

File With

SECTION 131 FORM

Appeal No

ABP— 314485-22

Defer Re O/H

☐

Having considered the contents of the submission dated/received 11/12/2023
from Breffni and Orla Conaty I recommend that section 131 of the Planning
and Development Act, 2000 be/not be invoked at this stage for the following reason(s):

no new material issues
(Inspector to advise)

Section 131 not to be invoked at this stage.

☒

Section 131 to be invoked — allow 2/4 weeks for reply.

☐

Signed

Pat B

Date

13/12/2023

EO

Signed

Date

SEO/SAO

M

Please prepare BP — Section 131 notice enclosing a copy of the attached submission.

To

Task No

Allow 2/3/4 weeks

BP

Signed

Date

EO

Signed

Date

AA

Coolquay,
The Ward
Co. Dublin,

11th December 2023.

The Secretary,
An Board Pleanála,
64 Marlborough Street,
Dublin 1.
D01 V902.

Re: Observation against case number 314485

Dear Sir/ Madam,

We wish to submit an objection to this development on the following grounds:

1. We hired a private company to conduct a sounds/ acoustics test which confirm the noise levels we are experiencing are considerable higher than those the daa have indicated in their submission. This noise has had a devastating impact on the quality of our lives. We built this house having consulted with the original plans by the daa and approved planning. FCC (Fingal County Council) did not even suggest we would need to install any noise insulation as part of condition of planning. Now we cannot open a window because of the noise. As a consequence, during the summer months we suffering from extreme heat in the house due to solar gain and are having to spend a fortune on fans & electricity. I have attached the report to the end of this submission which shows the daa exceed the noise levels in every area.
2. I served on the Board of Management on our local school (Kilcoskan National School). As the school is 100yards from my home, all the children (including my own) are now suffering from the impact of the noise due to the divergent flight paths. The school has units for children with special needs and their ability to enjoy outdoor time has gone while other kids speak about the impact on classes and distractions that take place because of the planes. The daa have tried to use consultations with the school to say they are working with the community but play this as some form of acceptance. Mr Jacobs is incorrect in statements he has made that he has 'worked things out'. The schools own observation to this planning should highlight this fact & their concerns.
3. We are very concerned about the suggestion the night time flight cap will be lifted and day time operating hours are to be extended. The daa are already breaching this planning condition. We need our sleep and are woken by the planes every morning as it is. A noise quota system is hugely flawed and should only be used in conjunction with the 65 night time flight cap. The airport is capable of increasing capacity without increasing operating hours if they can manage air traffic control better.

I strongly encourage the board to **reject this planning application**. To accept it would to grant permission for illegal flight paths currently in operation and sets a dangerous precedent for further growth plans the daa wish to pursue. I believe an oral hearing would help demonstrate the gravity of the situation facing the 30,000 people now impacted by the daa ignoring the planning permission they were granted.

Regards,

Breffni & Orla Conaty

2 Baseline Noise Survey

Attended and unattended noise surveys were undertaken to quantify the noise levels from aircraft flyovers at the residence of Breffni Conaty D11 PD87. The attended noise measurements were conducted from 11:10hrs to 12:10hrs on the 13th of September 2023 and 11:17hrs to 14:20hrs on the 14th of September 2023. The unattended noise measurements were taken continuously from 04:30hrs on the 9th of June 2023 to 10:05hrs on 22/09/2023. Sound exposure level measurements were taken for aircraft flyovers during the attended survey.

2.1.1 Site Description and Measurement Locations

The site is on the R130 in Coolquay, The Ward, Dublin, as shown in Figure 1 below. The area is mainly agricultural, with sporadic residential dwellings and commercial properties. Dublin Airport is located to the residence's southeast, approximately 5 km from the edge of the new North Runway.



Figure 1: Site location and monitoring location L1 and SEL measurement location A1.

2.1.2 Survey Period

Based on the data review, the measurements commenced at 00:00hrs on Wednesday, the 14th of June 2023 and finished at 20:00hrs on Sunday, the 17th of September 2023. The measurement duration was set to 1-minute intervals. It is understood that the North Runway was operational throughout the measurement period, initially between 09:00hrs and 20:00hrs until 4 July 2023, after which the operating hours of the North Runway were 07:00hrs to 23:00hrs.

The measurement period was set in line with Dublin Airport's busiest 92-day period, 16th of June to 15th of September, around which the DAA contour maps are developed. Many of the Dublin Airport planning conditions have been set based on the predictions of noise levels over this 92-day period such as the home insulation scheme. The unattended noise monitoring undertaken allows for direct comparison of the measured noise levels to the DAA noise contour maps.

2.1.3 Noise Measurement Equipment

A Class 1 sound level meter/noise logger, in general accordance with IEC 61672-1:2013, was used for the attended measurements. Table 1 below summarises the measurement equipment used.

