PF/1692/22

COMHAIRLE CONTAE FHINE GALL

RECORD OF CHIEF EXECUTIVE'S ORDER

Register Reference: F20A/0668

Area: Swords

Date of Registration: 21 September, 2021

Correspondence: Gavin Lawlor Tom Phillips & Associates, 80 Harcourt Street, Dublin 2, D02 F449.

Development: Development Description:

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.

AI received 13/09/21

AI deemed significant

Revised public notices(SAI) received 21/09/21

Location: Dublin Airport, Co. Dublin.

Applicant: daa plc

Application Type: Permission

Zoning: 'DA' – The objective of which is to 'Ensure the efficient and effective operation and development of the airport

in accordance with the adopted Dublin Airport Local Area Plan'

Planning Officers Report:

CMcV/AF

Report of the Planning Officer typed 19th February 2021.

Proposal:
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 at Airfield in the townlands of Cloghran, Corballis, Forrest Great, Forrest Little, Collinstown & Rock, Dublin Airport, Co. Dublin for daa plc.

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 night-time 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.

Site Notice Inspection: 4th January 2021 and 6th January 2021

Contents

1.0 Site Location and Description:

The subject site comprises the entire runway system at Dublin Airport, Co. Dublin and encompasses a site of c. 580 hectares. The runway system includes the existing main (southern runway) 10R/28L, the cross runway 16/34 and the north runway 10L/28R currently under construction and expected to be operational in 2022.

2.0 . Relevant Action

Pursuant to Section 34C of the Planning and Development Act 2000 (as amended) the daa are proposing an amendment of the operating restrictions set out in condition no. 3 (d) and replacement of the operating restriction condition no. 5 of the north runway permission as well as proposing new noise mitigation measures. The relevant planning register references for the North Runway are F04A/1755 [ABP Ref. No. PL06F.217429] as amended by F19A/0023 [ABP Ref. No. 305298-19].

Proposed relevant action:

- To remove the numerical cap on the number of flights permitted between the hours of 23.00 and 07.00 daily and replace it with an annual night-time noise quota between 23.30 and 06.00.
- The proposed noise quota system for night time noise at the airport is an annual noise quota of 7990 between the hours of 2330 and 0600hrs.
- To allow flights to take off from and/or land on the North Runway for an additional 2 hours – 2300 hours to 0000hours and 0600 hours instead of at 0700 hours.
- To use the North Runway at night outside of the 'shoulder hours' 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 (North Runway) is required for a specific type of aircraft.
- Overall, this would lead to an increase in the number of flights taking off and/or landing at Dublin Airport between 2300 and 0700 over that permitted in condition no. 5 of the North Runway permission.

Proposed 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 result to be reported annually to the Aircraft Noise Competent Authority, in compliance with the Aircraft Noise Regulation Act 2019.

The effect of the proposed amendment is to reduce the time during which Runway 10L-28R shall not be used for take-off and landing from an overall 8 hour night time period to 6 hours (i.e. from between the permitted 2300 and 0700 hours to the proposed between 0000 hours (midnight) and 0600 hours).

The proposed amendment also makes a change to the stated exclusions at the end of Condition 3 through the addition of *'or where Runway 10L-28R length is required for a specific aircraft type'.*

The application does not detail the reasoning for the inclusion of the above as a stated exception – which could not be included within the replacement of Condition 5; the potential numbers of aircraft involved or likely impacts of this amendment.

The applicant is also proposing to replace Condition 5 of F04A/1755 with the following:
'5. 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 this context, and while not set out in the application documentation, the original reason for applying Condition 5 in its existing format would require replacement as a result of this proposed change.

There is no proposal to amend or replace Conditions 3(a), 3(b) and 3(c) of the ABP permission and application does not seek any change to the permitted combined capacity of Terminal 1 and Terminal 2 which together shall not exceed 32 million passengers per annum [mppa].

3.0 Policy Context

National Policy

National Planning Framework

National Strategic Outcome – High Quality International Connectivity
This is crucial for overall international competitiveness and addressing opportunities and challenges from Brexit through investment in our ports and airports in line with sectoral priorities already defined through National Ports Policy and National Aviation Policy and signature projects such as the second runway for Dublin Airport and the Port of Cork - Ringaskiddy Redevelopment.

NSO 6

- Airports The development of additional runway and terminal facilities such as the second runway for Dublin Airport for which planning permission has been approved;
- Enhancing land-side access, particularly in public transport terms, such as through the Metro Link project in Dublin;
- and Careful land-use management of land-side areas to focus on the current and future needs of the airports.

International Connectivity is referenced as a critical factor in the economy/prosperity of 'Making Stronger Urban Places' (p56 refers)

Ireland and the European Union: 'Ireland's direct linkages with other EU countries both by air and sea...may become significantly more important, given their advantages in terms of resilience and ease of movement across internal borders'. (P107 refers)

National Development Plan 2018-27
The National Development Plan 2018-27 (NDP) supports the implementation of the National Aviation Policy and identifies the importance of high quality international connectivity as being: 'crucial for overall international competitiveness and addressing opportunities and challenges from Brexit through investment in airports in line with sectoral priorities already

defined through National Aviation Policy and signature projects such as the second runway for Dublin Airport...'

Other key objectives identified in the National Development Plan for Dublin Airport are: The development of an additional runway and terminal facilities. (Chapter 5 Section 5.2)

National Aviation Policy

The NAP published by the Department of Transport, Tourism and Sport seeks:
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; and
To maximise the contribution of the aviation sector to Ireland's economic growth and development.

The NAP specifically states: 'To ensure future connectivity and to deliver growth, it will be important that the State airports and Dublin Airport in particular, have sufficient capacity and runways of sufficient length to enable services to operate to global emerging markets without weight restriction'. and
'A specific level of airport infrastructure, including terminal and runway capacity as well as surface access is required to support the development of Dublin Airport as a secondary hub'.

Chapter 2 of the NAP also highlights that: 'Ireland is committed to working with its EU and international partners to mitigate the impacts of aviation on the environment and facilitate the sustainable growth of the sector. Ireland will implement a "Balanced Approach" to noise management at Irish airports in accordance with Regulation (EC) No.598 of 2014 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Union airports.'

Regional Policy

Regional Spatial and Economic Strategy

Section 3.2 Growth Enablers for Dublin City and Metropolitan Area
Protect and improve access to the global gateways of Dublin Airport and Dublin Port for the Region and to serve the Nation, and safeguard and improve regional accessibility and service by rail, road and communication, with a key focus on the Dublin-Belfast Economic Corridor.

Section 6.4 The Region's Economic Engines and their Sectoral Opportunities
Access to international markets through airports.

Section 7.3. A Clean and Healthy Environment – Noise pollution
RPO 7.8: Local authorities shall incorporate the objectives of the EU Environmental Noise Directive in the preparation of strategic noise maps and action plans that support proactive

measures to avoid, mitigate, and minimise noise, in cases where it is likely to have harmful effects

Section 8.5 International Connectivity.
Dublin Airport accounted for 85% of all air passengers in the Country in 2016. The number of passengers has increased year on year to reach 29.5 million in 2017 and is forecast to increase again in 201859. Dublin Airport is a key national asset to Ireland's economic success which is linked with its global connectivity to trade and tourism markets and requires support to ensure it continues as an economic driver. The National Aviation Strategy for the first time supports the growth of the Airport to a secondary hub airport; Dublin Airport has a number of features which make it an attractive option for airlines, including the availability of full US Preclearance.

Consideration of continued growth of the Airport has to include the environmental considerations, airplanes are a significant emitter of greenhouse gas and noise both of which have to be mitigated. Also, in the interests of public safety, careful land use planning considerations must be given in the surrounding areas and flight paths.

RPO 8.17 Support the National Aviation Policy for Ireland and the growth of movements and passengers at Dublin Airport to include its status as a secondary hub airport. In particular, support the provision of a second runway, improved terminal facilities and other infrastructure.

Regional Strategic Outcome 14.
Promote Dublin as a global city region and protect and enhance international connectivity, including ports and airports and promote the Region as a gateway to Ireland. (NSO 6)

Site Zoning and Designations from the Fingal Development Plan 2017-2023:
DA Zoning Objective and Vision
The subject site is located on lands zoned as 'DA' Dublin Airport. The DA zoning covers an extensive area of some 1,024 hectares and includes all the operational buildings and lands associated with the airport and runways.

The Objective for the DA Zoning is to: Ensure the efficient and effective operation and development of the airport in accordance with an approved Local Area Plan.

The Vision for the DA Zoning seeks to: Facilitate air transport infrastructure and airport related activity/ uses only (i.e. those uses that need to be located at or near the airport). All development within the Airport Area should be of a high standard reflecting the status of an international airport and its role as a gateway to the country and region. Minor extensions or alterations to existing properties located within the Airport Area which are not essential to the operational efficiency and amenity of the airport may be permitted, where it can be demonstrated that these works will not result in material intensification of land use.

Air Transport Infrastructure includes: aircraft areas, air traffic control/tower, ancillary health, safety and security uses, aprons, cargo handling, maintenance hangers, meteorology, retail - airside/duty free, runways, taxiways, terminals and piers.

Development Plan Designations
The total DA zoned lands, and the subject site, are included within the development boundaries for Local Area Plan (LAP) 11.A which corresponds with the adopted Dublin Airport Local Area Plan (January 2020).

The site is located within Noise Zone A, which is a designation associated with the operational activities of the airport and runways. The subject site is located inside the Inner Public Safety Zone and Outer Public Safety Zone. Map Based Objective 60 to "Facilitate the provision of a second major east-west runway".

The site is located within the Low Lying Agriculture landscape character area.

Section 1.9 Strategic Policy
9. Safeguard the current and future operational, safety, and technical requirements of Dublin Airport and provide for its ongoing development within a sustainable development framework of a Local Area Plan. The plan shall take account of any potential impact on local communities and shall have regard to any wider environmental issues.

Objectives:
The Development Plan includes a range of stated policy and objectives relating to Dublin Airport, including about its key function as the country's international airport, the range of operational requirements and the economic importance at a local to national level. The relevant objectives relating to the functional and operational aspect of Dublin Airport are outlined as follows.

Objective DA01: Facilitate the operation and future development of Dublin Airport, in line with Government policy, recognising its role in the provision of air transport, both passenger and freight.

Objective DA02: Prepare and implement a new Local Area Plan for Dublin Airport which will accommodate the future sustainable growth and development of the airport lands while also facilitating the efficient and effective operation of Dublin Airport in accordance with the requirements of the Local Area Plan and proper planning and sustainable development.

Objective DA03: Safeguard the current and future operational, safety, technical and developmental requirements of Dublin Airport and provide for its ongoing development within a sustainable development framework, having regard to both the environmental impact on local communities and the economic impact on businesses within the area.

Objective DA05: Facilitate the development of a second major east-west runway at Dublin Airport and the extension of the existing east-west runway 10/28.

Objective DA09: Ensure that aircraft-related development and operation procedures proposed and existing at the Airport consider all measures necessary to mitigate against the potential negative impact of noise from aircraft operations (such as engine testing, taxiing, taking off and landing), on existing established residential communities, while not placing unreasonable, but allowing reasonable restrictions on airport development to prevent detrimental effects on local communities, taking into account EU Regulation 598/2014 (or any future superseding EU regulation applicable) having regard to the 'Balanced Approach' and the involvement of communities in ensuring a collaborative approach to mitigating against noise pollution.

Objective DA10: Restrict development which would give rise to conflicts with aircraft movements on environmental or safety grounds on lands in the vicinity of the Airport and on the main flight paths serving the Airport, and in particular restrict residential development in areas likely to be affected by levels of noise inappropriate to residential use.

Objective DA15: Take into account relevant publications issued by the Irish Aviation Authority in respect of the operations of and development in and around Dublin Airport.

Objective DA16: Continue to take account of the advice of the Irish Aviation Authority with regard to the effects of any development proposals on the safety of aircraft or the safe and efficient navigation thereof. To refer planning applications for any proposals that may be developed in the environs of the airport to the Irish Aviation Authority and daa in accordance with the Obstacle Limitation Requirements of Regulation (EU) No 139 / 2014 (EASA Certification Specifications), previously required under ICAO Annex 14, and which are depicted on the aerodrome operator's map.

Objective DA18: Ensure that every development proposal in the environs of the Airport takes account of the current and predicted changes in air quality, greenhouse emissions and local environmental conditions.

Objective DA19: Ensure that every development proposal in the environs of the Airport takes into account the impact on water quality, water based-habitats and flooding of local streams and rivers and to provide mitigation of any negative impacts through avoidance or design and ensure compliance with the Eastern River Basin District Management Plan.

Objective DA24: Protect and enhance the transportation capacity required to provide for the surface access needs of the Airport.

Objective DA25: Maintain and protect accessibility to the Airport as a priority.

Objective ED11 Maximise sustainable economic opportunities associated with the presence of key infrastructural assets within the County including Dublin Airport, the national motorway network, railway services, and the close proximity to Dublin City and Dublin Port via the Port Tunnel.

Objective ED31: Ensure that the required infrastructure and facilities are provided at Dublin Airport so that the aviation sector can develop further and operate to its maximum sustainable potential, whilst taking into account the impact on local residential areas, and any negative impact such proposed developments may have on the sustainability of similar existing developments in the surrounding area, and the impact on the environment, including the climate.

Objective ED32 Ensure an appropriate balance is achieved between developing the unique potential of Dublin Airport as an economic generator and major employer in the County and protecting its core operational function as the Country's main international airport.

Objective ED33 Balance the impact of expansion of aviation and the important strategic issue of reducing carbon emissions.

Objective NP01 Implement the relevant spatial planning recommendations and actions of the Dublin Agglomeration Environmental Noise Action Plan 2013-2018 (or any subsequent plan), working in conjunction with relevant statutory agencies.

Objective NP02 Continue to promote appropriate land use patterns in the vicinity of Dublin Airport to minimise the amount of residents exposed to undesirable noise levels.

Policy on the Aviation Sector, National Aviation Policy, Dublin Airport as a Secondary Hub and Dublin Airport: Economic Growth is set out in Section 6.7 of the Development Plan.

Variation no. 1 to the Development Plan states: -
Noise Zones have been prepared in relation to aircraft noise associated with Dublin Airport as outlined in Table 7.2 below and supported by the following objectives. The approach taken in preparing these noise zones is considered to be supportive of National Policy Objective 65 set out in the Department of Housing Planning and Local Government (DHPLG) National Planning Framework 2040, February 2018, to:

"Promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life and support the aims of the Environmental Noise Regulations through national planning guidance and Noise Action Plans".

This approach also has regard for land use planning which is a component of the ICAO Balanced Approach to Aircraft Noise Management, as set out under EU Regulation 598/2014.

This approach is therefore considered also to align with the key objective set out in the Dublin Airport Noise Action Plan 2019, which is:

"to avoid, prevent and reduce, where necessary, on a prioritised basis the effects due to long term exposure to aircraft noise, including health and quality of life through implementation of the International Civil Aviation Organisation's 'Balanced Approach' to the management of aircraft noise as set out under EU Regulation 598/2014"

There is a need to minimise the adverse impact of noise without placing unreasonable restrictions on development and to avoid future conflicts between the community and the operation of the airport. Three noise zones are shown in the Development Plan maps, Zones B and C within which the Council will continue to restrict inappropriate development, and Zone A within which new provisions for residential development and other noise sensitive uses will be actively resisted. An additional assessment zone, Zone D is also proposed to identify any larger residential developments in the vicinity of the flight paths serving the Airport in order to promote appropriate land use and to identify encroachment.

Table 7.2 presents the four aircraft noise zones and the associated objective of each zone along with an indication of the potential noise exposure from operations at Dublin Airport. The zones are based on potential noise exposure levels due to the airport using either the new northern or existing southern runway for arrivals or departures.

The noise zoning system has been developed with the overarching objective to balance the potential impact of aircraft noise from the Airport on both external and internal noise amenity. This allows larger development which may be brought forward in the vicinity of the Airport's flight paths to be 3 identified and considered as part of the planning process. The focus of the noise zones is to ensure compatibility of residential development and ensuring compatibility with pertinent standards and guidance in relation to planning and noise, namely:

• National Planning Framework 2040, DHPLG, February 2018;
• ProPG: Planning & Noise – New Residential Development, May 2017;
• British Standard BS8233:2014 'Guidance on sound insulation and noise reduction for buildings'; and • ICAO guidance on Land-use Planning and Management in Annex 16, Volume I, Part IV and in the ICAO Doc 9184, Airport Planning Manual, Part 2 — Land Use and Environmental Control. Where development includes other non-residential noise sensitive receptors, alternative design guidance will need to be considered by the developer. Non-residential buildings and uses which are viewed as being noise sensitive within the functional area of FCC include hospitals, residential care facilities and schools.

Table 7.2 Aircraft Noise Zones.

Objective DA07: Strictly control inappropriate development and require noise insulation where appropriate in accordance with table 7.2 above within Noise Zone B and Noise Zone C and where necessary in Assessment Zone D, and actively resist new provision for residential development and other noise sensitive uses within Noise Zone A, as shown on the Development Plan maps, while recognising the housing needs of established families farming in the zone. To accept that time based operational restrictions on usage of a second runway are not unreasonable to minimize the adverse impact of noise on existing housing within the inner and outer noise zone.

Dublin Airport Local Area Plan 2020-2026 policy

The LAP presents the vision for Dublin Airport and surrounding lands for the coming years.

The strategic aims of the LAP include:

- Support for airport safeguarding.
- Support the continued sustainable growth of Dublin Airport and connectivity as a hub airport whilst ensuring protection of the environment.
- Support the timely delivery of required infrastructure to facilitate airport growth.
- Support the growth of the Airport as a major economic driver for the region.
- Support continued communication between the Airport and neighboring communities to protect community amenity and mitigate potential impact from airport growth in the interests of long-term sustainability.

Section 1.4 – Purpose of the Local Area Plan

Specifically, this LAP provides a detailed planning framework to:

Facilitate the capacity enhancements and operational improvements that are required within the short to medium term for Dublin Airport to:

- Continue to operate safely and efficiently;
- Keep pace with the anticipated growth in demand; and
- Develop as a secondary European hub;

Outlines the community, environmental and supporting infrastructure and surface access measures necessary to support the Airport's growth, consistent with:

- Sustainable development principles;
- Appropriate noise and environmental measures designed to protect public health; and
- Ensuring high quality surface transport access to the Airport.

The applicable objectives to the proposal within the LAP are outlined as follows:

Objective RW01: Facilitate the operation of the runways at Dublin Airport in line with current operational procedures, as determined by way of existing planning permissions or as otherwise determined in line with the requirements of the Aircraft Noise (Dublin Airport) Regulation Act 2019.

Objective CA01: Support relevant permissions contained in the Fingal County Council Climate Change Action Plan 2019-2024, the National Climate Action Plan 2019 and any subsequent plan(s), National Climate Change Adaptation Framework 2018 and any subsequent plan(s) and the National Mitigation Plan 2017 and any subsequent plan (s).

Objective EI01: All development proposals at Dublin Airport shall have regard to the requirement for environmental assessment including screening for Appropriate Assessment, Environmental Impact Assessment and Flood Risk Assessment in accordance with relevant legislation and guidelines.

Objective EI02: All development proposals in the LAP area shall safeguard key operational features of the Airport (runways, taxiways, obstacle surfaces, radar and control tower sightlines).

Objective EI03: All development proposals shall not prejudice the orderly operation and continued growth of the Airport including provision of a third terminal in the future.

Objective EA01: Maintain and protect accessibility to Dublin Airport as a priority and provide for alternative access points to the road networks in line with the recommendations of the South Fingal Transport Study.

Objective CS01: Fingal County Council will continue to engage with local communities that are likely to be affected by the growth of the Airport with a view to ensuring their concerns are understood and appropriate mitigation proposals implemented where required.

Objective CS02: Support the continual engagement between daa and neighbouring communities regarding airport growth.

Objective AQ04: Take account of the global and local impacts of aviation as well as the likelihood of international action to limit greenhouse gas emissions from aviation through action at the International Civil Aviation Organisation (ICAO) as mandated in the Kyoto Protocol when evaluating any proposals to significantly increase the use of Dublin Airport.

4.0 Planning History:

Reg. Ref. F04A/1755 (ABP PL 06F.217429)

Under Reg. Ref. F04A/1755, Fingal County Council granted 12th April 2006 and subsequently under Ref: PL 06F.217429, An Bord Pleanála GRANTED PERMISSION 29th August 2007: To construct on airport lands, a runway, 3110m in length and 75m in width. The permission sought to include all associated taxiways, associated road works including internal road network, substations, navigational equipment, equipment enclosures, security fencing, drainage, ducting, lighting, services diversions, landscaping and all associated site development works including the demolition of an existing derelict house and associated

outbuildings; the relocation of the Forrest Tavern monument; the removal of a halting site including the demolition of any structure whether temporary or permanent on that site which is currently leased from the applicant. The road works include the realignment of an 800m section of the Forrest Little Road; the rerouting of a 700m section of the Naul Road (R108) and a 200m section of Dunbro Lane and replacement of these latter roads with a new 2km long road (7.5m wide carriageway) running in an east-west direction connecting to the St. Margaret's Bypass at a new junction. The proposed duration of this permission is 10 years. the development is located on lands of approximately 261 hectares in the Townlands of Millhead, Kingstown, Dunbro, Barberstown, Pickardstown, Forrest Great, Forrest Little, Cloghran, Collinstown, Corballis, Rock, and Huntstown, north and north-west of the Airport Terminal building. An Environmental Impact Statement will be submitted with the planning application.

An Bord Pleanála granted permission for the North Runway on the 29th August 2007 for a period of 10 no. years. The grant of permission was subject to 31 no. conditions of which 15 no. conditions required matters to be submitted and agreed in writing with the planning authority prior to the commencement of development.

To date, compliance on the appropriate conditions of the north runway permission have been submitted and agreed with Fingal County Council.

Reg. Ref. F04A/1755/E1
Under Reg. Ref. F04A/1755/E1, the applicant applied for and Fingal County Council GRANTED an EXTENSION OF DURATION of the parent permission for the maximum period of five years.

In the extension of duration decision, the life of the parent permission is indicated as being extended from its expiration date of 28th August 2017 for five years until the 28th August 2022.

Reg. Ref. F19A/0023 (ABP-305298-19)
Under Reg. Ref. F19A/0023, Fingal County Council granted and subsequently under ABP-305298-19 An Bord Pleanála GRANTED PERMISSION to: Amend the North Parallel Runway (North Runway)(permitted under FCC Reg. Ref. F04A/1755; An Bord Pleanála Ref: PL06F.217429), on this site of c.265.7 hectares at Dublin Airport, Co. Dublin, in the townlands of Millhead, Kingstown, Dunbro, Barberstown, Pickardstown, Forrest Great, Forrest Little, Cloghran, Collinstown, Corballis, Rock and Huntstown. The permitted runway is located to the north and north-west of terminal 1 and Terminal 2, Dublin Airport.

The development will consist of:
Amendments to the structural composition of the outer shoulder of the runway (7.5m wide on each side of the runway) to be constructed of reinforced grass instead of paved construction;
Reduction in the width of permitted taxiways from c.30m (min. width) to c.27m (min. width);

Removal of 4 No. permitted taxiways (2 No. rapid exit taxiways (RETS) (P4 and P9); and 2 No. north-south taxiways (P5 and P12);
Relocation of 5 No. permitted taxiways; RETS P3 relocated to the east (renamed 'N5'); RETS P10 relocated to the west (renamed 'N3); North-south access taxiway (P2), relocated by c. 152 m to the east at eastern end of runway (renamed 'N6'); North-south taxiway (P17) (linking parallel taxiway to the North Apron) relocated by c. 116 m to the east (renamed 'Kilo'); Re-location of taxiway at intersection with existing Runway 16/34 (P6 renamed 'Mike' and P7 renamed 'Echo 1');
Removal of taxiways (P14, P15, P16) including passing bay located to the south of parallel taxiway; minor amendments to the runway levels where the permitted runway intersects existing Runway 16/34;
Re-location of 2 No. permitted sub-stations (each increasing from c.450 sq.m. to c. 475 sq.m. GFA) and associated amendments to access roads;
Amendments to the alignment and location of permitted fire access roads, including removal of 6 No. permitted crash gates with egress to St. Margaret's Bypass L3132 and Castlemoate Road; and the re-location of 1 No. permitted crash gate with egress to St. Margaret's Bypass L3132;
Amendments to the location of the permitted airside perimeter fence (along northern, south-western and eastern boundaries); Re-location of 2 No. permitted localiser (equipment) cabins and associated amendments to permitted localiser access roads; and re-location / provision of maintenance access to permitted and proposed air navigation equipment; drainage and pollution monitoring facilities.

The development will also consist of:
Amendments to ground profiles providing 6 No. elevated Earthworks Landscape Areas (ELAs) to the north, west and south of the permitted runway (to improve the quality of the radiated signal from Navigational Aid equipment and for landscape screening purposes) with max levels as follows: ELA 1 (max. level +74.8m AOD), ELA 2 (max. level +76.3m AOD), ELA 3 (max. level +70.1 m AOD), ELA 4 (max. level +64.5 m AOD), ELA 5 (max level + 68.0m AOD), ELA 6 (max. level +74.2 m AOD); The provision of concrete safety 'blast pads' on the western and eastern ends of the permitted runway and the northern end of Runway 16/34; Provision of new vehicular (maintenance) access roads to permitted approach lighting: 1) with access off (unnamed) road off eastern side of Castlemoate Road (at eastern end of runway); and 2) with access from the eastern and western sides of Toberburr Road (at western end of runway); Provision of maintenance access road and laybys off the permitted (and proposed to be amended) airside airport perimeter road consisting of: 3 No. laybys located to the south of St. Margaret's Bypass L3132 and Forrest Little Road; and 1 No. access road located to north-east of The Boot Inn; Provision of 2 no. shelters (each c.14.4 sq.m GFA) as rendezvous points for emergency vehicles (1 No. located to south-west of the permitted runway and 1 No. to east of permitted runway); Provision of 1 No. pumping station kiosk (c.36 sq.m GFA) and 2 No. pollution control kiosks (each c.9 sq.m. GFA); Demolition of existing security entrance Gate 1A including security building and 2 No. cabins (c. 201.9 sq.m. GFA) and the removal of the access off Castlemoate Road; Erection of 8 No. CCTV masts; erection of sections of airside

blast fencing; and all associated landscaping, boundary treatment works and all ancillary site development works above and below ground.

Reg. Ref. F20A/0550

Full planning permission to extend the North Apron in the Airfield at Dublin Airport, Co Dublin to facilitate the provision of twelve aircraft stands and a ground servicing equipment area on a site of 19.2ha.
The development will consist of:
* The expansion of the North Apron at Dublin Airport to provide twelve replacement Code C aircraft stands and ground servicing equipment storage area;
* Construction of a 520m long by 6m high blast fence on the northern and western boundary of the extended Apron and ground servicing equipment area;
* Construction of a 20m long by 6m high blast fence southwest of the Apron;
* Construction of a 550m service road immediately to the north of the twelve replacement Code C aircraft stands to provide access for service vehicles;
* Rehabilitation of existing pavement;
* Construction of two new underground attenuation tanks on 9000m² of existing grassland;
* Provision of a total organic carbon analyser enclosure;
* Provision of drainage and electrical infrastructure;
* Provision of Aerodrome Ground Light (AGL) installations this includes underground ducting to provide power to centreline lights and new edge lights;
* Provision of 26 No. High Mast Lights;
* Modifications to internal airside fencing, service road infrastructure and provision of construction site security fencing;
* Provision of a temporary construction site compound and modification to the Airfield security fence to temporarily change part of the construction site form 'airside' with access restrictions to 'landside';
* Provision of road and stand pavement markings, Stand id-signs and High Mast Lighting (HML);
* The application includes all associated site development works and services;
* This planning application is accompanied by an Environmental Impact Assessment Report (EIAR).

Applicant: daa
Date received: 03/11/2020
Application type: Permission
Request Additional Information on 04/01/2021
Decision: Pending

Passenger capacity conditions:

Reg. Ref F06A/1248 (ABP PL06F.220670)

New airport terminal and ancillary works, including the demolition of Corballis House (protected structure). Dublin Airport, T/Ds of Collinstown, Rock and Corballis,

Condition 3 states. *The combined capacity of Terminal 2 as permitted together with Terminal 1 shall not exceed 32 million passengers per annum unless otherwise authorised by a further grant of planning permission. Reason: Having regard to the policies and objectives of the Dublin Airport Local Area Plan and capacity constraints (transportation) at the eastern campus.*

Reg. Ref F06A/1843 (ABP PL06F.223469)
The construction of an extension to the existing main terminal building at Dublin Airport in the Townland of Collinstown, in the Barony of Coolock, County Dublin. Permission is also sought for the establishment of a temporary construction compound associated with the above works to the north of the proposed development, within the airport complex in the Townland of Collinstown, in the Barony of Coolock, County Dublin. The development with a gross floor area of 7,472 square metres, will consist of a two-storey plus mezzanine and part third storey extension to the north of the existing main terminal building and west side of existing link building which extends from the main terminal building to Pier A and Pier D (under construction). The development will include works integrating with the existing main terminal building and with the link building. The development will consist of arrivals and departures facilities on two levels, with ancillary support accommodation including additional check-in desks, retail, restaurant/bar on mezzanine level with external smoking area, catering, storage, service and plant utilities

Condition 2 states. *The combined capacity of Terminal 1 (including the extension authorised by this grant of permission) and Terminal 2 granted permission under planning register reference number F06A/1248 (An Bord Pleanála appeal reference number PL 06F.220670) shall not exceed 32 million passengers per annum unless otherwise authorised by a further grant of planning permission.*

Reason: Having regard to the policies and objectives of the Dublin Airport Local Area Plan and capacity constraints (transportation) at the eastern campus.

Remainder of the Subject Site, Applicant's wider landholding and adjacent locations
There are a number of other planning applications and works that have been covered under exempted development provisions that pertain to the subject site, the wider applicant's landholding and on other lands adjacent to the subject site.

The applicant has presented a comprehensive schedule of extant permissions in Appendix B of Tom Phillips and Associates Planning Report, December 2020. The Planning Officer has reviewed the contents of these documents and considers that the planning applications outlined above are the pertinent planning history applications in respect of the current proposal.

5.0 Pre-Application Consultation:

The applicant has indicated that pre-application consultations were undertaken between the applicant, agents for the applicant, Fingal County Council staff and representatives from the Airport Noise Competent Authority (ANCA).

Table 5.1: Record of pre-application consultations

Ref. No or PPC No.	Date
Ref. No. 03984	12th September 2019
PPC 106276	3rd October 2019
PPC 106276 and PPC 106336 combined	5th February 2020
PPC 106276 and PPC 106336 combined	14th February 2020
PPC 106276 and PPC 106336 combined	25th February 2020
PPC 106276	2nd April 2020
PPC 106276	30th April 2020
PPC 106276	11th May 2020
PPC 106276	10th September 2020
PPC 106276	16th September 2020
PPC 106276	23rd October 2020
PPC 106276	11th November 2020

At initial pre-application consultation held in September 2019 the applicant, the daa, outlined the need to amend conditions 3 (d) and 5 of the north runway permission to enable the airport function as a secondary hub. The planning authority sought further detail on the proposal to enable a consideration of the nature of the relevant action and a consideration of its environmental impacts. The daa sought agreement on the objective criteria for metrics and ANCA advised not to focus solely on metrics but also look at the situation through scenarios. In October 2019 the focus of the pre-application was in respect to EIAR scoping document on the change to permitted runway operations.

Pre-application consultations recommenced in February 2020 and a joint pre-application consultation was held in respect to the proposed relevant action application and a request

to commence pre-application consultations relating to the proposed application to increase passenger capacity to 40mppa was facilitated. The daa requested a modelling workshop with the competent authority, which was also held in February 2020 in respect to the relevant action application.

Cost effectiveness analysis and considerations in respect to identification of a noise problem and the setting of a Noise Abatement Objective formed the agenda for the pre-application consultations in April 2020. In May 2020 pre-application consultation focused on draft proposed noise mitigation measures that may be included within a future planning application. The presentation included comments on ANCA current thinking on a potential noise problem and candidate NAO.

Pre-application consultation held on 10th September 2020 comprised a presentation of the modelling of operating scenarios to account for post-covid and operating within the surface access restriction of 32mppa. The Planning Authority requested an EIAR scoping report and set out the rationale for scenarios selected. At the 16th September 2020 pre-application consultation, the description of the relevant action was discussed. The Planning Authority advised that the daa should request a formal scoping opinion. The Planning Authority highlighted the importance of the EIAR clearly setting out what reasonable alternatives were considered and considering cumulative impacts with other existing or approved projects.

In October 2020 the planning documentation was discussed and the red-line boundary options presented. The EIAR scoping document for the relevant actions was presented in November 2020 during the pre-application consultation and a draft description of the relevant action was provided by the applicant to the Planning Authority to assist with the consideration of likely environmental impacts. Clarification was sought on the current daa stakeholder engagement/ consultation plan and further feedback provided by the Planning Authority on the scope of the EIAR.

6.0 Observations/ Submissions:

A total of 205 valid submissions and observations were received. A significant number of objections from individuals, community groups, residents' associations, family groups and public representatives have been received highlighting the proposed adverse impact of night time flights and the resultant noise pollution which will, it is stated, negatively affect the quality of life and wellbeing of residents.

As the issues are common throughout these submissions and a number of submissions are duplicated the issues have been grouped into themes for ease of assessment and for response purposes, these issues include:

Consultation and examination of planning documentation

- Requests for period of consultation to be extended due to Covid-19 restrictions. Covid-19 has impacted on the public's opportunity to review planning application documentation and to make submissions.
- Request for application to be discussed in the Council Chamber.
- There has been no public consultation by the daa as part of their commitment to engage contained with the Dublin Airport Masterplan dated May 2018 (daa). The Dublin Airport Authority must show their bona-fides and engage in meaningful consultation with the surrounding communities above and beyond minimal compliance with Planning Law. Public consultation undertaken in 2016 outdated and not relevant to current application.
- No consultation has been sought in new areas affected by proposed night time flights.
- Development fails to comply with objectives in development plan and conditions 28 in respect to consultation with the community. Neither FCC or daa have taken any steps to publicise this important case beyond people checking the website constantly.
- Issue with the lodgement of the application at the late stage of the runway's construction and on the 18th December 2020 just before Christmas would limit the time people had to review the detailed documentation.
- Additional information being uploaded onto FCC website in January 2021.
- Quality of the documentation online is poor and makes it difficult to follow
- Site notices didn't sufficiently alert the public to the application and a leaflet drop should have been undertaken taking into account COVID-19 restrictions.

Need for the Relevant Action

- No change in circumstances to justify a change to the conditions attached to the North Runway.
- Air traffic projections not realistic. Need for night flights not justified on business times / percentage.
- With the North Runway and significant reduction of flights, there is no real justification at this point of time for DAA to be given the permission to increase the night flights. The day capacity of all the Runways available is more than sufficient.
- Economic reasons to change the conditions should not trump the well-being of the community at large.

Flight path

Concerns expressed about the 15 degree divergence in flight path when runways operating in mixed mode. It is stated that the route has not been included in the contour modelling.

Noise and health concerns

- Concerns about adverse health impacts that unlimited night-time flights would impose on residents within the noise contours. A significant number of the submissions indicate high levels of stress in relation to the proposals and concerns about the lack of sleep impacting on physical and mental health.

- Night time noise quota is not acceptable, a limit on the number of flights should be given.
- Serious problem caused by aircraft noise currently. Noise criteria at 2018 levels as baseline unacceptable, in 2018 noise levels were severe and intolerable. No additional night flights should be permitted.
- Due to complexity of the application there is uncertainty whether certain residential properties will be affected by the proposals. The daa need to highlight locations by naming streets and roads that will be affected.
- Concerns about being affected by night time noise and uncertainty whether house will be included in the noise insultation scheme.
- No information about future mitigation measures when 40mppa is reached or exceeded.
- No details on passenger numbers is questionable.
- Noise levels should follow the WHO recommendations. Night flights should be less than 40 dB Lnight and 45 dB Lden. The World Health Organisation (WHO) strongly recommend that night noise levels should not exceed 40dB at night. DAA have totally ignored this health warning and therefore their proposals should not be accepted as they put people's health at risk over a long period of time. DAA have selected 55dB at night as the target level that beyond which noise insulation must be provided. The WHO clearly state that the level of 55dB at night is an Interim Target level to be used only temporarily in a local situation until other mitigation measures are put in place The WHO state that vulnerable groups cannot be protected at a noise level of 55dB at night. The proposal by DAA is therefore totally inadequate and should not be allowed
- There are also several other serious consequences for people's health resulting from night time aircraft noise.
- Communities should be able to open the windows.
- Night time flights to be shared across both runways as all night time flights on southern runway causes noise disturbance in Portmarnock
- The conditions laid down by ABP should remain to protect the quality of life of airport communities.
- An independent specialist company should by condition measure and monitor night noise generated and publish on a weekly not annual basis.
- The choice of a noise quota will mean that the number of flights will increase, due to quieter planes being deployed, so frequency of sleep interruptions will increase.
- If the change is to go ahead then consultation is required in a transparent manner to explain and discuss the noise quota of 7990.
- Given the severity of the impact of night-time noise this suggests that the Planning Authority must refuse planning permission for the proposed development.
- Generous noise insulation grants required (to include new windows) and wider scope of properties to be included.

- Objection to the proposal to remove Dublin Airport night-time fight restrictions imposed as noise mitigation measures to protect residents of Kilreesk Lane, St. Margaret, Co. Dublin and the wider communities impacted by aircraft noise.
- How has the Noise Quota of 7990 been calculated as no values of the QC rating are included?
- Lack of clarity of how many times the North runway would have to be used by aircraft needing a longer runway
- No details of what the situation at the airport will be like when they reach 40mppa
- The DAA intend to operate the runways in mixed mode during busy times. For easterly operations, their preferred runway will be the existing South Runway. But at busy times (23:00-24:00 and 06:00- 07:00) they will use the North Runway for departures to the east also. This route has a 15-degree divergence and flies over Robswall Park at Low Rock. This route is not modelled in the contours. So, the figures they've produced do not take into account the effects of this route on Malahide and Portmarnock.
- Queries regarding projections for when the airport reaches 40m passengers and the affects this has on our Community?
- FCC carried out a revision to their current development plan -variation no 1 whereby they introduced various noise zones associated with the airport. They set out criteria that had to be met by providing a standard of noise insulation in housing to be built in the future within these noise zones. One of the criteria is that the maximum single event noise level within a bedroom shall not exceed 45dBLAmax. However, the DAA have not reviewed single events or the number of single events at night which can cause serious sleep disturbance and major resulting health issues such as cardiovascular disease. Measurements taken inside newly insulated houses by DAA indicate that the noise levels for single events exceeds the criteria set out by FCC. Therefore, the proposals by DAA are unhealthy and do not meet FCC's criteria and therefore must be rejected.

<u>Noise insulation scheme</u>

- Frustration at not being included in noise insulation scheme when other properties less than 100yards away are included.
- Particular concern in relation to the lack of contact by the daa, in order to move towards ensuring families can make an informed decision in relation to Conditions 9 & 10, re. Voluntary buy-out scheme for residents, Conditions 6 & 7, re. Voluntary noise Insulation for schools & existing dwellings and Condition 15 & 16, re. associated roads and western access road.

<u>Climate change</u>

- There is a climate and biodiversity emergency. Now is a time to reduce rather than increase the number of flights through Dublin Airport.
- The degree of climate forcing? resulting from a flight is highly variable depending on a wide range of factors including meteorological conditions, routing including altitude, and timing in the diurnal and seasonal cycles. We refer to a selection of articles from both academic and specialist journalistic sources. Note for example, Stuber et al.'s conclusion: "*These results suggest that flight rescheduling could help to minimise the climate impact of aviation.* "An increase in night-time flights will impact the climate much more than an increase in daytime flights. This information should be in the EIAR and the planning authority should take this additional impact into account.

Environmental Impact Assessment

- Submission requesting that a new environmental impact statement be prepared to accompany the application to change the conditions.
- All transportation noise to be considered collectively including road noise by movements.

Appropriate Assessment

- This application is for the amendment of a planning permission for which appropriate assessment under the Habitats Directive was wrongly not carried out. The screening report for this application refers only to the night flight conditions and does not screen the overall development. Public authorities are required to make good insofar as possible, the failure to correctly implement EU law. Therefore, the Council should seek the information necessary for it to carry out a full appropriate assessment.

- No appropriate assessment was carried out on the project under article 6(3) of the Habitats Directive. The legislation in force at that time incorrectly integrated the carrying out of an appropriate assessment with the carrying out of an environmental impact assessment. This legislation was condemned by the Court of Justice of the European Union in Case C418/04 in its judgment of 13 December 2007. Planning permission for modifications to the project was granted on 18 March 2020 (ABP Ref 305928). It is stated that there has never been an appropriate assessment for the entire project and therefore the grant of planning permission was and remains unlawful under EU law.

Decision making and legislation

- Concerns about FCC making the decision as it stands to gain from the growth at the airport. the Aircraft Noise (Dublin Airport) Regulation 2019 vests the functions of the competent authority in the Chief Executive of Fingal County Council and therefore breaches article 3(2) of the Aircraft Noise Regulation Request that families in Kilreesk

are included in the process of the decision making, and considered an equal stakeholder.
- Change in Time Restrictions goes against European Directive 2002/49/EC
- Urge FCC and ANCA to reconsider the removal of these protection measures that were imposed to safeguard our human health and wellbeing and the future of our livelihoods here in St. Margaret's.
- Legal framework not in accordance with the spirit of the law.

In support of the proposed relevant action are a significant number of submissions from airlines, business and tourism organisations, businesses and individuals taking into account *"the €300m+ investment in critical national aviation infrastructure that night time capacity at Dublin Airport would reduce below the current levels"*, on grounds relating to negative impact of connectivity, the positioning of Dublin airport, negative impact on revenues and investment.

It is put forward by submissions in support of the application that the relevant planning conditions need to be refined to take account of (i) the new regulatory process (ii) new technological advancements in relation to aircraft noise (iii) and best practice in relation to noise management and mitigation in airport environments. A number of these submissions and observations set out the positive improvements in noise reduction from more modern and quieter aircraft that offer steeper take-off climb gradient profiles that helps to reduce the noise footprints on the surface.

Some of the cargo operators identify disproportionate impact upon cargo flights if unable to fly at night. A request is made that all cargo operations are excluded from the restrictions on movement in the night-time period.

The Planning Officer has had regard to the substantive planning considerations raised in the third party submissions and observations throughout the assessment. An assessment of issues outside of key areas of assessment are addressed separately in a subsection of section 10.0 of this report.

7.0 Internal Departmental Reports:

Environmental Health Officer [Air and Noise] – Report received. In respect to Chapter 13 of the submitted Environmental Impact Assessment Report (EIAR) recommends further consideration of the night time noise exposure using the ProPG method for night time events, and the cumulative effect of both aircraft noise and ground noise on the individual. In relation to Chapter 10 of the EIAR concludes that the proposed relevant action is unlikely to cause a negative impact on the air quality surrounding the airport.

Environment Section (Waste Enforcement & Regulation) - no objection to the application.

Water Services Planning Section – The EIAR, Chapter 12 – Water: Runways and Taxiways, outlines that the proposed relevant action will not alter the current operational drainage systems and de-icing operations at the airport & will result in no additional infrastructure, changes to design, hydrology, flow control or changes to the operation of the north runway itself or wider pollution control infrastructure at the airport.

Recommended conditions:

- No surface water / rainwater is to discharge into the foul water system under any circumstances.
- The surface water drainage must be in compliance with the "Greater Dublin Regional Code of Practice for Drainage Works, Version 6.0, FCC, April 2006.

Transportation Planning Section – report received. The Transportation Planning section does not raise any issues with regard to the conclusion of the EIAR with regard to Traffic and Transport.

Parks and Green Infrastructure Division – no objections.

Conservation Officer –Considers that the Cultural Heritage Chapter of the EIAR should set out a more thorough written assessment of both potential direct and indirect impacts on the archaeological and architectural heritage within the affected area of the relevant action prior to setting out the final recommendations/conclusions.

Heritage Officer - Considers that chapter 20 does not detail the cultural heritage baseline, the designated and non-designated heritage assets or archaeological investigations on the basis that the proposed amendments will not result in any effects upon cultural heritage assets when compared with the permitted/constrained scenario. However, given there will be no changes to the physical infrastructure of the North Runway it is considered there will be no significant impact on archaeological remains as a result of the proposal as outlined.

Environment, Climate Action and Active Travel Department – No report received at time of writing.
Housing Department – No report received at time of writing.
Architects Department – No report received at time of writing.
Bio-diversity Officer – No report received at time of writing.
Public Lighting Section – No report received at time of writing.

8.0 Prescribed Bodies:

Transport Infrastructure Ireland (TII) - In the case of the above planning application, the Authority will rely on your planning authority to abide by official policy in relation to

development on/affecting national roads as outlined in DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012), subject to the following:

The TII requests that:

- The Council has regard to the provisions of Chapter 3 of the DoECLG Spatial Planning and National Roads Guidelines in the assessment and determination of the subject planning application.
- The proposed development shall be undertaken in accordance with the recommendations of the original, Mobility Management Plans, Transport (Traffic) Assessments and Road Safety Audits, which accompanied 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-305298-19. Any recommendations arising should be incorporated as Conditions in the Permission, if granted. The Developer should be advised that any additional works required as a result of the Mobility Management Plans, Transport Assessment and Road Safety Audits should be funded by the developer.

Irish Water – no objection subject to conditions.

Health Service Executive [Department of Public Health] – report received and states that:

"Sleep time of 8 hours is thought to protect 50% of the population, therefore reduction of the restricted flight times to a 6 hour window between midnight and 6am may have an adverse effect on health outcomes. Proposed noise mitigation measures are welcomed; however, consideration should be given to whether these are sufficient to reduce night noise levels to recommended levels, especially in the summer months when air traffic is increased and windows are more likely to be open, modifying insulation effects".

The submission concludes that:

- All efforts should be made by the daa to ensure that as many people as possible are protected from adverse health effects associated with aircraft noise as outlined above in this report. This must include reducing aircraft noise levels to below 45 dB Lden, and for night exposure to below 40 dB Lnight.

- The EHS is of the opinion that the World Health Organisation's Environmental Noise Guidelines of 45 dB Lden and 40 dB Lnight should have been used for ground noise assessments.

Health Service Executive – Environmental Health Submission

In respect to the EIAR the following observations have been made on the environmental factors:

Air Quality
The EHS is satisfied with the conclusion in the EIAR which states that the model was based on a conservative assessment and even with this worst case scenario the annual mean concentrations of all the pollutants considered are below the relevant Limit Values for all of the assessed receptor locations. Concentration changes between the permitted and proposed Relevant Action show residual effects to be Not Significant.

Water
The EHS is satisfied that the proposed development will not have any significant effect on the water environment.

Air Noise and Vibration
While the EHS welcomes the significant reduction in the people exposed to airline noise between the 2018/2019 baseline and the 2022/2025 forecast baseline scenario it still acknowledges that a significant proportion of people, namely 63,316 people assessed as highly annoyed and 128 people
exposed to at least a high noise level based on the 2025 baseline scenario, will still be exposed to airline noise above the WHO recommendations of 45Lden.

The WHO 2018 Noise Guidelines strongly recommends reducing night noise exposure levels produced by aircraft during night time below 40 dB Lnight, as it states aircraft noise above this level is associated with adverse effects on sleep.

The EHS acknowledges that the increase in people exposed to 50 dB Lden and 45 dB Lnight may result in adverse health effects as outlined in The World Health Organisation's Environmental Noise Guidelines 2018. Due to this the EHS feels that the mitigation measures proposed must be reflected in these increased numbers in order to reduce as much as possible the number of people exposed. The EHS also feels that the WHO levels of 45 dB Lden and 40 dB Lnight should be used when assessing eligibility for schemes such as the sound insulation improvement works.

