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Our ref. ANCA/DI-IA 01/2024

01 March 2024

Copy to: Mr Ultan McCloskey
Director of Infrastructure, daa

Re: Direction by the Competent Authority through Section 9(10) of the Aircraft Noise (Dublin Airport) Regulation Act 2019 in relation to planning application F23A/0781 to provide information and assessments for the purposes of an assessment of the noise situation at Dublin Airport.

Dear Mr Coakley,

I refer to the above application for planning permission ref. F23A/0781 (the Application) lodged by Coakley O'Neill Town Planning Ltd on behalf of the airport authority for Dublin Airport (daa) on 15 December 2023.

ANCA has concluded that it is of the opinion that the proposed development the subject of F23A/0781 contains a proposal requiring the assessment for the need for a noise related action.

ANCA is now exercising its power to request information under Section 9(10) of the Act of 2019, which provides that ANCA may, for the purposes of an assessment of the noise situation at the airport, direct the applicant to provide ANCA with such information as ANCA may reasonably require.

ANCA expressly reserves its right to issue further directions to provide information to obtain such subsequent and supplementary information as is reasonably necessary to discharge its statutory functions.

For the avoidance of doubt, this Direction is separate and distinct from the planning authority's request for additional information, dated 16 February 2024.

ANCA has formed the opinion that the Application should be supplemented with additional information for the purposes of the aircraft noise assessment. For this purpose, ANCA



hereby directs, pursuant to Section 9(10)(b) of the Act of 2019, daa to submit the information requested within Appendix A (attached) as soon as practicable.

Any information submitted will be made publicly available to the extent required for ANCA to comply with its legal obligations (whether in respect of public participation or otherwise). It is a matter for daa to ensure – and ANCA will assume without further inquiry that daa has ensured - that the responses contain no personal or commercially sensitive data unless so identified.

If through the course of responding to this Direction, the additional information request made by the planning authority dated 16 February 2024, or for any other reason information within the planning application (relevant to the aircraft noise situation at and around Dublin Airport) is changed or updated, ANCA requires daa to immediately supply to ANCA, full information with respect to such change or update, for the purpose of assessing the noise situation at the airport.

For the avoidance of doubt, this requirement extends to any information provided in associated documentation, including noise assessments, environmental documentation, and any update to the EIAR and the Natura Impact Statement.

In assessing the noise situation at the airport ANCA will have regard to the implications for the aircraft noise situation arising from a decision of other relevant statutory authorities or bodies. For this purpose, the information requested in this Direction, must incorporate the measures arising from any such decision made after the date of this Direction.

Yours sincerely



Ethna Felten
Aircraft Noise Competent Authority

Appendix A

Direction to Provide Information ref. ANCA/DI-IA 01/2024

General Note

1.1 Existing Situation - Operational and Noise Data Requests

Table A: Operational and Noise Data Request.

Request Index	Description
A-1	<ol style="list-style-type: none">1. Flight tracks (from ANOMS in CSV format) and associated operational data (in CSV format) i.e., movement by aircraft type, arrival and departure, route and runway be provided for each aircraft movement for the period 01 January 2023 to 31 December 2023.2. Correlated noise measurement data for each aircraft movement as captured by the airport's noise monitoring terminals (NMTs) in terms of SEL and L_{ASmax} for the period 01 January 2023 to 31 December 2023 from all permanent and temporary NMTs. Where any adjustments are required at each NMT to the measured SEL and L_{ASmax} values to address local conditions these should be clearly reported.3. A complete and defined list of all noise mitigation measures in place at Dublin Airport for the operational year 2023. The dates at which any measures changed throughout the year must also be reported alongside any investigations made with respect to the noise performance of the measures. This must include any investigations that have been carried out in relation to the use of the NADP2 departure procedures, and the westerly north runway departure flight paths in place since February 2023 against the metrics set out within the NAO.4. Records of all runway operations since 1 January 2009 to support the determination and variation of modal split. These records must include as a minimum:<ol style="list-style-type: none">a) time and date of arrival / departureb) runway selectionc) aircraft typed) aircraft destinatione) flight routing5. Records of all meteorology conditions that have occurred since 1 January 2009. These records must include:<ol style="list-style-type: none">a) wind direction