Table 1: Noise Measurement Equipment

Description	WD Asset Number	Model	Serial No.	Calibration Certificate No.	Calibration Due Date
Sound Level Meter	SLM4	Nti XL2-TA	A2A-23316-E1	UK-23-100	01/09/2025
Calibrator	CAL1	Nor 1251	31056	AC230226	16/10/2024
Noise Monitor	-	EM2030-AO	01803	2301803	15/02/2024
Calibrator	Cal 2	Cirrus	99866	183284	16/11/2023

2.1.4 Subjective Noise Environment

Based on the information provided during the attended noise survey and logger deployment, the following noise sources were identified:

- Aircraft Noise from Aircraft Fly Overs.
- Road noise from the R130
- Birdsong
- Occasional activity from residents (cars arriving/departing, voices, etc.)

2.2 Noise Measurement Results

This section outlines the results of the attended noise survey.

Unattended Monitoring Results

Table 4 in Appendix C of this report outlines the results of the noise levels recorded at the noise monitoring location L1 over the full monitoring period averaged over the following periods:

- $L_{Aeq,16hour}$ 07:00 – 23:00
- $L_{Aeq,8hour}$ 23:00 – 07:00

Figure 4 below highlights each of the daytime $L_{Aeq,16hour}$ values and the number of times they occur over the full 92-day monitoring period. The graph indicates a significant modal value of 61 dBA with a total of 33 occurrences. This is 15 more occurrences than the next highest value at 60dBA (18 occurrences).

Table 2: Aircraft Flyover Noise Levels

Measurement				Aircraft Type	Measured Noise Levels		Sound Exposure Level
Location	Date	Time (hrs)	Duration (sec)		L _{Aeq} dB	L _{Afmax} dB	L _{Ax} dB
A1	13/09/2023	11:11	45	Boeing 737-8AS	71	80	88
A1	13/09/2023	11:12	42	Airbus A380-25IV	67	80	83
A1	13/09/2023	11:14	37	ATR 72-600	53	60	69
A1	13/09/2023	11:17	47	DASSAULT FALCON 8X	63	73	80
A1	13/09/2023	11:25	51	Boeing 767-332(ER)	72	82	89
A1	13/09/2023	11:28	41	Embraer E1895AR	71	81	87
A1	13/09/2023	11:29	47	Boeing 737-8AS	68	77	85
A1	13/09/2023	11:31	31	ATR72-600	56	64	71
A1	13/09/2023	11:35	41	Airbus A320-251N	65	73	81
A1	13/09/2023	11:37	30	Embraer E180STD	69	77	84
A1	13/09/2023	11:38	53	Bombardier Global 6000	65	77	82
A1	13/09/2023	11:40	40	Boeing 737-8AS	70	78	86
A1	13/09/2023	11:42	50	Airbus A330-302	73	82	90
A1	13/09/2023	12:00	45	Boeing 777-31H(ER)	50	59	67
A1	14/09/2023	11:17	23	Airbus A320-214	70	77	84
A1	14/09/2023	11:25	41	Boeing 787-8 Dreamliner	69	79	85
A1	14/09/2023	11:28	54	Airbus A321-271NX	66	76	83
A1	14/09/2023	11:29	35	ATR 72-600	53	65	68
A1	14/09/2023	11:31	40	ATR 72-600	64	71	80
A1	14/09/2023	11:35	39	Boeing 737 MAX 8-200	66	73	82
A1	14/09/2023	11:37	42	Airbus A320-214	69	77	85
A1	14/09/2023	11:38	39	Airbus A320-214	70	78	86
A1	14/09/2023	11:40	45	Boeing 737 MAX 8-200	67	76	84
A1	14/09/2023	11:42	26	ATR 72-600	59	68	73
A1	14/09/2023	12:00	50	Boeing 777-31H(ER)	73	82	90
A1	14/09/2023	14:00	44	Airbus A320-214	70	78	86
A1	14/09/2023	14:03	42	Boeing 737-8AS	70	78	86

