S.37

File With

SECTION 131 FORM

Appeal No

ABP— 314485-24

Defer Re O/H

Having considered the contents of the submission dated/received 23/12/24

from Aer Lingus Limited I recommend that section 131 of the Planning and Development Act, 2000 be/not be invoked at this stage for the following reason(s):

Section 131 not to be invoked at this stage. ☑

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

Signed _____ Date 24/12/24

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

James

VFL, 24/12

An Bord Pleanála

Planning Appeal Online Observation

Online Reference
NPA-OBS-004153

Online Observation Details

Contact Name
Anne McElligott (Hughes Planning)

Lodgement Date
23/12/2024 14:06:11

Case Number / Description
314485

Payment Details

Payment Method
Online Payment

Cardholder Name
Catherine Hughes

Payment Amount
€50.00

Processing Section

S.131 Consideration Required

☑ Yes — See attached 131 Form

☐ N/A — Invalid

Signed
Cathy Carelton
EO

Date
24/12/24

Fee Refund Requisition

Please Arrange a Refund of Fee of

€ 50

Lodgement No

LDG—076977-24

Reason for Refund

Overpaid - already a party

Documents Returned to Observer

☐ Yes ☑ No

Request Emailed to Senior Executive Officer for Approval

☑ Yes ☐ No

Signed

Cathy Cameron

EO

Date

24/12/24

Finance Section

Payment Reference

ch_3QZCGtB1CW0EN5FC1eVgXMBT

Checked Against Fee Income Online

EO/AA (Accounts Section)

Amount

€

Refund Date

Authorised By (1)

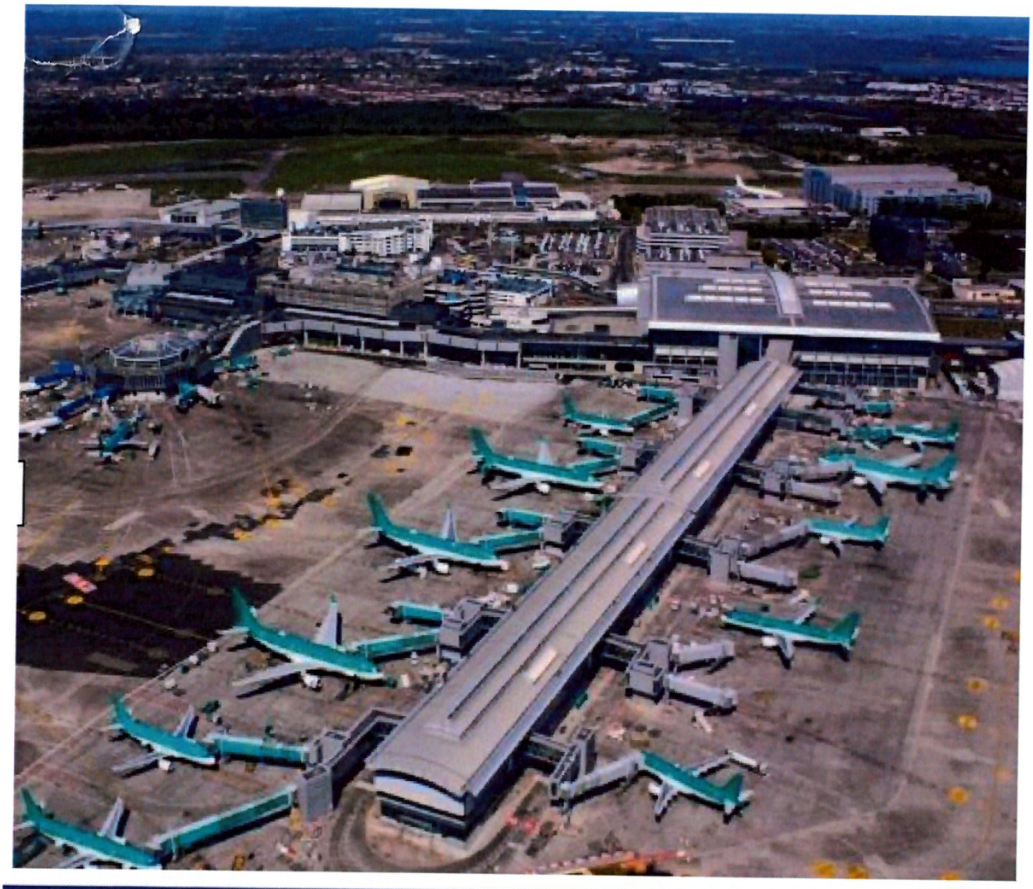
SEO (Finance)

Authorised By (2)

Chief Officer/Director of Corporate Affairs/SAO/Board Member

Date

Date



HUGHES PLANNING
& DEVELOPMENT CONSULTANTS

Aer Lingus

PLANNING OBSERVATION

Night-time use of the Runway System

Dublin Airport, Co. Dublin

An Bord Pleanála Ref. ABP-314485-22

December 2024

SUBMITTED ON BEHALF OF:
Aer Lingus Limited, Hangar 6,
Dublin Airport, Dublin, Ireland.

85 Merrion Square, Dublin 2, D02 FX60
+353 (0)1 539 0710
info@hpdc.ie
www.hpdc.ie

Contents

1.0 Introduction

Hughes Planning and Development Consultants, 85 Merrion Square, Dublin 2 have been appointed by our clients, Aer Lingus Limited ("Aer Lingus"), Hangar 6, Dublin Airport, Dublin, Ireland.

Aer Lingus has also engaged Think Research Limited to carry out a Dublin Airport Night Time Noise Review in light of the conditions imposed in the Draft Decision. The full report together with an Executive Summary is attached as Appendix 2.

Aer Lingus is an Irish based airline which was incorporated in 1936 and operates a short-haul network between Ireland and destinations in the UK and Europe and a long-haul network between Ireland and destinations in North America. Since 2015, Aer Lingus has been a member of the IAG Airlines Group which comprises British Airways, Iberia and Vueling.

Aer Lingus' principal base is at Dublin Airport which serves as a hub connecting its long-haul network and its extensive short-haul network. Aer Lingus operates to 92 destinations in Europe and North America. Aer Lingus is a leading carrier across the North Atlantic, ranking fourth among airlines in Europe in terms of the number of US transatlantic destinations it offers. On 12 of its 21 routes from Ireland, Aer Lingus is the only direct operator and almost all of Aer Lingus's transatlantic routes are year-round. Thanks largely to Aer Lingus' investment in transatlantic expansion, Dublin (DUB) Airport currently ranks sixth in Europe in terms of airline seats to North America. As Aer Lingus is exclusively focussed on North America and Europe, the Dublin hub is much more reliant on early-morning operations than other major European hubs. North Atlantic arrivals and corresponding shorthaul feeder routes naturally fall into early morning periods due to the constraints of geography and time zones.

Aer Lingus employs a total of almost 5,300 people directly, of whom almost 5,000 are based at Dublin Airport. Aer Lingus (along with its franchise partner, Emerald Airlines) carried approximately 12m passengers in 2023 through Dublin Airport.

Aer Lingus is supportive of the proposed 'relevant action' within the meaning of section 34C of the Planning and Development Act 2000, as amended, at Dublin Airport which relates to the night-time use of the runway system. As an island nation, air transport connectivity to other countries is of vital importance both to Ireland's economic and employment prospects and to society in general. However, if implemented, the conditions that have been attached to the Board's Draft Decision (Ref. ABP-314485-22) (the "Draft Decision") would have very serious consequences **on the operational efficiency of Aer Lingus'** existing aircraft fleet and the wider facilities of Dublin Airport as a whole.

It is within that context that Aer Lingus presents the information contained within this report to An Bord Pleanála regarding the Draft Decision.

This is a third-party observation regarding An Bord Pleanála's Notice of a Draft Decision to Grant Permission under **Ref. ABP-314485-22**. The application was for 'taking of relevant action', within the meaning of section 34C of the Planning and Development Act 2000, as amended. This type of application is used when the application is being made by the person in whose favour a relevant permission operates. The proposed relevant action, in this case, relates to the night-time use of the runway system at Dublin Airport.

Essentially, the application is seeking an (i) **amendment** to the operating restriction set out in Condition 3(d) and a (ii) **replacement** of the operating restrictions in Condition 5 of the North Runway planning permission (Fingal County Council register reference number F04A/1755; An Bord Pleanála reference PL06F.217429 as amended by Fingal County Council register reference number F19A/0023, An Bord Pleanála reference ABP-305289-19), as well as (iii) **proposing** new noise mitigation measures at Dublin Airport, Co. Dublin.

The application was formally submitted on 18th December 2020 and the Development Description was as follows:

> *A proposed development comprising the taking of a 'relevant action' only within the meaning of Section 34C of the Planning and Development Act 2000, as amended, at Dublin Airport, Co. Dublin, in the townlands of Collinstown, Toberbunny, Commons, Cloghran, Corballis, Coultry,*

Portmellick, Harristown, Shanganhill, Sandyhill, Huntstown, Pickardstown, Dunbro, Millhead, Kingstown, Barberstown, Forrest Great, Forrest Little and Rock on a site of c. 580 ha.

The proposed relevant action relates to the night-time use of the runway system at Dublin Airport. It involves the amendment of the operating restriction set out in condition no. 3(d) and

the replacement of the operating restriction in condition no. 5 of the North Runway Planning Permission (Fingal County Council Reg. Ref. No. F04A/1755; ABP Ref. No. PL06F.217429 as amended by Fingal County Council F19A/0023, ABP Ref. No. ABP-305289-19), as well as proposing new noise mitigation measures. Conditions no. 3(d) and 5 have not yet come into effect or operation, as the construction of the North Runway on foot of the North Runway Planning Permission is ongoing. The proposed relevant action, if permitted, would be to remove the numerical cap on the number of flights permitted between the hours of 11pm and 7am daily that is due to come into effect in accordance with the North Runway Planning Permission and to replace it with an annual night-time noise quota between the hours of 11.30pm and 6am and also to allow flights to take off from and/or land on the North Runway (Runway 10L 28R) for an additional 2 hours i.e. 2300 hrs to 2400hrs and 0600 hrs to 0700 hrs. Overall, this would allow for an increase in the number of flights taking off and/or landing at Dublin Airport between 2300 hrs and 0700 hrs over and above the number stipulated in condition no. 5 of the North Runway Planning Permission, in accordance with the annual night time noise quota.

The relevant action pursuant to Section 34C (1) (a) is: To amend condition no. 3(d) of the North Runway Planning Permission (Fingal County Council Reg. Ref. No. F04A/1755; ABP Ref. No.: PL06F.217429 as amended by Fingal County Council F19A/0023, ABP Ref. No. ABP-305289-19). Condition 3(d) and the exceptions at the end of Condition 3 state the following: '3(d). Runway 10L-28R shall not be used for take-off or landing between 2300 hours and 0700 hours except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports.' Permission is being sought to amend the above condition so that it reads: 'Runway 10L-28R shall not be used for take-off or landing between 0000 hours and 0559 hours except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports or where Runway 10L-28R length is required for a specific aircraft type.' The net effect of the proposed change, if permitted, would change the normal operating hours of the North Runway from the 0700hrs to 2300 hrs to 0600 hrs to 0000 hrs. The relevant action also is: To replace condition no. 5 of the North Runway Planning Permission (Fingal County Council Reg. Ref. No. F04A/1755; ABP Ref. No.: PL06F.217429 as amended by Fingal County Council F19A/0023, ABP Ref. No. ABP-305289-19) which provides as follows: 5. On completion of construction of the runway hereby permitted, the average number of night time aircraft movements at the airport shall not exceed 65/night (between 2300 hours and 0700 hours) when measured over the 92 day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March, 2007. Reason: To control the frequency of night flights at the airport so as to protect residential amenity having regard to the information submitted concerning future night time use of the existing parallel runway'. With the following: A noise quota system is proposed for night time noise at the airport. The airport shall be subject to an annual noise quota of 7990 between the hours of 2330hrs and 0600hrs. In addition to the proposed night time noise quota, the relevant action also proposes the following noise mitigation measures: - A noise insulation grant scheme for eligible dwellings within specific night noise contours; - A detailed Noise Monitoring Framework to monitor the noise performance with results to be reported annually to the Aircraft Noise Competent Authority (ANCA), in compliance with the Aircraft Noise (Dublin Airport) Regulation Act 2019. The proposed relevant action does not seek any amendment of conditions of the North Runway Planning Permission governing the general operation of the runway system (i.e., conditions which are not specific to nighttime use, namely conditions no. 3 (a), 3(b), 3(c) and 4 of the North Runway Planning Permission) or any amendment of permitted annual passenger capacity of the Terminals at Dublin Airport. Condition no. 3 of the Terminal 2 Planning Permission (Fingal County Council Reg. Ref. No. F04A/1755; ABP Ref. No. PL06F.220670) and condition no. 2 of the Terminal 1 Extension Planning Permission (Fingal County Council Reg. Ref. No. F06A/1843; ABP Ref. No. PL06F.223469) provide that the combined capacity of Terminal 1 and Terminal 2 together shall not exceed 32 million passengers per annum. The planning application will be subject to an assessment by the Aircraft Noise Competent Authority in accordance with the Aircraft Noise (Dublin Airport) Regulations Act 2019 and Regulation (EU) No 598/2014. The planning application is accompanied by information provided for the purposes of such assessment. An Environmental Impact Assessment Report will be submitted

with the planning application. The planning application and Environmental Impact Assessment Report may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy, at the offices of the Planning Authority during its public opening hours of 9.30 - 16.30 (Monday – Friday) at Fingal County Council, Fingal County Hall, Main Street, Swords, Fingal, Co. Dublin.

Following the statutory 8-week period, post lodgement, a request for Further Information was made by Fingal County Council on 19th February 2021, which consisted of 3 no. items. Following the assessment of the Further Information Response, under **Reg. Ref. F20A/0668**, a Notification of Decision to Grant Permission was issued by the Planning Authority on 8th August 2022.

On 24th August 2022, numerous parties submitted Appeals to An Bord Pleanála against the decision of Fingal County Council. Following two requests for further information from the Board, dated 26th May 2023 and 13th February 2024 respectively, the Board issued a Notice of a Draft Decision on 11th September 2024, under Ref. **ABP-314485-22**.

From the outset, we wish to emphasise that Aer Lingus is fully supportive of the proposed relevant action. However, **Aer Lingus has very significant concerns regarding** some of the conditions which have been attached to the Draft Decision which, if implemented, would have a devastating impact on its operations and on operations generally at Dublin Airport. Therefore, for the reasons outlined in this observation, Aer Lingus strenuously objects to the attachment of these restrictive conditions which will not only adversely impact on the operations of Aer Lingus and other airlines operating at Dublin Airport but will also have significant adverse effects on the wider economy of Ireland.

On the basis of the foregoing, this third-party observation respectfully requests that the conditions attached to the decision of An Bord Pleanála's granted permission for the relevant action to the night-time use of the runway system at Dublin Airport, be re-examined and reassessed. We also highlight how the Board's decision has not followed proper legal procedures. Therefore, Aer Lingus is seeking for the Board to consider the contents of this observation report, while reevaluating the contents of planning application Ref. **ABP-314485-22.**

The rationale for reassessing the application, will be discussed in detail in the following sections of this submission. This observation is accompanied by the statutory fee of **€50** and a copy of the Notice of a Draft Decision, issued by An Bord Pleanála dated 11th September 2024, is enclosed in Appendix 1, for ease of reference.

2.0 Proposed Development

The proposed development, as submitted by daa plc at application stage under Reg. Ref. F20A/0668 to Fingal County Council requested to:

1. Amend Condition 3(d) of ABP Ref No. PL06F.217429 (F04A/1755)

   (i) The Applicant sought to increase the number of flights between 11pm and 7am above the restrictions contained within Condition 5. The normal hours of operation of the North Runway would change overall from 7am - 11pm to 6am - 12 midnight.

   (ii) To allow flights to take off and land on the North Runway for an additional 2 hours (11am - 12am and 6am - 7am) – known as 'shoulder hours'.

2. Replace Condition 5 of ABP Ref No. PL06F.217429 (F04A/1755)

   (i) To change the average number of night-time aircraft movements at the airport from not exceeding 65 per night (between 11pm - 7am) when measured over the 92-day modelling period (as submitted in the RFI) to a noise quota system with an annual limit of 16,260 units between the hours of 11pm – 7am.

3. Propose Mitigation Measures

   (i) Noise insulation grant scheme for eligible dwellings and a Noise Monitoring Framework to be reported to ANCA.

Both Fingal County Council and ANCA (Aircraft Noise Competent Authority), in their positions as deciding bodies, issued decisions to grant permission subject to compliance with a number of conditions.

The granted permission was appealed to An Bord Pleanála and the Board issued a Notice of a Draft Decision under Ref. ABP-314485-22. A number of conditions attached to the original grant (F20A/0668) have been amended and expanded upon, as part of the Board's draft decision. These are discussed in the following section.

3.0 Grounds of Observation

3.1 Draft Decision ABP-314485-22

There are 6 conditions attached to the Draft Decision, three of which (i.e. numbers 3(d) and (e), 4 and 5) are the subject of this observation.

This observation requests that:

Part (e) of Condition 3 be removed.

And,

Condition 5 be removed.

In summary, the existing, proposed and granted scenarios are depicted in the following table. The colours indicate where the Board has granted the Applicant's request (shaded green) and where the Board has materially differentiated from the Applicant's request (shaded red), incongruent with previous decisions made by Fingal County Council and ANCA.

	Existing Scenario	**Originally Proposed as part of Reg. Ref. F20A/0668**	**Draft Decision ABP-31485-22**
Draft Cond 3	Flights can both take off and land from the North Runway (7am – 11pm).	Allow flights both take off and land from the North Runway for an additional 2 hours (6am – 12 midnight).	Allows flights operate from the North Runway (6am – 12 midnight) but only departures are allowed between 6am – 8am.
Draft Cond 4	Numerical cap on the number of flights at the airport (to not exceed 65/night (11pm – 7am) when measured over the 92-day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March 2007.	Noise quota system with an annual limit of 16,260 units, between 11pm – 7am.	Noise Quota system with an annual limit of 16,260 units between 11pm – 7am
Draft Cond 5	Numerical cap on the number of flights at the airport (to not exceed 65/night (11pm – 7am) when measured over the 92-day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March 2007.	No restriction on nighttime aircraft movements, outside of the NQS, was proposed.	Annual aircraft movement limit of 13,000 between the nighttime hours of 11pm – 6.59am, with aircraft movements split between the Winter 3,900 and Summer 9,100 to allow for extra flights during the 95-day summer busy period.

3.1.1 Condition 3 of the Draft Decision

ABP Ref No. PL06F.217429 (F04A/1755) was decided on 29th August 2007 and involved the demolition of an existing short north runway (10R/28L) and construction of new runway (10L/28R) located to the north and parallel to the existing main runway.

There were a number of operational scenarios put forward by the Applicant, as part of Ref. PL06F.217429 to demonstrate how the new runway would operate, alongside the existing runway. Some of these scenarios or modes included:

Option 1b – Mixed Mode (equal use of each runway for take-off and landing)
Scenario 2b – Segregated Mode (new runway 28R used for majority of take offs)
Scenario 3b – Segregated Mode (existing runway 28L used for majority of take offs)
Scenario 4b – Mixed Mode (peak only on new runway)
Scenario 5b – Mixed Mode (peak only on existing runway)

While originally seeking to operate the runway system in mixed mode, the Applicant, by way of further information, put forward a further, preferred option - Option 7b. In this scenario, when winds are westerly Runway 28L will be preferred for arriving aircraft. Either Runway 28L or 28R will be used for departing aircraft as determined by Air Traffic Control (ATC). When winds are easterly, either Runway 10L or 10R as determined by ATC will be preferred for arriving aircraft. Runway 10R will be preferred for departing aircraft.

Noise modelling for each of the operational modes was carried out. The modelling for the preferred mode of operation – Option 7b, was provided as part of a further information submission. This approach aimed to limit the numbers of people affected by operations on the proposed northern parallel runway. The 57dB contour would extend over the southern part of Portmarnock and St. Margaret's and the area to the north around Kilreesk would be within the 69dB contour. The definition of nighttime for these purposes was confirmed as 11pm – 7am.

The said Option 7b has the following parameters:

1. The parallel runways (existing 10R-28L and proposed 10L-28R) would be used in preference to the cross runway 16-34.
2. When winds are from a westerly direction runway 28L will be preferred for arriving aircraft. Either runway 28L or 28R will be used for departing aircraft as determined by Air Traffic Control (ATC).
3. When winds are from an easterly direction, either runway 10L or 10R as determined by ATC will be preferred for arriving aircraft. Runway 10R will be preferred for departing aircraft.
4. No operations at night with very limited exceptions on runway 10L/28R.

Essentially, Option 7b is a single mode of operation i.e. westerly single mode is for departures and arrivals to the west and vice versa for easterly mode. Dublin Airport operates approximately 75% westerly single mode and 25% easterly single mode due to the prevailing west to southwest winds. This reflects the safety defined preference for aircraft to take off and land into the wind.

The Applicant did not propose any amendments to the preferential use of the runway as part of the current application; Ref. ABP-314485-22 (F20A/0668). However, the Board has introduced an additional, unrequested restriction, which appears as part (e) of draft Condition No. 3.

Condition 3 of the Draft Decision states as follows:

3. *Revoke Part (d) of condition number 3 of An Bord Pleanála permission PL06F.217429 (Planning Authority register reference F04A/1755):*
   'Runway 10L-28R shall not be used for take-off or landing between 2300 hours and 0700 hours,"

   And replace with:

(d) Runway 10L-28R shall not be used for take-off or landing between 0000 and 0559 hours (inclusive, local time) except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports or where Runway 10L-28R length is required for a specific aircraft type.

Also, include an additional Part (e) in condition number 3 of permission PL06F.217429 (Planning Authority register reference F04A/1755):

(e) Runway 10L-28R shall be used for departure only between the hours of 06:00 to 08:00.

Reason: In the interest of clarity and to ensure the operation of the runways in accordance with the mitigation measures set out in the Environmental Impact Assessment Report Supplement (September 2023) in the interest of the protection of the amenities of the surrounding area.

While the drafting of the proposed Condition (e) is somewhat ambiguous, we are interpreting this restriction to mean that Runway 10L-28R can only be used for departures between the hours of 06:00 to 08:00 but, subject to Condition (d), can be used for both departures and landings outside of these hours. In westerly winds, it would be normal practice for Runway 10L-28R to be used for departures only during these hours. However, in limiting the North runway to departures only between the hours of 6am and 8am, this will have the effect of imposing single runway operations at Dublin Airport during easterly winds during which arrivals would normally be on the northern runway from the Runway 10L and departures would normally be from the southern runway on Runway 10R.

The imposition of such a restriction, which conflicts with Option 7b described above, would have a negative impact on airport operations, causing a reduction in airport capacity and runway movements thereby increasing taxi times with on time performance being adversely affected during the critical "first wave" of departures from Dublin.

The smooth running of this early morning period is essential for an efficient operation of Dublin Airport. As described in more detail in Section 4, the vast majority of aircraft departing between 06:00 and 08:00 make up to 4 return trips between Dublin and European cities, returning to Dublin in the late evening and restarting the cycle the following morning. These services form the backbone of Ireland's connectivity to Europe. They also underpin the Dublin hub by providing European connectivity to and from North American flights.

Obviously, airlines cannot predict the wind direction on any given day and schedules are put on sale up to a year in advance of the operation. The addition of part (e) would mean that on days with an easterly wind, passengers using Dublin airport would inevitably be subject to delays, disruption and short notice cancellations.

In summary, as outlined above, there is already adequate restrictions in place regarding the directions of aircraft accessing and departing the North Runway. Both Fingal County Council and ANCA agreed that the use of the North Runway for both arrivals and departures from 6am is adequate and acceptable.

This observation requests that part (e) of Condition 3, attached to draft decision Ref. ABP-314485-22 is removed.

3.1.2 Draft Conditions 4 and 5 of the Draft Decision

Condition 5 of ABP Ref No. PL06F.217429 (F04A/1755) stated as follows:

On completion of construction of the runway hereby permitted, the average number of night-time aircraft movements at the airport shall not exceed 65/night (between 2300 hours and 0700 hours) when measured over the 92-day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March 2007.

Reason: To control the frequency of night flights at the airport so as to protect residential amenity having regard to the information submitted concerning future night-time use of the existing parallel runway.

The current appeal; ABP Ref. No. 314485 (Reg. Ref. F20A/0668) seeks to amend the above condition 5 so that it reads:

"*A noise quota system is proposed for night-time noise at the airport. The airport shall be subject to an annual noise quota of 7990 between the hours of 2330hrs and 0600hrs*".

Essentially, the Applicant is seeking to replace current flight restrictions with a Noise Quota Scheme (NQS) to control noise during nighttime hours. The NQS operates on a noise classification system of each aircraft, based on how much noise each aircraft makes. Therefore, the focus at night will be for the schedule to keep within the annual noise budget allocation, rather than to keep within the limits of a particular number of flights.

The Applicant recalculated the noise quota, as part of a request for further information and therefore, the Applicant ultimately requested an annual noise quote of 16,260 points per year between 11.00pm – 7am, rather than the 7990 points per hour between 11.30pm – 6am, as originally requested. Both Fingal County Council and ANCA have agreed to this request.

Condition 4 of the Draft Decision is set out in full in Appendix 1. An overview of this condition is set out as follows:

Revoke condition number 5 of An Bord Pleanála permission PL.06F.217429 (Planning Authority register reference number F04A/1755): "On completion of construction of the runway hereby permitted, the average number of night-time aircraft movements at the airport shall not exceed 65/night (between 2300 and 0700 hours) when measured over the 92-day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March 2007."