	<ul style="list-style-type: none"> b) wind speed c) temperature d) humidity <p>6. Summary statistics with respect to aircraft operations for the period 01 January 2023 to 31 December 2023 on a daily basis indicating:</p> <ul style="list-style-type: none"> a) total annual aircraft movements by hour b) annual movements by aircraft type c) total quota count of aircraft operations by hour d) passenger numbers e) aircraft destinations f) flight routings g) runway use
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Submission of Relevant Reports and Materials

Table B: Submissions of Existing Reports and Materials

Request Index	Description
B-1	All reports and digital contours, grids and exposure statistics prepared under Sections 19 and 21 of the Act of 2019 since 1 st January 2020.
B-2	All significant further information issued to An Bord Pleanála dated 13 September 2023 (ABP Case Reference: PL06F.314485). This must include digital versions of all noise exposure datasets i.e. grids and contours.
B-3	Noise contours and exposure data as reported under Environmental Noise Directive for the 2021 calendar year as part of the Noise Action Plan process.

Requesting Information Relating to Infrastructure Application

General FI Request in Relation to Noise Exposure Data

Table C sets out general overarching requests that the Applicant is required to observe when providing or returning any new or update noise exposure information to ANCA.

Table C: General Overarching Requests

Request Index	Description
C-1	All noise exposure data provided within the EIAR and ANCA Reporting Template should be submitted with outcomes based on a 2019 population dataset and additionally based on a forecast population based on the assessment year in question.
C-2	Where new scenarios and sensitivity tests are requested in Table D, all noise exposure data must be provided for all metrics set out within the ANCA Reporting Template. Where these new scenarios lead to different forecasts, these should be fully described.

C-3	In the context of sustainable development, as described within the Aircraft Noise Regulation, the Applicant is invited to justify its position as to why no further noise mitigation is proposed with the Application.
C-4	Where operational forecasts or assumptions have been made, such as those relating to departure route use and runway usage, records of any relevant technical consultation or cooperation with AirNav Ireland, IAA, the airport slot coordinators, or airlines, should be provided to support these forecasts or assumptions.

Alternative Scenarios and Sensitivity Tests

The following alternative scenarios and sensitivity tests are requested in **Table D**.

Table D: Additional Scenarios Requested

Request Index	Description
D-1	<p>2023 Existing Situation: The noise situation for the calendar year of 2023 must be provided.</p> <p>Under the Aircraft Noise Regulation and the Act of 2019 the noise situation at the airport is to be assessed in line with Directive 2002/49/EC, which requires the noise mapping to present the situation over the preceding calendar year.</p> <p>The existing situation should be assessed from 1st January to 31st December 2023, inclusive. Revised noise modelling, noise maps, exposure data, health effects and impact assessment are required which correctly reflect the situation in the preceding calendar year.</p> <p>The 2023 existing situation must be assessed based on both the actual i.e. 2023 and additionally the 10-year modal split.</p> <p>Calculated noise exposure levels are requested at each of the Airport's NMTs along with modelled SEL and L_{ASmax} values for the top five dominant aircraft types.</p>
D-2	<p>Interim Forecasts (2024 – 2026): Noise exposure forecasts for 2024, 2025 and 2026 are requested based on a 10-year modal split.</p>
D-3	<p>Alternative Night-Time Situation - (Condition 5 – ABP ref. PL 06F.217429 not in place) An alternative night-time situation is requested for all assessment years and for 'with' and 'without' Proposed Development scenarios in the absence of the application of a night-time limit of 65 flights / night and night-time operation become unconstrained with the exception of Condition 3(d) of the North Runway Planning Permission.</p>
D-4	<p>Slower Fleet Transition All modelling presented in the EIAR and provided in the ANCA Reporting template is based on a single fleet forecast in each assessment year. Subject to Requests E-33 to</p>

	E-36 the Applicant is requested to develop and assess scenarios which consider a slower rate of fleet modernisation than that assumed within the Application.
D-5	Alternative Passenger Throughput Notwithstanding Requests D-3 and D-4, the Applicant shall provide forecasts assuming a maximum passenger throughput of 35mppa in future assessment years.