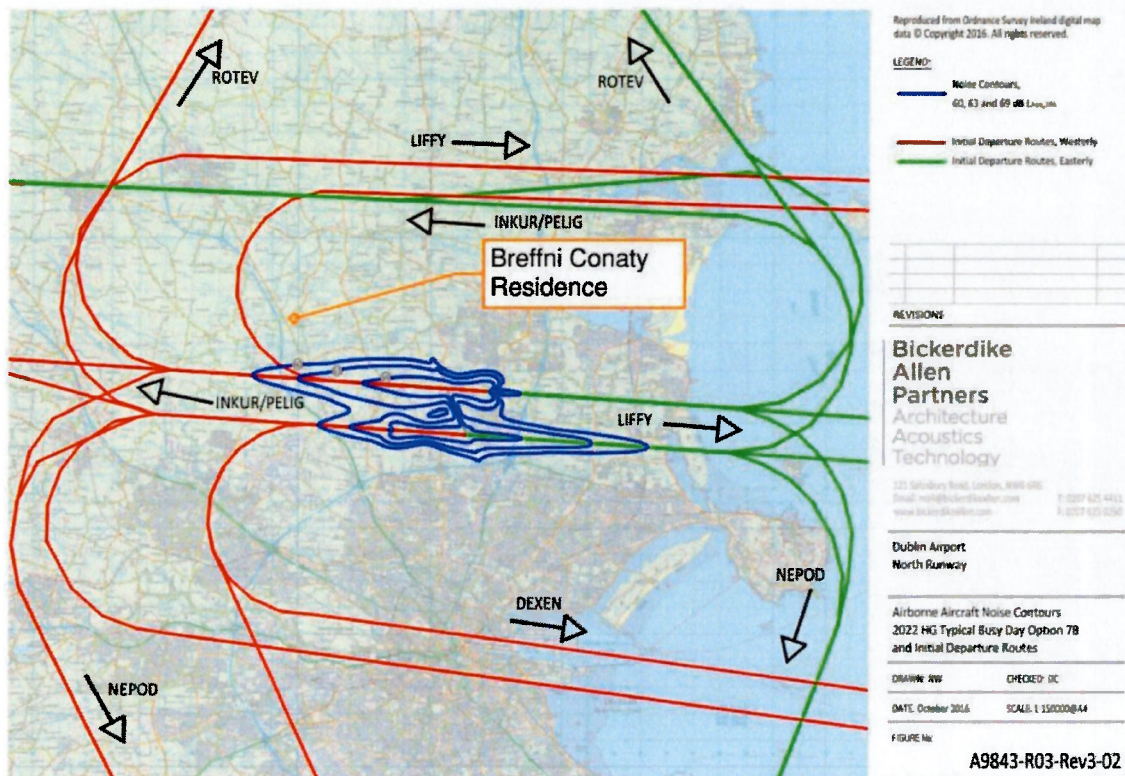


Figure 5: Predicted $L_{Aeq,16hour}$ (07:00 – 23:00) airport noise contours with North Runway in operation.

Noise contour maps presented in the most recently submitted EIAR supplement by DAA provided to ABP place Breffni Conaty's dwelling in the 57-59 dB $L_{Aeq,16hr}$ contour for the 2025-year scenario. Given that the measurements were undertaken during the summer of 2023 and they find noise levels are 59dB $L_{Aeq,16hr}$ it would indicate that the predicted noise contours from the aircraft flyovers are a lower case estimate than those typically experienced at the dwelling currently.

To establish the aircraft noise impact of the North Runway, Tables 13-2 and 13-3 (shown below in Figure 8 and Figure 9) of the *Dublin Airport North Runway EIAR Volume 2 – Main Report* can be used to determine both the absolute noise level and the change in noise level due to the North Runway operations.

Based on the predicted L_{night} noise at the residence with the proposed development in place, as outlined in this section, an air noise impact scale description of “Medium” is appropriate for L_{night} . Pairing this with a change in the noise level of greater than 9dB due to North Runway operations to give a relative noise impact scale of “Very High” the magnitude of the effect of the North Runway can be described as “Very Significant” as per Table 13-4 of the *Dublin Airport North Runway EIAR Volume 2 – Main Report*.

Given the discrepancy between daytime noise levels measured versus contours predicted by DAA it is likely that the L_{night} noise impact here is being underestimated.

Table 13-2: Air Noise Impact Criteria (absolute) – residential

Scale Description	Annual dB Lden	Annual dB Lnight
Negligible	<45	<40
Very Low	45 – 49.9	40 – 44.9
Low	50 – 54.9	45 – 49.9
Medium	55 – 64.9	50 – 54.9
High	65 – 69.9	55 – 59.9
Very High	≥70	≥60

Figure 8: Dublin Airport North Runway EIAR Volume 2 – Main Report Table 13-2: Air Noise Impact Criteria (absolute).

Table 13-3: Air Noise Impact Criteria (relative)

Scale Description	Change in noise level, dB(A)
Negligible	0 – 0.9
Very Low	1 – 1.9
Low	2 – 2.9
Medium	3 – 5.9
High	6 – 8.9
Very High	≥9

Figure 9: Dublin Airport North Runway EIAR Volume 2 – Main Report Table 13-3: Air Noise Impact Criteria (relative).