While the EHS welcomes the significant reduction in the people exposed to airline noise between the 2018/2019 baseline and the 2022/2025 forecast baseline scenario it still acknowledges that a significant proportion of people, namely 19,464 people assessed as highly annoyed and 281 people exposed to at least a high noise level based on the 2025 baseline scenario, will still be exposed to airline noise above the WHO recommendations of 40Lnight.

Ground Noise and Vibration

The EHS acknowledges that the increase in people exposed to 50 dB Lden and 45 dB Lnight may result in adverse health effects as outlined in The World Health Organisation's Environmental Noise Guidelines 2018. Due to this the EHS considers that the mitigation measures proposed must be reflected in these increased numbers in order to reduce as much as possible the number of people exposed. The EHS also considers that the WHO levels of 45 dB Lden and 40 dB Lnight should be used when assessing eligibility for schemes such as the sound insulation improvement works.

Land and Soils
The EHS is satisfied that the proposed development will not have any significant effect on land and soils.

Failte Ireland - It is considered that the changes proposed in this application by DAA which include amending the operating hours of the runway to allow for use between 11pm-midnight and 6am-7am, the introduction of a noise quota system along with additional noise mitigation provide a balanced approach between maintaining the role of Dublin Airport as a key state asset supporting economic development, international connectivity, and tourism and the protection of residential amenity in the area.

An Taisce - An Taisce is opposed to the proposed amendments. Two primary areas of concern: the impact of the proposals on the health and wellbeing of people living in the area, and the implications of the proposal for the climate.

The proposed amendments would result in the addition of 1.1 m passengers to the total capacity of the airport. The submission highlights concern that the significance of added emissions contemplated in the proposal is deeply flawed.

It is submitted that the EIA report does not adequately identify or describe the direct or indirect effects on the environment of the proposal at hand. It is stated that the "*EIA Report is overly dismissive of the climate and health impacts of the proposed amendments, and mistaking prioritises the perceived economic imperatives of the proposal above its environmental impacts. As a result, the EIA is inadequate and not fit for purpose.*"

9.0 Aircraft Noise Competent Authority

Under Section 34C (2) of the Planning and Development Act 2000 (as amended), where an application is made to for a relevant action to be taken, the planning authority shall give a copy of the relevant application and consult with the competent authority in relation to any noise problem that would arise from taking the relevant action as proposed (including any implications that would arise therefrom in relation to appropriate assessment or environmental impact assessment matters).

By Chief Executive Order ref. ANCA/002/2021, dated 10th February 2021, the Aircraft Noise Competent Authority (ANCA) has identified that a Noise Problem, within the meaning of Section 9(2) of the Aircraft Noise (Dublin Airport) Regulation Act 2019 (the Act of 2019) and Section 34C (2) of the Planning and Development Act 2000 (the Act of 2000), would arise at Dublin Airport from the taking of a Relevant Action as proposed by application to the planning authority re. F20A/0668 on 18th December 2020.

In summary, the reasons for ANCA's determination of a Noise Problem include:

- The application proposes an increase in aircraft activity at night, when referenced against the situation that would otherwise pertain, which may result in higher levels of human exposure to aircraft noise.
- The application proposes a situation where some people will experience elevated level of night-time noise exposure for the first time which may be considered to be harmful to human health.
- The EIAR accompanying the planning application indicates that the proposed relevant action will give rise to significant adverse night-time noise effects. This indicates that the noise effects of the proposed development are a material consideration. Mitigation in the form of a night-time noise insultation scheme is proposed by the application. The provision of such mitigation is an indicator that the proposed development may give rise to a Noise Problem.

Notification of the identification of the Noise Problem was received by the planning authority on the 10th February 2021 advising that ANCA will now proceed to apply the Balanced Approach of the International Civil Aviation Organisation in accordance with the provision of the Aircraft Noise Regulation (EU 598/2014), the Act of 2019 and Section 34C of the Act of 2000.

Pursuant to Section 34C (4) of the Act of 2000, the planning authority shall neither decide to refuse the Planning Application nor grant the Planning Application subject to or without conditions until it received a notice from ANCA either:

a) Pursuant to Section 34(5) of the Act of 2000, directing the Planning Authority to refuse permission for the reason that inadequate provision has been made in the Planning Application (or in any plans or further information, or both, subsequently given by the daa to the Planning Authority and ANCA) to deal with the noise problem that would arise from the carrying out of the relevant action as proposed, or
b) Pursuant to Section 34C (15) (a) (ii), sending a copy of a regulatory decision adopted under Section 34C (14) (a) providing for the noise mitigation measures or operating restrictions that it proposes to direct the Planning Authority to include as conditions of the planning authority's decision (if any) to grant the Planning Application.

ANCA confirm their intention to consult with the planning authority and coordinate, in a timely manner, request (s) for further information, according with Section 34C (2) of the Act of 2000.

Assessment of the relevant action proposed is contained in Section 10.0. It is important to note that given ANCA's determination that a Noise Problem may arise as the result of taking the relevant action issues relating to aircraft noise and mitigation measures will be subject to the application of the 'Balanced Approach'. The 'Balanced Approach' means the process developed by the International Civil Aviation Organisation under which a range of available measures, namely the reduction of aircraft noise at source, land use planning and management, noise abatement operational procedures and operating restrictions.

The supplementary provisions relating to operating restriction included in planning permission requires the planning authority to wait for the competent authority's decision either to refuse pursuant to Section 34C (5) or their regulatory decision adopted under Section 34C (14) (a) providing for the noise mitigation measures or operating restrictions that it proposes to direct the planning authority to include as conditions of the planning authority's decision (if any) to grant the Planning Application. At such a time the planning authority's assessment of the relevant action, following ANCAs application of the 'Balanced Approach' can be completed and the planning authority shall make its decision on the application as soon as practicable after it received the regulatory decision.

ANCA will be requesting information subsequently, as confirmed in consultation between the Planning Authority and ANCA under Section 34C (2).

10.0 Assessment of the relevant action:

The proposed development is assessed in terms of national and regional planning policy, Fingal Development Plan policy, the Local Area Plan and a range of other relevant planning considerations.

As noted in Section 9.0 ANCA will be requesting information subsequently, as confirmed in consultation between the planning authority and ANCA under Section 34C (2). Therefore, in undertaking the assessment of the planning application it is acknowledged that issues relating to aircraft noise, human health impacts and measures aimed at reducing the noise impact from aircraft at airports will be subject to further assessment under the 'Balanced Approach'. If the competent authority is satisfied that permission could be grated following their assessment, this assessment and the resultant regulatory decision will inform the final assessment to be undertaken by the planning authority.

The primary issues for assessment include;

- National and regional policy;

- Fingal Development Plan 2017-2023 policy;
- Dublin Airport Local Area Plan 2020-2026 policy;
- Noise Impact Assessment;
- Rationale for the making of the application;
- Rationale for the proposed relevant action;
- Integration with and impact on the amenity of area;
- Transportation considerations;
- Water, wastewater and surface water considerations;
- Appropriate Assessment screening;
- Environmental Impact Assessment; and
- Issues raised in third party observations/ submissions.

National and regional policy

NSO6 of the NPF specifically references development at Dublin Airport, with an emphasis on land use management to focus on the current and future needs of the airport. Furthermore, the NDP set out that implementation of the NAP is to be supported, re-iterating the crucial nature of international connectivity to investment in the state. The National Aviation Policy seeks to enhance connectivity, foster growth and maximise the contribution of aviation to Ireland's economic growth and development.

The Regional Spatial Economic Strategy identifies the airport as a growth enabler for the region and specifically for Dublin City, acknowledging the need to protect and improve access to the airport for the benefit of the region and Nation, with access to international markets being a key part of the economic engine of the region. The RSES states that the airport is a key national asset for economic success for Ireland due to links to global connectivity. RPO 8.17 sets out support for the NAP and growth at the airport, while RSO14 supports enhancement of international connectivity.

Reflective of the importance of Dublin Airport as an international hub and the country's main airport, a range of national planning and transportation policy frameworks support the delivery of the North Runway. Support for the provision of the runway is cited in 'Ireland 2040 Our Plan: National Planning Framework (NPF)' and the associated funding plan the 'National Development Plan 2018-2027' in relation to achieving high quality international connectivity where it is identified as a signature project. Similarly, the Government's 'National Aviation Policy (NAP) for Ireland' identifies the importance of the provision of the second parallel runway to facilitate the development of Dublin Airport as a secondary hub at an international basis.

In consistency with the NPF and the NAP, the draft 'Regional Spatial and Economic Strategy for the Eastern and Midland Region' through Regional Policy Objective 8.17 supports the growth of Dublin Airport to ensure its status as a secondary hub airport, in particular through the provision of a second runway, improved terminal facilities and other infrastructure.

The project to develop the second parallel runway at Dublin Airport is identified as a key factor in providing long-term capacity requirements to facilitate its further development as a secondary hub. As stated in the second progress report (2019) of the NAP the North Runway will be capable of delivering a 31% gain in connectivity by 2034.

It is also noted that the NPF, NDP and RSES all support mitigation of the effects of aviation, including noise, either through the implementation of the Balanced Approach in accordance with Regulation (EC) No. 598 of 2014 and through promotion of clean and healthy environments and proactive measures to avoid, mitigate and minimise noise (RPO 7.8)

The submitted planning documentation and supporting Environmental Impact Assessment Report (EIAR) does not sufficiently acknowledge the North Runway's capacity, as permitted, to deliver a gain in connectivity. As a result, it is considered that further consideration is required of the 'base case' (i.e. as referred to in the EIAR the future permitted baseline (2022 constrained)). Such further consideration should inform the alternative(s), which would operate within the existing operational hours / restrictions but which would also support economic growth. This may involve additional flight activity throughout the day. Regard should be had to how such an alternative would impact on the most appropriate and effective levels of connectivity to other EU member states and further afield. Where relevant, consideration of proposed alternatives should also demonstrate how they interact with conditions associated with annual passenger numbers at the Dublin Airport.

Fingal Development Plan 2017-2023 policy

With regard to the zoning objective and use classes, the subject site is zoned as 'DA' Dublin Airport, which seeks to: Ensure the efficient and effective operation and development of the airport in accordance with an approved Local Area Plan.

The relevant action relates to the proposed use of the permitted runway system and is considered to come within the scope of the DA zoning objective for the area. The Development Plan contains numerous statements regarding development at Dublin Airport. Acknowledgement of the importance of the airport to the national, regional and local economy is referenced, specifically to the need to maintain and improve international connectivity. Overarching strategic policy for the Development Plan outlines a requirement to safeguard the current and future operational requirements of Dublin Airport and to provide for ongoing development within a sustainable development framework of an LAP. This strategic policy is supported by a significant number of policies within the Development Plan which refer to the operation and future development of the airport (Objective DA01), accommodation of future growth at the airport (DA02), and safeguarding and providing for ongoing development at the airport (DA03). Furthermore, protection of the economic benefit of the airport is referenced (DA25) along with the opportunities afforded by the airport (ED11).

Other policies within the Development Plan reference the need to balance growth at the airport with the impact which such growth may have, including a Key objective DA09 regarding the application of the balanced approach in assessment of impact of noise on existing established communities. Furthermore, Objective ED31 setting out support for the further development at the airport to facilitate the maximum sustainable potential of the aviation sector, also requires that the impact on local residential areas, the environment, climate to be taken into account.

The Development Plan sets out clear support for the undertaking of sustainable development and growth at the airport, having regard to the role of the airport as an enabler of national, regional and local economic growth, however, impacts of any such growth must be carefully considered against the receiving environment, including local communities.

Variation no. 1 to the Fingal Development Plan was adopted in December 2019 and provides an approach for land use planning as a part of the ICAO Balanced Approach to Aircraft Noise Management. Variation no. 1 also ensures that the Development Plan is supportive of NPO65 of the National Planning Framework regarding pro-active management of noise and aligns with the key objective of the Dublin Airport Noise Action Plan 2019 to avoid, prevent and reduce the effects of aircraft noise over the longer term.

The variation incorporates updated zones relating to aircraft noise into the Development Plan in order to balance the potential impact of noise from the airport on both external and internal amenity.

It is considered that application of the Balanced Approach by ANCA as a part of the process identified within the Aircraft Noise Regulation Act 2019 will, through the determination of a noise abatement objective and a regulatory decision, provide greater clarity on the matter of noise impact of the relevant action on human health.

As a result of concerns regarding the sufficiency of information contained in the Environmental Impact Assessment Report (EIAR), it is not possible at this stage in the assessment to conclude that the proposal is consistent with Objectives DA18.

Dublin Airport Local Area Plan 2020-2026 policy
The LAP presents the vision for Dublin Airport and surrounding lands for the coming years.

The strategic aims of the LAP include:

- Support for airport safeguarding.
- Support the continued sustainable growth of Dublin Airport and connectivity as a hub airport whilst ensuring protection of the environment.
- Support the timely delivery of required infrastructure to facilitate airport growth.
- Support the growth of the Airport as a major economic driver for the region.

- Support continued communication between the Airport and neighboring communities to protect community amenity and mitigate potential impact from airport growth in the interests of long-term sustainability.

The Local Area Plan, which follows from Objective DA02 provides a framework for accommodating the future sustainable growth and development of the airport lands while also facilitating the efficient and effective operation of Dublin Airport in accordance with the requirements of proper planning and sustainable development. The LAP should be considered within the hierarchy of national, regional and countywide policy regarding support for sustainable growth at the airport reflecting the importance of maintaining international connectivity as a key part of maintaining the attractiveness of Ireland and Dublin as a location of employment and investment.

It is specifically set out in Section 1.4 – purpose of the LAP, that the Plan provides a framework to 'facilitate the capacity enhancements and operational improvements that are required within the short to medium term for Dublin Airport. Furthermore, this section sets out that sustainable development principles, including appropriate noise and environmental measures to protect public health will form part of the purpose of the Plan.

Objective RW01 sets out that operation of the runways at the airport is to be in line with existing or new planning applications which may be determined in line with the requirements of the Aircraft Noise (Dublin Airport) Regulation Act 2019. It is considered that the relevant action application, made under the provisions of Section 34C of the Planning and Development Act 2000 (as amended) and introduced under the provisions of the Aircraft Noise (Dublin Airport) Regulation Act 2019 is an appropriate method of applying for amendments to the runway conditions associated with the grant of planning permission under F04A/1755.

In assessing the planning application for the relevant action, there is support for the proposal within the LAP, specifically within RW01 and in the purpose of the plan, subject to assessment of environmental effects of the proposal on local communities, having regard to noise and impact on public health.

As a result of the concerns regarding the sufficiency of information contained in the Environmental Impact Assessment Report (EIAR), it is not possible at this stage in the assessment to conclude that the proposal is consistent with Objectives CA01.

Noise Impact Assessment

There are now two Noise Action Plans for Fingal in accordance with the requirements of the Environmental Noise Regulations 2006, S.I. 140 of 2006 which give effect to the EU Directive 2002/49/EC relating to the assessment of noise. Fingal County Council together with the other Dublin Local Authorities prepared the Dublin Agglomeration Environmental Noise Action Plan 2018- 2023. Fingal County Council also prepared the Noise Action Plan for Dublin

Airport 2019-2023. The key objective of the Noise Action Plans is to avoid, prevent and reduce where necessary on a prioritised basis the harmful effects including annoyance due to long term exposure to environmental noise.

Objective NP01: Implement the relevant spatial planning recommendations and actions of the Dublin Agglomeration Environmental Noise Action Plan 2018-2023 and the Noise Action Plan for Dublin Airport 2019-2023 (or any subsequent plan), working in conjunction with relevant statutory agencies.

The report received from the Environmental Health Officer notes set out the noise abatement procedures contained in The Noise Action Plan (NAP) for Dublin Airport 2019-2023 as follows;

- Noise Preferential Runway Usage: Aircraft must use the preferred runway under specific conditions and time of day/night. These are selected for noise abatement purposes, the intent being to utilise whenever possible the runways which enable aircraft to avoid noise-sensitive areas during the initial departure and final approach phases of flight.

- Noise Preferential Routes (NPRs) and Track Keeping: NPRs are used to minimise disruption by routing aircraft away from built-up areas, where possible daa has regular meetings with the IAA to continuously review the track-keeping of aircraft in the vicinity of Dublin Airport. If a complaint is made to Dublin Airport the flight track is reviewed to assess whether the aircraft was off-track. 99% of aircraft using Dublin Airport adhere to the established routings.

- Environmental Noise Corridors which aircraft must adhere to on arrival and departure to minimise noise impact. These corridors apply to the majority of aircraft that use the airport.

- Continuous Descent Approach (CDA): The airport operates a Continuous Descent Approach (CDA) which reduces the noise experienced on the ground by reducing the overall thrust required during the initial descent and keeping aircraft at higher altitudes for longer.

- Noise Abatement Departure Procedures (NADP): Specific rules on how aircraft should perform take-off climbs to ensure that noise is minimised. Dublin Airport requires compliance with a take-off climb profile, which is based on noise abatement departure climb guidance contained in an ICAO document (Doc 8168 Vol 1).

- Rules on the use of reverse thrust: Reverse thrust is used to aid the deceleration of aircraft on landing through the use of the aircraft's engines. This should not be used at night, unless required for safety reasons.

- Engine Ground Running: Engine testing is only permitted at certain times to minimise ground noise. Engine testing is restricted between 2000-0700hrs for all aircraft types with only the smaller aircraft being able to undertake engine testing between 0700-0900hrs.

- Limitations on the use of the Cross-wind Runway.

The Environmental Health Officer notes that the NAP 2019-2023 did not include the WHO guidance "Environmental Noise Guidelines for the European Region" as it was not published at the time of writing. The guidelines summarise the research into the impact on health of environmental noise. The critical health outcomes investigated were: Cardiovascular disease, Effects on sleep, Annoyance, Cognitive Impairment, Hearing impairment and tinnitus.

The WHO Environmental Noise Guidelines for the European Region state that "for night noise exposure, the GDG strongly recommends reducing noise levels produced by aircraft during night time below 40 dBLnight, as night time aircraft noise above this level is associated with adverse effects on sleep".

WHO guidance which states that "for average noise exposure, the GDG strongly recommends reducing noise levels produced by aircraft below 45 dBLden, as aircraft noise above this level is associated with adverse health effects."

Identification of the Noise Problem was received by the Planning Authority on the 10th February 2021 advising that ANCA will now proceed to apply the Balanced Approach of the International Civil Aviation Organisation in accordance with the provision of the Aircraft Noise Regulation (EU 598/2014), the Act of 2019 and Section 34C of the Act of 2000. As part of this process, ANCA as required under Section 9(2) of the Aircraft Noise Regulation Act 2019, shall ensure that the Noise Abatement Objective is, as appropriate, defined, restated of amended taking into account as appropriate, Article 8 of, Annex V to, the Environmental Noise Directive.

As set out in Section 9.0 the Planning Authority shall neither decide to refuse the relevant application nor grant the relevant application subject to or without conditions until it receives a notice under subsection 34C (5) or 34C (15) (a) (ii) from the competent authority (i.e. ANCA).

Consideration in respect to noise impacts in the context of the Environmental Impact Assessment Report (EIAR) is addressed under Section 12.0.

Rationale for the making of the application

The planning history relating to the airport lands and specifically the North Runway are detailed in Section 4.0. On appeal to An Bord Pleanála 31 no. conditions were attached under

the North Runway permission Register Reference F04A/1755 An Bord Pleanála Reference Number PL06F.217429. The relevant action seeks to amend the operating restriction set out in Condition no. 3 (d) and replace operating restriction in condition no. 5 of the North Runway permission F04A/1755 (ABP PL06F.217429) as amended by F19A/0023 (ABP-305298-19).

The reason given in respect to condition 3 was to ensure the operation of the runways were in accordance with the mitigation measures set out in the Environmental Impact Statement in the interest of the protection of amenities of the surrounding area. Condition no. 5 was attached 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 submission received by An Taisce outlines that: "*The intended effect of conditions 3(d) and 5 was to limit the frequency of night flights arriving and departing the airport during the night, to ensure that the communities close to the Airport would not suffer unduly from noise disturbance at night. In particular, the conditions provided for 8 hours of relative calm - between 11pm and 7am, no flights would be permitted to arrive or depart via the new North Runway, and a total of 65 aircraft movements would be permitted across the Airport as a whole in that timeframe. These conditions were accepted by the DAA, and first phase construction of the new runway commenced in December 2016 on the basis of application of those conditions*". A number of other submissions raise concerns that the relevant action seeks to modify conditions of a grant of permission.

Supplementary provisions relating to operating restriction included in planning permission provided under amending section 34C of the Planning and Development Act (as amended) facilitates the person in whose favour a relevant permission operates to make an application for a relevant action.

In this section 'relevant action' in relation to a relevant operating restriction the subject of a relevant application means -

(23) In this section— 'relevant action', in relation to a relevant operating restriction the subject of a relevant application, means—
(a) to revoke the operating restriction,
(b) to amend the terms of the operating restriction in the manner specified in the application,
(c) to replace the operating restriction with the alternative operating restriction specified in the application,
(d) to take an action referred to in paragraph (a), (b) or (c) together with introducing new noise mitigation measures or revoking, revoking and replacing, or amending the terms of, existing noise mitigation measures, or a combination thereof,
(e) if the relevant application relates to 2 or more relevant operating restrictions, to take any combination of any of the actions referred to in paragraphs (a) to (d), or (f) to take an action

referred to in paragraph (a), (b), (c), (d) or (e) together with revoking, revoking and replacing, or amending the terms of, a condition of the relevant permission;

In Section 3.3.1 of the submitted EIAR current night movements are stated as being 113 in summer 2019 during the 23.00-07.00 period. It is stated that "*Short haul scheduled services make up the bulk of these night flights, with departures between 06.00-07.00 and arrivals after 23.00. There are 17 long haul night arrivals in the early morning. The night cargo operations are primarily flights by the package integrators, DHL, FedEx, TNT and UPS operating to their main sortation hubs. These operations are very time critical to connect at these hubs and to achieve an overnight package delivery service.*"

It is considered that the application relates to proposed amendments to operating restrictions in respect to a permission granted for development at the airport and the provisions under Section 34C are applicable.

Rationale for the proposed relevant

Chapter 3 of the EIAR sets out the need for the project as follows:

"*The result of the permitted/constrained scenario coming into effect when North Runway becomes operational in 2022, is a loss of air traffic movements and associated loss of 1.1m passengers per year (-3.5%) and a cumulative loss over the 4-year period 2022-2025 of 4.3m passengers. The net effect of the proposed Relevant Actin would be to facilitate an increase in the number of flights permitted to take off from, or land at, Dublin Airport at night, which would enable the lost 1.1 million passengers to be regained annually in the post-COVID-19 recovery period*'.

Chapters 2 and 3 sets out the description of, and need for the project. In this chapter, and elsewhere, the EIAR states that the Relevant Action is required to offset the effect of Covid-19 restrictions. For example:

> '*The net effect of the proposed Relevant Action would be to facilitate an increase in the number of flights permitted to take off from, or land at, Dublin Airport at night, which would enable the lost 1.1million passengers to be regained annually in the post-COVID-19 recovery period.*'
> (Section 2.1.1, page 2-3 of EIAR)

> '*The net effect of the proposed Relevant Action would be to facilitate an increase in the number of flights permitted to take off from, or land at, Dublin Airport at night, which would enable the lost 1.1million passengers to be regained annually in the post-COVID-19 recovery period.*'
> (Section 2.1.2.3, page 2-4 of EIAR)

'The net effect of the proposed relevant action would be to facilitate an increase in the number of flights permitted to take off from, or land at, Dublin Airport at night and enable a return to growth at the airport post Covid-19.'
(Section 3.1, page 3-2 of EIAR)

These statements, when taken together with the information presented in Figure 3.3 of the EIAR, show the airport returning to maximum capacity (32mppa) in a short number of years post restrictions.

Therefore, it is considered appropriate that the applicant provides clear reasoning in the EIAR for the need for the proposed Relevant Action, including for its longer-term need post any COVID-19 restrictions, and how this is achieved given the 32mppa limit to enable an assessment of both the effective functioning of the airport infrastructure and protection of the environment.

Integration with and impact on the amenity of area

The Fingal Development Plan 2017-2023 was varied in 2019 (Variation No. 1) to give effect to updated noise zones to reflect improved knowledge of the impact of aviation noise on affected communities, the provision of specific noise related policy concerning noise from aircraft, road and rail. The four Dublin Airport noise zones A-D.

It is stated that "*Three noise zones are shown in the Development Plan maps, Zones B and C within which the Council will continue to restrict inappropriate development, and Zone A within which new provisions for residential development and other noise sensitive uses will be actively resisted. An additional assessment zone, Zone D is also proposed to identify any larger residential developments in the vicinity of the flight paths serving the Airport in order to promote appropriate land use and to identify encroachment*".

The focus of the noise zones is to ensure compatibility of residential development and ensuring compatibility with pertinent standards and guidance in relation to planning and noise, namely:
• National Planning Framework 2040, DHPLG, February 2018;
• ProPG: Planning & Noise – New Residential Development, May 2017;
• British Standard BS8233:2014 'Guidance on sound insulation and noise reduction for buildings'; and • ICAO guidance on Land-use Planning and Management in Annex 16, Volume I, Part IV and in the ICAO Doc 9184, Airport Planning Manual, Part 2 — Land Use and Environmental Control.

Where development includes other non-residential noise sensitive receptors, alternative design guidance will need to be considered by the developer. Non-residential buildings and uses which are viewed as being noise sensitive within the functional area of FCC include hospitals, residential care facilities and schools.

Noise zones relating to Dublin Airport have been in place for many years to aid land use planning. Since the publication of previous noise zones in 2005, and over the last decade, further evidence has emerged that has updated understanding of how aircraft noise can affect health and quality of life. With the north runway set to become operational in 2022, updated information is available relating to aircraft noise and performance which was incorporated into the updated noise zones A-D to allow for more effective land use planning for development within airport noise zones.

A significant number of the submissions and observations received indicate that there is uncertainty in the documentation submitted in respect to whether their homes will be affected by the Relevant Action, the need for mitigation measures and applicability of the night noise insultation grant. It is considered that Section 6.4 Local Planning of the EIAR does not sufficiently address land use zoning in the wider area around the airport, which may be potentially impacted by the proposed Relevant Action. Likewise, potential impact on wider land use zoning from night time flights is not considered under Chapter 19 Material Assets to identify the likely impacts of the relevant action. These issues will be addressed by a request for further information.

Transportation considerations

The proposed development is located in within Dublin Airport and would result in a change in the number of night time flights & operating hours as currently permitted when the north Runway comes into operation. The development will not result in additional trips to/from the airport as an increase in passenger numbers is not being sought as part of this permission.

A TTA was undertaken as part of this application, with data recorded in May of 2019 informing the baseline for assessment purposes. The permitted scenario was examined in detail, including assessment of flight schedules and passenger arrival/departure lag times. A similar exercise was undertaken for the proposed development and comparisons made with the current traffic distribution on the surrounding Road network for both scenarios, to determine changes in vehicle trips in the years 2022 & 2025.

Two-way traffic flows based on recorded 2019 traffic data are presented. A comparison of Permitted/Constrained vs Proposed/Unconstrained is undertaken with hourly % change in two-way vehicle trips per hour presented. The two-way hourly vehicle trip difference is distributed onto the road network based on existing origin-destination behaviour as recorded in 2019. This comparison exercise indicates a redistribution of traffic from one hour to another, in the hours from 00:00 to 08:00. In some hours a reduction in trips is demonstrated whilst in others an increase. However, notwithstanding that some hours experience additional trips, in both the 2022 & 2025 scenarios, the additional flows do not

exceed the maximum background traffic flows recorded in May 2019 on the road network in the vicinity of the Airport.

The TTA determined that there would be no additional trips generated by the proposed development. Trips to/from the airport would be redistributed, however they would not exceed the current recorded maximum hourly flows in both 2022 & 2025 scenarios. This is noted as acceptable to the Transport planning section. The planning authority concurs with the opinion of the Transportation Planning Section, however. notes that the changes identified in traffic levels within Chapter 9 Traffic and Transport of the submitted EIAR should be included in the revised ground noise assessment.
The TII recommend in the event of a grant of permission the proposed development shall be undertaken in accordance with the recommendations of the original, Mobility Management Plans, Transport (Traffic) Assessments and Road Safety Audits, which accompanied 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-305298-19. In the event of a grant of permission the planning authority consider that conditions can be attached to ensure the compliance with the recommendations contained in the Mobility Management Plans, Transport (Traffic) Assessment and Road Safety Audits.

Water, wastewater and surface water considerations

The Water Services Department note that within Chapter 12 of the submitted EIAR – Water: Runways and Taxiways, it is outlined that the proposed relevant action will not alter the current operational drainage systems and de-icing operations at the airport and will result in no additional infrastructure, changes to design, hydrology, flow control or changes to the operation of the north runway itself or wider pollution control infrastructure at the airport. Irish Water have no objection to the proposed application. The planning authority, having regard to the submitted information contained within the EIAR, concur that the proposed relevant action will not alter the current operational drainage systems and de-icing operations at the airport.

Issues raised in third party submissions and observations (not encompassed in either the planning assessment above, in the considerations in respect to Appropriate Assessment Screening or within the review of the submitted Environmental Impact Assessment Report (EIAR).

A central theme in the submissions received from third parties is both the lack of meaningful consultation undertaken by the daa in respect to their proposals prior to submitting the application, the submission of the application during the Christmas period and limited access to consider the impact of the proposals, taking into account the lack of access to the Council offices to examine the planning file due to COVID-19 restrictions.

Some concern has been raised about additional information submitted after the lodgement date and being uploaded onto the planning portal. For the purposes of clarity information uploaded on subsequent dates comprised pre-application records (Section 247 Pre-application Consultations) which are made available by the Planning Authority after a planning application is received in accordance with Section 2.5 of the Development Management Guidelines (2007).

A number of the submissions request a public consultation to enable a discussion and clarification on the potential impacts, mitigation measures including voluntary buy-out and availability of appropriate night noise insultation schemes. The application for the taking of a relevant action is made under Section 34C of the Planning and Development Act 2000 (as amended) and the opportunity to participate in the decision-making procedures is by the making of an submission of observation within the statutory period on the application.

Furthermore, details of consultations undertaken by the daa are outlined out in Chapter 5 of the EIAR, however there is little information on the timings of the various consultations and no information has been provided in relation to the issues raised in the consultations and how these have informed the assessments in the EIAR. It is considered that the applicant should be requested to submit further information in respect to Chapter 5.

Concerns are noted in respect to independence of decision-making of Fingal County Council. It is not intended to respond on these procedural and legal matters in the context of the planning assessment. However, to enable a understanding of the process set out in the legislative framework the taking of a relevant action is contained within Section 34C of the Planning and Development Act 2000, as amended. The planning authority have been notified that a noise problem has been identified by ANCA. The provisions under Section 34C (4) restrict the planning authority in making a decision to either refuse the relevant application nor grant the relevant application subject to or without conditions until it receives a notice from the competent authority under subsection (5) or (15) (a) (ii).

11.0 Appropriate Assessment screening

11.1 Introduction

The applicant has submitted an Appropriate Assessment Screening Report prepared by AECOM Ireland Limited. An independent review has been carried out of the AA Screening report prepared by Aecom by Matthew Hague CEnv MCIEEM, Senior Ecologist, Brady Shipman Martin environmental, landscape and planning consultants on behalf of Fingal County Council, as well as the other relevant planning application documentation, in particular the EIA Report (Aecom, 2020), including the Biodiversity chapters (Chapters 15 (Terrestrial Ecology) and 16 (Aquatic)), the Water chapter (Chapter 12) and the Air and Ground Noise and Vibration chapters (Chapters 13 and 14).

11.2 Brady Ship Martin review of submitted AA Screening report

The review of the screening report sets out that "In Section 2 (Identification of Relevant European Sites) the AA Screening report describes the source-pathway-receptor model for identifying European sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) relevant to the proposed development. It notes that there is no set distance over which effects may occur and that the zone of influence of a proposed development must be defined on a case by case basis".

Furthermore, it is highlighted that in "...Section 2.1.5. the report states that '*the proposals can have no possible direct effects on any SAC as they do not involve any change to the final layout of the North Runway nor do they propose any additional stands, piers or other infrastructure at the airport.*' This statement is predicated on the fact that, as the report notes, '*the proposed Relevant Action does not entail the carrying out of any works at all*'. The report states that '*taking into consideration the distance to Malahide Estuary SAC from the North Runway* [c. 4km to the north east] *there is no potential for the increased number of night-time flights to have any effect on the qualifying habitats*'. The report extrapolates, stating that '*for these reasons, no further consideration is given to SACs and likely effects on SACs*'. In other words, the AA Screening report claims that there will be no impacts on the nearest SAC (Malahide Estuary) and there will similarly be no effect on any other SAC. The reasoning for this is based on the fact that the proposed Relevant Action will involve no new physical works at the Airport. This is expanded on at Section 5.1 and more specifically at Section 5.2 (in the context of the potential for significant effects on SPAs), which states that likely significant effects on the five SPAs from pollution-related impacts associated with the Proposed Relevant Action, both individually and in combination with other plans and projects, can be excluded. This is because the Proposed Relevant Action involves operational changes only with no additional infrastructure or changes to the drainage design.

Therefore, at Section 2.1.5 of the AA Screening report, potential direct effects on any SACs are explicitly ruled out. The EIAR, in several places (such as at Sections 12.3.1, 12.5, 15.4 and 16.3), states that the Cuckoo Stream flows west to east through the application site. At Section 19.3.2.4 it is noted that the Forrest Little, Wad and Kealy's Streams also flow through the application site. The Cuckoo Stream eventually joins the Mayne River, and the other streams eventually join the Sluice River. Both of these rivers flow into Baldoyle Bay SAC / SPA and not Malahide Estuary. Only a small proportion of airfield drainage at Dublin Airport drains to Malahide Estuary". Having regard to the considerations highlighted by the consultant ecologist (Brady Shipman Martin) following their review the screening report should be updated to correctly identify all surface water pathways.

In respect to SPAs the review indicates that "At Section 2.1.7 the AA Screening report addresses SPAs (designated for the protection of certain bird species). The report screens in only those SPAs over which aircraft arriving or departing the North Runway will pass at 10,000 feet or less. These SPAs are Rogerstown Estuary SPA, Baldoyle Bay SPA, Ireland's Eye SPA, Lambay Island SPA and South Dublin Bay and River Tolka Estuary SPA. At Section 2.1.11

it is noted that a Wildlife Management Plan is in place that permits daa plc to disturb and prevent birds from flocking at or near the North Runway, in the interest of public safety. On that basis the AA Screening Report does not consider the potential for significant effects on birds of Special Conservation Interest (i.e. birds for which the SPAs are designated) arising from operations at the airport itself. This is considered in further detail at Section 5.3 (Collision Risk Impacts). Based on the information contained in the AA Screening report and in the EIAR this is a reasonable approach".

The review findings establish the following: "Having effectively excluded the potential for any significant effects on SPAs through pollution impacts (Section 5.2) and collision risk (Section 5.3), the AA Screening report focuses on disturbance. Section 3 of the AA Screening report comprises a literature review, focussing on the effects of noise and visual stimuli on birds, and in particular on the effects of aircraft noise on birds (the SCI species of the five named SPAs). In the summary of the Literature Review (Section 3.5) it is noted that hearing in birds is not as well developed as that in humans, and that although noise can disturb birds, greater responses tend to occur when there is a visual stimulus. This is relevant, as the proposed Relevant Action involves changes to night-time operations at the airport (Section 5.4.3 addresses the hours of darkness in summer and winter). Night-time operations are not likely to result in visual disturbances to birds via aircraft shadows (Section 3.3.1). The report notes that the majority of studies reviewed found that overflights did not result in disturbance to birds when the flights are over 300m (c.1000 feet) from the ground.

Section 4 (Receiving Environment) of the AA Screening Report addresses previous studies related to Dublin Airport itself, including the results of field studies undertaken at Baldoyle Bay and Rogerstown Estuary. These studies considered disturbance events potentially caused by overflying aircraft when the airport was at its busiest, and according to Section 4.3, the results of bird surveys undertaken showed that while there was disturbance to birds within the SPAs caused by a variety of sources (such as dogs and walkers), no disturbance events were caused by passing aircraft to or from Dublin Airport.
Section 5.4 the AA Screening report addresses the potential impacts of disturbance on birds potentially caused by the proposed Relevant Action. Section 5.4.9 concludes that '*the proposals would not result in any disturbance to the SCI species of the relevant European designated sites*'. Based on the information contained in the AA Screening report and in the EIAR this is the correct conclusion".

The AA Screening report does not address the potential effects of emergency fuel dumping from the relevant action. This is set out in Chapter 8 of the EIAR, however no analysis of the potential effects of this element of the Relevant Action is provided in the AA Screening report. In light of the foregoing in relation to the correct identification of surface water pathways to Baldoyle Bay as well as the potential impacts of emergency fuel dumping from the Relevant Action, this AA Screening Report conclusion should be reviewed, and updated if necessary.

11.3 Screening for Appropriate Assessment Determination

Having reviewed the submitted AA Screening report and EIAR, together with the details of the proposed Relevant Action, in conjunction with the review report prepared by Brady Shipman Martin on behalf of the planning authority it is considered that the applicant has not provided sufficient information to allow Fingal County Council, the competent authority, to determine that the proposed development would not have significant effect on European Sites either alone or in-combination with other plans or projects.

Further information is therefore required in relation to AA Screening, as follows:

a) Section 2.1.5 of the AA Screening report, potential direct effects on any SACs are explicitly ruled out. The EIAR, in several places (such as at Sections 12.3.1, 12.5, 15.4 and 16.3), states that the Cuckoo Stream flows west to east through the application site. At Section 19.3.2.4 it is noted that the Forrest Little, Wad and Kealy's Streams also flow through the application site. The Cuckoo Stream eventually joins the Mayne River, and the other streams eventually join the Sluice River. Both of these rivers flow into Baldoyle Bay SAC / SPA and not Malahide Estuary. The screening report should be updated to correctly identify all surface water pathways.
b) The AA Screening report should be revised to take account of potential impacts on European sites caused by emergency fuel dumping as identified in Chapter 8 of the EIAR, should this take place.
c) The review of in-combination effects should be reviewed, and updated if necessary, to take account of the responses submitted to this request for further information in relation to both the Screening for Appropriate Assessment and Environmental Impact Assessment Report.

12.0 Environmental Impact Assessment

12.1 Introduction

The applicant has submitted an Environmental Impact Assessment Report (EIAR), prepared by AECOM Ireland Limited (December 2020). It is stated in section 1.4 of the Main Report of the EIAR that *"...this application to remove, replace or vary Conditions No. 3 (d) and No. 5 of the North Runway permission is not an application for development consent for a 'project' within the meaning of the EIA Directive, and is therefore outside the scope of that Directive. Strictly without prejudice to that position, daa is submitting an EIAR with the application out of an abundance of caution."*

Notwithstanding, the contention made by the applicant in respect to the need for an Environmental Impact Assessment, the application is being made under Part 3 of the Planning and Development Act 2000 (as amended) in respect to an operating restriction included in a planning permission. While acknowledging that conditions 3(d) and 5 impose

restrictions to operations at Dublin Airport, it should also be noted that they were applied for the protection of the environment, including the human environment and not for the purpose of limiting access or reducing the operational capacity of the airport. As such it is important to have regard to Article 102 of the Planning and Development Regulations 2001 (as amended) where a planning application for sub-threshold development is accompanied by an EIAR, the application shall be dealt with as if the EIAR had been submitted in accordance with section 172(1) of the Act.

12.2 Initial consideration of the EIAR

As defined in section 171A of the Planning and Development Act 2000, as amended, environmental impact assessment means, an assessment, which includes an examination, analysis and evaluation carried out by the Planning Authority. The process of Environmental Impact Assessment consists of:

- Preparation of an EIAR by the applicant;
- Carrying out of consultations in accordance with statutory requirements;
- Examination of the EIAR, any supplementary information provided in accordance with legislation and any relevant information received through consultations;
- The reasoned conclusion of the competent authority, i.e. Fingal County Council (or An Bord Pleanála on appeal) on the significant effects on the environment of the proposed development; and,
- The integration of the reasoned conclusion of the competent authority into the development consent decision.

The Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018) establishes that the initial consideration of the EIAR should include examining the completeness and quality of the report, in light of the Directive that the EIAR is prepared by competent experts.

The submitted EIAR states the following:

"The following EIA regulations and EPA guidelines were considered by AECOM in preparing this EIAR:

- *The requirements of EC Directive and Irish Regulations regarding EIA, such as European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296/2018), and EIA Directives 2011/92/EU and 2014?52/EU;*
- *Guidelines on the information to be contained in Environmental Impact Statement, EPA (Draft August 2017)*
- *Advice Notes for preparing Environmental Impact Statements, EPA, Draft September 2015*

- *Environmental Impact Assessment of Projects - Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU), European Union, 2017; and*
- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA, August 2018.*
- *In addition to this, a number of specific guidance documents have been used in individual assessments where required. These will be addressed within the policy and legislation section of each assessment topic covered within the EIAR."*

The following initial examination has been undertaken having regard to:

- EIA Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018), published by the Department of Housing, Planning and Local Government and the Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU).

- Submissions and observations that were received by third parties concerning the effects on the environment by the proposed relevant action.

- In addition, submissions received by prescribed bodies as itemised in section 8.0 of this report.

The examination has been undertaken by internal staff and statutory consultees normally engaged in the planning process. In addition, an independent review of the submitted planning documentation Appropriate Assessment Screening and EIAR by consultants Thomas Burns B.Agr.Sc. (Landscape); Dip. EIA Management; Ad. Dip. Planning and Environmental Law; MILI, MIELA, Partner with Brady Shipman Martin, and by Matthew Hague CEnv MCIEEM, Senior Ecologist, Brady Shipman Martin environmental, landscape and planning consultants in the process of examining the contents of the EIAR.

In reviewing the submitted EIAR, the requirements of Schedule 6 of the Planning and Development Regulations 2001 as amended, which sets out the requirements of information to be included in an EIAR and Article 94 of the Planning and Development Regulations 2001 as amended, were considered.

The application is primarily seeking to increase the number of flights during night time hours, no new construction is proposed. As such, the assessment is focused on any changes that arise between the current permitted situation and the proposed increased night time activity. The likely significant direct and indirect effects (to include *secondary, cumulative, transboundary, short-term, medium-term and long term, permanent and temporary, positive and negative effects)* of the development are considered under the headings below which follow the order of the factors set out in Article 3 of the EIA Directive 2014/52/EU:

- population and human health;
- biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
- land, soil, water, air and climate;
- material assets, cultural heritage and the landscape; and
- the interaction between those factors

The EIAR which accompanies the application comprises:
- Environmental Impact Assessment Report – Main Report
- Environmental Impact Assessment Report – Technical Appendices (Volume I)
- Environmental Impact Assessment Report – Technical Appendices (Volume II)
- Environmental Impact Assessment Report – Non Technical Summary

The EIAR includes for all environmental aspects as set out in the 2014 EIA Directive (2014/52/EU). Section 1.5 of the EIAR sets out a detailed description of the approach, process and methodology used in the assessments. Significance criteria are to be evaluated in accordance with magnitude of impacts and the sensitivity of the resources / receptors that could be affected in order to classify the effect. Figure 1-2 as provided in the EIAR is an extract from the Draft Guidelines for EIAR (EPA, 2017).

Following the initial consideration of the EIAR, including its completeness and quality, several deficiencies have been identified. There appear to be significant gaps and missing information that would preclude the planning authority from carrying out the assessment. Furthermore, acknowledging the notification of a Noise Problem as determined by ANCA, any implications that would arise therefrom (the relevant action) in relation to appropriate assessment and environmental impact assessment) are subject to consultation under Section 34C (2) and further assessment by ANCA under the 'Balanced Approach'. As such, the planning authority will not be in a position to undertake its own investigation and analysis to reach as complete an assessment as possible, especially on matters relating to the significance of impact on human health, air noise and ground noise until the 'Balanced Approach' is completed and the regulatory decision is provided by ANCA.

ANCA will be requesting information subsequently, as confirmed in consultation between the Planning Authority and ANCA under Section 34C (2). In this respect it is important that the applicant shall have regard to, and, provide such information as is necessary to demonstrate any implications that would arise from the taking the relevant action, and any further information subsequently sought by the relevant authority, in relation to appropriate assessment or environmental impact assessment.

12.3 Examination of completeness and quality of EIAR

As noted, following the initial consideration of the EIAR several deficiencies have been identified, as follows:

Competencies of Experts

The introduction to each chapter contains the details and competencies of the experts who undertook the work. While some information on the EIAR Project Team is provided at Section 1.10 of the EIAR, not all names or qualifications are provided and statements of experience demonstrating competency should be provided. Article 94(e) of the Regulations requires that an EIAR includes a list of names of all the experts contributing to the various sections of the report, together with details of their competency including, as appropriate, qualifications, experience and any additional information that demonstrates the required competency. This is to facilitate the competent authority and the public in coming to a conclusion in relation to the competency of experts.

EIAR Scenarios Assessed

Scenarios assessed and used throughout the EIAR make various reference to 'constrained' / 'permitted constrained' / 'future constrained' / 'future permitted' scenarios and to 'proposed' / 'proposed unconstrained'. Given that both permitted and proposed scenarios involve constraints, e.g. either by time / number of flights in the permitted, or by time / noise quota in the proposed, it would be helpful to clarify, as appropriate, the basis of the use of 'constrained' and 'unconstrained' in the EIAR and if these are simply 'as permitted' and 'as proposed' scenarios.

Section 1.7.2 of the EIAR sets out that scenarios being assessed are based on:

- 2018 the existing baseline being close to 32mpp (notwithstanding that Table 1-1 shows annual passengers of 32.9m in 2019);
- 2022 being the year when the North Runway is expected to open; and
- 2025 and as the first year 32mppa is forecast to be reached with North Runway operations.

It is noted that airport operations are shown to be still recovering from COVID-19 implications in 2022 and that normal (post-COVID-19) operations are not expected to return until 2025 at the earliest. Therefore, in order to gain a fuller understanding of the characteristics and likely significant impacts of the proposed changes over time, and in keeping with the requirements of Annex IV (5) of the EIA Directive and standard assessment practice, the assessments presented in the EIAR should also provide for a longer-term scenario (i.e. 10 or 15 years post opening year scenario (2022).

Do-nothing / Worse-case Scenarios

While not expressly stated in each and every chapter it is noted that by assessing the 'permitted' scenario in 2018, 2022 and 2025 that the Do-nothing scenario has been included. Likewise, it is noted chapters of the EIAR that the assessment includes for the 'worse-case' scenario (e.g. Chapters 7, 10, 13, 14).

Consideration of Alternatives

While the assessment of alternatives is presented in Chapter 4 of the EIAR, further consideration should be given to alternative(s), which would operate within the permitted operational hours but which would also support economic growth. This may involve additional flight activity throughout the permitted flight period.

The forecast schedules produced for both "proposed / unconstrained" and "permitted / constrained" operations for the two future years (2022 and 2025) should also include a longer-term future year consideration (i.e. 10 or 15 years post 2022).

Where appropriate, the assessment should give further consideration to alternatives that operate within permitted take-off and landing hours and demonstrate how they are interact with other relevant permissions at Dublin Airport, specifically regarding the 32mppa limit, over a longer timeframe.

Consultations

While details of consultations are outlined out in Chapter 5 of the EIAR, there is little information on the timings of the various consultations and no information has been provided in relation to the issues raised in the consultations and how these have informed the assessments in the EIAR.

Information should be provided on timings of consultations, issues arising and how these have informed / been assessed in the EIAR.

Local Planning Policy (& Material Assets)

Section 6.4 Local Planning does not address land use zoning in the wider area around the airport, areas which may be potentially impacted by the proposed Relevant Action. Likewise, potential impact on wider land use zoning is not considered under Chapter 19 Material Assets. Existing land use and land use zonings around the airport should be described under local planning policy and described and assessed for potential impacts under Chapter 19 Material Assets.