And replace with the following:

The airport shall be subject to a Noise Quota Scheme (NQS) with an annual limit of 16,260 between the hours of 2300 and 0659 (inclusive, local time) with noise-related limits on the aircraft permitted to operate at night. The NQS shall be applied as detailed below.

It is clear from the condition wording as set out in full in Appendix 1 that An Bord Pleanála also agrees with and accepts the Applicant's request for a NQS with an annual limit of 16,260 between the hours of 11pm – 7am.

However, the Board have decided to attach another additional condition which further substantially undermines the NQS set out in Condition 4. As stated in the Think Report, NQS schemes, when used in conjunction with a movement cap, are usually applied as an incentive to move to quieter aircraft. This requires, initially at least, the quota count (QC) budget to be consistent with the movement cap. However, the annual QC limit of 16,260 as specified in Condition 4 of the Draft Decision is not consistent with the 13,000 movement cap. At the target ratio of 0.51 QC per air transport movement (QC/ATM), the QC limit of 16,260 translates to approximately 32,000 annual movements. The QC limit would, therefore, provide no incentive to use quieter aircraft. In fact it may result in a disincentive because it would allow the QC/ATM to degrade from the target of 0.51 to approximately 1.25.

The Think Report therefore concludes that, as currently designed within the Draft Decision, the NQS would be redundant and may be counterproductive. As noted on page, 14 of the Think Report, the 13,000 night movement limit in the Inspector's Report is at odds with the other supporting information including the Vanguardia Report (which recommends an annual limit of 32,000).

Concept of Additional Awakenings

An Bord Pleanála appointed an independent noise consultant, Mr. Dani Fiumicelli, to assist in assessing the appeal. Mr. Fiumicelli provided the Board with a Vanguardia Report and Addendum Report.

The Inspector's Report (Ref. ABP-314485-22) includes the following paragraph:

> 12.4.45 *The Vanguardia Report notes the use of a NQS alone is not sufficient to prevent a negative impact sleep disturbance. The NQS promotes the use of quieter aircraft but allows a greater number of aircraft movements which in themselves can have a detrimental impact on sleep. The impact of aircraft movement on sleep, during these additional hours is better understood when looking at the results from the additional awakening assessment and can be better mitigated by the inclusion of a restriction on the aircraft movements and/or additional insulation for those persons subject to any aircraft noise.*

As set out in the Think Report, the concept of 'additional awakenings' assessment is a new and novel approach which has not been used in previous noise related decisions. Indeed, the work commissioned by ABP on noise assessment notes '*...there are no specific criteria by which to judge the significance of the number of additional awakenings...*' In addition, this concept is not mentioned in the draft Noise Action Plan for Dublin Airport for 2024 to 2028 and is not an ANCA noise objective. Its application would also mean that the basis used for noise impact assessment at Dublin Airport would be different to that used in the past and different to that used at most EU and other airports. This could put Dublin Airport and its operators at a competitive disadvantage.

The Think Report therefore concludes that analysis of additional awakenings is not currently reliable, may result in distortions and should not be used.

Proposed 13,000 Annual Night-time Aircraft Movement Limit

The Board seems to heavily rely on the Vanguardia Report for opting to introduce an additional, unrequested restriction on aircraft movements during nighttime hours, alongside the NQS, when it was purely a NQS was requested as part of the original submission and was supported by Fingal County Council and ANCA.

Condition 5 of the Draft Decision states as follows:

> *The airport shall be subject to an annual aircraft movement limit of 13,000 between the nighttime hours of 2300 and 0659 (inclusive, local time) with aircraft movements split between the Winter 3,900 and Summer 9,100 to allow for extra flights during the 95-day summer busy period.*
>
> *Reason: To control the frequency of night flights at the airport so as to protect residential amenity having regard to the information submitted concerning future night-time use of the existing parallel runway.*

With regards to the figure of 13,000 flight movements, the Inspector's Report references Table 13.1 of the Supplementary EIAR and argues at paragraph 1.10.2 that "*the permitted scenario for the assessment year 2025 includes 227,000 annual aircraft movements in the proposed scenario and the Relevant Action, proposes 240,000 annual aircraft movements. Therefore, the Relevant Action will increase the annual aircraft movements by 13,000.*"

The Inspector expands in her report as follows:

> *12.4.27.* ***The proposed number of ATMs (Air Traffic Movement) proposed during the additional hours varies throughout the applicant's documentation****. The applicant's Mott MacDonald Report estimates the Dublin Forecast Night Movement Demand between 23:00- 07:00 (on a busy day schedule) in 2025 would be 133 flights. Table 13.1 of the EIAR states that the ATMs per annum for 2025 will be 240,000 with 114 ATMs during the night in a typical summer busy day, with no change up to the year 2035.*
>
> *12.4.28. The QC (Quota Count)/ATM (air traffic movement) target for the NQS is derived from assessing records of the aircraft types that used the airport at night and the noise certification of each aircraft using the EPN dB metric to establish which of the QC*

categories each ATM lies in. The QC/ATM target is then calculated by summing all the QC values for every aircraft and dividing it by the number of ATMs. The original QC/ATM target was 0.49 and was based on an annual NQS of 7,990, applicable between 2330 and 05:59). The final RD amended the QC/ATM target to 0.51 based on 16,260 between 2300 to 07:00.

12.4.29. The Vanguardia Report quantifies the QC/ATM target into ATMs. A QC target of 0.51 equates to c. 87 flights per night between the hrs of 23:00 and 06:59. If calculated on an annual basis, this equates to c. 32,000 ATMs per year. Based on the applicant's information, the yearly flights proposed would equate to c. 48,545 (133 per night). This is not an exact calculation as the Vanguardia Report does not consider a busy summer schedule and has regard to the applicants QC/ATM calculations for the NQS.

12.4.30. The Board will note the difference in total number of aircraft movements which can operate during the night when using different scenarios. ***When using the QC budget, if calculated on a nightly basis and using an average QC/ATM, there could be c. 32,000 aircraft movements, using the EIAR information there would be 13,000 aircraft movements and, in the applicants, most recent forecast schedule there would be c.48,545.*** *The number of aircraft movements is relevant when considering the Additional Awakening assessment and the potential impact on sleep disturbance from the movement of individual aircraft.*

As set out in the Think Report, the Draft Decision does not contain any explicit basis justifying the condition that the airport shall be subject to an annual 13,000 aircraft movement limit between the nighttime hours of 23:00 and 06:59, inclusive local time. There is no direct reference to 13,000 movements in the supporting information for the draft decision or in previous submissions. However, the difference between the permitted (227,000) and proposed (240,000) (by daa) annual movements for 2025 amounts to 13,000 based on the information in Table 13.1 of the EIAR which is referenced in the Inspector's Report. This may or may not be coincidence but refers, in any case, to total movements, day and night, not just night movements. If this is the basis of the 13,000 annual limit on night-time movements, it is clearly an error.

There is no noise impact assessment of applying a 13,000 night movement cap nor is there any economic or operational impact assessments of applying such a cap. Its consequences are, therefore, not known. As highlighted in the Think Report, 13,000 night movements would average to approximately 35 movements per night, well below the 65 movements per night averaged over a 92-day reference period set in the original 2007 permission (currently under stay of enforcement in the High Court) which would equate to an annual movement cap of 23,725. Prior to the opening of the northern runway, there was no night movement restriction and it currently, at peak times, reaches circa 120 movements per night. The limit of 13,000 night movements would therefore impose a very stringent constraint well below long-established custom and practice. In addition, there are a number of 'historical slots' granted to airlines operating at Dublin Airport during the night-time hours and the imposition of the proposed limit of 13,000 nighttime flights is not compatible with these historic rights. This raises significant legal issues which are discussed in more detail at Section 3.2 below.

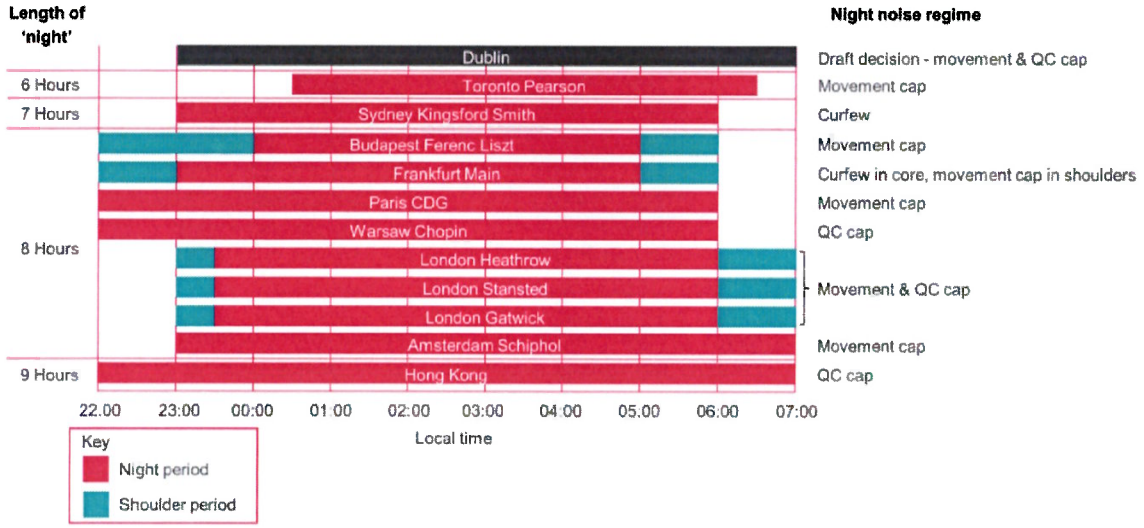
The references to winter, summer and the 92-day summer busy period in the Inspector's Report are confusing and potentially contradictory. For clarity, for the purpose of airline schedules, winter and summer refer to the IATA scheduling seasons. The winter season spans from the last Sunday in October to the last Saturday in the following March. The summer season starts on the last Sunday in March and ends on the last Saturday in the following October. The winter season is 22 weeks long and the summer season is 30 weeks long. The 92-day summer busy period is simply a tool used to assess the required capacity for planning purposes.

The proposed split of the cap into 3,900 for the winter season and 9,100 movements for the summer period results in inconsistent average limits of approximately 25 movements per night in winter and approximately 42 movements per night in summer. The Inspector's Report highlights that the cap would allow circa 100 movements per night during the 92-day summer busy period (actually 99 movements per night over the full 92 days). The Inspector's Report neglects to add if 100 flights per night were to occur during this period, it would mean that zero night movements would be allowed for the remainder of the summer season, approximately 120 days.

The Think Report therefore concludes that there is no rational basis for the 13,000 night movement cap. Its derivation is highly unclear and its proposed application is inconsistent. The constraints that it places on airport and airline operations are likely to be excessively restrictive or could result in complete night closures and will have significant negative economic impacts. This is explored in more detail in Section 4 of this submission.

The night period

For the conditions in the Draft Decision relating to the movement cap and the NQS the night period is defined as starting at 23:00 and ending at 07:00, that is a blanket period of eight hours. As highlighted in the Think Report and as illustrated in the figure below, blanket application over an eight-hour period is unusual compared to other airports, where different degrees of restrictions are applied over different periods – often called shoulders and core night.



For example, at Heathrow, Gatwick and Stansted airports, there are two shoulder periods, from 23:00 to 23:30 and 06:00 to 07:00 local time, around a core night period from 23:30 to 06:00 local time. Operations during the shoulder periods are less restricted than those during the core night so that they can enable critical operations. For example at Heathrow, the shoulder period between 23:00 and 23:30 hours facilitates economically important long haul departures whereas the shoulder period between 06:00 and 07:00 accommodates long-haul arrivals and is accompanied by a relaxation on the normal runway operating restrictions. Those airports without shoulders either have a NQS alone (Hong Kong, and Warsaw Chopin) or a movement cap alone (Paris CDG) whereas Toronto Pearson has a short night period, of six hours, with a movement cap as a percentage of the total movements.

This illustrates that night noise regimes are usually established according to the specifics of the airport. This is not the case in the draft decision. The hard start to the night at 23:00 is potentially detrimental to Dublin based carriers and operational resilience where it is necessary for aircraft to return to the airport after their last rotation of the day to avoid knock-on disruption the next day. In the early morning, the late hard stop of the night period at 07:00 is potentially detrimental to long-haul arrivals, especially from the United States. This could have a negative impact on Dublin Airport's unique position in the Europe-US market supported by the US Customs and Border Protection (CBP) pre-clearance facility. This would potentially erode Dublin Airport's competitive advantage and diminish the positive economic contribution that connectivity with the US provides to Ireland.

Restricting departures to 07:00 will also be detrimental to short-haul connectivity with the UK and continental Europe noting in particular the one-hour time difference between Dublin time and Central European Time (CET).

The Think Report concludes that blanket application of nighttime operating restrictions between 23:00 and 07:00 does not consider the operational and economic implications for key air services using the airport. To avoid potentially damaging negative effects the night noise regime should follow the model applied in other places with different restrictions applied at different times, balancing noise, economic and operational impacts.

For the reasons outlined above, this observation requests that Condition 5 of the Draft Decision be removed.

3.2 Legal Context

3.2.1 Historic Slots

The implementation of a limitation of 13,000 night movements would inevitably require a significant reduction in the numbers of 'historic slots' granted to airlines operating at Dublin Airport which Aer Lingus considers to be unlawful.

Article 8(2) of Council Regulation (EEC) No. 95/93 of 18 January 1993 on common rules for allocation of slots at Community Airports, as amended (the "Slot Regulation"), provides that where an air carrier has had a series of slots and can demonstrate that it has used such series of slots for at least 80% of the time during the relevant scheduling period, then it has an entitlement to the same slots in the next equivalent scheduling period (these are known as "historic slots").

It is the position of Aer Lingus that it has vested statutory rights under Article 8(2) of the Slot Regulation in such historic slots, and / or such historic slots constitute a property right and that the withdrawal of historic slots in the manner which would be required to give effect to the Draft Decision would be unlawful. In circumstances where such statutory rights are explicitly and unambiguously granted to air carriers by way of Article 8(2) of the Slot Regulation, in order for it to be permissible for these rights to be withdrawn, this would need to be explicitly and unambiguously provided for in legislation. No such provision is made in the Slot Regulation.

Aer Lingus also considers that it holds property rights in these historic slots which are protected by Article 40.3 and Article 43 of the Constitution and/or Article 16 and 17 of the Charter of Fundamental Rights of the European Union.

Finally, in this regard, it should be noted that the status of "historic slots" and the circumstances under which such historic slots can be withdrawn is currently the subject of a reference to the European Court of Justice in the context of the legal proceedings relating to passenger cap at Dublin Airport imposed by Condition 3 of Planning Permission F06A/1248 (An Bord Pleanála Reg. Ref. PL06F.220670) and Condition 2 of Planning Permission F06A/1843 (An Bord Pleanála Reg. Ref. PL06F.223469).

3.2.2 The Balanced Approach

If there is considered to be a potential noise issue with regards to a planning permission, ANCA (Air Noise Competent Authority), are required to carry out their own assessment of the proposal. ANCA must assess the application in accordance with Regulation (EU) No 598/2014 of the European Parliament and of the Council (the "EU Noise Regulation"). Firstly, ANCA issued their decision by way of a Chief Executive Order Ref. ANCA/002/2021, dated 10th February 2021 and identified that a Noise Problem, within the meaning of Section 9(2) of the Aircraft Noise (Dublin Airport) Regulation Act 2019, would arise at Dublin Airport from the taking of the proposed Relevant Action. Upon assessment, ANCA issued a positive decision in relation to ANCA/002/2021 and did not recommend that any further restrictions, over those originally requested, be attached to the decision.

ANCA's decision was followed by the decision of the designated local authority, in this case Fingal County Council, who also approved the application. In this instance, Fingal County Council's decision was appealed by third parties to An Bord Pleanála and the Board then were required to assess both Fingal's and ANCA's decision, before issuing their own decision.

At this point in proceedings, if the Board are minded to alter or modify any of the proposed operating restrictions, then they must do so in accordance with EU Noise Regulation and ICAO's (International Civil Aviation Organisation) Balanced Approach, which should include an assessment against the NAO (Noise Abatement Objective) for Dublin Airport.

The Draft Decision proposes significant changes to the nighttime use of the runway system at Dublin Airport.

The Draft Decision includes both a NQS and a nighttime annual movement limit of 13,000. This limit is

a restrictive measure that should be addressed in accordance with the EU Noise Regulation as transposed into Irish law by the Aircraft Noise (Dublin Airport) Regulation Act 2019 (the "2019 Act"). This legal framework mandates the application of a Balanced Approach to noise management, ensuring that any measures imposing operating restrictions are both necessary and proportionate to achieve the NAO. The Inspector's Report at paragraph 12.2.49 refers to Section 37R(4)(a) of the 2019 Act which provides that the Board can adopt noise mitigation measures or operating restrictions, or a combination thereof, which were not, during the process that gave rise to the relevant regulatory decision, the subject of previous consultation conducted by the competent authority. However, any such mitigation measure or operating restriction must comply with the Balanced Approach in accordance with the EU Noise Regulation.

The Balanced Approach requires that noise-related operating restrictions should be 'introduced only when other balanced approach measures are not sufficient to attain the specific noise abatement objectives.' Applying the Balanced Approach should ensure that operating restrictions are proportionate, alternative methods are considered and the most cost-effective combination of measures is applied. Cost-benefit analysis can also be applied to understand the broader impacts that operating restrictions have on economic welfare, airline operations and connectivity.

The Board is required to ensure that the Balanced Approach is followed when imposing any operating restrictions. This includes assessing a combination of measures to determine the most cost-effective solution and ensuring that any measures or combination of measures are not more restrictive than necessary to achieve the NAO, so that such measure is proportionate towards airport operations.

In this instance, beyond the compulsory analysis of less restrictive alternatives, we note the lack of proper assessment of the economic impact of the proposed condition on Dublin Airport's economy, as well as on Ireland's more broadly. This analysis should have considered the constraint on airlines' operations and the broader economic implications in their connections with the rest of European airports, and in particular the interconnectedness of night and day operations and the potential multiplier effect on traffic.

It would also be expected that the costs associated with the noise insulation scheme would be counter-balanced by less stringent operating restrictions as fewer people would be noise impacted. The results presented of this trade-off should be presented clearly in a cost-effectiveness analysis. This clarity is lacking leading to the conclusion that potential relaxation of the operating restrictions due to the noise benefits of the inclusion has not been considered. **This approach is doubly penalising from the airport's and airline's perspective because operating restrictions are compounded by the cost of the noise insulation scheme.**

Although both the Balanced Approach and NAO are mentioned in the accompanying Inspector's Report, their inclusions are limited to mere definitions. **It is clear that the new restrictions, as contained within the conditions attached to the draft decision, have not been assessed against the Balanced Approach and compliance with NAO has not been demonstrated**. The Inspector has not concluded that the NAO was or was not achieved.

Therefore, the operational restrictions which An Bord Pleanála has placed on Dublin Airport, by way of the draft decision, have not followed proper procedure. It appears that the Board has skipped a step, by not assessing the new restrictions against the Balanced Approach and NAO and therefore, we believe the Board needs to re-issue a corrected draft decision.

This observations requests that an amended draft decision be re-issued, which follows the correct procedure, as highlighted above.

4.0 Wider Impacts of Draft Decision ABP-314485-22

4.1 Impacts on Aer Lingus' and Dublin Airport Operations

If implemented, the conditions set out in the Draft Decision will have a devastating impact on Aer Lingus' operations and indeed the operation of Dublin Airport which is the most significant facilitator of international tourist and business visitors into Ireland.

4.1.1 Night-time restrictions on aircraft movements as proposed will fundamentally undermine National Aviation Policy which seeks to develop Dublin Airport as a Hub Airport

Aer Lingus' Dublin hub schedule is designed to maximise connecting opportunities for passengers travelling between destinations in North America and Europe/UK while also offering attractive timings for passengers travelling on direct flights to/from Dublin ("Point to Point" (P2P) passengers). The graphic below illustrates how the Dublin Hub connects North America and Europe.

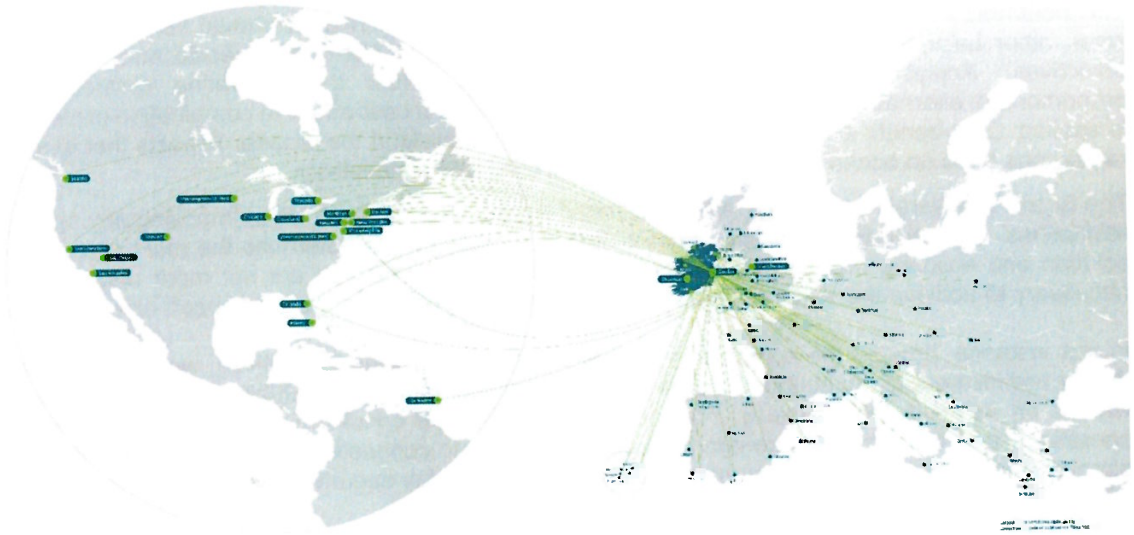


Chart 1 – Aer Lingus Network Map

Key transatlantic flights arrive at Dublin early in the morning pre 5am and depart mid-day or afternoon, a timing dictated by P2P passenger preferences, connectivity, the constraints of the United States Customs and Border Protection (USCBP) preclearance gates, processing capacity at Dublin and runway slot availability.

Aer Lingus' shorthaul aircraft start their days in a "first wave" that departs from Dublin for UK/Europe destinations in the early morning (which is critical given Dublin's geographic location) and subsequently arrive back in Dublin between late morning and mid-afternoon.

These first wave eastbound departures are tightly concentrated between 05:45 and 07:45, most departing before 07:00. The flights leave as early as possible to meet customer demand and within the limits of slot availability (both at Dublin and at the airport on the other end of the route). These flights are crucial for connecting passengers at Dublin. More than half of all passengers connecting from North America to Europe depart on a first wave flight and almost all passengers connecting from Europe to North America travel on a first wave flight returning to Dublin. These early morning first wave flights are therefore critical to the commercial viability of both the European and the North American network of Aer Lingus at Dublin.

Almost all Aer Lingus shorthaul aircraft make 2-3 daily rotations (a rotation consisting of an outbound flight from Dublin and a return flight to Dublin.) This number is limited by the relatively long average flight length of the continental Europe routes (again dictated by Ireland geographic location).

It is critical to note that Aer Lingus's schedule is shaped by the availability of slots at both Dublin and destination airports, many of which are highly congested airports where well-timed slots are extremely difficult to obtain. The airline's Dublin hub is the product of decades of development with historic slot holdings gradually built up and refined to enable the extensive connectivity provided today.

In Dublin Airport, The Runway Peak Week Hourly Total Usage versus capacity is illustrated in Chart 2 below. This highlights that **the retiming of early morning arrivals during the night-time period to later in the morning is not an option at Dublin due to the absence of spare runway capacity.** 06:00-0700 local time is the busiest hour of the day for departures with almost 50 movements.

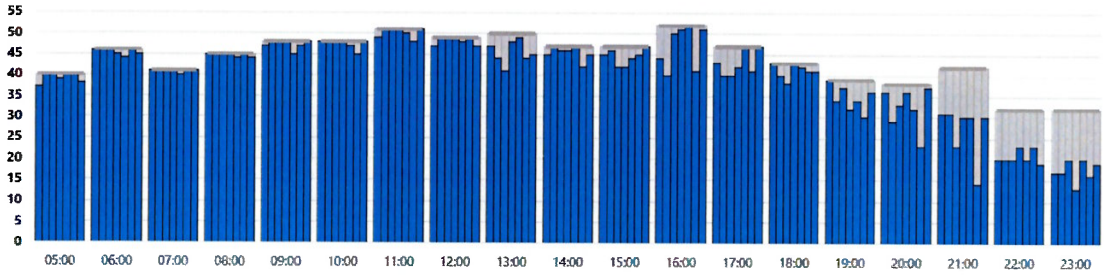


Chart 2 – Dublin Airport Runway Peak Week Hourly Total Usage vs capacity (Times UTC)

4.1.2 Night-time restrictions on aircraft movements as proposed will jeopardise the economic viability of both longhaul North American operations and Shorthaul European operations from Dublin and result in significant capacity reductions

Any reduction in Aer Lingus' daily night movements from current levels would inevitably lead to the disintegration of the hub model that has enabled Ireland's enviable level of transatlantic air service which has been so crucial to economic development in Ireland. If such reductions were imposed, Aer Lingus would have no option but to fly considerably less and shrink its fleet, network and workforce.

Aer Lingus cannot compress its current shorthaul flights into a shorter operating day. In practice, such conditions would require Aer Lingus to reduce aircraft utilisation from two to one or from three to two daily rotations. This would not be financially viable and would inevitably result in a smaller network reducing choice and increase fares for passengers.