3.2.1 Calculation of $L_{Aeq,16hr}$ Noise Levels from SEL Measurements

Based on the SEL measurements undertaken at the residence in combination with the information submitted by DAA to ANCA as part of the response to ANCA’s review of the 2022 airport noise emission outlining the number of flights per aircraft type (included in Appendix B) the $L_{Aeq,16hr}$ noise levels at the residence can be calculated to be compared with the unattended measurement results to confirm validity. The noise level for each aircraft type can be calculated using the following formula and then logarithmically added to predict the daily $L_{Aeq,16hour}$ level as follows:

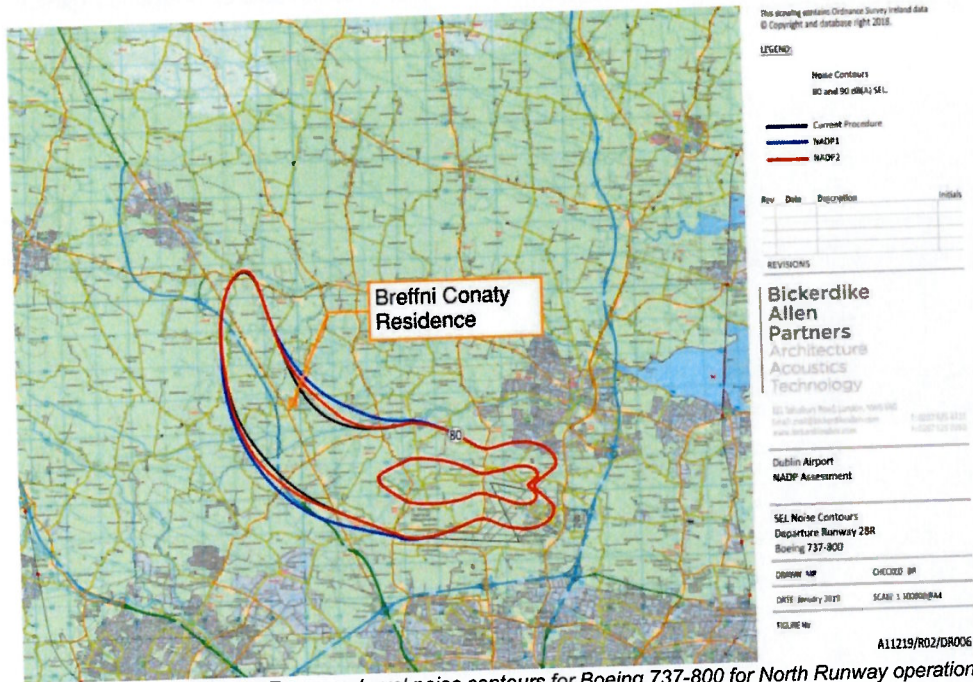


Figure 10: Predicted Sound Exposure Level noise contours for Boeing 737-800 for North Runway operation.

For the DAA predicted SEL contours for the Airbus A320, as shown in Figure 11 below, Breffni Conaty's residence currently lies on the edge of the 80dB(A) contour for all departure procedures. Based on the recorded noise levels at the residence and calculated SELs as outlined in Table 2, the sound exposure level ranged 80 – 86 dB(A) for the Airbus A320 with a logarithmical average SEL of 85dB(A). This highlights an exceedance of the predicted SEL noise levels by up to 6dB(A).

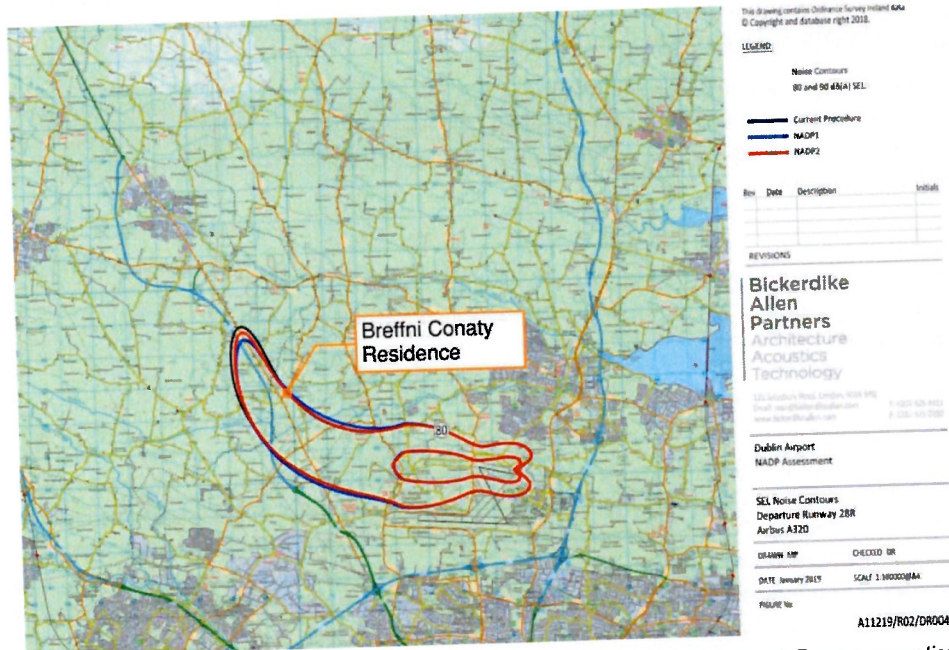


Figure 11: Predicted Sound Exposure Level noise contours for Airbus A320 for North Runway operation.