Population and Human Health

The assessment at Section 7.7 of Chapter 7 should initially present the findings of the unmitigated scenario to allow for a full assessment of potential worse-case scenario. The effect of mitigation measures on the impacted environment should be presented separately, followed by a clear and definitive discussion on any residual impacts, associated locations, characteristics, effects etc. The assessment presented in Chapter 7 should have regard to any further review or update required of other chapters of the EIAR, e.g. ground noise assessment.

Ground Noise

The assessment presented in Chapter 14 should include a longer-term assessment scenario (i.e. 10 or 15 years post 2022) to allow for a full understanding of the medium and long-term

characteristics and significance of impacts. To allow for consideration of impact on potentially worst affected locations, the impact assessment should include properties closest to the airport.

Chapter 9 Traffic and Transport identifies changes to traffic levels and therefore traffic should be included in the noise assessment. It appears that noise contour mapping for ground noise (referenced as being included in Appendix 14C) have not been included. These should be updated as required and submitted.

Notwithstanding the reasoning given for not providing a cumulative assessment of the interaction between ground and air noise, it is considered that this is essential information in determining the significance of impact and the assessment should be prepared and submitted.

Climate and Carbon

Directive 2014/52/EU requires the consideration of the likely significant effects of the project on climate and also the vulnerability of the project to climate change. Further information is required to demonstrate sufficiency of information with regard to this environmental factor.

The issue of climate impact of aviation has been raised in the submissions received. One submission states that the degree of climate forcing resulting from a flight is highly variable depending on a wide range of factors including meteorological conditions, routing including altitude, and timing in the diurnal and seasonal cycles. Further consideration should be given to impacts, with two key aspects to be addressed 1) climate change mitigation and 2) climate change adaptation.

Cultural Heritage

Chapter 20 of the EIAR relates to the Cultural Heritage. It is a very brief section, two pages in length. The designated and non-designated heritage assets within the area that the relevant action relates are not listed as "no construction or operational impacts are anticipated as part of the proposed Relevant Actions". The Conservation Officer queries this decision as by listing them, at the very least including a table of the statutory designated archaeological and architectural heritage sites, there would be a clearer picture of the type of man-made heritage sites within the confines of the scheme some of which may be more vulnerable to indirect rather than direct impacts.

It appears that only potential direct physical impacts on the cultural heritage have been considered as Chapter 20 asserts that as there are to be no alterations to the design or construction of the North Runway then there will be no changes or effects to the cultural heritage when comparing the permitted/ constrained scenario and the proposed/unconstrained scenario. The relevant chapter of the EIAR further states that the change arising from the application is a small variation in the number of and times at which

flights can use Dublin Airport at night time. The chapter concludes that further assessment is therefore not required.

The Conservation Officer acknowledges that impacts from the physical construction of the North Runway will not change the situation from what has been previously permitted, they state the potential indirect impacts of the increase in aircraft movement should have been considered and addressed in Chapter 20, such as potential vibration impacts on structures that are protected under National Monument legislation or Part IV of the Planning and Development Act 2000. In Chapter 13 on Aircraft Noise and Vibration, Section 13.3.8 discusses both Vibration Effect and Vortex Damage to buildings from passing aircraft. It is indicated in the document that the vibration levels would be below those at which minor cosmetic damage is likely to occur. The report also addresses the potential of vortex damage, which while a seldom occurrence internationally can in extreme cases cause damage to some roofs. It is stated that there have been no reported cases of wake vortex at Dublin Airport and that it was considered in the initial planning application granted permission for the North Runway. The EIAR includes tables for modelling to inform vibration effects on dwellings. The Conservation Officer considers that potential vibration effects or vortex damage on occupied and non-occupied Protected Structures, irrespective of them being dwellings, should form part of the appraisal and assessment process for the proposed relevant action.

Having regard to the relevant permission F04A/1755 PL06F.217429 as amended by F19A/0023 ABP-305298-19; the previous consideration of wake vortex undertaken in the relevant permission application along with the assessment of the north runway on the historic built fabric, it is considered that the proposed aircraft movements as a result of the relevant action being less (241,000 Annual ATMs) than what was the assumption of 348,358 movements per annum under the relevant permission would not be of such significance with respect to wake vortex or potential vibration effects to require further assessment. This issue is, therefore, scoped out. Notwithstanding, in the interests of completeness of the EIAR baseline a table of the statutory designated archaeological and architectural heritage sites should be submitted.

Interaction and Cumulative Effects

Chapter 21 includes references to 'in-combination effects' throughout (e.g. Section 21.5 In-combination Effects). In-combination is not an EIA term, and the assessment presented in Section 21.5 does not adequately address, consider or assess impacts as set out in the EIA Directive, legislation, and EIA guidance.

The assessment in the EIAR should address, consider and assess, where required, impacts which may arise from 'interactions' between environmental factors, e.g. noise and health, noise and population, noise and biodiversity, noise and materials assets (land use), etc.

Chapter 21 also addresses Cumulative Impacts and states (Section 21.3.2) that:

'Due to the fact that there are no works proposed as part of the proposed Relevant Action and that the Relevant Action will only result in the amendment and replacement of operating restrictions at night time, it is assessed that schemes outside that of the airport boundary will not result in any potential cumulative effects and so have been scoped out of this assessment. This is due to the fact that the proposed Relevant Action relates to night time operations only, and does not seek to alter the existing layout, location, flight paths, design, or infrastructure of the airport, and does not involve any construction.'

This is an overly restrictive consideration of impacts as the subject of the application may have potential for cumulative impacts with other projects or plans outside of the airport on health, population, noise, etc. While recording projects which may have a cumulative impact Table 21-1 excludes certain Dublin Airport projects on the basis they are 'not currently on Fingal Planning Portal', however this does not explain the reasoning for their inclusion and potential cumulative effects.

The assessment of potential cumulative impacts should be reviewed and updated to consider specifically planned or permitted projects, or land use zonings (community, residential, etc.) within the zone of influence of the Relevant Action. Table 21-1 should be reviewed and expanded as necessary, to address all potential cumulative impacts and the assessment updated accordingly.

EIAR Non-Technical Summary

It is considered that the EIAR Non-Technical Summary (NTS) is overly simplified and fails to adequately set out the receiving environment, the assessment of potential impacts, proposed mitigation measures and residual impacts, as required of the EIA Directive and Guidance including EC EIA Guidance – EIAR, 2017.

The NTS for the EIAR should be reviewed and updated to provide appropriate and sufficient detail to describe the receiving baseline environment, to detail the assessment of potential impacts, to outline the nature and effect of proposed mitigation measures and to define residual impacts in a non-technical manner.

12.4 Conclusion on completeness and quality of EIAR

The EIA process requires the competent authority (the planning authority) to come to a reasoned conclusion on the significant effects of the project on the environment. The reasoned conclusion must take into account the results of its examination of the EIAR and, any supplementary information requested by the competent authority and provided by the developer and any relevant information received through consultations, or otherwise available to the competent authority and the competent authority's own supplementary examination, where appropriate.

To enable the planning authority to undertake an investigation and analysis to reach as complete an assessment as possible of the direct and indirect effects on the environmental

factors it is recommended that the applicant is requested to address the items identified above in a revised EIAR.

13.0 Conclusion:

To conclude, the National Planning Framework (NPF), The National Development Plan (NDP) and the National Aviation Policy set out the importance of Dublin Airport to the state. The need to maintain and improve high quality international connectivity is addressed in the referenced documents, with attention given to improved air connectivity as a way to ensure that challenges from Brexit can be overcome and increased linkages to other EU countries provided. Such connectivity is referenced as being a critical factor in economic growth, a crucial factor in international competitiveness and important in terms of resilience and ease of movement across internal borders. It is also noted that the NPF, NDP and RSES all support mitigation of the effects of aviation, including noise, either through the implementation of the Balanced Approach in accordance with Regulation (EC) No. 598 of 2014 and through promotion of clean and healthy environments and proactive measures to avoid, mitigate and minimise noise (RPO 7.8). To this end in order to achieve sustainable development at Dublin Airport requires an integrated approach aimed at ensuring both the functioning of the runway systems and protection of the environment.

Taking into account notification by ANCA that they will now proceed to apply the Balanced Approach of the International Civil Aviation Organisation in accordance with the provision of the Aircraft Noise Regulation (EU 598/2014), the Act of 2019 and Section 34C of the Act of 2000 the applicant shall have regard to, and, provide such information as is necessary to demonstrate any implications that would arise from the taking the relevant action, and any further information subsequently sought by the relevant authority, in relation to appropriate assessment or environmental impact assessment.

On initial consideration of the completeness and quality of the submitted documentation supporting the planning application contained within the Tom Phillips and Associates Planning Report, the AECOM Environmental Impact Assessment Report (EIAR) and the Appropriate Assessment Screening Report prepared by AECOM a number of deficiencies were identified. It is considered that additional information should be sought to enable the planning authority to undertake its own assessment of direct and indirect effects on the environmental factors in the context of the proposed relevant action.

Finally, in respect of a procedural issue, the Planning Officer notes that some items of information provided in the particulars of the EIAR and AA are unclear or inaccurate and the applicant should be given the opportunity of correcting the public file.

The Applicant is requested to submit the following Additional Information:

Item 1. Further information is required in relation to AA screening report, as follows:
a) Section 2.1.5 of the AA Screening report, potential direct effects on any SACs are explicitly ruled out. The EIAR, in several places (such as at Sections 12.3.1, 12.5, 15.4 and 16.3), states that the Cuckoo Stream flows west to east through the application site. At Section 19.3.2.4 it is noted that the Forrest Little, Wad and Kealy's Streams also flow through the application site. The Cuckoo Stream eventually joins the Mayne River, and the other streams eventually join the Sluice River. Both of these rivers flow into Baldoyle Bay SAC / SPA and not Malahide Estuary. The screening report should be updated to correctly identify all surface water pathways.
b) The AA Screening report should be revised to take account of statements within Chapter 8 of the EIAR regarding potential impacts on European sites caused by emergency fuel dumping from the Relevant Action application, should this take place.
c) The review of in-combination effects should be reviewed, and updated if necessary, to take account of the responses submitted to this request for further information in relation to both the Screening for Appropriate Assessment and Environmental Impact Assessment Report.

Item 2. To enable the planning authority to undertake an investigation and an analysis to reach as complete as assessment as possible of the direct and indirect effects on the environmental factors the applicant is requested to address the following in a revised Environmental Impact Assessment Report (EIAR):

a) While some information on the EIAR Project Team is provided at Section 1.10 of the EIAR, not all names or qualifications are provided and statements of experience demonstrating competency should be provided. Article 94(e) of the Regulations requires that an EIAR includes a list of names of all the experts contributing to the various sections of the report, together with details of their competency including, as appropriate, qualifications, statements of experience and any additional information that demonstrates the required competency.
b) Given that both permitted and proposed scenarios involve constraints, e.g. either by time / number of flights in the permitted, or by time / noise quota in the proposed. It should be clarified, as appropriate, the basis of the use of 'constrained' and 'unconstrained' in the EIAR and if these are simply 'as permitted' and 'as proposed' scenarios.
c) In order to gain a fuller understanding of the characteristics and likely significant impacts of the proposed changes over time, and in keeping with the requirements of Annex IV(5) of the EIA Directive and standard assessment practice, the assessments presented in the EIAR should also provide for a longer-term scenario (i.e. 10 or 15 years post opening year scenario (2022).
d) While not expressly stated in each and every chapter it is noted that by assessing the 'permitted' scenario in 2018, 2022 and 2025 that the Do-nothing scenario has been included. Likewise, it is noted chapters of the EIAR that the assessment includes for the 'worse-case' scenario (e.g. Chapters 7, 10, 13, 14). In the interests of clarity, the do nothing

and 'worse-scenario' should be identified clearly and applied consistently throughout the assessment.

e) The submitted planning documentation and supporting Environmental Impact Assessment Report (EIAR) does not sufficiently acknowledge the North Runway's capacity, as permitted, to deliver a gain in connectivity. As a result, it is considered that further consideration is required of the 'baseline scenario' (i.e. as referred to in the EIAR the future permitted baseline (2022 constrained)). The assessment should give further consideration to alternatives that operate within permitted take-off and landing hours and demonstrate how they are interact with permissions and conditions at Dublin Airport regarding the 32mppa limit, over a longer timeframe (i.e. 10 or 15 years post 2022).

f) While details of consultations are outlined out in Chapter 5 of the EIAR, there is little information on the timings of the various consultations and no information has been provided in relation to the issues raised in the consultations and how these have informed the assessments in the EIAR. Information should be provided on timings of consultations, issues arising and how these have informed / been assessed in the EIAR.

g) Section 6.4 Local Planning does not address land use zoning in the wider area around the airport, areas which may be potentially impacted by the proposed Relevant Action. Likewise, potential impact on wider land use zoning is not considered under Chapter 19 Material Assets. Existing land use and land use zonings around the airport should be described under local planning policy and described and assessed for potential impacts under Chapter 19 Material Assets.

h) The assessment at Section 7.7 of Chapter 7 Population and Human Health should initially present the findings of the unmitigated scenario to allow for a full assessment of potential worse-case scenario. The effect of mitigation measures on the impacted environment should be presented separately, followed by a clear and definitive discussion on any residual impacts, associated locations, characteristics, effects etc. Any revised assessment presented in Chapter 7 should have regard to any further review or update required of other chapters of the EIAR, e.g. ground noise assessment.

i) The assessment presented in Chapter 14 Ground Noise and Vibration should be revised to include:

- A longer-term assessment scenario (i.e. 10 or 15 years post 2022) to allow for a full understanding of the medium and long-term characteristics and significance of impacts. To allow for consideration of impact on potentially worse affected locations, the impact assessment should also include properties closest to the airport.
- Chapter 9 Traffic and Transport identifies changes to traffic levels and, therefore, traffic should be included in the revised ground noise assessment.
- Ground Noise Modelling Figures referenced as being included in Appendix 14, section 14C.4.1, in Technical Appendices Volume 1 have not been included. These should be updated as required and submitted.
- A cumulative assessment of the interaction between ground and air noise, calculating quantitively the numbers of persons "highly annoyed" or "Highly Sleep Disturbed" by both Ground and Air Noise. The assessment should explain the relative

contribution to noise annoyance and sleep disturbance by ground and air noise. The combined noise impacts should be also shown by means of maps.

j) Directive 2014/52/EU requires the consideration of the likely significant effects of the project on climate and also the vulnerability of the project to climate change. Further information is required to demonstrate sufficiency of information with regard to this environmental factor. Further consideration should be given to impacts regarding two key aspects to be addressed, 1) climate change mitigation and 2) climate change adaptation.

k) Chapter 20 Cultural Heritage does not detail the cultural heritage baseline, the designated and non-designated heritage assets or archaeological investigations on the basis that the proposed amendments will not result in any effects upon cultural heritage assets when compared with the permitted/constrained scenario. A table of the designated archaeological and architectural heritage sites protected by statutory legislation should be included within the EIAR.

l) Chapter 21 includes references to 'in-combination effects' throughout (e.g. Section 21.5 In-combination Effects). In-combination is not an EIA term, and the assessment presented in Section 21.5 does not adequately address, consider or assess impacts as set out in the EIA Directive, legislation, and EIA guidance. The assessment in the EIAR should address, consider and assess, where required, impacts which may arise from 'interactions' between environmental factors, e.g. noise and health, noise and population, noise and biodiversity, noise and materials assets (land use), etc. In addition, the assessment of potential cumulative impacts should be reviewed and updated to consider specifically planned or permitted projects, or land use zonings (community, residential, etc.) within the zone of influence of the Relevant Action. Table 21-1 should be reviewed and expanded as necessary, to address all potential cumulative impacts and the assessment updated accordingly.

m) A summary table of features and/or measures envisaged to avoid, prevent or reduce and, if possible, off set likely significant effects of the proposed development, and a timescale for the implementation of proposed mitigation measures.

n) It is considered that the EIAR Non-Technical Summary (NTS) is overly simplified and fails to adequately set out the receiving environment, the assessment of potential impacts, proposed mitigation measures and residual impacts, as required of the EIA Directive and Guidance including EC EIA Guidance – EIAR, 2017. The NTS for the EIAR should be reviewed and updated to provide appropriate and sufficient detail to describe the receiving baseline environment, to detail the assessment of potential impacts, to outline the nature and effect of proposed mitigation measures and to define residual impacts in a non-technical manner.

Item 3. In the interest of ensuring accuracy of the particulars submitted with the planning application for the public file, the applicant is requested to address the following:

a) Correct the planning register references where typographical errors have been made in respect to the submitted Environmental Impact Assessment Report, as prepared by AECOM and Planning Report, as prepared by Tom Phillips and Associates. For clarity, an incorrect reference to An Bord Pleanála planning file number is repeated. The reference is

to amended permission (FCC Reg. Ref. No.: F19A/0023) ABP Ref. No. ABP-305298-19, which is incorrectly listed as ABP-305289-19. Furthermore, an incorrect Register Reference in respect to the Terminal 2 permission FCC Reg. Ref. No. F06A/1248, which is incorrectly listed as F04A/1755.

b) Amend the number of incorrect cross-references to other sections of a chapter and/or other chapters. Incorrect references noted as 'section 0' are prominent in Chapters 7, 13 and 14.

NOTE 1:
As ANCA has identified that a Noise Problem and will now proceed to apply the Balanced Approach of the International Civil Aviation Organisation in accordance with the provision of the Aircraft Noise Regulation (EU 598/2014), the Act of 2019 and Section 34C of the Act of 2000 there will be a requirement to consult and coordinate such further information with both the Planning Authority and the Aircraft Noise Competent Authority. Furthermore, the applicant shall have regard to, and, provide such information as is necessary to demonstrate any implications that would arise from the taking the relevant action as proposed, or in response to any further information or plans sought by ANCA in relation to appropriate assessment or environmental impact assessment.

Any submission made resulting from the above will be examined and MAY be deemed to be SIGNIFICANT ADDITIONAL INFORMATION. In this event, the applicant will be subsequently notified and requested to re-advertise the changes and will also be advised as to the required format for such advertisements, in accordance with Article 35 of the Planning and Development Regulations, 2001.

HON/FR

Subsequent Report of the Planning Officer Typed 8th August 2022

Description of *Relevant Action:*

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.

AI received:	13 September 2021
Decision Due:	as soon as may be practicable

Table of contents:

1 Introduction

1.1 Purpose of this report

Fingal County Council, as the Planning Authority considered the Relevant Action application Reg Ref F20A/0668, as set out in Chief Executive Order of 19th February 2021 which concluded with a recommendation seeking Further Information.

This report sets out the conclusion of an assessment by the Planning Authority (PA) under Reg Ref F20A/0668, of a proposal to alter the permitted operating restrictions imposed by An Bord Pleanála (ABP) under 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). The operating restrictions were imposed by way of planning conditions intended to limit the impact of aircraft noise at Dublin Airport at night time.

This proposal to alter the conditions of permission was initiated by an application under Reg Ref F20A/0668 by DAA (Dublin Airport Authority) applying to the Planning Authority for this Relevant Action (RA). The RA was subsequently the subject of a Regulatory Decision (RD) by the Aircraft Noise Competent Authority (ANCA) which prescribed alternative conditions to those sought in the RA application. This proposal is now what is under consideration by the planning authority and in the interests of clarity is described as the 'RA subject to the RD' throughout this report or as 'the RA as amended by and incorporating the RD' or 'as the RA as varied by the RD'. Where the RA or RD is specifically stated, the assessment relates directly.

The proposal has been assessed as provided for in Section 34(2) taking account of the provisions set out in Section 34C of the Planning and Development Act 2000 as amended (PDA).

1.2 Scope of this report/assessment

This report follows the previous planning report of 19th February 2021 and contains an assessment of the response to further information (FI) sought therein and received 13th September 2021. In accordance with Article 33(3) of the Planning and Development Regulations (as amended) agreement to extend the time by 3 months to **18 November, 2021** for submission of Further Information was confirmed on 30th July 2021.

In accordance with Article 33(3) of the Planning and Development Regulations (as amended) your agreement in writing to the **extension, not exceeding an Additional Three Months** by the Council of the period for receipt of Further Information in respect of the above planning application within the meaning of Sub-Article (3) of Article 33, has been agreed up to and including **18 November, 2021.**

FI received contained significant additional data for the purposes of Article 35 of the Planning and Development Regulations 2001 as amended (PDR). Revised notices were published/erected by the applicant inviting submissions. The FI received was referred to relevant consultees by the planning authority. This report sets out an assessment of the FI submitted and takes account of and/or has regard to the submissions received.

Revised Site notices with a reported erection date of 21st September 2021 giving notice of the submission of FI were inspected by the Planning Authority on 11 October 2021 and were recorded as being in compliance with the requirements of the PDR.

ANCA issued a Regulatory Decision (RD) on 20th June 2022 to which the RA is subject, in addition to the assessment of the RA and all of the inputs received to the RA prior to receipt of the RD this report also includes assessment of Relevant Action as subject to the Regulatory Decision.

The RA and this report relate to conditions 3 and 5 of the Relevant Permission (RP) granted by An Bord Pleanála under PL 06F.217429 extended under FCC Reg. Ref.: F04A/1755/E1 and further amended under FCC Reg. Ref.: F19A/0023 / ABP Ref.: ABP-305298-19 and the addition of a new condition relating to a domestic noise insulation scheme.

Taking account of the specialist and technical nature of the issues at the centre of the RA application, in addition to the expertise and direction of ANCA in their capacity as the Competent Authority (CA) in consideration of the subject amendments to the planning permission for the North Runway, in order to ensure completeness and quality of the assessment, an independent review of the relevant planning documentation and EIAR and the Regulatory Decision and associated

documents has been carried out by the consultancy firm Brady Shipman Martin. The preparation of the review has been directed by Thomas Burns B.Agr.Sc. (Landscape), Dip. E.I.A. Mgmt., Ad. Dip. En. and Planning Law, MILI, Partner with BSM.

An independent review of the relevant planning documentation and AA screening reports has also been carried out by the consultancy firm Brady Shipman Martin. This review has been carried out by Ecologist Matthew Hague CEnv MCIEEM, Associate, Brady Shipman Martin

Notwithstanding the targeted nature of the subject proposal the aircraft noise related operating restrictions form part of a wider context in the consent for construction and operation of the North runway. The RA, RD and this assessment consider growth scenarios including beyond 32 Million Passengers Per Annum (MPPA) combined capacity for Terminal 1 and Terminal 2 at Dublin Airport. However any amendment to the Relevant Permission consented as a result of this Relevant Action would remain subject to other relevant planning conditions including the restriction of 32 MPPA.

The Aircraft Noise Competent Authority (ANCA) is the competent authority in ensuring the adoption of the balanced approach seeking to achieve an integrated approach aimed at ensuring both the effective functioning of transport systems and protection of the environment in accordance with International aviation policy, as set out by the International Civil Aviation Organization (ICAO) and in European policy and legislation, including EU Council Directive 2002/49/EC (the Environmental Noise Directive) (as amended), and Regulation EU 598/2014 (the Aircraft Noise Regulation).

1.3 Description of the Relevant Action under consideration

A Relevant Action application was made for amendment of Condition 3(d), replacement of Condition 5 of the relevant permission and sought to introduce an additional voluntary noise insulation grant scheme to ABP consent for the North Runway ref: PL06F.217429, extended under FCC Reg. Ref.: F04A/1755/E1 and further amended under FCC Reg. Ref.: F19A/0023 / ABP Ref.: ABP-305298-19. A request for Further Information was issued by the Planning Authority on 19th

February 2021, and a response to this request was received by the Planning Authority on 13th September 2021.

The Further Information received primarily relates to:

- Revised Environmental Impact Assessment Report (EIAR)
- Inclusion of additional assessment years
- Clarification of the scenarios for assessment in the EIAR
- Response to the latest passenger forecasts at Dublin Airport and update of Dublin Airport Operating Restrictions, Quantification of Impacts on Future Growth, Mott McDonald.
- Dublin Airport Economic Impact of Operating Restrictions, Intervistas, June 2021.
- Regulation 598 Documentation
- Preparation of an Appropriate Assessment Screening Report

Details of items of further information requested and the response of the planning authority are set out in detail in section 5 of this report.

ANCA issued a Regulatory Decision (RD) on 20th June 2022 setting out alternative operating restrictions and alternative noise mitigation measures to that sought by DAA, to be given effect by amendment of Condition 3(d), replacement of Condition 5 of the relevant permission and the introduction of a noise insulation grant scheme.

Under section 34C The Planning Authority is required to incorporate the RD into any decision arising.

The RD includes 3 conditions replacing those sought in the Application for RA these can be described as follows:

The first condition set out in the RD revokes condition 5 of the existing permission which includes for a numerical cap restriction on night time aircraft movements. ANCA prescribes a replacement condition introducing a Noise Quota Scheme (NQS) which includes noise restrictions on aircraft operating at the Airport at nighttime. The NQS sets an annual limit of 16,260 between the hours of 23:00 and 06:59. The NQS quantifies and specifies noise restrictions for aircraft operations at the airport at night-time for the first time.

The second RD condition prescribed by ANCA seeks to amend condition 3 (d) of the existing permission to permit flight operations on the north runway during the

shoulder night hours (23.00-00.00 and 06.00-07.00). The second condition would be subject to the Noise Quota Scheme outlined in the first condition.

The third RD condition provides a voluntary residential sound insulation grant scheme for residential dwellings. Dwellings located within the Initial or reviewed Eligibility Contour Area shall be eligible for the scheme. Scheme eligibility shall be reviewed every 2 years commencing March 2027 for dwellings located in the 55 dB Lnight contour. The insulation grant scheme is the first nighttime noise grant scheme for residential dwellings in the vicinity of Dublin Airport.

2 Summary of process and inputs to date

2.1 Planning history update

The following is an update of the relevant planning history set out in the previous Chief Executive order of February 2021.

F20A/0550 For full planning permission to extend the North Apron in the Airfield at Dublin Airport, Co Dublin to facilitate the provision of twelve aircraft stands and a ground servicing equipment area on a site of 19.2ha.

Applicant: DAA plc Application Date: 03-Nov-2020 Application type: Permission

Decision: Granted 08-Dec-2021 Currently on appeal to ABP: First party against financial condition.

2.2 Background and function of NAO and RD

The Aircraft Noise Competent Authority (ANCA) identified a noise problem on assessment of application F20A/0668 for a Relevant Action when it was received by the planning authority. In accordance with legislative requirements (Aircraft Noise (Dublin Airport) Regulation Act 2019), ANCA were required to define a Noise Abatement Objective (NAO), and apply the Balanced Approach. The reasons for the Regulatory Decision are set out in section 10.2 of this report.

The function of the NAO is to implement a long-term management plan to reduce the noise effects of aircraft operations on communities in the vicinity of Dublin Airport. The making of the NAO and RD were subject to SEA and AA which included public consultation. The NAO includes targeted and measured noise outcomes which aim to reduce the number of people who will be impacted by noise by 2030, 2035 and 2040, when compared to the situation existing in 2019. The NAO also seeks to reduce the number of people exposed to noise levels above set threshold levels with the timelines outlined.

The RD should be consistent with and enable the achievement of the NAO. The RD prescribes 3 conditions to be incorporated in any decision the planning authority may make on the relevant action application in accordance with Section 34C(2) of the Planning and Development Act 2000 as amended.

2.3 Relevant Action subject to the Regulatory Decision (RD)

There is a significant degree of overlap between RA as applied for, the revised information submitted by way for Further Information, and the RA as amended subject to the RD. The EIAR submitted for the RA application and as revised in response to the FI request and its contents remain strongly and directly relevant for the purpose of the assessment following making of the RD. Specifically, there is a clear alignment between the RA and RD in the composition of both.

The Relevant Action (RA) application sought to replace the numerical cap on the number of flights at nighttime with a Noise Quota System (NQS). The RA proposal did not include the period from 23:00 to 23:30 or 06:00 to 07:00 meaning that there could be operation of additional nighttime flights during this period without restriction. The operation of the Noise Quota Scheme (NQS) as sought in the RA would also not align with the EU 8 hour night time period. It is considered that these scenarios are likely to have potentially significant adverse impacts on human health as a result of noise. In addition, the RA did not include specific noise related limits on the noisier type of aircraft permitted to be operated at night, therefore particularly noisy aircraft could operate in this scenario. The RD includes for specific noise related limits on noisier aircraft types at nighttime. Having considered the RA, the Regulatory Decision has also addressed these shortcomings. The reasons for the RD are set out in section 10.2 of this report with the conditions prescribed included in section 11 of this report.

The RD includes a Noise Quota Scheme with an annual limit of 16,260 between 23:00 and 06:59. The Relevant Action the subject of the RD by ANCA has altered the RA sought by the applicant and ensures that there will be no unrestricted flights at night time within the 8 hour night time period and that aircraft operations at night time will be subject to the Noise Quota Scheme.

Both the RA and the RD seek to introduce a noise insulation grant scheme for residential dwellings, with eligibility being based on night time noise contours.

In applying the balanced approach to the operating restrictions contained in the RD ANCA considered alternatives including that proposed by the DAA in the RA..

2.4 Role of the Planning Authority, and ANCA

On receipt of the Relevant Action application, the Planning Authority referred it to and consulted with, the Competent Authority, Aircraft Noise Competent Authority (ANCA). ANCA declared by way of notification to the Planning Authority that a noise problem will arise from the taking of a Relevant Action in the application as proposed. This requires ANCA to define a Noise Abatement Objective (NAO), apply the Balanced Approach process and to then make a Regulatory Decision (RD).

The Planning Authority is required to determine if consenting to the Relevant Action requires reconsideration of any other aspect of the relevant permission.

The Planning Authority ultimately decides on an application made to it under section 34C. However, the Planning Authority shall not, under section 34C(4), determine the application until it has received from ANCA either: a notice under Section 34C(5) (stating that, in the view of ANCA, inadequate provision has been made by the applicant in the application and that a permission should not be granted for that reason); or, alternatively, a notice under section 34C(15)(a)(ii) (whereby ANCA notifies the Planning Authority of the making by ANCA of a finalised 'Regulatory Decision' containing the noise mitigation measures or operating restrictions (if any) (or combination thereof) that ANCA requires to be included as conditions in the Planning Authority's decision, if any, to grant permission under Section 34C.

ANCA issued a Regulatory Decision (RD) setting out alternative operating restrictions and alternative noise mitigation measures to that sought by DAA by amendment of Condition 3(d), replacement of Condition 5 of the relevant permission and the introduction of a noise insulation grant scheme.

Following the adoption of the NAO and making of a RD by ANCA, the Planning Authority is required under S. 34C(16) to incorporate any RD into any decision made on the RA application.

The Planning Authority is required to determine if it is necessary to revoke, revoke and replace or amend a condition of the relevant permission to make it compatible with the RD.The Planning Authority is required to make a decision on the Relevant Action application as soon as practicable after it receives the RD.

3 Third Party submissions/Observations received in response to further information received.

Further information requests were made by FCC and ANCA's Direction 01. In the response to further information received 13th September 2021 a number of revisions have been made to the material supporting the planning application. The revisions primarily relate to the following:

- Revised Environmental Impact Assessment Report (EIAR)
- Inclusion of additional assessment years
- Clarification of the scenarios for assessment in the EIAR
- Response to the latest passenger forecasts at Dublin Airport and update of Dublin Airport Operating restrictions, Quantification of Impacts on future growth, Mott McDonald
- Dublin Airport Economic Impact of Operating restrictions, Intervistas, June 2021
- Regulation 598 Documentation
- Preparation of an Appropriate Assessment Screening Report

Section 5.1 of this report sets out each point of further information requested, the submitted response and an assessment of that response.

54 no. valid submissions and observations were received during the statutory time period in respect of the significant additional information received. For the most part the objections/submissions reiterate the issues raised in the initial planning application, expressing support or opposition to the proposal. All relevant substantial matters are addressed in the assessment. All submissions addressed in the first report have been carried over and are addressed here.

For the purpose of this assessment the issues have been summarised and presented thematically as follows:

3.1 Support for the proposed Relevant Action application

- The noise quota system will encourage move towards quieter and more environmentally efficient aircraft.
- Disproportionate impact upon cargo flights if unable to fly at night.
- All cargo operations are exempt from any curfew.
- Support from tourism industry

3.2 Quality of life considerations, impact of noise on human health;

- Concerns expressed in relation to noise impacting on health including sleep deprivation and how this outweighs economic benefits

- The opinion is expressed that night flights should be curtailed instead of increased to protect residential amenity,
- Night time period from 2300-0700 should be protected. 7990 quotas would increase night flights instead of a reduction.
- Noise levels should follow the WHO recommendations.
- Concern set out regarding modelling including SEL (Single Level Event) metric measurements
- The prediction that G1 Aircraft types will be largely replaced by 2030/2040 is aspirational.
- The noise quota system not suitable, will mean flights will increase, due to quieter planes, frequency of sleep interruptions will increase.
- Measurements taken inside newly insulated houses by DAA indicate that noise levels within bedrooms exceed criteria set out by FCC many times per night.
- Use of both runways between 0600 – 0800 hours would have cumulative noise related sleep disturbance
- Runway used for specific aircraft type must not be allowed before 07.00 hrs.
- Alteration of conditions would be contrary to the proper planning and development of airport
- Voluntary Insulation Scheme Aspirational noise reduction not obtainable.
- Communities should be able to open the windows
- Vibration and sound wave impact on home alarms
- Table 13-64 of the EIAR compares 2025 Proposed and 2025 Permitted and shows that 10474 people will be significant adversely impacted by residual effects after allowing for the benefit of the existing and proposed insulation schemes
- The Relevant Action proposal only aims to mitigate those 'very significantly affected by night time noise, leaving a large proportion of the population subjected to noise levels beyond the WHO recommended safe limits
- Proposal undermines objective DA07 of the FDP which states 'times based operational restrictions on usage of a second runway are not unreasonable to minimize the adverse impact of noise on existing housing within the inner and outer noise zone'

3.3 Environmental /climate/biodiversity grounds;

- Concerns have been raised regarding the quality of the air quality assessment and impacts of increased flights on air pollution.
- Concerns are raised regarding data presented and potential for greenhouse gases emissions including achievement of the goals of the Climate Action Plan
- Assertion that night time flights are twice as bad for the environment
- Concerns that Night time flights will be detrimental to biodiversity and equine industry around airport.

3.4 Criticism of methodology and modelling used in the application.

- EIAR only considers future scenarios capped at 32m passengers. Realistic future scenario not presented documentation shows DAA planning to lodge application to increase passenger numbers to 40m. This is project splitting as both applications should be considered as a single application.

- Chapter 9 of EIAR Traffic and Transport has not considered passenger numbers beyond 32m not addressed in EIAR, EIAR is inadequate.
- Not clear if growth scenario modelling includes downside risks with passenger demand forecasts assumed inflated. Increased capacity of an additional runway should be sufficient to deliver expected numbers while maintaining the restrictions on night flights and protecting people's health.
- Incorrect criteria and metrics to evaluate noise contours; in proposals for noise measurement and for evaluating noise quota counts. Contours used do not show true impact WHO values should have been used
- Claim that the proposal affects more residents than eluded to in EIAR and ambiguity in the information submitted
- Concerns expressed that lower bands have a disproportional influence on the number of people highly annoyed and highly sleep disturbed
- Population and Human Health chapter uses the incorrect HSD values for 2025 Proposal, therefore grossly underestimates the health effects of the proposed scenario
- No noise predictions provided for location reference points under the flight path of the north runway operating in a westerly direction. Population mostly affected are not considered in EIAR
- AQS is not designed for those under the flight path or parallel to the runways as it does not consider the number of SEL's and LAX levels envisaged to cause sleep disturbance and health issues
- ANCA in pre-planning requested percentages of HA and HSD per noise level bands and have not been provided
- Concerns expressed 2018 baseline should not be accepted as it was the noisiest year on record where 32m cap not breached .
- Concerns 2019 not used as benchmark with more aircraft recorded in terms of ATMS compared to 2018
- Projections gives no certainty to new communities who will be affected
- No study of population which will be adversely affected by the 'high risk' proposed noise situation partially at night has been carried out by the DAA
- Incorrect figures in Forecasting tables
- CEA report makes no attempt to quantify costs associated with adverse health effects. or environmental harm of increased aviation activity.
- Cost benefit analysis performed by daa based on losses accrued up to 2025 are theoretical.

3.5 Inadequacies in EIAR

- Concerns expressed EIAR has not assessed non CO2 impacts of aviation on climate
- Concerns expressed that benzene and APU emissions have not been assessed.
- Concerns expressed in relation to baseline used for air quality and GHG
- Not opening the runway is not considered as an alternative option
- Project team listed in EIAR does not contain any experts in the medical profession.
- No explanation on the proposed annual noise quota in plain language or number of air traffic movements in Aircraft Quota Count per annum Condition 3 (d) - no clear definitions,'
- Applicant has not set aside funds for noise and flight track monitoring system.

- Concerns expressed on independent verification and monitoring of QC count, publication of reports, sanctions to apply, appointment of regulator with powers
- ANCA incorrectly recommends the exclusion of existing noise mitigation measure and restrictions and have misinterpreted Annex 1 (2.3) of EU598/2014. Ricondo have taken ANCAs interpretation and excluded conditions 3(d) and 5 from their definition of 'forecast without new measures'
- Correctness of the fleet mix assumptions not given
- Mitigation cannot be taken for impacts on public health and sleep deprivation, other than total avoidance by not having further night flights

3.6 Appropriate Assessment of the proposed Relevant Action application;

- This application can no longer proceed unless full appropriate assessment of entire project as granted is carried out. NIS must be produced that assesses impact of the full construction of the north runway (albeit a retrospective one) in addition to impact of the amendments to the conditions of the original grant of planning.
- The north runway development could be considered as requiring substitute consent. It could also require a full updated EIA assessment and updated EIAR of the full project.
- The view is expressed that An Bord Pleanála (ABP) must refuse permission and possibly refuse to accept the application and refer the application for substitute consent
- All reports of fuel jettison events relating to Dublin Airport by IAA to EASA should be requested to remove all scientific doubt in relation to fuel dumping overland or at sea and its impacts on SAC's and SPA's and receptor pathways such as rivers
- The number of bird strikes involving aircraft reported should be assessed
- There are no mitigation measures in terms of sleep disturbance to protected bird species which have not been fully and cumulatively appropriately assessed.
- Comparing Relevant Action screening report and Fingal County Council screening report for Variation 1 of the FDP 2017-23, the revised Relative Action screening report is deficient and not fit for purpose

3.7 No justification for the Relevant Action application;

- Retaining operating restrictions does not hinder growth. Sufficient capacity to achieve 42m passengers in 2040, objectives of National Aviation Policy 2015 can be achieved while protecting health of residents.
- The airport catered for 32.9m passengers in 2019 using a single main runway. There is no need for a change to planning for 32m passengers for 2025.
- No independent analysis that aviation contributes to economic growth of a nation.
- Application based on economic consideration. Need for early morning flights is grossly exaggerated. Requirement for a new runway in light of Covid19 and climate targets. Other international airports trying to decrease night noise Pattern of demand makes no reference to effects of covid or climate change
- National Aviation Policy is flawed
- IAA position should be set out
- Applicant has not taken into account shortage of labour, future price of carbon, strengthening of EU ETS

- Concerns expressed noise quota will allow over 100 flights at night with 65 flights permitted per night and Heathrow Airport only permits 16 scheduled flights at night.
- Lack of support within Fingal other than aviation industry and those associated with it
- DAA incentivised aircraft to fly into Dublin Airport at night by offering free parking of aircraft overnight
- Continued growth of Dublin Airport will be detrimental to other Irish Airports
- Unsustainability of tourism

3.8 Potential damage to property from vortex caused by aircraft;

- Concerns expressed on process and scheme to address damage to homes at the end of runway
- Concerns expressed in relation to setting of noise threshold level for potential significance of vibration effects

3.9 Schemes, Extent of noise insulation and buyout

- Insulation scheme only for 'very significantly' affected by noise; Failure to address the population 'significantly' affected or given consideration to dwellings constructed in 1970s,
- Lack of mitigation measures and requirement for adequate mitigation measures entailing relocation for those seriously affected
- Residents should be afforded opportunity to amend conditions 7 – Voluntary noise insulation for existing dwellings and Condition 9 – Voluntary buy out scheme for residents
- Dwellings which cannot achieve required indoor noise environment as set out by ProPG and WHO have to be included in voluntary dwelling purchase scheme or relocation scheme to protect health and well being
- Concerns expressed regarding the extent of the noise contours for application of Noise Insulation grant scheme.
- Noise study confirms that internal noise levels are at damaging levels even after insulation.
- Cost benefit analysis consider individually or collectively the number of dwellings requiring noise insulation and so the application of the balanced approach is flawed.
- Buyout is not in place for businesses, and is not fit for purpose
- Independent aircraft acoustic specialist should complete correct noise measurements to show specific aircraft noise levels for purpose of defining insulation grant scheme.
- No figures for QALYs or DALYs provided

Overheating was not taken into account for insulation purposes.

- Concerns expressed in relation to existing schemes, inadequacy and difficulties with DAA regarding installation Request professional oversight be permitted for any future noise insulation scheme and mediator be allowed review disputes
- Concerns expressed on devaluation of property

3.10 Inadequate consultation on proposed Relevant Action application;

- Lack of proper consultation due to Covid and poorly presented info by FCC .
- Applicants communication with local community was unrealistic
- Daa refused consultation with CLG group to explain the additional information

- No consultation with people potentially affected and requiring insulation
- No meaningful engagement for installation of bespoke noise mitigation for daytime operation
- Meeting to discuss Condition 9 and material loss requested and never happened.
- Failure to hold a public consultation is in breach of the North Runways planning permission conditions
- Availability of professional advice in reading difficult documentation
- No meaningful engagement to participate in framework

3.11 Legislation;

- Concerns set out regarding the suitability/validity and application of S34C to the subject application and definition of relevant action and balanced approach.
- Concerns with FCC as a competent authority making decision based on income, rates and not having expertise. Decisions of the competent authority will be made by the Chief Executive as per Section (3) (2) of the Aircraft Noise (Dublin Airport) Regulation Act 2019.
- Concerns raised in relation to a direct conflict of interest no balanced approach for communities
- 31 conditions of planning permission must be adhered to as this is a legal document that directly impacts on those in flightpath
- Planning Conditions 3 (a)-3(d) - dual runway departures between 06:00-08:00 conflict with Option 7(b) and planning conditions 3 (a)-3(c) which state 'Either /Or'
- Conflicts with condition 3 (c) runway 10 R should not be used for take off as outlined in advice given to ABP during oral hearing in 2007
- Concerns expressed that conditions sought to be changed and VDPS and VDIS remain the same
- Object to the user pays principle used in relation to noise pollution given the subsequent health and environmental impact aircraft noise has
- Concerns expressed in relation to independence of ANCA
- Concern expressed that NAO will place Airport Operator as regulator and body to be regulated and who will regulate the regulator?

3.12 Flight path;

- Divergence not considered in original permission. All runways had straight out departures
- Concerns are expressed regarding altered flight paths, responsibility for regulation thereof and concern that the subject application will permit changes thereto.
- Who will monitor noise abatement operating procedure
- Large sections of Malahide and Swords are newly enclosed in 40dB Lnight contour for first time

3.13 Drainage;

- Concerns over details of stormwater handling and storage in the airport.

3.14 Safety;

- Safety concerns are expressed including issues of the Boeing 737 max accidents, conditions under which permitted to take off and land, no refence to aircraft accidents

The Planning Officer has had regard to the substantiative planning considerations raised in the third party submissions and observations throughout the assessment in this planning report.

4 Reports on the further information received:

4.1 Internal reports received:

4.1.1 Environmental Health Officer –

With regard to the application above, the EIAR submitted has identified that a significant portion of people will be exposed to high levels of noise.

Noise level exposure – Proposed scenario v's Permitted scenario:

2025-24% more people are likely to be highly annoyed by the 2025 proposed scenario than that of the 2025 permitted scenario. This figure reduces to 19% by 2035.

2025-65% more people are likely to be highly sleep deprived by the 2025 proposed scenario than that of the 2025 permitted scenario.

The 2018 WHO guidelines strongly recommend reducing night noise exposure levels produced by aircraft during night time to below 40dB Lnight. Aircraft noise above these levels are associated with adverse health effects. The DAA have modeled the night time insulation programme on exposure levels of 55dB which leaves a significant proportion of people exposed to night time levels above the 40dB exposure level recommended by WHO.

Ground noise exposure levels are lower than that of the air craft noise exposure, however there are a significant number of people effected by exposure to noise levels greater than 45dB. Pro PG states that where existing noise sensitive locations already experience high noise levels a development that is expected to cause even a small increase in the overall noise may result in a significant adverse effect occurring even though little or no change in behavior would be likely to occur.

The removal 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 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 will have an adverse effect on a large percentage of the population.

It is recommended that consideration is given to the proposed noise mitigation measures i.e. to provide an extension of the noise insulation schemes to include the 2018 WHO Environmental noise guidelines.

The above issues raised by the EHO are addressed in Section 7 Planning Assessment of Relevant Action.

4.1.2 Transportation Planning Section

The applicant has undertaken further Traffic Analysis of a 2035 scenario of foot of the request for further information. Scenarios are set out more clearly.

The Transport planning section agrees with the conclusion of the EIAR with regard to Traffic and Transport.

The Transportation Planning Section has no objection to the proposed development.

4.1.3 Other responses to internal referrals

No Objection stated by: Parks and Green Infrastructure Division, Conservation Officer, Water Services Engineering Section, Environment Section (Waste Enforcement & Regulation)

No report received from: Public Lighting, Community Archaeologist, Biodiversity Officer, Architects Department , Community, Culture and Sports Department, Housing Department Heritage Officer,

4.2 Reports by Prescribed Bodies/Statutory Consultees

4.2.1 Irish Water

No objection (submission notes proximity of subject site to the Greater Dublin Drainage Pipeline Corridor).

4.2.2 Health and Safety Authority (HSA)

Points to note/no objection.

4.2.3 HSE Environmental Health

The EHS outlines Conditions 3(d) and 5 were put in place to protect public health so if the planning authority are going to increase the hours of operation they must ensure all who are significantly impacted have the opportunity of mitigation.

Reference is made to previous submission where the following observations were made:

All efforts should be made by the DAA to ensure as many people as possible are protected from the adverse health effects associated with aircraft noise as outlined above in this report. This must include reducing aircraft noise levels to below 45 dB Lden, and for night noise exposure to below 40 dB Lnight.

The EHS is of the opinion that The World Health Organisation's Environmental Noise Guidelines of 45dB Lden and 40 dB Lnight should have been used for ground noise assessments.

The issues raised are addressed in 7 of this report, Planning Assessment of Relevant Action.

4.2.4 An Taisce

It is submitted that the EIAR is insufficient to comply with the requirements of the EIA directive (2014/52/EU). It has not assessed the impact of non CO2 emissions from planes (including nitrogen oxides, water vapor and various aerosols), and these emissions have a significant radiative forcing impact on the climate. Furthermore, and crucial for this subject proposal, nighttime flights have a greater climate impact than flights during the day[1] and this must also be addressed.

1 See https://www.nature.com/articles/nature04877

The above issues raised are addressed in Section 7 Planning Assessment of Relevant Action

4.2.5 TII

The original TII submission requested that:

> *The Council has regard to the provisions of Chapter 3 of the DoECLG Spatial Planning and National Roads Guidelines in the assessment and determination of the subject planning application.*
>
> *The proposed development shall be undertaken in accordance with the recommendations of the original, Mobility Management Plans, Transport (Traffic) Assessments and Road Safety Audits, which accompanied 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-305298-19. Any recommendations arising should be incorporated as Conditions in the Permission, if granted. The Developer should be advised that any additional works required as a result of the Mobility Management Plans, Transport Assessment and Road Safety Audits should be funded by the developer.*

It is considered that in the event of any grant of permission a condition should be applied to ensure that the proposal is carried out in accordance with the terms and conditions of previous permission An Bord Pleanála Reg. Ref. PL06F.217429 extended under FCC Reg. Ref.: F04A/1755/E1 and further amended under FCC Reg. Ref.: F19A/0023 / ABP Ref.: ABP-305298-19 (the amending permission). This would ensure the proposal is undertaken in accordance with all original plans and assessments and would address the recommendation of TII. On the basis of the above, it is therefore considered that the TII conditions should not be included in the event of any grant of permission.