Information Requests following Review of the Application

Information requests arising from review of the Application are provided in Table E.

Table E Requests Arising from Review of the Application

Request Index	Description
E-1	<p>Worst Case Assessment Year Notwithstanding Requests D-2 and D-4, the determination of the worst-case assessment years presented in the EIAR, Chapter 9: 'Aircraft Noise & Vibration' need to be fully justified. It is requested that this is demonstrated through a quota count for day, evening and night-time periods for the years 2027 to 2046 inclusively.</p> <p>Worst case years from 2027 to 2046 should be identified with respect to overall noise exposure and the potential impact of the Proposed Development.</p> <p>A full description of how the quota counts have been determined must be provided.</p>
E-2	<p>Land Use Planning The information provided does not address the compatibility or otherwise of the Proposed Development with the provisions described in Section 8.5.7(i) of the Fingal Development Plan 2023-2029.</p> <p>For the worst-case assessment year for noise exposure from 2027, the following information is requested:</p> <p>Segregated Mode Contours for the Current situation and with Proposed Development situations</p> <ul style="list-style-type: none"> - Westerly Operations, with arrivals on the North Runway and departures on the South Runway - Westerly Operations, with arrivals on the South Runway and departures on the North Runway - Easterly Operations, with arrivals on the North Runway and Departures on the South Runway - Easterly Operations, with arrivals on the South Runway and Departures on the North Runway. - Westerly and Easterly mixed mode contours assuming equal use of each runway

	Data should be provided for the $L_{Aeq,16hr}$ and L_{night} metrics as digital contours and grids.
E-3	<p>Methodology EIAR Appendix 9-2: 'Air Noise Modelling Methodology' states at Paragraph 9-2.2.1 "Nineteen scenarios, some of which allow for the North Runway Relevant Action (NRRRA), have been included in the air noise assessment".</p> <p>A11524_03_CA150_2.0 ANCA Reporting Template 40mppa Nov 2023.xlsx contains details of 13 assessment scenarios, the six scenarios used for the NAO comparison have not been reported. All nineteen scenarios must be provided in the ANCA Reporting Template.</p>
E-4	<p>Assessment EIAR, Chapter 9: 'Aircraft Noise & Vibration' describes assumptions relating to wake vortex. Evidence is required to demonstrate that wake vortex impacts have been considered and have not significantly changed since the North Runway decision in 2007.</p>
E-5	<p>Assessment All noise exposure values presented in EIAR, Chapter 9: 'Aircraft Noise & Vibration' and Appendix 9.2 and Appendix 9.4 of the EIAR must be presented to 1 decimal place.</p>
E-6	<p>Assessment Confirmation is required whether the noise exposure change assessments presented in EIAR, Chapter 9: 'Aircraft Noise & Vibration', are based on levels of exposure rounded to the nearest integer or not.</p>
E-7	<p>Air Noise Modelling Methodology EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Paragraph 9-2.3.7 states that "For most aircraft, substitutions are proposed by the AEDT software or the ANP database".</p> <p>Since the Aircraft Noise Regulation came into effect, EASA has the legal mandate to collect and verify ANP data and manage and host ANP legacy data. Legacy ANP data is no longer available from EUROCONTROL at the referenced website.</p> <p>Confirmation is required that up to data ANP data, legacy data, and substitutions were sourced from EASA, and not from EUROCONTROL as indicated</p>
E-8	<p>Air Noise Modelling Methodology EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Paragraph 9-2.3.7 states that "For most aircraft, substitutions are proposed by the AEDT software or the ANP database".</p> <p>The Appendix does not allow ANCA to verify the details of the substitutions and assignments used in AEDT.</p> <p>A detailed list of substitutions and assignments is required.</p>
E-9	Air Noise Modelling Methodology