For the DAA predicted SEL contours for the Airbus A330, as shown in Figure 12 below, Breffni Conaty's residence currently lies between the 80dB(A) and 90dB(A) contour for all departure procedures. Based on the

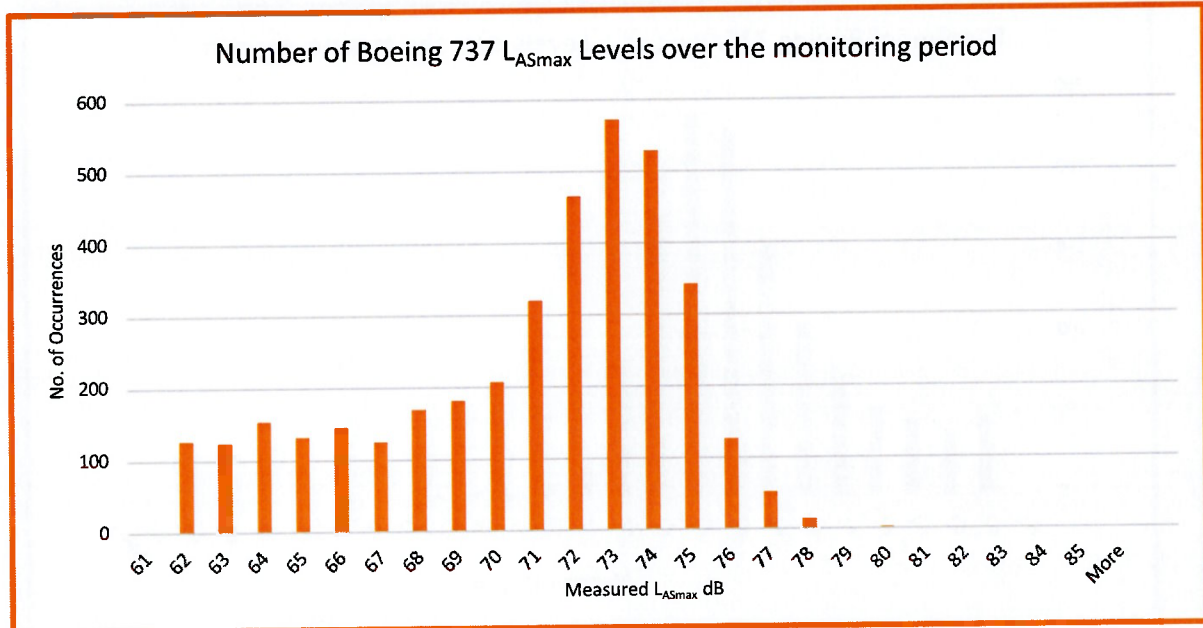


Figure 13: Number of Boeing 737 $L_{ASmax, 1min}$ noise levels over the monitoring period.

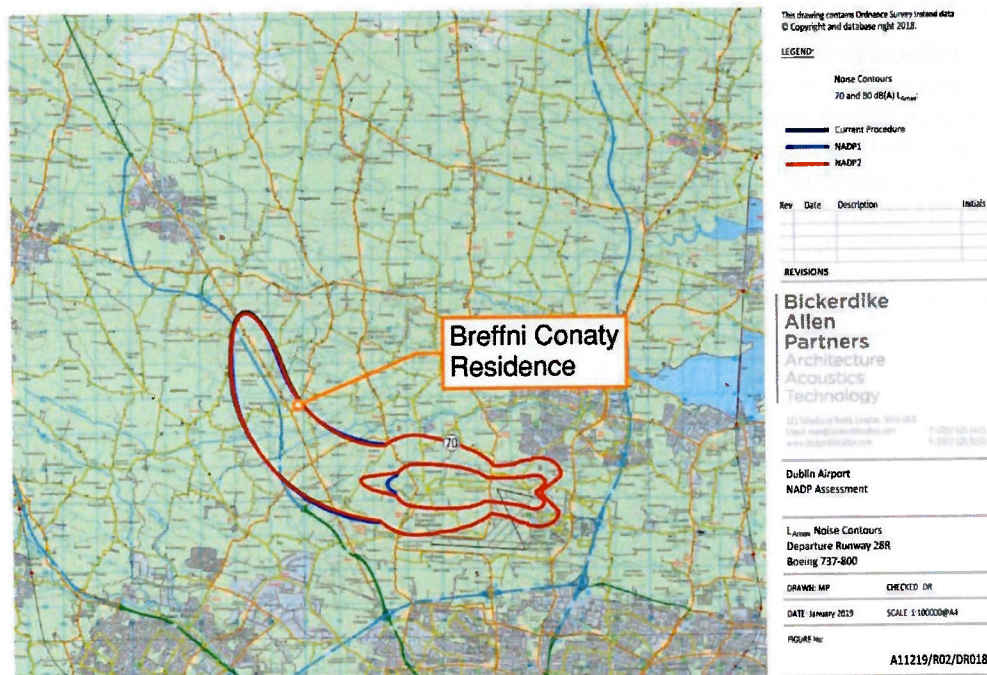


Figure 14: DAA predicted L_{Amax} noise contours for Boeing 737-800.