4.2.6 IAA

Support for proposal

4.2.7 DAA

No comment to make other than to recommend consultation with IAA and IAA-ANSP

4.2.8 Meath County Council

It is submitted that the primary objective of MCC is to ensure that current residents located within Noise Zone B and C of Dublin Airport are not significantly adversely

affected by night-time noise and sleep disruption as a result of the proposed application. Accordingly, the following considerations remain unclear:

> ***It is uncertain if any area of County Meath is eligible for the Noise Insulation Grant Scheme and; MCC have not been able to ascertain from the documentation the extent to which night-time noise impacts will increase for residents within the county.***

The Proposed Night Quota System Proposal states that the proposed changes arising from the system would be managed and controlled such that they will not exceed the night-time noise experienced in 2018. Should FCC and ANCA determine this threshold as acceptable, MCC ask that both authorities ensure that the monitoring of night time noise is measurable, frequently monitored and adhered to.

MCC note that consultation on proposals to amend condition 3 (d) and condition 5 were undertaken in 2016 while more recent and ongoing engagement that has taken place is outlined. Recent noise contour data from early 2020 illustrates that a greater portion of the County is subject to airport noise to that outlined prior to 2020 and therefore requires appropriate noise insulation. While MCC support the need for Dublin Airport to operate effectively, the need for greater consultation from both the DAA and the ANCA on matters that have potential to impact residential amenity within County Meath is emphasised.

MCC also ask that FCC ensure that the proposed application adequately demonstrates all reasonable measures to reduce significant adverse effects on the residential amenity with respect to sleep disruption and disturbance to ensure that any noise increase remains within the acceptable level thereby ensuring the residential amenity of the existing population.

The above issues raised are addressed in Section 7 of this report.]

4.2.9 South Dublin County Council

The Environmental Health team would have concerns regarding the levels of night time noise affecting properties in functional area with noise complaints received in past from residents in the Clondalkin area stating aircraft noise from flights at Dublin Airport impacting at night.

Concurs with the recent submissions from the HSE namely that in interests of protecting public health the WHO Environmental Noise Guidelines of 45dB Lden and 40 dB Lnight should have been used for ground noise assessments.

Outline a large number of people potentially affected by this proposal and assessments and mitigation measures should reflect the potential health impacts of such. All efforts should be made by the DAA to ensure as many people as possible are protected from the adverse health effects associated with aircraft noise.

Conditions 3(d) and 5 were put in place to protect public health so if the planning authority are going to increase the hours of operation they must ensure all who are significantly impacted have the opportunity of mitigation.

The above issues raised are addressed in Section 7 of this report.]

5 Further Information

The response to Further Information submitted on 13th September 2021 states that in addressing FCC's request of 19th February 2021 for Further Information and ANCA's Direction 01, a number of revisions have been made to the material supporting the planning application for the relevant action. The revisions primarily relate to the following:

- Revised Environmental Impact Assessment Report (EIAR)
- Inclusion of additional assessment years
- Clarification of the scenarios for assessment in the EIAR
- Response to the latest passenger forecasts at Dublin Airport and update of Dublin Airport Operating Restrictions, Quantification of Impacts on Future Growth, Mott McDonald.
- Dublin Airport Economic Impact of Operating Restrictions, Intervistas, June 2021.
- Regulation 598 Documentation
- Revised Appropriate Assessment Screening Report

The information received was considered to be significant for the purposes of Article 35 of the Planning and Development Regulations 2001as amended and was therefore advertised and site notices were erected.

5.1 Further Information request part 1

Each point of further information requested, the submitted response and the Planning Officer's assessment of that response are considered in order as follows:

1. *To enable the planning authority to undertake an investigation and an analysis to reach as complete as assessment as possible of the direct and indirect effects on the environmental factors the applicant is requested to address the following in a revised Environmental Impact Assessment Report (EIAR):*

5.1.1 Item 1a:

a) While some information on the EIAR Project Team is provided at Section 1.10 of the EIAR, not all names or qualifications are provided and statements of experience demonstrating competency should be provided. Article 94(e) of the Regulations requires that an EIAR includes a list of names of all the experts contributing to the various sections of the report, together with details of their competency

including, as appropriate, qualifications, statements of experience and any additional information that demonstrates the required competency.

Response:

A revised EIAR has been prepared and is submitted with this response to FCC's request for FI. Chapter 1 of the revised EIAR includes all the names and qualifications, including statements of corporate experience and years' experience demonstrating competency for the individuals responsible for the preparation of the revised EIAR. This information is provided in accordance with Article 94(e) of the Planning and Development Regulations 2001 [as amended]

Assessment:

It is acknowledged that Section 1.8 (Project Team) of the revised EIAR provides information on EIAR contributors, including the lead consultants, AECOM Ireland. Information on quality assurance procedures and the names, qualifications, organisation and years of experience for the EIAR contributors is provided in Table 1.2 of the revised EIAR.

Conclusion:

It is acknowledged that Section 1.8 (Project Team) of the revised EIAR provides information on EIAR contributors, including the lead consultants, AECOM Ireland. Information on quality assurance procedures and the names, qualifications, organisation and years of experience for the EIAR contributors is provided in Table 1.2 of the revised EIAR.

It is considered that the response demonstrates adequate competency of the individual contributors to the EIAR, and across the EIAR project team, and meets the requirements of Article 94e(i), (ii) and (iii) of the Planning and Development Regulations 2001 (as amended).

5.1.2 Item 1b:

b) Given that both permitted and proposed scenarios involve constraints, e.g. either by time / number of flights in the permitted, or by time / noise quota in the proposed. It should be clarified, as appropriate, the basis of the use of 'constrained' and 'unconstrained' in the EIAR and if these are simply 'as permitted' and 'as proposed' scenarios.

Response:

Section 1.7 of the revised EIAR describes the proposed Relevant Action which this application is subject to, including description of the scenarios assessed. The revised EIAR does not refer to 'constrained' and 'unconstrained' scenarios but instead refers to the 'permitted' and 'proposed' scenario for each assessment year for ease of reference. Refer to Chapter 1 of the revised EIAR for more information.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that this clarified in Chapter 1 (Introduction) of the revised EIAR.

Conclusion:

It is acknowledged that this has been addressed and clarified in Section 1.5 (EIAR Methodology and Relevant Guidelines) of the revised EIAR.

5.1.3 Item 1c:

c) In order to gain a fuller understanding of the characteristics and likely significant impacts of the proposed changes over time, and in keeping with the requirements of Annex IV(5) of the EIA Directive and standard assessment practice, the assessments presented in the EIAR should also provide for a longer-term scenario (i.e. 10 or 15 years post opening year scenario (2022).

Response:

The revised EIAR includes an assessment of the permitted and proposed scenarios for the following years:-2022: when North Runway is first expected to become operational; -2025: the first year of highest use of the runway system in the Proposed Scenario (i.e. when 32 million passengers per annum throughput is first expected to be reached but not exceeded). This is also the first year of predicted maximum environmental effects in the Proposed Scenario; and-2035: this year has been included in the assessment in response to a request from Fingal County Council for Further Information which sought assessment of a longer-term scenario (i.e. 10 or 15 years post opening year scenario (2022).

Assessment:

It is acknowledged that the revised EIAR includes for assessments for the years 2022, 2025 and 2035.

Conclusion:

Issues raised in the RFI have been addressed

5.1.4 Item 1d:

d) While not expressly stated in each and every chapter it is noted that by assessing the 'permitted' scenario in 2018, 2022 and 2025 that the Do-nothing scenario has been included. Likewise, it is noted chapters of the EIAR that the assessment includes for the 'worse-case' scenario (e.g. Chapters 7, 10, 13, 14). In the interests of clarity, the do nothing and 'worse-scenario' should be identified clearly and applied consistently throughout the assessment.

Response:

The revised EIAR includes a Key Concepts & Terminology in the Introductory section of the revised EIAR. The Key Concepts & Terminology sets out the definitions of the relevant terms used in the assessment of each scenario as well as clarification of the relevant terms used in describing the scenarios assessed. For

the avoidance of doubt, the revised EIAR does not refer to the 'Do-nothing scenario' or the 'worse-case scenario' as the scenarios assessed as part of the revised EIAR, however the Permitted Scenario assessed in the revised EIAR represents the 'do-nothing' scenario i.e. that which will pertain in future if the proposed Relevant Action is not consented and conditions 3(d) and 5 of the North Runway Planning Permission come into effect.

Assessment:

While this is acknowledged it is noted that the revised EIAR does reference 'worst-case' years in Chapter 21 (Interactions and Cumulative Effects), i.e. sub-section 21.3.1, Table 21.1 (13. 14.) Table 21.3 and sub-section 21.7.1. In these references the assessments for year 2025 are noted as being the 'worst-case'. It is considered that the response / revised EIAR addresses the RFI.

Conclusion:

It is considered that the response / revised EIAR addresses the RFI.

5.1.5 Item 1e:

The submitted planning documentation and supporting Environmental Impact Assessment Report (EIAR) does not sufficiently acknowledge the North Runway's capacity, as permitted, to deliver a gain in connectivity. As a result, it is considered that further consideration is required of the 'baseline scenario' (i.e. as referred to in the EIAR the future permitted baseline (2022 constrained)). The assessment should give further consideration to alternatives that operate within permitted take-off and landing hours and demonstrate how they are interact with permissions and conditions at Dublin Airport regarding the 32mppa limit, over a longer timeframe (i.e. 10 or 15 years post 2022).

Response:

The revised EIAR includes a Permitted Scenario as well as a Proposed Scenario, to contrast the effects of the North Runway's capacity, as permitted, with that of the proposed Relevant Action in each of the Assessment Years, 2022, 2025 and 2035. Additionally, it is noted that various alternatives were considered in developing the proposed Relevant Action. The revised EIAR presents details of these in Chapter 4: Alternatives.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that the revised EIAR includes a Permitted Scenario and a Proposed Scenario to contrast the effects of the North Runway's capacity, as permitted, with that of the proposed Relevant Action in each of the assessment years 2022, 2025 and 2035. It is further noted that various alternatives are also considered in Chapter 4 (Alternatives) of the EIAR.

Conclusion:

It is considered that the response / revised EIAR addresses the issues raised in the RFI.

5.1.6 Item 1f:

While details of consultations are outlined out in Chapter 5 of the EIAR, there is little information on the timings of the various consultations and no information has been provided in relation to the issues raised in the consultations and how these have informed the assessments in the EIAR. Information should be provided on timings of consultations, issues arising and how these have informed / been assessed in the EIAR.

Response:

The revised EIAR includes a revised Chapter 5 – Consultation which outlines the timings of the various consultations, the issues raised, as well as how the issues raised have informed the assessments in the EIAR. In this regard it should be noted that consultation was undertaken by daa in 2016 which made clear that

daa would seek changes on condition 3(d) and 5 of the North Runway Planning Permission. A key outcome of this consultation informed the current application for the proposed Relevant Action, in that it does not seek unrestricted use of the runway system as was envisaged 2016, but proposes to amend and replace the current operating restrictions. Furthermore, the revised EIAR has considered each of the submissions and observations received to the application during the 5 week statutory planning period. A summary of this consideration is set out in the revised EIAR. Refer to Chapter 5 – Consultation of the revised EIAR.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that the revised EIAR includes Chapter 5 (Consultation), which sets out the consultations, their timings, issues arising and how they informed the proposed project / assessment. It is considered that Chapter 5 of the revised EIAR provides sufficient information to demonstrate that adequate and effective consultation has been undertaken.

Conclusion:

It is considered that the response / revised EIAR addresses the issues raised in the RFI.

5.1.7 Item 1g:

Section 6.4 Local Planning does not address land use zoning in the wider area around the airport, areas which may be potentially impacted by the proposed Relevant Action. Likewise, potential impact on wider land use zoning is not considered under Chapter 19 Material Assets. Existing land use and land use zonings around the airport should be described under local planning policy and described and assessed for potential impacts under Chapter 19 Material Assets.

Response:

Following consideration by the EIAR Project Team it is considered that the above referenced item is best addressed in Chapter 6 – Planning, Development Context and Land Use Zoning, rather than in both Chapter 6 and Chapter 19 – Material Assets as the potential impacts relate to impacts on land use zoning and any impacts on the ability of the policy objectives within the relevant County Development Plans to be achieved. The revised EIAR includes a revised Chapter 6 which includes a review and discussion of the Land Use Zoning surrounding the airport and the wider area. An assessment of the potential impacts to existing Land Use Zoning is included having regard to the current policy provisions of the County Development Plan. This is based on the potential for the proposed Relevant Action to impact on the achievement of the policies and objectives set out for the land use zonings surrounding the airport. The assessment concludes that the existing policy environment relating to the airport and the surrounding lands will continue to operate sufficiently and is considered suitable to achieve the required outcomes sought by the County Development Plan.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that the revised EIAR addresses existing land use and land use zonings in a revised Chapter 6 (Planning, Development Context and Land Use Zoning).

Conclusion:

It is considered that this point of Further information has been addressed to the satisfaction of the Planning Authority.

5.1.8 Item 1h:

The assessment at Section 7.7 of Chapter 7 Population and Human Health should initially present the findings of the unmitigated scenario to allow for a full assessment of potential worse-case scenario. The effect of mitigation measures on the impacted

environment should be presented separately, followed by a clear and definitive discussion on any residual impacts, associated locations, characteristics, effects etc. Any revised assessment presented in Chapter 7 should have regard to any further review or update required of other chapters of the EIAR, e.g. ground noise assessment.

Response:

Chapter 7 (Population and Human Health) in the revised EIAR presents the findings of the unmitigated scenario (an assessment before mitigation) and presents a discussion of the residual impacts. The chapter is fully updated to reflect the remainder of the revised EIAR.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that Chapter 7 (Population and Human Health) in the revised EIAR presents the findings of the unmitigated scenario (an assessment before mitigation) and presents a discussion of the residual impacts.

Conclusion:

The chapter is fully updated to reflect the remainder of the revised EIAR.

5.1.9 Item 1i:

The assessment presented in Chapter 14 Ground Noise and Vibration should be revised to include:

•A longer-term assessment scenario (i.e. 10 or 15 years post 2022) to allow for a full understanding of the medium and long-term characteristics and significance of impacts. To allow for consideration of impact on potentially worse affected locations, the impact assessment should also include properties closest to the airport.

•Chapter 9 Traffic and Transport identifies changes to traffic levels and, therefore, traffic should be included in the revised ground noise assessment.

•Ground Noise Modelling Figures referenced as being included in Appendix 14, section 14C.4.1, in Technical Appendices Volume 1 have not been included. These should be updated as required and submitted.

•A cumulative assessment of the interaction between ground and air noise, calculating quantitively the numbers of persons 'highly annoyed' or 'Highly Sleep Disturbed' by both Ground and Air Noise. The assessment should explain the relative contribution to noise annoyance and sleep disturbance by ground and air noise. The combined noise impacts should be also shown by means of maps.

Response:

The Ground Noise and Vibration chapter of the revised EIAR include assessments in the years 2022, 2025 and 2035. Road traffic noise impacts have been included in the assessments presented. All technical appendices have been fully updated and included in the submission. A cumulative assessment of air and ground noise impacts is also provided. An assessment of the number of people highly annoyed and highly sleep disturbed has been carried out using the dose response relationships given in the WHO Environmental Noise Guidelines (2018) for air noise and road traffic noise separately, as endorsed by EU Directive 2020/367. A comparable dose response relationship for aircraft ground noise is not available and so this has not been assessed.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that a fully updated Chapter 14 (Ground Noise and Vibration), with assessments for years 2022, 2025 and 2035, is included in the revised EIAR. Road traffic noise impacts have been included in the assessments. Technical appendices have been fully updated and included in the

revised EIAR. A cumulative assessment of air and ground noise impacts is also provided.

Conclusion:

It is considered that this point of Further Information has been addressed by virtue of the update to Chapter 14.

5.1.10 Item 1j:

> *Directive 2014/52/EU requires the consideration of the likely significant effects of the project on climate and also the vulnerability of the project to climate change. Further information is required to demonstrate sufficiency of information with regard to this environmental factor. Further consideration should be given to impacts regarding two key aspects to be addressed, 1) climate change mitigation and 2) climate change adaptation.*

Response:

> *The climate and carbon assessment rules out the requirement to assess climate change adaption further, as explained in the revised EIAR, because the proposed Relevant Action only affects the operational use of the North Runway and does not propose any physical changes to infrastructure that could be affected by future climate change and thus require mitigation to adapt to such changes. The Relevant Action is not vulnerable to climate change. In terms of climate change mitigation, the assessment has been revised to address the impacts of the Permitted Scenario as well as the Proposed Scenario*

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that Chapter 11 (Climate and Carbon) in the revised EIAR rules out the requirement to assess climate change adaption further, because no construction is involved; the proposed Relevant Action only affects the operational use of the North Runway; and does not propose any physical changes to infrastructure that could be affected by future climate

change and thus require mitigation to adapt to such changes. The Relevant Action is not vulnerable to climate change. In terms of climate change mitigation, the assessment has been revised to address the impacts of the Permitted Scenario as well as the proposed RA.

Conclusion:

It is considered that this point of Further information has been addressed.

5.1.11 Item 1k:

> *Chapter 20 Cultural Heritage does not detail the cultural heritage baseline, the designated and non-designated heritage assets or archaeological investigations on the basis that the proposed amendments will not result in any effects upon cultural heritage assets when compared with the permitted/constrained scenario. A table of the designated archaeological and architectural heritage sites protected by statutory legislation should be included within the EIAR.*

Response:

> *A table of the designated archaeological and architectural heritage sites protected by statutory legislation is included in the revised EIAR in Chapter 20, Cultural Heritage.*

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that Chapter 20 (Cultural Heritage) of the revised EIAR provides a table as requested.

Conclusion:

It is considered that this point of Further information has been addressed.

5.1.12 Item 1l:

> *Chapter 21 includes references to 'in-combination effects' throughout (e.g. Section 21.5 In-combination Effects). In-combination is not an EIA term, and the assessment presented in*

Section 21.5 does not adequately address, consider or assess impacts as set out in the EIA Directive, legislation, and EIA guidance. The assessment in the EIAR should address, consider and assess, where required, impacts which may arise from 'interactions' between environmental factors, e.g. noise and health, noise and population, noise and biodiversity, noise and materials assets (land use), etc. In addition, the assessment of potential cumulative impacts should be reviewed and updated to consider specifically planned or permitted projects, or land use zonings (community, residential, etc.) within the zone of influence of the Relevant Action. Table 21-1 should be reviewed and expanded as necessary, to address all potential cumulative impacts and the assessment updated accordingly.

Response:

'In-combination' is an EIA term commonly used by practitioners to describe the assessment impacts which may arise from 'interactions' between environmental factors. However, it is acknowledged that other terms are often used as well, and the revised EIAR now aligns with the terminology used in the Environmental Protection Agency's draft guidance on EIA.

The revised chapter includes an assessment of the interactions between the factors identified in the Directive, presenting evidence to demonstrate that there are none

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that Chapter 21 (Interactions and Cumulative Effects) aligns with EIA guidance (EPA) and includes an assessment of interactions between the factors identified in the Directive presenting evidence that there are none.

Conclusion:

It is considered that this point of Further information has been addressed.

5.1.13 Item 1m:

A summary table of features and/or measures envisaged to avoid, prevent or reduce and, if possible, off set likely significant effects of the proposed development, and a timescale for the implementation of proposed mitigation measures.

Response:

An additional chapter summarising these matters as outlined above has been included in the revised EIAR. This is Chapter 23 of the revised EIAR, which includes a summary of the assessment of effects in each chapter, mitigation measures proposed to offset adverse effects (including mitigation which forms an inherent part of the proposed Relevant Action) and describes the residual effects. Timescales for implementation are also set out.

Assessment:

The Response to the RFI (TPA, Sept. 2021) notes that the request is addressed in Chapter 23 (Summary of Impacts and Mitigation) of the revised EIAR.

Conclusion:

It is considered that this point of Further information has been addressed.

5.1.14 Item 1n:

It is considered that the EIAR Non-Technical Summary (NTS) is overly simplified and fails to adequately set out the receiving environment, the assessment of potential impacts, proposed mitigation measures and residual impacts, as required of the EIA Directive and Guidance including EC EIA Guidance – EIAR, 2017. The NTS for the EIAR should be reviewed and updated to provide appropriate and sufficient detail to describe the receiving baseline environment, to detail the assessment of potential impacts, to outline the nature and effect of proposed mitigation measures and to define residual impacts in a non-technical manner.

Response:

The Non-Technical Summary has been re-written to respond to the information request and better reflect the content of the revised EIAR, more fully describing the receiving environment for the relevant environmental factors and including the complete set of mitigation measures.

Assessment:

The NTS provides a description of the project (proposed RA), a description of the reasonable alternatives, a description of the environment (for each environmental factor), a description of the likely significant effects (for each environmental factor), a description of the methodology used to identify and assess the significant effects (for each environmental factor), a description of mitigation measures, as appropriate (for each environmental factor), and a description of expected significant adverse effects on the environment from the vulnerability of the project to risks of major accidents and/or disasters, where relevant.

Conclusion:

It is considered that this point of Further information has been addressed to the satisfaction of the Planning Authority.

5.2 Further Information request item 2

Further information is required in relation to AA screening report, as follows:

5.2.1 Item 2a:

Section 2.1.5 of the AA Screening report, potential direct effects on any SACs are explicitly ruled out. The EIAR, in several places (such as at Sections 12.3.1, 12.5, 15.4 and 16.3), states that the Cuckoo Stream flows west to east through the application site. At Section 19.3.2.4 it is noted that the Forrest Little, Wad and Kealy's Streams also flow through the application site. The Cuckoo Stream eventually joins the Mayne River, and the other streams eventually join the Sluice River. Both of these rivers flow into Baldoyle Bay SAC

/ SPA and not Malahide Estuary. The screening report should be updated to correctly identify all surface water pathways.

Response:

The AA Screening Report has been corrected to identify the features noted and further to explain why, in the light of the above, the assessments in the original Screening Report remain correct. This AA Screening concludes that, on the basis of objective information, likely significant effects on European sites from the proposed Relevant Action, both individually and in-combination with other plans and projects, can be excluded. There is no requirement to proceed to the next step of Appropriate Assessment and, subject to other requirements, the proposed Relevant Action can be authorised.

Assessment:

The AA Screening Report provides a clear and unambiguous definition of the zone of influence – (SPAs and SACs with fauna (specifically sea birds/water birds as well as grey seal, harbour seal and harbour porpoise)), as requested.

Conclusion:

Having reviewed the information submitted by the applicant in response to this part of the Request for Further Information, Ecologist Matthew Hague CEnv MCIEEM, Associate, Brady Shipman Martin has advised that the screening report has been updated to correctly identify all surface water pathways..

5.2.2 Item 2b:

The AA Screening report should be revised to take account of statements within Chapter 8 of the EIAR regarding potential impacts on European sites caused by emergency fuel dumping from the Relevant Action application, should this take place.

Response:

The AA Screening Report, in Sections 3.4 to 3.10, addresses the potential implications of fuel dumping (carried out only in emergency situations). The report notes that fuel dumping by an aircraft using Dublin Airport has been undertaken only once since 2014, and in that case the fuel dumping took place at sea, east of Drogheda. It was not undertaken in or anywhere near Dublin Bay. It is noted in the AA Screening Report that much of the fuel, if not all of it, evaporates before it reaches the sea, and that any fuel actually reaching the sea would be greatly diluted.

As set out clearly in the AA Screening report, fuel dumping is not considered likely to cause significant effects on European sites, for the following reasons:

• Fuel dumping is only carried out rarely (according to the Applicant, one recorded incident in seven years at Dublin Airport) and only in emergency situations;

• Much or all of the dumped fuel vaporises before reaching the sea, so does not cause any pollution of the marine environment. Any fuel which did reach the sea would be dispersed over a wide area; and,

• It is impossible to know where any such event may take place given that it is carried out in emergency situations. It is therefore impossible to assess what the effects may be on a given European site.

Assessment:

The response to further information and the revised documentation has taken account of statements within Chapter 8 of the EIAR regarding potential impacts on European sites caused by emergency fuel dumping from the Relevant Action application, should this take place.

Conclusion:

Having reviewed the information submitted by the applicant in response to the Request for Further Information, Ecologist Matthew Hague CEnv MCIEEM, Associate, Brady Shipman Martin has advised that concerns regarding presentation and coordination of information pertaining to fuel dumping has been addressed.

5.2.3 Item 2c:

The review of in-combination effects should be reviewed, and updated if necessary, to take account of the responses submitted to this request for further information in relation to both the Screening for Appropriate Assessment and Environmental Impact Assessment Report.

Response:

In-combination effects have been reviewed and updated to reflect the revised content of the EIAR and AA Screening Report.

Assessment:

An updated consideration of in-combination effects has been submitted as part of the FI response.

Conclusion:

Having reviewed the information submitted by the applicant in response to the Request for Further Information, Ecologist Matthew Hague CEnv MCIEEM, Associate, Brady Shipman Martin has advised that information presented for assessment of in combination effects is acceptable.

5.3 Further Information request part 3

In the interest of ensuring accuracy of the particulars submitted with the planning application for the public file, the applicant is requested to address the following:

5.3.1 Item 3a:

Correct the planning register references where typographical errors have been made in respect to the submitted Environmental Impact

Assessment Report, as prepared by AECOM and Planning Report, as prepared by Tom Phillips and Associates. For clarity, an incorrect reference to An Bord Pleanála planning file number is repeated. The reference is to amended permission (FCC Reg. Ref. No.: F19A/0023) ABP Ref. No. ABP-305298-19, which is incorrectly listed as ABP-305289-19. Furthermore, an incorrect Register Reference in respect to the Terminal 2 permission FCC Reg. Ref. No. F06A/1248, which is incorrectly listed as F04A/1755.

Response:

Item 3 a) and 3 b) of FCC's request for FI relates to a typographical errors and incorrect cross-references in the documents submitted with the application. All relevant documents have been updated and errors corrected.

Assessment:

The Environment Impact Assessment Report as prepared by AECOM and the Planning Report as prepared by Tom Phillips and Associates, received 13th September 2021, have been updated and corrected to detail the relevant planning register references.

Conclusion:

It is considered that this point of further information has been addressed.

5.3.2 Item 3b:

Amend the number of incorrect cross-references to other sections of a chapter and/or other chapters. Incorrect references noted as 'section 0' are prominent in Chapters 7, 13 and 14. Response:

Response:

Item 3 a) and 3 b) of FCC's request for FI relates to a typographical errors and incorrect cross-references in the documents submitted with the application. All relevant documents have been updated and errors corrected.

Assessment:

The chapters in the Environmental Impact Assessment Report have been updated and corrected to detail relevant cross-references to sections of a chapter and other chapters.

Conclusion:

It is considered that this point of further information has been addressed.

6 Consideration of revised Environmental Impact Assessment Report received 13 September 2021

An assessment of the EIAR has been carried out in accordance with the requirements of the Planning and Development Act 2000 as amended. In carrying out the assessment of the EIAR, it should be noted that there is a significant degree of overlap between (i) RA as applied for and (ii) the content of the RD. The EIAR submitted for the RA application and its contents remain strongly and directly relevant for the purpose of the RD. Any changes that have occurred between the RA and RD have been identified and assessed for the purpose of EIA. Section 9 of this planning report contains analysis and EIA of the RA subject to the RD.

Taking account of the specialist and technical nature of the issues at the centre of the RA application, in addition to the expertise and direction of ANCA in their capacity as the Competent Authority (CA) in consideration of the subject amendments to the planning permission for the North Runway, in order to ensure completeness and quality of the assessment, an independent review of the relevant planning documentation and EIAR and the Regulatory Decision and associated documents has been carried out by the consultancy firm Brady Shipman Martin. The preparation of the review has been directed by Thomas Burns B.Agr.Sc. (Landscape), Dip. E.I.A. Mgmt., Ad. Dip. En. and Planning Law, MILI, Partner with BSM.

An independent review of the relevant planning documentation and AA screening reports has also been carried out by the consultancy firm Brady Shipman Martin. This review has been carried out by Ecologist Matthew Hague CEnv MCIEEM, Associate, Brady Shipman Martin

6.1 Consideration of the EIAR of the RA submitted by way of Further Information Environmental Impact Assessment Report received 13 September 2021

The revised EIAR, which comprises four volumes as set out at 1.4.2 above, is well laid out in a 'Grouped Format Structure' (EPA, Guidelines) and follows a clear structure with detailed methodologies. The EIAR includes for a detailed description of the project; an examination of the alternatives considered; the consultations undertaken; a description of the baseline environment; an assessment of the likely significant effects on environmental aspects as set out in Article 3 of Directive (2014/52/EU); together with potential interactions and cumulative effects; and a summary of the impacts and mitigation measures.

As required under Article 3(1) of the amending Directive, the revised EIAR describes and assesses in:

- Chapters 6 & 7 and Chapters 9 to 20, the direct and indirect significant effects of the project on the following factors: (a) population and human health; (b) biodiversity with particular attention to the species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape.
- Chapter 21 (Interactions and Cumulative Effects) the revised EIAR considers the interaction between the factors referred to in points (a) to (d) and potential cumulative effects.
- Chapter 22 (Future Development Plans) the proposed project in the context of potential future development plans at the airport.
- Chapter 23 (Summary of Impacts and Mitigation) a summary of the impacts, mitigation and residual impacts as a result of the proposed Relevant Action.

Article 3(2) of the amending Directive includes a requirement that the expected effects derived from the vulnerability of the project to major accidents and / or disasters that are relevant to the project concerned are considered. This requirement is addressed at Chapter 8 (Major Accidents and Disasters) of the revised EIAR.

The proposed RA does not involve any construction activities or works and therefore, construction stage impacts do not arise and are not considered in the revised EIAR or in this review.

6.2 Alternatives

Article 5(1)(d) of the 2014 EIA Directive requires: a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option

chosen, taking into account the effects of the project on the environment; Annex (IV) (Information for the EIAR) provides more detail on 'reasonable alternatives':

> *2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.*

Chapter 4 (Examination of Alternatives) of the EIAR provides a description of the reasonable alternatives considered. Given the nature of the application reasonable alternative locations, layouts and designs are not applicable. The 'do-nothing' scenario – in effect the situation which will prevail with Conditions 3(d) and 5 in operation once the permitted North Runway is completed – is considered as the 'Permitted Scenario' alternative.

Alternative modes of operation and alternatives focused on variations to permitted hours of operation are also considered in the revised EIAR. The proposed RA includes the night-time noise insulation grant scheme as mitigation for noise and human health impacts, and no alternative mitigation measures are considered. It is noted that a day-time noise mitigation scheme is already in place under Conditions 7 and 9 of the permission for the North Runway.

Ten alternative scenarios (Scenarios 01 – 10) present variations in potential night-time use of the runways, including the North Runway. The alternatives have been detailed and assessed in the revised EIAR. Scenario 01 represents the 'permitted' North Runway ('do-nothing') position. Scenario 06, which proposes revoking rather than replacing Conditions 3(d) and 5, is not considered a viable alternative. Scenario 02 is the selected alternative forming the basis for the proposed RA as assessed throughout the revised EIAR.

The comparative environmental assessment of alternative scenarios versus the Proposed Scenario (02) is presented in Table 4.1 of the revised EIAR. The assessment indicates that in comparison to Scenario 02 (Proposed Scenario), Scenario 01 (Do-nothing Scenario) has potential for 'significant beneficial effects' in terms of air and ground noise and vibration and is 'beneficial' in terms of

population and human health. Comparison between Scenario 02 (Proposed Scenario) and all other scenarios (03-10) are adverse for these factors. Comparison differences between the other environmental factors (e.g. biodiversity, land and soils, etc.) across all scenarios would not be materially different and therefore are imperceptible.

Existing, planned and recommended Noise Management Measures (i.e. Mitigation Measures) for Scenario 02 are set out in Table 4.2 of the revised EIAR. The new measures set out are:

> NA-11: A Three-Runway Preferential Runway Programme. Utilise whenever possible the runways that enable aircraft to avoid noise-sensitive areas during the initial departure and final approach phases of flight. This includes limiting take-offs or landings to the South Runway (10L-28R) between 00:00 – 05:59 except in exceptional circumstances or where the length of the North Runway (10R-28L) is required.
>
> LU-8: A Night-time Sound Insulation Grant Programme. For households located within the 2025 forecast L_{night} 55 dB and higher noise contours.
>
> OR-1: North Runway Permission: Condition No. 4. Restrict use of Crosswind Runway (16-34) to 'essential' occasional use on completion of the North Runway. However, it is noted that this is already required of Condition 4 of the permission for the North Runway.
>
> OR-2: Runway 10L-28R 'No Use' Limit. Runway 10L-28R shall not be used for take-off or landing between 0000 hours and 0559 hours except in exceptional circumstances or where the length of the North Runway (10R-28L) is required.
>
> OR-3: Quota Count. The proposed quota count is based on an Annual Night Quota (ANQ) count of 7,990 between 23:30hrs to 06:00hrs (Night Quota Period (NQP)) to be applied for each year from the opening of the North Runway to 2025.
>
> CE-5: Relevant Action Noise Reporting Framework. Noise reporting associated with compliance with cNAO and measures proposed.

The do-nothing scenario (Permitted Scenario) is included as Alternative Scenario 01 and the assessment demonstrates that is the most beneficial in terms of 'air and ground noise and vibration' and for 'population and human health'.

However, alternative Scenario 02 is selected as the preferred alternative as it is the preferential runway use scenario with the lowest number of people exposed to changes that potentially result in significant adverse effects caused by the change in noise levels for both L_{night} and L_{den} levels. For all environmental factors, with the exception of noise and health, the difference between each of the alternative scenarios and Scenario 02 is imperceptible.

6.3 Consultation

Chapter 5 (Consultation) of the revised EIAR sets out in detail the consultation process relating to the proposed RA, which pre-dated the lodgement of the application for the RA. The process, which involved the general public, local communities, elected representatives, stakeholders and statutory consultees, involved a Phase 1 (June – July 2016) and Phase 2 (October – December 2016) process, together with subsequent consultations leading to the finalisation of the proposed RA and the submission of the planning application in December 2020.

The revised EIAR notes that the key issues raised during the Phase 1 and 2 stages and that a key outcome of the consultation was to seek to amend and replace the current conditions as set out in the planning application whereas the original intention at the time of the consultations had been to seek unrestricted use of the runway system (Section 5.4.2, revised EIAR).

In addition to pre-application consultations, lodgement of the planning application with FCC was publicised (Dec 2020) and the application made available for display and for submission of observations. Likewise the submission of the response to the RFI was deemed 'significant additional information', and again publicised (Feb 2021) and made available for display and for submission of further observations.

Consultation, including participation of the public has been effective, and the application has been made accessible to the public by electronic and hard copy means with appropriate timelines afforded for submissions.

It is considered that Chapter 5 of the revised EIAR provides sufficient information to demonstrate that adequate and effective consultation has been undertaken.

6.4 Review of Likely Significant Environmental Effects

This section considers the revised EIAR for the proposed application.

References to the Proposed Scenario and proposed Relevant Action (proposed RA) are interchangeable in the following.

As previously noted the proposed RA does not involve any construction works and construction stage impacts do not arise. Therefore, the revised EIAR and this review is limited to consideration of operational stage impacts, including potential for interactions between operational impacts and cumulative impacts.

In discussing the Permitted and Proposed Scenarios, the revised EIAR includes references to a faster post-COVID return to the 32mppa operational cap in the Proposed Scenario (proposed RA), for example (section 9.1.2 of revised EIAR) states:

'Overall, the Proposed Scenario would allow for an increase in the number of flights taking off and/or landing at Dublin Airport between 23:00 and 07:00 in accordance with the annual night-time noise quota and this also results in a faster return to 32mppa than in the Permitted Scenario. Between 2022 and 2026 there would be more passengers using the airport in the Proposed Scenario, which reaches the 32mppa Cap in 2025. However, by 2027 the 32mppa Cap will also have been reached in the Permitted Scenario, meaning that the return to the pre-Covid-19 passenger throughput will take approximately two years longer than in the Proposed Scenario. Around 7.1 million additional passengers will have used the airport in in the period 2022-2026 in the Proposed Scenario.'

The above references a return to a 32mppa Cap in 2025 in the Proposed Scenario but suggests that it will take until 2027 in the Permitted Scenario, meaning that circa 7.1 million additional passengers will have used the airport in the period 2022-2026 in the Proposed Scenario. Therefore, in comparing scenarios over time the revised EIAR envisages 30.4 million passengers using the airport in the 2025 Permitted Scenario but 32 million passengers in the 2025 Proposed Scenario. However, it is noted in this review that a return to the 32mppa cap may occur much faster than 2027 as suggested for the Permitted Scenario.

6.4.1 Chapter 6

Chapter 6 (Planning and Development Context) sets out how the proposed RA complies with the Strategic Planning Context, National and Regional Planning Policy, and Local Planning Policy.

Under National and Regional Planning Policy the strategic role of Dublin Airport serving as a major transport hub for millions of business and leisure travellers, a gateway for tourism and foreign direct investment and a critical facilitator of connectivity for an island nation is presented. In this regard the National Aviation Policy (NAP) for Ireland (DTTS, 2015) acknowledges the importance of the aviation sector to the Irish economy and describes Dublin Airport (Section 4.3) as follows:

> *The size and location of Dublin Airport distinguishes it from the other State airports. Dublin Airport has seen a major increase in the numbers of transfer passengers in recent years with significant benefits to the broader economy. An opportunity now exists to develop Dublin as a vibrant secondary hub, competing effectively with the UK and other European airports for the expanding global aviation services market. A hub combines local passengers with transfer passengers enabling airlines to operate services to more destinations and more frequently than could be supported by local demand alone. This allows airport operators to utilise airport assets more efficiently, to exploit economies of scale and to drive down per passenger airport charges to the benefit of airport users and passengers. In this context, the support and promotion of Dublin as a hub airport is an important means of maximising air access for the Irish economy. Dublin Airport is currently (summer 2015) ranked fifth in Europe in terms of weekly transatlantic seats, and is therefore well placed for further development as a hub for global business.*

In relation to future capacity the NAP states (Section 4.5) that:

> *To ensure future connectivity and to deliver growth, it will be important that the State airports, and Dublin Airport in particular, have sufficient capacity and runways of sufficient length to enable*

services to operate to global emerging markets without weight restriction. It is important that regular reviews are conducted to ensure that all of the main airports are well placed to accommodate passenger growth, changing passenger and air-cargo needs and carrier needs.

Dublin Airport is identified as key infrastructure for national development in the National Planning Framework (NPF) and confirms the important role that Dublin Airport has in supporting the goals of the NPF. Likewise the National Development Plan (NDP) identifies the importance of high-quality international connectivity (Strategic Outcome 6):

As an island, continued investment in our port and airport connections to the UK, the EU and the rest of the world, is integral to underpinning international competitiveness. It is also central to responding to the challenges as well as the opportunities arising from Brexit', and 'Significant investment in Ireland's airports and ports will play a major role in safeguarding and enhancing Ireland's international connectivity which is fundamental to Ireland's international competitiveness, trading performance in both goods and services and enhancing its attractiveness to foreign direct investment. The importance of this objective cannot be understated in the context of the UK's exit from the EU in 2019.

The Eastern and Midland Regional Assembly's Regional Spatial and Economic Strategy, 2019 (RSES) acknowledges Dublin Airport as a key national asset to Ireland's economic success which is linked with its global connectivity to trade and tourism markets, and requires support to ensure it continues as an economic driver. In relation to Dublin Airport, the RSES states that:

Dublin Airport accounted for 85% of all air passengers in the Country in 2016. The number of passengers has increased year on year to reach 29.5 million in 2017 and is forecast to increase again in 2018. Dublin Airport is a key national asset to Ireland's economic success which is linked with its global connectivity to trade and tourism markets and requires support to ensure it continues as an

economic driver. The National Aviation Strategy for the first time supports the growth of the Airport to a secondary hub airport; Dublin Airport has a number of features which make it an attractive option for airlines, including the availability of full US Preclearance.

This strategic position of Dublin Airport in the RSES is further supported by policies RPO8.17 and RPO 8.19.

The important role of Dublin Airport and the quality of its infrastructure and service as an important factor in delivering on tourism policy is also reflected in National Tourism Policy (DTTS, 2015).

In terms of local policy as well as discussing land use objectives, zoning, etc, it is noted that the strategic policy for Dublin Airport as stated in the Fingal Development Plan 2017-2023 is to:

Safeguard the current and future operational, safety, and technical requirements of Dublin Airport and provide for its ongoing development within a sustainable development framework of a Local Area Plan. The plan shall take account of any potential impact on local communities and shall have regard to any wider environmental issues.

Specific objectives in the development plan relating to the airport include:

DA01: Facilitate the operation and future development of Dublin Airport, in line with Government policy, recognising its role in the provision of air transport, both passenger and freight.

DA09: Ensure that aircraft-related development and operation procedures proposed and existing at the Airport consider all measures necessary to mitigate against the potential negative impact of noise from aircraft operations (such as engine testing, taxiing, taking off and landing), on existing established residential communities, while not placing unreasonable, but allowing reasonable restrictions on airport development to prevent detrimental effects on local communities, taking into account EU Regulation 598/2014 (or any future superseding EU regulation

applicable) having regard to the 'Balanced Approach' and the involvement of communities in ensuring a collaborative approach to mitigating against noise pollution.

In addition objective DA18 requires every development in the environs of the airport to take account of current and predicted changes in air quality, greenhouse emissions and local environmental conditions and likewise DA19 requires every development to take account of water quality, water based habitats and flooding.

The development plan makes specific reference to the National Aviation Policy (2015), and the following objectives are noted:

ED31: Ensure that the required infrastructure and facilities are provided at Dublin Airport so that the aviation sector can develop further and operate to its maximum sustainable potential, whilst taking into account the impact on local residential areas, and any negative impact such proposed developments may have on the sustainability of similar existing developments in the surrounding area, and the impact on the environment, including the climate.

ED32 Ensure an appropriate balance is achieved between developing the unique potential of Dublin Airport as an economic generator and major employer in the County and protecting its core operational function as the Country's main international airport.

Objective NP03: Require all developments to be designed and operated in a manner that will minimise and contain noise levels.

Objective DMS162 Ensure all development proposals include measures to protect and enhance biodiversity.

Objective NP01: Implement the relevant spatial planning recommendations and actions of the Dublin Agglomeration Environmental Noise Action Plan 2018-2023 and the Noise Action Plan for Dublin Airport 2019-2023 (or any subsequent plan), working

in conjunction with relevant statutory agencies. (Variation 1 of Development Plan)

Likewise the Dublin Airport Local Area Plan 2020 (LAP) and the Noise Action Plan for Dublin Airport 2019-2023 are both supportive of provision of a specific level of growth and operation at the airport, whilst recognising the need to mitigate potential impact of noise on neighbouring communities. The LAP notes that the airport is of '*vital importance to the Irish economy and acts as the principal international gateway for trade, inward investment and tourism*', and that '*the Airport facilitates Ireland's integration with Europe and aids in attracting foreign direct investment.*'

An assessment of impacts on Existing Land Use and Zoning is also presented. The latter assessment sets the study area within the 40db L_{night} noise contour, this being '*the limit suggested by the World Health Organisation (WHO) to avoid negative effects on humans*' (section 6.5.2, revised EIAR).

It is noted that each land use zone may accommodate a range of land uses, some zones prohibit sensitive uses (set out within Variation No. 1 to the County Development Plan), being residential, hospitals, residential care facilities and schools. The assessment (presented in detail in Appendix 6A of the revised EIAR) concludes that the proposed RA would not necessitate any change to the existing Noise Zones or the existing Public Safety Zones and that existing Noise Zones in the County Development Plan are sufficient to ensure that the future development potential of zoned lands is unaffected. The impact is assessed as being neutral in the assessment years 2022, 2025 and 2035 as presented in the revised EIAR.

Given the nature of the proposed RA and the existing protective policy framework it would not give rise to significant environmental effects in terms of existing and proposed land use.

6.4.2 Chapter 7

Chapter 7 (Population and Human Health) sets out the relevant National Guidance, National Planning Policy, Local Planning Policy, together with other legislation, International policy, standards and guidance, including the WHO Environmental Noise Guidelines for the European Region. In providing public health advice the

Guideline Development Group '*strongly recommends*' that for average daytime exposure that noise levels produced by Aircraft are below 45dB L_{den}, and below 40dB L_{night} for average night exposure. It is aircraft noise above these levels that the WHO Regional Office for Europe states are associated with adverse health effects.

The assessment, which relies on the findings or other chapters – most notably Chapter 10 (Air Quality), Chapter 13 (Air Noise and Vibration) and Chapter 14 (Ground Noise and Vibration) considers effects on Amenity and Local Communities and Human Health and Well-being, including Annoyance and Sleep Disturbance.

The assessment notes that based on the scientific literature reviewed and referenced throughout the chapter, there is strong evidence for the adverse effects of air pollution, specifically particulate matter (PM) and nitrogen dioxide (NO_2), on human health. Exposure to air pollution – induced inter alia by aircraft, airside plant and vehicle movements - over several years can reduce life-expectancy, mainly due to an increased risk of cardiovascular and respiratory illness such as chronic obstructive pulmonary disease and lung cancer, while short-term exposure can aggravate respiratory and cardiovascular conditions, and trigger asthma attacks and premature deaths.

The evidence for population level changes in health outcomes due to concentrations of fine PM and NO_2 below statutory levels (see Chapter 10 (Air Quality)) is more limited, but there is a general association of sufficient strength to warrant assessment and development of environmental measures to reduce emission levels to as low as reasonably practicable.

Based on the scientific literature reviewed in the chapter, the strength of evidence is strong for a direct causal relationship between noise disturbance and health outcomes and quality of life effects, although this is dependent on the level of disturbance. Emerging from the evidence base are a number of key health outcomes, including noise annoyance, sleep disturbance, cardiovascular health, mental health, and children's learning.

Noise annoyance, commonly used within European policy to measure the quality of life impacts of noise exposure on communities around airports, is defined as disturbance, irritation, dissatisfaction and nuisance from environmental noise.

Sleep disturbance, potentially induced by aircraft noise, can, in the short-term, impair mood and cognitive performance. The long-term effects of sleep disturbance can influence glucose metabolism, appetite regulation, memory immune response and endothelial dysfunction, which can act as precursors for high blood pressure, cardiovascular disease, diabetes and obesity. Measuring sleep is challenging as there is no one physical, physiological or psychological measure that is considered reliable. As such, there is little evidence evaluating the relationship between aircraft noise and sleep disturbance. However, a recent study utilised meta-analysis (including a study of the London Docklands Light Railway (DLR)) to estimate exposure-response functions for the probability of sleep change as a result of aircraft noise and findings suggested that a relationship did exist.

Cardiovascular Disease (CVD), a term used to describe an umbrella of health conditions such as Coronary Heart Disease (CHD), Ischaemic Heart Disease (IHD), angina, heart failure, stroke, and Acute Myocardial Infarction (AMI), have been widely studied in relation to environmental noise. In regards to studies which have specifically assessed aircraft noise and cardiovascular outcomes, a number of studies have found small, but statistically significant effects, on a range of cardiovascular outcomes including AMI and CHD as well as risk factors including hypertensions and diabetes.

Mental health and well-being is defined by the WHO as a '*state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.*' In regards to studies relating to aircraft noise, a number of studies have found evidence to suggest aircraft noise can be linked to a number of mental health and well-being outcomes including anxiety and depressive disorders.