In addition, night time restrictions would impact on our ability to facilitate same day returns for business passengers between Dublin and major European business destinations (such as Paris, Brussels, Amsterdam and Frankfurt and London) which are dependent on early morning departures.

A shortened operating window would also destroy the Aer Lingus transatlantic hub model. Moving the departure times of multiple shorthaul aircraft from pre-7:00 to post- 8:00 would not only lengthen eastbound connections for passengers arriving from North America and travelling on to Europe by 1-2 hours, but would also drastically reduce westbound connections, as the aircraft would return from its first rotation too late to connect to many transatlantic departures.

With reduced feed from a smaller shorthaul fleet and deterioration in connectivity, multiple transatlantic routes would become unviable. It is easy to foresee a vicious cycle in which reduced shorthaul support for longhaul results in a smaller longhaul operation, which in turn leads to further shorthaul cuts and then more longhaul cuts, eventually leading to a sub-scale Aer Lingus.

Table 1 below illustrates both the number of flights that currently have one or both legs operating as a night movement (in red) but also crucially, how the existing schedule works in practice today with early morning transatlantic arrivals feeding first wave European flights (many of which would require a night slot as they are pre 0700). The table also demonstrates how these first wave European arrivals from 0800-1000 feed our transatlantic flights from 1100 onwards (as the departure leg from Dublin of these European arrivals is in the "night" - many of these connections would therefore be lost).

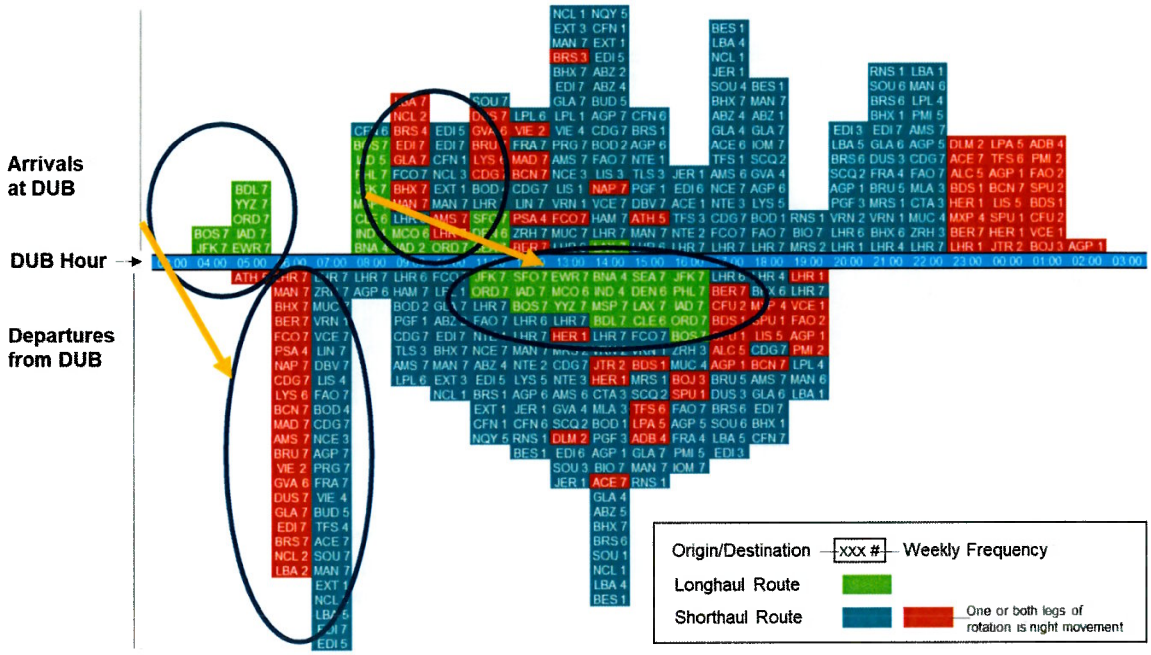


Table 1 – Aer Lingus Arrivals and Departures

Because of Dublin's geographic location, Aer Lingus' average shorthaul flight times are longer than those at other European hubs with only a handful of destinations being reachable in under 4 hours round trip (including turnaround time at the destination airport). This limits Aer Lingus to 2-3 daily rotations per shorthaul aircraft, and the lack of short routes that could fit in at end of day but return to Dublin before 23:00 means that it would not be possible to both fully utilise aircraft and to avoid night movements.

The chart below shows the Aer Lingus "lines" of shorthaul flying at Dublin on a peak summer day, with each row showing the rotations flown by each aircraft over the course of a 24-hour period.

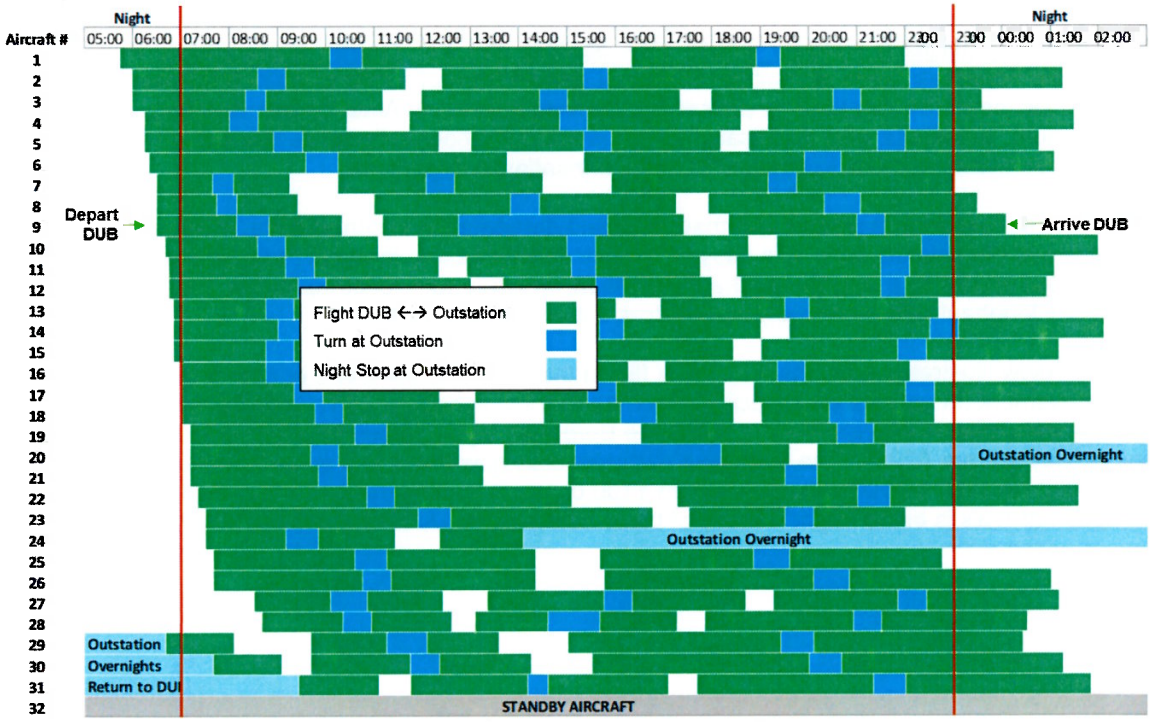


Chart 3 –Aer Lingus "lines" of shorthaul flying at DUB on a peak summer day

As can be seen from the above chart, more than half of Aer Lingus's Dublin-based shorthaul aircraft start the day with a pre-07:00 departure from Dublin. In addition, 22 of 31 active short-haul aircraft end their day back in Dublin after 23:00, and most of these arrive after midnight.

4.1.3 Night-time restrictions as proposed on aircraft movements will result in devastating revenue losses for the airlines in both transatlantic and European services

Aer Lingus estimates that the imposition of a limit on night-time movements as proposed in the Draft Decision would likely to force Aer Lingus to shrink its fleet **by up to 9 shorthaul aircraft and 6 longhaul aircraft** resulting in the loss of approximately 16 shorthaul routes and 5 transatlantic routes.

We estimate the annual revenue impact on Aer Lingus across our network could be up to €753 million and require significant a restructuring of Aer Lingus's operations and significant reductions in its fleet and workforce.

4.1.4 Night-time restrictions on aircraft movements as proposed will significantly impact air freight both into and out of Ireland

The importance of night flights for the air freight industry is critical for maintaining efficient global supply chains, including perishable items and time-sensitive materials, by aligning with international schedules and meeting customer demands. This is particularly important for the pharmaceutical industry, a key contributor to the economy in Ireland.

4.2 Wider Economic Impacts

In December 2023, Aer Lingus commissioned an economic report by Jim Power Economics relating to the Night-time Restrictions under the 2007 permission titled 'Assessment of Potential Economic Impact of Dublin Airport Planning Issues'. A copy of this report is included in Appendix 3 of this consultation submission.

This report outlines how the original nighttime aircraft movement restrictions at Dublin Airport, if not addressed as envisaged by ANCA and FCC decision, would result in a reduction in the number of flights and as a result, a reduction in the number of passengers who utilise Dublin Airport.

As outlined above, the annual limit in the night-time movements proposed in the Draft Decision would be significantly more restrictive and therefore would cause even greater damage to the Irish economy.

In his report Jim Power Economics has estimated that:

For every 1,000 overseas visitors that are not allowed fly into Dublin Airport, (assuming they do not fly into other airports) the following employment and economic effects are estimated by Jim Power Economics per annum.

- **€823,805 in direct tourism expenditure** is foregone.
- The **indirect and induced expenditure** foregone is estimated at **€576,663.**
- The direct jobs that would not be generated in tourism, or in other words the jobs foregone would be **22 direct jobs**, and 1**5 indirect and induced jobs.**

- The **loss to the Exchequer** from the tax revenues foregone due to **direct tourism expenditure** would be **€189,475.**
- The **loss to the Exchequer** from the tax revenues foregone due to the **indirect and induced** effects of direct **tourism expenditure** would be **€132,623.**
-

For every 1 million passengers not allowed to arrive into Dublin Airport every year:

- **€1.4 billion** would be lost to the economy in **direct, indirect and induced expenditure**.
- **€322.1 million** would be lost to the Exchequer in **tax revenues foregone**.
- The direct, indirect, and induced **loss of employment** would be **37,000 jobs**.

Jim Power Economics estimated the reduction of arriving passengers associated with the original aircraft night time movements should the planning constraint not be lifted as envisaged by both ANCA and Fingal County Council decisions to be in the region of 1 million passengers.

The proposed new restrictions in the Draft Decision would clearly result in an even greater reduction in passenger numbers and corresponding economic impact.

The Jim Power Economics report also notes that it is difficult to quantify or be certain about the impact of poorer connectivity on foreign direct investment (FDI) but given the other challenges facing FDI over the coming years, restrictions to night time aircraft movements at Dublin Airport would further undermine Ireland's attractiveness for what is an incredibly important part of the country's economic model.

The Report concluded that the original restrictive planning conditions would undermine Ireland's economic growth potential by causing a ***"challenge to the future growth of Dublin Airport and by implication, the Irish economy."*** For the reasons outlined above, this challenge would be even greater if the proposed night-time movement limit was imposed.

5.0 Conclusion

This third-party observation is in relation to An Bord Pleanála's Notice of a Draft Decision to Grant Permission under **Ref. ABP-314485-22**. The application was for 'taking of relevant action', within the meaning of section 34C of the Planning and Development Act 200, as amended.

This observation respectfully requests that the conditions attached to the decision of An Bord Pleanála's granted permission for the relevant actions to the night-time use of the runway system at Dublin Airport, be re-examined and reassessed. We also highlight how the Board's decision has not followed proper legal procedures and would impact on airlines' entitlement to historic slots which is protected under the Slot Regulation. Therefore, Aer Lingus is seeking for the Board to consider the contents of this observation report, while reevaluating the contents of planning application Ref. **ABP-314485-22.**

This observations requests that;

- part (e) of Condition 3, attached to draft decision Ref. ABP-314485-22 and
- Condition 5, attached to draft decision Ref. ABP-314485-22

are removed.

The proposed new restrictions, as contained within the conditions attached to the draft decision, have not been assessed against the Balanced Approach and compliance with NAO has not been demonstrated. Furthermore, the restrictions appear to have been strongly influenced by an analysis of additional awakenings which is a novel approach subject to considerable uncertainty.

The annual 13,000 night time aircraft movement limit does not have any rational basis and is inconsistent with the NQS. If a movement limit is to be applied, any such limit should be in line with the proposed QC limit in the NQS. The blanket application of a single regime across the entire night period, as proposed in the Draft Decision, does not allow for any consideration of the specific characteristics of Dublin Airport's markets and operations.

Therefore, it is requested that an amended draft decision be re-issued which takes account of the observations set out in this submission.

As outlined in this submission, the proposed additional planning restrictions, if implemented, would severely damage Aer Lingus operations at Dublin Airport and fundamentally undermine its hub model. More generally these conditions would cause broader economic damage to the Irish economy impacting on tourism and Ireland's attractiveness for Foreign Direct Investment.

We trust that the Board will have regard to this report and respectfully request that the conditions attached to the draft decision are re-examined.

We look forward to the decision of the Board in due course.

Kevin Hughes MIPI MRTPI
Director
for HPDC Ltd.

Appendix 1 – Notice of a Draft Decision issued by An Bord Pleanála dated 11th September 2024 Reg. Ref. F20A/0668 / ABP Ref. 314485-22

An Bord Pleanála

Draft Decision

ABP-314485-22

Draft Decision in accordance with Section 37(4) of the Planning and Planning and Development Act 2000, as amended.

Planning Authority: Fingal County Council

Planning Register Reference Number: F20A/0668

Appeal by Friends of the Irish Environment and by Others against the decision made on the 8th day of August, 2022 by Fingal County Council to grant, subject to conditions, a permission to Dublin Airport Authority PLC care of Tom Phillips and Associates of 80 Harcourt Street, Dublin in accordance with plans and particulars lodged with the said Council:

Proposed Development: A proposed development comprising the taking of a 'relevant action' only within the meaning of Section 34C of the Planning and Development Act 2000, as amended, at Dublin Airport, Co. Dublin, in the townlands of Collinstown, Toberbunny, Commons, Cloghran, Corballis, Coultry, Portmellick, Harristown, Shanganhill, Sandyhill, Huntstown, Pickardstown, Dunbro, Millhead, Kingstown, Barberstown, Forrest Great, Forrest Little and Rock on a site of circa 580 hectares. The proposed relevant action relates to the night-time use of the runway system at Dublin Airport. It involves the amendment of the operating restriction set out in condition

number 3(d) and the replacement of the operating restriction in condition number 5 of the North Runway Planning Permission (Fingal County Council register reference number F04A/1755; An Bord Pleanála reference PL06F.217429 as amended by Fingal County Council register reference number F19A/0023, An Bord Pleanála reference ABP-305289-19), as well as proposing new noise mitigation measures. Conditions number 3(d) and 5 have not yet come into effect or operation, as the construction of the North Runway on foot of the North Runway Planning Permission is ongoing. The proposed relevant action, if permitted, would be to remove the numerical cap on the number of flights permitted between the hours of 2300 and 0700 daily that is due to come into effect in accordance with the North Runway Planning Permission and to replace it with an annual night-time noise quota between the hours of 2330 and 0600 and also to allow flights to take off from and/or land on the North Runway (Runway 10L 28R) for an additional two hours, that is, 2300 to 2400 hours and 0600 to 0700 hours. Overall, this would allow for an increase in the number of flights taking off and/or landing at Dublin Airport between 2300 and 0700 hours over and above the number stipulated in condition number 5 of the North Runway Planning Permission, in accordance with the annual night time noise quota. The relevant action pursuant to Section 34C (1) (a) is: To amend condition no. 3(d) of the North Runway Planning Permission (Fingal County Council register reference F04A/1755; An Bord Pleanála reference.: PL06F.217429 as amended by Fingal County Council register reference number F19A/0023, An Bord Pleanála reference ABP-305289-19). Condition 3(d) and the exceptions at the end of Condition 3 state the following: '3(d). Runway 10L-28R shall not be used for take-off or landing between 2300 hours and 0700 hours except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports.' Permission is being sought to amend the above condition so that it reads: 'Runway 10L-28R shall not be used for take-off or landing between 0000 hours and 0559 hours except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical

faults in air traffic control systems or declared emergencies at other airports or where Runway 10L-28R length is required for a specific aircraft type.' The net effect of the proposed change, if permitted, would change the normal operating hours of the North Runway from the 0700 to 2300 hours to 0600 to 0000 hours. The relevant action also is: To replace condition number 5 of the North Runway Planning Permission (Fingal County Council register reference number F04A/1755; An Bord Pleanála reference: PL06F.217429 as amended by Fingal County Council register reference number F19A/0023, An Bord Pleanála reference ABP-305289-19) which provides as follows: 5. On completion of construction of the runway hereby permitted, the average number of night time aircraft movements at the airport shall not exceed 65/night (between 2300 hours and 0700 hours) when measured over the 92 day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March, 2007. Reason: To control the frequency of night flights at the airport so as to protect residential amenity having regard to the information submitted concerning future night time use of the existing parallel runway'. With the following: A noise quota system is proposed for night time noise at the airport. The airport shall be subject to an annual noise quota of 7990 between the hours of 2330hrs and 0600hrs. In addition to the proposed night time noise quota, the relevant action also proposes the following noise mitigation measures: - A noise insulation grant scheme for eligible dwellings within specific night noise contours; - A detailed Noise Monitoring Framework to monitor the noise performance with results to be reported annually to the Aircraft Noise Competent Authority (ANCA), in compliance with the Aircraft Noise (Dublin Airport) Regulation Act 2019. The proposed relevant action does not seek any amendment of conditions of the North Runway Planning Permission governing the general operation of the runway system (that is, conditions which are not specific to nighttime use, namely conditions numbered 3 (a), 3(b), 3(c) and 4 of the North Runway Planning Permission) or any amendment of permitted annual passenger capacity of the Terminals at Dublin Airport. Condition number 3 of the Terminal 2 Planning Permission (Fingal County

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Council register reference number F04A/1755; An Bord Pleanála reference PL06F.220670) and condition number 2 of the Terminal 1 Extension Planning Permission (Fingal County Council register reference number F06A/1843; An Bord Pleanála reference PL06F.223469) provide that the combined capacity of Terminal 1 and Terminal 2 together shall not exceed 32 million passengers per annum. The planning application will be subject to an assessment by the Aircraft Noise Competent Authority in accordance with the Aircraft Noise (Dublin Airport) Regulations Act 2019 and Regulation (EU) No 598/2014. The planning application is accompanied by information provided for the purposes of such assessment, at Dublin Airport, County Dublin.

Decision

GRANT permission for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

Reasons and Considerations

Appropriate Assessment

The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on European Sites

- Malahide Estuary Special Area of Conservation (Site Code 000205)
- Baldoyle Bay Special Area of Conservation (Site Code 000199)
- Rogerstown Estuary Special Area of Conservation (Site Code 000208)

- North Dublin Bay Special Area of Conservation (Site Code 000206)
- South Dublin Bay Special Area of Conservation (Site Code 000210)
- Ireland's Eye Special Area of Conservation (Site Code 002193)
- Rockabill to Dalkey Island Special Area of Conservation (Site Code 003000)
- Howth Head Special Area of Conservation (Site Code 000202)
- Lambay Island Special Area of Conservation (Site Code 000204)
- Rye Water Valley/Carton Special Area of Conservation (Site Code 001398)
- Malahide Estuary Special Protection Area (Site Code 004025)
- Baldoyle Bay SPA (site code 004016)
- North-West Irish Sea Candidate Special Protection Area (Site Code 004236)
- South Dublin Bay and River Tolka Estuary Special Protection Area (Site Code 004024)
- Rogerstown Estuary Special Protection Area (Site Code 004015)
- North Bull Island Special Protection Area (Site Code 004006)
- Ireland's Eye Special Protection Area (Site Code 004117)
- Howth Head Coast Special Protection Area (Site Code 004113)
- Lambay Island Special Protection Area (Site Code 004069)
- Skerries Islands Special Protection Area (Site code 004122)
- Rockabill Special Protection Area (Site Code 004014)
- Dalkey Islands Special Protection Area (Site code: 004172)

or any other European site, in view of the site's Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required.

This determination is based on the following:

(a) the distance of the proposed development from the European Sites and the demonstrated lack of any meaningful ecological connections;

(b) the potential for disturbance impacts from noise which, in the majority of instances L_{max} remains the same or changes only slightly under the proposed RA at all European sites considered;

(c) the altitudes and noise levels of aircraft when above identified European sites are outside of the ranges commonly considered, within the scientific literature, to be causes of disturbance;

(d) the interest features of the European sites have already become habituated to noise and overflying more generally, and any increase as a result of Relevant Action is unlikely to have further significant effects;

(e) that although increases in night-time flights are proposed to occur, this will lead to no significant effect to the conservation objectives of the European sites within the Zone of Influence; and,

(f) that increased numbers of flights are low enough that changes in air quality will also be small and will not affect the habitats within the Special Areas of Consideration (and Special Protection Areas) such that there is deterioration.

Environmental Impact Assessment

Having regard to the examination of environmental information and in particular to the Environmental Impact Assessment Report and Environmental Impact Assessment Report Supplement, and the submissions from the planning authorities and prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment have been identified throughout this report. In the absence of additional operational restrictions and mitigation measures it is considered that the proposed development would give rise to

significant direct or indirect impacts of the population and human health, and the minor direct and indirect impacts on climate change as detailed below:

- Population and Human Health will be mainly impacted by the number of people Highly Annoyed (HA), which will initially decrease in 2025 and then increase in 2035 in the Relevant Action when compared to the permitted scenario. The number of people Highly Sleep Disturbed (HSD) will increase in both assessment years (that is, 2025 and 2035). These figures are based on the average impact of the increased aircraft movements and do not reflect the full extent of the increased movement of aircraft during the additional two nighttime hours in the Relevant Action. The inclusion of additional mitigation measures and operating restrictions in the form of an aircraft movement limit can ensure additional awakenings are minimised and the impact on sleep disturbance is mitigated.

- Total Annual Green House Gas (GHG) emissions of the Relevant Action is projected to increase in 2025 when compared to the permitted scenario and then decrease in 2035. No specific mitigation measures have been included in the predicted emissions. The decrease in the 2035 is based on a change in forecasted aircraft scheduling which indicates there will be an increase in short-haul night flights modelled in 2035 which will decrease long-haul day flights, leading to lower Continuous Climb Departures (CCD) emissions in the proposed scenario for 2035 when compared to the permitted scenario. The scheduling has not been presented in the documentation. This aside, international aviation towards net zero emissions will ensure the use of climate friendly fuels and having regard to minor differences of aircraft movement increases between the permitted and proposed scenario, the long-term impact on the climate is considered to be of minor significance.

- The significance of the effect of the impacts of the Relevant Action on aircraft noise and vibration has been presented in the Environmental Impact Assessment Report as an average over the entire night-time period. Aircraft noise is not experienced as an average and the noise impacts of sleep from Air Traffic Movements are intermittent and not continuous. The additional awakening results generally follow the same pattern as the HA and HSD, but the scale of the additional awakening results has a much greater significance due to the reality of the effect of one additional awakening. This result is greater due to the number of aircraft movements which is allowable under the Noise Quota System. This impact can be mitigated through the inclusion of an aircraft movement restriction during the additional nighttime hours and the use of an insulation scheme to protect the communities impacted by the flight paths of aircraft.

Proper Planning and Sustainable Development

Having regard to,

European legislation, including of particular relevance.

- European Communities (Relating to the Assessment and Management of Environmental Noise) (Directive 2002/49/EC).

National policy and guidance including:

- the Climate Action Plan 2024,
- Project Ireland 2040- the National Planning Framework (NPF), and
- A National Aviation Policy for Ireland, 2015.

Regional and Local Level policy; including:

- Eastern and Midlands Regional Authority – Regional Spatial and Economic Strategy (EMRA-RSES) (2019),

- Fingal County Council Climate Action Plan 2024-2029,
- the policies and objectives of the Fingal County Development Plan 2023-2029, particularly DAO16 and the introduction of a Noise Quota System,
- Fingal Noise Action Plan 2019-2023,
- Dublin Airport Local Area Plan, 2020, and
- Dublin Airport Noise Action Plan, 2019-2023,

And the following matters:

- the nature, scale, and location of the proposed development,
- the planning history of the site and the surrounding area,
- the pattern of existing and permitted development in the area,
- the distance to dwellings and other sensitive receptors from the proposed development,
- the Environmental Impact Assessment Report submitted,
- the Screening for Appropriate Assessment,
- the report of the Planning Inspector, and
- the submissions and observations received,

it is considered that, subject to the reasons and considerations above, and compliance with the conditions set out below, the decision to grant permission in respect to the proposed development would not seriously injure the amenities of property in the vicinity by reasons of excessive noise disturbance at night and would be in accordance with the proper planning and sustainable development of the area.

Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars received by An Bord Pleanála on the 14th day of September 2023 and the 4th day of March 2024, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

   Reason: In the interests of clarity and of proper planning and sustainable development of the area.

2. Apart from any departures specifically authorised by this permission, the development shall be carried out and completed in accordance with the terms and conditions of the permissions, under An Bord Pleanála PL06F.217429 (Planning Authority register reference number F04A/1755) and as extended under Planning Authority register reference number F04A/1755/E1 and further amended under An Bord Pleanála reference ABP-305298-19 (Planning Authority register reference number 19A/0023) (the amending permission), and any agreements entered into thereunder.

   Reason: In the interest of clarity and to ensure that the overall development is carried out in accordance with the previous permissions.