In addition, the recorded L_{ASmax} noise levels for the Boeing 737-max aircraft have been plotted as shown in Figure 15 below which shows a modal L_{ASmax} of 70dB with 235 occurrences and a number of occurrences above 70dBA.

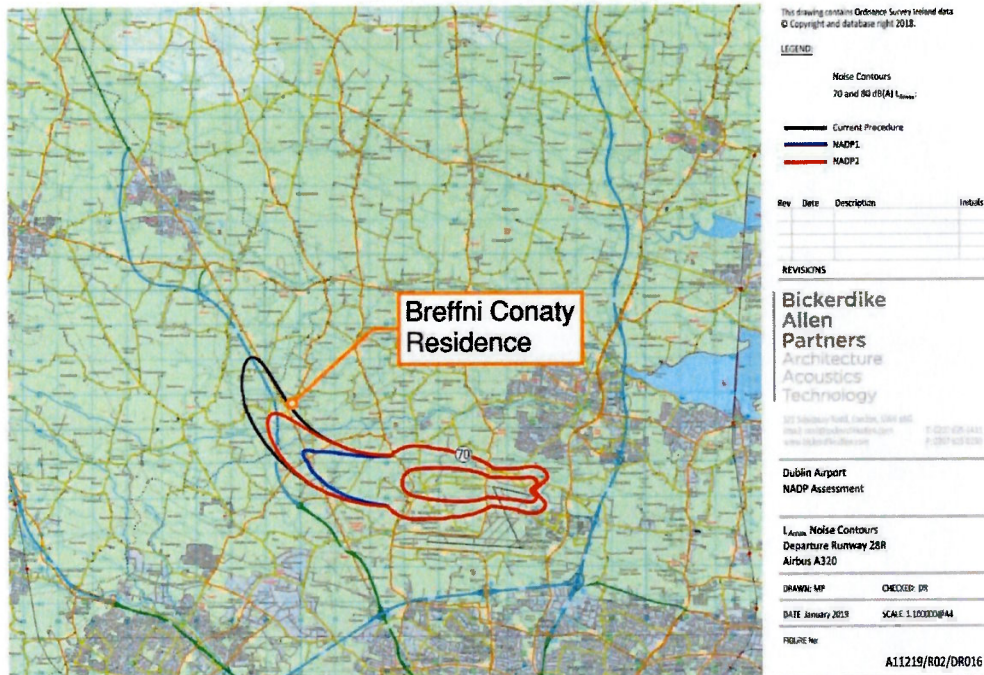


Figure 17: DAA predicted L_{Amax} noise contours for Airbus A320

Airbus A330

Figure 18 below outlines the number of L_{Amax} occurrences for Airbus A320 aircraft over the full 92-day period at the monitoring location. The DAA predicted L_{Amax} noise levels for the Airbus A320 are shown further below in Figure 19 which place Breffni Conaty's residence just inside the 70dB contour for all departure procedures. A comparison of the DAA predicted maximum noise levels with the measured levels show a significant exceedance at the residence due to aircraft take-offs. The modal L_{Amax} value recorded at the residence for Airbus A330 aircraft was 77dB, with 95 occurrences. This shows an exceedance of the DAA predicted noise levels by approximately 7dBA.

