



Dublin Airport Update

December 4, 2024

Agenda

Dublin Airport Environmental Working Group, December 4, 2024

1. Apologies
2. Minutes of Previous Meeting
3. Matters Arising
4. Dublin Airport Update
5. Air Quality
6. Water Quality
7. Noise and Flight Track Monitoring
8. Fingal County Council Planning Applications
9. Members Update
10. AOB

| No | Issue | daa response |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| 1. | JH requested further information about the locations of the top complainants. | 1. St. Margaret's; 2. Ratoath; 3. Ratoath; 4. Swords; 5. Kilsallaghan |
| 2. | GS queried the noise report results for March and June, and IC had advised the difference was likely due to easterly winds but would confirm. | In March, 44% easterly operations; in June, 11% easterly operations. |
| 3. | IC advised the Earth Berm study was complete and daa was looking at next steps. IC advised a copy of the report would be sent to members. | XO will present the Earth Berm study at this evening's meeting, and the report will then issue to members. |
| 4. | The status and locations of the temporary air quality monitors to be discussed at next meeting. | AK will discuss as part of the Air Quality Update at this evening's meeting. |
| 5. | JH queried the number of vehicles in the Dublin Airport fleet that had been converted to electric. | AK advised that 81% of the 145 light fleet vehicles have been converted to low emissions, 100 of which are now full EV. |
| 6. | JH noted the recent reduction in attendance at meetings; Chair to follow up. | Chair to provide update. |
| 7. | JH requested an update on the Swords Bypass noting recent surveyors doing works in the area. CMC advised he will revert with an update and daa will confirm if they had any works or surveys taking place. | daa did not undertake any works or surveys in the area. |

- In November, Dublin Airport welcomed 2.3m passengers.
- daa continues to make every effort to dampen demand to comply with the 32 million terminals passenger cap.
- daa asked the High Court to review the Irish Aviation Authority's (IAA) allocation of slots for the winter 2024/25 season. The High Court hearing on this and the summer slots decision starts today.
- North Runway will close daily at 21.00 for one week from Monday, December 9, in order to facilitate pavement repairs on the South Runway and taxiways.
- Dublin Airport submitted its response on November 13 to Fingal's further Request for Information in relation to the Infrastructure Application.
- Phase 1 of Dublin Airport's new 9GWh solar farm at Harristown became operational in October, and the plant will generate 13% of the airport's electricity needs.
- Dublin Airport is also examining the potential of geothermal energy as a renewable, low-carbon energy source to heat and cool the airport.



- Development has begun on the new 412 guest room Sofitel hotel located at Terminal 2.
- The Community Fund has closed for this year's second round of applications and the independent Grant Making Panel will meet in December to consider all eligible proposals.

Temporary Noise Monitoring

- The temporary noise monitor assigned to DAEWG-nominated locations is now available to be installed.
- A site at Rivervalley, with suitable flat roof and power source, has been found and owner is agreeable to installation.
- Duration of temporary monitoring to be agreed with DAEWG.
- Schedule for next four locations to be agreed with DAEWG.
- Dublin Airport has received a request from a resident in Rivermeade for temporary noise monitoring.



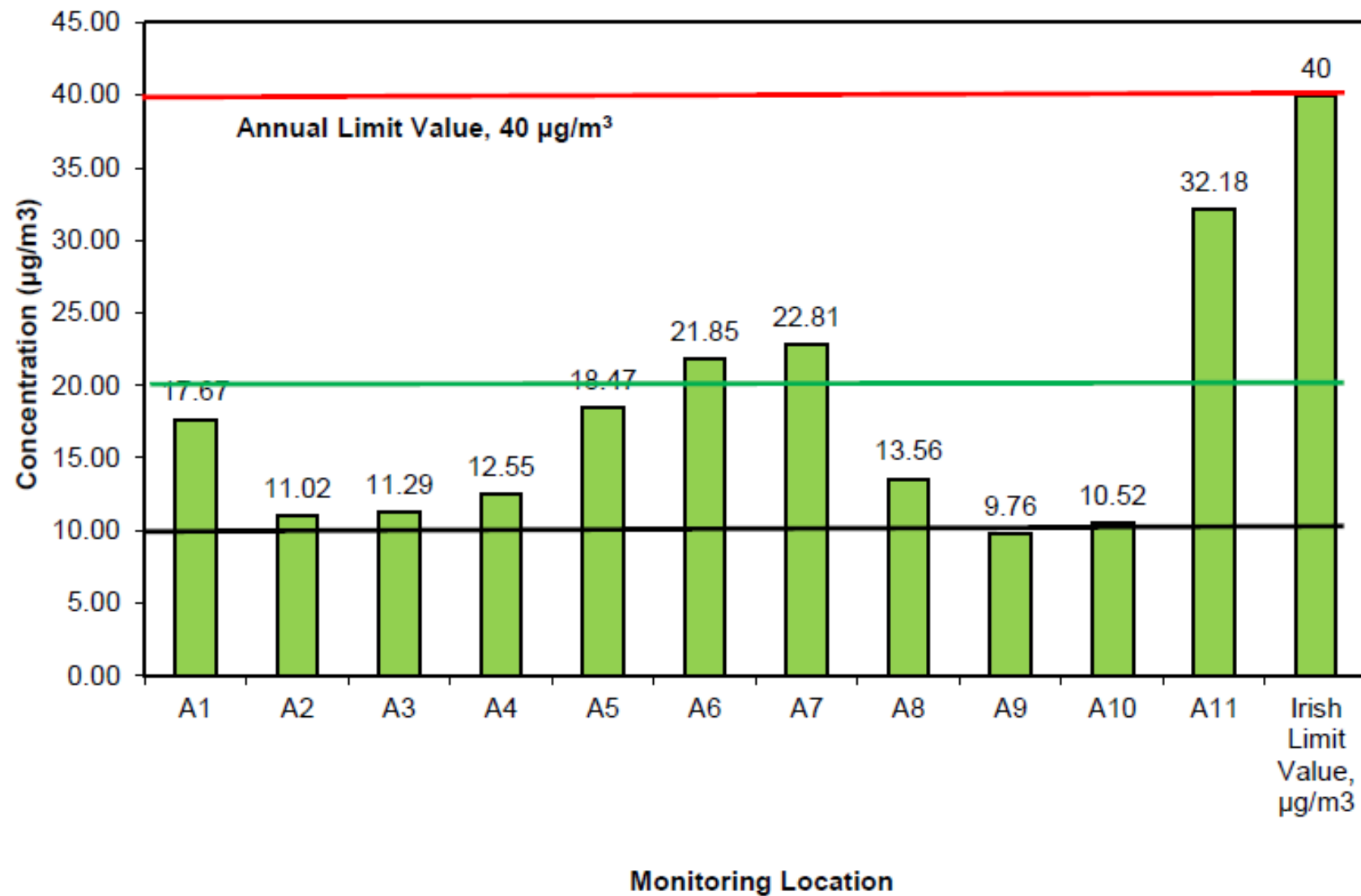
Air Quality Update

4 December 2024

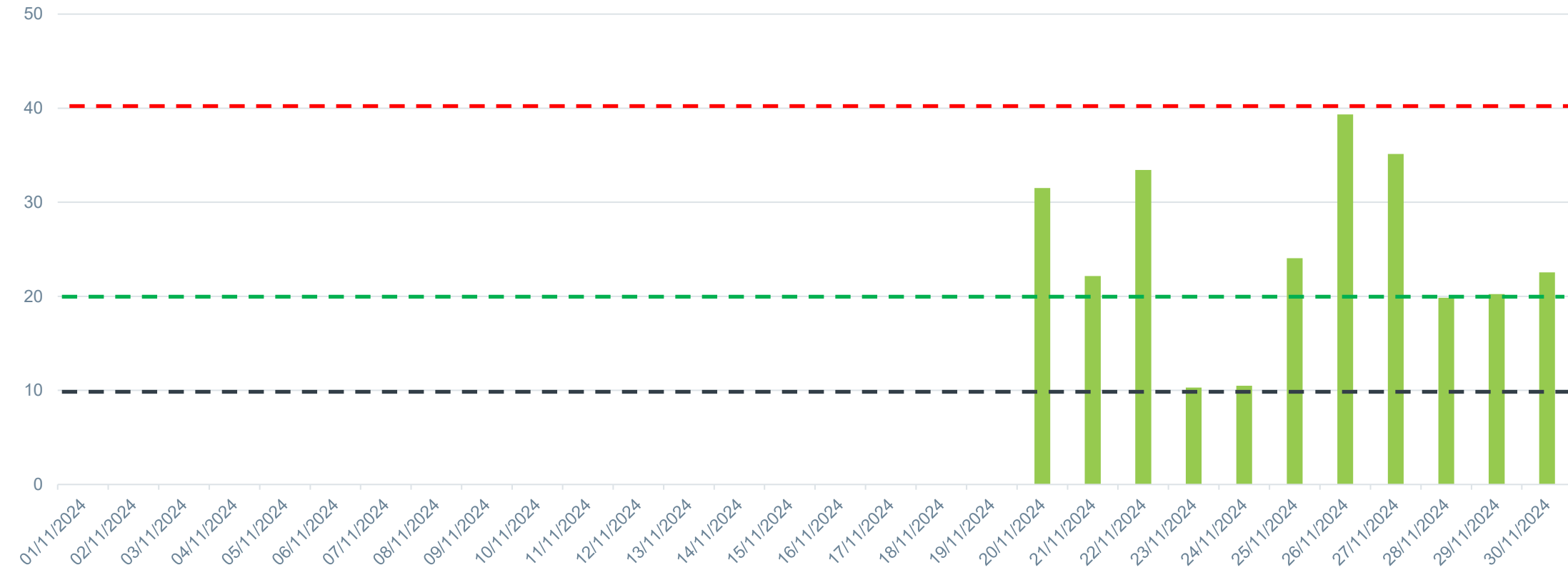
Dublin Airport Air Quality Monitoring Locations