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3. Revoke Part (d) of condition number 3 of An Bord Pleanála permission PL06F.217429 (Planning Authority register reference F04A/1755): "Runway 10L-28R shall not be used for take-off or landing between 2300 hours and 0700 hours,"

And replace with:

(d) Runway 10L-28R shall not be used for take-off or landing between 0000 and 0559 hours (inclusive, local time) except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports or where Runway 10L-28R length is required for a specific aircraft type.

Also, include an additional Part (e) in condition number 3 of permission PL06F.217429 (Planning Authority register reference F04A/1755):

(e) Runway 10L-28R shall be used for departure only between the hours of 06:00 to 08:00.

Reason: In the interest of clarity and to ensure the operation of the runways in accordance with the mitigation measures set out in the Environmental Impact Assessment Report Supplement (September 2023) in the interest of the protection of the amenities of the surrounding area.

4. Revoke condition number 5 of An Bord Pleanála permission PL06F.217429 (Planning Authority register reference number F04A/1755): "On completion of construction of the runway hereby permitted, the average number of night-time aircraft movements at the airport shall not exceed 65/night (between 2300 and 0700 hours) when measured over the 92-day modelling period as set out in the reply to the further information request received by An Bord Pleanála on the 5th day of March 2007."

And replace with the following:

The airport shall be subject to a Noise Quota Scheme (NQS) with an annual limit of 16,260 between the hours 2300 and 0659 (inclusive, local time) with noise-related limits on the aircraft permitted to operate at night. The NQS shall be applied as detailed below.

Part 1 - Definitions

1.1 The following definitions shall apply with reference to the scheme described in Part 2.

Term: Annual Quota Period
Meaning: The twelve-month period from 1 April to 31 March inclusive each year

Term: EASA Noise Certification Database
Meaning: The database of noise certification levels approved and as varied from time to time by the European Union Aviation Safety Agency (EASA) and published on its website. (https://www.easa.europa.eu/domains/environment/easa-certification-noise-levels). The noise levels are established in compliance with the applicable noise standards as defined by International Civil Aviation Organization (ICAO) Annex 16 Volume 1.

Term: Night time

Meaning: The hours at night between 23:00 (local time) to 07:00 (local time).

Term: Noise Classification Level (NCL)

Meaning: The noise level band in EPNdB assigned to an aircraft for take-off or landing, as the case may be, for the aircraft in question for the purposes of identifying the Quota Count of the aircraft. The Noise Classification Level for an aircraft taking off from and landing at the Airport shall be taken from the Flyover Level from the EASA Noise Certification Database:

NCL(Take-Off) = EPNL(Flyover)

NCL(Landing) = EPNL(Approach) −9 dB.

Term: Quota Count.

Meaning: The amount of the quota assigned to one take-off or to one landing by an aircraft based on the Noise Classification Level for the aircraft having regard for engine type and take-off weight:

Noise Classification Level	Quota Count (QC)
Greater than 101.9 EPNdB	16.0
99-101.9 EPNdB	8.0
96-98.9 EPNdB	4.0
93-95.9 EPNdB	2.0
90-92.9 EPNdB	1.0
87-89.9 EPNdB	0.5
84-86.9 EPNdB	0.25
81-83.9 EPNdB	0.125
Less than 81 EPNdB	0

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Part 2 – Noise Quota Scheme

2.1 Subject the dispensations described in Paragraph 2.2:.

(a) A take-off or landing at the Airport shall be determined to fall within the night time based on runway time.

(b) No aircraft with a Quota Count of 4.0 or more shall be permitted to take off at the Airport during the night time.

(c) No aircraft with a Quota Count of 2.0 or more shall per permitted to land at the Airport during the night time.

(d) Each aircraft landing at or taking off from the Airport during the night time will be assigned a Quota Count based on its Noise Classification Level.

(e) The Noise Quota at the Airport shall be I imited to 16,260 for the Annual Quota Period.

2.2 The restrictions set out in Paragraph 2.1 shall not apply in any of the following dispensations:

(a) Where a take-off or landing of any aircraft at the Airport is made in an emergency, where there is an immediate danger to life or health, whether human or animal.

(b) Where a take-off or landing of any aircraft at the Airport occurs as a result of a delay to that aircraft which is likely to lead to serious congestion at the Airport and/or serious hardship or suffering to passengers or animals.

(c) Where a take-off or landing of any aircraft at the Airpo rtoccurs as a result of widespread and prolonged disruption of air traffic.

(d) Flights for military, medical or humanitarian purposes granted exemption by the Irish Government

Part 3 – Noise Quota Scheme Reporting Requirements

3.1 The Applicant shall submit quarterly reports to the planning authority and ANCA on its implementation of the Noise Quota Scheme. The reports shall include:

(a) the number of aircraft operating during the Noise Quota Period and their type, including technical details including their engines and take-off weights, where applicable;

(b) the Quota Count assigned to aircraft operating in the Noise Quota Period;

(c) the total Noise Quota used during the quarter and in the Annual Period to date;

(d) the total Noise Quota used by Quota Count in the quarter and in the Annual Period to date; and

(e) Details of any dispensations pursuant to Paragraph 2.2 which have been relied upon during the quarter and in the Annual Period to date.

3.2 The quarterly reports shall be issued so that:

(a) The first quarterly report considering activity over the period 1 April to 30 June each year is published by no later than the 30 September each year.

(b) The second quarterly report considering activity over the period 1 July to 30 September each year is published by no later than the 31 December each year.

(c) The third quarterly report considering activity over the period 1 October to 31 December each year is published by no later than the 31 March the following year.

(d) The fourth quarterly report considering activity over the period 1 January to 31 March each year is published by no later than the 30 June each year.

Part 4 – Noise Performance Reporting

4.1 The Applicant shall issue annual reports to the planning authority and ANCA on its noise performance. The report for the previous Annual Period (1 January to 31 December) shall be issued by no later than 31 March each year, for the first full Annual Period to which this regulatory decision applied and comprise of:

(a) Noise exposure statistics and contours as required to facilitate performance review of the Noise Abatement Objective including as a minimum:
- Annual 55dB L_{night}
- Annual 65dB L_{den}
- the number of people 'highly sleep disturbed' and 'highly annoyed' in accordance with the approach recommended by the World Health Organisation's Environmental Noise Guidelines 2018 as endorsed by the European Commission through Directive 2020/367, taking into account noise exposure from 45 dB L_{den} and 40 dB L_{night}.
- Annual L_{night} contours from 40 dB in 5 dB increments
- Annual L_{den} contours from 45 dB in 5 dB increments
- Summer 60 dB $L_{Aeq.\ 16hr}$, 63 dB $L_{Aeq.\ 16hr}$ and 69 dB $L_{Aeq.\ 16hr}$ (measured averaged across 92-day summer period from 16th June to 15th September)

(b) Confirmation of the number of residential properties that (i) have benefitted from and (ii) are eligible for but yet to benefit from the Applicant's noise insulation schemes.

(c) Key Statistics with respect to aircraft operations in the preceding Annual and Summer Periods including but not limited to:

- aircraft movements including average hourly movements
- use of the Noise Quota Scheme
- movements by aircraft type
- passenger numbers
- aircraft destinations
- flight routings
- runway use

(d) Summaries from noise monitoring terminals for the Airport in such format as ANCA shall stipulate.

(e) Details of all noise modelling undertaken in support of the Noise Performance Reporting describing compliance with the methodology set out in Directive 2015/996 (ECAC Doc.29 4th Edition). All noise modelling shall be validated using local noise and track keeping performance data from the Airport's systems.

(f) Summary of complaints records for the preceding Annual Period categorised by the:

- location of complaints; and
- reason for complaint

(g) Details of any anticipated changes or developments that may affect noise at the Airport in the current year, through for example airspace change or fleet modernisation.

Reason: To limit the impact of the aircraft noise at Dublin Airport on sleep disturbance in the interest of residential amenity and to ensure the effective implementation of the Noise Abatement Objective for the Dublin Airport by means of a noise-related limit on aircraft operations.

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5. The airport shall be subject to an annual aircraft movement limit of 13,000 between the nighttime hours of 2300 and 0659 (inclusive, local time) with aircraft movements split between the Winter 3,900 and Summer 9,100 to allow for extra flights during the 92-day summer busy period.

Reason: To control the frequency of night flights at the airport so as to protect residential amenity having regard to the information submitted concerning future night-time use of the existing parallel runway.

6. A voluntary residential sound insulation grant scheme (RSIGS) for residential dwellings shall be provided.

Initial eligibility to the scheme shall apply to all residential dwellings situated within the 'Eligibility Contour Sep 2023 as shown in the 'Overview Map' in Pack 1 of submission dated the 4th day of March, 2024 submitted on behalf of the applicant by Tom Phillips and Associates (attached to this Draft Decision).

Eligibility to the scheme shall be reviewed every two years commencing in 2027 with residential dwellings situated in the 55 dB L_{night} contour being eligible under the scheme as detailed in Parts 1 to 5 below.

Further eligibility to the scheme shall include for all residential dwellings that satisfy the following criteria:

- Residential dwellings situated in the 50 dB L_{night} contour in the first full year when the Relevant Action comes into operation, together with a change of at least +9 dB when compared with the current permitted operation in the same equivalent year,

- Residential dwellings subject to aircraft noise of 80 dB L_{Amax} based on the noise footprint of the airport's westerly and easterly single modes of approach and departure (not averaging the modes of operation of the airport over the 92 days of summer) between 2300 hrs and 0700hrs.

Part 1 Definitions

1.1 The following definitions shall apply with reference to the scheme described in Part 2.

Term: Approved Contractor
Meaning: A contractor procured and managed by the Applicant and considered competent and appropriately qualified and have suitable levels of insurance coverage to install the sound insulation measures described in Part 4 in line with acceptable standards and in compliance with the Building Regulations.

Term: Bedroom
Meaning: A room other than in an attic or loft within an Eligible Dwelling which is used as sleeping accommodation.

Term: Competent Surveyor
Meaning: An appropriately qualified surveyor to inspect and determine relevant information in relation to the existing construction and elements of an Eligible Dwelling for the purposes of undertaking an Elemental Analysis as defined in Part 5.1, Step 5 below.

Term: Eligibility Contour Area
Meaning: The 55 dB L_{night} contour area as varied from time to time pursuant to the review process set out in Part 3.2 below.

Term: Eligible Dwelling
Meaning: A habitable dwelling built in compliance with the provisions of the building regulations and the Planning and Development Act within

the Term Eligibility Contour Area and which otherwise qualifies under the conditions set out under Part 3.1 below.

Term: Index Linked
Meaning: Index-linked by reference to changes in the Consumer Price Index (CPI) (maintained by the Central Statistics Office) in the period between the Application and the date of the Statement of Need.

Term: Initial Eligibility Contour Area
Meaning: The area shown on the 'Eligibility Contour Sep 2023 as shown i nthe 'Overview Map' in Pack 1 submission dated 4th March 2024 submitted on behalf of the applicant by Tom Phillips and Associates (attached to this Draft Decision).

Term: Relevant External Noise Level
Meaning: The noise exposure level at the relevant Eligible Dwelling.

Term: Statement of Need
Meaning The recommended measures identified from those available under the scheme as outlined in Part 4

Term Target Performance
Meaning: An improvement of at least 5 dB, where feasible, in the sound insulation of each bedroom of the Eligible Dwelling. Where possible, the guidelines recommended in BS8233:2014 for internal ambient noise levels shall be targeted.

Part 2 – Purpose of the Scheme

2.1 The purpose of the scheme is to provide financial assistance by the Applicant to property owners in the form of a grant in the sum of €20,000 (Index Linked) towards the costs of noise insulation measures to Bedrooms in Eligible Dwellings (the Grant).

2.2 Bedrooms and properties may qualify only once for the financial assistance provided under this scheme.

2.3 Where a dwelling is eligible under this scheme but is also eligible for insulation under the Residential Noise Insulation Scheme (RNIS) and the Home Sound Insulation Programme (HSIP) best endeavours shall be made by the Applicant to ensure that the dwelling receives insulation under RNIS and HSIP instead of this scheme.

Part 3 – Eligibility

3.1 Dwellings shall be determined to be Eligible Dwellings under this scheme if they are located within (i) the Initial Eligibility Contour Area as shown on the map 'Eligibility Contour Sep 2023 as shown in the 'Overview Map' in Pack 1 submission dated 4th March 2024 submitted on behalf of the applicant by Tom Phillips and Associates (attached to this Draft Decision) or (ii) the Eligibility Contour Area (following any review carried out pursuant to Part 3.2 below) and:

(a) Were constructed pursuant to a planning permission granted following a planning application lodged on or prior to 9th December 2019, being the date of adoption of Variation number 1 to the Fingal Development Plan 2017-2023 incorporating policies relating to development within Aircraft Noise Zones;

(b) Have not benefitted from noise insulation previously under this scheme; and

(c) Have not benefitted from noise insulation under either the RNIS or HSIP schemes previously.

3.2 By 31 March 2027 and every two years thereafter, the Applicant shall update and publish a revised Eligibility Contour Area map identifying all authorised habitable dwellings within the 55 dB L_{night} contour in the calendar year immediately preceding the review.

Part 4 - Measures available under the Scheme

4.1 The owner of an Eligible Dwelling in accordance with Part 3 and following the procedure described in Part 5 shall be entitled to the Grant to be applied towards a selection of insulation measures to be applied to Bedrooms within an Eligible Dwelling as specified in Paragraphs 4.2 to 4.10 below.

4.2 The insulation measures referred to in Paragraph 4.1 must be installed by an Approved Contractor and comprise of the following unless the equivalent measure already exists within the Eligible Dwelling

(a) P rimary Acoustic Glazing

(b) Secondary Acoustic Glazing

(c) Glazing Roof Light

(d) Passive Ventilator

(e) Mechanical Ventilator

(f) Loft Insulation

(g) Ceiling Overboarding

4.3 The sound installation measures provided unde rthis scheme shall otherwise comply with the specification of the measures in place under the RNIS scheme as summarized in Part 5 below.

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4.4 Where secondary acoustic glazing is to be installed, this shall meet the following specification, namely, 6.4 millimetres laminated glass with minimum 100 millimetres gap from the primary glazing unit. However, where this is not possible, the secondary glazing should be provided to account for the below variations.

Thickness of Glazing of the Inner Window	**Window Minimum Horizontal Distance**
Less than 4 mm and not less than 3 mm thick	200mm
Less than 6 mm and not less than 4 mm thick	150mm

4.5 Where secondary glazing is being installed reasonable endeavours will be made to repair the draft seals, catches and hinges to provide an air-tight seal on the existing primary glazing unit.

4.6 Where a replacement primary acoustic glazing is to be provided, this shall achieve a minimum Rw of 43 dB tested and rated to BS EN ISO 140-3 and BS EN ISO 717.

4.7 Where ventilators (passive or mechanical) are to be provided, a ventilation strategy for the bedrooms within each Eligible Dwelling shall be determined in accordance with Part F of the Building Regulations. Mechanical ventilation shall comprise of a ventilator unit consisting of a controlled variable- speed inlet fan with sound attenuating duct and cover that is capable of supplying fresh air to the room directly from outside by means of the supply duct and cowl (or grille).

4.8 Where no loft insulation is present in an Eligible Dwelling 200mm of fibrous acoustic insulation may be placed between ceiling joists, the insulation is to have a minimum density of 80 kilogrammes per metres cubed. Where insulation is already present but found to be unsatisfactory additional layers of insulation will be added to increase the total thickness to 200 millimetres.

4.9 Any ceiling overboarding shall comprise of a continuous layer of mass to provide at least 12 kilogrammes per metres squared added above joists in attic, for example 22 millimetres plywood (or similar approved).

4.10 In the event that loft Insulation or loft boards cannot be installed due to inaccessibility or other practical reasons, any ceiling overboarding shall comprise a dense plasterboard with a total minimum surface mass of 12 kilogrammes per metres squared, that is, 15 millimetres SoundBloc (or similar approved).

Part 5 – Procedure

5.1. The Applicant in operating this Scheme shall follow the procedure set out in this Part 5 as required in the discharge of the Applicant's obligations under Condition 7 of the North Runway Consent, the discharge of which obligations is achieved through the RNIS.

Step 1 – Determine Eligibility - Eligible Dwellings shall be identified as per Part 3 of this Schedule.

Step 2 – Notification of Eligibility - The Owner of an Eligible Dwelling shall be notified of their eligibility under the scheme within six months of their eligibility being determined under Step 1.

Step 3 – Determine Relevant External Noise Level - The Relevant External Noise Level at the Eligible Dwelling shall be determined

Step 4 – Undertake Building Survey – The Applicant shall use reasonable endeavours to arrange for the Eligible Dwelling to be inspected by the Competent Surveyor (and secure the necessary agreement to this from the owner of the Eligible Dwelling) within six months of eligibility being determined to record relevant information. The building survey shall be carried out by a Competent Surveyor appointed

on behalf of the Applicant. The survey shall record the location and number of Bedrooms, and for each Bedroom record the following relevant information:

- External wall constructions - where possible the construction type of the external walls will be recorded for example wall composition including inner leaf, cavity, and external leaf dimensions including all associated building materials;
- Window type – e.g. frame material, single glazing, double glazing, including key dimensions;
- Roof construction – including where possible roof construction type
- Details of chimneys and fireplaces
- Ventilation paths – e.g. existing wall and floor vent types, quantities and dimensions
- Details of any existing sound insulation measures which have been installed previously
- Dimensions of all Bedrooms including window, roof and wall dimensions
- Drawings and/or floor plans – if these are available from the owner
- Photographic records of the building

Step 5 – Elemental Analysis - An elemental analysis shall be undertaken to provide a technical assessment of the noise insulation required for the Eligible Dwelling. The following process shall be followed:

(a) The existing sound insulation properties of each Bedroom shall be established

(b) The anticipated future internal noise levels within each Bedroom having regard for the Relevant External Noise Level, presented in octave bands scaled from measurements taken around the Airport, and the existing noise insulation performance obtained from Step (a).

(c) A comparison shall be made between the anticipated internal noise level to the BS8233:2014 Targets for internal ambient noise;

(d) An assessment will be undertaken to determine the required improvement in the noise insulation performance, having regard for the Target Performance.

(e) Through an elemental analysis, the most effective combination of measures set out in Part 4 having regard for the Target Performance and the financial assistance grant shall be identified.

Step 6 – Statement of Need - A Statement of Need shall be prepared for each Eligible Dwelling. The Statement of Need will be a bespoke document for each Eligible Dwelling. The Statement of Need shall:

(a) Describe the existing sound insulation performance for each Bedroom having regard for the Buil dingSurvey as described in Step 4

(b) Identify the potential improvement in the existing sound insulation performance for each Bedroom as ca nbe afforded within the Grant and whether the Target Performance can be met

(c) Set out the recommended set of measures for the Eligible Dwelling in the form of a schedule of works and the associated measures on a bedroom-by-bed roombasis

(d) Provide an opinion on the future internal noise level following the implementation of the noise insulation works and the ability of the works to the meet Target Performance.

pM

The Statement of Need shall be issued to the owner of the Eligible Dwelling.

Step 7 – Acceptance - Subject to the owner of the Eligible Dwelling agreeing to the scope of works as defined under the Statement of Need, the engagement of the Approved Contractor and access to the dwelling by the Approved Contractor for the purposes of undertaking the works, the Airport will use reasonable endeavours to procure that the Approved Contractor undertakes the scope of works within six months of the owner's agreement to the same.

Step 8 – Works – The scope of works as defined by the Statement of Need shall be undertaken by the Approved Contractor or a suitably qualified contractor procured by the home owner. The Applicant shall procure the Approved Contractor to ensure that the works are undertaken to the necessary standards and in compliance with the necessary regulations and that the Approved Contractor provides the owner with all appropriate certification and warranties relative to the works completed to the Eligible Dwelling. The Approved Contractor shall photograph the Eligible Dwelling before and after the works for record purposes.

5.2 In the event that a property owner declines to accept the scope of works as defined under the Statement of Need (Step 6) the Applicant shall make a grant available towards the costs of sound insulation measures through the Approved Contractor equal to the cost of the measures identified through the Statement of Need. This grant may be used by the owner to request alternative measures providing they as a minimum meet the Target Performance. Where the alternative measures are calculated to cost more than the cost of the measures identified through the Statement of Need, any difference shall be at the expense of the owner.

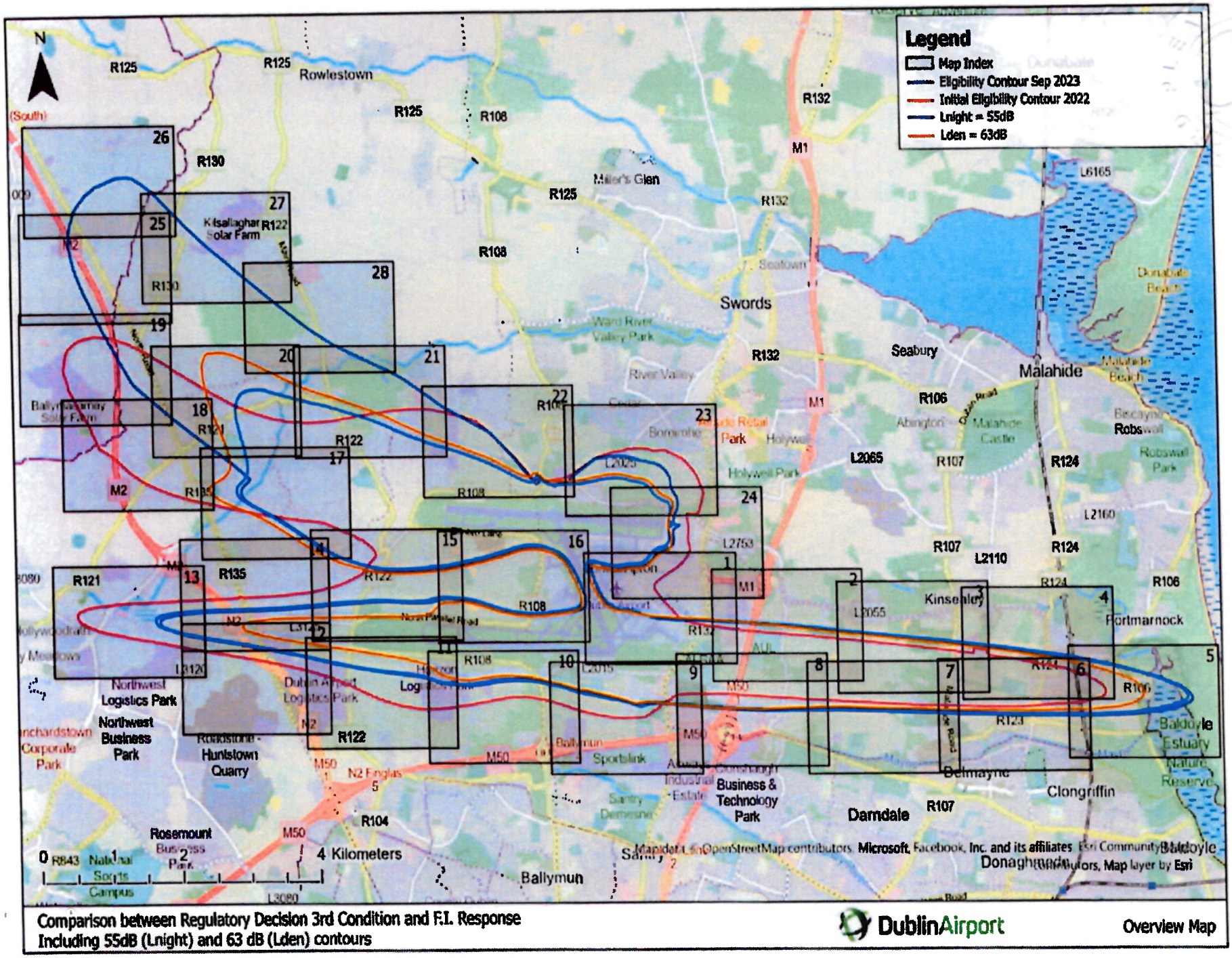
5.3 In the event that a property owner wishes to appoint their own competent contractor, the Applicant will provide a specification for the works. The property owner must provide a written quotation from their competent contractor for approval of both the identity of the contractor and the quotation by the Applicant. Following approval, the property owner shall be responsible for managing the works and making payments to their contractor and the provisions of and schedule as agreed by the planning authority shall be deemed to be amended accordingly. Upo ncompletion of the works, the Applicant will carry out an inspection and issue payment to the property owner. Where works are not carried out in accordance with the approved specification, payment will not be made by the Applicant. Where works are not carried out in accordance with the approved specification, payment will not be made by the Applicant. The Applicant must act reasonably in the approvals process, but if the Applicant does not approve of the contractor or the quotation, payment will not be made by the Applicant.

Reason: To account for the impact of noise from individual aircraft movements from, any change in flight paths, and assessed in terms of the maximum noise level at a receptor during the fly-by. Also, to mitigate the impact of aircraft night-time noise as a result of the use of the Airport's runways

Peter Mullan

Peter Mullan
Member of An Bord Pleanála
duly authorised to authenticate
the seal of the Board.

Dated this 11th **day of** September, **2024.**



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An Bord Pleanála

ABP-314485-22

Appendix 2- 'Dublin Airport Night Time Noise Review and Executive Summary' by Think Research Limited dated December 2024

Dublin Airport night noise review executive summary

12 December 2024

1 Introduction

This summary report has been prepared for Aer Lingus by Think Research Limited. It presents the results of a review of the conditions imposed in the draft decision of An Bord Pleanála (ABP) – ABP-314485-22 – in response to a third-party appeal against the decision made by Fingal County Council concerning a proposed relevant action relating to the night-time use of the runway system at Dublin Airport.