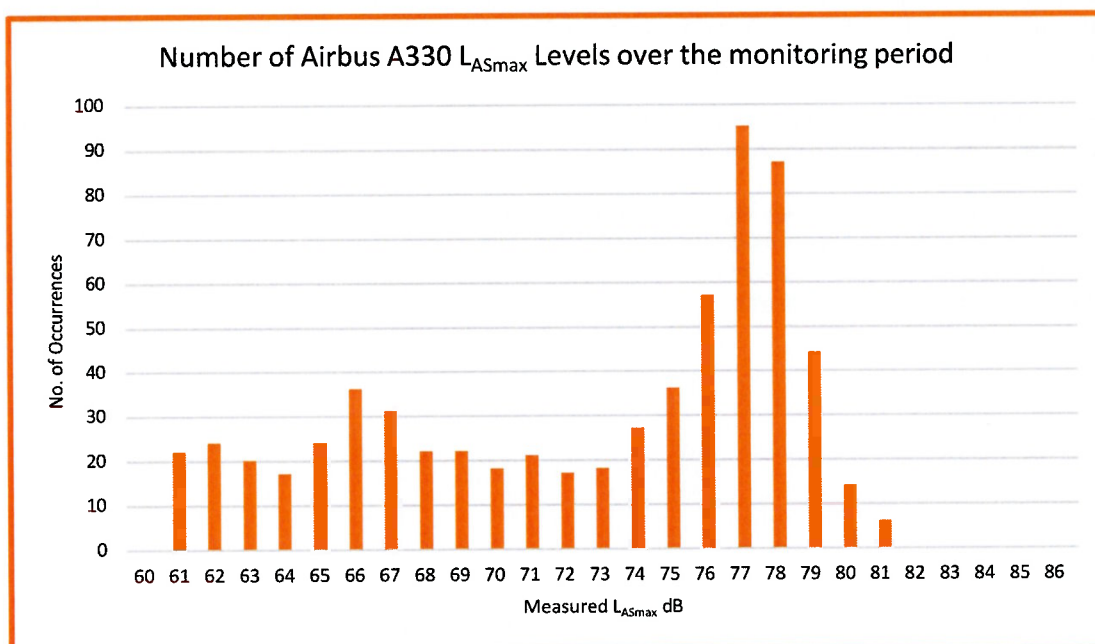


Figure 18: Number of Airbus A330 $L_{Amax, 1min}$ noise levels over the monitoring period

4 Conclusion

Following the commencement of operations of the new Dublin Airport North Runway, Wave Dynamics were engaged by Breffni Conaty to review the 92-day unattended noise monitoring results and undertake sound exposure level measurements at Coolquay Common, The Ward, Dublin, D11 PD87.

The objective of the assessment was to quantify the existing noise environment and the current noise levels from aircraft noise following the commencement of the operation of the North Runway. The measured noise levels have been compared with the predicted noise levels from the DAA noise contours and industry criteria.

Based on the results of the unattended noise monitoring at the residence, a 92-day average $L_{Aeq,16hour}$ of 59 dB(A) was recorded which suggests an exceedance of the DAA predicted contour maps which place the residence significantly outside the 60dBA contour.

Sound exposure level measurements have also been taken at the residence and thus used to calculate the 92-day average $L_{Aeq,16hour}$ based on the number of aircraft types over the 92-day period which predicted an $L_{Aeq,16hour}$ of 62 dB(A).

Both the predicted $L_{Aeq,16hour}$ calculated from the attended measurements and the measured $L_{Aeq,16hour}$ exceed the DAA predicted 92-day contour map level at the residence which is situated significantly outside the 60dBA contour for aircraft noise exposure. In addition these have been compared to the DAA 2025 predicted noise contours which are 57-59dBA at the dwelling.

The DAA predicted L_{night} contours have been compared to the existing nighttime noise levels at the dwelling. Based on the *Dublin Airport North Runway EIAR Volume 2 – Main Report* it is likely that commencement of night time flights will have a "Very Significant" impact on the noise levels at the residence.

Sound exposure level measurements for the three most common aircraft types were also compared to the DAA predicted noise contours for the same aircraft types which showed exceedances for all three aircraft types of up to 8dB(A).

L_{ASmax} values over the full 92-day monitoring period for the three most common aircraft types were compared to the DAA-predicted noise contours for the same aircraft types. All three aircraft types showed exceedances over the predicted maximum noise levels with the worst case aircraft having a modal L_{ASmax} value of 7dBA in excess of the predicted noise levels.

Appendix B – Volume of Flights per Aircraft Type

The volume of flights per aircraft type have been submitted to DAA by ANCA and are outlined below in Table 3.

Table 3: Volume of each aircraft type over the entire year and over summer period

Aircraft Type	2023						
	Annual Average				Summers Period		
	Annual Day	Annual Eve	Annual Night	Annual 24hr	Summer Day 16hr	Summer Night	Summer 24hr
Airbus A300	0	0	0	0	0	0	0
Airbus A306	595	298	298	1190	262	87	350
Airbus A319	2083	0	0	2083	612	0	612
Airbus A320	38379	10115	4165	52659	14246	1224	15470
Airbus A320neo	3273	1488	298	5058	1398	87	1486
Airbus A321	1785	893	595	3273	787	175	961
Airbus A321neo	5355	0	595	5950	1573	175	1748
Airbus A330	8628	0	893	9520	2535	262	2797
Airbus A330neo	0	0	0	0	0	0	0
Airbus A350	0	0	0	0	0	0	0
ATR 42	0	0	0	0	0	0	0
ATR 72	9223	2083	0	11305	3321	0	3321
BAe 146/Avro RJ	0	0	0	0	0	0	0
Boeing 737-400	595	1190	595	2380	524	175	699
Boeing 737-500	0	0	0	0	0	0	0
Boeing 737-700	0	0	0	0	0	0	0
Boeing 737-800	38974	10710	4463	54147	14596	1311	15907
Boeing 737 MAX	17553	6545	2975	27073	7079	874	7953
Boeing 757	2380	298	298	2975	787	87	874
Boeing 767	1190	1190	595	2975	699	175	874
Boeing 777	1190	0	595	1785	350	175	524
Boeing 777X	0	0	0	0	0	0	0
Boeing 787	3570	0	595	4165	1049	175	1224
Bombardier CS300	1190	595	0	1785	524	0	524
Bombardier Dash 8	595	0	0	595	175	0	175
Convair 580	0	0	0	0	0	0	0
Embraer E190/195	4165	1785	298	6248	1748	87	1835
Embraer E190-E2	595	0	0	595	175	0	175
HS748A	0	0	0	0	0	0	0
Lockheed C130	0	0	0	0	0	0	0
McDonnell Douglas	0	0	0	0	0	0	0
MD83	0	0	0	0	0	0	0
Piper PA34	0	0	0	0	0	0	0
Shorts SD330/360	0	0	0	0	0	0	0