	<p>EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Paragraph 9-2.3.56, and Table 9-2-33, and Table 9-2-34, suggests that the Airbus A321neo has been modelled as A320-271N.</p> <p>ANP data for the A321-271N was published by EASA in May 2021. Detail must be provided as to why the A321neo was modelled using the A320-271N when an A321-271N type was available in 2021.</p> <p>All modelling should be based on published ANP data rather than substitutions where data is available.</p>
E-10	<p>Runway Usage Assumptions</p> <p>EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Paragraph 9-2.3.22 states that <i>"Consideration has been given to likely exceptions from the typical runway usage"</i>.</p> <p>Evidence should be provided to support the assumptions adopted for the exceptions set out in the paragraph.</p>
E-11	<p>Runway Usage Assumptions</p> <p>EIAR, Appendix 9.2: 'Air Noise Modelling Methodology' describes criteria for mixed mode operations are presented in Paragraph 9-2.3.16.</p> <p>Table 9-2-21 to 9-2-31 should be expanded to present the corresponding movements by arrival or departure for each runway.</p> <p>A description of how runway usage may change due to the Proposed Development is also required. This should be provided in the context of the flexibility afforded through Conditions 3(a)-(c) of the North Runway Planning Permission (Option 7b).</p>
E-12	<p>Departure Route Usage</p> <p>Illustrations of the centrelines of the modelled departure routes must be provided and labelled against the Route Groups set out in EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Table 9-2-32.</p> <p>The number of departures by route, day, evening and night period for each scenario should also be provided.</p>
E-13	<p>Air Noise Model Validation</p> <p>EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Paragraph 9-2.3.59 refers to the use of a mobile monitoring terminal in support of air noise modelling validation.</p> <p>The location of the mobile monitoring terminal referenced in 9-2.3.59 should be provided.</p>
E-14	<p>Air Noise Model Validation</p> <p>Further to Request E-13, further description of how data collected at the NMTs to adjust the AEDT default assumptions in EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Table 9-2-34 must be provided. It is unclear whether the corrections are based on single or multiple NMTs.</p> <p>Justification should be provided as to why the airport's other NMTs were not included in the AEDT validation exercise.</p>
E-15	<p>Air Noise Model Validation</p>

	<p>EIAR, Appendix 9.2: 'Air Noise Modelling Methodology', Paragraphs 9-2.3.59 – 9-2.3.67 describe the adjustments made for each of the AEDT types for the SEL metrics.</p> <p>Adjustments used in the preparation of L_{ASmax} based outputs provided with Application should also be provided responding to Request E-14.</p>
E-16	<p>Noise Quota</p> <p>The assumptions adopted with respect to aircraft types, their respective quota counts and use of the noise quota for the North Runway Relevant Action scenarios must be demonstrated. This includes G3 aircraft in the 2046 scenarios.</p>
E-17	<p>Cargo Operations</p> <p>Details of forecast cargo operations must be provided separately to the overall ATM forecasts provided within the ANCA reporting template. The timing and type of aircraft comprising the forecast cargo operations are to be clearly described.</p>
E-18	<p>Assessment</p> <p>Values for the N65 and N60 metrics must be provided for each of the AR receivers (AR01 – 18) for all scenarios described in EIAR, Chapter 9: 'Aircraft Noise & Vibration'.</p>
E-19	<p>Assessment</p> <p>Digital noise contours and grids are to be provided for the N65 and N60 metrics. These must be provided for the current situation (Request D-1) and as average westerly and easterly days with and without the Proposed Development.</p>
E-20	<p>Assessment</p> <p>Annual average easterly and westerly days are requested for the L_{day}, $L_{evening}$, L_{night} and $L_{Aeq,16hr}$ metrics.</p>
E-21	<p>Assessment</p> <p>Subject to the identification of the worst-case assessment year, the effect of the Proposed Development on objective awakenings is requested.</p>
E-22	<p>Non-residential receptors</p> <p>All non-residential noise-sensitive receptors i.e. schools, hospitals, nursing homes exposed to at least 45 dB L_{den} across the scenarios and considered to be overflowed by the airport's arrivals and departures are to be identified and noise exposure data demonstrating changes due to the Proposed Development in the worst case assessment year provided for both 100% westerly and easterly conditions for the L_{day}, $L_{evening}$, $L_{Aeq,16hr}$ metrics, and for schools, the $L_{Aeq,T}$ representative of school hours. L_{ASmax} and N65 data is also required.</p>
E-23	<p>Assessment</p> <p>For sensitive receptors within 500m of the airfield boundary forecast levels of air and ground noise for each scenario are required to allow a full evaluation of the combined noise impacts.</p>
<p>Requests Relating to Fleet Modernisation Report (Part 4, Appendix 9.7)</p>	
E-24	<p>ATM Forecasts</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' the Applicant should explain any evolution, changes or reuse of the information provided within the</p>