Average Monthly NO₂ Concentrations from January to September 2024



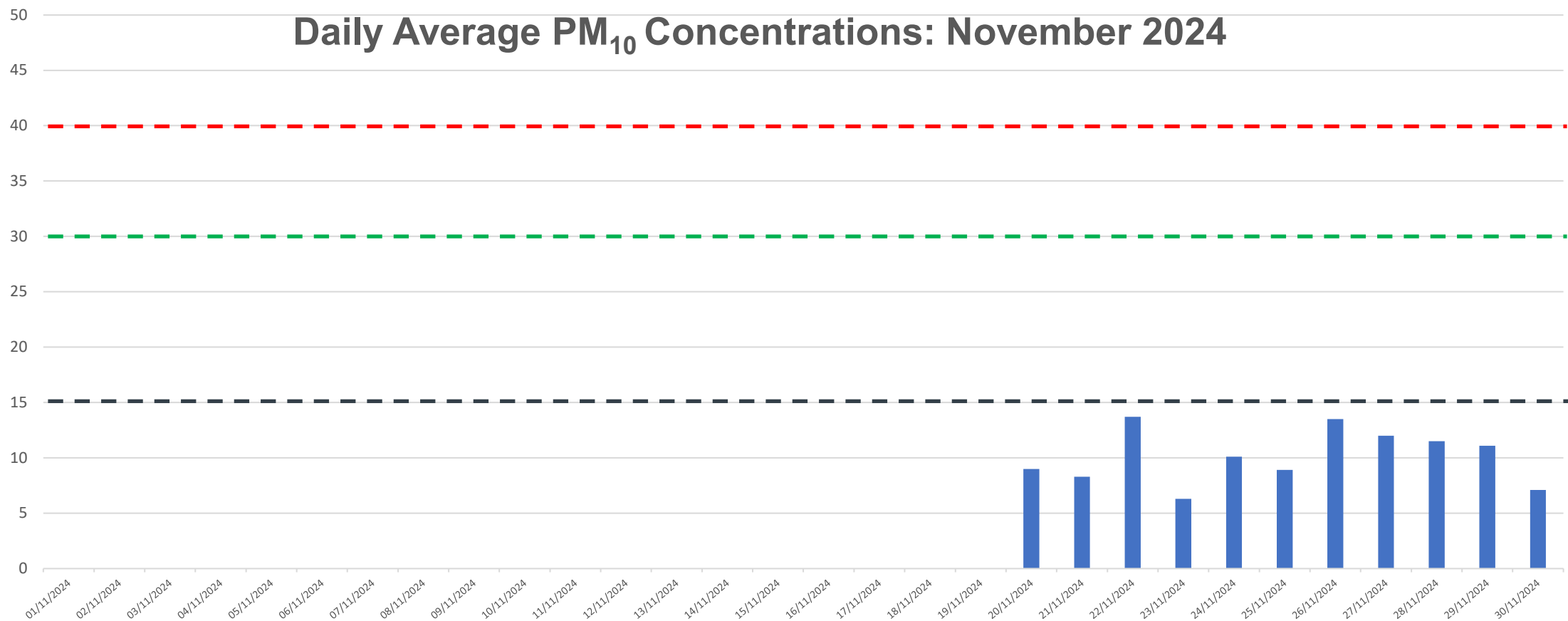
Daily Average NO₂ Concentration: November 2024



- NO₂ average for November: 24.5 µg/m³

— EU Current Limits (40µg/m³)
— WHO Targets 2026 (20µg/m³)
— WHO Targets 2040 (10 µg/m³)

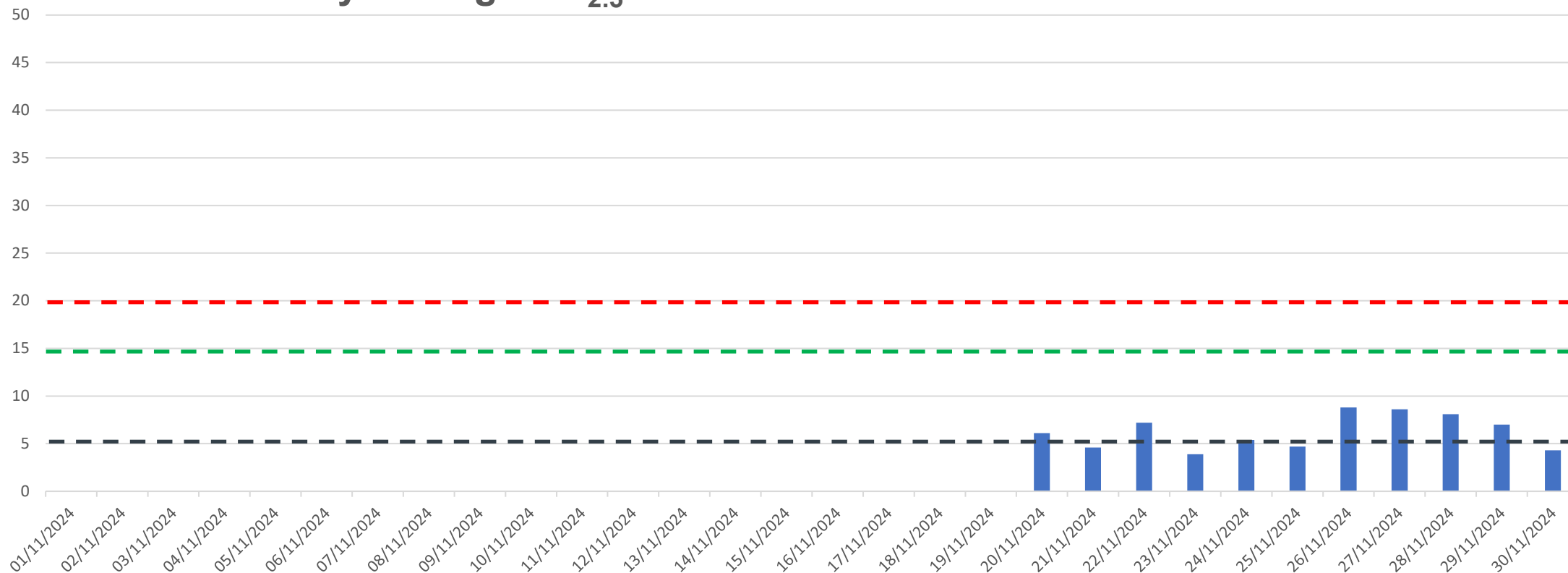
Daily Average PM₁₀ Concentrations: November 2024



- PM₁₀ average for November: 10.1 µg/m³

— EU Current Limit (40 µg/m³)
— WHO Target 2026 (30 µg/m³)
— WHO Target 2040 (15 µg/m³)

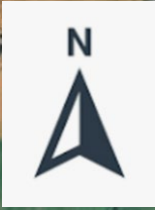
Daily Average PM_{2.5} Concentration: November 2024



- PM_{2.5} average for November: 6.3 µg/m³

--- EU Current Limit (20 µg/m³)
--- WHO Target 2026 (15 µg/m³)
--- WHO Target 2040 (5 µg/m³)

Proposed Locations of Temporary PM Monitors



Water Quality Update

4 December 2024

Surface Water Monitoring - Dublin Airport (October - November 2024)

| Sample locations - entering daa lands | | | | | | | | | | | | |
|---------------------------------------|-------------------|----------|-------------------|-------------------|----------|-------------------|---------------------|----------|-------------------|-------------------|----------|--------------|
| Month | C1- Cuckoo Stream | | | C4- Cuckoo Stream | | | S1 - Santry Stream* | | | M1- Mayne Stream* | | |
| | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N |
| October | 1.9 | 15 | 0.12 | <10 | 114 | 8.57 | - | - | - | - | - | - |
| November | Awaiting result | 22 | 0.12 | | | | - | - | - | - | - | - |

| Sample locations - on daa lands | | | | | | | | | | | | |
|---------------------------------|--------------------|----------|-------------------|-------------------------|----------|-------------------|------------------|----------|-------------------|-----------------------|----------|--------------|
| Month | K2 - Kealys Stream | | | NRML 7 - Forrest Little | | | W1 - Wad Stream* | | | NRML 1 - Ward Stream* | | |
| | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N |
| October | 0.8 | <5 | 0.26 | 1.1 | <5 | 0.08 | - | - | - | - | - | - |
| November | 0.7 | 10 | 0.46 | Awaiting result | 28 | 5.92 | - | - | - | - | - | - |
| | | | | - | - | 2.28 | | | | | | |
| | | | | - | - | 0.06 | | | | | | |

| Sample locations - leaving daa lands | | | | | | | | | |
|--------------------------------------|----------------------|-----------------|-------------------|---------------------|----------|-------------------|--------------------|----------|-------------------|
| Month | C9 - Cuckoo Stream** | | | M5- Mayne Stream*** | | | S3 - Santry Stream | | |
| | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N mg/L | BOD mg/L | COD mg/L | Ammonia as N mg/L |
| September | 7.3 | 14 | 1.84 | 1.9 | 6 | 0.04 | <10 | 41 | 0.1 |
| October | 1.1 | 12 | 0.15 | 1.1 | <5 | 0.04 | 0.7 | 5 | 0.02 |
| | | | | 0.6 | 9 | 0.01 | | | |
| | | | | 0.8 | 9 | 0.04 | | | |
| | | | | 1.6 | 13 | 0.02 | | | |
| November | Awaiting Result | Awaiting Result | Awaiting Result | Awaiting Result | 15 | 0.05 | Awaiting result | 15 | 0.01 |

*quarterly sample
 **twice monthly sample
 ***weekly sample

Noise Update

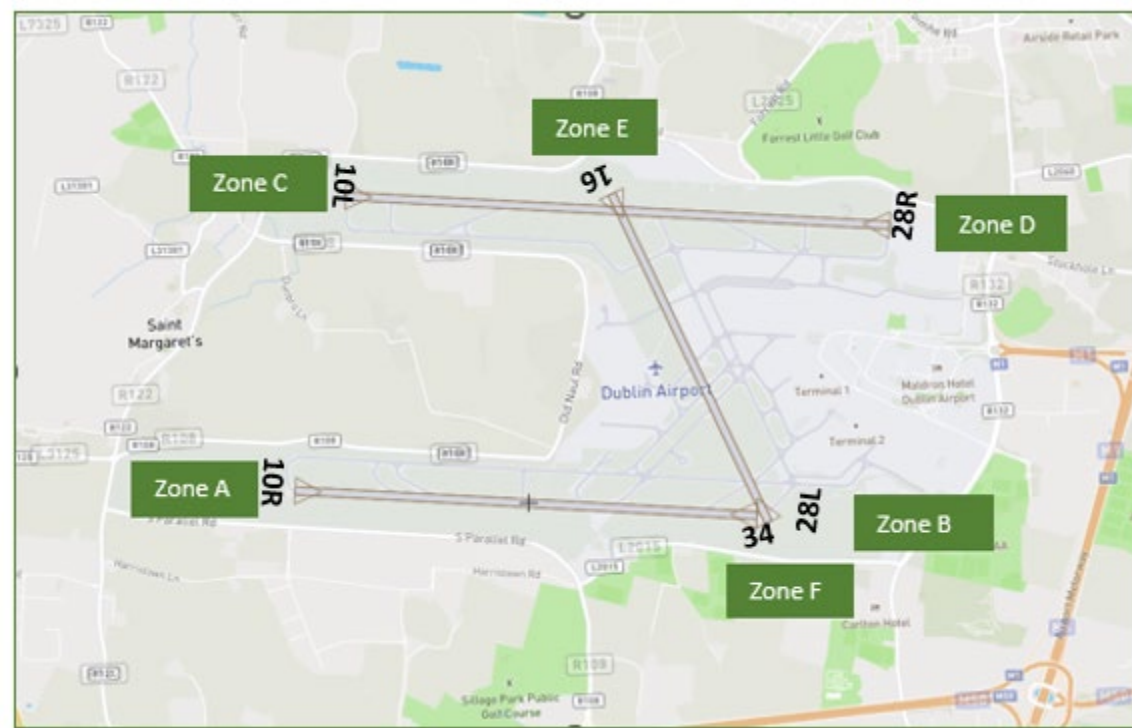
4 December 2024

| | Item | Details |
|---|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1 | October Monthly Report and draft November data | <ul style="list-style-type: none">• Operations, Complaints, NPR Track Adherence |
| 2 | Q3 NFTM Report | <ul style="list-style-type: none">• Noise Monitors• 92-day Summer – Noise Contours and NMT Measured data |
| 3 | Earth Berm | |
| 4 | NADP study | |