In addition, there is a reasonable body of scientific evidence indicating that both actual and perceived neighbourhood amenity plays an important role in physical and mental health.

There is an existing evidence base which suggests that **climate change** has a wide range of implications for human health, including increased mortality and morbidity from extreme weather events, infectious diseases (waterborne,

foodborne and vector-borne), diseases resulting from degraded air pollution and mental health. However, as climate change is multi-faceted, it is not possible for studies to attribute health outcomes to specific developments such as airports.

The chapter provides a detailed description of the current state of the environment, including population, deprivation, participation rates and unemployment, education and skills, occupational profile and income, health, local community facilities land uses and the Dublin Airport Community Fund. The latter provides support for sports and recreation, social inclusion and community development, health and well-being, culture and heritage, and environment and sustainability.

In assessing the **Air Quality effects on Amenity and Local Communities** the assessment refers to Chapter 10 (Air Quality) noting that the proposed RA would not result in any significant change to the local air quality environment (NO_2, PM_{10} and $PM_{2.5}$) or odour and therefore, there is little risk of any exceedance of the relevant environmental air quality thresholds applicable for the protection of human health (Section 7.8 of revised EIAR).

In assessing the **Air Noise and Vibration effects on Amenity and Local Communities** the assessment refers to Chapter 13 (Aircraft Noise and Vibration) noting that the proposed RA would result in increases in the number of residents that would experience significant adverse residual effects in all assessment years (Section 7.8 of revised EIAR).

The assessment finds that residential receptors close to flight paths to the west of the existing South Runway or close to flight paths from the Crosswind Runway are typically forecast to see reductions in noise level, whereas the opposite is true for receptors closer to flight paths to the west of North Runway. Similarly, using the overnight metric, the majority of the residual significant adverse effects are expected to be experienced within close proximity to the flight paths from the North Runway (Section 7.8.5).

In comparing the Proposed Scenario vs the Permitted Scenario (Table 7.16), in 2022 79 people would experience a *significant beneficial* effect based in terms of L_{den}, while 10 people would experience *significant adverse* effects. For L_{night} 151 people

would experience a *significant beneficial* effect, while 8,985 people would experience *significant adverse* effects.

In 2025 8 people would experience a *significant beneficial* effect based in terms of L_{den}, while 54 people would experience *significant adverse* effects. For L_{night} 86 people would experience a *significant beneficial* effect, while 10,560 people would experience *significant adverse* effects.

In 2035 no people would experience a *significant beneficial* effect based in terms of L_{den}, while 20 people would experience *significant adverse* effects. For L_{night} 12 people would experience a *significant beneficial* effect, while 4,284 people would experience *significant adverse* effects.

There are no significant residual air noise and vibration effects reported on schools, residential health care facilities or places of worship when comparing the Permitted and Proposed Scenarios.

In terms of cumulative night-time Ground, Road and Air noise levels for 2022 showed increases of between 0 dB to 5 dB was assessed at the representative locations (refer to Chapter 14 (Ground Noise and Vibration) of the revised EIAR), with the greatest at Ridgewood. For 2025 the increases were of between 0 dB to 4 dB again with the greatest at Ridgewood. For 2035 the increases were of between 0 dB to 3 dB with the greatest at Ridgewood. With the greatest increases at Ridgewood, the area most impacted by the proposed RA is north of the North Runway, however, areas to the west around St. Margaret's, and to the east around The Baskins are also impacted.

On the basis of the number of residents that are assessed to experience residual *significant adverse* impacts by noise, the post-mitigation effect on amenity and local communities from a population and human health perspective is assessed to be *permanent moderate adverse (significant)* for all assessment years.

In assessing the **Air Quality effects on Human Health and Well-being** the assessment refers to Chapter 10 (Air Quality) noting that the proposed RA would not result in any significant change to the local air quality environment (NO_2, PM_{10} and $PM_{2.5}$) or odour and therefore, there is little risk of any exceedance of the

relevant environmental air quality thresholds applicable for the protection of human health.

In assessing the **Air Noise and Vibration effects on Human Health and Well-being** the assessment refers to Chapter 13 (Aircraft Noise and Vibration) noting that the proposed RA would result in increases in the number of residents that would experience *significant adverse* residual effects in all assessment years. Table 7.24 shows that excluding consented developments in 2022 the increase in people **highly annoyed** from the Proposed Scenario is +2,110 (+4.2%). In 2025 the increase is +15,164 (+23.6%) and in 2035 the increase is +6,256 people (+18.7%). Including consented developments, in 2022 the increase from the Proposed Scenario is +2,281 (+3.9%). In 2025 the increase is 15,741 (+21.5%), and in 2035 is +6,729 people (+16.3%).

In considering the number of people **highly sleep disturbed** (at night) and excluding consented developments, Table 7.25 shows that in 2022 the increase from the Proposed Scenario is +399 (+2.1%). In 2025 there is a decrease of -3,711 (-16.5%), however, in 2035 the increase is +7,337 people (+64.5%). Including consented developments, in 2022 the increase from the Proposed Scenario is +156 (+0.7%). In 2025 there is a decrease of -4,077 (-14.7%), and in 2035 the increase is +8,016 people (+51.5%).

In considering **Ground Noise and Vibration effects on Human Health and Well-being** the assessment refers to Chapter 14 (Ground Noise and Vibration) noting that the proposed RA would result in small increases in the number of residents (+ 10 to +30) that would be **highly annoyed** from the Proposed Scenario in all assessment years. Small additional numbers of people (+17 to +21) would also be **highly sleep disturbed** (at night) in all assessment years.

It is noted that there '*are a number of people assessed as experiencing residual significant adverse effects within Chapter 13: Aircraft Noise and Vibration.*' (Section 7.8.31). Considering all contributions, and while numbers decrease over time (i.e. to 2035), it is considered that air noise and cumulative noise effects arising from the Proposed RA is assessed as **negative (-)** as a determinant of human health and well-being for all assessment years (2022, 2025 and 2035).

In considering the impact of **Climate Change of Human Health and Well-being** the assessment notes that no significant effects on climate change have been identified in Chapter 11 (Climate and Carbon) and that for all assessment years, the impact of the proposed RA on climate change as a determinant of human health and well-being is assessed to be neutral. However, the assessment in Chapter 11 did indicate that the Proposed Scenario would result in a 5.51% increases in Green House Gas (GHG) in 2022 and a 3.28% increase in 2025. In 2035 the Proposed Scenario results in a 1.79% reduction in GHG. The -1.79% GHG reduction by 2035 is broadly consistent with the overall (national) target of net zero by 2050.

In conclusion, the assessment of population identifies *moderate adverse (significant)* residual effects on Amenity and Local Communities in all assessment years, and a *negative* residual effect on Human Health and Well-being in all assessment years from noise and vibration. While measures to reduce the effect of noise on the population is included in the application for the proposed RA, no additional mitigation measures are proposed. This review considers that given the potential effect of noise as a determinant for health and the increase in numbers impacted, including increases in those 'highly annoyed' and 'highly sleep disturbed', the potential impact on human health and well-being from noise is *significant adverse*.

6.4.3 Chapter 8

Chapter 8 (Major Accidents and Disasters) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) associated with the risks to third parties arising from aircraft crash. Given the nature of the proposed RA, the primary focus is on the risk of air accident. While noting that essentially there is no material difference between the Permitted and Proposed Scenarios, in respect of risk arising from bird strike, wake vortex (disturbance that forms behind an aircraft as it passes through the air) and fuel dumping these are also addressed in this chapter of the revised EIAR.

It is noted that aircraft crashes are very rare events but those that do occur take place predominantly during take-off and landing, along flight paths and close to the ends of runways. The risks to members of the public that live and work in these areas can therefore be expected to be elevated above the background to which

people in general are exposed. Therefore, there are concerns for any airport development or operational change proposal.

The chapter sets out the relevant National Legislation, National Planning Policy, Local Planning Policy, together with other relevant policy, standards and guidance. Three key parameters are used in modelling the assessment of risk associated with an aircraft crash: 1) the likelihood or probability of a crash; 2) the probability of impact at any specific location; and 3) the severity of the consequences of an impact on the ground. The scale of the risk is determined by the fleet mix of operating aircraft and the annual number of movements of each aircraft type.

Risks may be characterised as:

Individual Risk: the annual probability of fatality for a hypothetical resident present at any given location relative to the runway threshold and flight path; and

Societal Risk: the annual probability of accidents causing any given number of fatalities in any particular area of development, taking account of the nature of the development, in particular the density of occupancy.

Individual risk is the measure employed for the definition of Public Safety Zones. PSZ policy is a land use planning tool for controlling new residential and other development in the vicinity of existing airport infrastructure.

Risk contours for three different levels of risk are typically employed in the assessment of individual risk, as follows:

- A risk of 1 in 10,000 per annum, considered to be a relatively high risk and at the limit of what is considered to be an acceptable level of risk exposure for members of the public;
- A risk of 1 in 100,000 per annum, considered to be a risk that is of potential concern but one that can nevertheless be considered acceptable in return for the economic benefits derived from the activity giving rise to the risk, provided that the risk is managed to be as low as reasonably practicable; and
- A risk of 1 in a million per annum, considered to be a low risk that is a generally acceptable level of exposure for members of the public.

Assessment criteria for individual risk significance is provided in Table 8.1 of the revised EIAR, and ranges from Negligible Effects (< 1 in 1,000,000 per annum), through to Profound Effects (> 1 in 10,000 per annum, with high numbers of people exposed). Negligible risk levels are below regulatory concern.

Societal risk estimates typically take account of the wide range of potential outcomes of an accident from the more common scenarios involving relatively few fatalities to less common ones involving larger numbers of fatalities. Societal risk is characterised quantitatively in terms of the estimated frequency of accidents, *f(N)*, leading to a defined number of fatalities, *N*.

The assessment is based on a Societal Risk Index (SRI) where a criteria of 2000 is 'broadly acceptable' up to 500,000, which is 'significant' in the wording of Health and Safety Authority (HSA) guidance in assessment of COMAH establishments. Based on this assessment criteria for societal risk is provided in Table 8.2 of the revised EIAR and ranges from Negligible (SRI < 2000), to Slight (SRI > 2000 to < 32000), to Moderate (SRI > 32,000 to < 500,000) and Significant (SRI > 500,000).

The HSA guidance states that the SRI is used to provide a rapid initial assessment of societal risk and that a full consideration of the FN curve is probably a more robust approach. Both have been considered in the assessment presented in the revised EIAR and it is found that they result in comparable conclusions in relation to significance of the impacts associated with the Permitted and Proposed Scenarios.

The assessment also addresses risk of accidents affecting other environmental receptors, including risk of impacts on water, biodiversity, material assets and cultural heritage. No other environmental receptors could experience a significant effect from aircraft crashes.

The **individual risk** assessments for the Permitted Scenario in 2022, 2025 and 2035 are presented on Figures 8.2, 8.3 and 8.4 and in Tables 8.3, 8.4 and 8.5 (for 1 in 100,000 and 1,000,000 per annum) respectively. The 1 in 10,000 per annum risk contours for the three runways are contained within the airport boundary. Eighty-five percent of the 1 in 100,000 per annum contours are also contained within the airport boundary.

The individual risk assessments for the Proposed Scenario in 2022, 2025 and 2035 are presented on Figures 8.6, 8.7 and 8.8 and in Tables 8.7, 8.8 and 8.9 (for 1 in 100,000 and 1,000,000 per annum) respectively. The 1 in 10,000 per annum risk contours for the three runways are contained within the airport boundary.

In 2022 there is a slight increase in the length of the 1 in 100,000 per annum risk contour for the Proposed Scenario, however, there are no changes to the residential (0) or commercial properties (1no.) are effected. Likewise there is also a slight increase in the 1,000,000 per annum risk contour for the Proposed Scenario, but there are no changes to the number of residential (93no.) or commercial properties (12no.) within the contours.

In 2025 there is a slight increase in the length of the 1 in 100,000 per annum risk contour for the Proposed Scenario, however, there are no changes to the residential (0) or commercial properties (1no.) are effected. There is also a slight increase in the 1,000,000 per annum risk contour for the Proposed Scenario but no changes to commercial properties (19no.) within the contours. The number of residential properties within the risk contour increases by four (105 to 109no.) properties located at the west end of South Runway.

In 2035 there is a slight increase in the length of the 1 in 100,000 per annum risk contour for the Proposed Scenario, which brings in one commercial property (i.e. from 0 to 1). No residential properties are effected. There is also a slight increase in the 1,000,000 per annum risk contour for the Proposed Scenario but no changes to residential properties (89no.) or commercial properties (19no.) within the contours.

The individual risk assessment demonstrates that there is no material change between the Permitted and Proposed Scenarios with individual risks for both scenarios falling around the border between 'slight' and 'moderate' effects for all assessment years.

The **societal risk** assessments for the Permitted Scenario in 2022, 2025 and 2035 are presented on Figure 8.5 and in Table 8.6, with a between scenario comparison presented in Table 8.11. The risk assessments for the Proposed Scenario in 2022, 2025 and 2035 are presented on Figure 8.9 and in Table 8.10. The risk estimates for 2022 and 2025 are slightly larger (+3.6% and +3.1% respectively), compared with those for the Permitted Scenarios, in accordance with the increased movement numbers for these scenarios. However, the risk estimates for the 2035 Permitted and Proposed Scenarios are broad similar (+0.2%) as the annual movements and average crash rates for Permitted and Proposed Scenarios in 2035 are the same. It is noted that when set against current level of risk, the assessment in Table 8.11,

indicates an anticipated increase of approximately 32% in the Permitted Scenario between 2022 and 2035. In this context a 0.2% increase in level of risk between the Permitted and Proposed Scenarios in 2035 is not material.

The assessment sets out no change in the order of magnitude in estimated risks on **ecological designated sites** between the Permitted and Proposed Scenarios for all assessment years. Likewise it is considered that there is no material change in the level of risk for **other environmental factors** between the Permitted and Proposed Scenarios and therefore any impact would be imperceptible.

In terms of potential for **bird strike** it is noted that daa has implemented an effective bird hazard management programme in accordance with international good practice and under the wildlife and habitat management section of the Aerodrome Manual. An extended bird hazard management programme formed part of the North Runway Planning Permission and this programme will be implemented when North Runway becomes operational. This programme will be able to effectively address bird hazard management for operations under the proposed Relevant Action. Therefore the proposed Relevant Action would have no significant implications for future bird strike management requirements and bird strike risk.

The issue of **wake vortex** was considered in some detail prior to the North Runway Planning Permission being granted. In granting permission for North Runway, the wake vortex impacts of the number of operations that the permission provides for was considered acceptable by the consenting authorities including An Bord Pleanála. As the Proposed Scenario would not involve an increase in operations (i.e. 32mppa stays in place), and would not materially change the wake vortex impacts associated with the Permitted Scenario.

Emergency fuel dumping does not occur in normal operation and is a rare occurrence that would typically be undertaken in a controlled manner. Where possible, it is expected that fuel would normally be jettisoned under these circumstances at a sufficient altitude (5,000 to 6,000 feet above ground level) to allow for vaporisation and dispersion before reaching ground level.

The Dublin Airport database which dates back to 2014 identified only one relevant fuel dumping event that occurred on 30 September 2018 when the landing gear of an aircraft failed to retract after departure from South Runway (Runway 28L). Fuel was jettisoned in a controlled manner over the Irish Sea approximately 35 to 40 km to the northeast of the airport (aviation area known as KERAV) at a sufficient altitude to allow for vaporisation and dispersion in that area for 5 minutes to reduce landing weight without any identified significant adverse impacts. It is also noted that modern aircraft design and manufacturing allows aircraft to land at maximum take-off weight and / or aircraft circle to consume fuel to achieve the required landing weight.

Based on historical data and increasing changes in modern aircraft design, it can be concluded that impacts associated with emergency fuel dumping and possible in-flight accidental losses of fuel or oil are considered to be not significant.

In **overall terms** the Proposed Scenario does not seek to increase passenger numbers beyond the existing cap and therefore, would not result in a major change to overall aircraft movements or associated risk factors. The scale of the risk associated with the Proposed Scenario can be put in perspective by a comparison between the risk contours for those operations and the contours identified for the parallel runway configuration in the DoEHLG study (Public Safety Zones, 2003), shown in Figure 8-1 of revised EIAR, which informed the North Runway planning permission. In the context of Public Safety Zone policy, the DoEHLG study contours are considered to be acceptable. The predicted contours for the Proposed Scenario are considerably smaller overall than those identified in the DoEHLG study and therefore may also be considered acceptable.

6.4.4 Chapter 9

Chapter 9 (Traffic and Transport) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on traffic and transport. The assessment makes use of the existing Local Area Model (LAM) which has been developed for the road network in the vicinity of the airport. As the model provides forecasts of future year traffic conditions it was used to assess the potential impact of the proposed Relevant Action in the assessment years.

A number of assumptions / conversions are included in the assessment:

- Airport capacity returns to 32mppa in 2027 in the Permitted Scenario and 2025 in the Proposed Scenario (reflecting more favourable operating conditions);
- Passengers enter the Airport on the landside two hours before their flight is due to depart;
- Passengers exit the Airport on the landside one hour after the flight arrives; and
- Passenger mode share (based on Mobility Management Update 2019) at the airport is:
    - Car Private 35%
    - Car Rental 6%
    - Bus 35%
    - Taxi 22%
    - Other 2%

For 2022 the assessment for the Proposed Scenario indicates substantially higher vehicle trip generation in the periods 00:00 hrs - 02:00 hrs and 04:00 hrs - 05:00 hrs and higher trip generation between 02:00 hrs – 03:00 hrs; 06:00 hrs – 08:00 hrs; 10:00 hrs – 13:00 hrs; 14:00 hrs – 19:00 hrs and 21:00 hrs – 22:00 hrs (i.e. 15 of 24 hour bands).

The assessment for the Proposed Scenario indicates substantially lower vehicle trip generation in the periods 03:00 hrs - 04:00 hrs and 23:00 hrs - 24:00 hrs and lower trip generation between 05:00 hrs – 06:00 hrs; 08:00 hrs – 10:00 hrs; 13:00 hrs – 14:00 hrs; 20:00 hrs – 21:00 hrs and 22:00 hrs – 23:00 hrs (i.e. 9 of 24 hour bands).

Given the existing low traffic numbers using the airport road network at night, the assessment indicates an over 80% increase in trips generated between 00:00 hrs – 02:00 hrs and 04:00 hrs – 05:00 hrs (with the increase being 280% between 01:00 hrs and 02:00 hrs). The assessment shows an almost 60% reduction in trips generated between 03:00 hrs – 04:00 hrs. Almost 20% or more increases also arise between 02:00 hrs – 03:00 hrs; 12:00 hrs – 13:00 hrs; 14:00 hrs – 15:00 hrs; 16:00 hrs – 17:00 hrs; 18:00 hrs – 19:00 hrs and 21:00 hrs – 22:00 hrs (i.e. 6 hour bands).

For 2025 the assessment for the Proposed Scenario indicates substantially higher vehicle trip generation in the periods 00:00 hrs - 02:00 hrs and 04:00 hrs - 05:00 hrs and higher trip generation between 02:00 hrs – 03:00 hrs; 06:00 hrs – 08:00 hrs; 10:00 hrs – 17:00 hrs; 18:00 hrs – 20:00 hrs and 21:00 hrs – 22:00 hrs (i.e. 16 of 24 hour bands).

The assessment for the Proposed Scenario indicates substantially lower vehicle trip generation in the period 23:00 hrs - 24:00 hrs and lower trip generation between

03:00 hrs – 04:00 hrs; 05:00 hrs – 06:00 hrs; 08:00 hrs – 10:00 hrs; 17:00 hrs – 18:00 hrs; 20:00 hrs – 21:00 hrs and 22:00 hrs – 23:00 hrs (i.e. 8 of 24 hour bands).

Given the existing low traffic numbers using the airport road network at night, the assessment indicates an over 60% increase in trips generated between 00:00 hrs – 02:00 hrs and 04:00 hrs – 05:00 hrs (with the increase of over 320% between 01:00 hrs and 02:00 hrs). Almost 20% or more increases also arise between 07:00 hrs – 08:00 hrs; and 21:00 hrs – 22:00 hrs (i.e. 2 hour bands), with an almost 20% or more reduction between 03:00 hrs – 04:00 hrs; 05:00 hrs – 06:00 hrs; 20:00 hrs – 21:00 hrs and 23:00 hrs – 24:00 hrs (i.e. 4 hour bands).

For 2035 the assessment for the Proposed Scenario indicates substantially higher vehicle trip generation in the periods 00:00 hrs - 02:00 hrs and 04:00 hrs - 05:00 hrs and higher trip generation between 02:00 hrs – 03:00 hrs; 07:00 hrs – 08:00 hrs; 11:00 hrs – 17:00 hrs; 19:00 hrs – 20:00 hrs and 21:00 hrs – 22:00 hrs (i.e. 13 of 24 hour bands).

The assessment for the Proposed Scenario indicates substantially lower vehicle trip generation in the period 23:00 hrs - 24:00 hrs and lower trip generation between 03:00 hrs – 04:00 hrs; 05:00 hrs – 07:00 hrs; 08:00 hrs – 11:00 hrs; 17:00 hrs – 18:00 hrs; 20:00 hrs – 21:00 hrs and 22:00 hrs – 23:00 hrs (i.e. 8 of 24 hour bands).

There is no appreciable change between 18:00 hrs – 19:00 hrs (i.e. 1 hour band).

Given the existing low traffic numbers using the airport road network at night, the assessment indicates an over 60% increase in trips generated between 00:00 hrs – 02:00 hrs and 04:00 hrs – 05:00 hrs (with the increase of over 320% between 01:00 hrs and 02:00 hrs). Almost 20% or more increases also arises between 07:00 hrs – 08:00 hrs (i.e. 1 hour band), with an almost 20% or more reduction between 03:00 hrs – 04:00 hrs; 05:00 hrs – 06:00 hrs; 08:00 hrs – 09:00 hrs; 20:00 hrs – 21:00 hrs and 23:00 hrs – 24:00 hrs (i.e. 5 hour bands).

Tables 9.5, 9.6 and 9.7 of the revised EIAR show actual changes in numbers of two-way traffic on individual sections of roads within the LAM. In almost all instances, where there is an increase or a reduction on one section it applies to all sections for all assessment years. Tables 9.8, 9.9 and 9.10 show the percentage change on individual sections with wide variance. For example, for the highest increase hour

(between 01:00 hrs and 02:00 hrs) in 2025 the percentage change ranges from 16% increase on the Naul Road to 813% on the M1 Airport Link. There is over 400% increase on the R132 South, the Old Airport Road and the R108. In terms of reductions for the greatest decrease hour (i.e. 23:00 hrs – 24:00 hrs) the range is significantly less from -5% and -26%. The assessment shows that in general there is no significant change or there is a reduction in traffic during morning and evening peaks. However, 5 – 6% increases are indicated between 07:00 hrs – 08:00 hrs for the M1 Airport Link, the Old Airport Road and the R108.

For 2035 the percentage change ranges from 16% increase on the Naul Road to 1103% on the M1 Airport Link. There is over 150% increase on the R132 South, the Old Airport Road and the R108. In terms of reductions for the greatest decrease hour (i.e. 23:00 hrs – 24:00 hrs) the range remains between -5% and -26%. Again the assessment shows that in general there is no significant change or there is a reduction in traffic during morning and evening peaks. However, a 5% increase is indicated between 07:00 hrs – 08:00 hrs for the M1 Airport Link.

Tables 9.11, 9.12 and 9.13 sets out the Proposed Scenario Traffic Flows versus the Maximum hourly Permitted Scenario traffic flows in any hour, for 2022, 2025 and 2035. The assessment indicates that while a >5% increase arises for different road links at different times, this increase only exceeds the maximum hourly permitted on the link in one instance – the R108 between 01:00 hrs – 02:00 hrs (i.e. 1047no. vs 1029no.) – thereby generating a new maximum hourly figure (i.e. 1047no.). Further assessment of the R108 road link highlights its capacity at 1,800 vehicles / hour and as such, the new hourly maximum (1047no.) represents a 0.57 volume to capacity (V/C) ratio, which is well below the 0.8 V/C indicative of a road approaching capacity (refer to Table 9.14 of revised EIAR).

Therefore, the assessment indicates that:

- Broken down by hour, the proposed Relevant Action would result in an increase in two-way traffic flows on some adjacent road links, and a decrease on others. For the majority of the 24-hour period, increases in traffic flows caused by the proposed Relevant Action were estimated to be less than 5%, comparing the Proposed Scenario and Permitted Scenario, and are therefore considered to have a slight effect;
- Significant increases in traffic (i.e. greater than 5%) would occur on a number of road links in the vicinity of the Airport. The most notable increases (c. 60% to 320%) are in the early night (00:00 hrs – 02:00 hrs) and during the late night / early morning period (04:00 hrs to 05:00 hrs), when

background traffic flows are low and, as such, more susceptible to large percentage increases as a result of additional trip generation. None of the increases greater than 5% occurred during the background road traffic peak periods (08:00 hrs – 09:00 hrs and 17:00 hrs – 18:00 hrs);

- In 2022, the Proposed Scenario traffic flow on the R108 during the period 01:00 hrs – 02:00 hrs was shown to exceed the maximum hourly Permitted Scenario traffic flow at any time on the same road link. Further capacity analysis indicated that the maximum V/C ratio on the R108 (i.e. 0.57) was the same for both the proposed and Permitted Scenarios, with both estimated to operate well within practical capacity.
- For all other instances where the estimated 2022, 2025 and 2035 increase was greater than 5%, the Proposed Scenario traffic flows were less than the overall maximum hourly Permitted Scenario traffic flows on those road links during any other time period.

Therefore, the proposed Relevant Action is considered to have a slight effect on traffic and transport and would not result in any significant impact on the surrounding road network.

6.4.5 Chapter 10

Chapter 10 (Air Quality) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on air quality. The assessment focuses on the impact and effect of changes to long-term and short-term concentrations of nitrogen dioxide (NO_2) and Particulate Matter (PM_{10} and $PM_{2.5}$), considered the pollutants of greatest concern from aircraft emissions, at nearby human health sensitive receptors. Consideration is also given to the potential for odour nuisance associated with aircraft operations. The assessment takes account of the proposed RA and potential effects on traffic movements on the public road network.

Baseline information has been incorporated within an ADMS (Advanced Dispersion Modelling System) airport dispersion model, along with road traffic emissions data, to predict future changes to air quality between the Permitted and Proposed Scenarios for the assessment years 2022, 2025 and 2035. The assessment for NO_2 also included for conversion of aircraft and road-NO_x to NO_2.

The Air Quality Standard Regulations 2011 implement the European Union Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe (CAFE) and designate the EPA as the competent authority responsible for assessing ambient air quality in the territory of the State. The standards also establish Limit Values for concentrations of certain pollutants in ambient air, to prevent or reduce harmful effects on human health and the environment. The air quality limit values and

permitted exceedances for NO_2 PM_{10} and $PM_{2.5}$ are set out in Table 10.1 of the revised EIAR.

Results from daa pollutant monitoring show that background concentrations of pollutants are well below respective air quality standards and there are no exceedances of air quality standards in the study area. EPA monitoring in the wider Dublin City region does not directly cover the airport – with Swords being the closest location. EPA results for Swords are also shown to be compliance with the standards. The only non-compliant results were for NO_2 in 2019 on Pearse Street and in 2018 and 2019 on St. John's Road, which are not related to airport operations.

Projections for future background concentrations for NO_2 PM_{10} and $PM_{2.5}$ into 2022, 2025 and 2035 are also shown to be well within air quality standard values (refer to Table 10.10 of revised EIAR).

The assessment of all predicted NO_2 concentrations for the Permitted and Proposed Scenarios are well below the limited values (40µg/m^3). The highest concentration for the Proposed Scenario is 27.3µg/m^3 at Creston Avenue (location R5) in 2022.

Annual mean concentrations of NO_2 increase at the worse-case location (R32 – north of airport) in the Proposed Scenario in all assessment years. The greatest increase in 2022 is by 1µg/m^3, which at c.3% of the air quality standard in an area where the total concentrations in the Proposed Scenario is less than 75% of the air quality standard equates to a negligible impact.

The assessment of PM_{10} and $PM_{2.5}$ show no exceedances of the annual mean limit values at any receptor location across the model area, and the values are all well below the annual mean limit values. All 52 receptors are predicted to experience PM_{10} concentrations falling within the annual mean range of 10 to 20µg/m^3, where the limit value is 40µg/m^3. For $PM_{2.5}$ all 52 receptors lie within the annual mean range of 5 to 10µg/m^3, where the limit value is 25µg/m^3.

In terms of potential odour nuisance (from aircraft fuels) no receptor is shown as anticipated to experience levels >1 OUe/m^3 (where 1 odour unit equivalent / m^3 (OUe/m^3) is considered the minimum point of potential odour detection). The

highest predicted odour levels with the Predicted Scenario is 0.7 OUe/m^3 in 2022, which is not considered significant.

The proposed RA is unlikely to generate any significant effects on air quality, with limited impacts predicted and total pollutant concentrations remaining well below the air quality standard value.

6.4.6 Chapter 11

Chapter 11 (Climate and Carbon) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on climate and carbon.

The section on climate change adaption (11.3.2) notes there are no physical changes to the runway to evaluate the resilience of, and there will be no additional climate change impacts during operation beyond those already faced during permitted airport operations. Given that there are no physical changes to the North Runway as a result of the proposed Relevant Action, and no obvious means by which climate change would affect the Relevant Action, such an assessment is not necessary or appropriate.

The Green House Gas (GHG) assessment considers all GHG emissions from fuel used by aircraft during the Landings and Take-off (LTO) (up to 3,000 feet) and Climb, Cruise, and Descent (CCD) phases (collectively referred to as Air Traffic Movements (ATMs) and GHG emissions from surface access passenger journeys under the Permitted and Proposed Scenarios for each of the assessment years.

Only the ATMs (LTO) and CCD phases) of departure flights are considered within the assessment. To avoid double counting of aviation emissions between airports, it is assumed that the emissions associated with the arriving flights would be accounted for within the carbon accounts of the airports of origin.

The assessment is based on permitted and proposed ATM projections for each assessment year, refer to Table 11.1 of revised EIAR, which indicates an additional 10,000 ATMs between the Permitted and Proposed Scenarios in 2022; 9,000 in 2025; and no difference in 2035.

The global climate has been identified as the receptor for the purposes of the GHG emissions assessment.

The most recent emissions inventory for Ireland (2019), as reported in Ireland's National Inventory Report 2021 amounts to 59,778 kilotonnes of carbon dioxide emissions ($ktCO_2e$).

The assessment indicates that the Proposed Scenario results in an increase over the Permitted Scenario for LTO and for Surface Access Passenger Journey emissions in all assessment years. In 2022 the increase is between 6 and 7%, falling to 3.5 to 4.5% in 2025 and less than 1% in 2035. For CCD emissions (the greatest contributor to GHG) the increase is 5.26% in 2022 and 3.06% in 2025, however, the Proposed Scenario gives rise to a 2.28% reduction in CCD emissions in 2035.

Taking account of total GHG emissions, the increase from the Permitted to the Proposed Scenario is 5.51% (117,421 $ktCO_2e$) in 2022 and 3.28% (101,774 $ktCO_2e$) in 2025. The Proposed Scenario results in a 1.79% (56,991 $ktCO_2e$) decrease in overall GHG emissions in 2035.

While there are the same number of flights are in each scenario, in 2035 it is expected that some of the short-haul night flights that have been modelled as part of the Proposed Scenario are lost under the Permitted Scenario and are expected to be replaced with long-haul day flights, therefore leading to increased CCD emissions under the Permitted Scenario. This is set out in the Mott McDonald *Impact of the Operating Restrictions Report* which concludes that the Permitted Scenario has a disproportionate impact on the base carriers with mostly short haul flights being affected. The increase in short-haul flights and decrease in long-haul flights under the Proposed Scenario for 2035 (relative to the Permitted Scenario) results in fewer CCD emissions associated with these flights.

Any additional GHG emissions arising as a result of the proposed Relevant Action are considered to have a direct, negative effect on the receptor. The effects of GHG emissions are also considered to be long term, irreversible and have the potential to be cumulative with other projects.

The assessment indicates that by 2035 and presumably for some time before the Proposed Scenario would result in a reduction in Green House Gas emissions, however, this is based on an envisaged increase in short-haul flight and decrease in long-haul flights, which may or may not be realised.

Table 11.7 of the revised EIAR presents the GHG emissions from the Proposed RA against Future National Emissions Inventory Scenarios and indicates that the emissions as a percentage of national emissions inventory falls from 0.191% to 0.166% to 0.103% from 2022 to 2025 to 2035 respectively.

Table 11.8 of the revised EIAR presents the GHG emissions from the Proposed RA against Future Transport Emissions Inventory Scenarios and indicates that the emissions as a percentage of transport emissions inventory falls from 0.91% to 0.81% to 0.52% from 2022 to 2025 to 2035 respectively.

As GHG emissions associated with the proposed RA do not represent ≥1% of the projected National Emissions Inventory for any of the assessment years, GHG emissions are considered to be not significant.

In terms of mitigation the applicant's draft Carbon Reduction Strategy1 sets out how GHG emissions will be reduced on an airport-wide basis. Within the draft Carbon Reduction Strategy the Applicant has stated they will '*work closely with our airlines participating in CORSIA* [Carbon Offsetting and Reduction Scheme for International Aviation] *to help stabilise their net carbon emissions by developing infrastructure which supports efficient operations of aircraft on the ground and encourages the introduction of new generation, fuel efficient aircraft.*' (Section 11.6.6 of EIAR)

Further measures outlined in the Applicant's Draft Carbon Reduction Strategy include better surface transport access to the airport, facilitation of improved transport links to and from the airport, and for all traffic generating applications at the airport to demonstrate measures to maximise non-motorised and public transport use while minimising the use of the private car (Section 11.6.7 of EIAR).

The proposed RA will result in increased GHG emissions which are considered to be minor and not significant.

6.4.7 Chapter 12

Chapter 12 (Water) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on the water environment.

Dublin Airport is located within four Water Framework Directive (WFD) sub-basins:

- The Mayne River Sub-basin, which includes the Cuckoo Stream. This sub-basin covers the majority of the airport campus, including the terminal, the west and central aprons, and the majority of the South Runway. The Cuckoo Stream flows into the Mayne River, which then flows into the Baldoyle Estuary Special Area of Conservation (SAC) and Special Protection Area (SPA). EPA monitoring of water quality indicates that the Mayne River is of *Poor* status (moderately polluted) and *At Risk* under the WFD with historical Q values between 3 and 2-3. daa water quality monitoring of the Cuckoo Stream records Q values of 1-2 *Bad* (seriously polluted) status. The Mayne River and tributaries including the Cuckoo Stream are currently non-salmonid (Inland Fisheries Ireland).
- The Sluice sub-basin, which includes the Forrest Little Stream and Kealy's Stream. This sub-basin extends across the majority of the North Runway, the North Apron, and other airport areas. Forrest Little Stream and Kealy's Stream flow into the Sluice River, which then flows into the Baldoyle SAC and SPA; These water courses are not monitored by the EPA. daa water quality monitoring of Forrest Little / Sluice downstream of the airport records Q values of 3 *Moderate* status, and this has improved from 1-2 status in over time. The WFD status of the Forrest Little / Sluice is unclassified. The Sluice system is salmonid (Inland Fisheries Ireland).
- The Ward River sub-basin. The Ward River natural catchment extends across the western part of the North Runway, however, does not receive drainage from the North Runway. The Ward River flows into the Malahide Estuary SAC and SPA. Two tributaries of the Ward are located to the north and west of the North Runway; these are named St. Margaret's Stream and Barberstown Stream and flow in westerly and northerly directions, respectively. The tributaries confluence approximately 1.1 km north-west of the North Runway, prior to flowing into the Ward River immediately upstream of Toberburr Road. EPA monitoring of water quality indicates that the Ward River has a Q value of 3-4 *Moderate* status and is *At Risk* under the WFD. The Ward River is salmonid (Inland Fisheries Ireland). As the Ward catchment is considered a salmonid water course, all drainage from paved areas of the North Runway is designed to be directed to the Forrest Little / Sluice. Only runoff from grassed areas of the North Runway discharges to the Ward.
- The Santry River sub-basin, which extends across the western part of the South Runway and airport car parking. The Santry River flows into Dublin Bay behind Bull Island – part of North Dublin Bay SAC and North Bull Island SPA. EPA monitoring of water quality indicates that the Ward River has a Q value of 2-3 *Poor* status and is *At Risk* under the WFD. The Santry River is currently non-salmonid due to a number of impassable features (Inland Fisheries Ireland).

While not noted in the chapter, for completeness, the Santry River flows into Dublin Bay which is designated as both a SAC and SPA. Potential impacts on European sites is assessed in the separate Screening for AA report submitted with the application.

The bedrock beneath the airport and surrounding area is classified as a *Locally Important Aquifer*, beneath the majority of the site, and a *Poor Aquifer* towards the south-east of the airport, corresponding to parts of the Tober Colleen Formation.

Owing to the thin overburden cover, the bedrock aquifer is classified as being *Highly to Extremely* vulnerable to pollution. There are no public supply or group scheme Source Protection Areas mapped within a 2 km radius of the Dublin Airport.

The majority of the airport is within the Dublin groundwater body (IE_EA_G_008), which is classified as *Good* under the WFD with a status of *Not at Risk*. The north-west of the airport is within the Swords groundwater body (IE_EA_G_011), which is classified as *Good* under the WFD with a risk status of Not at Risk.

The eastern end of the North Runway site is within the Industrial Facility (P0480-02) groundwater body (IE_EA_G_086), which is classified as *Poor* and *At Risk*. Industrial Emissions Licence P0480-02 was granted to Dublin Aerospace Limited, which operates out of Hangar 5 at Dublin Airport. It is understood from publicly available monitoring data that chlorinated solvents are detected in groundwater beneath the Dublin Aerospace Limited site.

OPW mapping indicates small areas of potential flooding in an area north of the North Runway (grass areas), an area along Corballis Road South (roads, carparks and non-aviation infrastructure), and a number of areas south of the South Runway (grass and carpark areas).

Dublin Airport has an existing stormwater drainage network that flows to various open drains and streams to the local watercourses (discussed above). The stormwater network provides attenuation to most hard-standing and developed areas, with the exception of the Mayne and Santry sub-catchments, which are currently attenuated. These areas drain part of the main runway which impacts on the rate and quality of the surface water discharge to the receiving watercourse. The applicant is currently investigating options to provide attenuation to these areas (daa, 2020).

Pollution retention facilities are provided for the runways, the aprons and the taxiways, to collect de-icing chemicals. Surface water runoff from other hardstanding areas, including roads and car-parking, do not have any formal treatment prior to downstream discharge. The paved area drainage network is

sealed to protect groundwater from contamination. Operational discharges at the airport are controlled under an extant trade effluent licence.

De-icing of planes and taxi/runways occurs at Dublin Airport several times a year during cold weather. As a result, associated runoff would be polluted and the Biological Oxygen Demand (BOD) of the polluted water would spike and exceed the permissible BOD discharge limit. Therefore, the stormwater drainage network pollution system is designed to control pavement de-icer (potassium acetate) run-off.

De-icing of the runway, stands and taxiways generally occurs when temperatures are predicted to drop to 0°C or lower. Departing aircraft are generally de-iced when the air temperature reaches 3°C or lower. All aircraft are de-iced while stationary on their stands prior to departure / pushback.

The majority of the airfield, within the Cuckoo Stream sub-catchment, is treated via a flow diversion chamber and pollution control tank that has been constructed at the Cuckoo stream adjacent to the underground attenuation facility. As water is conveyed along the channel, BOD monitors take readings and when the levels exceed the allowable threshold (as agreed with FCC and IFI), flow is diverted out of the channel and into a pollution tank. The polluted water is then pumped from the site via the Irish Water (IW) sewer to the wastewater treatment facility at Ringsend.

Once construction of North Runway is completed, run-off from paved areas will be continuously monitored via online Total Organic Carbon (TOC) analysers to measure TOC values which shall be calibrated to equivalent BOD and Chemical Oxygen Demand (COD) limits to measure compliance with permitted discharge levels. If monitoring shows that the surface water is contaminated, it will be automatically diverted to the polluted water holding tank (PWHT), from there pumped to the IW sewer. If the pollution is below the threshold it will be diverted into the clean water attenuation tank from where it will be discharged at green-field rates.

Potable water is supplied to Dublin Airport via existing potable water pipes from the Dublin Airport Reservoir. The existing public foul sewer system and pumping

house serving Dublin Airport is located on the R132 road and discharges into the North Fringe Sewer and ultimately to Ringsend wastewater treatment facility.

Given their poor water quality status the sensitivity of the Cuckoo Stream & Mayne River sub-basin, the Forrest Little / Sluice sub-basin, the Santry sub-basin and the groundwater aquifers is considered to be Low. The moderate water quality and salmonid status of the Ward sub-basin and the European site designation for the Malahide Estuary, Baldoyle Estuary and Dublin Bay results in a High sensitivity for these receptors.

The proposed Relevant Action would not alter the current or consented operational drainage systems and de-icing operations at the airport. There would be no amendments to surface water drainage operation relative to that already consented in the Permitted Scenario. The assessment states that there would be no change between the Permitted and Proposed Scenarios in any assessment year in terms of biological loading to sewer; hydraulic loading; area of infrastructure; estimated extent of de-icer use; IW agreement with regard to flows; IFI agreement with regard to streams.

While more aircraft would take off during the 23:00 hrs to 07:00 hrs in the Proposed Scenario, the number of aircraft taking off between 07:00 hrs to 08:00 hrs would be reduced. Given the relatively low number of de-icing events, requirements would likely be similar in both timeframes and therefore in both scenarios, and it is not expected that additional de-icer (estimated at 3000 – 5000 litres in each scenario) would be required.

The extent of de-icing undertaken is independent of the time of day or the usage of the runway. The volume of de-icing fluid used and, therefore, the volume of potentially contaminated surface water arising, is directly related to the area of the runways / taxiways being de-iced and subsequent rainfall and is independent of the number of aircraft using the runway system. The design criteria for the pollution control system on the runway are not affected by the runway usage patterns (timing, frequency or aircraft types). Therefore, there would be no changes to either de-icing procedures / volumes or the runway drainage system as a result of the proposed RA.

There would also be no change in stormwater run-off volumes, attenuation discharge rates, attenuation volume requirements, or discharge locations as a result of the proposed RA.

It is concluded that the proposed RA would have no effect on surface water features in any of the assessment years since the drainage system would prevent any increase in pollution.

The drainage system consented as part of the North Runway permission is sealed to prevent impacts to groundwater and incorporates pollution control measures to prevent any increase in pollution to either surface water or infiltration to groundwater. As with surface water, the increase in the number of night-time flights (and passengers in Assessment Years 2022 and 2025) in the Proposed Scenario would have no effect on groundwater features, since the number or the time of day at which flights operate has little bearing on the volume of pollution in runoff from the runway system.

Therefore, the proposed RA would have no effect on groundwater features in any of the assessment years since the consented drainage system would prevent any increase in pollution.

The increase in the number of passengers in the Proposed Scenario, compared with the Permitted Scenario, would likely lead to a proportional increase in the volume of water usage and wastewater generation in the assessment years 2022 and 2025. However, the total volumes in the Proposed Scenario would be comparable to those experienced in 2018 when the airport was operating at close to the consented capacity, without causing significant effects on the supply of potable water or discharge and treatment of wastewater.

The difference between the Permitted and Proposed Scenarios is forecast to narrow to nothing by 2027 and there is no difference between the two scenarios in the 2035 Assessment Year. The impact on water usage and wastewater generation is therefore assessed as imperceptible and temporary.

It is considered that the proposed Relevant Action will have not any significant effects on water or the water environment.

6.4.8 Chapter 13

Chapter 13 (Aircraft Noise and Vibration) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on the noise environment.

Forecast numbers of passengers and air traffic movements (ATMs) in the Permitted and Proposed Scenarios for each assessment year is presented in Table 13.1 of the revised EIAR. In terms of 'annual' and 'typical busy day night-time' ATMs this projects:

Assessment Year and Scenarios	ATMs Annual	ATMs Typical Busy Day Night-time (23:00 hrs to 07:00 hrs)
2022 Permitted	166,000	57
2022 Proposed	176,000	82
2025 Permitted	227,000	60
2025 Proposed	236,000	98
2035 Permitted	236,000	60
2035 Proposed	236,000	98

Air noise and vibration specifically encompasses noise and vibration associated with flights into and out of Dublin Airport while airborne or using the runway system, including any start of roll or reverse thrust activities but excluding noise and vibration related to any other aircraft ground operations such as taxiing and when aircraft are on stands, which are covered in Chapter 14 (Ground Noise and Vibration).

Chapter 14 also includes an assessment of the road traffic noise effects and a cumulative assessment of all noise sources, refer also to section 2.5.12 of this review.

The assessment of air noise relies heavily on the modelling of noise levels, which has been carried out using the industry standard noise modelling software produced by the Federal Aviation Administration (FAA), the Aviation Environmental Design Tool (AEDT). This model evaluates aircraft noise in the vicinity of airports based on aircraft type, operation, route, and flight profile, as well as taking into account local terrain and meteorological information.

European noise metrics have been adopted as the primary assessment metrics:

- L_{den}, which takes into account the annual activity throughout the 24-hour period, with a 5 dB penalty applied to noise in the evening (19:00-23:00) period and a 10 dB penalty applied to noise in the night (23:00-07:00) period. The key effect linked with this metric is annoyance;
- L_{night}, which takes into account the annual activity during the night (23:00-07:00) period. The key effect linked with this metric is sleep disturbance.

These two metrics are required to be used in order to comply with the requirements of EU Regulation 598/2014, and are the metrics used for strategic noise mapping as required under the Environmental Noise Regulations (S.I. No. 549/2018) in Ireland.

Potential receptors of high sensitivity for the assessment are: dwellings, schools, residential healthcare facilities, and places of worship. The assessment of dwellings includes an allowance for those which are consented but not yet constructed, including land zoned for residential development. Receptors with a lower sensitivity to noise, such as offices and hotels, have not been considered as part of this assessment.

For the purposes of the assessment the following impact criteria are used for residential receptors (refer to Tables 13.2 and 13.3 of revised EIAR):

Scale (Rating)	Absolute Annual dB L_{den}	Absolute Annual dB L_{night}	Relative Change in dB(A)
Negligible	<45	<40	0 - 0.9
Very Low	45 - 49.9	40 - 44.9	1 - 1.9
Low	50 - 54.9	45 - 49.9	2 - 2.9
Medium	55 - 64.9	50 - 54.9	3 - 5.9
High	65 - 69.9	55 - 59.9	6 - 8.9
Very High	≥70	≥60	≥9

The magnitude of effect is derived by comparing the Absolute noise level rating against the change in the noise level rating as per Table 13.4 of the revised EIAR. The criteria for non-residential receptors is given in Table 13.5 of the revised EIAR.

Low frequency noise from airborne aircraft has the potential to cause perceptible vibration levels within dwellings. For this reason, the most appropriate noise metric to assess the likelihood of these effects is the maximum C-weighted noise level, denoted L_{Cmax}. C-weighting gives more weight to low frequency noise rather than

the more commonly used A-weighting, which approximates the average human hearing response to different frequencies of noise. The effects of vibration (e.g. window rattling), which can vary depending on the specific details of the building, is likely to be audible where aircraft produces a maximum noise level above 97 dB L_{Cmax}.

The noise level of 97 dB L_{Cmax} occurring on average at least once per 24-hour day over the year has been taken as a threshold for potential significance of vibration effects due to airborne aircraft events. Whether a significant effect occurs between the Permitted and Proposed Scenarios depends on the number of dwellings affected and the frequency of the events.

The other potential effect from airborne aircraft vibration is vortex (circulating currents of air that are shed from the aircraft wings) damage to buildings. There have been no reported cases of wake vortex damage at Dublin and the issue was considered in the original application for the North Runway, on which the EIA was based on an assumption of 348,358 ATM / annum, which is significantly higher than the number now projected for 2025 and thereafter (i.e. 236,000). No further assessment of wake vortex is presented.