	Report against that relied on from the Relevant Action application and as submitted to An Bord Pleanála as part of further significant information.
E-25	ATM Forecasts Busy hour demand rates should be provided for the 32mppa and 40mppa scenarios split by arrivals and departures. These rates should be provided for all scenarios described within EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic'.
E-26	ATM Forecasts In addition to scenarios presented in EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic', an unconstrained demand forecast is required. The assumptions supporting this forecast should be provided alongside a breakdown of the passenger forecast by segment (i.e. domestic, international short haul, long haul, and/or by carrier) and by day, evening and night-time periods.
E-27	ATM Forecasts In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic', further description of Scenarios B and D are required taking into account the actual number of passenger movements in 2023. The Applicant is requested to demonstrate whether the ATM forecasts for all 32mppa scenarios have been based on 2023 operations as were scheduled or as constrained by other consents.
E-28	ATM Forecasts The Applicant is requested to provide a narrative on the validity of the forecasts for the future 32mppa forecasts based on the operations and passenger throughput that occurred in 2023.
E-29	ATM Forecasts EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic', Scenario C indicates that up to the point that the annual cap is hit, the forecast is aligned to the unconstrained demand. Confirmation is required that the noise quota in the with NRRRA would no longer be limiting movements in the night-time period. To confirm this observation, the aircraft type assumptions by carrier and by year are required. This information is also required in relation to Scenario B.
E-30	ATM Forecasts EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' states that "The busy day traffic was then converted in annual equivalents in order to assess the overall impact of constraints on airport throughput." The methodology for determining the annual passenger forecasts from the busy day schedules is unclear. For example, are flights removed from the busy day night period also removed from the night period on less busy days of the year when they could potentially have been accommodated. Further description of the methodology is required.
E-31	ATM Forecasts EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' states that night cargo flights grew significantly during the pandemic. However, the report only provides outturn data for 2019. The forecast for 2025 is only marginally higher than the 2019 outturn figure.