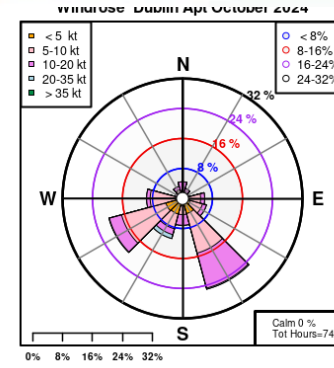
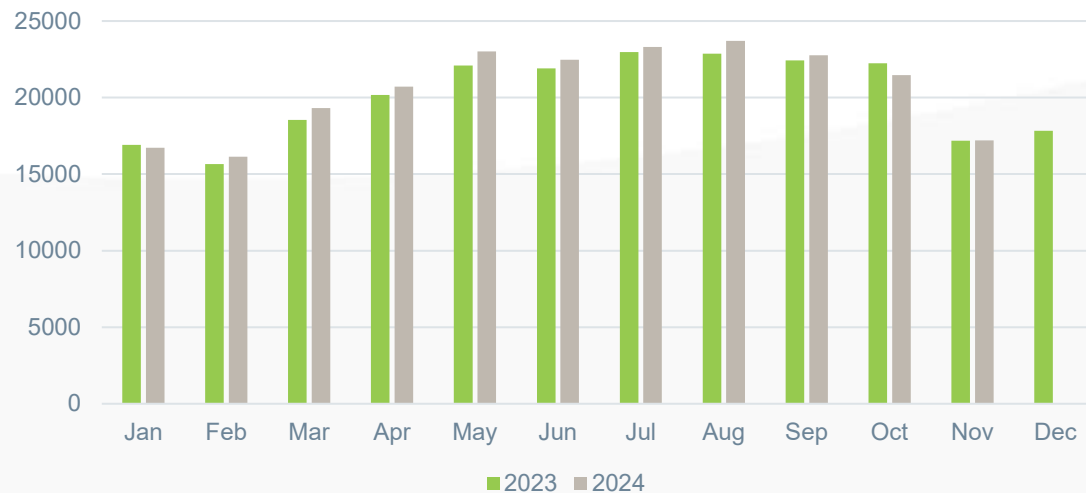
Operations – Movements and Runway Use

Aircraft Movements (Cat ABC&D) Oct 2024

| Zone | | Arrivals | | Departures | | Total |
|------|--------------|-------------------|-------|-----------------|-------|-------|
| A | South Runway | from West (RW10R) | 638 | to West (RW28L) | 820 | 1458 |
| | | from East (RW28L) | 6600 | to East (RW10R) | 3912 | 10512 |
| C | North Runway | from West (RW10L) | 3340 | to West (RW28R) | 5942 | 9282 |
| | | from East (RW28R) | 121 | to East (RW10L) | 8 | 129 |
| E | Cross Runway | from North (RW16) | 45 | to North (RW34) | 1 | 46 |
| | | from South (RW34) | | to South (RW16) | 42 | 42 |
| | | | 10744 | | 10725 | 21469 |

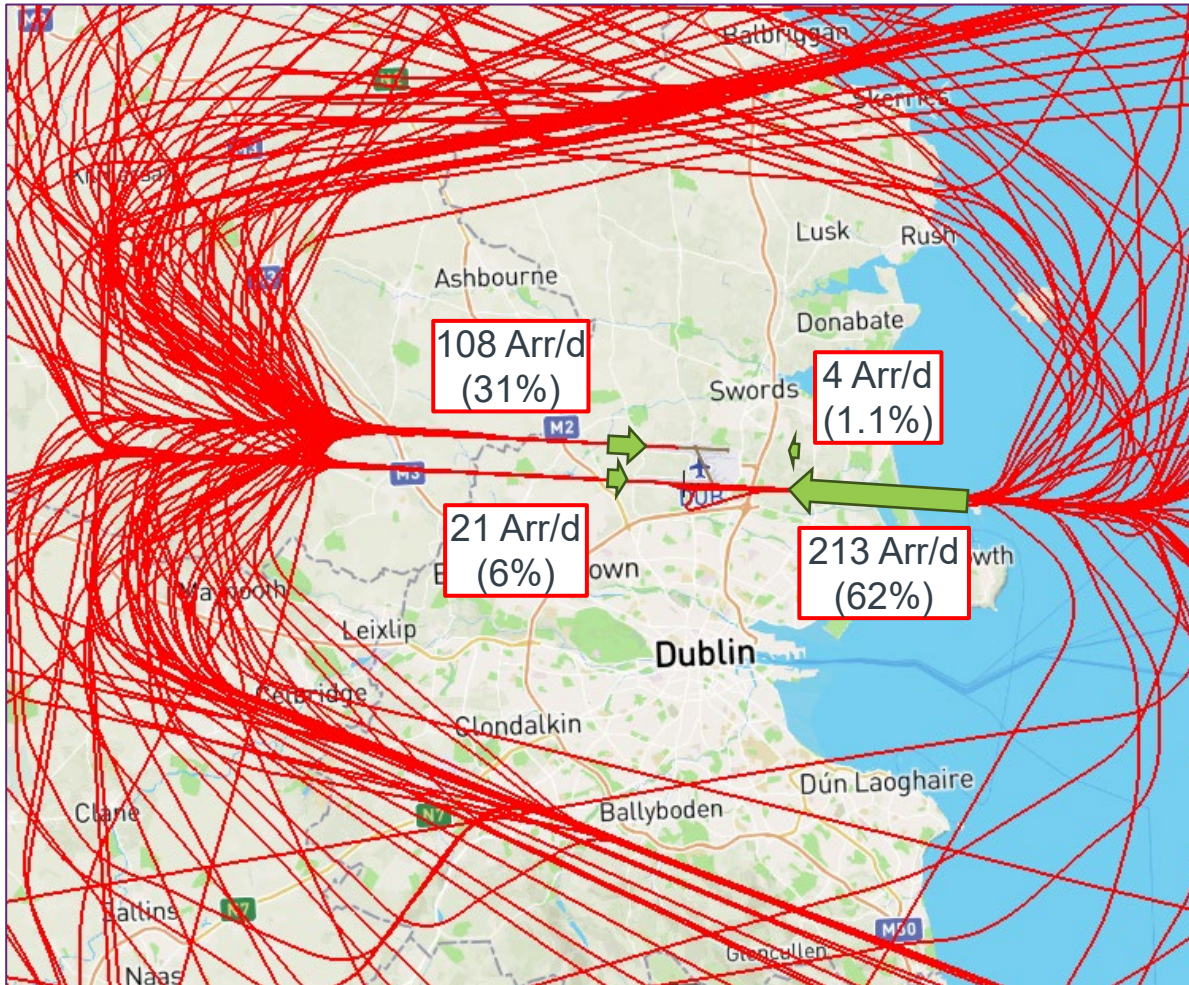


Monthly Aircraft Movements YTD + 2023



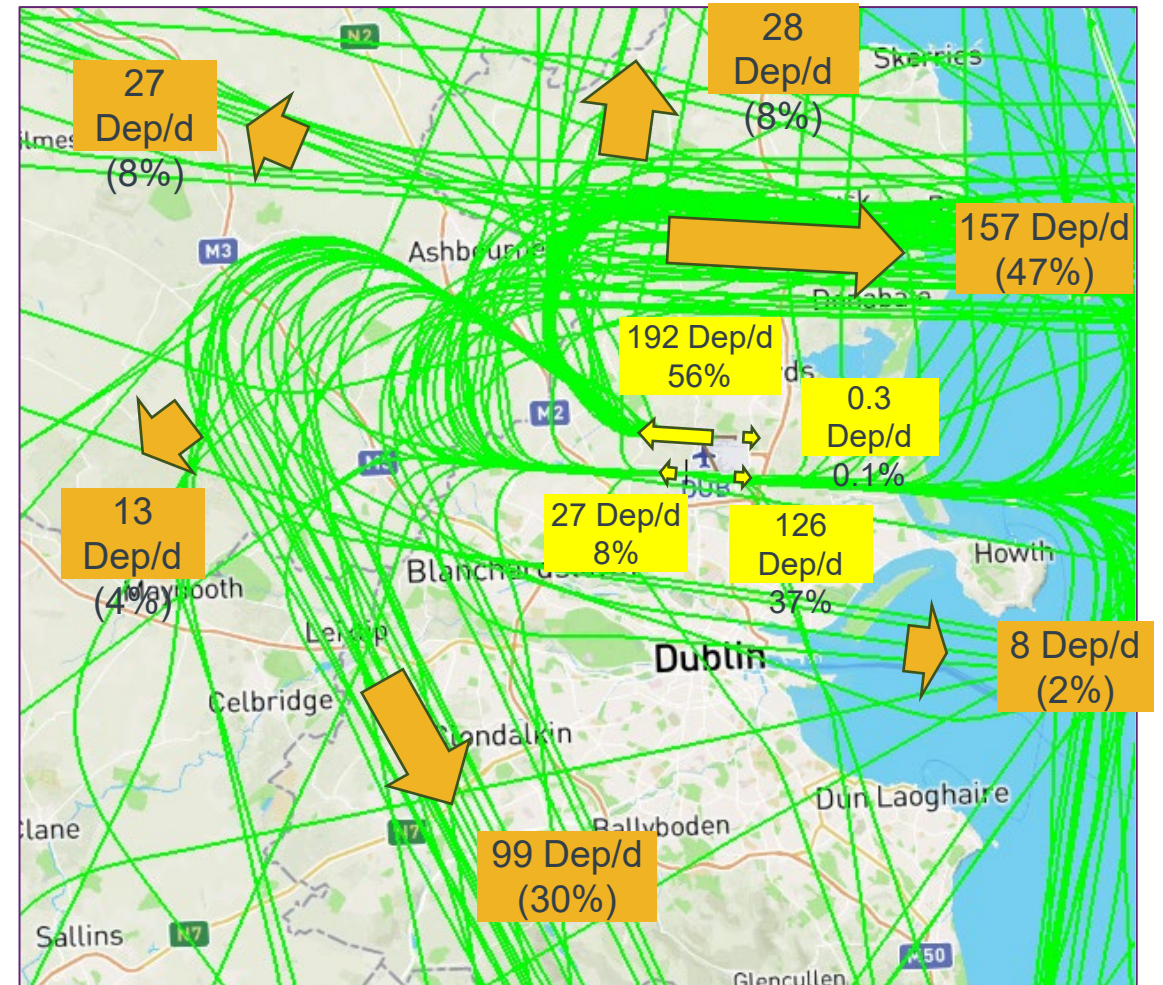
October 2024 Wind Rose: shows percentage of time in each wind direction. Table below shows YTD – Westerly and Easterly operations

| 2024 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| W | 86% | 87% | 56% | 78% | 65% | 89% | 81% | 90% | 61% | 63% |
| E | 14% | 13% | 44% | 22% | 35% | 11% | 19% | 10% | 39% | 37% |