It is intended that this summary report will be used by Aer Lingus as part of its submission in response to ABP's draft decision.

2 Review

We have reviewed the conditions imposed in ABP's draft decision ABP-314485-22. Our review includes an assessment of the rationale for the conditions and the processes used to derive them. Based on this review, we have the following observations.

Balanced approach

Regulation (EU) 598/2014 on noise-related operating restrictions, as transposed into Irish law by the Aircraft Noise (Dublin Airport) Regulation Act 2019, requires a balanced approach to be applied. The EU regulation notes that noise-related operating restrictions should be '*introduced only when other balanced approach measures are not sufficient to attain the specific noise abatement objectives.*' Applying the balanced approach should ensure that operating restrictions are proportionate, alternative methods are considered and the most cost-effective combination of measures is applied. Cost-benefit analysis can also be applied to understand the broader impacts that operating restrictions have on economic welfare, airline operations and connectivity.

The conditions in ABP's draft decision are based on operating restrictions along with a noise insulation scheme. The rationale used to derive these operating restrictions and their interaction with the noise insulation scheme is not clear. For example, it would be expected that the costs associated with the noise insulation scheme would be counter-balanced by less stringent operating restrictions as fewer people would be noise impacted. The results presented of this trade-off should be presented clearly in a cost-effectiveness analysis. This clarity is lacking leading to the conclusion that potential relaxation of the operating restrictions due to the noise benefits of the inclusion has not been considered. This approach is doubly penalising from the airport's and airline's perspective because operating restrictions are compounded by the cost of the noise insulation scheme.

We note that alternative mechanisms to operating restrictions have been considered as various scenarios and options in the original planning application. However, it is unclear how these alternatives have been factored into ABP's draft decision.

The draft decision does not consider the broader economic implications of constrained capacity.

It is our view, therefore, that ABP has not fully followed the balanced approach in reaching its draft decision.

Additional awakenings

In addition to the widely accepted approach to assessing night noise impact based on the usual L_{night} indicator, ABP's draft decision gives high weighting to a new approach based on the L_{max} indicator. Whilst the logic appears sound that sleep disturbance is more likely driven by discrete high intensity noise events rather than average noise, there is considerable uncertainty associated with additional awakenings. The work commissioned by ABP[1] on noise assessment notes '*...there are no specific*

[1] A11267-23-RP060-4.0, Noise modelling report in response to ABP RI 27 April 2023, page 11

criteria by which to judge the significance of the number of additional awakenings…' An independent review of the approach to additional awakenings performed by a renowned expert, Professor, Dr Thomas Penzel, also concludes that '*…while a systematic approach to measuring the probability of increased awakenings would be beneficial, it is my opinion than none exists to date. The making of evidence based decisions is dependent on clearly defined thresholds in the literature, which are not available.*'

Furthermore, this is a new and novel approach, different to the basis for previous noise-related decisions. To our knowledge it is not widely applied elsewhere. It is not mentioned in the draft Noise action Plan for Dublin Airport for 2024 to 2028 and is not an ANCA noise objective. Its application would also mean that the basis used for noise impact assessment at Dublin Airport would be different to that used in the past and different to that used at most EU and other airports. This could put Dublin Airport and its operators at a competitive disadvantage.

It is our view, therefore, that analysis of additional awakenings is not currently reliable, may result in distortions and should not be used.

The 13,000 air transport movement cap

We can find no explicit basis for the condition that the airport shall be subject to an annual 13,000 aircraft movement limit between the nighttime hours of 23:00 and 06:59, inclusive local time. There is no direct reference to 13,000 movements in the supporting information for the draft decision or for previous submissions. However, the difference between the permitted (227,000) and proposed (240,000) (by daa) annual movements for 2025 sums to 13,000. This may or may not be coincidence but refers, in any case, to total movements, day and night, not just night movements.

There is no noise impact assessment of applying a 13,000 night movement cap nor is there any economic or operational impact assessments of applying such a cap. Its consequences are, therefore, not known.

13,000 night movements would average to approximately 35 movements per night, well below the 65 movements per night averaged over a 92-day reference period set in the original 2007 permission, currently under stay of enforcement in the High Court. This 65 movement limit would equate to an annual movement cap of 23,725. Prior to the opening of the northern runway, there was no night movement restriction and it currently, at peak times, reaches circa 120 movements per night. The limit of 13,000 night movements, therefore, imposes a very stringent constraint well below long-established custom and practice.

The references to winter, summer and the 92-day summer busy period are confusing and potentially contradictory. For clarity, winter and summer refer to the IATA scheduling seasons. The winter season spans from the last Sunday in October to the last Saturday in the following March. The summer season starts on the last Sunday in March and ends on the last Saturday in the following October. The winter season is 22 weeks long and the summer season is 30 weeks long. The 92-day summer busy period is simply a tool used to assess the required capacity for planning purposes.

The split of the cap into 3,900 for the winter season and 9,100 movements for the summer period results in inconsistent average limits of approximately 25 movements per night in winter and approximately 42 movements per night in summer. The ABP Inspector's Report highlights that the cap would allow circa 100 movements per night during the 92-day summer busy period (actually 99 movements per night over the full 92 days). The Inspector's Report neglects to add if 100 flights per night were to occur during this period, it would mean that zero night movements would be allowed for the remainder of the summer season, approximately 120 days.

Other analyses, including that performed by Vanguardia[2] on behalf of ABP as well as Anderson Acoustics[3] work for daa present night quota figures that, if converted to movements, result in an annual night movement limit of around 32,000.

We conclude, therefore, that there is no rational basis for the 13,000 night movement cap. Its derivation is highly unclear and its proposed application is inconsistent. The constraints that it places on airport

[2] 0000-BHE-EN-NS-DF-0-EIAR, Dublin Airport North Runway – Addendum Report – Noise, Rev. P01, Vanguardia, 19 April 2024, page 40.
[3] 3870-AnnualNightQuota – RFI Final, Dublin Airport Night Quota System Proposal – Response to RFI. Anderson Acoustics, 30th July 2021.

and airline operations are likely to be excessively restrictive or could result in complete night closures. Its negative economic impacts are not known and nor are the reductions in noise impact. This cap has been specified without any application of the balanced approach.

The noise quota scheme

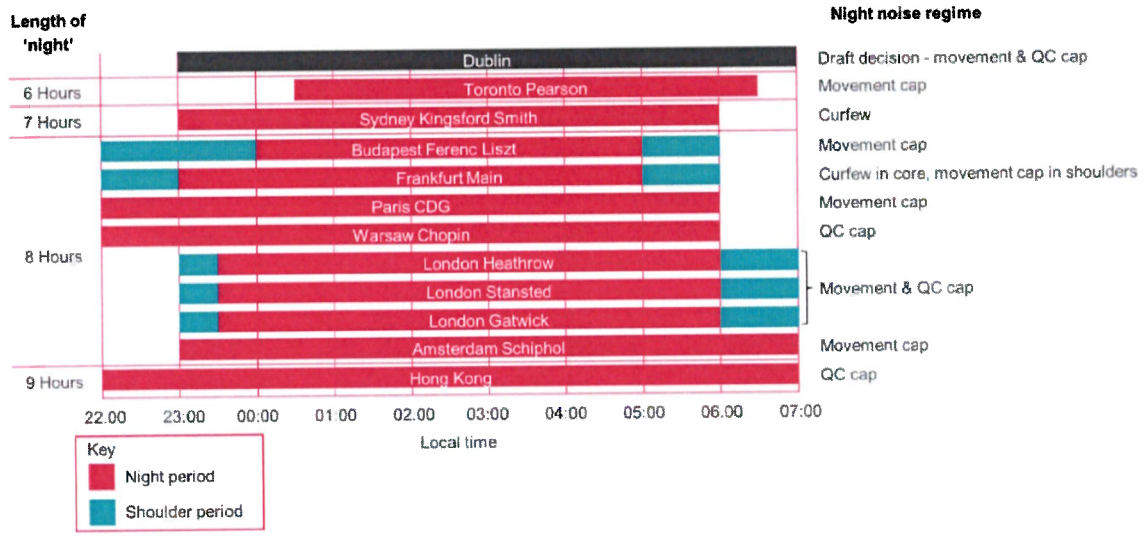
Noise quota schemes (NQSs), when used in conjunction with a movement cap, are usually applied as an incentive to move to quieter aircraft. This requires, initially at least, the quota count (QC) budget to be consistent with the movement cap. The annual QC limit of 16,260 as specified in condition 4 of the draft decision is not consistent with the 13,000 movement cap. At the target ratio of 0.51 QC per air transport movement (QC/ATM), the QC limit of 16,260 translates to approximately 32,000 annual movements. The QC limit would, therefore, provide no incentive to use quieter aircraft. In fact it may result in a disincentive because it would allow the QC/ATM to degrade from the target of 0.51 to approximately 1.25.

There are examples across the world of NQSs being applied without associated movement caps, such as Hong Kong and Warsaw Chopin airports. There are also, conversely, examples of movement limits being applied without an associated NQS, such as Amsterdam Schiphol, Paris Charles de Gaulle and Toronto Pearson.

We conclude, therefore, that as currently designed within the package of conditions within the draft decision, the NQS is redundant and may be counter productive. It does imply, however, a much more relaxed and realistic night movement limit of around 32,000 per year.

The night period

For the conditions in the draft decision relating to the movement cap and the NQS the night period is defined as starting at 23:00 and ending at 07:00, that is a blanket period of eight hours. As illustrated in the figure below, blanket application over an eight-hour period is unusual compared to other airports, where different degrees of restrictions are applied over different periods – often called shoulders and core night.



For example, at Heathrow, Gatwick and Stansted airports, there are two shoulder periods, from 23:00 to 23:30 and 06:00 to 07:00 local time, around a core night period from 23:30 to 06:00 local time. Operations during the shoulder periods are less restricted than those during the core night so that they can enable critical operations. For example at Heathrow, the shoulder period between 23:00 and 23:30 hours facilitates economically important long haul departures whereas the shoulder period between 06:00 and 07:00 accommodates long-haul arrivals and is accompanied by a relaxation on the normal runway operating restrictions. Those airports without shoulders either have a NQS alone (Hong Kong, and Warsaw Chopin) or a movement cap alone (Paris CDG) whereas Toronto Pearson has a short night period, of six hours, with a movement cap as a percentage of the total movements.

This illustrates that night noise regimes are usually established according to the specifics of the airport. This is not the case in the draft decision. The hard start to the night at 23:00 is potentially detrimental to home-based carriers and operational resilience where it is necessary for aircraft to return to the airport after their last rotation of the day to avoid knock-on disruption the next day. In the early morning, the late hard stop of the night period at 07:00 is potentially detrimental to long-haul arrivals, especially from the United States. This could have a negative impact on Dublin Airport's unique position in the Europe-US market supported by the US Customs and Border Protection (CBP) pre-clearance facility. This would potentially erode Dublin Airport's competitive advantage and diminish the positive economic contribution that connectivity with the US provides to Ireland.

Restricting departures to 07:00 will also likely be detrimental to short-haul connectivity with continental Europe noting the one-hour time difference between Dublin time and Central European Time (CET).

In our view blanket application of nighttime operating restrictions between 23:00 and 07:00 does not consider the operational and economic implications for some key air services using the airport. To avoid potentially damaging negative effects the night noise regime should follow the model applied in other places with different restrictions applied at different times, balancing noise, economic and operational impacts.

3 Conclusions

The process to reach the draft decision has not followed the balanced approach and is highly skewed towards the impact of night noise alone, without considering its other impacts, notably on the economy and the positioning of Dublin Airport and Ireland's home carriers in the market. Furthermore, the decision seems to have been strongly influenced by analysis of additional awakenings, which is a unique approach and is noted by experts, including ABP's advisors, as being subject to considerable uncertainty.

The 13,000 night movement cap does not have any traceable foundation, is applied inconsistently, is very constraining and introduces the risk that, during some periods, no night movements would be allowed at all. The QC limit specified in the NQS is highly inconsistent with the proposed movement limit and risks having the perverse incentive of allowing the operation of noisier aircraft. Conversely, however, applying a movement limit in line with the proposed QC limit would result in a workable situation.

The blanket application of a single regime across the entire night period does not allow any consideration for the specifics of Dublin Airport's markets and operations. This risks reducing the positive impact to Ireland's economy as well as eroding the competitive position of the Airport and the home-based carriers in certain markets, particularly to the US.

Considering these points, ABP's draft decision needs review, revision and substantiation.

Think

ADDRESS

Think Research Ltd
6 Branksome Park House
Bourne Valley Road

CONTACT

Phone: +44 (0) 1202 765 654
Email: Info@think.aero

Think | Aer Lingus

Dublin Airport night noise review

Final report

V1.1

19 December 2024

Image courtesy of Aer Lingus

Contents

This report describes a review of the operating restrictions proposed in ABP's draft decision on the night-time use of the runway system at Dublin Airport

The draft decision was produced in response to a third-party appeal against a planning decision made by Fingal County Council on a proposal made by daa to modify the conditions imposed in the original planning consent for the Airport's northern runway

General

The report has been produced for Aer Lingus by Think Research Limited (Think). It describes of review of the conditions imposed in the draft decision of An Bord Pleanála (ABP) – ABP-314485-22 – in response to a third-party appeal against the decision made by Fingal County Council on the night-time use of the runway system at Dublin Airport.

Scope

The review investigated the derivation and substance of the two main operating restrictions proposed in the draft decision, which are (paraphrased):

- the airport shall be subject to an annual aircraft movement limit of 13,000 between the night-time hours of 23:00 and 06:59, local time, inclusive.
- the airport shall be subject to a noise quota scheme (NQS) with an annual limit of 16,260 between the hours of 23:00 and 06:59, local time, inclusive.

The key points investigated were:

- the quantitative limits and their interplay.
- the drivers, analysis and logic that led to the definition of the quantitative limits.
- the length of the night period and the potential variation of restrictions across that period.

The review did not investigate directly the conditions concerning the restrictions on the operation of the northern runway or the requirement for a voluntary residential sound insulation grant scheme (RSIGS).

The review was based on publicly accessible source material available from the ABP and daa websites.

Contents and structure of the report

Section	Title	Description
2	Balanced approach	Reviews the method used by ABP to reach the draft decision against the requirements to apply a balanced approach as defined in Regulation (EU) 598/2014 on noise-related operating restrictions, as transposed into Irish law by the Aircraft Noise (Dublin Airport) Regulation Act 2019
3	Additional awakenings	Assesses the application and implications of ABP factoring new and novel additional awakenings analysis into noise impact considerations
4	The 13,000 movement cap	Investigates the rationale for applying a cap of 13,000 aircraft movements between the hours of 23:00 and 06:59 local time
5	The night quota scheme	Similarly investigates that rationale for applying a quota count (QC) of 16,260 between the hours of 23:00 and 06:59 local time and considers the interaction of this cap with the movement limit
6	Other night noise regimes	Describes night noise regimes applied at other airports to learn lessons about the potential alternative approaches
7	Considerations for the Dublin regime	Highlights additional factors that could be considered when specifying the regime for Dublin Airport
8	Conclusions	Consolidates and summarises the conclusions drawn from the review
A	Annex	Provides fact sheets describing the night noise regimes in place at other airports

Contents

In reaching the draft decision, there is no evidence that ABP has followed the balanced approach

The concluding sentence to recital (9) in Regulation (EU) 598/2014 states that '*Noise-related operating restrictions should be introduced only when other Balanced Approach measures are not sufficient to attain the specific noise abatement objectives*'

Regulation (EU) 598/2014 also implies that, inter alia:

- measures other than operating restrictions available to reduce noise are identified, including noise abatement operational procedures and that operating restrictions should only be applied after consideration of other measures
- public interest in the field of air transport as regards the development prospects of airports should be taken into account
- the cost-effectiveness of the measures is thoroughly evaluated and this does not preclude the use of cost-benefit analysis

It is not clear how these considerations have been factored into the draft decision. Three of the four specific conditions (3, 4, 5 and 6) to imposed in the draft decision are 'operating restrictions', relating to the hours of operation of the northern runway, applying noise quota scheme (NQS) with a quota count (QC) cap, applying a night movement cap. The fourth condition relates to a residential sound insultation grant scheme (RSIGS). **The draft decision is weighted very heavily to operating restrictions**.

If there is any consideration of alternatives to the operating restrictions, this draws on the previous work done and scenarios analysed in support of daa's application. The validity of this extrapolation from the previous work is not clear because the operating restrictions proposed in the draft decision are very different to those analyses in daa's original application. **Except for the RSIGS, there appears to be no explicit consideration or analysis of measures other than operating restrictions leading up to the definition of conditions in the draft decision**.

Any cost effectiveness and cost benefit analysis that has been performed is not reported transparently. **There is no obvious trade-off or balancing between the RSIGS scheme and the NQS and movement limits**. It might be expected that application of RSIGS would enable less constraining operating restrictions. **There is no assessment of the economic impact or cost to airlines and the Airport due to the operating restrictions**, either currently or in constraining future development.

Contents

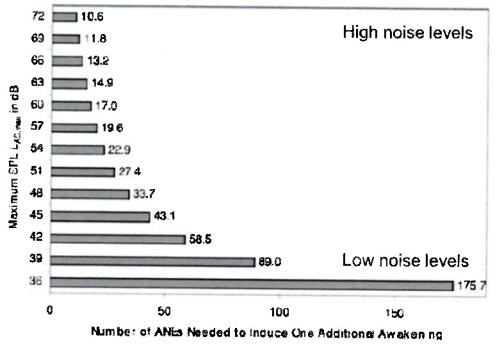
To address shortcomings using averages to address noise impacts on sleep, ABP has factored 'additional awakenings' into the assessment

Studies from the World Health Organization (WHO) and observations from those affected, indicate that metrics that quantify average noise levels, such as L_{night} do not represent actual experience and, on their own, do not predict sleep disturbance adequately

The additional awakening assessment evaluates the probability of people being woken due to the maximum noise level of an aircraft movement, L_{Amax}, above and beyond the normal wakening pattern, circa 23 awakenings per night per person

The rationale for this analysis is:

- averaging metrics, on their own, such as L_{night} *'may not be best'* for assessing the impacts of noise on sleep disturbance
- because of the quantum nature of QC allocation, an aircraft that falls into a lower QC band might not be substantially quieter than an aircraft in the next highest band
- the relationship between aircraft noise events (ANEs) is not linear, that is, in simple terms, other than at low noise levels a reduction in noise by 50% (3dB) does not result in a reduction additional awakenings by 50% (see the chart below) or, conversely, twice as many aircraft each of which is half as noisy would not create the same number of additional awakenings



J. Acoust. Soc. Am., Vol. 119, No. 5, May 2006

The chart shows that:

- at high noise levels a reduction in 3dB (halving) of noise would only allow a few additional aircraft movements (e.g. increase from 10.6 to 11.8) for the same impact in additional awakenings
- at very low noise levels, a 3dB reduction in noise would result allow many more additional aircraft movements (e.g. from 89.0 to 175.7) for the same number of additional awakenings

Quotes from Vanguardia report. Chart reproduced from the Vanguardia report, figure 1, page 16, originally from Basner et al, *'Aircraft noise effects on sleep,'* Journal of the Acoustical Society of America, 119 (5), May 2006

At ABP's request, daa's noise consultants extended the noise impact analysis to include additional awakenings

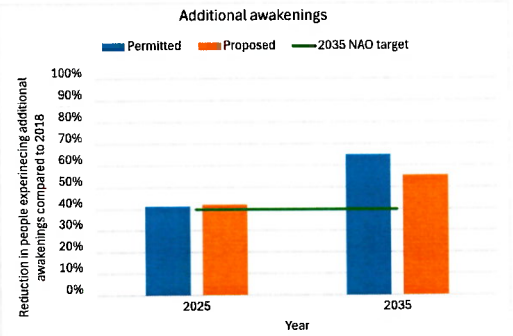
This analysis only addresses the permitted and proposed scenarios. It does not consider the conditions imposed in the draft decision and the outcomes are not substantially different to traditional analysis

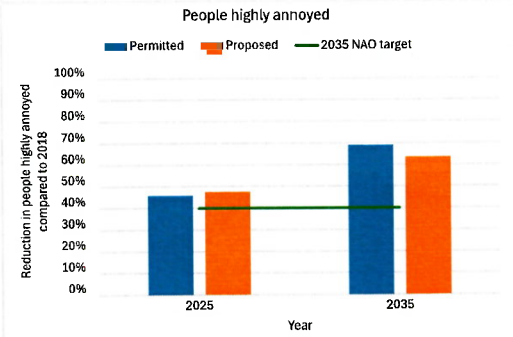
The charts show the results of the noise analysis for three noise indicators: additional awakenings, people highly annoyed and people highly sleep disturbed expressed as the percentage reduction from the baseline of 2018. The charts show as the orange bar the noise impact of the scenario proposed by daa in its original application (proposed scenario). The blue bar shows the noise impact of the scenario permitted by the original planning consent from 2007, that is the current operation (permitted scenario). The green horizontal line approximates to the 2035 noise abatement objective.

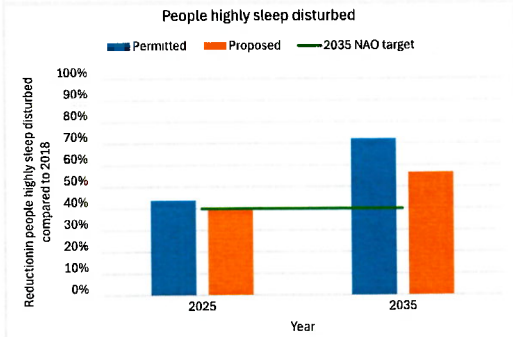
The noise analysis alone shows that:

- there is little difference in 2025 between the original permitted scenario and the proposed scenario for each of the three noise indicators
- as expected, the noise impact of the proposed scenario is higher in 2035 than for the permitted scenario because of the higher traffic volume. However, this analysis does not factor in the reduction in noise impact that will arise from the RSIGS scheme
- both proposed and permitted scenarios meet the 2035 noise abatement objective.

This noise analysis should be used to provide input into creating the holistic analysis following the balanced approach. It is insufficient alone to specify operating restrictions.







Sources: Vanguardia addendum report summarising the findings of the supplementary EIAR. Bickerdike Allen Partners noise modelling report in response to ABP RI of 27 April 2023

The noise abatement objective (NAO) for Dublin Airport include the reduction of people highly sleep disturbed and people highly annoyed in 2035 compared to 2019. The NAO does not mention additional awakenings. The noise analysis in support of daa's application and ABP's investigation uses 2018 as a baseline so the NAO indicated on the charts is an approximation

Although its application is logical, the scientific understanding of additional awakenings is insufficiently mature to be used as the basis of decision-making

In addition, text in recital (12) of Regulation (EU) 598/2014 states '*noise assessments should be based on objective and measurable criteria common to all Member States and should build on existing information*' and '*Member States should ensure that all such information is reliable*'

Comments on the level of maturity of additional awakenings analysis

> While there are no specific criteria by which to judge the significance of the number of additional awakenings, the relative values for the scenarios can be compared. Considering the annual situation, a reduction is expected from 2018. In 2025 this is by around 40% irrespective of whether the proposed change to the controls at night proceeds. By 2035 a greater reduction is forecast, by around 55% with the proposed change, and 65% without it.

A11267-23-RP060-4.0, Noise modelling report in response to ABP RI 27 April 2023, page 4 and page 11

Note: both the permitted and proposed scenarios meet the 2035 noise abatement objective, which has no mention of additional awakenings

> To conclude, while a systematic approach to measuring the probability of increased awakenings would be beneficial, it is my opinion that none exists to date. The making of evidence based decisions is dependent on clearly defined thresholds in the literature, which are not available. An accurate measure of the probability of awakenings would involve an assessment of sleep and sleep awakenings with appropriate equipment which would allow us to assess sleep and awakenings. There would also be additional considerations such as the need for sleep electroencephalography, similar to the home sleep studies, as done in the NORAH study in Frankfurt.

Report on awakenings as a response to noise during sleep, Professor Dr Thomas Penzel, https://www.pleanala.ie/publicaccess/Responses/314485/Applicant's%20response%20including%20EIAR%20Supplement%2014-09-23/8.Independent%20Opinion%20-%20Dr%20Penzel/Penzel-report-Dublin%20FINAL%2011.09.23.pdf?r=743350

Professor Penzel notes that due to the probabilistic nature of additional awakenings, objective criteria are needed to assess their significance – in simple terms what does an increased probability of one additional awakening beyond the normal 23 per night actually mean?

Use of additional awakenings to drive operational restrictions changes the baseline for previous decisions and would make Dublin Airport unique, potentially creating market distortions with other airports

> (12) Noise assessments should be based on objective and measurable criteria common to all Member States and should build on existing information available, such as information arising from the implementation of Directive 2002/49/EC. Member States should ensure that such information is reliable, that it is obtained in a transparent manner and that it is accessible to competent authorities and stakeholders. Competent authorities should put in place the necessary monitoring tools.

Regulation (EU) 598/2014, recital (12)

To our knowledge, additional awakenings analysis has not been applied at any other airports. In addition, due to its immaturity this likely means that the playing field will not be level for Dublin Airport

Contents

We can find no explicit mention of 13,000 night movements in any of the application documents: this figure appears unreasonably low

The only reference to 13,000 movements across the various documents relates to the difference between the ATMs per annum in 2025 between the proposed and permitted scenarios.