Appendix C - Unattended Noise Monitoring Results

Table 4 below outlines the noise levels recorded at location L1 over the period 14th of June 2023 to 17th of September 2023. The results are averaged over the following periods:

- $L_{Aeq,16hour}$ 07:00 – 23:00
- $L_{Aeq,8hour}$ 23:00 – 07:00

Table 4: Unattended Measurement Results

Date	Start Time	End Time	Average $L_{Aeq,T}$
14/06/2023	07:00	23:00	50
14/06/2023	23:00	07:00	47
15/06/2023	07:00	23:00	46
15/06/2023	23:00	07:00	46
16/06/2023	07:00	23:00	49
16/06/2023	23:00	07:00	47
17/06/2023	07:00	23:00	50
17/06/2023	23:00	07:00	39
18/06/2023	07:00	23:00	48
18/06/2023	23:00	07:00	45
19/06/2023	07:00	23:00	58
19/06/2023	23:00	07:00	44
20/06/2023	07:00	23:00	54
20/06/2023	23:00	07:00	46
21/06/2023	07:00	23:00	58
21/06/2023	23:00	07:00	42
22/06/2023	07:00	23:00	47
22/06/2023	23:00	07:00	45
23/06/2023	07:00	23:00	59
23/06/2023	23:00	07:00	44
24/06/2023	07:00	23:00	58
24/06/2023	23:00	07:00	43
25/06/2023	07:00	23:00	59
25/06/2023	23:00	07:00	46
26/06/2023	07:00	23:00	59
26/06/2023	23:00	07:00	46
27/06/2023	07:00	23:00	59
27/06/2023	23:00	07:00	44
28/06/2023	07:00	23:00	59
28/06/2023	23:00	07:00	46
29/06/2023	07:00	23:00	59
29/06/2023	23:00	07:00	45
30/06/2023	07:00	23:00	58
30/06/2023	23:00	07:00	45
01/07/2023	07:00	23:00	59
01/07/2023	23:00	07:00	44
02/07/2023	07:00	23:00	59
02/07/2023	23:00	07:00	46
03/07/2023	07:00	23:00	59
03/07/2023	23:00	07:00	47
04/07/2023	07:00	23:00	61

Date	Start Time	End Time	Average L _{Aeq,T}
30/07/2023	23:00	07:00	45
31/07/2023	07:00	23:00	60
31/07/2023	23:00	07:00	46
01/08/2023	07:00	23:00	60
01/08/2023	23:00	07:00	44
02/08/2023	07:00	23:00	59
02/08/2023	23:00	07:00	43
03/08/2023	07:00	23:00	61
03/08/2023	23:00	07:00	45
04/08/2023	07:00	23:00	61
04/08/2023	23:00	07:00	51
05/08/2023	07:00	23:00	60
05/08/2023	23:00	07:00	44
06/08/2023	07:00	23:00	61
06/08/2023	23:00	07:00	45
07/08/2023	07:00	23:00	61
07/08/2023	23:00	07:00	42
08/08/2023	07:00	23:00	61
08/08/2023	23:00	07:00	46
09/08/2023	07:00	23:00	60
09/08/2023	23:00	07:00	43
10/08/2023	07:00	23:00	49
10/08/2023	23:00	07:00	46
11/08/2023	07:00	23:00	61
11/08/2023	23:00	07:00	46
12/08/2023	07:00	23:00	60
12/08/2023	23:00	07:00	43
13/08/2023	07:00	23:00	61
13/08/2023	23:00	07:00	43
14/08/2023	07:00	23:00	61
14/08/2023	23:00	07:00	41
15/08/2023	07:00	23:00	60
15/08/2023	23:00	07:00	44
16/08/2023	07:00	23:00	58
16/08/2023	23:00	07:00	41
17/08/2023	07:00	23:00	50
17/08/2023	23:00	07:00	41
18/08/2023	07:00	23:00	53
18/08/2023	23:00	07:00	53
19/08/2023	07:00	23:00	61
19/08/2023	23:00	07:00	43
20/08/2023	07:00	23:00	61
20/08/2023	23:00	07:00	45
21/08/2023	07:00	23:00	60
21/08/2023	23:00	07:00	46
22/08/2023	07:00	23:00	61
22/08/2023	23:00	07:00	47
23/08/2023	07:00	23:00	61
23/08/2023	23:00	07:00	46
24/08/2023	07:00	23:00	60
24/08/2023	23:00	07:00	45
25/08/2023	07:00	23:00	61