Graphic depicts:

- Average arrival movements per day (d) on each main runway
- % arrivals on each main runway October 2024
- Note: example flight track selection used



Graphic depicts:

- Average departure movements per day on each main runway (yellow boxes)
- % departures on each main runway October 2024 (yellow boxes)
- Average departures per day on each main track swathe (orange boxes)
- Note: example flight track selection used

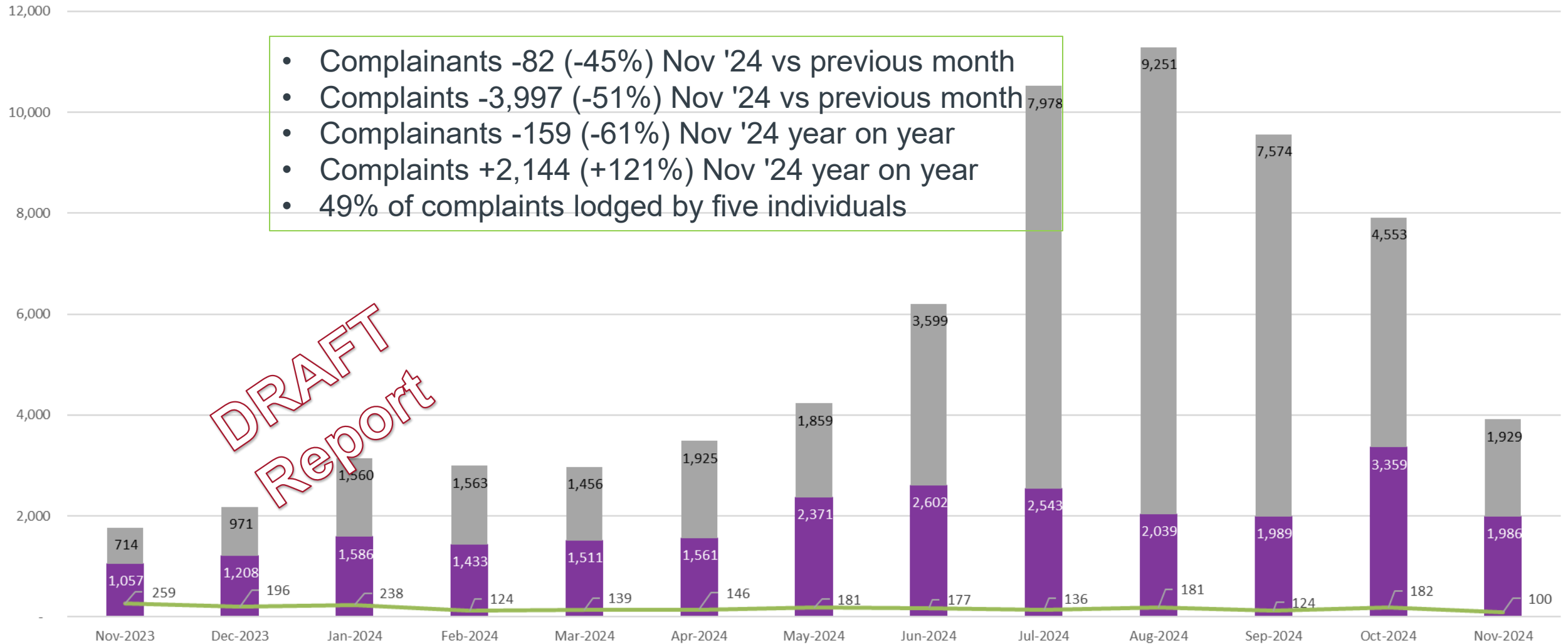
Noise Complaints - Complainant Statistics

Complainant Statistics

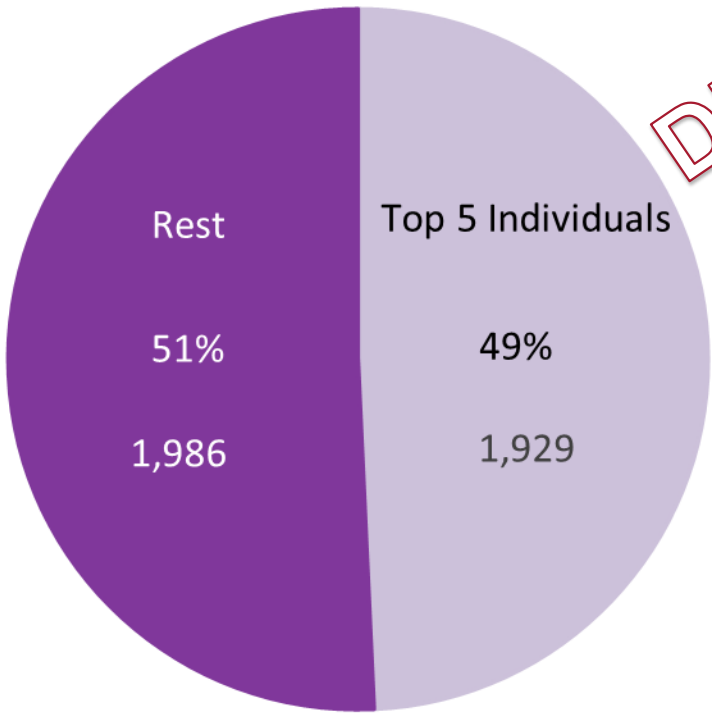
Complaints excluded Top 5 Individuals Top 5 Individuals' Complaints Complainants

- Complainants -82 (-45%) Nov '24 vs previous month
- Complaints -3,997 (-51%) Nov '24 vs previous month
- Complainants -159 (-61%) Nov '24 year on year
- Complaints +2,144 (+121%) Nov '24 year on year
- 49% of complaints lodged by five individuals