Table 13-1: Assessment Years, Scenarios, PAX and ATMs

Assessment Years and Scenarios	Predicted Annual Passengers (PAX) (millions per annum)	Permitted vs Proposed Difference in PAX (millions)	Air Traffic Movements (ATMs) ('000s per annum)	Typical 'Busy Day' Night-Time ATMs (23:00-07:00)
2025 Permitted	31.8	n/a	227	60
2025 Proposed	32.0	0.2	240	114
2035 Permitted	32.0	n/a	228	60
2035 Proposed	32.0	0.0	240	114

Source: Supplementary EIAR

Note: the combination of passenger numbers and movements implies a decrease in aircraft gauge or load factor of up to 5% unless the additional movements are comprised mainly of freighters

daa proposal within the EIA leads to an additional 13,000 ATMs per annum.

This additional 13,000 movements is a 'total', including additional night movements and additional day movements. In terms of absolute movements as a conservative illustration:

- 114 movements per night over the 92-day busy period would total approximately 10,500 night flights
- if the remainder of the summer season operates at 75% of this peak demand level, there would approximately 10,000 night flights over the less busy part of the summer
- if the winter season operates at 60% of the peak demand, there would be approximately 10,000 night flights in the winter.

This gives a conservative estimate of 30,500 night flights per year – roughly 2.3 times the 13,000 limit

The split of the movement allocation between summer (9,100) night movements and winter (3,900 movements) is also difficult to understand

Summer and winter refer to the IATA scheduling seasons of length 30 weeks and 22 weeks respectively, or an approximate 58:42 split summer:winter

Extract from the Inspector's report

12.4.52. I consider that it is reasonable and practical to restrict the aircraft movement to the proposed aircraft movements in the applicant's EIAR which is 13,000 per year. This conclusion also has consideration to the conclusions in the EIAR which relate to the impact of aircraft noise on the existing communities at night. In compliance with international best practice and in keeping with the information in the applicant's documentation, I recommended that the split in seasonal operation is included at 70% and the summer movement limit of 9,100-night flights are permitted (i.e., Movement limit: Winter 3,900 and Summer 9,100). This aircraft movement limit would allow c. 100 aircraft movements per night during the 92-day summer busy period.

Implications

The split as it stands would **allow 25 flights per night in the winter season and 42 flights per night in the summer season**. This is not logical from a purely noise impact perspective because it implies that noise has a higher impact in winter than in summer

Traffic of 100 flights per night over the 92-day busy period would exceed the summer limit (99 flights per night would fit) and would leave **no allowance for remainder of the summer**

Other comments and observations

The winter season starts on the last Sunday in October and runs to the Saturday before the last Sunday in the following March. The summer season starts on the last Sunday in March and ends on the Saturday before the last Sunday in the following October. The winter season is either 21 or 22 weeks long and the summer season is either 30 or 31 weeks long. The 92-day summer busy period is simply a tool used to assess the required capacity for planning purposes

In terms of practice elsewhere, at Heathrow for example, the summer:winter split is in the ratio 56:44 and Stansted the ratio is 60:40 (both close to the ratio of the lengths of the season) whereas at Gatwick the ratio is approximately 78:22 reflecting Gatwick's peak summer demand. There is, therefore, **no single good practice** elsewhere, rather **the approach is tailored to the specific airport**

The 13,000 night movement limit stated in the Inspector's Report is also at odds with the limits considered in the other supporting information

There is also no explicit noise impact assessment of the 13,000 night movement limit

Comparison of night movement allowances/assumptions from different sources

	Annual Limit	Summer Allocation	Winter Allocation	Summer ATMs/night	Winter ATMs/night
Inspector's report as stated*	13,000	9,100	3,900	99 ATMs/night for 92 nights. 0 ATMs/night for remaining ~118 nights.	26 ATMs/night
Inspector's report with regular scheduling seasons	13,000			42 ATMs/night	26 ATMs/night
Vanguardia proposals	~32,000			Average of 87 ATMs/night	
Mott McDonald scheduling assumptions	~32,000 – 38,000			Up to a peak of 133 ATMs/night**	
Anderson Acoustics QC assumptions	~32,000			Average of 87 ATMs/night	

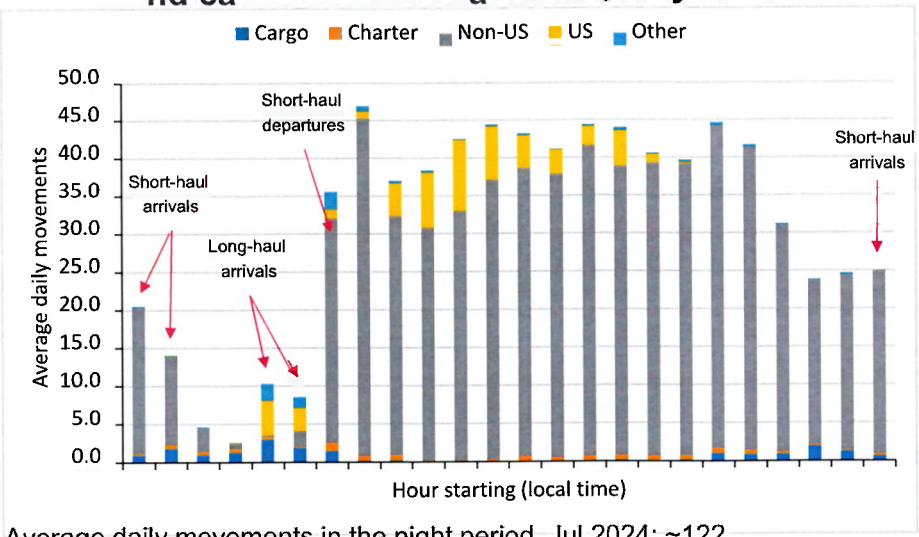
* Summer flight allocation purely for "92-day summer busy period

** "Typical busy day in 2025" includes allocation for ad-hoc flights in addition to the schedule.

Using a readily available traffic sample illustrates that the 13,000 falls way short of accommodating even the still-recovering demand in 2022

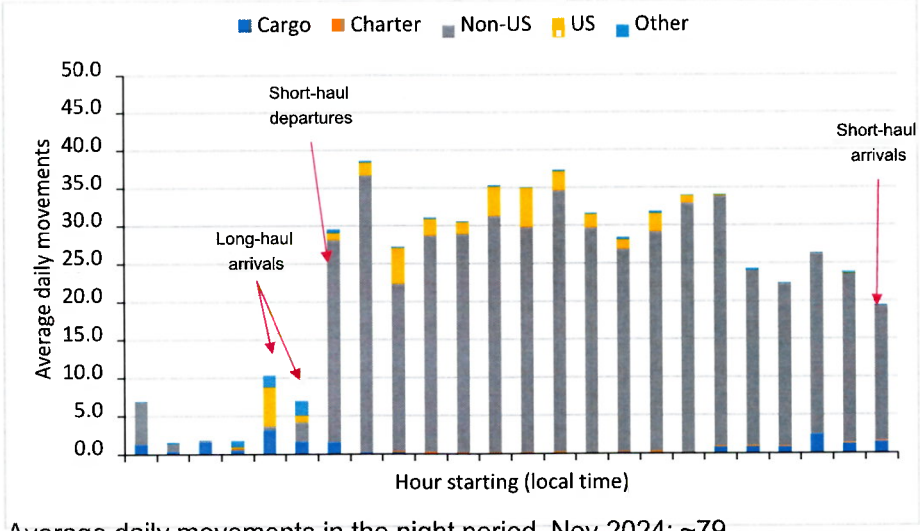
With current traffic patterns, all the 13,000 per night ATM limit would be consumed by traffic in the 06:00 to 07:00 and 23:00 to 24:00 hours

Indicative commercial traffic, July 2024



Average daily movements in the night period, Jul 2024: ~122
Average allowance from 13,000 ATM limit: 42

Indicative commercial traffic, November 2024



Average daily movements in the night period, Nov 2024: ~79
Average allowance from 13,000 ATM limit: 26

The limit would mean that flights critical to Airport and airline operations and economics, connectivity and Ireland's economy could be prejudiced. These flights are:

- late evening short-haul arrivals, essential to return home-based aircraft to the Airport reliably to provide resilience and avoid knock-on disruption the next day
- first wave short-haul departures providing important connectivity to Europe
- early morning long-haul arrivals, including those from the US providing economically important connectivity with the US enabled by the US Customs and Border Protection (CBP) pre-clearance facility

Source: Dublin Airport traffic statistics, Think analysis

Contents

In the noise quota scheme (NQS) standard quota count values for individual flights are counted against an overall noise quota

The annual limit for the NQS scheme proposed in the draft decision is 16,260 between the hours of 23:00 and 06:59 local time

QC values from the ICAO noise certification scheme

Noise Level EPN dB	Quota Count Value
More than 101.9	16
99 to 101.9	8
96 to 98.9	4
93 to 95.9	2
90 to 92.9	1
87 to 89.9	0.5
84 to 86.9	0.25
81 to 83.9	0.125
Less than 80.9	0

Average target QC/ATM at Dublin is approximately 0.51 (see Vanguardia report, 0000-BHE-EN-NS-DF-0-EIAR, Review of EIARs & Additional Information – Noise, 18 April 2024, page 23)

Material produced by Vanguardia for ABP argues that a NQS alone is not sufficient and must be accompanied by a restriction on the number of night movements. The reasons for this include:

- the quantised nature of the allocation of QC values to aircraft, where, for example, an aircraft with a QC of 0.5 might not be substantially quieter than an aircraft with a QC of 1
- the use of average noise metrics, such as L_{night}, mask some of the real noise impacts and allow one movement with QC of 1 to be traded for two movements with QC of 0.5 with the same overall QC value where, in reality, the noise impact might actually have increased
- the QC values are based on measurements in a controlled, test environment, do not necessarily reflect the noise generated in a real environment and are not correlated to population response, i.e. they do not necessarily reflect on-the-ground experience

There are examples of night use regimes that use both movement limits and QC schemes, movement limits alone and QC schemes alone

Most airports with a QC limit also have a movement limit in combination. Various other airports taken from a sample of mainly European, Australian and Canadian airports have movement limits or curfews in place without QC schemes.

The three largest London airports are mandated to follow both the QC system and movement limits by the UK CAA. Heathrow also has a quiet night charter that discourages night flights between 00:30 and 04:40 local time. Heathrow also has some variances on a blanket scheme to enable the critical parts of its operation (see section 6 and the annex on airport facts sheets).

Several airports do not use QC but apply variations of nighttime slot restrictions, curfews or noise budgets, e.g. Amsterdam Schiphol, Paris CDG, Sydney Kingsford Smith and Toronto Pearson.

Few airports use QC schemes alone – Hong Kong and Warsaw Chopin in this sample.

There is no clear best practice, with each airport applying their own limits in line with the needs of their operation and airline slot demand

Airport	QC Limit	Night Movement Limit
London Heathrow	W- 2,415	W-2,550
	S- 2,735	S- 3,250
London Gatwick	W- 1,785	W-3,250
	S- 5,150	S- 11,200
London Stansted	W- 3,310	W- 5,600
	S- 4,650	S- 8,100
Sydney Kingsford Smith	No QC	No, but overnight curfew in place (some exceptions)
Amsterdam Schiphol	No QC	W-10,476[1]
		S-21,290
Toronto Pearson	No QC	0030-0630 movements capped to % of total movements.
Paris CDG	No QC	17,877 night slots[2]
Hong Kong	Allocated to airlines, total not published	None
Warsaw Chopin	11,680, 32 per night	None

1 Night slots reducing from 32,000 to 27,000 (Nov 2025)

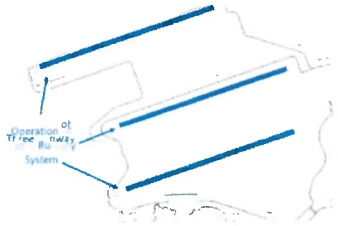
2 As of last reporting in 2017. The split between summer/winter seasons are unclear. Unused night slots are subsequently removed

3. US airports have not been included because of the completely approach to noise management in the US

It is rare to see a QC scheme implemented without movement controls or other restrictions

The rationale for applying multiple noise control levers in tandem is largely due to the recognition that the health impacts of night noise are a function of both the frequency of noise events and the individual event noise energy

Hong Kong International



"Pilot" QC scheme implemented in 2017. Operates from 2200 to 0659 daily. Intended to keep the airport night noise contours from expanding to encroach on new communities whilst allowing growth in night flights from quieter aircraft.

Noise contours from the 2RS now being maintained with the 3RS in operation. The lowest QC aircraft value is 0.25.

London Stansted

MAG London Stansted Airport

London Heathrow, Gatwick and Stansted are all subject to QC and movement limits, with a much greater allowance in the summer season at Stansted and Gatwick.[1]

Current Stansted night noise limit rules have been extended, with a decision on proposals to introduce a new 8-hour night QC limit subject to further government consultation. The Govt has, until 2028 at least, retained a movement cap for the airport.

Warsaw Chopin International

WARSAW CHOPIN AIRPORT

QC scheme operates from 2200 to 0600 daily. 32 QC points per night are available. Once used, no further flights are allowed.

Equates to 11,680 QC annually. This only allows a small number of flights daily when considering the 22.00 – 23.00 hour is included. The limit has not increased since the scheme commencement in 2013.

1 See annex for details

Where QC schemes are coupled to movement limits, they are used to incentivise the use of quieter aircraft

The three London airports are the principal examples of this where the regimes are tailored to the specifics of each airport

Airport	QC limit	Night movement limit	Average movement limit per night	QC/ATM from QC & movement limits	Achieved QC/ATM (2018-2019)
London Heathrow	W- 2,415	W-2,550	16.6	0.95	0.85
	S- 2,735	S- 3,250	15.5	0.84	0.77
London Gatwick	W- 1,785	W-3,250	21.1	0.55	0.54
	S- 5,150	S- 11,200	53.3	0.46	0.37
London Stansted	W- 3,310	W- 5,600	36.4	0.59	0.57
	S- 4,650	S- 8,100	38.6	0.57	0.51

In all cases, the achieved QC/ATM outperforms the 'allowed' QC/ATM derived from the QC and movement limits

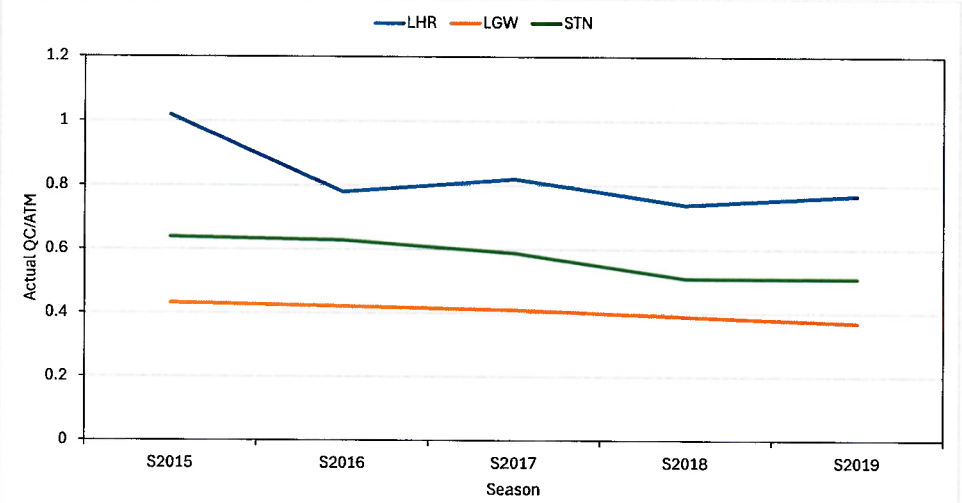
Specifically for Gatwick, where there is a large movement allowance during the summer season, the quota count limit is set comparatively much lower than in winter (0.46 compared to 0.55 per movement) to offset the impact of the higher number of movements per night (53.3 on average compared to 21.1)

Historical trends show a year-on-year decrease in QC/ATM, indicating a move to quieter aircraft:

- ~7% per reduction for LHR
- ~4% reduction per year for LGW
- ~6% reduction per year for STN

Source: DfT consultation material

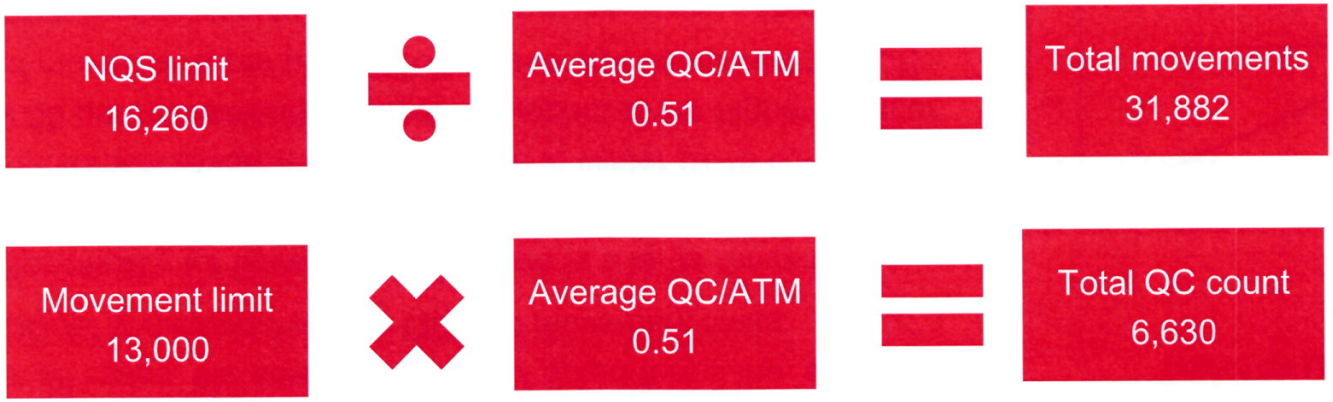
Trend in QC/ATM for summer seasons from 2015 to 2019



Note: QC limits were reduced in October 2018 as part of the UK government's regular review cycle. However, the trend in QC/ATM was downwards even before this reduction

The proposed 13,000 night movement cap and the NQS quota limit of 16,260 are not self-consistent when the current aircraft mix is considered

This inconsistency risks prejudicing the possible objective of incentivising the use of quieter aircraft



The NQS limit implies a movement volume around 2.5 times the ATM limit being proposed

The movement limit implies a QC count at around 2.5 times lower that the NQS limit being proposed

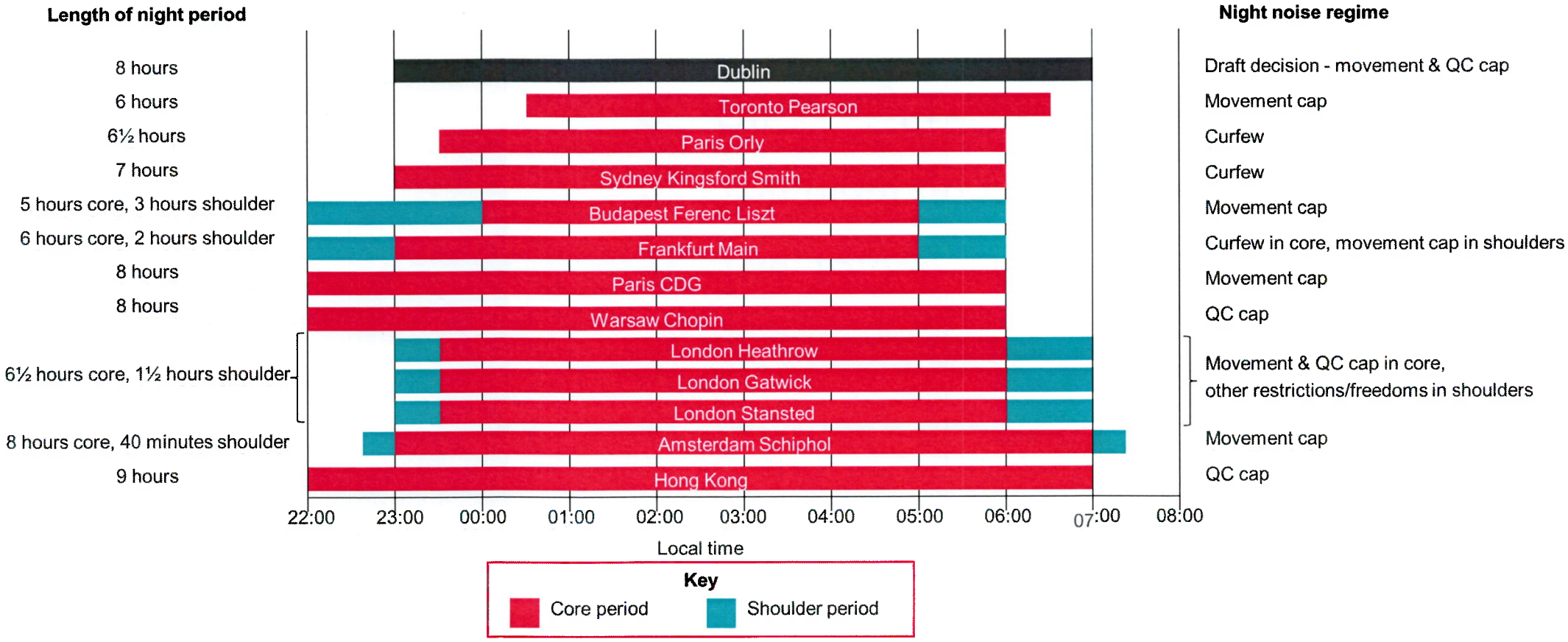
The very stringent movement limit would at best **make the NQS redundant** or at worst **enable operators to use noisier aircraft**. Applying both limits together would mean that the average QC/ATM could degrade from 0.51 to 1.25 (16,260 divided by 13,000) which is higher than any of the average QC/ATM figures for the London airports. The impact of this possible degradation has not been considered, either using conventional averaged metrics or the peak noise metric that feeds into the additional awakenings analysis.

Contents

Night noise regimes vary from airport-to-airport depending on circumstance: there is no one-size-fits all or best practice uniform solution

The start, end and length of the night period varies from airport-to-airport with some having different regimes in place at different times of the night, often termed core night, where the most stringent controls are applied, and shoulders, where more liberal controls are in place

Comparison of night regimes in place at different airports



See the annex to this report for details on each of the above regimes

The regimes at Heathrow and Gatwick airports are examples of how the night noise regime can balance noise controls with the needs of the airports

Both airports have core night periods governed by coordinated QC and movement limits combined with shoulder periods with less stringent restrictions and voluntary charters

Heathrow	Gatwick
The core night period is between 23:30 and 06:00 with combined movement and QC caps defined for summer and winter periods. Aircraft at QC 4 and above are not permitted to operate during this period. Extension of this ban to cover the full night period is being considered.	
As demand variation at Heathrow is small between winter and summer, the caps are approximately scaled according to the length of the seasons and, hence, allow roughly the same average quotas per day. 10% of any under- or overspend can be carried over to the following season. There is a voluntary agreement that prevents flights being scheduled between 23:30 and 04:30 the next day. Departures are not scheduled in the period 23:00 to 06:00 the following day. There are two shoulder periods. The period 23:00 to 23:30 enables departures that are scheduled for the late evening to use the runway, accounting for potentially long taxi times from stand to runway. During the second shoulder period from 06:00 to 07:00 both runways are used predominantly for arrivals outside of the normal alternation pattern, with westerly preference. This facilitates the early morning peak of long-haul arrivals that are extremely valuable to Heathrow, its airlines and the UK economy. No arrivals are scheduled before 04:30. Flights scheduled to arrive between 04:30 and 06:00 are not allowed to land before 04:30. The flights that land between 04:30 and 06:00, typically 16 per day, are economically important long-haul arrivals. A quiet night charter is applied to discourage night flights between 01:30 am to 04:30. During the night period a single runway is used and is rotated on a weekly basis around the four possible runway ends according to a pre-defined schedule. Easterly preference is applied when the alternation pattern designates easterly operations and westerly preference is applied for designated westerly operations (this can be overruled operationally under certain condition, such as excessive tailwinds).	Demand in summer is considerably higher than demand in winter. Gatwick's movement and QC caps are weighted to summer, enabling more movements per summer night than per winter night. The QC cap is proportionately lower than the movement cap in summer, incentivising the use of quieter aircraft to offset the higher number of nightly movements. There are two shoulder periods. Amongst other things, period 23:00 to 23:30 enables home-based, highly utilised aircraft to return to Gatwick reliably, avoiding knock-on disruption the next day. The second shoulder period from 06:00 to 07:00 facilitates Gatwick's extremely busy first wave, enabling a combination of long-haul arrivals and short-haul departures. Through its noise action plan, Gatwick is exploring the feasibility of phasing out QC2 aircraft voluntarily during the core night period. In the first half of 2024, Gatwick ran a trial to investigate the potential for reducing the loudest/lowest night movements using performance-based navigation (PBN). Although the trial did not meet its objective, it illustrated the potential of PBN and more appropriate instrument flight procedures design to mitigate noise events.

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Using lessons learnt from other regimes suggest that various noise abatement alternatives could be considered alongside operational restrictions

Some of these are counter to the original conditions on the permission for the northern runway. Some may have already been considered in daa's original submission, which has not been subject to this review

Westerly preference

The analysis shows that fewer people are impacted by noise on westerly operations than on easterly operations. Applying a westerly preference would increase the proportion of westerly operations and decrease the overall noise impact. This would, however, mean that those affected by westerly operations would be more affected.

Modelled additional awakenings, easterly operations

Year	Nightly Additional Awakenings
2025 Permitted	33,326
2025 Proposed	40,985
2035 Permitted	20,849
2035 Proposed	33,089

Modelled additional awakenings, westerly operations

Year	Nightly Additional Awakenings
2025 Permitted	24,515
2025 Proposed	21,468
2035 Permitted	14,075
2035 Proposed	15,801

Tables for illustrative purposes taken from the response to ABP RFI of 27 April 2023, *Noise modelling report, Bickerdike Allen Partners*

Runway alternation

As at Heathrow, rotating the use of the runways during the night could allow periods of respite. This would share the noise burden but would mean that some communities that do not currently have night noise impact would become newly affected. This would also require complete revision of the planned restriction on the use of the northern runway.