To provide further information on changes in the noise environment for specific communities, predictions have also been undertaken of the noise levels at 18 representative locations around the airport as shown on Plate 13.4 of the revised EIAR. While the locations are representative of surrounding areas, it is noted that they do not include the nearest residential properties to the runways and therefore, higher levels of noise than those predicted for the representative locations can be expected at other properties. These are best considered with reference to noise contour mapping and to the tables outlining the Areas, Numbers of Dwellings and Population within the L_{den} (e.g. Tables 13.11, 13.12, 13.13) , and L_{night} (e.g. Tables 13.15, 13.16, 13.17) contours for the assessment years.

It is noted that as the air noise assessment relates to external noise levels, the following assessment does take account of any benefit from the residential sound insulation scheme, which reduces the internal noise level. Internal noise level may be more representative of effects, in particular for night-time noise (which is the

main focus of the RA application) when most people would be expected to be indoors.

For **2022 the** L_{den} (i.e. Tables 13.33 – 13.37) assessment indicates that the majority (i.e. 13 of 18) of the representative locations would experience a 1 or 2 dB(A) increase in noise level between the Permitted and Proposed Scenarios. Three locations would experience 1 or 2dB(A) decrease (i.e. Mayeston Hall, Kilshane Cross and Mount Garrett) and two have no change (i.e. Dunboyne and Ongar). Comparing Table 13.20 (2022 Permitted) with Table 13.34 (2022 Proposed), it can been determined that the area of ground within each noise contour level increases by c. 10% (e.g. for 55 dB L_{den} the area increases from 67.6km^2 to 76.9km^2), with a corresponding increase in the number of dwellings and population within each contour (e.g. for 55 dB L_{den} dwellings (excluding consented) increase from 4,492 to 6,061, and the population increases from 12,850 to 17,270). This increase is reflected in across all noise contour levels. The number of people '*highly annoyed* increases from 50,603 to 52,713. Table 13.36 indicates that 87 people would experience a *significant beneficial* effect from the Proposed Scenario, while 80 would experience a *significant adverse* effect. The Proposed Scenario also increases the number of schools above the threshold for medium absolute effects from 5 to 7.

For **2022 the** L_{night} (i.e. Tables 13.38 – 13.42) assessment indicates that the majority (i.e. 14 of 18) of the representative locations would experience a 1 to 9 dB(A) increase in noise level between the Permitted and Proposed Scenarios, with a 4dB(A) or greater increase experienced at Tyrellstown, Ridgewood and Swords. Four locations would experience 1 or 2dB(A) decrease. Comparing Table 13.26 (2022 Permitted) with Table 13.39 (2022 Proposed), it can been determined that the area of ground within each noise contour level increases by over 40% (e.g. for 45 dB L_{night} the area increases from 75.1km^2 to 116.3km^2), with a corresponding increase in the number of dwellings and population within each contour (e.g. for 45 dB L_{den} dwellings (excluding consented) increase from 9,421 to 11,526, and the population increases from 27,964 to 33,603). This increase is reflected in across all noise contour levels. The number of people '*highly sleep disturbed* increases from 18,789 to 19,188. Table 13.41 indicates that while 212 people would experience a *significant beneficial* effect from the Proposed Scenario, 9,207 would experience a

significant adverse effect, with 75 of those being *profound* (i.e. a *high* or *very high* absolute noise level rating and a *high* or *very high* change in noise level rating – refer to Table 13.4 of revised EIAR).

For 2025 L_{den} (i.e. Tables 13.43 – 13.47) assessment, which indicates that the majority (i.e. 13 of 18) of the representative locations would experience a 1 to 5 dB(A) increase in noise level between the Permitted and Proposed Scenarios. No locations would experience a decrease while five have no change. Comparing Table 13.21 (2025 Permitted) with Table 13.44 (2025 Proposed) the area of ground within each noise contour level increases with a corresponding increase in the number of dwellings and population within each contour. This increase is reflected in across all noise contour levels. The number of people '*highly annoyed*' increases from 64,241 to 79,405. Table 13.46 indicates that no people would experience a *significant beneficial* effect from the Proposed Scenario, while 67 would experience a *significant adverse* effect. The Proposed Scenario also increases the number of schools above the threshold for medium absolute effects from 7 to 8.

For **2025 the L_{night}** (i.e. Tables 13.48 – 13.52) assessment indicates that the majority (i.e. 15 of 18) of the representative locations would experience a 1 to 8 dB(A) increase in noise level between the Permitted and Proposed Scenarios, with a 4dB(A) or greater increase experienced at Tyrellstown, Ridgewood, Swords, Malahide Castle, Portmarnock North and Malahide South. No locations would experience decrease. Comparing Table 13.27 (2025 Permitted) with Table 13.49 (2025 Proposed) the area of ground within each noise contour level increases with a corresponding increase in the number of dwellings and population within each contour. This increase is reflected in across all noise contour levels. The number of people '*highly sleep disturbed*' increases from 22,599 to 37,080. Table 13.51 indicates that no people would experience a *significant beneficial* effect from the Proposed Scenario, while 11,494 would experience a *significant adverse* effect, with 40 of those being *profound*.

For 2035 L_{den} (i.e. Tables 13.53 – 13.57) assessment, which indicates that the majority (i.e. 12 of 18) of the representative locations would experience a 1 to 3 dB(A) increase in noise level between the Permitted and Proposed Scenarios. No locations would experience a decrease while six have no change. Comparing Table 13.22 (2035 Permitted) with Table 13.54 (2035 Proposed) the area of ground within

each noise contour level increases with a corresponding increase in the number of dwellings and population within each contour. This increase is reflected in across all noise contour levels. The number of people '*highly annoyed* increases from 33,437 to 39,693. Table 13.56 indicates that no people would experience a *significant beneficial* effect from the Proposed Scenario, while 20 would experience a *significant adverse* effect. The Proposed Scenario also increases the number of schools above the threshold for medium absolute effects from 5 to 6 and the number of places of worship would increase from 4 to 5.

For **2035 the L_{night}** (i.e. Tables 13.58 – 13.62) assessment indicates that the majority (i.e. 15 of 18) of the representative locations would experience a 1 to 8 dB(A) increase in noise level between the Permitted and Proposed Scenarios, with a 4dB(A) or greater increase experienced at Tyrellstown, Ridgewood, Swords, Malahide Castle, Portmarnock North and Malahide South. No locations would experience decrease. Comparing Table 13.28 (2035 Permitted) with Table 13.59 (2035 Proposed) the area of ground within each noise contour level increases with a corresponding increase in the number of dwellings and population within each contour. This increase is reflected in across all noise contour levels. The number of people '*highly sleep disturbed* increases from 11,374 to 18,711. Table 13.51 indicates that no people would experience a *significant beneficial* effect from the Proposed Scenario, while 4,706 would experience a *significant adverse* effect, with 40 of those being *profound*.

In terms of vibration 2 dwellings are expected to exceed the threshold for potential vibration effects in the 2022 Permitted Scenario only.

The proposed RA includes for further noise insulation measures additional to those already in place. Specifically these include for a:

- A night-time sound insulation scheme.
- A detailed framework for monitoring the noise performance of Dublin Airport.

The proposed scheme would provide a grant of €20,000 to fund sound insulation improvement works, for dwellings meeting either of the following criteria:

- Exposed to night-time noise levels of at least 55 dB L_{night} once the North Runway is operational, or

- Exposed to a 'very significant' rating arising from forecast noise levels of at least 50 dB L_{night} in the first full year when the Relevant Action comes into operation, with a change of at least +9 dB when compared with the current permitted operation in the same equivalent year. For the purpose of this assessment a comparison of the 2022 Permitted and Proposed Scenarios has been used to estimate which dwellings would be eligible.

Eligibility within the 55 dB L_{night} contour would be reviewed every 2 years.

A Noise Monitoring Framework would report annually on: the effects of aircraft noise; exposure to aircraft noise; Aircraft Source Noise Measures; Operational Measures; Noise Insulation Scheme Reporting; and Community Noise Reporting.

In considering residual effects, Table 13.64 compares the Proposed vs. the Permitted Scenarios. In 2022, 79 people would experience *significant beneficial* residual effects while 10 people would experience *significant adverse* residual effects based in the L_{den} assessment. Considering the L_{night} assessment 151 people would experience *significant beneficial* residual effects while 8,985 people would experience *significant adverse* residual effects.

In 2025, 8 people would experience *significant beneficial* residual effects while 54 people would experience *significant adverse* residual effects based in the L_{den} assessment. Considering the L_{night} assessment 86 people would experience *significant beneficial* residual effects while 10,560 people would experience *significant adverse* residual effects.

In 2035, no people would experience *significant beneficial* residual effects while 20 people would experience *significant adverse* residual effects based in the L_{den} assessment. Considering the L_{night} assessment 12 people would experience *significant beneficial* residual effects while 4,284 people would experience *significant adverse* residual effects.

Table 13.65 presents the number of people exposed to residual noise levels assessed as high or very high.

Considering the L_{den} and L_{night} results the number of people exposed to a high residual noise level is under 100 for the Permitted Scenario and the Proposed Scenario in all Assessment Years. The number of people exposed to a high L_{den} noise level in the Proposed Scenarios is the same or higher than the Permitted Scenarios for the same Assessment Year.

The number of people exposed to a high L_{night} noise level in the Proposed Scenarios is higher than the Permitted Scenarios for the same Assessment Year in 2022 and 2035, but in 2025 is lower than in the Permitted Scenario. This is due to the implementation of the proposed sound insulation scheme.

In summary looking at the predicted number of people **highly annoyed**, in the 2022 Proposed Scenario this is 4% higher than the 2022 Permitted Scenario. In the 2025 Proposed Scenario it is predicted to be 24% higher than the 2025 Permitted Scenario and in the 2035 Proposed Scenario it is predicted to be 19% higher than the 2035 Permitted Scenario.

Looking at the predicted number of people **highly sleep disturbed**, in the 2022 Proposed Scenario this is 2% higher than the 2022 Permitted Scenario. In both the 2025 and 2035 Proposed Scenarios it is predicted to be 65% higher than the 2025 and 2035 Permitted Scenarios.

Looking at the number of people with significant residual effects after the proposed sound insulation measures, under the L_{den} metric there is a forecast net significant beneficial effect when comparing the 2022 Proposed Scenario with the 2022 Permitted Scenario, and a forecast net significant adverse effect when doing a similar comparison for 2025 or 2035. In all three years the number of people experiencing significant residual effects (beneficial or adverse) is under 100.

Looking at the number of people with significant residual effects with the proposed sound insulation measures implemented, under the L_{night} metric there is a forecast net significant adverse effect for 8,985 people when comparing the 2022 Proposed Scenario with the 2022 Permitted Scenario. This increases to 10,560 people in 2025 and reduces to c.4,284 people in 2035. However, for the majority of these people the resulting noise levels are low or very low.

No significant effects were found for non-residential receptors as a result of the proposed Relevant Action.

In conclusion, the proposed RA would result in increases in the number of residents that would experience significant adverse residual effects as a result of air noise.

6.4.9 Chapter 14

Chapter 14 (Ground Noise and Vibration) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on ground noise and vibration.

The focus of this chapter is aircraft ground noise. This excludes any start of roll or reverse thrust activities, which are considered to be part of the air noise and covered in Chapter 13 (Aircraft Noise and Vibration). The key aircraft ground operations are aircraft taxiing and aircraft using Auxiliary Power Units (APUs) when on stands.

Aircraft ground operations do not typically produce any significant vibration effects at sensitive receptors outside of the airport site, and the assessment of vibration due to aircraft ground operations does not need further assessment.

An assessment of road traffic noise effects and a cumulative assessment of all noise impacts from the proposed RA are also included in the chapter.

For **2022** L_{den} the assessments indicate that **Aircraft Ground Noise** between the Permitted and Proposed Scenario would increase by between +1 and +2 dB L_{den} (Table 14.36) with a corresponding increase from 12,310 to 20,872 in the number of people (excluding consented developments) experiencing an increase in noise levels (50 dB and above), however, no people are assessed as having a significant effect – either beneficial or adverse (Table 14.38). The situation is comparatively similar when inclusive of consented developments.

For **2022** L_{night} the assessments indicate that **Aircraft Ground Noise** between the Permitted and Proposed Scenario would increase by between +2 and +5 dB L_{den} (Table 14.39) with a corresponding increase from 139 to 2,580 in the number of people experiencing an increase on noise levels (50 dB and above). The situation is comparatively similar when inclusive of consented developments. Thirty-five people are assessed as having a significant adverse effect (Table 14.41).

For **2025** L_{den} the assessments indicate that **Aircraft Ground Noise** between the Permitted and Proposed Scenario would increase by up to +1 dB L_{den} (Table 14.42) with a corresponding increase from 21,381 to 27,624 in the number of people (excluding consented developments) experiencing an increase on noise levels (50

dB and above), however, no people are assessed as having a significant effect – either beneficial or adverse (Table 14.44). The situation is comparatively similar when inclusive of consented developments.

For **2025 L_{night}** the assessments indicate that **Aircraft Ground Noise** between the Permitted and Proposed Scenario would increase by between +2 and +4 dB L_{den} (Table 14.45) with a corresponding increase from 156 to 6,274 in the number of people experiencing an increase on noise levels (50 dB and above). The situation is comparatively similar when inclusive of consented developments. Sixty-two people are assessed as having a significant adverse effect (Table 14.47).

For **2035 L_{den}** the assessments indicate that **Aircraft Ground Noise** between the Permitted and Proposed Scenario would increase by up to +1 dB L_{den} (Table 14.48) with a corresponding increase from 21,880 to 27,624 in the number of people (excluding consented developments) experiencing an increase on noise levels (50 dB and above), however, no people are assessed as having a significant effect – either beneficial or adverse (Table 14.50). The situation is comparatively similar when inclusive of consented developments.

For **2035 L_{night}** the assessments indicate that **Aircraft Ground Noise** between the Permitted and Proposed Scenario would increase by between +2 and +4 dB L_{den} (Table 14.51) with a corresponding increase from 156 to 6,274 in the number of people experiencing an increase on noise levels. The situation is comparatively similar when inclusive of consented developments. Sixty-two people are assessed as having a significant adverse effect (Table 14.53).

Similar results are presented for the assessment of the Permitted and Proposed Scenarios with **Apron 5H Scenario** in all assessment years.

Results are presented for the assessment of the impact of **road traffic noise** in the Permitted and Proposed Scenarios show only marginal changes.

In 2022 L_{den} the number of people highly annoyed by **road traffic noise** increases in the Proposed Scenario by 30 from 7,497 in the Permitted Scenario (Table 14.74). In 2022 L_{night} the number of people highly sleep disturbed increases in the Proposed Scenario by 19 from 2,263 in the Permitted Scenario (Table 14.77).

In 2025 L_{den} the number of people highly annoyed by **road traffic noise** increases in the Proposed Scenario by 27 from 8,580 in the Permitted Scenario (Table 14.80). In 2025 L_{night} the number of people highly sleep disturbed by **road traffic noise** increases in the Proposed Scenario by 21 from 2,598 in the Permitted Scenario (Table 14.83).

In 2035 L_{den} the number of people highly annoyed by **road traffic noise** increases in the Proposed Scenario by 10 from 8,825 in the Permitted Scenario (Table 14.86). In 2035 L_{night} the number of people highly sleep disturbed by **road traffic noise** increases in the Proposed Scenario by 17 from 2,698 in the Permitted Scenario (Table 14.89).

In considering total **cumulative L_{den} Ground Noise and Air Noise levels** (refer to Tables 14.99 – 14.101) the assessment indicates that in 2022 the Proposed Scenario would result in a +2 dB increase in noise levels at Ridgewood (north of airport) and a +1 dB increase at St. Margaret's (west of airport). In 2025 this would reduce to a +1 dB increase in noise levels at Ridgewood and St. Margaret's. In 2035 this would reduce to a +1 dB increase in noise levels at Ridgewood only.

In considering total **cumulative L_{night} Ground Noise and Air Noise levels** (refer to Tables 14.102 – 14.104) the assessment indicates that in 2022 the Proposed Scenario would result in a +5 dB increase in noise levels at Ridgewood; a +2 dB increase at St. Margaret's and a +1 dB increase at The Baskins (east of airport). In 2025 this would reduce to a +4 dB increase in noise levels at Ridgewood; and a +1 dB increase at St. Margaret's and The Baskins. In 2035 this would reduce further to a +3 dB increase in noise levels at Ridgewood; with a continued +1 dB increase at St. Margaret's and The Baskins.

In summary, due to the limited changes in the predicted noise levels no significant effects either beneficial or adverse are predicted to arise from road traffic noise with the Relevant Action with or without the Apron 5H development.

Likewise, no significant L_{den} effects are forecast in the assessment years for aircraft ground noise with or without the Apron 5H development.

In 2022 for L_{night} no people are exposed to significant adverse effects from aircraft ground noise under the Proposed Scenario and 3 people are exposed with the

Apron 5H development. In 2025 and 2035 under both scenarios 9 people are exposed to significant adverse effects.

The overall effect of ground noise arising from the proposed RA is not significant.

6.4.10 Chapter 15

Chapter 15 (Terrestrial Biodiversity) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on terrestrial ecology features.

A separate Screening for Appropriate Assessment (AA) has been prepared and submitted with the planning application (refer to separate review of Screening for AA (BSM, 2022)).

The Malahide Estuary SPA and SAC is located approximately 4 km north-east of North Runway. The SPA and SAC encompass the estuary, saltmarsh habitats and shallow subtidal areas at the mouth of the estuary. Following construction of a railway viaduct in the 19th century, the estuary became lagoonal in character and is only partly tidal.

The landcover within the airport is industrial / commercial, comprising the terminals, hangers, piers, runaways, and support facilities. Habitat in the surrounding area is largely improved grassland, arable and horticultural land and other agricultural land, dissected by species-poor hedgerows and ditches, as well as large areas of urban and sun-urban development.

The assessment takes account of the Wildlife Management Plan, which is implemented under licence at Dublin Airport. This prevents flocks of hazardous birds including gulls, waders, geese and swans and/or other animals (e.g. Irish hare) from occurring in areas within which they could present a risk to aircraft.

There is no new pathway for pollution impacts as a result of the proposed RA and no increase in pollution loading is anticipated (refer to Chapter 12 (Water) for a discussion of the operation of drainage) and there is no change to the 32mppa cap and therefore the number of passengers using the airport has no bearing on terrestrial biodiversity in the study area.

The proposed RA would result in an increase in the number of night-time flights from 2022 over the Permitted Scenario. However, any fauna species which occur in the vicinity of the airport campus and its runways would necessarily be habituated to the presence and operation of aircraft and historic airport activities. This applies in both the Permitted and Proposed Scenarios.

There are very few examples of important species occurring within the airport campus, and these are actively discouraged from occurring in the vicinity of the airport and thus have negligible value. Night-time flights are a feature of existing airport activity, and while restricted, the Permitted Scenario allows for night-time flights. The Proposed Scenario would result in a negligible change in terms of potential magnitude of disturbance and therefore, the proposed RA would have an imperceptible impact from noise disturbance.

The existing Wildlife Management Plan has a zero tolerance approach to flocks of hazardous species in order to avoid potential collisions and for operational safety. The Plan actively prevents flocks of birds and other fauna species from occurring in the vicinity of the airport and given the established nature of airport activity no impacts on terrestrial biodiversity are envisaged from the proposed RA.

6.4.11 Chapter 16

Chapter 16 (Aquatic Biodiversity) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on aquatic ecology features.

As previously noted a separate Screening for Appropriate Assessment (AA) has been prepared and submitted with the planning application (refer to separate review of Screening for AA (BSM, 2022)).

There is no new pathway for pollution impacts as a result of the proposed RA and no increase in pollution loading is anticipated (see Chapter 12 (Water) for a discussion of the operation of drainage). However, the increased rate of return to 32mppa and the change in operation of flights / runways could result in pollution of watercourses from additional flights.

Dublin Airport lies within the catchment of different watercourses. The main surface water catchment within the airport complex is the 'Cuckoo Stream', whose catchment is located in the vicinity of the terminal, south of the North Runway. The

Cuckoo Stream is within the Mayne sub-catchment and flows from west-north-west to east-south-east, discharging to Baldoyle Bay (a SPA and SAC), approximately 7km east-south-east from the airport.

The North Runway is located across two surface water catchments: the 'Forrest Little / Sluice' and, to a lesser extent, the 'Ward'. The majority of the North Runway is within the Forrest Little / Sluice sub-basin of the Mayne sub-catchment, which also includes the Cuckoo Stream to the south. The 'Forrest Little / Sluice' flows from west-north-west to east-south-east, discharging to the north of Baldoyle Bay (a SPA and SAC).

The western end of the North Runway is within the 'Ward' sub-basin, which is a sub-division of the Broadmeadow sub-catchment that discharges to Malahide Estuary (a SPA and SAC), approximately 4km northeast of the airport. However, drainage from the North Runway is diverted from the hardstanding towards the 'Forrest Little / Sluice' sub-catchment to prevent degradation of the Ward.

EPA monitoring of the Mayne sub-catchment downstream of the confluence of the Cuckoo stream classifies the water quality as Poor in 2019 under the Water Framework Directive (WFD). Biannual biological sampling by the daa reflects a similar status for the waterbodies, with Q values of 1-2 (Bad WFD status) for the Cuckoo Stream and 3 (Poor WFD status) for the Mayne.

Biannual biological sampling by the daa reports Q values of 3 (Poor WFD status) for the Forrest Little / Sluice. The nearest downstream EPA surface water quality monitoring point within the Ward sub-basin, is the bridge north of Killeek, located 1.8 km north of the airport. At this point the surface water quality is classified as Moderate WFD status with an EPA Q value of 3-4 in 2020. The Ward is considered a salmonid river by Inland Fisheries Ireland (IFI).

The assessment considers that the proposed RA would not result in any significant effects to the water environment and would have no significant effects on the aquatic environment in any of the assessment years.

6.4.12 Chapter 17

Chapter 17 (Landscape and Visual) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on the landscape and visual environment.

The assessment notes the presence of highly sensitive landscapes of high or very high value within 4km of the airport. A portion of the historic landscape character area of Swords also runs through the northern part of the airport lands. Objectives NH40 and NH42 of the development plan seek to protect the visual and historic landscape character of the county respectively.

The assessment notes that the overall number of flights, especially post 2027, would be similar between the Permitted and Proposed Scenarios, however, the Proposed Scenario would see more flights between 23:00 hrs and 07:00 hrs (night-time) and consequently less outside of this period. The assessment states there would be about 60% more flights in the Proposed Scenario than in the Permitted Scenario. However, the assessment does not distinguish between runway use (which is different in the Permitted and Proposed Scenarios), and given the differential noise characteristics, the actual number of night-time flights could differ noticeably in localised areas.

No appreciable change in lighting at the airport is envisaged between the Permitted and Proposed Scenarios and no significant impact is anticipated.

6.4.13 Chapter 18

Chapter 18 (Land and Soils) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on land and soils.

The Proposed Scenario would not result in any appreciable change in terms of land and soils and no significant impact is anticipated.

6.4.14 Chapter 19

Chapter 19 (Material Assets) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on material assets.

The assessment considers potential operational impacts on:

- increase in the use of gas and electricity by additional passengers;

- increased usage of water by additional passengers;
- increased generation of wastewater by additional passengers; and
- increase in waste generated by additional passengers.

The Proposed Scenario envisages a faster return to the 32mppa cap than in the Permitted Scenario and this would lead to proportionally increased use of gas, electricity and water and increased generation of wastewater and waste. However, the airport previously operated at its 32mppa and therefore, neither the Proposed nor Permitted Scenario are likely to exceed previous use / generation in relation to material assets.

The proposed Relevant Action would have no significant effects on material assets in any of the assessment years: 2022, 2025 or 2035.

6.4.15 Chapter 20

Chapter 20 (Cultural Heritage) reports the findings of an assessment of the effects of the proposed Relevant Action (proposed RA) on cultural heritage.

There are no National Monuments within the study area. The closest is HA2 Dunsoghly Castle (NM 230) which is located within a farmyard 1,460m west of the site. Dunsoghly Castle is a 15th century tower house consisting of four storeys with four large corner towers built with coursed limestone blocks with dressed stone quoins and a base batter. It is recorded as DU014-005001 on the Record of Monuments and Places.

Four sites on the Record of Monuments and Places (RMP) are located within the boundaries Dublin Airport with a further 3 are in close proximity outside the airport boundaries.

The sites within the grounds of Dublin Airport are:

- HA6 Corballis Castle (DU014-011). The original location of HA6 is under airport buildings southeast of Terminal 2.
- HA5 an enclosure (DU014- 008). The location of HA5 is under the runway.
- HA8 a house (DU014-040). The location of HA8 is under the runway.
- HA29 a ringfort (DU011-046). Partly demolished in 1822 and cleared in 1873 the site is now under the North Runway.

The sites outside of the airport are:

- HA27 a holy well (DU014-023). An unenclosed pool located behind Toberbunny Lodge close to the Cuckoo Stream. Now within golf course.
- HA26 a holy well (DU014-010). 'Lady Well' located in a field east of the R132 No longer flowing or venerated.
- HA25 a church (DU014-009001) is located in a graveyard (DU014-009-002). Located on rock outcrop which has been quarried. No upstanding remains.
- A further asset HA9 Boot Inn (DU014-090) is located to the immediate west of the airport at Pickardstown. It consists of a two-storey, four bay building dating to post 1700.
- A further enclosure (DU014-121) was uncovered south of the airport during archaeological fieldwork associated with the proposed Metro West rail scheme between 2008 – 2009.

Other assets recorded on the RMP within the study area generally represent site types already noted within Dublin Airport and immediately adjacent. Many of these assets have no visible upstanding remains but have been included on the Fingal County Council Record of Protected Structures.

There are four Protected Structures located within the airport boundary. HA14 is the Old Central Terminal Building which is also recorded on the National Inventory of Architectural Heritage (NIAH 11349006). HA16 is the Church of our Lady Queen of Heaven (RPS 864 & NIAH 11349001) located within the main airport complex to the north of Terminal 1. HA24 Castlemoate House (RPS 611) is a five bay, two-storey house without-offices and gates. HA27 is the former Cloghran Stud Farm (RPS 606).

Outside of the airport HA22 a thatched dwelling (RPS 604 & NIAH 11349003) located on the Swords Road south of Dublin Airport and HA20 Kilreesk Bridge (RPS 627 & NIAH 11342008) is located northwest of the airport boundary on the R122. There are a number of other features on the RPS in the surrounding area, including HA19 windmill (RPS 628) at Millhead; and HA18 St Margaret's RC Church (RPS 625).

Changes in passenger numbers in the airport within the 32mppa cap in either the Permitted or Proposed Scenario is highly unlikely to have a material effect on heritage receptors within the airport boundary, particularly as in both scenarios only a very small proportion of passengers ever interact with heritage receptors at the airport.

The impact of the increase in the number of night flights under the Proposed Scenario would have little if any effect on the setting of cultural heritage receptors. There would be no new flight paths in the Proposed Scenarios, so any potential setting impact would continue to affect the same receptors. In the Proposed

Scenario there would be more flights at night-time but less during the day, which arguably might have a lesser impact on the setting of cultural heritage receptors than the Permitted Scenario, but any beneficial effect would be imperceptible.

There would be no overflights of Dunsink Observatory in the Permitted or Proposed Scenario and therefore no impact. With regard to other sensitive cultural heritage receptors the overall setting effect was imperceptible.

6.4.16 Chapter 21

Chapter 21 (Interactions and Cumulative Effects) reports the findings of an assessment of the interaction of effects and cumulative effects arising from the proposed Relevant Action (proposed RA).

The principal interaction of effects associated with the proposed RA arises between Population and Human Health and Air Noise and Ground Noise as set out in Table 21.3 of the revised EIAR. The assessment notes that Chapter 14 (Ground Noise and Vibration) considered and incorporated the potential contribution from air noise and the effect that the proposed Relevant Action, in conjunction with Apron 5H, would have on the overall noise levels at sensitive receptors.

The assessment notes that at Ridgewood (GR01), considering the total noise, the increase due to the proposed Relevant Action is predicted to be +5 dB(A) in 2022 and reduces to +3 dB(A) in 2035. This represents a medium overall impact and would result in a moderate effect (not significant). However, we note that Ridgewood is located c.1km north of the North Runway and many properties are located significantly closer to the airport and these may experience a greater increase, albeit where the existing and / or Permitted baseline figure would also be greater than at Ridgewood.

In any case we note that the findings of the noise assessment has been incorporated into the assessment in Chapter (Population and Human Health) of the revised EIAR.

An assessment of the potential cumulative effects of relevant projects is set out in Table 21.4 of the revised EIAR with a long-list assessment presented in Appendix 21A. No significant cumulative effects are identified.

6.4.17 Chapter 22

Chapter 22 (Future Development Plans) sets out details of future plans for development at the airport.

The assessment includes consideration of a potential future Infrastructure Application, which envisages an increase in the 32mppa cap to 40mppa by 2030. The assessment is presented in Table 22.1 of the revised EIAR. Full details of any likely significant environmental effects would be presented in an EIAR to accompany any such application. However, it is noted that the plan would likely to have positive (e.g. airport operations, employment) and negative (loss of amenity, effects on water, biodiversity, increased traffic, noise, climate / carbon, effects and potentially on human health).

A proposal to change the existing 32mppa does not comprise part of the application for the proposed RA.

6.4.18 Chapter 23

Chapter 23 (Summary of Impacts and Mitigation) sets out a summary of the impacts, mitigation and residual impacts as a result of the proposed Relevant Action.

The information is provided in table form in Tables 23.1, 23.2 and 23.3 for each of the 2022, 2025 and 2035 assessment years. All impacts are classified as being *Not Significant* with the exception of a *Moderate Adverse (Significant)* assessment in all assessment years for impacts on Amenity and Local Communities under Population and Human Health (Chapter 7 of revised EIAR). A *Negative* assessment of effects is also assessed for Human Health in all assessment years.

6.5 Conclusion of Review of EIAR and Identification of likely Significant Effects of the Proposed Relevant Action

The EIAR and information submitted as part of the planning application is considered to be in accordance with Section 172 of the Planning and Development Act 2000, as amended.

The proposed Relevant Action application relates to night-time use of the runway system at Dublin Airport and involves the amendment of condition no. 3(d) and the replacement of condition no. 5 of the parent permission for the North Runway

(Runway 10L - 28R) at Dublin Airport, as well as proposing new noise mitigation measures.

The proposed RA seeks an operational change at Dublin Airport, to remove the numerical cap on the number of flights permitted between the hours of 23:00 and 07:00 daily, replacing it with an annual night-time noise quota, and to allow flights to take off from and / or land on the North Runway (Runway 10L 28R) for an additional two hours i.e. 23:00 to 00:00 and 6:00 to 07:00.

Therefore, the principal operational effects of the proposed RA would be to:

- Allow regularly scheduled flights to use the North Runway between 06:00hrs – 24:00hrs – (*i.e.* for two additional (night-time) hours);
- Replace the average 65 aircraft movements / night (averaged over the 92 modelling days) cap between 23:00hrs and 07:00hrs (night-time), with an Annual Noise Quota which applies to flights between 23:30hrs and 06:00hrs;
- Allow aircraft numbers / type and noise generation which are not subject to the Quota Count / Annual Noise Quota within the restricted night-time period (in Permitted Scenario) of 23:00hrs to 23:30hrs and 06:00hrs to 07:00hrs (*i.e.* within one-and-a-half hours of the normal eight hour night-time period).
- While not expressly stated, the use of the North Runway for flights between 23:30hrs and 24:00hrs would contribute to – and thereby be limited by – the Annual Noise Quota.
- Reduce the period of 'night-time' restriction (currently expressed in terms of an aircraft movements cap) that applies in the Permitted Scenario from eight hours (23:00hrs – 07:00hrs) to six-and-a-half hours (23:30hrs – 06:00hrs);
- Allow Dublin Airport not to be limited to 65 aircraft movements per 8-hour night-time period (i.e., 23:00hrs - 07:00hrs) averaged across the 92 day modelling period;
- Provide for a noise insulation scheme for dwellings, which for the first time would be based on night-time noise levels.

The review of the revised EIAR for the proposed RA, as set out above, has identified the following *potentially significant adverse and residual environmental impacts*:

Population and Human Health

On Amenity and Local Communities as a result of noise.
On Human Health and Well-being as a result of noise.

7 Assessment

Initial assessment of the Relevant Action application (RA) is set out in the initial planning report. Initial assessment concluded with a recommendation for Further Information (FI) to be sought from the applicant on 19th February 2021. The assessment of the Further Information received on 13th September 2021, is set out in sections 3,4, 5, 6 and 7.1 of this report.

7.1 Relevant Matters for assessment of the Relevant Action application.

- Response to FI requests on the RA
- Internal reports on the RA
- Statutory/prescribed consultee reports on the RA
- Third party submissions and observations to the RA
- Consistency of the RA as applied for with spatial policy and application of the Balanced Approach
-
-

7.1.1 Response to FI requests on the RA

The request for Further Information was divided into 3 sections relating to EIAR, AA Screening and accuracy and consistency in the information represented. Each request was responded to, an assessment of each response is set out in Section 5 of this report. The information received is considered to address deficiencies identified in the request for Further Information. Further detailed consideration of the EIA and AA screening of the proposed consent are set out in sections 6, 8 and 9 of this report.

7.1.2 Internal reports on the RA

Summary of issues raised in reports which are set out in detail in section 4.1

The EHO highlights the fact that the submitted EIAR states that the proposal will have an adverse effect on a large percentage of the population. The report also sets out divergences between the proposal and the levels of protection aspired to in the WHO 2018 guidelines which it considers should be given consideration in the mitigation of the impacts. The EHO report sets out concerns regarding the impact of Ground Noise Exposure.

It is acknowledged, as set out in the submitted EIAR that *the proposed Relevant Action would have an overall residual negative effect on human health and well-being.* The review of the revised EIAR for the proposed development carried out by Brady Shipman Martin, has identified potentially significant adverse and residual environmental impacts on human health and well-being as a result of noise, on amenity and local communities as a result of noise. In the review of the revised EIAR as set out in section 6.4.9 above it is outlined the overall effect of ground noise arising from the proposed RA is not significant.

Mitigation measures are proposed in the EIAR to address the identified negative effects and these have been given careful consideration in undertaking the EIA. Proposed mitigation measures include a noise insulation scheme.

Following receipt of the Further Information response including the revised EIAR as assessed by internal consultees, the planning authority received direction in the form of a Regulatory Decision from ANCA, in a process which included an SEA environmental report. The SEA process included consultation with Environmental Authorities as well as public consultation prior to finalisation of the SEA Statement and formal Adoption of the RD and NAO by ANCA by Chief Executive Order. The SEA statement states the following:

> *The SEA of the NAO and RD concluded that there would be no significant adverse environmental effects as a result of implementing the preferred alternatives.*

The Regulatory Decision was drafted in accordance with the Aircraft Noise (Dublin Airport) Regulation Act 2019 at the core of which is the application of the Balanced Approach. The Regulatory Decision followed detailed analysis, modelling, assessment and consultation to quantify negative impacts. Taking the identified impacts into account the Aircraft Noise Competent Authority (ANCA) determined the application of the Balanced Approach in the form of the RD.

7.1.3 Statutory/prescribed consultee reports on the RA

Summary of issues raised are set out in detail in section 4.2.

The HSE Environmental Health report states the opinion that *The World Health Organisation's Environmental Noise Guidelines of 45dB Lden and 40 dB Lnight should have been used for ground noise assessments.*

To protect against adverse health effects from aircraft noise it is stated that r*educing aircraft noise levels to below 45 dB Lden, and for night noise exposure to below 40 dB Lnight is required. It is also stated that those significantly impacted have opportunity of mitigation.*

It is acknowledged, as set out in the submitted EIAR that *the proposed Relevant Action would have an overall residual negative effect on human health and well-being*. The review of the revised EIAR for the proposed development carried out by Brady Shipman Martin, has identified potentially significant adverse and residual environmental impacts on human health and well-being as a result of noise, on amenity and local communities as a result of noise. In the review of the revised EIAR as set out in Section 6.4.9 above it is outlined the overall effect of ground noise arising from the proposed RA is not significant.

Mitigation measures are proposed in the EIAR to address the identified negative effects and these have been given careful consideration in undertaking the EIA. Mitigation measures include a noise insulation scheme.

An Taisce state the *EIAR has not assessed the impact of non CO2 emissions from planes.* In addition it is stated *nighttime flights have a greater climate impact than flights during the day and this must also be addressed.*

Section 11.3.14 of the EIAR sets out a consideration of non-CO2 emissions and sets out the accounting provisions for the 7 Kyoto Protocol GHGs. Section 11.3.15 makes the case as to why other Non CO2 GHGs are not addressed including their absence from EU and international policy.

In relation to the impact of non C02 emissions, the SEA of the NAO and the RD states the following:

> *Various studies have each determined that airborne emissions from aircraft, in particular NO2 and particulates, become negligible, in terms of changes in ground-level air quality and the effect of this on*

human health, once aircraft are more than approximately 350-650 ft (100-200m) above the ground on departure, and when greater than approximately 160-350 ft (50-100m) on arrival. This means that pollutants will have dispersed to such an extent that they will have only a negligible effect on human health anywhere outside of a radius of 2km from the Airport boundary which is, conservatively, the point at which these altitudes are reached. Additionally, effects can only occur where populations are overflown and therefore when they occur on defined flight paths. Within a 2km radius of the Airport boundary, and situated along flight paths (including those that will be in operation to serve the second runway) lie the settlements of St Margaret's, Kishane Cross, Broughan and Baskin Lane...

..Overall, the likelihood of compliance with the air quality legislation as a result of the implementation of the NAO and RD is considered high. Beyond 2km from the Airport, where most residents are located, no impacts are likely to be felt with regards to air quality. For residents of settlements located directly under the flightpath within 2km of the Airport, air quality may deteriorate due to the ~10% increase in passenger numbers and associated ATMs under the assessment case – particularly if aircraft take a steeper ascent – but this is unlikely to be significant to the extent that air quality legislation is breached. Consideration will however, need to be paid to this during any detailed environmental assessment work undertaken to inform future growth plans at the Airport.

In addition, the SEA of the NAO and the RD states the following in relation to climate forcing:

uncertainties around climate forcing in the scientific community mean it is not yet included in guidance for carbon calculations provided by the UK Committee on Climate Change or the International Civil Aviation Organization (ICAO), and as such has not been expressly factored into this assessment.

Following receipt of the Further Information response including the revised EIAR as assessed by the internal consultees, the planning authority received direction in the form of a Regulatory Decision from ANCA. in a process which included an SEA environmental report. The SEA process included consultation with Environmental Authorities as well as public consultation prior to finalisation of the SEA Statement and formal Adoption of the RD and NAO by ANCA by Chief Executive Order. The SEA of the NAO and RD concluded *that there would be no significant adverse environmental effects as a result of implementing the preferred alternative.*

Meath County Council request *that the monitoring of night time noise is measurable, frequently monitored and adhered to. It is stated the need for greater consultation from both the DAA and the ANCA on matters that have potential to impact residential amenity within County Meath is emphasised.*

MCC also ask that FCC ensure that the proposed application adequately demonstrates all reasonable measures to reduce significant adverse effects on the residential amenity with respect to sleep disruption and disturbance to ensure that any noise increase remains within the acceptable level thereby ensuring the residential amenity of the existing population.

MCC also request that adequate measures are implemented to reduce significant adverse effects on the residential amenity.

South Dublin County Council express concerns regarding the impact of Ground Noise Exposure.

SDCC State appropriate assessments and mitigation measures should take into account the potential health impacts of the proposed development and that PA should ensure the opportunity for mitigation exists for those who are significantly impacted.

The Relevant Action application has been subject to a number of public consultation processes. The proposal for which consent is now sought has been subject to public consultation with details of consultations held outlined in the response to further information (Item No.1(f)) and Chapter 5 of the EIAR..

It is acknowledged, as set out in the submitted EIAR that *the proposed Relevant Action would have an overall residual negative effect on human health and well-being*. The review of the revised EIAR for the proposed development carried out by Brady Shipman Martin, has identified potentially significant adverse and residual environmental impacts on human health and well-being as a result of noise, on amenity and local communities as a result of noise.

Mitigation measures are proposed in the EIAR to address the identified negative effects and these have been given careful consideration in undertaking the EIA. Mitigation includes for a noise insulation scheme.

Monitoring measures set out within the RD by way of planning condition are in addition to the provisions of section 21 which sets out the monitoring obligations of the Aircraft Noise (Dublin airport) Regulation Act 2019. The monitoring regime as prescribed in the RD is therefore considered to address the concerns set out in the submissions received from Meath and South Dublin County Council in response to the FI received for the RA.

7.1.4 Third party submissions and observations to the RA

The Planning Officer has had regard to the substantive planning considerations raised in the third party submissions and observations throughout the assessment of the original relevant action application, the assessment of the response to further information and in the consideration of the RA as subject to the RD.

Substantive considerations were raised in relation to the impacts of the RA on the environment and to the impact of noise on human health and quality of life. The application is accompanied by an EIAR, the consent is subject to EIA and this substantive issue is addressed therein. It is acknowledged there will be impacts on human health and that mitigation is proposed. The EIAR is considered to be in accordance with S.172 of the PDA and as such is considered to identify and describe adequately the direct and indirect significant effects on the environment of the proposed development.

Substantive issues raised outside of the key areas of assessment set out elsewhere in this report include the following

<u>Flight paths</u>

Concerns have been expressed in relation to the introduction of flight paths. Concerns are raised regarding divergence in flight paths when runways are operating in mixed mode. It is stated that the route has not been included in the contour modelling. It is also stated noise contours cannot be relied upon given metrics used.

The proposal under consideration in the Relevant Action as subject to the Regulatory Decision has no impact on nor consents any changes to flightpaths. It is outlined in the EIAR there will be no new flight paths in the proposed scenario.

Flight paths have been included in the modelling. ANCA has undertaken their own modelling and metrics in analysing and these have been taken into account in the Regulatory Decision consent. ANCA in SEA report outline the assessment of impacts of flight paths and departure procedures of *Dublin Airport's operation is a matter for daa and the competent authorities for airspace management and design.*

Appropriate Assessment of relevant permission.

It is stated in a submission that, in carrying out its functions in relation to Environmental Impact Assessment and Appropriate Assessment, that the Planning Authority must conduct its assessments in relation to what is referred to as 'the entirety of the development subject to the original planning, extension of planning and now the amendment of planning'.

The original permission dates from 2007 and the 'extension of planning' dates from 2017 and it is noted that those permissions have never been deemed to be other than valid by reference to the requirements of the EIA Directive or of the Habitats' Directive. The original permission is the 'Relevant Permission' within the meaning of Section 34C. As regards the reference to certain examples/projects involving 'extension of time', it is noted that what is applied for under the application before the planning authority is not an application for a permission for an 'extension of time' to determine if the project the subject of the original permission can proceed. Rather, the application relates to, specifically, a 'relevant action', being a proposed variation to two of the conditions attached to a permission that has been implemented. In respect of that variation it is noted that the application was accompanied by an EIAR as well as, for the purpose of the Habitats Directive, a

report that examined implications of the relevant action, if permitted, for European Sites across a wide zone of influence.

These reports enable the Planning Authority to consider the implications of the Relevant Action for the environment as a whole and specifically for European Sites in the discharge of its role under section 34C of the PDA in assessing this application.

7.1.5 *Consistency of the RA as applied for with spatial policy and application of the Balanced Approach*

While the RA would place an operating restriction on night time flight operations on the airport, it is considered that it does not give consideration to all measures necessary to mitigate against the potential negative impact of noise from aircraft operations on existing established residential communities. This relates to scope of changes sought to conditions 5 and 3 (d) of the parent permission.

For condition 5, the quota count system as outlined in the RA would not be subject to specific aircraft type noise generation restrictions and therefore there is no disincentive built into the proposal in relation to addressing the use of the runways by specific and noisy aircraft types at night-time. No target reductions are sought on noise outcomes. In addition by not aligning the hours of the quota count system with the night time noise definition of 8 hours /the whole of the night the Noise Quota Scheme (NQS) as proposed would give rise to potentially significant adverse impacts by way of sleep disruption.

In relation to condition 3 (d), if granted the RA would allow for unrestricted use of the north runway for flights between 23.00-23.30 and 06.00-07.00. This would enable aircraft operations occur for a period of 1.5 hours without being subject to any NQS.

While the proposed noise insulation scheme is acknowledged, which aims to mitigate the impact of night time noise, it is considered that the lack of specific aircraft type noise generation restrictions outlined within the RA noise quota monitoring system, the proposed hours of operation of the noise quota system and proposed north runway hours of operation sought would leave existing established communities exposed to potentially significant adverse noise impacts at night time.

A crucial aspect of the RA is that it does not seek to address the potential significant adverse residual environmental impacts arising from the scheme. Aside from the proposed noise insulation scheme, it does not seek to ameliorate residual impacts over time. No target reductions are sought on noise outcomes. The framework of the RA therefore indicates that it does not have a capacity to address/improve the potential significant adverse environmental impacts within a specific timeframe. Taking into account the magnitude and spatial extent of the potential impact, together with the duration and frequency of the predicted impacts and the sensitivity of the receiving environment, this is a central weakness of the RA as proposed by the applicant. This was not improved by the response to the Council's Request for Additional Information.

Having regard to the EIAR findings identified and the above, there are concerns that the proposed RA development as outlined would not align with a number of objectives in the Fingal Development Plan 2017-2023, which seek to ensure that the aviation sector can develop further and operate to its maximum sustainable potential, whilst at the same time taking into account the impact on local residential areas and any negative impact such proposed developments may have on the sustainability of similar existing developments in the surrounding area, as well as impact on the environment, including the climate.

7.2 Relevant Matters to be considered in consideration of a consent arising from RA subject to RD

- Climate Action and Low Carbon Development Act 2015/2021 as amended
- Consistency with Spatial Policy
- Revised condition 3 (d) as prescribed in the RD
- Revised condition 5 as prescribed in the RD
- Third Condition as prescribed in the RD

7.2.1 Climate Action and Low Carbon Development Act 2015/2021 as amended

It is considered that the Relevant Action, subject to the Regulatory Decision if granted, would be consistent with the following plans, strategies and objectives specified in section 15 of the Climate Action and Low Carbon Development Act 2015, as amended: ('CA&LCDA')

- The National Climate Objective;
- The most recent Climate Action Plan;

- The most recent National Long-Term Climate Action Strategy;
- The most recent National Adaptation Framework) and approved Sectoral Adaptation Plans;
- The objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

The CA&LCDA defines the National Climate Objective '... to pursue and achieve by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy ....' ;

Under section 3(2) CA&LCDA the requirement for the Minister (for ECC_) to make the Climate Action Plan, the National Long-Term Climate Action Strategy and the National Adaptation Framework is for the purpose of achieving the National Climate Objective.

The National Climate Objective (again, the objective of becoming 'climate neutral' by 2050) is the same objective (and is to be achieved within the same timeframe) as the climate objective that the EU as a whole has set for itself (n Regulation (EU) No. 2021/1119 (the 'European Climate Law'). The 'European Climate Law', writes into law at EU level the goal set in the 'European Green Deal' for the EU to achieve climate neutrality (or, 'net zero' greenhouse gas emissions) by 2050.

None of the Irish plans, strategies or objectives that are mentioned in Section 15 of the CA&LCD) require significant and quantified greenhouse gas emissions' reductions from Irish-related aviation in the short term. However those plans, strategies or objectives do recognise that in order to for aviation to make an important contribution to the achievement of the common/shared Irish and EU objective of achieving climate neutrality by 2050 that aviation emissions will have to consistently reduce over the long-term - to 2050.