**DRAFT
Report**

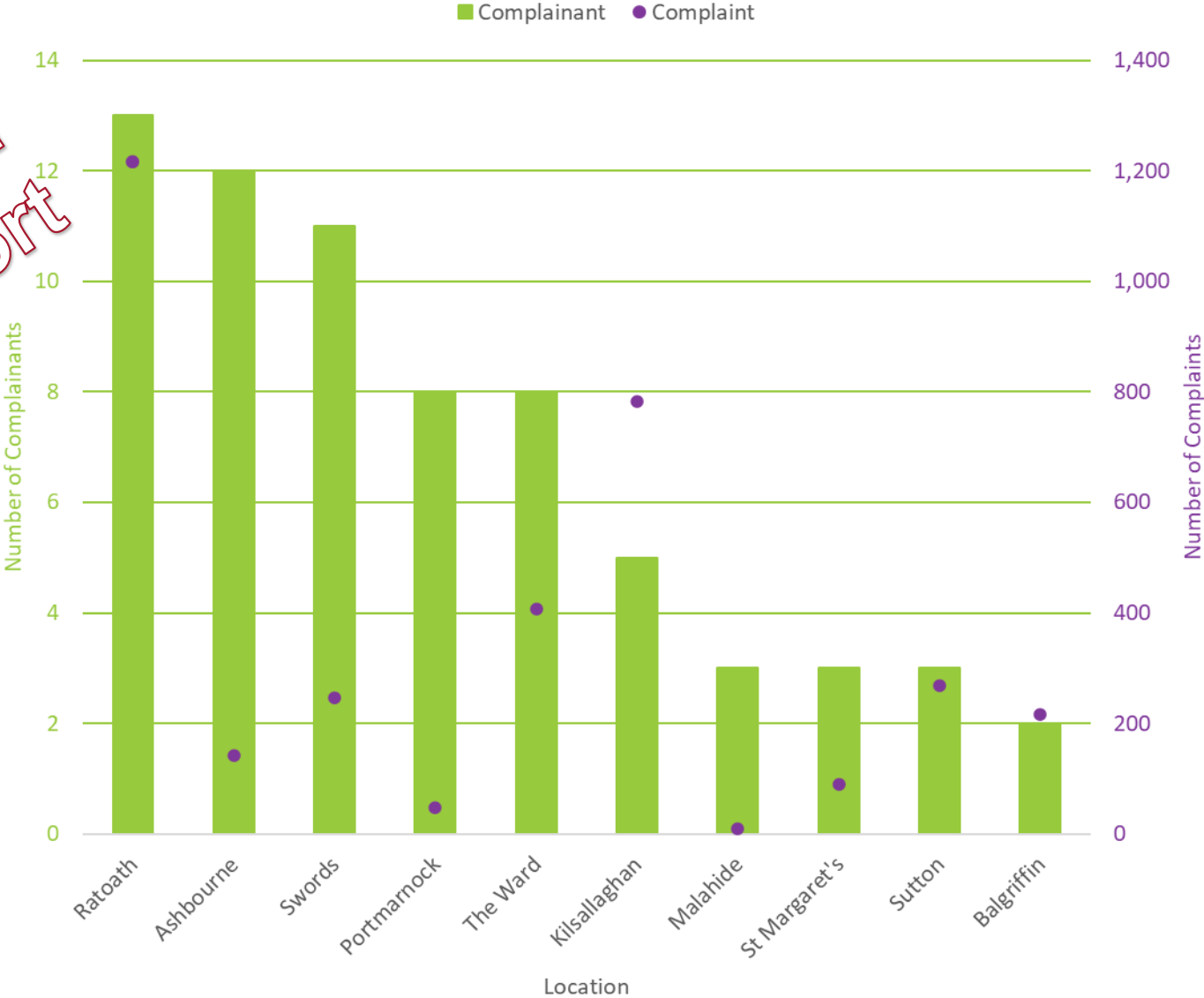


Complaints by Top 5 Individuals November 2024



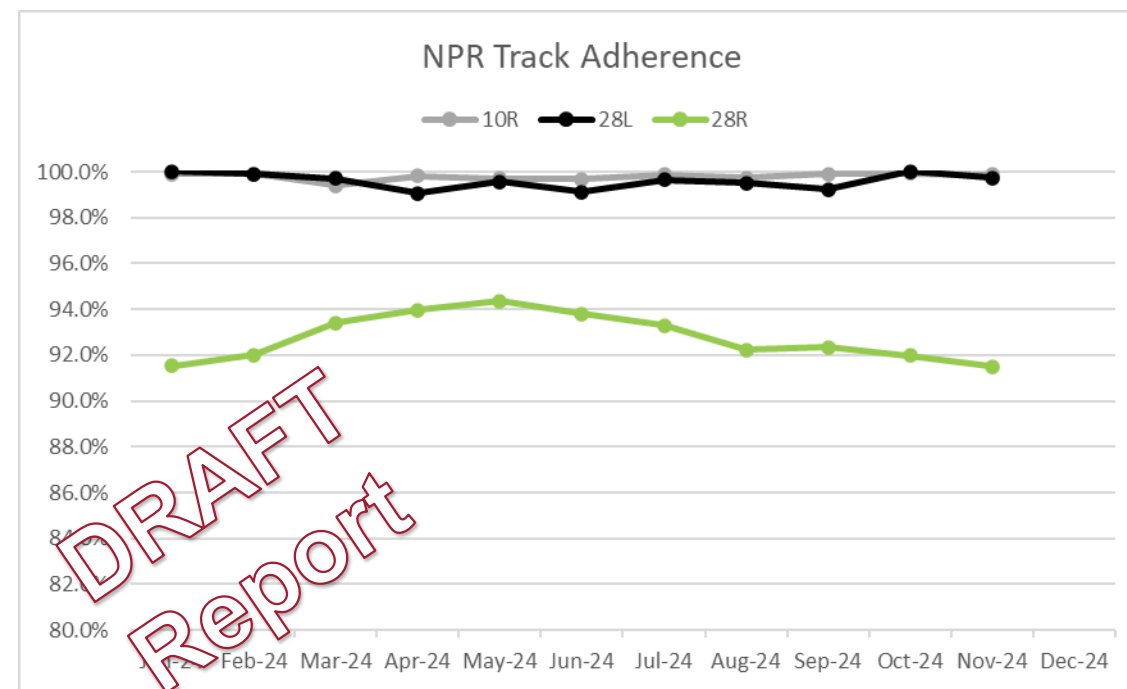
DRAFT
Report

Top 10 Number of Complainants by Area - November 2024



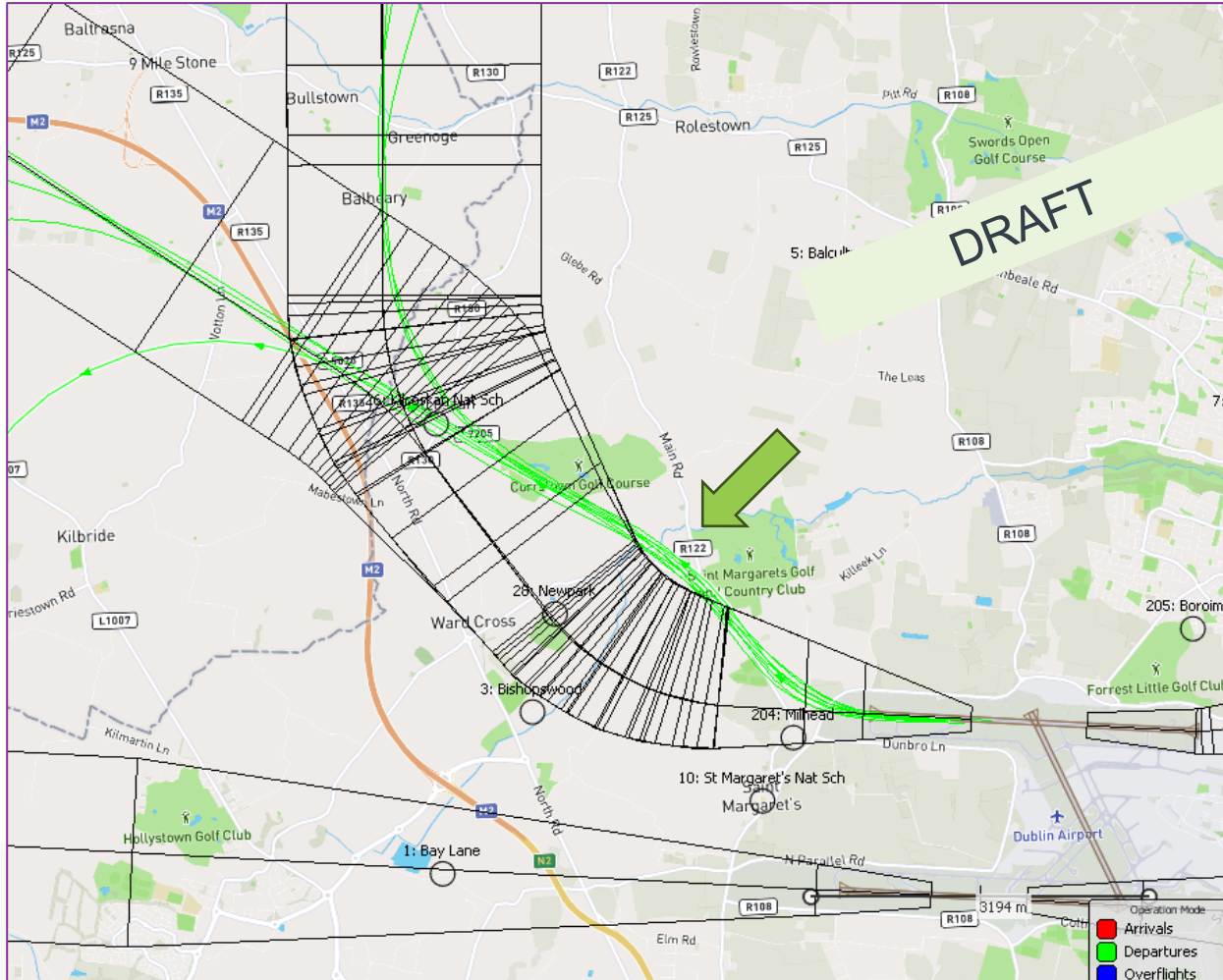
Departure Track Adherence (Monthly 2023 and 2024 YTD)

- Track Adherence refers to jet aircraft departures that remain within the NPR up to the minimum height.
- Both runways are displaying a high level of track adherence (over 90% for North Runway westerly and South Runway – westerly and easterly - is close to 100%).
- Further work is underway on improving track adherence which will include the implementation of a tool which can be used by AirNav Ireland and airlines to track and manage deviations and conduct detailed investigations into individual deviations.
- Note: North Runway easterly and Cross Runway operations are too seldom used to report.
- daa has conducted a review of the Track Adherence monitoring process. 2023 data was displaying a lower level of track adherence than what was actually occurring however, this has now been amended.

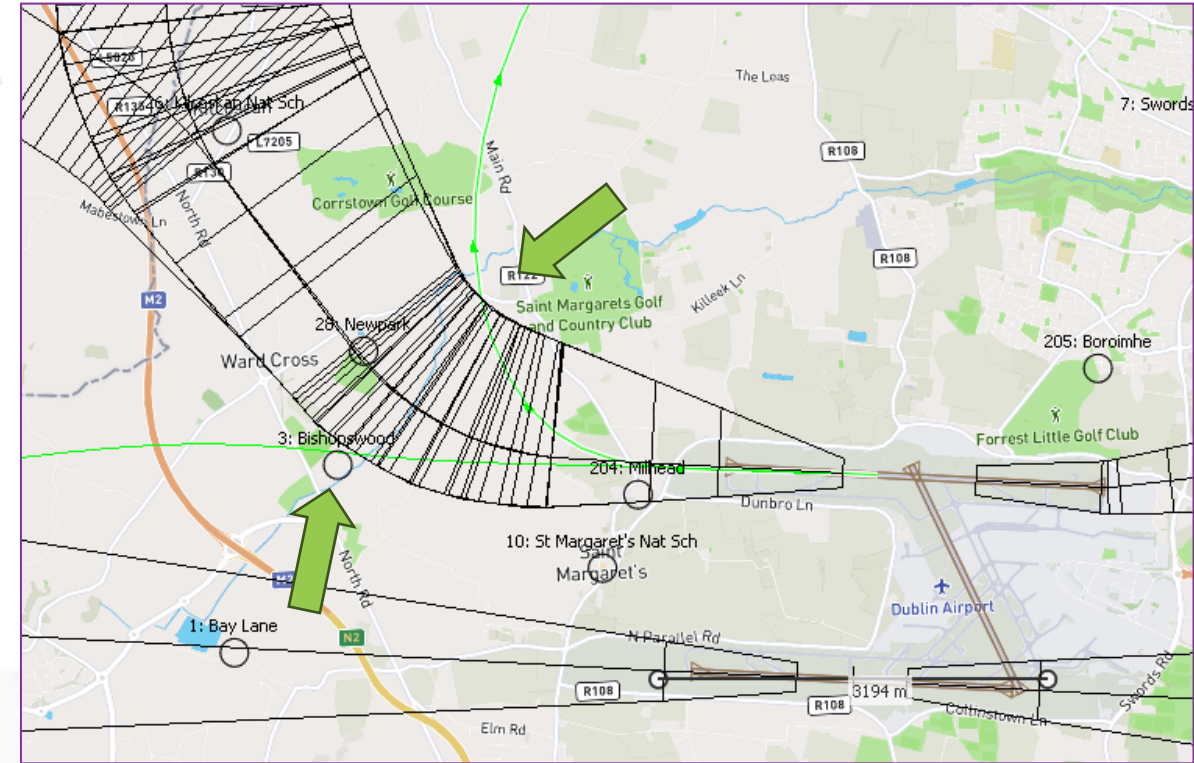


| Departure Runway | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 10R (South Runway) | 99.9% | 99.9% | 99.4% | 99.8% | 99.7% | 99.7% | 99.9% | 99.7% | 99.9% | 99.9% | 99.9% | |
| 28L (South Runway) | 100.0% | 99.9% | 99.7% | 99.1% | 99.6% | 99.1% | 99.7% | 99.5% | 99.2% | 100.0% | 99.7% | |
| 28R (North Runway) | 91.5% | 92.0% | 93.4% | 94.0% | 94.4% | 93.8% | 93.3% | 92.1% | 92.3% | 92.0% | 91.5% | |
| Total Airport (2024) | 93.9% | 94.0% | 96.5% | 95.9% | 96.8% | 95.1% | 95.4% | 93.6% | 95.8% | 95.5% | 94.7% | |
| Total Airport (2023) | 77.1% | 82.4% | 96.7% | 96.9% | 97.4% | 97.8% | 94.4% | 93.6% | 95.4% | 95.4% | 91.8% | 92.7% |

Track NPR Deviation Examples – North Runway (RW28R)



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.