Performance-based navigation (PBN) and route redesign

Application of PBN at night, as trialled at Gatwick, ensure better adherence to height and tracks and, for example, reduce the impact of low-flying aircraft. It may be possible to slightly amend routes to avoid overflying communities. PBN would ensure better adherence to these routes and compliance with continuous climb/descent operations (CCO/CDO). Amending routes is more likely to be possible to the west of the Airport. Routes to the east are constrained by the close proximity of UK airspace.

Instead of a blanket application, the night period could be split into a few sub-periods to reflect the time-dependence of operations and associated impacts

This would be similar to the core night and shoulder periods applied at several airports, including Heathrow, Gatwick, Stansted and Frankfurt airports

Potential example

This type of regime could include three segments each designed to balance Airport and airline operational needs with the noise impact on the local communities:

- **late evening shoulder period**, say from 23:00 to 24:00. This would accommodate principally short-haul arrivals meeting the need for airlines to ensure that their Dublin-based aircraft can return reliably to the airport at the end of the day, accounting for normal operating delays. The benefits of this would be that the risk of disruption on the following day would be reduced and the airlines could maximise the utilisation of their aircraft.
- **core night period**, say from 00:00 to 06:00. This would accommodate the few scheduled short-haul passenger arrivals, long-haul arrivals including those from the US (mainly between 04:00 and 06:00) and elsewhere, and cargo arrivals and departures.
- **early morning shoulder period**, say from 06:00 to 07:00. This would accommodate the first wave of short-haul departures.

To counter the associated noise impact, acknowledging that sleep disturbance is likely to differ across the three periods, different regimes cold be designed for each period. For example, a restriction could be place on the maximum QC of aircraft that can operate in each period as well as, potentially, applying a movement cap coupled with an NQS to incentivise the use of quieter aircraft specifically tailored for each period. In addition, noise abatement procedures could be mandated for each period.

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This review indicates that the process followed to reach the draft decision does not follow the balanced approach

In addition, the basis of parts of the draft decision are not transparent and need review, substantiation and revision

The process to reach the draft decision has not followed the balanced approach and is highly skewed towards the impact of night noise alone, without considering its other impacts, notably on the economy and the positioning of Dublin Airport and Ireland's home carriers in the market.

Furthermore, the decision seems to have been strongly influenced by analysis of additional awakenings, which is a unique approach and is noted by experts, including ABP's advisors, as being subject to considerable uncertainty. Giving this approach a high weighting means that Dublin Airport is potentially being treated differently to other European airports, skews the level regulatory playing field and might erode the competitive position of the Airport and its home-based carriers.

The 13,000 night movement cap does not have any traceable foundation, is applied inconsistently, is very constraining and introduces the risk that, during some periods, no night movements would be allowed at all. The QC limit specified in the NQS is highly inconsistent with the proposed movement limit and risks having the perverse incentive of allowing the operation of noisier aircraft. Conversely, however, applying a movement limit in line with the proposed QC limit would result in a workable situation.

The blanket application of a single regime across the entire night period does not allow any consideration for the specifics of Dublin Airport's markets and operations. This risks reducing the positive impact to Ireland's economy as well as eroding the competitive position of the Airport and the home-based carriers in certain markets, particularly to the US.

There is also scope for tailoring the night noise regime to better balance the needs of the Airport and the airlines with the noise impact on local communities

Some other airports split the night into several different periods and apply a range of other operational mechanisms in addition to movement and QC caps

Investigating the night noise controls at a range of other airports suggest that there are alternative approaches that could be considered for Dublin, albeit noting that some of these would require considerable amendment of the existing planning consents and may have been considered in previous submissions, which have not been part of this review.

These approaches include:

- segmenting the night period into shorter periods considering the operational needs of the Airport and airlines in each period
- given these needs and the noise impact, identifying the most appropriate noise mitigation measures for each period
- applying these noise mitigation measures separately for each period.

Noise abatement procedures could also be considered, including:

- mandatory use of performance-based navigation (PBN) during night periods.
- redesign of routes to the extent possible to avoid population centres.
- application of a westerly preference to reduce overall noise impact.
- potentially, alternation of runway use during the night period to share out noise and provide periods of respite.

OFFICES

Think Research,
6 Branksome Park House,
Bourne Valley Road,
Bournemouth,
Dorset, BH12 1ED

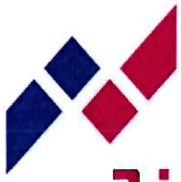
Think Research,
Office 168- 169,
The Hub, Fowler
Avenue, Farnborough,
Hampshire, GU14 7JF

Think Research QFZ,
Business & Innovation Park,
Unit 4104, Wing 4, Level 1,
Building 1, Street 504,
Zone 49, Doha, Qatar

Think

think-research-ltd

Appendix 3 – Assessment of Potential Economic Impact of Dublin Airport Planning Conditions by Jim Powers Economics dated January 2024



Jim Power
economics

ASSESSMENT OF POTENTIAL ECONOMIC IMPACT OF DUBLIN AIRPORT PLANNING ISSUES

JIM POWER

A REPORT PREPARED FOR AER LINGUS,
JANUARY 8TH 2024

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EXECUTIVE S UMMAR Y

Enforcement of the current planning restriction imposing a 32 million passenger cap to Dublin Airport will prevent growth in visitor numbers through the airport. The enforcement of night-time flight restrictions at Dublin Airport will see a reduction in the number of flights and will actually cause a reduction in visitor numbers through the airport. While the 32 million passenger cap will limit growth at the airport, the night-time flight restrictions will reduce existing business.

In this report Jim Power Economics has estimated that:

For every 1,000 overseas visitors that are not allowed fly into Dublin Airport, (assuming they do not fly into other airports) the following employment and economic effects are estimated by Jim Power Economics per annum.

- **€823,805** in **direct tourism expenditure** is foregone.
- The **indirect and induced expenditure** foregone is estimated at **€576,663**.
- The direct jobs that would not be generated in tourism, or in other words the jobs foregone would be **22 direct jobs**, and **15 indirect and induced jobs**.
- The **loss to the Exchequer** from the tax revenues foregone due to **direct tourism expenditure** would be **€189,475**.
- The **loss to the Exchequer** from the tax revenues foregone due to the **indirect and induced** effects of direct **tourism expenditure** would be **€132,623**.

For every 1 million passengers not allowed to arrive into Dublin Airport every year:

- **€1.4 billion** would be lost to the economy in **direct, indirect and induced expenditure**.
- **€322.1 million** would be lost to the Exchequer in **tax revenues foregone**.
- The direct, indirect, and induced **loss of employment** would be **37,000 jobs**.

It is estimated that the night-time reductions would reduce passenger numbers by around 1 million per annum. The loss of 1 million passenger from Dublin Airport (assuming they would not choose to fly into other Irish airports) would be similar to the impact of every 1 million passengers not allowed fly through the airport due to the 32 million passenger cap.

It is difficult to quantify or be certain about the **impact of poorer connectivity on foreign direct investment (FDI)** but given the other challenges facing FDI over the coming years, this would further **undermine Ireland's attractiveness for what is an incredibly important part of the economic model**.

If charter flights for special events are banned, this will damage major international tourism events such as the annual American College Football Game; the Ryder Cup; the Europa League Final would be seriously undermined. **This could cost the Irish tourism industry and the broader economy at least €500 million per annum**.

Dublin Airport is a key piece of national economic infrastructure. It is the most significant facilitator of international tourist and business visitors into Ireland.

The future capacity and growth potential of Dublin Airport is now in serious doubt due to certain planning conditions relating to the North Runway and the construction of Terminal 2.

The North Runway at Dublin Airport was granted planning permission in 2007 with the related subsequent investment totalling €320 million. The North Runway became operational in August 2022. Terminal 2 opened in 2010. According to DAA the construction costs for the whole construction project came out at €637 million, and planning and project fees brought the overall cost to €745 million.[i] The potential effect of three specific planning conditions are the subject of this report commissioned by Aer Lingus.

- In 2007 An Bord Pleanála issued a planning condition that would restrict the combined capacity of Terminal 2 and Terminal 1 to a maximum of 32 million per year.
- The 2007 planning conditions issued by An Bord Pleanála in relation to the North Runway contained the following restrictions:
  (a) Condition 3 (d) states that North Runway cannot be used for landings or take-offs between 11 pm and 7 am.
  (b) Condition 5 places a 65-movement cap right across the airfield, within the 11 pm to 7 am time-period.

It has been proposed by the Air Competent Noise Authority (ANCA) that these night-time restrictions be replaced by a noise quota system but these proposals have been appealed to An Bord Pleanála and it is unclear when a decision will be issued. The current restrictions are also subject to ongoing legal proceedings.

Connectivity in general is a vital element of national economic competitiveness and for a small open island economy with an inordinate dependence on tourism, foreign direct investment (FDI) and external trade, air connectivity is particularly important for Ireland.

In 2022, 93.8 per cent of overseas arrivals into Ireland came by air, and this increased to 94.2 per cent in the first 10 months of 2023.

Dublin airport is the most important element of Irish air connectivity as it is the entry point of choice for most visitors who come into Ireland for business or leisure purposes. There has been strong growth in passenger movements through Dublin Airport since 2005. Passenger numbers peaked at 32.9 million in 2019 but were then dramatically impacted by Covid-19. There was a strong recovery in 2022 and this has continued into 2023. While the interpretation of these restrictions is unclear, there is a risk that if they are put into effect, serious damage will be done to the Irish economy as these restrictions will put a cap on the number of overseas visitors and significantly restrict flights during the most important part of the day at Dublin Airport.

The planning conditions referred to above will challenge the future growth of Dublin Airport and by implication, the Irish economy. The two sectors most vulnerable in the event of the planning issues not being resolved are tourism and foreign direct investment. However, at a

broader level, the future growth potential and plans of the Irish aviation industry would be very adversely affected.

The damage to Ireland's FDI attractiveness is more difficult to gauge, as air connectivity is just one of many factors that makes Ireland an attractive location for FDI. However, it is a very important one, and any negative impact on such connectivity coming on top of many other challenges, could render Ireland less attractive for FDI.

The planning restrictions, if enforced, will damage Dublin Airport's ability to grow and will undermine the growth plans of the key airlines that have a base there. This will limit tourism growth; undermine the ability to have charter flights for one-off events; and damage Ireland's attractiveness for FDI. In total, unless these restrictions are addressed, they will undermine Ireland's economic growth potential.

SECTION 1: OVERVIEW

The future capacity and growth potential of Dublin Airport is now in serious doubt due to current planning restrictions at the airport. The implications for the national economy are also very significant.

The North Runway at Dublin Airport was granted planning permission in 2007, subject to 31 planning conditions with the related subsequent investment totalling €320 million. The North Runway became operational in August 2022. Terminal 2 opened in 2010 at a total cost of €745 million.

The potential effect of three specific planning conditions are the subject of this report commissioned by Aer Lingus.

- In 2007 An Bord Pleanála issued a planning condition, that would restrict the combined capacity of Terminal 2 and Terminal 1 to a maximum of 32 million per year.
- The 2007 planning conditions issued by An Bord Pleanála in relation to the North Runway contained the following restrictions:
  (a) Condition 3 (d) states that North Runway cannot be used for landings or take-offs between 11 pm and 7 am.
  (b) Condition 5 places a 65-movement cap right across the airfield, within the 11 pm to 7 am time-period.

  It has been proposed by the Air Competent Noise Authority (ANCA) that these night-time restrictions be replaced by a noise quota system, but these proposals have been appealed to An Bord Pleanála and it is unclear when a decision will be issued. The current restrictions are also subject to ongoing legal proceedings.

In assessing the economic impact of these planning restrictions, it is necessary to understand how the impact would work through the economy. Three key transmission mechanisms can be identified in relation to the contribution of tourism activities.

- **The contribution to GDP** – the economic contribution of tourism to GDP can be measured in terms of the additional employment and profits generated throughout the economy as a result of tourism activities. The contributions are of three types – the direct contribution is the business that is directly involved, and this come through wages and profits. Indirect contribution comes through the Irish firms supplying goods and services to the business; and the induced effect is generated though the additional incomes from the direct and indirect contributions being spent in the wider economy.
- **The employment contribution** – the number of people employed in the travel and tourism business; the employment in the supply chain; and the employment supported in other parts of the economy as the direct and indirect wages are spent.
- **The Exchequer contribution** – the payroll and profits taxes that are generated through direct, indirect and induced channels. In other words, all of the taxes generated by the tourism activity down through the chain.

It is important to understand that, if put into effect, the 32 million passenger cap will prevent growth in visitor numbers through Dublin Airport. The night-time flight restriction, if enforced, which will see a reduction in the number of flights, will actually cause a reduction in visitor numbers through Dublin Airport.

THE 32 MILLION PASSENGER CAP

Based on its published figures, Dublin airport facilitated the journeys of more than 28.1 million passengers in 2022, with 26.5 million passengers either starting or ending their journey at Dublin Airport, and 1.33 million using the airport as a transfer hub.[ii]. It handled a peak of 32.9 million passengers in 2019 and looks set to surpass that total soon. The airport delivers strong global connectivity for Ireland. While the extent to which transfer passengers should be included for the purpose of this restriction, there is a risk that there will be in excess of 32 million passengers in 2024 and subsequent years.

The 32 million passenger cap would stall growth at the airport. One possible response to this cap would be the banning of chartered flights into the airport. This approach has been suggested by Dublin Airport but has been rejected by airlines. This approach would prohibit charter flights for special events that make a very significant economic and financial contribution to the economy of the Greater Dublin Area and the broader national economy.

Given the level of passenger numbers in 2019, it is difficult to understand why daa is only now seeking to address this issue. The planning application to increase the cap to 40 million passengers was only submitted to Fingal County Council on 15th December 2023. However, the planning process will take considerable time, and meanwhile the disruption of activity at the airport could be significant.

The imposition of the passenger cap would prevent growth in passenger numbers in the airport. This would effectively put a cap on future growth in tourism. The economic and financial impact of this would be to prevent the employment, economic activity and tax revenues that would result from future projected growth in inward tourism to Ireland.

Fáilte Ireland estimated that in 2019 overseas holiday makers engaged in average expenditure of €96 per diem; and that every euro spent on tourism generates €0.23 for the Exchequer in taxes; every €1 million in tourism expenditure supports 27 jobs in tourism; and every 1,000 additional overseas tourists supports 20 jobs in the tourism sector.[iii] If this 2019 spending total is adjusted for subsequent inflation, the spend per diem is estimated at €112.85. Tourism Ireland estimates that the average stay of an overseas visitor is 7.3 nights.

For every 1,000 overseas visitors that are not allowed fly into Dublin Airport, (assuming they do not fly into other Irish airports) the following employment and economic effects are estimated by Jim Power Economics.

- €823,805 in direct tourism expenditure is foregone.
- The indirect and induced expenditure foregone is estimated at €576,663.
- The direct jobs that would not be generated in tourism, or in other words the jobs foregone would be 22 direct jobs, and 15 indirect and induced jobs.
- The loss to the Exchequer from the tax revenues foregone due to direct tourism expenditure would be €189,475.
- The loss to the Exchequer from the tax revenues foregone due to the indirect and induced effects of direct tourism expenditure would be €132,623.

For every 1 million passengers not allowed to arrive into Dublin airport:

- €1.4 billion would be lost to the economy in direct, indirect and induced expenditure.
- €322.1 million would be lost to the Exchequer in tax revenues foregone.
- The direct, indirect and induced loss of employment would be 37,000 jobs.

Economic analysis carried out for daa[iv] subtracting the economic impact under the constrained forecast from the economic impact under the unconstrained forecast suggests that as a result of the 32 million passenger cap, the Irish economy could forgo an additional 17,800 jobs and €1.5 billion in Gross Value Added (GVA) by 2030, relative to unconstrained traffic growth, increasing to 53,300 jobs and €4.4 billion in GVA by 2055.

In the event of a 32 million passenger cap being imposed, it is likely that all carriers would seek to have a more seasonal business going forward to concentrate on the highest yielding passengers, thereby reducing flights and connectivity in Winter. Aer Lingus estimates that it would need to cut 725,000 passengers from the short haul business to keep the same aggregate passenger numbers. Certain airport destinations would have to be cut out altogether, and others would have to see a significant reduction. Other airlines would have to do likewise.

NIGHT-TIME RESTRICTIONS

In 2019, between 11 pm and 7 am, Dublin Airport was averaging over 100 aircraft movements. Most of these movements occur between 11 pm and midnight, and between 6 am and 7 am, when based airlines require capacity to get the most efficient use from their aircraft. The one-hour time difference between Ireland and Continental Europe further highlights the importance of these peak hours for activity at Dublin Airport.

Between 6 am and 7 am is typically the busiest time of the day for departures at Dublin Airport as aircraft depart for their first service of the day. It is the peak time for Transatlantic flights landing and therefore is pivotal to the Dublin Hub National Strategy, allowing timely connections to departing short-haul services to the UK and Europe.

The number of Transatlantic flights is expanding, with routes such as Toronto becoming more important. The 'Global Ireland' Initiative of the Irish Government aims for Ireland to double its impact and influence in the world by 2025. The widening and deepening of the unique relationships with the United States and Canada will be central to the achievement of this ambitious goal.

The Vision of the Irish Government set out in '*Global Ireland: Ireland's Strategy for the US and Canada 2019–2025*' is that '*Ireland will inject new dynamism and ambition into our relationships with the US and Canada and will double our impact in the region by 2025.*' Strong air connectivity will be crucial in achieving these objectives.

Upwards of 30 per cent of the Transatlantic flights connect on to other European services. This is only viable at Dublin where there is a wide connecting offering. If flights were to be curtailed during the peak times, then the likelihood of the Transatlantic flights becoming unviable would increase.

Certain transatlantic flights such as Seattle, Denver and Hartford would likely disappear due to their dependency on connecting traffic to drive volumes and relatively low baseline margins.

Operational flexibility at the airport is essential and the three planning restrictions will seriously damage such flexibility. The practical implications of these restrictions are very real.

If the restrictions on night-time flights are not amended, airlines will be forced to restrict a significant number of their services to a shorter operating day. This would undermine efficiency and profitability and would damage the economic viability of aircraft located in Dublin. The retiming of early morning arrivals is not an option at Dublin due to existing runway constraints. It is the busiest time of the day, with almost 50 movements occurring during the hour.

Arrivals from North America are typically scheduled to arrive at Dublin Airport during the defined 'night-time' period. This is of vital importance to Dublin Airport and the airlines that fly from North America. It is important because it is essential to have competitive departure times from North American airports and to enable connecting passengers to transfer smoothly to the first wave of European departures from Dublin. Being forced to retime flights into Dublin Airport would damage its status as an important and effective hub and would have negative repercussions for the Irish economy.

Dublin Airport has been developed as a transatlantic hub. It funnels passengers from North America to airports in the UK and Europe. To function as a hub, operational flexibility is essential during peak hours. If such flexibility is not available, routes will be lost from Dublin Airport, and will be lost from Ireland. This is because the flights from North America are dictated by US requirements and in turn, they arrive in Dublin Airport at a time that is suited

to onward flights to the UK and Europe. Dublin Airport is competing with other airports across Europe, and if the planning conditions are not amended, Dublin Airport and the local economy will lose out.

The alternative of moving flights to Cork or Shannon is not a viable option. Scale is required at a major international airport to offer onward connections and frequency. This cannot be achieved at Cork or Shannon and therefore passengers would be more likely to connect in airports in London, Paris, Amsterdam, Frankfurt or Madrid.

OVERALL IMPACT OF ALL THREE PLANNING RESTRICTIONS

If the viability of basing aircraft in Dublin is damaged due to the planning conditions, the number of services from the airport will be reduced, and prices for the consumer would be likely to rise.

Air transport is essential for a small open island economy such as Ireland where there is a very strong dependence on FDI and tourism, but in external trade in general. It facilitates the flow of goods, people, and investment. Dublin Airport, which is the airport of choice for most visitors coming in and out of Ireland, plays a crucial role in the Irish air transport sector.

Airlines such as Ryanair and Aer Lingus have ambitious growth targets over the next decade, but with the three planning restrictions now in play, Dublin airport would not be in a position to facilitate these growth plans and the investment and associated direct and indirect employment would not materialise. The aircraft could move to other bases or completely different subsidiary airlines.

The North Runway which was delivered in 2022 is a critical element of national economic infrastructure, which is funded by Airport users through the price cap. The runway must be used in an efficient manner to deliver value to all stakeholders and to maximise its contribution to the Irish economy.

Several financial and economic costs resulting from the restrictions can be highlighted:

- As part of daa's planning application, a report by InterVISTAS specified that the economy will lose out on an additional 3,130 jobs in 2024 because of the restrictions not being lifted and that the Irish economy will lose out on a positive economic impact of €262 million in 2024.

Bodies such as Tourism Ireland and the Irish Tourism Industry Confederation are projecting strong growth in international tourism out to 2030. If the growth projected by both bodies were to be delivered, it would make a significant contribution to Exchequer revenues, employment, and overall economic activity, particularly in the regions. The **planning restrictions would prevent this growth from occurring**.

Tourism Ireland[v] plans to grow overseas tourism industry revenues by 5.6 per cent on average annually out to 2030. If this growth did not materialize it would prevent close to €15 billion in economic activity out to 2030 from being realised.

Based on ITIC's projections:

- The projection of **growing tourism receipts from €10 billion now to €15 billion by 2030 would not be achieved**. Over the period 2024 to 2030 this could mean that **up to €15 billion in possible tourism revenue could be missed**.
- **65,000 new jobs in tourism by 2030 could be sacrificed**.
- **€3.6 billion in increased Exchequer tax revenues could be sacrificed**.
- It is difficult to quantify or be certain about the **impact of poorer connectivity on FDI** but given the other challenges facing FDI over the coming years, this would **further undermine Ireland's attractiveness for what is an incredibly important part of the economic model**.

SECTION 2: DUBLIN AIRPORT AND THE IMPORTANCE OF CONNECTIVITY

Connectivity is an essential element of national economic competitiveness. This is particularly amplified for a small island economy that has such a significant dependence on tourism, foreign direct investment, and external trade.

Air connectivity can be broadly defined as the ability and ease with which passengers and freight can reach destinations by air. Air connectivity plays a crucial role in enhancing economic growth by facilitating tourism, inward foreign direct investment and trade in goods and services. There is also a growing recognition of the potential of air connectivity to deliver socio-economic benefits and that 'these benefits increase as air travel becomes less expensive and more accessible – thanks to progressive aviation liberalisation, the rise of low-cost carriers, and technological developments that have made air transport more efficient.'[vi]

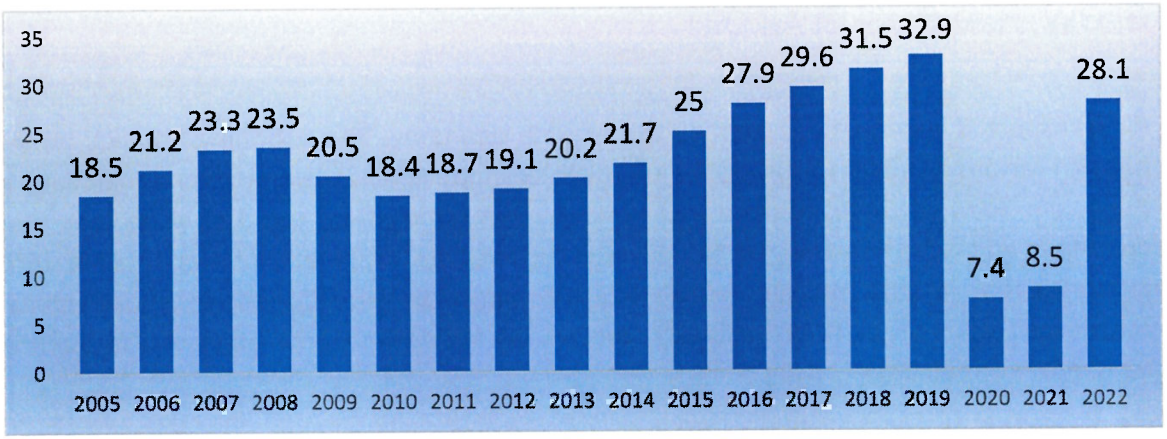
The OECD report[vii] posits that governments are interested in how well their national aviation systems connect the users of aviation to different destinations, because these connections foster exchange of goods and services, investment and ideas, workers, and tourists, as well as job creation, directly at airports and in businesses that depend on air transport. It goes on to argue that *'Aviation is particularly important to people doing business in international markets who often have no real alternative to aviation as a mode of transport. It also matters to the wider economy. Not only does air connectivity matter to those who depend on it directly, it can also boost the productivity and growth of economies by providing better access to markets, enhancing links within and between businesses and providing greater access to resources and to international capital markets.'*

For the small open Irish economy, where external trade, inward tourism and foreign direct investment are such important drivers of economic activity and socio-economic development, air connectivity is of vital importance.

CSO data show that in 2022, 93.8 per cent of overseas arrivals into Ireland came by air, and this increased to 94.2 per cent in the first 10 months of 2023.[viii] These data show just how important air connectivity is for the Irish economy.

Dublin Airport is the most important element of air connectivity for Ireland as it dominates air passenger movements. Figure 1 shows the strong growth in passenger movements through Dublin Airport since 2005. Passenger numbers peaked at 32.9 million in 2019 but were then dramatically impacted by Covid-19. There was a strong recovery in 2022 and this has continued into 2023.