In 2017 in the EU, direct emissions from aviation accounted for 3.8% of total CO2 emissions.. Also at EU level, the aviation sector accounts for 13.9 % of emissions from transport; and, under the European Green Deal, in order to achieve climate neutrality, those overall transport emissions are required to be reduced by 90% by 2050 (relative to 1990 levels).

In relation to aviation emissions, in the EU and Ireland, the principal mechanism for controlling and achieving reductions in greenhouse gas emissions from the aviation sector is the EU Emissions Trading System ('EU ETS'). The EU ETS applies to

approximately 10,000 large point sources/ground-based installations, but, since 2012, it has also covered emissions from the aviation sector (subject to certain exceptions - such as training and military flights). It applies to all airlines operating in Europe (whether those airlines are European or non-European). It is a 'cap-and-trade' scheme, under which airlines are required to monitor, report and verify annually their GHG emissions by reference to 'tonne-kilometre' data . The airlines are granted 'emission allowances', which are tradeable and which cover a certain level of their emissions from flights per year. The airlines are required to surrender allowances annually against their emissions, with the quantity of allowances issued through various phases of the EU ETS progressively reducing, thus incentivising reduced aviation-related GHG emissions.

Currently the EU ETS operates in respect of intra-EEA flights (flights taking off and landing within EEA territory). As regards GHG emissions from flights into EEA territory (from outside EEA territory) and from flights out of EEA territory (from within EEA territory), the position is that, for the present (until c. 2024), the EU is going to monitor the operation and effectiveness of the International Civil Aviation Organisation's market-based mechanism (MBM) for seeking to reduce aviation emissions internationally. The ICAO's MBM is called ' CORSAIR' (Carbon Offsetting and Reduction Scheme for International Aviation) . This differs from the EU's approach to controlling aviation emissions in that while the EU ETS seek to effect aviation emission reductions progressively through mandatory participation in a tightening cap-and-trade scheme, the ICAO's approach is based on voluntary participation in an offsetting scheme. The EU is proposing in 2024 to review the effectiveness of the ICAO's approach to reducing emissions related to air travel from (i) destinations outside the EEA into the EEA and (ii) from destinations within the EEA to destinations outside the EEA. All EU countries will participate in the ICAO's CORSAIR. The EU has indicated that, based on expected participation of States and airlines in the ICAO's CORSAIR scheme, it is expected to offset around 80% of the covered emissions (relative to 2020 levels).

Ultimately, Ireland's status as an EU Member State means that emissions related to all intra-EEA flights arriving at or departing from Dublin Airport that [in the future can be said to arise from or relate to the [Relevant Action – Regulatory decisions] will be subject to the control of the EU ETS; and, in relation to flights that arrive at or

leave Dublin Airport to/from destinations outside the EEA [and that can be said to be related to or connected to the Relevant Action- Regulatory Decision] those emissions will require to be offset in accordance with the terms of the ICAO's CORSAIR.

Ireland's most recent Climate Action Plan update , its Long Term Climate Action Strategy and its National Adaptation Framework all envisage transport emissions' reductions - including aviation emissions' reductions - making a contribution to the achievement of Ireland's ultimate 'National Climate Objective' (again, the objective of achieving climate neutrality by 2050). GHG emissions at Dublin Airport, including those related to the Relevant Action will be subject to a GHG control regime, either the EU ETS or the ICAO's CORSIA.

The most recent Climate Action Plan update contains specific recognition of the role of both the EU ETS and CORSIA in relation to controlling aviation emissions. At section 15.3.4 (page 152) the Plan states: 'As a small open economy on the periphery of Europe, the aviation and maritime sectors are critical for the movement of our goods and people. Action is being taken at EU and international levels to address emissions from these sectors, including through market based measures such as the ETS and sustainable fuel mandating initiatives (through Re-Fuel Aviation, Fuel EU Maritime and the Alternative Fuel Infrastructure Regulation which will all include binding targets once adopted). Continued international collaboration through the International Maritime Organization and the International Civil Aviation Organization will be key to achieving greater sustainability and preserving a level playing field in these global sectors. Ireland will support appropriate actions taken at EU and global levels to reduce emissions from the aviation and maritime sectors.'

In Ireland's National Energy and Climate Plan 2021-2030, the EU ETS and CORSIA are also both referenced as being 'supported' by Ireland as a key part of achieving the long-term reduction of greenhouse gases in aviation. The applicant's projected –1.79% GHG reduction by 2035 would, if achieved, be broadly consistent with the direction/trajectory of a target of achieving net zero nationally by 2050.

In relation to adaptation, the most recent National Adaptation Framework (2018) does not set out specific adaptation actions or steps for airport infrastructure;

however the Framework places a strong emphasis throughout on the need for all transport infrastructure and operations to be climate resilient against extreme weather and adverse meteorological conditions. The National Adaptation Framework is currently under review with a public consultation having closed in July 2022. In the most recent most recent Sectoral Adaptation Plan for Transport, there is a more detailed consideration of the difference adaptation challenges facing, respectively, road, heavy rail, light rail, maritime freight transport and air transport (passenger and freight). Climate-related challenges for the State airports and the regional airports mentioned in the Sectoral Adaptation Plan include storms and high winds, storm water management, increased potential for damage to airport buildings, ensuring runways are resilient against freeze and heat extremes. It is noted that key aviation stakeholders, including the applicant (daa), the Aviation Services Division and the Airport Division of the Department of Transport participate in the implementation of the overall Sectoral Adaptation Plan for the Transport sector.

In those circumstances, it is considered that the Relevant Action subject to the Regulatory Decision if granted,] would be consistent with:

- the most recent Climate Action Plan;
- the most recent National Long-Term Climate Action Strategy;
- the most recent National Adaptation Framework and approved Sectoral Adaptation Plans;
- the objective of mitigation greenhouse gas emissions and adapting to the effects of climate change in the State and, ultimately, with
- the 'National Climate Objective.'

7.2.2 Consistency with Spatial Policy

The Fingal Development Plan contains objectives to balance growth at the airport with the impact of noise from such growth on existing established communities. Further information was sought towards addressing the identified information deficit. Details are set out in section 5 of this report insofar as it relates to the Relevant Action and the supporting EIAR.

Insufficiency of data was noted in section 10 of the Chief Executive Order 19th February 2021 in relation to the Council's Request for Further Information, with regard to objectives of the Fingal Development Plan 2017-2023 and the Dublin Airport Local Area Plan 2020-2026. Concerns related to the extent/quantification of

the impact on local communities and reconciliation of these impacts with future development of the airport by way of applying the balanced approach in determination of the amended restrictions proposed in the RA.

The review of the EIAR for the RA carried out by Planning Consultants BSM has identified potentially significant adverse and residual environmental impacts on Amenity and Local Communities, human health and well being as a result of noise.

Support for the development of Dublin Airport is set out in policy to mitigate the impacts of aviation on the environment whilst facilitating the sustainable growth of the Airport, as contained in the following Policy documents:

- Project Ireland 2040 - National Planning Framework, 2017 (Government of Ireland)
- National Development Plan 2018-2027, 2018 (Government of Ireland)
- National Policy Statement on Airport Charges Regulation, 2017 (The Department of Transport, Tourism and Sport (DTTAS))
- A National Aviation Policy for Ireland, 2015 (The Department of Transport, Tourism and Sport (DTTAS))
- Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES) 2019 – 2031, 2019 (Eastern and Midland Regional Assembly)
- Fingal Development Plan 2017 – 2023, March 2017, Fingal County Council.
- Variation No. 1 of the Fingal Development Plan 2017 – 2023, September 2019, Fingal County Council.
- Dublin Airport Local Area Plan, 2020 (LAP), Fingal County Council.
- Dublin Airport Central Masterplan, 2016, Fingal County Council.
- Dublin Airport Noise Action Plan 2019 – 2023, 2018 (NAP), Fingal County Council.
- Dublin Airport Capital Investment Programme 2020+, 2019, daa.

The Regulatory Decision was drafted in accordance with the Aircraft Noise (Dublin Airport) Regulation Act 2019 at the core of which is the application the Balanced Approach. The adoption of the Regulatory Decision followed detailed analysis and modelling, assessment and consultation. Taking the identified impacts into account the Aircraft Noise Competent Authority (ANCA) determined the appropriate application of the balanced approach in the form of the RD thereby addressing and superseding concerns regarding the consistency with Policy provisions requiring a balanced approach.

7.2.3 Revised condition 3(d) as prescribed in the RD

The changes to condition 3(d) as set out in the RD allow for the extension of the permitted period of use of the North Runway by 2 hours. This revision if permitted

will result in a reduction from the 8 to 6 hour quiet period permitted for those newly affected by aircraft noise arising from operation of the North Runway. The impact of the revised condition is described by ANCA as being a redistribution of the same quantum of noise in a different manner.

The review of the EIAR for the RA carried out by Brady Shipman Martin has identified potentially significant adverse and residual environmental impacts on Amenity and Local Communities, human health and well being as a result of noise.

For Ground Noise and Vibration effects on Human Health and Well-being section 6.4.9 of this report sets out that the Chapter 14 of the revised EIAR for the proposed RA outlines that the overall effect of ground noise arising from the proposed RA is not significant.

The reasons set out by ANCA within the Regulatory Decision and incorporated in section 10.2 of this report states that this condition will result in the redistribution of aircraft noise which is considered to strike a balance between the number of people forecast to be exposed to night time aircraft noise and those who may experience significant adverse changes in night noise exposure.

The Regulatory Decision was drafted in compliance with the Aircraft Noise (Dublin Airport) Regulation Act 2019 at the core of which is the application the Balanced Approach. The Aircraft Noise Competent Authority (ANCA) in consideration of the identified impacts have determined the balanced approach in response to the RA is as set out in the RD and the conditions therein.

Taking account of the role and purpose of ANCA and the Regulatory Decision, the Planning Authority concludes that the impact of the revisions to the relevant permission is consistent with application of the Balanced Approach and is therefore in accordance with the proper planning and sustainable development of the area.

7.2.4 Revised condition 5 as prescribed in the RD

The Planning Authority is required to revoke and replace condition no. 5 in order to incorporate the RD in any grant of permission.

The review of the EIAR for the RA carried out by Brady Shipman Martin has identified potentially significant adverse and residual environmental impacts on

Amenity and Local Communities, human health and well being as a result of noise. The introduction of the RD will however put into place operating noise controls and restrictions on night time aircraft operations for the first time, which aims to reduce aircraft noise levels over time and in turn seeks to reduce and limit adverse impacts on human health. Mitigation measures, expected outcomes, target reductions and a monitoring framework have all been set out as part of the RD.

The reasons for the Regulatory Decision state that the Noise Quota Scheme will limit the impact of the aircraft noise at Dublin airport on communities in accordance with the NAO taking account of cost effectiveness and in anticipation of forecast growth at the airport.

It is considered that the replacement sought to the operating restriction together with the amendment sought to condition 3(d) would lead to varied impacts. The principle of amending the operating restrictions, to take account of the balanced approach has been set out in spatial and sectoral policy.

Taking account of the role and purpose of ANCA and the Regulatory Decision with particular regard to the SEA process undertaken, the Planning Authority concludes that the impact of the revisions is in accordance with the balanced approach and therefore in accordance with the proper planning and sustainable development of the area.

7.2.5 Third condition as prescribed in the RD

The Residential Sound Insulation Grant Scheme is designed to provide financial assistance to property owners to mitigate the impact of night time aircraft noise in the vicinity of Dublin Airport. This is the first time there has been a night-time noise insulation scheme in the vicinity of the airport.

It will be of benefit to people newly and already exposed to noise above a prescribed value. By allowing those who are forecast to experience very significant effects in 2022 and 2025 to benefit from insulation under the scheme will further reduce the number of people highly sleep disturbed. Eligibility to the scheme shall be reviewed every 2 years commencing in 2027.

8 Appropriate Assessment Screening Determination

An Appropriate Assessment Screening Report has been submitted for the relevant Action (RA) application. A revised Appropriate Assessment Screening Report was submitted at further information stage following a request for further information by the Planning Authority. Following ANCAs setting of a Noise Abatement Objective and its making of a Regulatory Decision (RD) on 20th June 2022 and in accordance with the Habitats Directive and Birds Directive, the Planning Authority is required to carry out an Appropriate Assessment Screening of the RA as varied by the RD.

Taking account of the specialist and technical nature of the issues in consideration of the subject amendments to the planning permission for the North Runway, in order to ensure completeness and quality of the assessment, an independent review has been carried out by the consultancy firm Brady Shipman Martin. The preparation of the review has been directed by Thomas Burns B.Agr.Sc. (Landscape), Dip. E.I.A. Mgmt., Ad. Dip. En. and Planning Law, MILI, Partner with BSM with specialist input from Ecologist Matthew Hague CEnv MCIEEM, Associate, Brady Shipman Martin.

Fingal County Council, in accordance with the Habitats Directive (Article 6(3)) and Section 177U of the Planning and Development Act 2000, as amended, has made an Appropriate Assessment (AA) Screening Determination in respect of the subject of the Relevant Action application by daa, as amended by and incorporating the Regulatory Decision (20 June 2022) of the Aircraft Noise Competent Authority (ANCA).

8.1 Description of the Relevant Action and local site characteristics

The proposal the subject of the Relevant Action application by daa relates to conditions 3(d) and 5 of the 'Relevant Permission' (within the meaning of section 34C(23) of the 2000 Act), namely the permission granted by An Bord Pleanála under ref. PL 06F.217429.

The proposal 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 (FCC Reg. Ref. No. F04A/1755; ABP Ref. No.:

PL06F.217429 as amended by FCC F19A/0023, ABP Ref. No. ABP-305289-19), as well as proposing new noise mitigation measures.

Following submission of the Relevant Action application the planning authority referred the application to the ANCA in accordance with Section 34C(2) of the 2000 Act. ANCA determined that the proposed Relevant Action would result in a noise problem at the airport. ANCA therefore (having identified a noise problem) was required to apply the 'balanced approach' and, to that end, established a Noise Abatement Objective (NAO). In addition, pursuant to section 37C(14) of the 2000 Act, in accordance with the balanced approach, a Regulatory Decision was prepared by ANCA and was finalised on 20 June 2022. ANCA completed its assessments process, which included Appropriate Assessment (AA), Strategic Environmental Assessment (SEA) and public consultation and published the final NAO and RD and associated documents on the 20 June 20222 and notified the planning authority of their decision. ANCA has directed the Planning Authority to include, in any grant by the Planning Authority, the Conditions of ANCA's Regulatory Decision.

Therefore the Relevant Action, as amended by and incorporating the Regulatory Decision of ANCA pursuant to Section 34C(10) and Section 34C (16) of the 2000 Act, is to amend condition no. 3(d) of the North Runway Planning Permission (as detailed in the Regulatory Decision of ANCA, 20 June 2022) so that it reads as follows:

> *'Runway 10L/28R shall not be used for take-off or landing between 00:00 and 05:59 (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.*
>
> *REASON:*
>
> *To permit the operation of the runways in a manner which reduces the impacts of aircraft night time noise, whilst providing certainty to communities as to how they will be affected by night time operations from the North Runway, while also providing continuity with the day-time operating pattern set down by Conditions 3(a)-(c) of the North Runway Planning Permission.'*

And would revoke and replace condition no. 5 of the North Runway Planning Permission with an annual noise quota scheme operating restriction (as detailed in the RD, ANCA 20 June 2022) as follows:

> *'The Airport shall be subject to a Noise Quota Scheme (NQS) with an annual limit of 16,260 between 23:00 and 06:59 (inclusive, local time) with noise-related limits on the aircraft permitted to operate at night.'*

And would apply a voluntary residential noise insulation grant scheme (as detailed in the RD, ANCA 20 June 2022) as follows:

> *'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 Initial Eligibility Contour Area as shown in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022.*
>
> *Eligibility to the scheme shall be reviewed every 2 years commencing in 2027 with residential dwellings situated in the 55 dB L_{night} contour being eligible under the scheme'.*

The proposed Relevant Action, as amended by and incorporating the Regulatory Decision, does not seek any amendment of conditions of the North Runway Planning Permission governing the general operation of the runway system (i.e. 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.

The local area comprises Dublin airport campus, including the North Runway, which is under construction, and the zone of influence (ZoI) defined in AA Screening Report. The dominant habitats present at the airport comprise artificial surfaces (Fossitt code: BL3) (i.e. airplane runway and roads), spoil and bare soil (Fossitt code: ED2), and recently seeded sections of amenity grassland (Fossitt code: GA2) which are all of no or negligible ecological value.

Land cover within the airport is industrial / commercial, comprising the terminals, hangers, piers and support facilities. Thus, no semi-natural habitats are present within the airport boundary which may be affected by the proposed Relevant Action (as the site has been dug up and/or is under hard-standing). The habitat in the surrounding area is largely limited to improved grassland and other agricultural land, dissected by species-poor hedgerows and ditches and developed areas.

8.2 Relevant Natura 2000 sites

In establishing a zone of influence (ZoI) for the proposed Relevant Action the AA Screening Report adopts the Precautionary Principle. Therefore, it includes all European sites that meet the following criteria:

- *All European sites within or immediately adjacent to the plan or project area;*

- *All European sites within the likely 'zone of impact' of the plan or project; and,*
- *Adopting the Precautionary Principle (UNESCO, 2005), all European sites for which there is doubt as to whether or not such sites might be significantly affected.*

No construction of any kind is proposed or intended as part of the project and there is no possibility of any construction-related impacts of any kind on European Sites (or on any other environmental receptors).

The only conceivable impacts from the proposed Relevant Action on the Qualifying Interests (QI) or Special Conservation Interests (SCI) of European sites (*i.e.* Special Areas of Conservation (SAC) and Special Protection Areas (SPA)) can be from direct noise and/or visual disturbance caused by over-flying aircraft, potential fuel dumping, or from collision mortality ('bird strike'). Therefore, any SACs which are designated only for habitats, and have no animal species listed as QI which could be subject to disturbance, are outside of the ZoI of the proposed Relevant Action.

At noise levels below 60 dB(A) birds are unlikely to be disturbed. There are only three European sites that could experience noise levels greater than 60 dB(A):

- *Baldoyle Bay SPA;*
- *Ireland's Eye SPA; and*
- *Rockabill to Dalkey Islands SAC.*

Notwithstanding this, on a precautionary basis and to account for potential rare exceedances of 60 dB(A), as well as visual disturbance, other European sites in and around the Dublin Bay area were also taken to be within the ZoI.

The following European sites (Table 1), with distances to the North Runway and summary of QI / SCI, were therefore considered to be within the zone of influence, either because they will be subject to noise levels greater than 60 dB(A) from passing aircraft and have mammal or bird species as a QI or SCI, or may be affected by visual disturbance from aircraft.

Table 1. European sites within the Potential ZoI of the proposed Relevant Action

European site Name / Code	Approximate Distance from North Runway at Dublin Airport	QI / SCI
Malahide Estuary SPA [004025]	4.0km northwest	Great Crested Grebe *Podiceps cristatus*, Light-bellied Brent Goose *Branta bernicla hrota*, Shelduck *Tadorna tadorna*, Pintail *Anas acuta*, Goldeneye *Bucephala clangula*, Red-breasted Merganser *Mergus serrator*, Oystercatcher *Haematopus ostralegus*, Golden Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Knot *Calidris canutus*, Dunlin *Calidris alpina*, Black-tailed Godwit Limosa limosa, Bar-tailed Godwit *Limosa lapponica*, Redshank *Tringa totanus*.

European site Name / Code	Approximate Distance from North Runway at Dublin Airport	QI / SCI
		Wetland Habitats and Waterbirds.
Baldoyle Bay SPA [004016]	6.6km east-southeast	Light-bellied Brent Goose *Branta bernicla hrota*, Shelduck *Tadorna tadorna*, Ringed Plover *Charadrius hiaticula*, Golden Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Bar-tailed Godwit *Limosa lapponica*. Wetland Habitats and Waterbirds.
Rogerstown Estuary SPA [004015]	8.0km northeast	Light-bellied Brent Goose *Branta bernicla hrota*, Shelduck *Tadorna tadorna*, Shoveler *Anas clypeata*, Oystercatcher *Haematopus ostralegus*, Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Knot *Calidris canutus*, Dunlin *Calidris alpina*, Black-tailed Godwit Limosa limosa, Redshank *Tringa totanus*. Wetland Habitats and Waterbirds.
South Dublin Bay and River Tolka Estuary SPA [004024]	8.1km south	Light-bellied Brent Goose *Branta bernicla hrota*, Shelduck *Tadorna tadorna*, Teal *Anas crecca*, Pintail *Anas acuta*, Shoveler *Anas clypeata*, Oystercatcher *Haematopus ostralegus*, Golden Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Knot *Calidris canutus*, Sanderling *Calidris alba*, Dunlin *Calidris alpina*, Black-tailed Godwit Limosa limosa, Bar-tailed Godwit *Limosa lapponica*, Curlew *Numenius arquata*, Redshank *Tringa tetanus*, Turnstone *Arenaria interpres*, Black-headed Gull *Croicocephalus ridibundus*. Wetland and Waterbirds.
North Bull Island SPA [004006]	8.2km southeast	Light-bellied Brent Goose *Branta bernicla hrota*, Shelduck *Tadorna tadorna*, Teal *Anas crecca*, Pintail *Anas acuta*, Shoveler *Anas clypeata*, Oystercatcher *Haematopus ostralegus*, Golden Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Knot *Calidris canutus*, Sanderling *Calidris alba*, Dunlin *Calidris alpina*, Black-tailed Godwit Limosa limosa, Bar-tailed Godwit *Limosa lapponica*, Curlew *Numenius arquata*, Redshank *Tringa tetanus*, Turnstone *Arenaria interpres*, Black-headed Gull *Croicocephalus ridibundus*. Wetland and Waterbirds.
Rockabill to Dalkey Island SAC [003000]	10.9km east	Harbour porpoise *Phocoena phocoena*

European site Name / Code	Approximate Distance from North Runway at Dublin Airport	QI / SCI
Ireland's Eye SPA [004117]	11.3km east-southeast	Cormorant *Phalacrocorax carbo*, Herring gull *Larus argentatus*, Kittiwake *Rissa tridactyla*, Guillemot *Uria aalge*, Razorbill *Alca torda*.
Howth Head Coast SPA [004113]	13.2km southeast	Kittiwake *Rissa tridactyla*.
Lambay Island SPA [004069]	15.1km northeast	Fulmar *Fulmarus glacialis*, Cormorant *Phalacrocorax carbo*, Shag P*halacrocorax aristotelis*, Greylag goose *Anser anser*, Lesser black-backed gull *Larus fuscus*, Herring gull *Larus argentatus*, Kittiwake *Rissa tridactyla*, Guillemot *Uria aalge*.
Lambay Island SAC [000204]	15,1km northeast	Grey seal *Halichoerus grypus*. Harbour seal *Phoca vitulina*.
Dalkey Islands SPA [004172]	19.7km southeast	Breeding Seabirds. Common tern S*terna hirundo*, Arctic tern *Sterna paradisaea*, Roseate tern *Sterna dougallii*.

8.3 Assessment of Likely Significant Effects

The AA Screening Report (as updated in September 2021 in response to the Request for Further Information) clearly demonstrates satisfactorily that *'there is no evidence that flights over-flying Baldoyle Bay or Rogerstown Estuary have any effect on birds present within these sites'* and the the operation of the Wildlife Management Plan means that there will be no change to the numbers of birds present in the vicinity of North Runway and the runway system at the airport.

In relation to disturbance events, incluiding potentially at night, caused by aircraft overflying birds and the SPAs of Baldoyle Bay and Rogerstown Estuary, the AA Screening Report (as updated in September 2021 in response to the Request for Further Information) provides evidence that '*despite an almost continuous stream of air traffic overhead*, only one instance of disturbance was caused by an aircraft and this related to a low-flying coastguard helicopter. All other disturbance events were caused by ground-based activities (walkers, dogs, aquaculture and other activities) which are unrelated to the proposed RA. In addition, the AA Screening Report confirms that '*During the 21 months of survey* [2017-2018 when the airport

was at its busiest], *comprising 252 hours of VP* [vantage point] *watch, no disturbance events caused by aircraft passing overhead on established flight paths to or from Dublin Airport were recorded*.

In relation to bird strike impacts, the continuing implementation of the Wildlife Management Plan does not represent a change from the existing receiving environment and removes the risk of such strikes involving SCI species. There will consequently be no impact to SCI species of European sites from the proposed Relevant Action as conditions will remain as they currently exist under the Wildlife Management Plan.

In relation to fuel dumping, it is noted that fuel dumping by an aircraft using Dublin Airport has been undertaken only once since 2014, and in that case the fuel dumping took place at sea, east of Drogheda. It was not undertaken in or anywhere near Dublin Bay. Much of the fuel, if not all of it, evaporates before it reaches the sea, and that any fuel actually reaching the sea would be greatly diluted.

In conclusion the AA Screening Report (as updated in September 2021 in response to the Request for Further Information) states the following:

> *6.8 This AA Screening therefore concludes that, on the basis of objective information, likely significant effects on European sites from the proposed Relevant Action, both individually and in-combination with other plans and projects, can be excluded. There is no requirement to proceed to the next step of Appropriate Assessment and, subject to other requirements, the proposed Relevant Action can be authorised.*

8.4 Screening Determination Statement

Fingal County Council, having examined both the original and updated Appropriate Assessment Screening Reports presented by the applicant and all other documentation submitted by the applicant in relation to the its proposed Relevant Action, as well as the documentation and information, including environmental information, associated with the Regulatory Decision published by the Aircraft Noise Competent Authority concludes that in light of best scientific knowledge and in the absence of mitigation, that the proposed Relevant Action, as amended by and incorporating the Regulatory Decision, is not likely to have significant effects on

any European Sites, either alone or in combination with other plans or projects. Therefore a Stage 2 Appropriate Assessment is not required.

9 EIA prior to development consent being determined

9.1 Noise Abatement Objective and Regulatory Decision (ANCA, 20 June 2022)

9.1.1 Background and Introduction

By Chief Executive Order ref. ANCA\002\2021 dated 10 February 2021, ANCA determined that a noise problem would arise at Dublin Airport from the taking of the Relevant Action as proposed in the Application and commenced the process of aircraft noise regulation as required by Section 34C(1)(c) and (d)of the PDA. The process of aircraft noise regulation in this context requires ANCA to apply the Balanced Approach, including when carrying out its functions under Section 34C of the PDA. On the 20 June 2022 ANCA made a Regulatory Decision (RD) under Section 34C(14) of the PDA.

The applicant (daa) prepared a candidate Noise Abatement Objective (cNAO):

> *'To limit and reduce the adverse effects of long-term exposure to aircraft noise, including health and quality of life, so that long-term noise exposure, particularly at night, does not exceed the situation in 2018. This should be achieved through the application of the Balanced Approach.'*

However, following its determination of a noise problem at Dublin Airport, ANCA set a Noise Abatement Objective (NAO) for Dublin Airport, which seeks to:

> *'Limit and reduce the long-term adverse effects of aircraft noise on health and quality of life, particularly at night, as part of the sustainable development of Dublin Airport.'*

On the 20 June 2022 the ANCA set a Noise Abatement Objective (NAO) to limit and reduce the long-term adverse effects of aircraft noise on health and quality of life, particularly at night, and made a Regulatory Decision (RD) requiring the inclusion of three conditions in any decision that the planning authority may grant for the application for the RA.

9.1.2 Noise Abatement Objective (NAO)

The Objective (Noise Abatement Objective for Dublin Airport, ANCA, 20 June 2022) is to:

'Limit and reduce the long-term adverse effects of aircraft noise on health and quality of life, particularly at night, as part of the sustainable development of Dublin Airport.'

The NAO would be primarily measured through 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}.

These metrics help articulate the effect of aircraft noise on health and quality of life. The following would also be used to help identify where noise exposure results in the populations experiencing the harmful effects. These are the number of people exposed to aircraft noise above:

- 55 dB L_{night} (a level of night-time noise exposure described by the WHO as representing a clear risk to health); and
- 65 dB L_{den} (where a large proportion of those living around Dublin Airport can be considered *highly annoyed*).

ANCA expects that the following outcomes would be achieved through the NAO:

'The number of people highly sleep disturbed and highly annoyed shall reduce so that compared to conditions in 2019:

- The number of people highly sleep disturbed and highly annoyed in 2030 shall reduce by 30% compared to 2019;
- The number of people highly sleep disturbed and highly annoyed in 2035 shall reduce by 40% compared to 2019
- The number of people highly sleep disturbed and highly annoyed in 2040 shall reduce by 50% compared to 2019 and;
- The number of people exposed to aircraft noise above 55 dB L_{night} and 65 dB L_{den} shall be reduced compared to 2019.'

Monitoring of the NAO would be informed by annual reports which would be reviewed by ANCA as part of its obligations under the Aircraft Noise (Dublin Airport) Regulation Act 2019.

It would be necessary for Dublin Airport to demonstrate its compliance with the NAO. This would need to be informed and presented in a manner that allows ANCA

and any other interested stakeholder to understand whether Dublin Airport is complying with the NAO.

The drafting of the NAO and Regulatory Decision was subject to screening for Appropriate Assessment (AA) and a Stage 2 AA, which included the preparation of a Natura Impact Report (NIR); and to screening for Strategic Environmental Assessment (SEA) and to SEA, which included the preparation of a SEA Environmental Report (ER). The NIR and ER accompanied the draft NAO and draft RD, and related documents, during a 14 week period of public consultation (including with the environmental authorities) from 11 November 2021 to 28 February 2022.

The NIR and ER were reviewed and updated to take account of submissions and finalised to accompany the NAO and RD, and associated documents and SEA Statement, as directed to the planning authority and published on 20 June 2022.

The SEA describes the impacts of the NAO and RD relative to an identified baseline scenario, which describes how matters would develop in the absence of the NAO and RD. For the purposes of the Final ER, the 'future baseline' assumes that daa will seek to grow the airport in line with existing policy, i.e. beyond the current 32 mppa cap. However, proposals to increase the passenger cap beyond 32mppa do not form part of the application for the proposed RA before the planning authority.

The SEA process considered a range of reasonable and realistic alternatives for the NAO and RD and the ER notes that '*through assessing the environmental performance of alternative options as they emerge, it is possible to influence the overall sustainability of the evolving NAO and RD, as well as the selection of the preferred alternative.*' The SEA process established the following environmental objectives, targets and indicators to assess the environmental impacts of the plan / programme (and selected alternatives):

- Air Quality - Minimise emissions of pollutants to air associated with aircraft.
- Biodiversity - Safeguard terrestrial, aquatic and marine biodiversity, particularly EU and nationally designated sites and protected species.
- Carbon and Climate Change - Minimise contribution to climate change by adopting mitigation measures.
- Cultural Heritage - Protect places, features, buildings and landscapes of cultural, archaeological and/ or architectural heritage from impact.

- Landscape and Visual - Protect and maintain the special qualities of the landscape character and views.
- Noise and Vibration - Avoid or reduce the harmful effects, including annoyance, due to long-term exposure to noise, especially at night.
- Population and Health - Protect amenity and health of local residents from effects of noise, pollution or loss of privacy.

In assessing the likely significant effects on the environment, the SEA process highlights the following (for the selected alternative, which includes an increase in the 32mppa):

1. The increase in passenger numbers and associated night-time ATMs facilitated by the RD is likely to cause:
- minor negative effects on air quality (specifically for settlements located directly under the flightpaths within 2km of the Airport);
- biodiversity (due to more overflying of protected sites and species, though existing research suggests that the birds for which nearby Natura 2000 sites are designated are habituated to overflying);
- carbon and climate change;
- noise and vibration; and
- population and health (due to more frequent noise episodes at night impacting on sleep).
2. The specified components of the NAO seek to limit and reduce the long-term adverse effects of aircraft noise on health and quality of life, including through encouraging a switch to quieter and more efficient aircraft, and these are expected to have beneficial effects on each of these environmental aspects.
3. However, though not within ANCA's remit, daa could choose to deliver the expected outcomes of the NAO (i.e. reductions in the number of people adversely affected by noise) by increasing the angle of ascent to get higher in the air more quickly, and/or changing airspace design to overfly less densely populated areas. Though these latter effects are indirect and uncertain, they could result in additional adverse impacts on air quality (though emissions from additional burnt fuel would affect a smaller area); biodiversity (through overflying of sites not previously overflown); and carbon and climate change.
4. Amending Condition 3(d) to enable use of North Runway during the period 23:00 to 00:00 and 06:00 to 07:00, with all landings to be from the east, and all take-offs to the west (i.e. runway use pattern P02) is expected to have additional minor negative effects on:
    - biodiversity (due to the increase in noise over Malahide Estuary SPA / SAC and Feltrim Hill pNHA), and
    - population and health (due to the increase in noise over settlements including Ridgewood, Kilbrook, The Ward Cross, Coolquay, Mooreside and Rathlittle).
5. It is noted that the alternative runway use patterns simply redistribute spatially the noise associated with the lifting of Condition 5. Runway use pattern P02 therefore, whilst causing an increase in noise for the people and species residing in the aforementioned locations, also causes a decrease in noise over Baldoyle Bay SPA / SAC / pNHA, Ireland's Eye SPA / SAC / pNHA, and settlements such as Ratoath and Dunshaughlin.

6. There are also a number of interrelationships between the environmental aspects that have been addressed throughout the assessment of the NAO and RD. For example, a deterioration in air quality has the potential to lead to impacts on biodiversity (especially pollution-sensitive habitats associated with SACs) and human health. For the NAO and RD, this is only relevant for locations directly beneath the flight paths within 2km of the Airport, and thus air pollution is not considered to be an issue for biodiversity or human health in this case.
7. An increase in noise also has the potential to lead to impacts on several of the other environmental aspects, as has been the focus of this assessment. For the NAO and RD, this increase in noise is expected to occur only at night, and so:
   - impacts on human health are of greatest concern;
   - impacts on biodiversity have been deemed to be insignificant;
   - whilst impacts on the use of cultural heritage and landscape assets and their settings are considered negligible.
8. The assessment of the NAO alternatives revealed that that the policy objective and outcomes proposed by daa in the RA would be likely to have an adverse effect on most of the environmental aspects, due to its lack of specific outcome reductions with no measurable requirement to reduce noise or health impacts beyond current levels.

   The best realistic alternative was considered to be Alternative 1 (final NAO), with a specific short-term, health based outcome reduction of 30% set for 2030 (mimicking EC guidance), with further, more stringent outcome reductions of 40% and 50% set for 2035 and 2040 respectively. These latter outcome reductions go beyond EC guidance.

9. In terms of Condition 5 the assessment of the RD alternatives revealed that the proposed amendments put forward by daa through the planning application (i.e. Alternative (i)) would be likely to have an adverse effect on most of the environmental aspects, due to its lack of operational constraints during the period 23:00 to 23:30 and 06:00 to 07:00. In particular, their proposal does not cover the same 8-hour night-time period as defined in EU noise policy and against which the NAO has been set.

   The alternative selected for the RD (Alternative (iv)), has the most positive impacts across the environmental aspects as not only would the proposed noise quota operate throughout the 8 hours of the night, but there would be additional noise-related limits on the types of aircraft permitted to operate at night.

10. For Condition 3(d) the alternatives are represented in terms of runway use patterns, and all involve the lifting of the Condition 5 restriction on numbers of flights at night. Alternative (v) (i.e. runway use pattern P11) simply restates the existing Condition 3(d), which would result in all of the additional night-time ATMs associated with lifting Condition 5 occurring on the South Runway. As a result, all areas currently affected by night-time ATMs and associated aircraft noise and health impacts would experience a proportional increase in these effects with other environmental aspects experiencing negligible effects.

However, ANCA's review of the information indicates that overall health outcomes are likely to improve by using both the North and South Runways at night (i.e. Alternative (vi)). ANCA also recognises daa's view that use of the North Runway is necessary as part of meeting demand. It is concluded by ANCA that Condition 3(d) should be revised as proposed by daa, alongside replacing Condition 5.

11. In terms of the proposed voluntary residential sound insulation grant scheme the assessment indicates that the alternative proposed by ANCA (Alternative (x) is more beneficial than that proposed by daa (Alternative ix), and that the alternatives differ only in terms of impacts on Human Health.
12. In conclusion, the overall assessment of the NAO and RD presented in the SEA ER revealed that there would be no significant adverse environmental effects as a result of implementing the preferred alternatives, (i.e. Alternative (1) for the NAO and Alternatives (iv), (vi) and (x) for the RD). The preferred (selected) alternatives are:

Alternative (1) for the NAO:

> *Limit and reduce the long-term adverse effects of aircraft noise on health and quality of life, particularly at night, as part of the sustainable development of Dublin Airport', with specific outcomes set for 2030, 2035 and 2040*).

Alternatives (iv), (vi) and (x) for the RD:

> Change to Condition 5: *subjects the Airport to a noise quota with an annual limit of 16,260 between the night-time hours of 23:00 and 07:00 with noise-related limits on the aircraft permitted to operate at night.*
>
> Change to Condition 3(d): *subjects the Airport to a noise quota with an annual limit of 16,260 between the night-time hours of 23:00 and 07:00 with noise-related limits on the aircraft permitted to operate at night; prohibits the use of North Runway for landings and take-offs only between the hours of 00:00 and 06:00, enabling use of both runways during 23:00 to 00:00 and 06:00 to 07:00 (with all landings to be from the east, and all take-offs to the west). This is runway use pattern P02.*
>
> And: *a voluntary residential sound insulation grant scheme for residential dwellings for all homes forecast in 2025 to be exposed to aircraft noise at or*

above 55dB L_{night} contour and for all those experiencing a 'very significant' effect in 2025 (i.e. the worst year for noise).

13. ANCA will monitor the effectiveness of these measures with regard noise through the requirements of the NAO.

The NAO requires that the monitoring data relating specifically to the Airport's performance against the NAO itself should be provided to ANCA in an Annual Report. The contents of this are detailed in the First Condition of the RD, and include:

- The number of people exposed to aircraft noise above 55 dB L_{night} and 65 dB L_{den};
- The number of people highly sleep disturbed and highly annoyed;
- Any residential properties that have benefits and are eligible for and yet to benefit from the Airport's noise insulation schemes;
- Key Statistics with respect to aircraft operations, such as aircraft movements, use of the Noise Quota Scheme,
- movements by aircraft type, passenger numbers, aircraft destinations, flight routings and runway use;
- Summaries from noise monitoring terminals for the Airport;
- Details of all noise modelling undertaken in support of the Noise Performance Reporting;
- A summary of complaints records; and
- Details of any anticipated changes or developments that may affect noise at the Airport.

9.1.3 Conditions of the Regulatory Decision

Following on the assessments above the RD provides for three conditions which are summarised as follows:

First Condition

Condition 5 of the North Runway Planning Permission shall be revoked and replaced with an annual noise quota scheme operating restriction as follows:

The Airport shall be subject to a Noise Quota Scheme (NQS) with an annual limit of 16,260 between 23:00 and 06:59 (inclusive, local time) with noise-related limits on the aircraft permitted to operate at night. The NQS shall be applied as detailed below.

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 the 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

The condition contains a number of definitions, including Sub-sections 2.1(b) and 2.1(c) of Part 2 which provide for the following further restrictions:

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.

The effect of this condition is to replace the 'number of flights cap' which on completion of the North Runway, would apply to night-time use with a 'noise quota cap'.

This would represent the first noise-based restriction to apply to aircraft operations at Dublin Airport.

Second Condition

Condition 3(d) of the North Runway Planning Permission shall be amended as follows:

Runway 10L/28R shall not be used for take-off or landing between 00:00 and 05:59 (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.

The effect of this condition is to allow flights operate on the North Runway for an additional 2 hours – those being the first and last hours that fall within the understanding of the 'night-time period' (*i.e.* 23:00 hrs to 07:00hrs).

It is understood that use of the North Runway between the hours of 23:00 – 00:00 and 06:00 – 07:00 would contribute to, and hence be controlled by, to the Noise Quota cap as set out in the First Condition (above).

Third Condition

Condition 3 of the RD includes the following:

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 Initial Eligibility Contour Area as shown in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022.

Eligibility to the scheme shall be reviewed every 2 years commencing in 2027 with residential dwellings situated in the 55 dB L_{night} contour being eligible under the scheme as detailed below (*refer to Regulatory Decision, ANCA, 20 June 2022 for full details*).

This would represent the first night-time noise-based insulation grant scheme to Dublin Airport.

9.1.4 Consideration of the effects of the Noise Abatement Objective and the Regulatory Decision

In the current scenario (i.e. up to completion of the North Runway) which includes a 32mppa, there are no operating restrictions relating to the use of the two runways (South and Crosswind) or on the numbers, types or noise generation of aircraft that can fly at Dublin Airport.

In the permitted scenario following completion of the North Runway (later 2022), condition 3(d) restricts use of the North Runway at night (23:00hrs – 07:00hrs),

except in exceptional circumstances. The RD reduces the restricted use of the North Runway at night from 8 hours to 6 hours (*i.e.* between 00:00hrs – 05:59hrs).

Condition 5 of the permission limits night-time use to 65 aircraft movements / night averaged over the 92 day modelling period. At present, and in the permitted scenario, there is no restriction to the daytime or night-time use of aircraft based on quantified noise generation. The RD introduces a night-time noise-based restriction for aircraft operations for the first time at the airport.

Noise insulation measures in the permitted scenario (i.e. Conditions 6, 7 and 8) are based on $L_{Aeq,16}$ hours day-time metrics only. The RD requires night-time noise insulation based on the 55 dB L_{night} contour for residential dwellings.

The NAO introduces specific outcomes to be achieved in the progressive reduction of the number of people 'highly annoyed' and 'highly sleep disturbed' as a result of noise generation from the operation of Dublin Airport. Targets are established for 2030, 2035 and 2040 and progress towards, and achievement in meeting these targets is to be assessed through monitoring and annual reporting.

An overall summary of the comparison between the Permitted Scenario the proposed Relevant Action (RA) Application and with the Noise Abatement Objective (NAO) and Regulatory Decision (RD) in presented in Table 3.1.

Table 3.1 Summary Comparison between Permitted Scenario, proposed RA Application and the NAO / RD of ANCA, 20 June 2022

Permitted Scenario	daa RA Planning Application	ANCA NAO & Regulatory Decision	Comments
Noise Abatement Objective: *N/A.*	candidate Noise Abatement Objective (cNAO) *To limit and reduce the adverse effects of long-term exposure to aircraft noise, including health and quality of life, so that long-term noise exposure, particularly at night, does not exceed the situation in 2018. This should be achieved through the application of the Balanced Approach.*	Noise Abatement Objective: *Limit and reduce the long-term adverse effects of aircraft noise on health and quality of life, particularly at night, as part of the sustainable development of Dublin Airport.* This policy objective is supported by specific *expected outcomes* for progressive reduction in 2030, 2035 and 2040 in the number of people '*highly sleep disturbed* and '*highly annoyed* as compared to 2019.	There are no noise reduction targets currently in place for operations at the airport. Likewise, other than reliance on the noise insulation scheme, there are no noise reduction objectives or targets attached to the permission for the North Runway. For the first time the NAO introduces progressive targets for the reduction of noise at Dublin Airport for reasons of improving health and quality of life, particularly at night. As stated in the revised EIAR, it is expected that on-going fleet renewal means that over time aircraft are getting quieter, however, the NAO sets specific expected outcomes and provides a for a framework for assessing and monitoring achievement on the targets. It is expected that on its own the NAO would not result in an immediate or short-term improvement, however it would be increasingly effective in ensuring that there is an improvement in reduction of noise generation and hence in human health and well-being in the medium and longer term.

Permitted Scenario	daa RA Planning Application	ANCA NAO & Regulatory Decision	Comments
Condition 3(d): *On completion of the runway hereby permitted ... Runway 10L-28R (the 'North Runway') 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.*	Amend Condition 3(d): *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.*	Second Condition of RD (Amend Condition 3(d)): *Runway 10L/28R [the north parallel runway] shall not be used for take-off or landing between 00:00 and 05:59 (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.*	The permission restricts the use of the North Runway in all but exceptional circumstances for flights between 23:00hrs and 07:00hrs (*i.e.* 8 hour night-time period). The planning application and Regulatory Decision restricts the use of North Runway in all but exceptional circumstances for flights between 00:00hrs and 05:59hrs. Therefore, the North Runway can be used for normal flights for 2 additional hours – 23:00hrs to 00:00hrs & 06:00hrs to 07:00hrs. However, the use of North Runway in these two additional hours would also contribute to the proposed Noise Quota (refer to Condition 5 below), which restricts night-time noise generation from aircraft operations between 23:00hrs and 07:00hrs. Nevertheless, the use of the North Runway in the first and last hours of the night-time period would introduce night-time noise and potential for sleep disturbance, albeit limited to 2 hours, to new populations located west, north and east of the North Runway that would otherwise not be effected by the Permitted Scenario.

Condition 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.*	Replace Condition 5 with: *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 0600 hrs.*	First Condition of the RD, revoke and replace Condition 5 with: *The introduction of a Noise Quota Scheme (NQS), with an annual limit of 16,260 between the hours of 23:00-06:59 (local time) with noise-related limits on the aircraft permitted to operate at night.* *Details of reporting metrics and frequency required are specified.*	The permission restricts the use of runways (other than the North Runway) to average 65 aircraft movements per night (23:00hrs to 07:00hrs) measured over the 92 day modelling period. However, there is no restriction on airport / flight operations based on noise generation. The planning application seeks to restrict noise generation between 23:30hrs – 06:00hrs (i.e. 6.5hrs). The Regulatory Decision applies noise restriction to 23:00hrs to 06:59hrs – the standard night-time period. However, the RD also restricts night-time flying of noisier aircraft types (*i.e.* with a noise classification level ≥99- EPNdB) and night-time landing of aircraft types with a noise classification level ≥93 EPNdB. While the Permitted Scenario restricts the number of flights it does not restrict associated noise generation. The RA application does apply a noise quota albeit to a six-and-a-half night-time period. However, the RD applies the noise quota to the full 8 hour night-time period and further restricts the use of noisier aircraft at the airport. One effect of this is that a greater number of less noisy flights would be possible – and this in turn may encourage fleet modernisation with quieter aircraft.

Permitted Scenario	daa RA Planning Application	ANCA NAO & Regulatory Decision	Comments
Noise Insulation Scheme: Conditions 6 (schools), 7 (dwellings) and 8 of the permission.	Noise Insulation Scheme: *A noise insulation grant scheme for eligible dwellings within specific night noise contours.* *Dwellings are eligible if:* ***Criteria 1** - dwellings forecast to be exposed to night time noise levels of at least 55 dB L_{night} in 2025.* ***Criteria 2** - dwellings with a 'very significant[3] rating arising from forecast noise levels of at least 50 dB L_{night} in the first full year when the relevant action comes into operation, with a change of at least +9 dB when compared with the current permitted operation in the same equivalent year.* *Eligibility for inclusion within the scheme under Criteria 1 would be reviewed every two years.* *A 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.*	Third Condition of RD, Noise Insulation Scheme: *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 Initial Eligibility Contour Area as shown in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022.* *Eligibility to the scheme shall be reviewed every 2 years commencing in 2027 with residential dwellings situated in the 55 dB L_{night} contour being eligible under the scheme as detailed below.*	The existing permission includes for two sound insulation schemes for schools and dwellings. These are based on daytime noise exposure using the $L_{Aeq, 16hr}$ metric. One of the measures proposed by the Application is for a night time noise insulation grant scheme (€20,000) and as such applies to bedrooms only. The RD includes for a broadly similar scheme and includes for continuance of the scheme through review every two years post 2025 commencing in 2027.

9.2 Overall Review of Environmental Effects arising from the Relevant Action Application incorporating the Regulatory Decision (RD).

It is expected that if consented, the RA Application (incorporating / including the conditions of the RD) would facilitate an increase in aircraft activity at night relative to the Permitted Scenario. Whilst an increase in aircraft activity is not a measure of noise impacts, it is indicative that the proposals have the potential to lead to adverse effects on human health and well-being.

Noise generation from aircraft is not restricted, even during night-time, in the Permitted Scenario. By contrast the RA Application / RD would introduce restrictions and expected outcome reductions based on noise generation for the first time at the airport.