EXTRACT

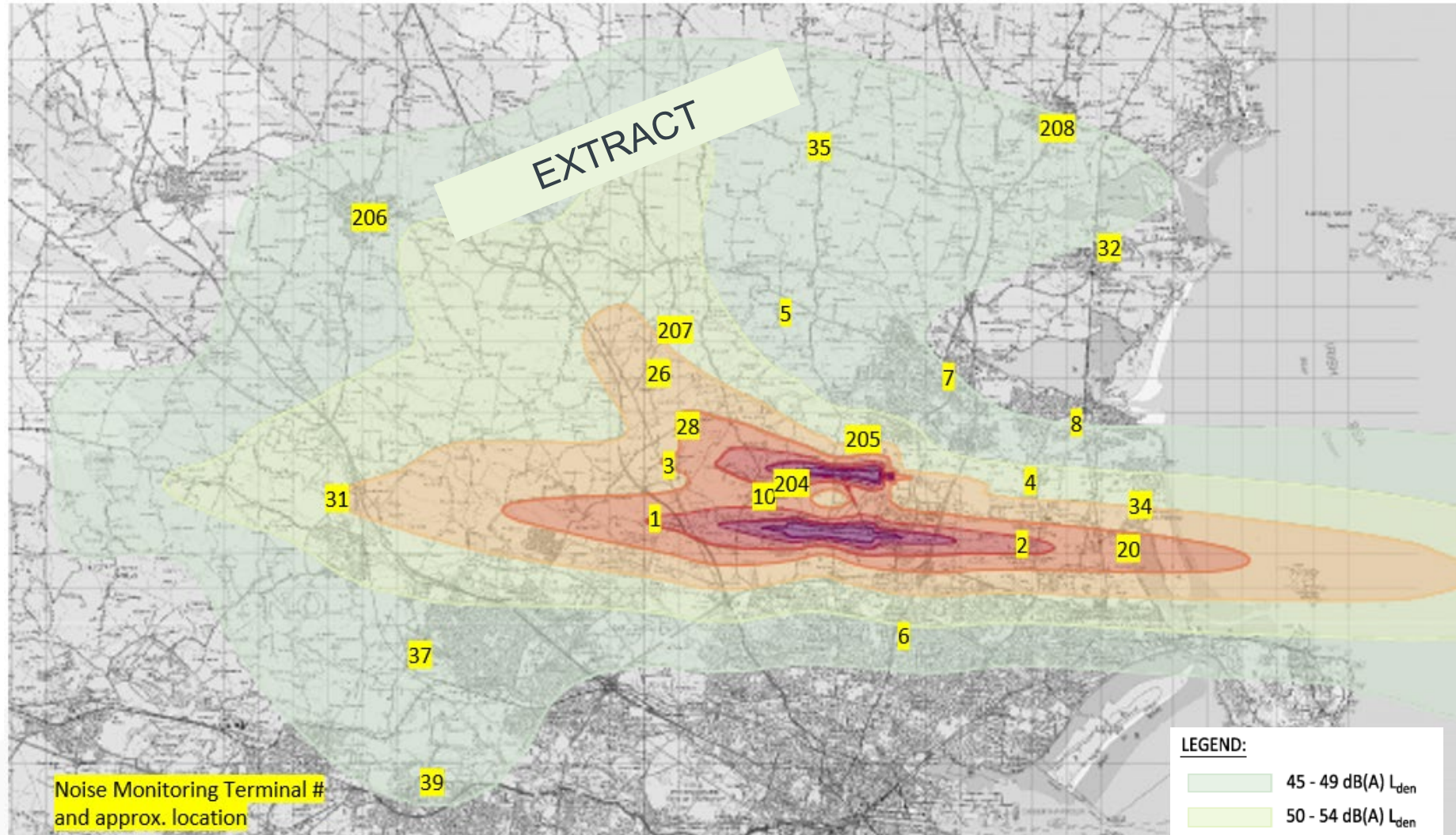
Dublin Airport Quarterly Noise and Flight Track Monitoring Report

July – September (Q3) 2024

including analysis of the 92-day peak summer 2024

Modelled Lden Noise Contour Levels at NMT Locations

| # | NMT Name | Lden 2023 |
|-----|------------------|-----------|
| 1 | Bay Lane | 65 |
| 2 | St. Doolaghs | 65 |
| 3 | Bishopswood | 60 |
| 4 | Feltrim | 54 |
| 5 | Balcultry | 49 |
| 6 | St. Davids | 44 |
| 7 | Swords | 45 |
| 8 | Malahide | 46 |
| 10 | St. Margarets NS | 63 |
| 20 | Coast Rd (OP) | 63 |
| 26 | Kilcoskan NS | 58 |
| 27 | Summerhill | 38 |
| 28 | Newpark | 60 |
| 29 | Ashbourne | 49 |
| 30 | Roundwood | 36 |
| 31 | Dunboyne | 54 |
| 32 | Donabate | 45 |
| 33 | Ardgillan | 33 |
| 34 | Portmarnock | 56 |
| 35 | Ballyboughal | 49 |
| 37 | Ongar | |
| 38 | Clondalkin | 48 |
| 39 | Lucan | 46 |
| 40 | Bray | |
| 206 | Ratoath | 47 |
| 207 | Kilcoskan | 58 |
| 208 | Lusk | 45 |



Map of 2023 Lden Annual Noise contours

6 NMT (27, 30, 33, 38, 39, 40) are located outside this map's boundaries

Including Permanent and Temporary NMT installations

NMT – 2023 and 2024 (YTD) Quarterly Measured Lden, Lnight &



| IM | Location | Lden (dBA) [Modelled Contour and Measured Noise] | | | | | | | Lnight (=Leq 8h) (dBA) [Modelled Contour and Measured] | | | | | | | Leq16h (dBA) (See Part 4) | | | | | |
|-----|-----------------|--------------------------------------------------|--------------------------------------------|---------|---------|---------|---------|------|--------------------------------------------------------|---------|---------|---------|---------|---------|------|---------------------------|---------|---------|---------|------|--|
| | | '23 Cont | '23 NMT | Q1 2024 | Q2 2024 | Q3 2024 | Q4 2024 | 2024 | '23 Cont | '23 NMT | Q1 2024 | Q2 2024 | Q3 2024 | Q4 2024 | 2024 | Q1 2024 | Q2 2024 | Q3 2024 | Q4 2024 | 2024 | |
| 1 | Bay Lane | 65 | 64.3 | 63.8 | 63.6 | 63.3 | | | 58 | 56.8 | 55.9 | 56.9 | 57.1 | | | 54.9 | 52.6 | 48.1 | | | |
| 2 | St. Doolaghs | 65 | 64.5 | 63.9 | 64.6 | 64.7 | | | 57 | 55.9 | 55.9 | 56.9 | 57.1 | | | 60.7 | 61.3 | 61.2 | | | |
| 3 | Bishopswood | 60 | 57.5 | 58.0 | 58.8 | 58.5 | | | 49 | 46.1 | 46.6 | 44.6 | 43.5 | | | 57.5 | 58.8 | 58.6 | | | |
| 4 | Feltrim | 54 | 51.1 | 51.8 | 52.5 | 52.4 | | | 46 | 43.7 | 44.5 | 46.7 | 44.3 | | | 47.8 | 44.4 | 50.2 | | | |
| 5 | Balcultry | 49 | 46.6 | 39.2 | 45.9 | 44.0 | | | 39 | 18.8 | 27.1 | 37.1 | 38.4 | | | 37.1 | 41.2 | 33.7 | | | |
| 6 | St.Davids | 44 | 38.5 | 37.9 | 45.2 | 39.8 | | | 36 | 25.0 | 25.7 | 36.8 | 28.1 | | | 38.3 | 41.0 | 39.0 | | | |
| 7 | Swords | 45 | 44.7 | 37.1 | 39.8 | 40.5 | | | 37 | 17.7 | 18.5 | 30.2 | 28.3 | | | 36.8 | 36.6 | 38.6 | | | |
| 8 | Malahide | 46 | 38.4 | 39.6 | 39.3 | 39.7 | | | 38 | 26.2 | 32.8 | 32.7 | 32.4 | | | 33.8 | 31.7 | 33.5 | | | |
| 10 | St.Margarets NS | 63 | 63.5 | 63.2 | 63.8 | 63.7 | | | 55 | 56.5 | 56.2 | 56.4 | 56.4 | | | 59.0 | 60.2 | 59.9 | | | |
| 20 | Coast Rd (OP) | 63 | 62.5 | 62.0 | 62.6 | 61.7 | | | 55 | 54.9 | 53.7 | 54.7 | 53.9 | | | 59.3 | 59.5 | 58.6 | | | |
| 26 | Kilcoskan NS | 58 | 59.1 | 59.5 | 61.2 | 61.0 | | | 40 | 35.8 | 33.1 | 38.3 | 34.5 | | | 60.3 | 61.7 | 61.6 | | | |
| 27 | Summerhill | 38 | 31.7 | 33.1 | 36.5 | 31.8 | | | 31 | 24.9 | 22.7 | 24.8 | 22.4 | | | 32.9 | 36.6 | 29.7 | | | |
| 28 | Newpark | 60 | 61.9 | 60.5 | 62.1 | 62.1 | | | 45 | 34.5 | 34.2 | 38.9 | 35.1 | | | 61.2 | 62.6 | 62.6 | | | |
| 29 | Ashbourne | 49 | 45.9 | 38.6 | 40.1 | 40.3 | | | 39 | 23.9 | 22.6 | 23.6 | 21.6 | | | 39.1 | 40.6 | 41.5 | | | |
| 30 | Roundwood | 36 | 12.8 | 15.1 | 19.0 | 20.8 | | | 28 | 0.0 | 0.0 | 0.0 | 0.0 | | | 16.4 | 20.6 | 22.4 | | | |
| 31 | Dunboyne | 54 | 50.5 | 49.8 | 50.9 | 50.7 | | | 47 | 43.0 | 43.9 | 45.4 | 45.3 | | | 41.1 | 39.3 | 36.2 | | | |
| 32 | Donabate | 45 | 0.0 | 33.4 | 28.2 | 35.1 | | | 37 | 0.0 | 11.8 | 12.4 | 26.5 | | | 32.6 | 27.8 | 31.6 | | | |
| 33 | Ardgillan | 33 | 26.5 | 30.6 | 30.6 | 30.4 | | | 24 | 19.3 | 17.9 | 21.2 | 23.1 | | | 29.0 | 27.5 | 26.5 | | | |
| 34 | Portmarnock | | | | 55.4 | 54.5 | | | | | | 47.4 | 46.7 | | | | 52.8 | 51.6 | | | |
| 35 | Ballyboughal | | | | 38.6 | 38.4 | | | | | | 26.4 | 14.3 | | | | 38.3 | 39.4 | | | |
| 206 | Ratoath | 47 | Including Permanent NMT installations only | | | | | | | | | | | | | 27.9 | | | 48.7 | | |