Figure 1: Annual Passenger Movements at Dublin Airport (Million)



Source: daa

An economic impact study prepared for daa by InterVISTAS Consulting[ix] demonstrates the importance of Dublin Airport to the Irish economy. The study suggests that Dublin Airport supports 17,800 fulltime equivalent (FTE) jobs; 10,300 indirect FTE jobs; 11,800 induced jobs; and 62,900 catalytic jobs, which result from the businesses in other sectors of the economy that are supported by the activities at the airport, such as trade, tourism, investment, and productivity growth. In total, it is estimated that Dublin Airport supports 102,800 FTE jobs; accounting for €4.9 billion in wages and contributes €9.6 billion to Gross Value Added (GVA) in the economy.

Dublin Airport is a major engine of growth in the Irish economy and its contribution is set to continue to expand. However, the planning restrictions that are the subject of this report, certainly pose a threat to that growth and expansion, and consequently to the overall health of the national economy.

Table 1: Total Passenger Numbers Handled by Irish Airports

AIRPORT	2019	% of Total	2022	% of TOTAL
Dublin	32,676,251	85.7%	27,793,346	85.4%
Cork	2,585,466	6.8%	2,238,455	6.9%
Shannon	1,616,422	4.2%	1,421,986	4.4%
Knock	805,443	2.1%	709,540	2.2%
Kerry	369,836	1.0%	355,043	1.1%
Donegal	48,542	0.1%	36,934	0.1%
Connemara	15,382	0.1%	N/A	-
Inishmore	8,831	0.0%	N/A	-
TOTAL	38,126,173	100.0%	32,555,304	100.0%

Source: CSO

Dublin Airport has a very dominant position in terms of passenger movements, accounting for 85.7 per cent of total passenger movements in 2019 and 85.4 per cent in 2022. Dublin is the airport of choice for most of the business and tourism travellers coming into Ireland. The notion that aircraft and passenger traffic would move to Cork or Shannon is not realistic.

SECTION 3: SECTORS THAT ARE HEAVILY DEPENDENT ON ONGOING GROWTH AT DUBLIN AIPORT

Air transport is extremely important to the Irish economy. The economic impact comes through various channels including the jobs directly supported by the airlines and their supply chain; the flows of trade, tourism and investment resulting from users of all airlines that operate in and out of Ireland; the city pair connections that make these flows possible. IATA estimates that in 2018 the air transport sector supported 143,000 jobs in the economy; contributed $20.6 billion (€18.9 billion) to gross value added in the Irish economy, accounting for 6.8 per cent of GDP.[x]

Having strong air connectivity is particularly important for two components of the economy in particular – foreign direct investment and tourism. Both sectors make a very strong contribution to economic growth and will be essential for the future success of the economy.

Foreign Direct Investment

Ireland's economic growth and development model for more than five decades has been heavily driven by attracting overseas investment into the economy. A favourable corporate tax rate; a flexible and pro-business environment; a highly educated and skilled English-speaking workforce and strong connectivity have been important factors in driving Ireland's success in attracting FDI. At the end of 2022, there was 1,796 IDA-supported companies operating in Ireland, employing 301,475 people directly. The United States accounted for 52.7 per cent of the total number of companies and 69.3 per cent of total direct employment.

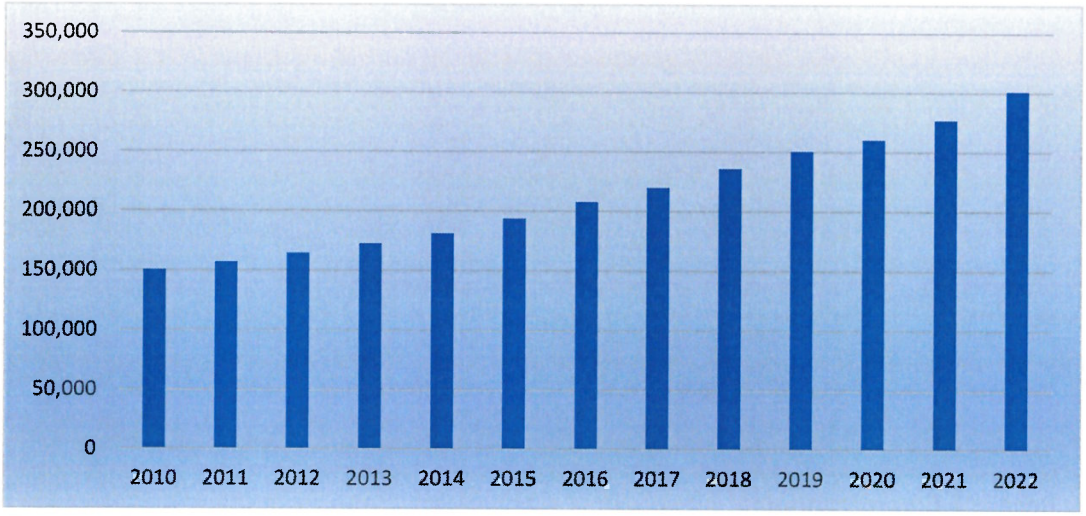
Table 2: Origin of IDA Supported Companies (2022)

ORIGIN	NUMBER OF COMPANIES	TOTAL EMPLOYMENT
United States	947	208,958
Germany	103	14,744
United Kingdom	179	11,819
France	80	9,049
Restof Europe	193	22,679
Rest of World	294	34,226
Total	1,796	301,475

Source: IDA Annual Report 2022

Employment in IDA Supported Companies expanded by 99.9% between 2010 and 2022.

Figure 2: Employment in IDA Supported Companies



Source: IDA

A significant number of the jobs created by IDA supported companies is near the Greater Dublin Area and Dublin Airport. Dublin and the Mid-East region account for 53 per cent of total employment provided by IDA supported companies.

Table 3: Total Employment by Region in IDA Supported Companies (2022)

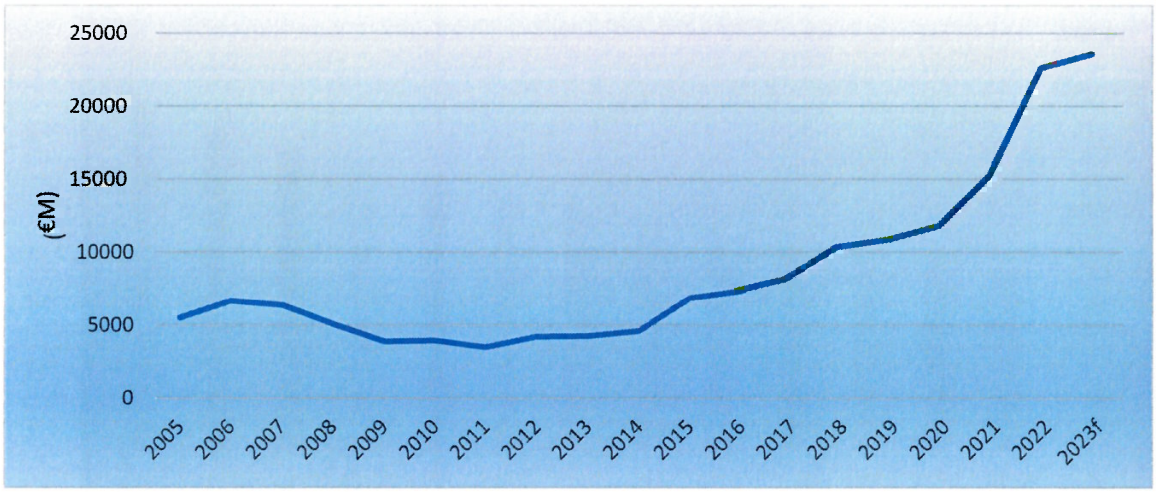
REGION	EMPLOYMENT	% OF TOTAL
Border	8,885	3.0%
Dublin	137,822	45.7%
Mid-East	21,861	7.3%
Mid-West	26,004	8.6%
Midlands	7,665	2.5%
Soth-East	15,520	5.1%
South-West	52,228	17.3%
West	31,490	10.4%
Total	301,475	100.0%

Source: IDA Annual Report 2022

The Department of Enterprise, Trade and Employment estimates that for every 10 jobs generated by Foreign Direct Investment (FDI) directly, another 8 are generated in the wider economy. This translates into 542,655 jobs that were supported by FDI at the end of 2022. Secondary economic benefits impact positively on many sectors across the economy, including the construction industry, the retail sector, and the hospitality industry.

In addition to the direct and indirect employment supported by multi-national companies, the sector also makes a very substantial contribution to tax revenue. Corporation tax has grown from €5.5 billion in 2005 to €22.6 billion in 2022. It is projected at over €23 billion in 2023. Corporation tax will account for around 28 per cent of total tax revenues in 2023.

Figure 3: Corporation Tax Receipts



Source: Revenue Commissioners

Strong growth in FDI has contributed to the strong growth in corporation tax receipts. Foreign-owned multinationals paid €19.6 billion (86.5 per cent of net corporation tax receipts in 2022). The level of corporation tax concentration is a potential risk for Ireland. Top 10 companies (all multinationals) accounted for 57 per cent of total corporation tax in 2022 up from 53 per cent in 2021.[xi]

Tourism

Tourism is a key contributor to economic activity and employment in Ireland. It is an indigenous industry, which has a strong regional economic and employment footprint.

In the context of the challenges facing the Irish economy now, particularly the concentration risk inherent in the very strong Exchequer revenue and employment dependence on a small number of large multi-national corporations, it is imperative that the tourism sector is as robust as possible and that it makes as significant a contribution as possible to Ireland's sustainable economic growth and development over the coming years.

The economic contribution from tourism comes primarily through employment and the taxes generated for the Exchequer.

2019 was the last normal year for Irish tourism as 2020 and 2021 were badly affected by Covid-19 as was Q1 2022. In 2019, Fáilte Ireland data show that 9.67 million tourists visited Ireland from overseas. A further 1.28 million visitors arrived from Northern Ireland, giving total out-of-state visitors of 10.95 million tourists. A further 11.6 million domestic tourists are estimated by Fáilte Ireland.

Table 4: Overseas Tourist Numbers to Ireland (2019)

REGION	NUMBER OF TOURISTS (000s)	MARKET SHARE
Great Britain	3,487	36.0%
Mainland Europe	3,609	37.3%
North America	1,902	19.7%
Rest of world	676	7.0%
Total	9,674	100.0%

Source: Key Tourism Facts 2019, Fáilte Ireland, March 2021

The economic contribution of tourism is incredibly significant at both a regional and national level. Fáilte Ireland estimates that every €1 million of tourist expenditure helps to support twenty-seven tourism jobs; 1,000 additional overseas tourists support twenty jobs in the tourism industry; and for every euro spent on tourism, both domestic and overseas, twenty-three cent is generated in tax revenues for the Exchequer.

The CSO published its first Tourism Satellite Account (TSA) for the sector – an internationally recognised harmonised framework for measuring tourist activity.[xii]

- Expenditure by inbound tourism to Ireland was €7.3 billion in 2019. Domestic tourism expenditure by Irish residents was €2.7 billion.
- Tourism accounted for 4.4 per cent share of Gross Value Added (GVA) in the Irish economy.
- 284,800 workers were directly employed in almost 46,000 tourism-related enterprises, based on full time job equivalents – 13 per cent share of total employment across the economy. Total employment related to tourism is estimated to increase to 352,000, when jobs in non-specific tourism businesses are considered.
- Tourism generated approximately €2,000 per head of population.

The overall economic and social contribution is very significant, and the potential to grow tourism in a sustainable way is significant. However, it is vital that issues such as air connectivity are as strong as possible to help achieve this ambition for tourism.

SECTION 4: POTENTIAL IMPLICATIONS OF PLANNING RESTRICTIONS

There are three significant planning issues challenging the future growth of Dublin Airport and by implication, the Irish economy. The two sectors most vulnerable in the event of the planning issues not being resolved are tourism and foreign direct investment. However, at a broader level, the future growth potential and plans of the Irish aviation industry would be very adversely affected.

Tourism

Tourism is a vital industry for the Irish economy at both a national and regional level. Tourism is integral to Irish society. It supports economic activity and enhances physical and societal well-being. The Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media has high-level goals in relation to tourism. These goals are:

- To support the sustainable growth of a competitive Tourism sector with a particular emphasis on supporting economic development in communities throughout the country, whilst protecting our environment and natural resources
- To promote North-South co-operation, within the context of the Good Friday Agreement and the Government's Shared Island Initiative, particularly in the context of the work of Tourism Ireland

The Government has an ambition to have a vibrant and competitive tourism sector that makes a significant contribution across the country, is economically, socially, and environmentally sustainable, helps promote a positive image of Ireland overseas, and enables local communities to prosper.

Tourism Ireland[xiii] plans to grow overseas tourism industry revenues by 5.6 per cent on average annually out to 2030. If this growth did not materialize it would prevent close to €15 billion in economic activity out to 2030 from being realised.

ITIC (Irish Tourism Industry Confederation) has published a very ambitious but realistic ambition for Irish tourism, which if delivered would make a very significant positive contribution to the Irish economy and Irish society over the coming years.[xiv]

The vision for Irish tourism set out by ITIC is that *'2030 will see Ireland as a leader in sustainable tourism growth, delivering a unique business experience which delivers regional economic growth based on value over volume, while respecting environmental, social and community values.'*

Specifically, ITIC believes that the value of tourism earnings could grow by 50 per cent to €15 billion by 2030; employing up to 350,000 workers, and delivering €3.5 billion annually to the Exchequer, compared to €2.3 billion now.

ITIC stresses the importance of connectivity for the viability and growth of tourism. Action 19 in the plan makes a call to the local authority and other stakeholders such as daa, the airlines and ITIC to *'support Dublin Airport in delivering high quality international connectivity in the*

national interest, through growth in passenger and aircraft movements and delivery of air transport related infrastructure to improve safety, efficiency, customer service and access.'

There is a risk that there will be in excess of 32 million passengers in 2024 and subsequent years. This needs to be addressed as a matter of national urgency.

Once-Off High-Profile Events

Commercial flights would be given priority over charter flights. In the event of the 32 million cap not being lifted, one possible option would be to ban charter flights or non-scheduled flights for special events such as concerts, sporting events or major international conferences. Such an approach has been suggested by Dublin Airport. Such events are a key element of Ireland's cultural tourism and business tourism economy, and the impact would be particularly serious for the Dublin economy.

An example of such an event is the annual US College Football game. Dublin Economic Monitor analysed spending patterns across 85 different services and showed the uplift to the local economy.[xv] The 2023 College Football Classic has been valued in an independent report from Fáilte Ireland and Grant Thornton to be worth more than €147 million to the Irish economy. It is estimated that a total of 40,354 international fans traveled to Ireland for the game, with an estimated 39,176 fans coming directly from the United States, representing a new world record for the largest number of Americans to travel internationally for a single sporting event. In addition to Irish based supporters, fans travelled to the game in Dublin from countries across Europe and further afield.[xvi] Dublin Chamber of Commerce estimates that the 2024 edition will contribute €69 million to the Dublin economy.[xvii]

Other events that would be affected would include the Six Nations rugby tournament, the Ryder Cup, the UEFA Europa League final in Dublin in 2024, the Cheltenham race meeting; Skiing; and Christmas flight to Lapland. Such restrictions would seriously damage Ireland's international reputation and have a significant economic cost.

It is estimated that cancellation of chartered flights for such events would cost the Irish economy at least €500 million per annum, but the social impact would be even more significant. For example, in 2024, there are 72 Aer Lingus flights to Lapland currently scheduled, carrying 12,528 passengers. In total, for 2024 Aer Lingus has 174 ad-hoc scheduled flights carrying 34,492 passengers; and 226 charter flights carrying 40,170 passengers.

Foreign Direct Investment

As demonstrated in this report, the foreign-owned multi-national sector makes a very significant economic, financial, and social contribution to Ireland. Attracting inward investment is becoming more challenging, not least due to intense global competition for mobile investment.

There are several issues that will have to be recognised and addressed by policy makers to ensure that Ireland remains an attractive option for mobile foreign direct investment. These include:

- Global corporation tax developments, and specifically Pillar 1 and 2 of the OECD global tax deal.
- The costs of doing business.
- The availability of affordable housing to buy and rent.
- Public services such as healthcare and education.
- A world-class IT infrastructure.
- The development of alternative and renewable energy supplies.
- The water infrastructure.
- Political changes.
- The availability of a well-educated labour supply.
- The growing threat to globalization and free trade.

It seems clear that Ireland's relative taxation attractiveness will be gradually eroded over time, so it will be essential to ensure that the non-taxation elements of Ireland's offering continue to be improved and that policy makers invest heavily in all these areas.

It has been demonstrated that international connectivity is essential and if the planning challenges facing Dublin Airport are not addressed, then Ireland's status will be undermined.

IDA Ireland is very conscious of the continued importance of Dublin as Ireland's leading global city and a key attractor of investment and talent. Dublin is an engine of national and regional growth, with many FDI clients choosing the capital as their first port of call when investing in Ireland before later expanding into second sites in regional locations.[xviii]

The IDA's current strategy covering the period 2021 to 2024 laid out challenging strategic objectives. These include:

- Win 800 total investments to support job creation of 50,000 and economic activity.
- Partner with clients for future growth through 170 RD&I and 130 training investments.
- Win 400 investments to advance regional development.
- Embrace the opportunities of a green recovery with 60 sustainability investments.
- Target a 20 per cent increase in client expenditure in Ireland to maximise the impact of FDI, valued at €3.8 billion.[xix]

The IDA stresses that Ireland's relative competitiveness will be vitally important considering economic headwinds and intense competition to win a potentially smaller number of global FDI projects. The main elements of competitiveness include stability, resilience and quality of life, cost competitiveness, investment in productive assets, education and skills, connectivity, and tax.

In relation to connectivity the IDA believes that to credibly position Ireland as a location of choice for resilient supply chains, the transport infrastructure, and aviation and maritime routes need to be cost efficient, effective, and reliable. It believes that the maintenance of international connections at Ireland's airports is essential to support the existing base of FDI and to enable future growth. Ireland's competitive position as a destination for manufacturing requires the continued provision of cost competitive aviation routes.

SECTION 5: COUNTING THE COST OF PLANNING CONDITIONS

It is not easy to calculate accurately the precise economic and financial cost of the planning restrictions as currently envisaged. It is important to specify again what these restrictions are:

- In 2007 An Bord Pleanála attached a planning condition attached to Terminal 2, that would restrict the combined capacity of Terminal 2 and Terminal 1 to a maximum of 32 million per year. The 2007 planning conditions issued by An Bord Pleanála in relation to the North Runway contained the following restrictions:

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These restrictions and their potential implications must be considered separately and jointly.

In assessing the economic impact of these planning restrictions, it is necessary to understand how the impact would work through the economy. Three key transmission mechanisms can be identified in relation to the contribution of tourism activities.

- **The contribution to GDP** – the economic contribution of tourism to GDP can be measured in terms of the additional employment and profits generated throughout the economy as a result of tourism activities. The contributions are of three types – the direct contribution is the business that is directly involved, and this come through wages and profits. Indirect contribution comes through the Irish firms supplying goods and services to the business; and the induced effect is generated though the additional incomes from the direct and indirect contributions being spent in the wider economy.
- **The employment contribution** – the number of people employed in the travel and tourism business; the employment in the supply chain; and the employment supported in other parts of the economy as the direct and indirect wages are spent.
- **The Exchequer contribution** – the payroll and profits taxes that are generated through direct, indirect and induced channels. In other words, all of the taxes generated by the tourism activity down through the chain.

It is important to understand that the 32 million passenger cap will prevent further growth in visitor numbers through Dublin Airport. The night-time flight restriction which will see a

reduction in the number of flights, will actually cause a reduction in visitor numbers through Dublin Airport.

THE 32 MILLION PASSENGER CAP

The 32 million passenger cap would put a cap on future growth at the airport and prevent the growth in international tourism and prevent national tourism objectives from being achieved.

In this report Jim Power Economics has estimated that:

For every 1,000 overseas visitors that are not allowed fly into Dublin Airport, (assuming they do not fly into other airports) the following employment and economic effects are estimated by Jim Power Economics per annum.

- €823,805 in direct tourism expenditure is foregone.
- The indirect and induced expenditure foregone is estimated at €576,663.
- The direct jobs that would not be generated in tourism, or in other words the jobs foregone would be 22 direct jobs, and 15 indirect and induced jobs.
- The loss to the Exchequer from the tax revenues foregone due to direct tourism expenditure would be €189,475.
- The loss to the Exchequer from the tax revenues foregone due to the indirect and induced effects of direct tourism expenditure would be €132,623.

For every 1 million passengers not allowed to arrive into Dublin airport every year:

- €1.4 billion would be lost to the economy in direct, indirect and induced expenditure.
- €322.1 million would be lost to the Exchequer in tax revenues foregone.
- The direct, indirect, and induced loss of employment would be 37,000 jobs.

NIGHT-TIME RESTRICTIONS

The inability to use the North Runway for landings or take-offs between 11 pm and 7 am would seriously disrupt flight schedules at the airport and these schedules would be lost rather than reallocated to different times of the day. The 65-movement cap right across the airfield, within the 11 pm to 7 am time-period would have a broadly similar impact as the restriction on the use of the North Runway. Both restrictions would seriously damage connectivity from the United States and onward early morning flights to the UK and Europe.

Research from Fáilte Ireland[xx] (November 2023) suggests that Dublin Airport accounts for 93 per cent of airport capacity for US visitors; 95 per cent for France; 76 per cent for Great Britain; and 97 per cent for Germany. It estimates that Aer Lingus accounts for 73 per cent of US visitors; 32 per cent of UK visitors; 34 per cent of French visitors; and 44 per cent of German visitors.

The conditions relating to night-time flights could reduce passenger numbers by at least 1 million per annum from existing levels.

The loss of 1 million passenger from Dublin Airport (assuming they would not choose to fly into other airports would be similar to the impact of every 1 million passengers not allowed fly through the airport due to the 32 million passenger cap.

For every 1 million passengers not allowed to arrive into Dublin Airport every year:

- €1.4 billion would be lost to the economy in direct, indirect and induced expenditure.
- €322.1 million would be lost to the Exchequer in tax revenues foregone.
- The direct, indirect, and induced loss of employment would be 37,000 jobs.

JOINT ASSESSMENT OF THREE PLANNING RESTRICTIONS

- It is very clear that the imposition of all three restrictions would not only inhibit the growth of Dublin Airport but would cause activity levels to contract. This would cost jobs, undermine tourism flows into the country, damage the attractiveness of Ireland as a preferred location for FDI, prevent the potential growth in Irish tourism, and undermine the status of Dublin Airport as a significant European hub.

daa stated before an Oireachtas committee (November 2023)[xxi] that daa is already 'managing down capacity' by taking away growth incentives for airlines and taking out transit passengers. The CEO of daa said that *'If the traffic is capped at 32 million passengers in coming years, it would lead to reduced jobs. Approximately 16,000 jobs that could be created in Ireland, in Leinster, Dublin and Fingal, would be lost. They will go elsewhere. Air fares will go up because I suspect the airlines would do two things. They would say they would not put their newest aircraft in Dublin, which will not be good for noise and sustainability, and if demand is managed down with an artificial cap, air fares will go up. It is as simple as that. There is evidence to support that in Amsterdam and any other city that has had a cap.*

Dublin is the fifth largest hub in Europe, and we want to develop it as a hub into the future and to really improve the airport. Caps do not work. Keeping it will just lose jobs. We will lose connectivity. Bringing the connectivity back is a big challenge. If Aer Lingus and Ryanair said they were moving the capacity we had hoped to add to Dublin to Manchester, Edinburgh, Gatwick, and other airports, it would be a challenge for us to get it back and to get the jobs associated with that traffic back. It would be wrong for Ireland and for Dublin Airport.'

This clashes with the actual fact that on a like for like basis next year, international traffic will increase by 8 per cent at Dublin Airport and daa is actively encouraging new entrants.

Dublin Airport would likely see flights moved to other hubs such as Manchester.
Cork and Shannon would not pick up the passengers displaced from Dublin Airport, as the statistics prove conclusively that Dublin Airport is the preferred airport of choice for inward business and tourist visitors to Ireland.

According to the Department of Transport Ireland's aviation policy is centred around three main aims:

- To enhance Ireland's connectivity by ensuring safe, secure, and competitive access responsive to the needs of business, tourism, and consumers.
- To foster the growth of aviation enterprise in Ireland to support job creation and position Ireland as a recognised global leader in aviation.
- To maximise the contribution of the aviation sector to Ireland's economic growth and development.[xxii]

The three planning restrictions at Dublin Airport fly in the face of these national aviation objectives.

Several financial and economic costs resulting from the restrictions can be highlighted:

- As part of the daa planning application, a report by InterVISTAS specified that the economy will lose out on an additional 3,130 jobs in 2024 because of the restrictions not being lifted and that the Irish economy will lose out on a positive economic impact of €262 million in 2024.
- ITIC is projecting growing tourism receipts from €10 billion now to €15 billion by 2030; The creation of 65,000 new jobs in tourism by 2030; €7 billion in increased Exchequer tax revenues. The planning conditions would prevent these gains from being achieved.
- It is difficult to quantify or be certain about the impact of poorer connectivity on FDI but given the other challenges facing FDI over the coming years, this would further undermine Ireland's attractiveness for what is an incredibly important part of the economic model.
- If charter and non-scheduled flights for special events are banned, this will damage major international tourism events such as the American Football Game; the Ryder Cup; the Europa League Final would be seriously undermined. This could cost the Irish tourism industry and the broader economy at least €500 million per annum.

The planning restrictions will damage Dublin Airport's ability to grow and will undermine the growth plans of the key airlines that have a base there. This will limit tourism growth; could undermine the ability to have charter flights for one-off events; and damage Ireland's attractiveness for FDI. In total, unless these restrictions are addressed, they will undermine Ireland's economic growth potential.