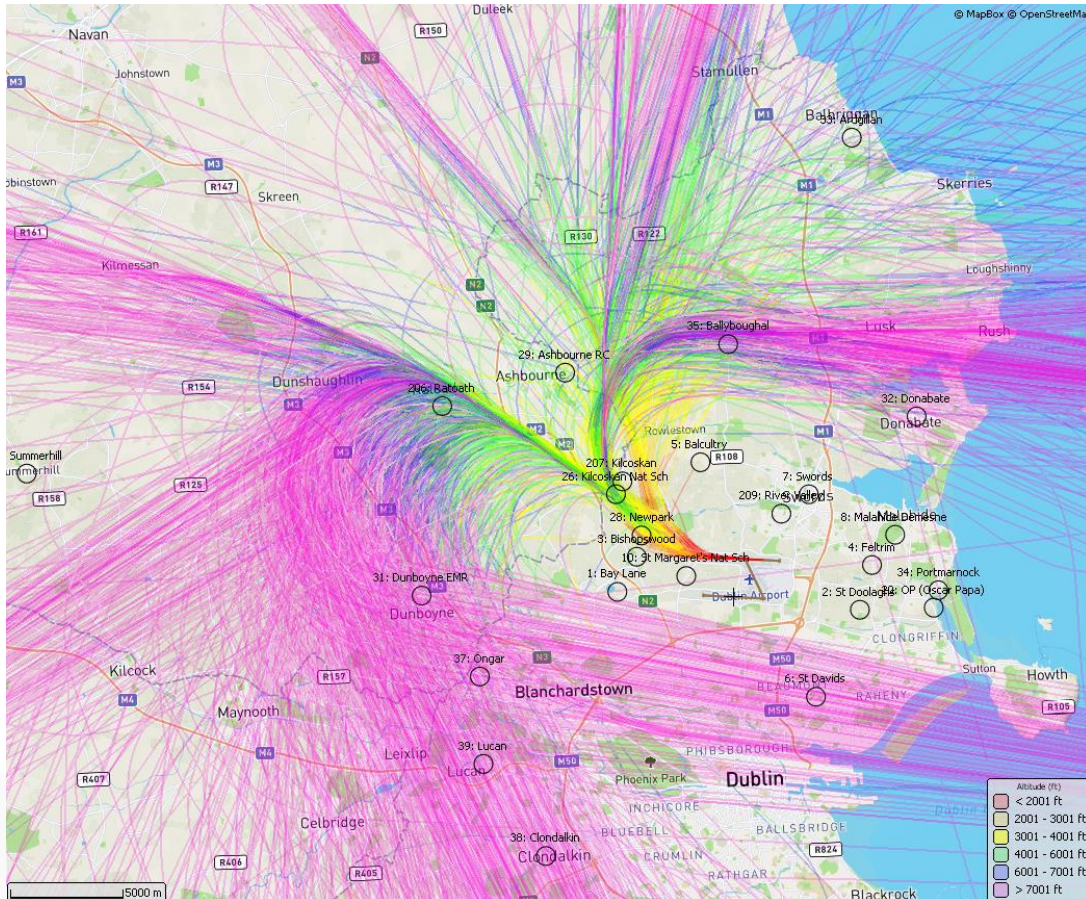


Main departure flight paths in calculation model for the 2 main runways – easterly and westerly departures

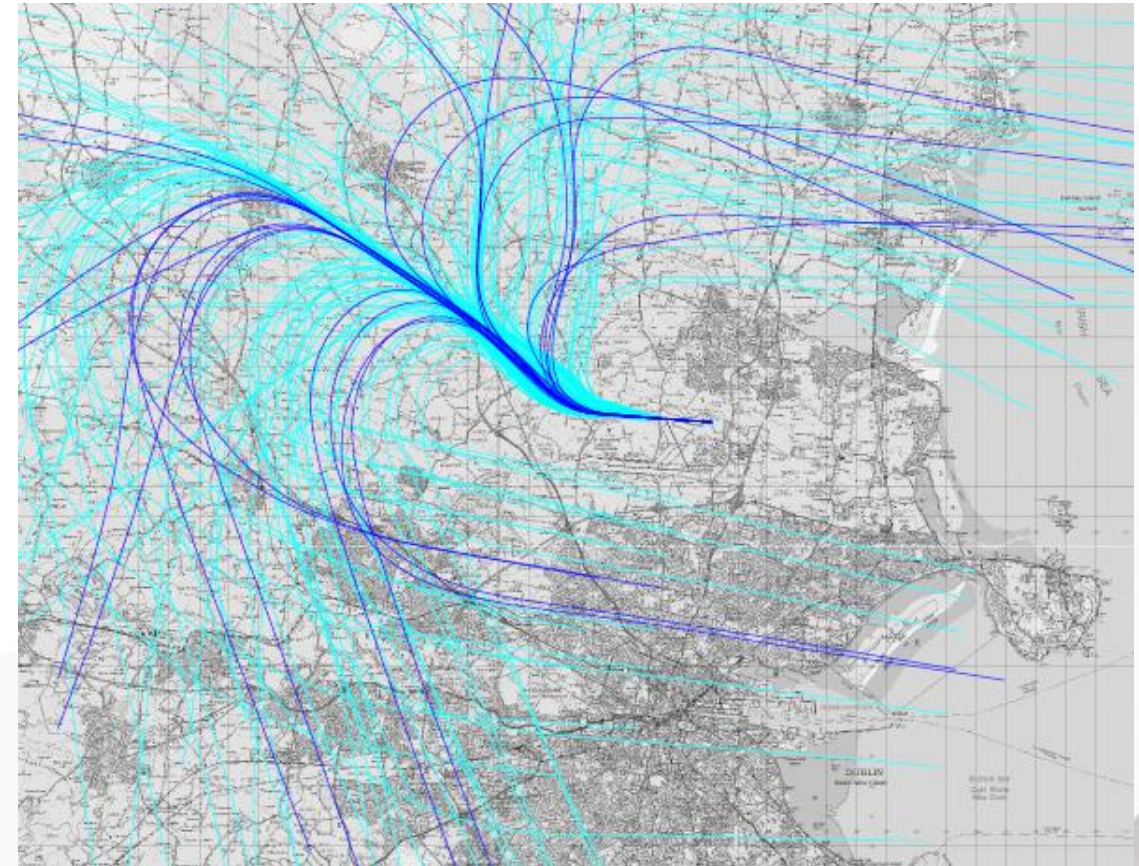


# Noise Contour Modelling (2) – Dispersed Flight Tracks

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  
11-24 June 2025



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 and 2 mobile Noise Monitoring Terminals (NMT) covering the entire Q2 2025 period, at locations ranging from less than 1 km to over 30 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.
- Monthly data is provided for the mobile NMTs at Kilcoskan (11 months) and at River Valley (4.7 months).

## 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](http://www.dublinairport.com)**