EXTRACT

Q3 2024 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 | | N(SEL)70 | N(SEL)75 | N(SEL)80 | N(SEL)85 | N(SEL)90 | N(SEL)95 | |
| | | | | | | | | (Average) | | | | | | | (Total in Q1) |
| 1 | Bay Lane | 51.0 | 51.0 | 49.5 | 33.3 | 6.5 | 0.1 | 51.0 | 50.9 | 48.5 | 32.0 | 1.8 | 0.0 | 4703 | |
| 2 | St. Doolaghs | 363.8 | 363.8 | 342.3 | 151.3 | 3.6 | 0.1 | 363.5 | 363.8 | 361.9 | 331.3 | 70.9 | 2.1 | 33442 | |
| 3 | Bishopswood | 200.1 | 200.1 | 156.1 | 52.9 | 2.7 | 0.3 | 200.1 | 200.2 | 196.8 | 142.3 | 30.4 | 1.7 | 0.2 | 18407 |
| 4 | Feltrim | 43.5 | 34.4 | 12.7 | 5.4 | 1.2 | 0.3 | 43.5 | 43.3 | 28.8 | 12.4 | 4.1 | 1.1 | 0.2 | 4003 |
| 5 | Balcultry | 1.0 | 1.0 | 0.7 | 0.4 | 0.2 | | 1.1 | 1.0 | 1.0 | 0.6 | 0.4 | 0.0 | 105 | |
| 6 | St.Davids | 2.2 | 2.1 | 1.1 | 0.3 | 0.1 | 0.0 | 2.8 | 2.2 | 2.0 | 0.5 | 0.2 | 0.1 | 256 | |
| 7 | Swords | 1.3 | 1.2 | 0.8 | 0.5 | 0.1 | | 1.4 | 1.3 | 1.1 | 0.8 | 0.4 | 0.1 | 131 | |
| 8 | Malahide | 1.5 | 0.6 | 0.1 | 0.0 | | | 3.1 | 1.6 | 0.4 | 0.2 | 0.1 | | 285 | |
| 10 | St.Margarets NS | 223.5 | 219.0 | 213.5 | 112.8 | 11.5 | 0.2 | 224.4 | 222.7 | 218.6 | 201.1 | 85.7 | 4.8 | 20643 | |
| 20 | Coast Rd (OP) | 147.2 | 147.2 | 130.4 | 10.7 | 0.5 | 0.0 | 147.1 | 147.2 | 147.2 | 128.8 | 10.1 | 0.1 | 0.0 | 13530 |
| 26 | Kilcoskan NS | 229.2 | 226.5 | 212.4 | 119.0 | 10.4 | 0.1 | 229.3 | 228.8 | 226.1 | 212.5 | 114.1 | 9.5 | 0.0 | 21092 |
| 27 | Summerhill | 0.6 | 0.4 | 0.1 | | | | 1.0 | 0.5 | 0.3 | 0.0 | 0.0 | | 95 | |
| 28 | Newpark | 227.6 | 227.0 | 202.6 | 152.4 | 19.5 | 0.8 | 227.7 | 227.6 | 217.7 | 199.7 | 152.7 | 14.8 | 0.3 | 20949 |
| 29 | Ashbourne | 9.4 | 8.3 | 2.1 | 0.2 | 0.0 | | 9.5 | 9.3 | 6.4 | 1.6 | 0.4 | 0.1 | 0.0 | 870 |
| 30 | Roundwood | | | | | | | 0.0 | | | | | | 0 | |
| 31 | Dunboyne | 20.7 | 15.3 | 2.6 | 0.1 | 0.0 | | 20.8 | 20.1 | 13.7 | 2.7 | 0.2 | | 1917 | |
| 32 | Donabate | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | | 0.5 | 0.4 | 0.3 | 0.1 | 0.1 | 0.0 | 46 | |
| 33 | Ardgillan | 0.2 | 0.2 | 0.1 | 0.0 | | | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | | 29 | |
| 34 | Portmarnock | 77.5 | 67.3 | 34.5 | 3.3 | 0.2 | 0.0 | 77.5 | 77.4 | 67.9 | 37.6 | 4.2 | 0.3 | 0.2 | 7131 |
| 35 | Ballyboughal | 2.8 | 2.8 | 2.8 | 0.5 | 0.0 | | 3.0 | 2.8 | 2.8 | 1.7 | 0.2 | 0.0 | 277 | |
| 206 | Ratoath | 64.9 | 47.7 | 7.3 | 0.9 | 0.1 | 0.0 | 64.9 | 62.9 | 47.3 | 7.8 | 0.9 | 0.1 | 0.0 | 5975 |

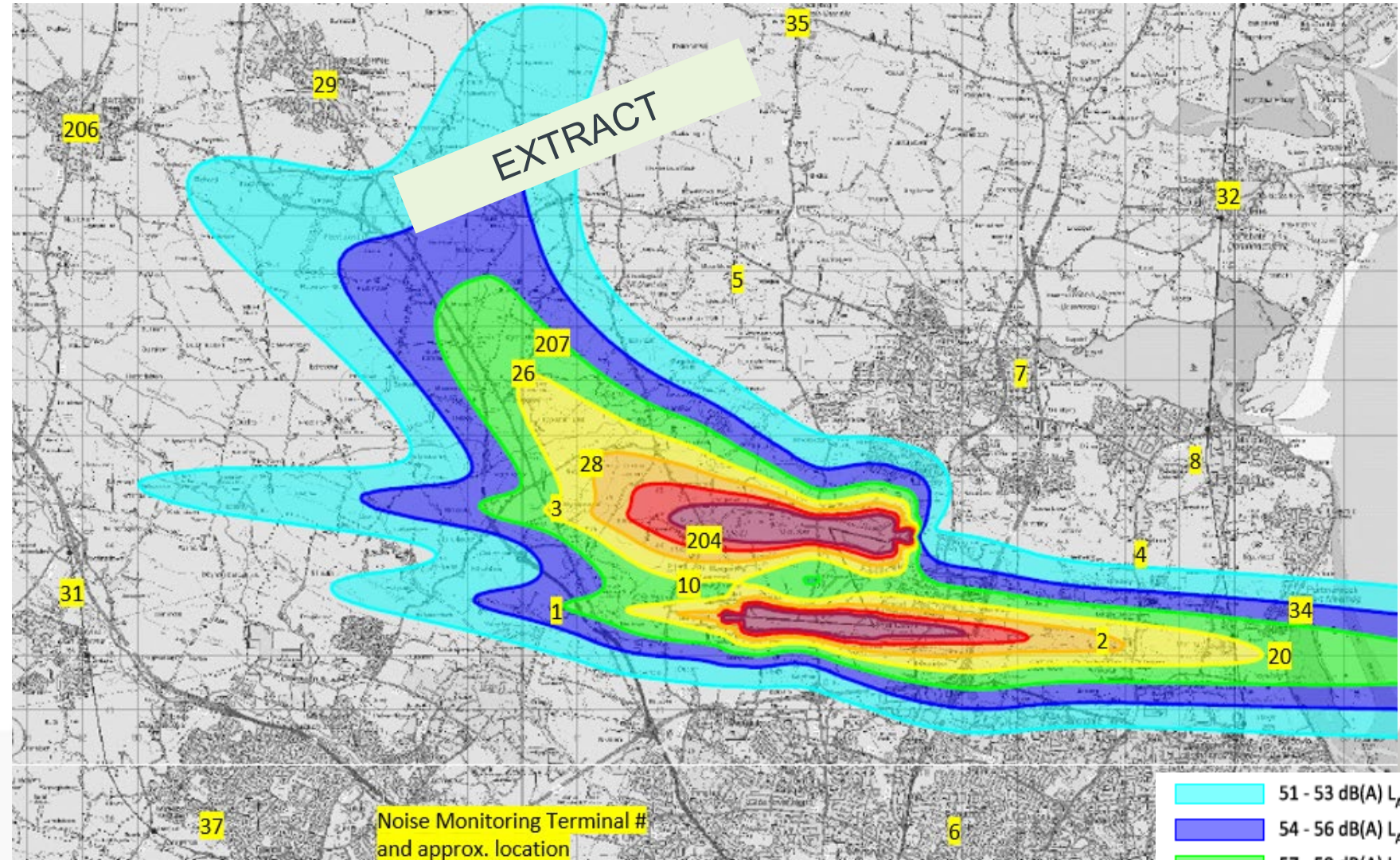
EXTRACT

Including Permanent NMT installations only

92-day Summer Day – Modelled Contours and Measured NMT

Levels

| # | NMT Name | Leq 16h 2023 (Model) | Leq 16h 2023 (NMT) | Leq 16h 2024 (NMT) |
|-----|-----------------|----------------------|--------------------|--------------------|
| 1 | Bay Lane | 55.2 | 53.9 | 48.1 |
| 2 | St. Doolaghs | 61.7 | 61.2 | 61.2 |
| 3 | Bishopswood | 60.3 | 57.8 | 58.1 |
| 4 | Feltrim | 49.1 | 43.7 | 49.8 |
| 5 | Balcultry | 46.7 | 41.7 | 33.5 |
| 6 | St.Davids | 39.5 | 36.5 | 38.3 |
| 7 | Swords | 43.7 | 50.1 | 38.5 |
| 8 | Malahide | 42.9 | 32.2 | 34.4 |
| 10 | St.Margarets NS | 61.4 | 60.5 | 60.4 |
| 20 | Coast Rd (OP) | 59.6 | 59.7 | 59.5 |
| 26 | Kilcoskan NS | 59.9 | 61.4 | 62.0 |
| 27 | Summerhill | 33.1 | 35.0 | 29.0 |
| 28 | Newpark | 62.2 | 62.8 | 62.9 |
| 29 | Ashbourne | 48.7 | 31.7 | 41.8 |
| 30 | Roundwood | 34.1 | 17.6 | 22.4 |
| 31 | Dunboyne | 46.2 | 40.1 | 35.9 |
| 32 | Donabate | 42.3 | 0.0 | 31.7 |
| 33 | Ardgillan | 32.2 | | 26.8 |
| 34 | Portmarnock | | | 51.0 |
| 35 | Ballyboughal | | | 39.2 |
| 206 | Ratoath | | | 49.1 |