	<p>Outturn figures for the 2023 night period cargo ATMs are required to validate the stated increase in cargo ATMs.</p>
E-32	<p>ATM Forecasts</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' the fleet renewal information provided is relatively high level. Justification is required as to whether 2019 remains an appropriate reference point for the updated fleet forecasts and whether these would be different if based on 2023 schedules and fleet.</p> <p>Provide details of fleet breakdown based on 2023, rather than that based on 2019, a year which was followed by a period of flux related to the pandemic. Justify whether the fleet forecasts remain valid based on a 2023 reference point.</p>
E-33	<p>Fleet Renewal</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' the mix of G1, G2 and G3 aircraft should be presented for each of the scenarios, <u>and</u> by ICAO noise chapter. This should be provided in support of Request D-4. The response should clearly set out which aircraft are categorised as G1, G2 and G3 aircraft.</p>
E-34	<p>Fleet Renewal</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic', clarification is required as to whether all the forecast scenarios presented in the Report and adopted for assessment purposes for the scenarios adopted within the EIAR utilise the same fleet renewal assumptions or not.</p>
E-35	<p>Fleet Renewal</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' the benefits associated with fleet renewal must be described with respect to anticipated aircraft noise event levels (L_{ASmax} and SEL).</p> <p>As a minimum, modelled values for each aircraft type should be provided at all AR receptors and at the NMT locations used for noise model validation purposes.</p>
E-36	<p>Fleet Renewal</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' the Report recognises that <i>"the pace of Ryanair's DUB fleet renewal is largely a strategic choice for the airline."</i> and as such fleet renewal is an area of relative uncertainty.</p> <p>Further description of the uncertainties that exist within the forecast fleets is required. A sensitivity test is necessary to determine whether the effects of the Proposed Development may be different should fleet renewal be slower than the rate assumed.</p>
E-37	<p>Passengers Per ATM</p> <p>In EIAR, Appendix 9.7: 'Quantification of Impacts on Future Traffic' the forecasts from 2027 to 2040 appear to assume that there is no change in the average annual pax per ATM. The justification and evidence for this assumption is required.</p>
E-38	<p>Environmental Charges</p> <p>Evidence is requested to demonstrate what effect the Applicant's new environmental charging regime has had on the fleet and ATM forecasts. This should include details of the environmental scheme and conditions of use.</p>

E-39	<p>NAO Assessment</p> <p>The Ricondo Memorandum 'daa_DUB_IA_598 NAO assessment_11.12_23' makes reference to documents prepared by Bickerdike Allen Partners and Ricondo & Associates. The applicant must provide all original modelling reports for any modelling work carried out by Bickerdike Allen Partners and Ricondo & Associates.</p>
E-40	<p>NAO Assessment</p> <p>The Ricondo Memorandum 'daa_DUB_IA_598 NAO assessment_11.12_23' presents assessments against the Noise Abatement Objective for Dublin Airport. It is requested that assessments provided in this memorandum are presented using forecast populations for the assessment years and scenarios considered.</p>
Other Environmental Requests	
E-41	<p>Bird Surveys</p> <p>The Applicant is requested to justify why bird survey data at the European sites collected in 2016 - 2018 and informing the Natura Impact Statement (page 39) is considered to be robust in informing the Appropriate Assessment conclusions made with regard disturbance to birds caused by additional overflying of these sites.</p>
E-42	<p>Natura Impact Statement</p> <p>The Applicant is requested to confirm whether the heading of the fifth column of Tables 6 and 7 of the Natura Impact Statement is correct or whether in fact they should refer to the 'with proposed development' assessment case.</p>
E-43	<p>Climate Change</p> <p>EIAR Chapter 13, Paragraph 13.3.28 indicates inconsistency with the air quality chapter with respect to the inclusion of Auxiliary Power Unit (APU) emissions. The Applicant is requested to clarify whether these emissions have been accounted for in its assessment of Climate Change.</p>
E-44	<p>Climate Change</p> <p>EIAR Chapter 13 states that emissions from aviation have been calculated using EMEP/EAA Emissions Calculator. No flight schedule or fleet mix and the corresponding emissions is provided in Appendix 13.1. This is requested.</p>
E-45	<p>Climate Change</p> <p>EIAR Chapter 13 makes references to a 2021 Mott MacDonald report 'Dublin Airport Operating Restrictions: Quantification of Impacts on Future Growth May 2021 Update – 2022-2025 Period'. This report is not included in the Application and the applicant is required to submit this report. The Applicant is also requested to confirm that the assessment of climate change is consistent with the forecasts provided for the future assessment years.</p>

E-46	Climate Change Further clarity is requested with respect to the EIAR Chapter 13, Table 13-1 and the ATM projections provided for the with and without Proposed Development scenarios presented.
E-47	Consistency The Applicant is requested to demonstrate that the approach to modelling emissions sources within EIAR Chapter 7 'Air Quality' and EIAR Chapter 'Climate Change' is consistent with those adopted in Chapter 9 'Noise'.

END OF APPENDIX A