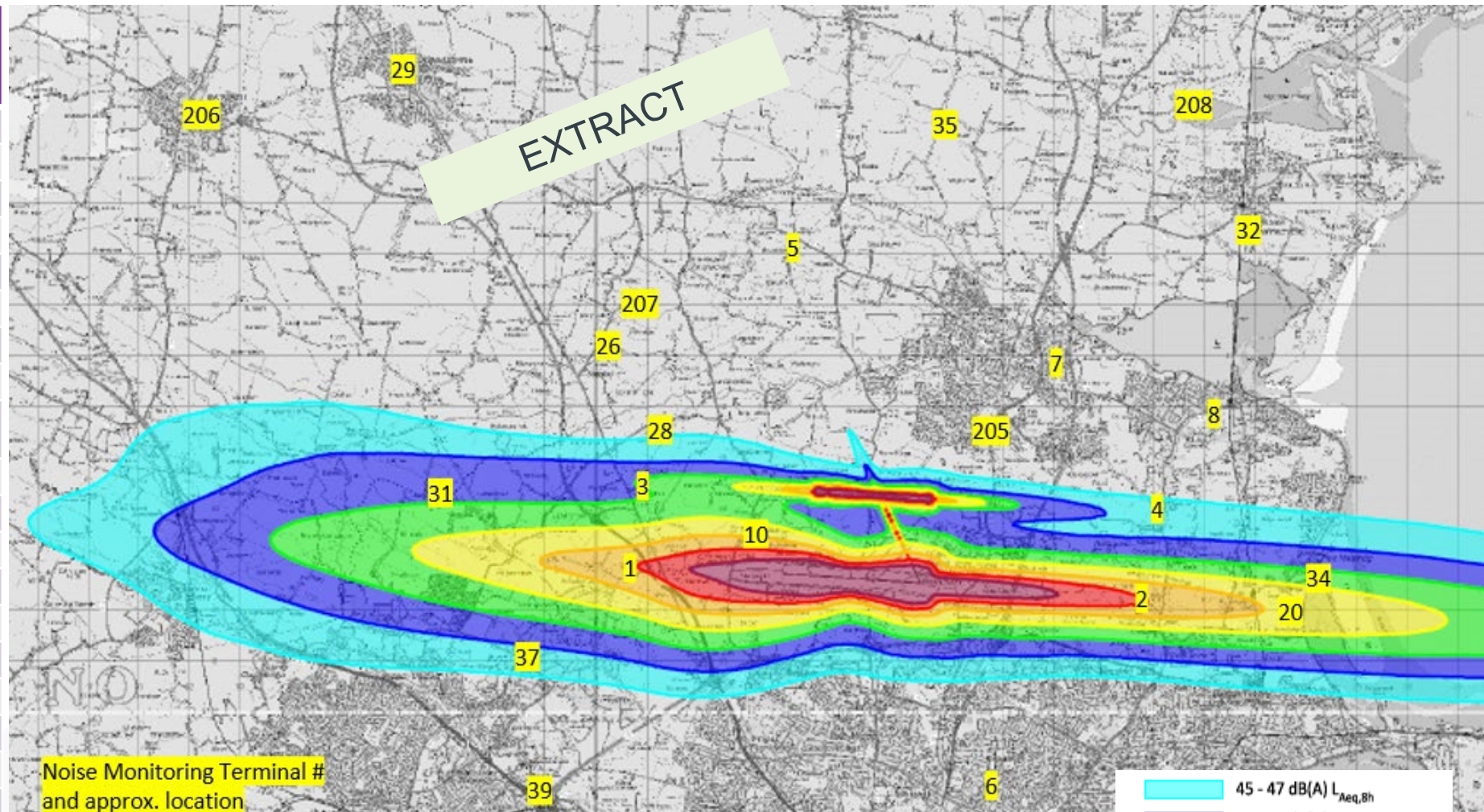


Map of 2023 Summer Leq16hr (day) noise contours

Including Permanent NMT installations

92-day Summer Night – Modelled Contours and Measured NMT Levels

| # | NMT Name | Leq 8h 2023 (Model) | Leq 8h 2023 (NMT) | Leq 8h 2024 (NMT) |
|-----|-----------------|---------------------|-------------------|-------------------|
| 1 | Bay Lane | 58.3 | 57.8 | 57.4 |
| 2 | St. Doolaghs | 58.2 | 57.7 | 57.2 |
| 3 | Bishopswood | 50.9 | 46.4 | 43.8 |
| 4 | Feltrim | 46.8 | 43.6 | 46.6 |
| 5 | Balcultry | 39.8 | 27.0 | 38.4 |
| 6 | St.Davids | 36.3 | 18.4 | 25.9 |
| 7 | Swords | 36.8 | 39.5 | 28.6 |
| 8 | Malahide | 38.9 | 33.5 | 33.9 |
| 10 | St.Margarets NS | 55.9 | 55.9 | 56.8 |
| 20 | Coast Rd (OP) | 56.3 | 56.0 | 55.2 |
| 26 | Kilcoskan NS | 40.6 | 36.1 | 37.2 |
| 27 | Summerhill | 31.3 | 23.2 | 20.6 |
| 28 | Newpark | 45.1 | 38.8 | 38.1 |
| 29 | Ashbourne | 39.5 | 0.0 | 22.2 |
| 30 | Roundwood | 29.3 | 0.0 | 0.0 |
| 31 | Dunboyne | 46.8 | 45.9 | 44.3 |
| 32 | Donabate | 36.7 | 0.0 | 26.5 |
| 33 | Ardgillan | 23.7 | | 23.2 |
| 34 | Portmarnock | | | 46.7 |
| 35 | Ballyboughal | | | 14.3 |
| 206 | Ratoath | | | 28.0 |

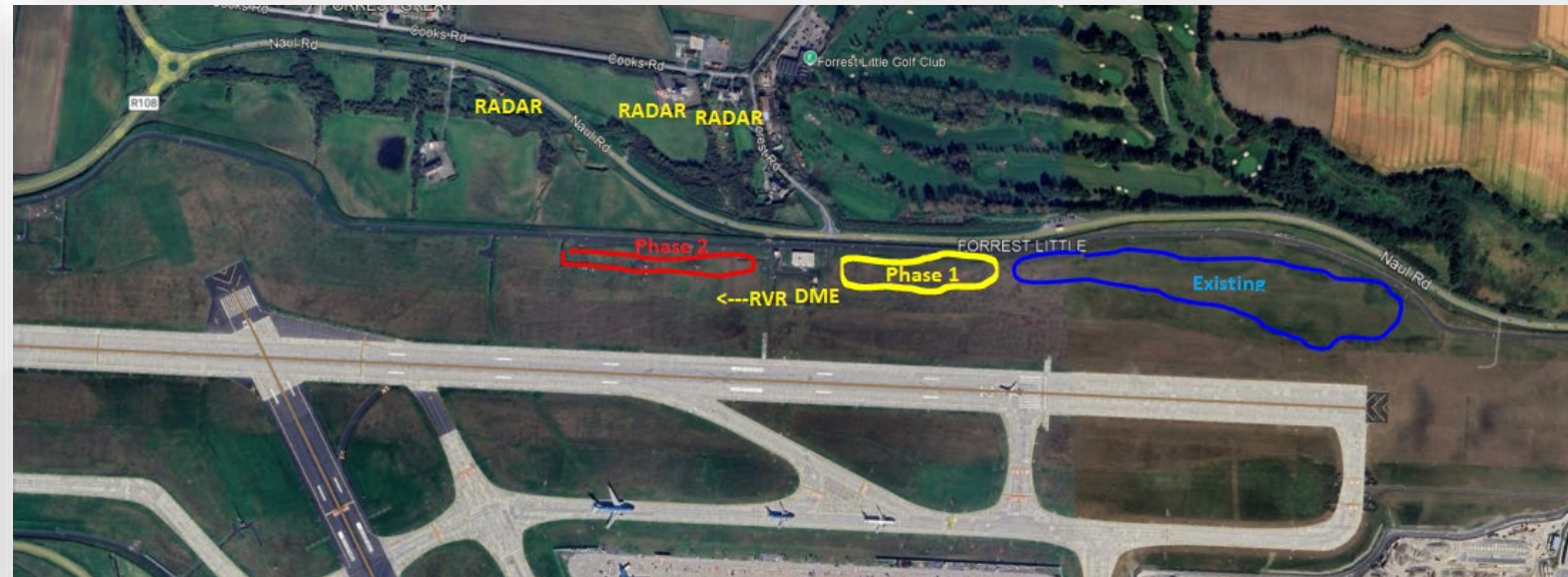
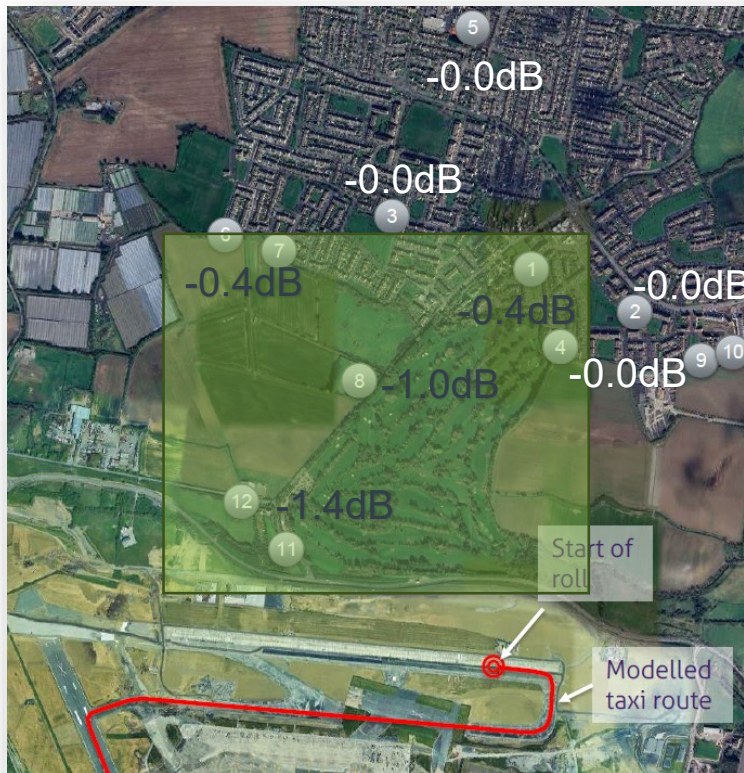


Map of 2023 Summer Leq8hr (night) noise contours

Including Permanent NMT installations

3. Earth Berm Review

- Desktop study to assess the benefit of earth berms to reduce ground noise at nearby residential dwellings to the north of the North Runway
- Assessed noise benefit of the 300m and 700m extension of the existing berm at either 3m or 6m height.
- Findings: The berms can be seen to reduce the modelled ground noise by a maximum of approx. 1.4dB to dwellings close to the airport and up to 0.4dB reduction within the area highlighted below.
- There is little benefit in the 6m berm over 3m berm.
- Next step: Risk assessment (turbulence and NavAid) with AirNav, design and build process



4. NADP (Noise Abatement Departure Procedure) Review

- The use of NADP can have the potential for important improvement margins by optimising the operational use of **NADP 1 which reduces noise close to the airport** but increases fuel burn due to the late flap retraction, or **NADP 2 which is more fuel efficient and reduces noise further from the airport**, to deliver the balance between community noise impact and fuel burn.
- Dublin's AIP recommends operators to fly NADP2
- Finding: 73% of departures fly NADP1
 - Westerly 84% NADP1
 - Easterly 61% NADP1
- Next Step: Engage with airlines and AirNav, review recommendation
- Note: Airlines decide which procedure to follow at each airport as part of their standard operating procedure based on the requirements of their operation. daa can recommend a preferred procedure to operators but have no formal power to enforce this.