The RA Application / RD would relax the restriction as permitted on no night-time flights (except in exceptional circumstances) from the North Runway. Albeit, the relaxation would be limited to the first and last hour of the night-time period (23:00hrs – 00:00hrs and 06:00hrs – 07:00hrs). This would lead to an increase in night-time noise with potential associated first time human health effects for people living west, north and east of the North Runway. However, aircraft movements between these hours would contribute to the annual limit of 16,260 within the Noise Quota Scheme (NQS), therefore limiting night-time noise generation at the airport.

The RA Application / RD together with the NAO has over time, the potential to reduce overall noise generation, including night-time noise generation, at the airport. This has potential for longer-term reduction of noise and improvement in human health and well-being. This would arise as a result of a number of factors. The First Condition of the RD sets a night-time noise generation-based restriction on the operation of aircraft for the first time at the airport. The condition would also impose further restrictions on the night-time use of noisier aircraft, which would both restrict their use and would also encourage transition to more modern quieter aircraft fleet. In addition the NAO would set specific expected outcomes for the reduction of all noise from aircraft operations (*i.e.* day, evening and night) with monitoring and assessment to ensure achievement of these outcomes.

The RA Application / RD includes for operation of a night-time noise insulation scheme for dwellings. This would be the first such scheme at the airport to be based on night-time noise effects and eligibility for inclusion in the scheme would be reviewed every two years from 2027.

The environmental assessment of the NAO and RD presented in the SEA Environmental Report and SEA Statement (ANCA, June 2022) identifies that there would be no significant adverse environmental effects as a result of implementing the preferred alternatives Alternative (1) for the NAO and Alternatives (iv), (vi) and (x) for the RD. These selected alternatives are set out in the First, Second and Third Conditions of the RD.

The inclusion of specific short, medium and long-term health-based outcomes go beyond EC guidance and are yet considered to be achievable. Specific outcome reductions in noise generation would result in beneficial effects for human health. ANCA will monitor the effectiveness of these measures with regard noise through the requirements of the NAO.

9.3 Reasoned conclusion for purposes of EIA of the development consent.

daa in its application for a proposed Relevant Action (RA) seeks to amend Condition 3(d) and replace Condition 5 of permission Ref. No. ABP PL06F.217429 and to introduce an additional voluntary noise insulation grant scheme and a noise monitoring framework. Following submission of the application, the planning authority referred the application to the Aircraft Noise Competent Authority (ANCA) in accordance with Section 34C(2) of the Planning and Development Act 2000 as amended. ANCA determined that the proposed RA would result in a noise problem at the airport and, having identified a noise problem, was required to apply the 'balanced approach' and, to that end, established a Noise Abatement Objective (NAO). 'In addition, in accordance with the balanced approach and pursuant to section 34C(14) of the PDA, a Regulatory Decision (RD) was prepared by ANCA and finalised on 20 June 2022. The preparation of the RD included Appropriate Assessment (AA), Strategic Environmental Assessment (SEA) and public consultation.

Having regard to the examination of environmental information contained above, to the information contained in the EIAR, to the additional / supplementary information (including supplementary EIAR information) provided by the applicant; to the information received through the carrying out of consultations in accordance with the 2000 Act, to the third party submissions received in the course of the application, to the reports received from the prescribed bodies / statutory consultees, to the RD made by ANCA (and the conditions of and reasons for the RD), to the NAO, to the environmental information prepared in respect of the RD and NAO and to the supplementary examination of the planning authority it is considered that the main significant direct and indirect effects on the environment of the RA as amended by and as incorporating the RD are as follows:

Noise and Human Health and well-being effects, which will be managed over time by appropriate abatement and mitigation measures: It is anticipated that the measures the

subject of the RA application, and incorporating the RD, would facilitate an increase in aircraft activity at night relative to the permitted situation. Whilst an increase in aircraft activity is not a measure of noise impacts, it is indicative that the proposals have the potential to lead to adverse effects from noise on human health and well-being.

The RA Application, as amended by and incorporating the RD, would relax the restriction laid down by Condition 3(d) of the existing Permission on night-time flights (except in exceptional circumstances) from the North Runway. Albeit, the relaxation would be limited to the first and last hour of the night-time period (23:00hrs – 00:00hrs and 06:00hrs – 07:00hrs), this would lead to an increase in night-time noise with potential associated first time human health effects, particularly for people living west, north and east of the North Runway.

The RA Application, as amended by incorporating the RD, would replace the aircraft movement limit in Condition 5 of the existing Permission with an annual noise quota scheme with an annual limit of 16,260 between 23:00 and 06:59 (inclusive, local time) and with noise-related limits on the aircraft permitted to operate at night. This would both place a limit on overall aircraft noise generation at night and also encourage the use of aircraft with lower noise generation characteristics, which could lead to a wider reduction in aircraft noise at the airport and surrounding areas, especially in the medium and longer-term.

The RA Application, as amended by and incorporating the RD, would introduce a voluntary residential sound insulation grant scheme focused on dwellings situated within the 55dB L_{night} contour. While other sound insulation schemes have been included in the parent permission for the North Runway, this is the first time that a sound insulation scheme is proposed specifically for reduction of the effects of night-time noise, and eligibility for inclusion in the scheme would be reviewed every two years commencing from 2027.

Therefore, the RA Application, as amended by and incorporating the RD, together with the NAO has over time, the potential to reduce overall noise generation, including night-time noise generation, at the airport. This has the potential for longer-term reduction of noise, the progressive reduction in residential disamenity and the amelioration of noise-related human health and well-being. This would arise as a result of a number of factors. The First Condition of ANCA's RD sets a night-time noise generation-based restriction on the operation of aircraft for the first time at the airport. The condition would also effect further restrictions on the night-time use of noisier aircraft, which would both restrict their use and would also encourage transition to more modern quieter aircraft fleet. The Third Condition of the RD would provide for a voluntary sound insulation scheme specifically focused on

reducing night-time noise effects. In addition the NAO would set specific expected outcomes for the reduction of all noise from aircraft operations (i.e. day, evening and night) with monitoring and assessment to ensure achievement of these outcomes.

The inclusion of specific short, medium and long-term health-based outcomes go beyond EC guidance and yet are considered achievable. Specific outcome reductions in noise generation would result in beneficial effects for human health relative in the medium and longer-term. ANCA will monitor the effectiveness of these measures with regard noise through the requirements of the NAO.

The RA Application, as amended by and incorporating the RD, would also allow Dublin Airport to respond to the key strategic objectives for the future development and growth of the airport as set out in Dublin Airport Local Area Plan (2020), including the fact that the airport is of recognised vital importance to the Irish economy; acts as the principal international gateway for trade, inward investment and tourism; facilitates Ireland's integration with Europe and aids in attracting foreign direct investment.

Mitigation Measures

The features and measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are set out in the Regulatory Decision (RD) and Noise Abatement Objective (NAO) relating to Aircraft Noise Management at Dublin Airport and in particular as set out in the First, Second and Third Conditions of the Regulatory Decision (ANCA, 20 June 2022).

These conditions are required to be included and incorporated into a grant by the Planning Authority of permission on foot of a RA application under section 34C of the 2000 Act.

It is considered that the information submitted to the Planning Authority, in particular the information presented in the EIAR, in the SEA for the RD and NAO and in the findings and conclusions of the RD and the RD Report is sufficient to indicate that the measures, monitoring and reporting proposed for noise management are likely to be successful.

Monitoring

The requirements for monitoring, monitoring measures and reporting are set out in the First, Second and Third Conditions of the Regulatory Decision (ANCA, 20 June 2022).

Conclusion

It is considered that the EIAR submitted with the application and the revised EIAR submitted to the Planning Authority, the other documentation submitted with the application and the supplemental information generated in the course of the application and considered by the Planning Authority are sufficient to enable the likely significant effects arising as a result of the subject of the Relevant Action application as amended by and incorporating the Regulatory Decision, to be identified, described and assessed. It is considered that the subject of the Relevant Action application, as amended by and incorporating the Regulatory Decision, would not have unacceptable direct or indirect effects on the environment subject to the implementation to the mitigation measures and conditions.

10 Conclusion, Reasons and Recommendation

10.1 Conclusion of the planning report:

The proposal under consideration is the Relevant Action as applied for subject to the incorporation of the Regulatory Decision adopted by ANCA.

This planning assessment has taken into account the requirements of S.34 of PDA, S.34C and all considerations as set out in the planning report including but not limited to the EIA Directive, Habitats Directive, Birds Directive, Fingal Development Plan 2017-2023 and the relevant Statutory 28 Guidelines.

The Regulatory Decision (RD) by ANCA and the reasons for the decision have been incorporated into this decision of the planning authority as set out below. The RD has been subject to a Strategic Environmental Assessment.

The Relevant Action (RA) application sought to replace the numerical cap on the number of flights at nighttime with a Noise Quota System (NQS). The RA proposal did not include the period from 23:00 to 23:30 or 06:00 to 07:00 meaning that additional nighttime flights could operate during this period without restriction. The operation of the NQS as sought would also not align with the EU 8 hour night time period. It is therefore considered that these scenarios are likely to have potentially significant adverse impacts on human health as a result of noise. Having considered the RA the Regulatory Decision has sought to address these shortcomings.

In addition, the RA did not include specific noise related limits on the noisier type of aircraft permitted to be operated at night, therefore particularly noisy aircraft could operate in this scenario. The RD includes for specific noise related limits on noisier aircraft types at nighttime. Having considered the RA the Regulatory Decision has also addressed these matters.

The Relevant Action the subject to the RD by ANCA has included for a Noise Quota Scheme with an annual limit of 16,260 between 23:00 and 06:59. The Relevant Action the subject to the RD by ANCA has altered the RA sought by the applicant and ensures that there will be no unrestricted flights at night time within the 8 hour night time period and that aircraft operations at night time will be subject to the Noise Quota Scheme.

10.2 Reasons for Regulatory Decision

The following reasons are set out in The Regulatory Decision dated 20 June 2022:

A Noise Abatement Objective (NAO) has been set for Dublin Airport which seeks to 'Limit and reduce the long- term adverse effects of aircraft noise on health and quality of life, particularly at night, as part of the sustainable development of Dublin Airport.'. The NAO sets outcomes which are required with respect to the harmful effects of aircraft noise. The NAO is the relevant policy which applies for decision making in relation to aircraft noise management at Dublin Airport.

The Application as proposed was screened by ANCA and it was determined that a noise problem would arise from the application due to three aspects:

The Application proposes an increase in aircraft activity at night, when referenced against the situation that would otherwise pertain, which may result in higher levels of human exposure to aircraft noise.

The Application proposes a situation where some people will experience elevated levels of night time noise exposure for the first time which may be considered harmful to human health.

The EIAR accompanying the Application indicates that the proposed relevant action will give rise to significant adverse night time noise effects.

Having followed the process of aircraft noise regulation as set out in Section 11 of the Aircraft Noise (Dublin Airport) Regulation Act 2019 which inserts Section 34C into the Planning and Development Act 2000 (as amended), ANCA has made a regulatory decision requiring the inclusion of three conditions in any planning permission that the planning authority may grant for the proposed development for the reasons set out in the regulatory decision report which accompanies the regulatory decision, including the following principal reasons:

First Condition

Condition 5 of the North Runway Planning Permission shall be revoked and replaced with a Night-time Noise Quota Scheme as described in the First Condition.

The Noise Quota Scheme will limit the impact of aircraft noise at Dublin Airport on communities surrounding the airport in accordance with the NAO. ANCA's Cost Effectiveness Assessment (CEA) identified that while it reduced the population highly sleep disturbed and population exposed above the NAO night-time priority of 55 dB Lnight, condition 5 was more

costly than other means of achieving those aspects of the NAO. Replacing Condition 5 with a Night-Time Noise Quota and associated aircraft type restrictions is a much more cost effective means of managing and limiting aircraft noise impacts in line with the NAO. It allows the airport to meet its movement forecasts whilst guarding against any risk that the Applicant's noise forecasts are optimistic with respect to fleet modernisation. For example, should the aircraft fleet mix not improve as forecast, the Night-Time Noise Quota will limit the number of night flights. Overall, the Night-Time Noise Quota will place a limit on night-time aircraft noise.

Second Condition

Condition 3(d) of the North Runway Planning Permission shall be revised to apply over the period 00:00 to 05:59 as set out in the Second Condition.

The revision to Condition 3(d) of the Northern Runway Planning Permission will facilitate the operation of runways at Dublin Airport in a manner that minimises the impact of night time noise on communities surrounding Dublin Airport, particularly those newly affected by aircraft night time noise. Although a series of runway use and restriction scenarios were considered by ANCA, the scenario which allows the preferred pattern of operation (Option 7b) as described in Condition 3(a)-(c) of the North Runway Planning Permission to be extended by 2 hours to commence from 06:00 and cease at 00:00 was considered by ANCA to strike a balance between the number of people forecast to be exposed to night time aircraft noise, including the number of people exposed above the NAO night-time priority value of 55 dB Lnight, and those who may experience significant adverse changes in night time noise exposure. Whilst other options were found to further reduce the number of people exposed above the NAO night-time priority value, these would have resulted in a much greater number experiencing significant adverse changes, and vice versa. The balance struck by extending the preferred pattern of operation also provides continuity between daytime operations and those occurring between 23:00-00:00, and 06:00-07:00.

Third Condition

A Night-Time Residential Sound Insulation Grant Scheme shall be provided in line with Third Condition

The NAO night-time priority of 55 dB Lnight reflects levels of noise exposure which presents a clear risk to human health. The Residential Sound Insulation Grant Scheme is therefore designed to mitigate the impact of night time aircraft noise in the vicinity of Dublin Airport. Although noise insulation is a relatively costly measure, a noise insulation scheme comprising of suitable measures with eligibility set around the priority value of 55 dB Lnight will help to mitigate effects on those who become newly exposed to potentially harmful levels of aircraft noise as per the second aspect of the noise problem. It will also benefit those who have already been exposed to noise above this priority value and would continue to do so in the future. By further allowing those who are forecast to experience very significant effects in 2022 and 2025 to benefit from insulation under the scheme will further reduce the number of people highly sleep disturbed.

10.3 Planning Recommendation

Taking account of the above report, which incorporates the Regulatory Decision by ANCA in accordance with S34C(16(a)(i)) of the PDA, the Relevant Action the subject of the RD by ANCA by virtue of Regulatory Decision made *20 June 2022* is consistent with the principle of the balanced approach established in spatial and sectoral policy.

Having regard to the specific nature of the proposed development relating to nighttime use of the runway system at Dublin Airport, the planning history relating to the site and the Regulatory Decision made by ANCA, given the strategic importance of Dublin Airport to the national economy, the national, regional and local policy set out in;

- Project Ireland 2040 - National Planning Framework (NSO 6) and National Development Plan, 2017 (Government of Ireland)
- National Policy Statement on Airport Charges Regulation, 2017 (The Department of Transport, Tourism and Sport (DTTAS))
- A National Aviation Policy for Ireland, 2015 (The Department of Transport, Tourism and Sport (DTTAS))
- Regional Spatial and Economic Strategy for the Eastern and Midland Region (RSES) 2019 – 2031, 2019 (Eastern and Midland Regional Assembly)
- Fingal Development Plan 2017 – 2023, March 2017, Fingal County Council.
- Variation No. 1 of the Fingal Development Plan 2017 – 2023, September 2019, Fingal County Council.
- Dublin Airport Local Area Plan, 2020 (LAP), Fingal County Council.
- Dublin Airport Central Masterplan, 2016, Fingal County Council.

- Dublin Airport Noise Action Plan 2019 – 2023, 2018 (NAP), Fingal County Council.
- Dublin Airport Capital Investment Programme 2020+, 2019, daa.

It is considered that the Relevant Action subject to the Regulatory Decision, is in accordance with the proper planning and sustainable development of the area and would further safeguard the role of Dublin Airport and the long term amenity of residents in the area. The Relevant Action, the subject of the RD by ANCA is therefore considered to be consistent with the proper planning and sustainable development of the area and should be permitted, subject to the following (8) conditions.

RECOMMENDATION

APPROPRIATE ASSESSMENT SCREENING DETERMINATION

As set out in this Report at paragraphs 8 -8.4, an Appropriate Assessment Screening Report was submitted for the relevant Action (RA) application. A revised Appropriate Assessment Screening Report was submitted at further information stage following a request for further information by the Planning Authority. Following ANCAs setting of a Noise Abatement Objective and its making of a Regulatory Decision (RD) on 20th June 2022 and in accordance with the Habitats Directive and Birds Directive, the Planning Authority is required to carry out an Appropriate Assessment Screening of the RA as varied by the RD. Fingal County Council has made an Appropriate Assessment (AA) Screening Determination on the '*Relevant Action* (RA)' as varied by the Regulatory Decision in accordance with the European Habitats Directive (Article 6(3)) and Section 177U of the *Planning and Development Act 2000* (as amended).

Having examined both the original and updated Appropriate Assessment Screening Reports and all other documentation submitted by the applicant in relation to the Relevant Action, as amended by and incorporating the Regulatory Decision, as well as the documentation associated with the Regulatory Decision and Noise Abatement Objective published by ANCA (the Aircraft Noise Competent Authority), and in light of best scientific knowledge, and in the absence of mitigation measures, Fingal County Council is satisfied that the Relevant Action, as amended by and incorporating the Regulatory Decision, is not likely to have a significant effect on any European sites, either alone or in combination with other plans or projects. Therefore a Stage 2 Appropriate Assessment is not required.

REASONED CONCLUSION FOR PURPOSES OF EIA OF THE DEVELOPMENT CONSENT

As set out in Paragraph 9.3 of this Report, in accordance with the EU Directive 2011/92/EU as amended by Directive 2014/52/EU on the assessment of the effects of certain public private projects on the environment (the EIA Directive) and the Planning and Development Act 2000 (as amended) the Planning Authority as part of carrying out an Environmental Impact Assessment has made a Reasoned Conclusion, as follows.

daa in its application for a proposed Relevant Action (RA) seeks to amend Condition 3(d) and replace Condition 5 of permission Ref. No. ABP PL06F.217429 and to introduce an additional voluntary noise insulation grant scheme and a noise monitoring framework. Following submission of the application, the planning authority referred the application to the Aircraft Noise Competent Authority (ANCA) in accordance with Section 34C(2) of the Planning and Development Act 2000 as amended. ANCA determined that the proposed RA would result in a noise problem at the airport and, having identified a noise problem, was required to apply the 'balanced approach' and, to that end, established a Noise Abatement Objective (NAO). In addition, in accordance with the balanced approach and pursuant to section 34C(14) of the Planning and Development Act 2000 (as amended), a Regulatory Decision was prepared by ANCA and finalised on 20 June 2022. ANCA completed their assessment processes, which included Appropriate Assessment (AA), Strategic Environmental Assessment (SEA) and public consultation, and published the final NAO and RD and associated documents on the 20 June 2022.

Having regard to the examination of environmental information contained above, to the information contained in the EIAR, to the additional / supplementary information (including supplementary EIAR information) provided by the applicant; to the information received through the carrying out of consultations in accordance with the 2000 Act, to the third party submissions received in the course of the application, to the reports received from the prescribed bodies / statutory consultees, to the RD made by ANCA (and the conditions of and reasons for the RD), to the NAO, to the environmental information prepared in respect of the RD and NAO and to the supplementary examination of the planning authority it is considered that the main significant direct and indirect effects on the environment of the RA as amended by and as incorporating the RD are as follows:

Noise and Human Health and well-being effects, which will be managed over time by appropriate abatement and mitigation measures: It is anticipated that the measures the subject of the RA application, incorporating the RD, would facilitate an increase in aircraft

activity at night relative to the permitted situation. Whilst an increase in aircraft activity is not a measure of noise impacts, it is indicative that the proposals have the potential to lead to adverse effects from noise on human health and well-being.

The RA Application, as amended by and incorporating the RD, would relax the restriction laid down by Condition 3(d) of the existing Permission on night-time flights (except in exceptional circumstances) from the North Runway. Albeit, the relaxation would be limited to the first and last hour of the night-time period (23:00hrs – 00:00hrs and 06:00hrs – 07:00hrs), this would lead to an increase in night-time noise with potential associated first time human health effects, particularly for people living west, north and east of the North Runway.

The RA Application, as amended by and incorporating the RD, would replace the aircraft movement limit in Condition 5 of the existing Permission with an annual noise quota scheme with an annual limit of 16,260 between 23:00 and 06:59 (inclusive, local time) and with noise-related limits on the aircraft permitted to operate at night. This would both place a limit on overall aircraft noise generation at night and also encourage the use of aircraft with lower noise generation characteristics, which could lead to a wider reduction in aircraft noise at the airport and surrounding areas, especially in the medium and longer-term.

The RA Application, as amended by and incorporating the RD, would introduce a voluntary residential sound insulation grant scheme focused on dwellings situated within the 55dB L_{night} contour. While other sound insulation schemes have been included in the parent permission for the North Runway, this is the first time that a sound insulation scheme is proposed specifically for reduction of the effects of night-time noise, and eligibility for inclusion in the scheme would be reviewed every two years commencing from 2027.

Therefore, the RA Application, as amended by and incorporating the RD, together with the NAO has over time, the potential to reduce overall noise generation, including night-time noise generation, at the airport. This has the potential for longer-term reduction of noise, the progressive reduction in residential disamenity and the amelioration of noise-related human health and well-being. This would arise as a result of a number of factors. The First Condition of ANCA's RD sets a night-time noise generation-based restriction on the operation of aircraft for the first time at the airport. The condition would also effect further restrictions on the night-time use of noisier aircraft, which would both restrict their use and would also encourage transition to more modern quieter aircraft fleet. The Third Condition of the RD would provide for a voluntary sound insulation scheme specifically focused on reducing night-time noise effects. In addition the NAO would set specific expected outcomes for the reduction of all noise from aircraft operations (i.e. day, evening and night) with monitoring and assessment to ensure achievement of these outcomes.

The inclusion of specific short, medium and long-term health-based outcomes go beyond EC guidance and yet are considered achievable. Specific outcome reductions in noise generation would result in beneficial effects for human health relative in the medium and longer-term. ANCA will monitor the effectiveness of these measures with regard noise through the requirements of the NAO.

The RA Application, as amended by and incorporating the RD, would also allow Dublin Airport to respond to the key strategic objectives for the future development and growth of the airport as set out in Dublin Airport Local Area Plan (2020), including the fact that the airport is of recognised vital importance to the Irish economy; acts as the principal international gateway for trade, inward investment and tourism; facilitates Ireland's integration with Europe and aids in attracting foreign direct investment.

Mitigation Measures

The features and measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are set out in the Regulatory Decision (RD) and Noise Abatement Objective (NAO) relating to Aircraft Noise Management at Dublin Airport and in particular as set out in the First, Second and Third Conditions of the Regulatory Decision (ANCA, 20 June 2022).

These conditions are required to be included and incorporated into a grant by the Planning Authority of permission on foot of a RA application under section 34C of the 2000 Act.

It is considered that the information submitted to the Planning Authority, in particular the information presented in the EIAR, in the SEA for the RD and NAO and in the findings and conclusions of the RD and the RD Report is sufficient to indicate that the measures, monitoring and reporting proposed for noise management are likely to be successful.

Monitoring

The requirements for monitoring, monitoring measures and reporting are set out in the First, Second and Third Conditions of the Regulatory Decision (ANCA, 20 June 2022).

Conclusion

It is considered that the EIAR submitted with the application and the revised EIAR submitted to the Planning Authority, the other documentation submitted with the application and the supplemental information generated in the course of the application and considered by the Planning Authority are sufficient to enable the likely significant effects arising as a result of the subject of the Relevant Action application as amended by and incorporating the Regulatory Decision, to be identified, described and assessed. It is considered that the subject of the Relevant Action application as amended by and incorporating the Regulatory Decision, would not have unacceptable direct or indirect effects on the environment subject to the implementation to the mitigation measures and conditions.

REASONS & CONSIDERATIONS AND CONDITIONS

Accordingly, in accordance with *inter alia* the Planning and Development Act 2000 (as amended), including sections 34 & 34C, the Planning and Development Regulations 2001-2022, the Local Government Act 2001 (as amended) and having regard to the aforesaid Report, the carrying out of an Environmental Impact Assessment by the Planning Authority and the making of a Reasoned Conclusion, the making of an Appropriate Assessment Screening Determination by the Planning Authority, the setting out of Reasons and Considerations therein, it is recommended that a DECISION to grant permission subject to the following ~~(8)~~ 5 OK condition(s) (including the reasons and considerations which form the subject matter of each of the ~~(8)~~ 5 OK conditions and the particular matters which they address) be made and that this accords with the principles of proper planning and sustainable development:

Conditions and Reasons

1. The development shall be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application on 18 December 2020, additional information received on 13 September 2021 and the Aircraft Noise Competent Authority Regulatory Decision made on 20 June 2022, save as may be required by the other conditions attached hereto.

   REASON: To ensure that the development shall be in accordance with the permission, and that effective control be maintained

2. The terms and conditions of the grant of permission made by Fingal County Council Reg. Ref. F04A/1755 (An Bord Pleanála under Reg. Ref. PL06F.217429) and as extended under FCC Reg. Ref: F04A/1755/E1 and further amended under FCC Reg. Ref: F19A/0023 / ABP Ref: ABP-305298-19 (the amending permission) shall be complied with in full in the course of the relevant action herein permitted, save for the changes permitted under this application.

REASON: In the interest of the proper planning and sustainable development of the area.

3. The existing operating restriction, Condition 5, of the North Runway Planning Permission (FCC Reg. Ref: F04A/1755; ABP Ref: PL06F.217429) reading as:

'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'

shall be revoked and replaced with an annual noise quota scheme operating restriction as follows: **The Airport shall be subject to a Noise Quota Scheme (NQS) with an annual limit of 16,260 between 23:00 and 06:59 (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	Meaning
Annual Quota Period	The twelve-month period from 1 April to 31 March inclusive each year
EASA Noise Certification Database	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.
Night time	The hours at night between 23:00 (local time) to 07:00 (local time)
Noise Classification Level (NCL)	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

<table>
<tr><td></td><td>Flyover Level from the EASA Noise Certification Database:</td></tr>
<tr><td></td><td>NCL(Take-Off) = EPNL(Flyover</td></tr>
<tr><td></td><td>NCL(Landing) = EPNL(Approach) −9 dB</td></tr>
<tr><td>Quota Count</td><td>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:</td></tr>
<tr><td></td><td><table>
<tr><td>Noise Classification Level</td><td>Quota Count (QC)</td></tr>
<tr><td>Greater than 101.9 EPNdB</td><td>16.0</td></tr>
<tr><td>99-101.9 EPNdB</td><td>8.0</td></tr>
<tr><td>96-98.9 EPNdB</td><td>4.0</td></tr>
<tr><td>93-95.9 EPNdB</td><td>2.0</td></tr>
<tr><td>90-92.9 EPNdB</td><td>1.0</td></tr>
<tr><td>87-89.9 EPNdB</td><td>0.5</td></tr>
<tr><td>84-86.9 EPNdB</td><td>0.25</td></tr>
<tr><td>81-83.9 EPNdB</td><td>0.125</td></tr>
<tr><td>Less than 81 EPNdB</td><td>0</td></tr>
</table></td></tr>
</table>

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 limited 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 Airport occurs 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 Lnight
- Annual 65dB Lden
- 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 Lden and 40 dB Lnight.
- Annual Lnight contours from 40 dB in 5 dB increments
- Annual Lden contours from 45 dB in 5 dB increments
- Summer 60 dB LAeq. 16hr, 63 dB LAeq. 16hr and 69 dB LAeq. 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:
g) location of complaints; and
h) reason for complaint
i) 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.

4. The existing operating restriction imposed by Condition 3(d) and the exceptions at the end of Condition 3 of the North Parallel Runway Planning Permission (FCC Reg. Ref: F04A/1755; ABP Ref: PL06F.217429) reading:
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.'
shall be amended as follows:
Runway 10L/28R shall not be used for take-off or landing between 00:00 and 05:59 (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.

REASON: To permit the operation of the runways in a manner which reduces the impacts of aircraft night time noise, whilst providing certainty to communities as to how they will be affected by night time operations from the North Runway, while also providing continuity with the day-time operating pattern set down by Conditions 3(a)-(c) of the North Runway Planning Permission.

5. 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 Initial Eligibility Contour Area as shown in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022. Eligibility to the scheme shall be reviewed every 2 years commencing in 2027 with residential dwellings situated in the 55 dB Lnight contour being eligible under the scheme as detailed below.

Part 1 Definitions

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

Term	Meaning
Approved Contractor	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.
Bedroom	A room other than in an attic or loft within an Eligible Dwelling which is used as sleeping accommodation.
Competent Surveyor	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.
Eligibility Contour Area	The 55 dB Lnight contour area as varied from time to time pursuant to the review process set out in Part 3.2 below.
Eligible Dwelling	A habitable dwelling built in compliance with the provisions of the building regulations and the Planning and Development Act within the Eligibility Contour Area and which otherwise qualifies under the conditions set out under Part 3.1 below.
Index Linked	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.

Initial Eligibility Contour Area	The area shown on the map Figure 3.1 – regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022.
Relevant External Noise Level	The noise exposure level at the relevant Eligible Dwelling.
Statement of Need	The recommended measures identified from those available under the scheme as outlined in Part 4
Target Performance	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 in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022 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 09th December 2019, being the date of adoption of Variation No. 1 to the Fingal Development Plan 2017 – 2023 incorporating policies relating to development within Aircraft Noise Zones and

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 Lnight 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) Primary 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 under this scheme shall otherwise comply with the specification of the measures in place under the RNIS scheme as summarized in Part 5 below.
4.4 Where secondary acoustic glazing is to be installed, this shall meet the following specification, namely, 6.4mm laminated glass with minimum 100mm 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	Minimum Horizontal Distance
Less than 4 mm and not less than 3 mm thick	200 mm
Less than 6 mm and not less than 4 mm thick	150 mm

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 80kg/m3. Where insulation is already present but found to be unsatisfactory additional layers of insulation will be added to increase the total thickness to 200mm.
4.9 Any ceiling overboarding shall comprise of a continuous layer of mass to provide at least 12kg/m2 added above joists in attic, for example 22mm 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 kg/m2, i.e. 15mm 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 Building Survey as described in Step 4
b) Identify the potential improvement in the existing sound insulation performance for each Bedroom as can be 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-bedroom basis
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.
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 this Schedule B shall be deemed to be amended accordingly. Upon completion 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 reasonable 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 mitigate the impact of aircraft night time noise as a result of the use of the Airport's runways.

6. That no development under any permission granted pursuant to this decision be commenced until security for the provision and satisfactory completion of services, including maintenance, to the taking in charge standard of the Local Authority for roads, open spaces, car parks and drains has been given by:-

A. Lodgement with the Council of a Bond of any Body approved by the Planning Authority in the sum of € which shall be kept in force by him until such time as the Roads, Open Spaces, Car Parks and Drains are taken in charge by the Council.....OR/

B. Lodgement with the Council of a Cash Sum of € to be applied by the Council at its absolute discretion if such services are not duly provided to its satisfaction on the provisions and completion of such services to standard specification.

REASON: To ensure that a ready sanction may be available to the Council to induce the provision of services and prevent disamenity in the development.

7. Prior to Commencement of development a financial contribution in the sum of € be paid by the applicant to Fingal County Council in lieu of open space provision towards the cost of amenity works in the area of the proposed development in accordance with the requirements of the Fingal Development Plan based on a shortfall of sqm of open space. CK

REASON: The provision of such services in the area by the Council will facilitate the proposed development. It is considered reasonable that the developer should contribute towards the cost of providing the services.

8. Prior to Commencement of development the developer shall pay the sum of € (updated at date of commencement of development, in accordance with changes in the Tender Price Index) to the Planning Authority as a contribution towards expenditure that was and/or that is proposed to be incurred by the planning authority in respect of public infrastructure and facilities benefiting development in the area of the Authority, as provided for in the Contribution Scheme for Fingal County made by the Council. The phasing of payments shall be agreed in writing with the planning authority prior to the commencement of development. CK

REASON: It is considered reasonable that the payment of a contribution be required in respect of the public infrastructure and facilities benefiting development in the area of the Planning Authority and which is provided, or which is intended to be provided by, or on behalf of the Local Authority.

Note on above Condition:
Please note that with effect from 1st January 2014, Irish Water are now the Statutory Body responsible for both water and waste water services (excluding surface water). Accordingly, the contribution payable has been reduced by the amount of the contribution associated with these services. A separate charge will be levied by Irish Water in relation to the provision of water and/or wastewater treatment infrastructure and connections to same. Further details are available on the Irish Water website www.water.ie, Tel. (01) 6021000.

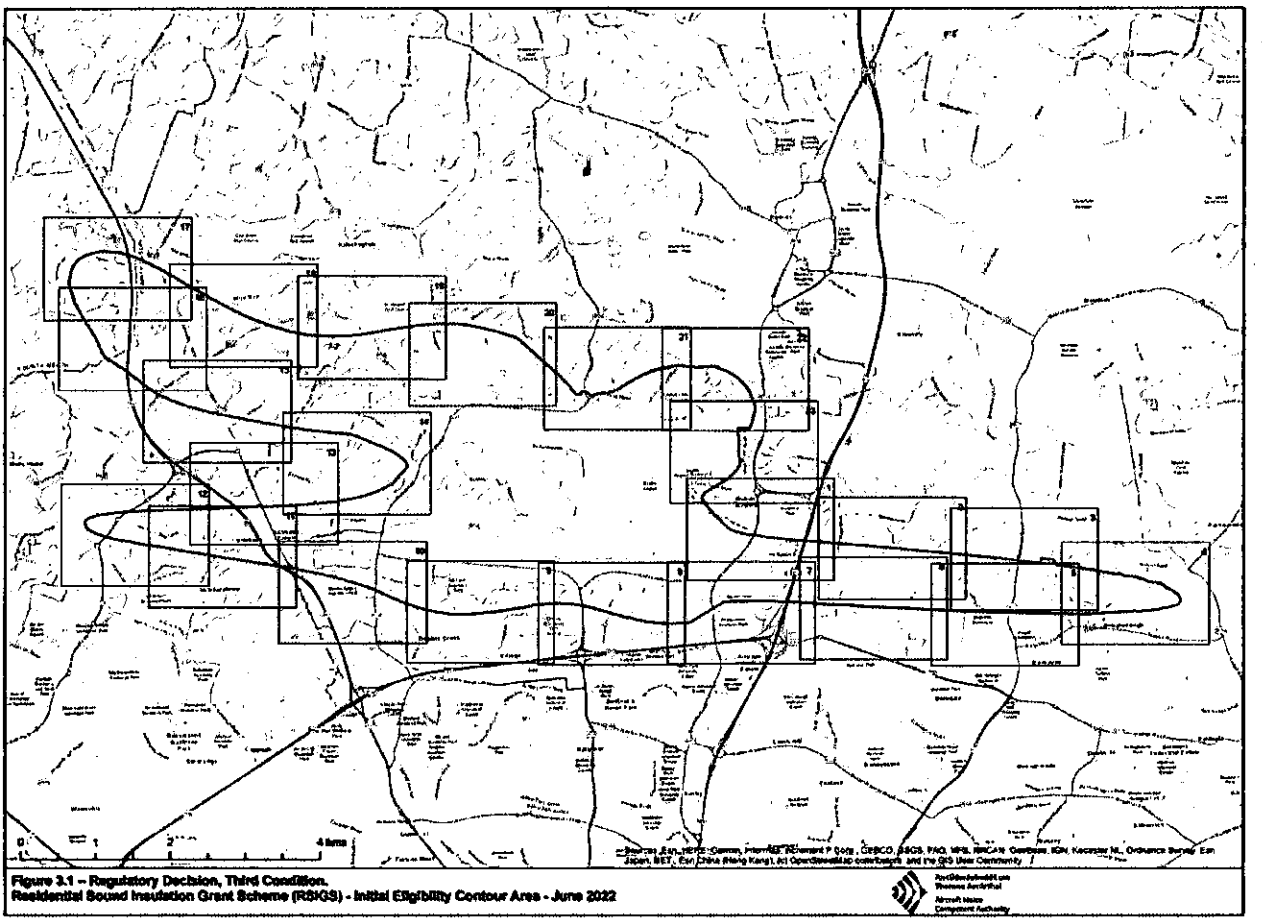

Figure 3.1 of Regulatory decision

Hugh O'Neill
A/ Senior Executive Planner

Endorsed:

Caroline Kelly
Administrative Officer

Dated 8th August, 2022

Malachy Bradley
Senior Planner

Dated 8th August, 2022

ORDER & DECISION:

In accordance with the Planning and Development Act 2000 (as amended), including sections 34 & 34C, the Planning and Development Regulations 2001-2022, the Local Government Act 2001 (as amended), the aforesaid Report as part of the carrying out by the Planning Authority of an Environmental Impact Assessment and the making of a Reasoned Conclusion, the making of a Determination screening out of the need for a Stage 2 Appropriate Assessment, the Reasons and Considerations set out therein, the Recommendation and Conditions and reasons and considerations (including the reasons which form the subject matter of each of the conditions and the particular matters which they address) are hereby accepted, approved and adopted in this Order and Decision and, accordingly, a **DECISION** pursuant to section 34 and section 34C of the Planning and Development Act 2000 (as amended) **to grant permission** for the above proposal subject to the 5 conditions (and reasons and considerations) as set out below and which accord with the principles of proper planning and sustainable development, is hereby made and so ordered as follows.

Appropriate Assessment Screening Determination

In accordance with the European Habitats Directive (Article 6(3)) and Section 177U of the Planning and Development Act 2000 (as amended), Fingal County Council has made an Appropriate Assessment (AA) Screening Determination on the 'Relevant Action (RA)' application by daa in accordance with the European Habitats Directive (Article 6(3)) and Section 177U of the Planning and Development Act 2000 (as amended) which is set out in the Report and Recommendation as follows: An Appropriate Assessment Screening Report was submitted for the relevant Action (RA) application. A revised Appropriate Assessment Screening Report was submitted at further information stage following a request for further information by the Planning Authority. Following ANCAs setting of a Noise Abatement Objective and its making of a Regulatory Decision (RD) on 20th June 2022 and in accordance with the Habitats Directive and Birds Directive, the Planning Authority is required to carry out an Appropriate Assessment Screening of the Relevant Action as varied by the Regulatory Decision. Fingal County Council has made an Appropriate Assessment (AA) Screening Determination on the '*Relevant Action* (RA)' application as varied by the Regulatory Decision as varied by the Regulatory Decision. Having examined both the original and updated Appropriate Assessment Screening Reports and all other documentation submitted by the

applicant in relation to the Relevant Action, as amended by and incorporating the Regulatory Decision, as well as the documentation associated with the Regulatory Decision and Noise Abatement Objective published by ANCA (the Aircraft Noise Competent Authority), and in light of best scientific knowledge, and in the absence of mitigation measures, Fingal County Council is satisfied that the Relevant Action, as amended by and incorporating the Regulatory Decision, is not likely to have a significant effect on any European sites, either alone or in combination with other plans or projects. Therefore a Stage 2 Appropriate Assessment is not required.

Reasoned conclusion for purposes of EIA of the development consent

In accordance with the EU Directive 2011/92/EU as amended by Directive 2014/52/EU on the assessment of the effects of certain public private projects on the environment (the EIA Directive) as transposed by the Planning and Development Act 2000 (as amended) the Planning Authority as part of carrying out an Environmental Impact Assessment has made a Reasoned Conclusion which is set out in the Report and Recommendation as follows: daa in its application for a proposed Relevant Action (RA) seeks to amend Condition 3(d) and replace Condition 5 of permission Ref. No. ABP PL06F.217429 and to introduce an additional voluntary noise insulation grant scheme and a noise monitoring framework. Following submission of the application, the planning authority referred the application to the Aircraft Noise Competent Authority (ANCA) in accordance with Section 34C(2) of the Planning and Development Act 2000 as amended. ANCA determined that the proposed RA would result in a noise problem at the airport and, having identified a noise problem, was required to apply the 'balanced approach' and, to that end, established a Noise Abatement Objective (NAO). In addition, in accordance with the balanced approach and pursuant to section 34C(14) of the Planning and Development Act 2000 (as amended), a Regulatory Decision was prepared by ANCA and finalised on 20 June 2022. ANCA completed their assessment processes, which included Appropriate Assessment (AA), Strategic Environmental Assessment (SEA) and public consultation, and published the final NAO and RD and associated documents on the 20 June 2022.

Having regard to the examination of environmental information contained above, to the information contained in the EIAR, to the additional / supplementary information (including supplementary EIAR information) provided by the

applicant; to the information received through the carrying out of consultations in accordance with the 2000 Act, to the third party submissions received in the course of the application, to the reports received from the prescribed bodies / statutory consultees, to the RD made by ANCA (and the conditions of and reasons for the RD), to the NAO, to the environmental information prepared in respect of the RD and NAO and to the supplementary examination of the planning authority it is considered that the main significant direct and indirect effects on the environment of the RA as amended by and as incorporating the RD are as follows:

Noise and Human Health and well-being effects, which will be managed over time by appropriate abatement and mitigation measures: It is anticipated that the measures the subject of the RA application, incorporating the RD, would facilitate an increase in aircraft activity at night relative to the permitted situation. Whilst an increase in aircraft activity is not a measure of noise impacts, it is indicative that the proposals have the potential to lead to adverse effects from noise on human health and well-being.

The RA Application, as amended by and incorporating the RD, would relax the restriction laid down by Condition 3(d) of the existing Permission on night-time flights (except in exceptional circumstances) from the North Runway. Albeit, the relaxation would be limited to the first and last hour of the night-time period (23:00hrs – 00:00hrs and 06:00hrs – 07:00hrs), this would lead to an increase in night-time noise with potential associated first time human health effects, particularly for people living west, north and east of the North Runway.

The RA Application, as amended by and incorporating the RD, would replace the aircraft movement limit in Condition 5 of the existing Permission with an annual noise quota scheme with an annual limit of 16,260 between 23:00 and 06:59 (inclusive, local time) and with noise-related limits on the aircraft permitted to operate at night. This would both place a limit on overall aircraft noise generation at night and also encourage the use of aircraft with lower noise generation characteristics, which could lead to a wider reduction in aircraft noise at the airport and surrounding areas, especially in the medium and longer-term.

The RA Application, as amended by and incorporating the RD, would introduce a voluntary residential sound insulation grant scheme focused on dwellings situated within the 55dB L_{night} contour[10]. While other sound insulation schemes

have been included in the parent permission for the North Runway, this is the first time that a sound insulation scheme is proposed specifically for reduction of the effects of night-time noise, and eligibility for inclusion in the scheme would be reviewed every two years commencing from 2027.

Therefore, the RA Application, as amended by and incorporating the RD, together with the NAO has over time, the potential to reduce overall noise generation, including night-time noise generation, at the airport. This has the potential for longer-term reduction of noise, the progressive reduction in residential disamenity and the amelioration of noise-related human health and well-being. This would arise as a result of a number of factors. The First Condition of ANCA's RD sets a night-time noise generation-based restriction on the operation of aircraft for the first time at the airport. The condition would also effect further restrictions on the night-time use of noisier aircraft, which would both restrict their use and would also encourage transition to more modern quieter aircraft fleet. The Third Condition of the RD would provide for a voluntary sound insulation scheme specifically focused on reducing night-time noise effects. In addition the NAO would set specific expected outcomes for the reduction of all noise from aircraft operations (i.e. day, evening and night) with monitoring and assessment to ensure achievement of these outcomes.

The inclusion of specific short, medium and long-term health-based outcomes go beyond EC guidance and yet are considered achievable. Specific outcome reductions in noise generation would result in beneficial effects for human health relative in the medium and longer-term. ANCA will monitor the effectiveness of these measures with regard noise through the requirements of the NAO.

The RA Application, as amended by and incorporating the RD, would also allow Dublin Airport to respond to the key strategic objectives for the future development and growth of the airport as set out in Dublin Airport Local Area Plan (2020), including the fact that the airport is of recognised vital importance to the Irish economy; acts as the principal international gateway for trade, inward investment and tourism; facilitates Ireland's integration with Europe and aids in attracting foreign direct investment.

Mitigation Measures

The features and measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment are set out in the Regulatory

Decision (RD) and Noise Abatement Objective (NAO) relating to Aircraft Noise Management at Dublin Airport and in particular as set out in the First, Second and Third Conditions of the Regulatory Decision (ANCA, 20 June 2022).

These conditions are required to be included and incorporated into a grant by the Planning Authority of permission on foot of a RA application under section 34C of the 2000 Act.

It is considered that the information submitted to the Planning Authority, in particular the information presented in the EIAR, in the SEA for the RD and NAO and in the findings and conclusions of the RD and the RD Report is sufficient to indicate that the measures, monitoring and reporting proposed for noise management are likely to be successful.

Monitoring

The requirements for monitoring, monitoring measures and reporting are set out in the First, Second and Third Conditions of the Regulatory Decision (ANCA, 20 June 2022).

Conclusion

It is considered that the EIAR submitted with the application and the revised EIAR submitted to the Planning Authority, the other documentation submitted with the application and the supplemental information generated in the course of the application and considered by the Planning Authority are sufficient to enable the likely significant effects arising as a result of the subject of the Relevant Action application as amended by and incorporating the Regulatory Decision, to be identified, described and assessed. It is considered that the subject of the Relevant Action application as amended by and incorporating the Regulatory Decision, would not have unacceptable direct or indirect effects on the environment subject to the implementation to the mitigation measures and conditions.

Reasons & Considerations and Conditions

1. The development shall be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application on 18 December 2020, additional information received on 13 September 2021 and the Aircraft Noise Competent Authority Regulatory Decision made on 20 June 2022, save as may be required by the other conditions attached hereto.

REASON: To ensure that the development shall be in accordance with the permission, and that effective control be maintained

2. The terms and conditions of the grant of permission made by Fingal County Council Reg. Ref. F04A/1755 (An Bord Pleanála under Reg. Ref. PL06F.217429) and as extended under FCC Reg. Ref: F04A/1755/E1 and further amended under FCC Reg. Ref: F19A/0023 / ABP Ref: ABP-305298-19 (the amending permission) shall be complied with in full in the course of the relevant action herein permitted, save for the changes permitted under this application.

REASON: In the interest of the proper planning and sustainable development of the area.

3. The existing operating restriction, Condition 5, of the North Runway Planning Permission (FCC Reg. Ref: F04A/1755; ABP Ref: PL06F.217429) reading as:

'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'
shall be revoked and replaced with an annual noise quota scheme operating restriction as follows:
The Airport shall be subject to a Noise Quota Scheme (NQS) with an annual limit of 16,260 between 23:00 and 06:59 (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	Meaning
Annual Quota Period	The twelve-month period from 1 April to 31 March inclusive each year
EASA Noise Certification Database	The database of noise certification levels approved and as varied from time to time

<table>
<tr><td></td><td>by the European Union Aviation Safety Agency (EASA) and published on its website. (https://www.easa.europa.eu/domains/environment/easa-certification-noise-levels).</td></tr>
<tr><td></td><td>The noise levels are established in compliance with the applicable noise standards as defined by International Civil Aviation Organization (ICAO) Annex 16 Volume 1.</td></tr>
<tr><td>Night time</td><td>The hours at night between 23:00 (local time) to 07:00 (local time)</td></tr>
<tr><td>Noise Classification Level (NCL)</td><td>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.</td></tr>
<tr><td></td><td>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:</td></tr>
<tr><td></td><td>NCL(Take-Off) = EPNL(Flyover</td></tr>
<tr><td></td><td>NCL(Landing) = EPNL(Approach) −9 dB</td></tr>
<tr><td>Quota Count</td><td>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:</td></tr>
<tr><td></td><td><table>
<tr><td>Noise Classification Level</td><td>Quota Count (QC)</td></tr>
<tr><td>Greater than 101.9 EPNdB</td><td>16.0</td></tr>
<tr><td>99-101.9 EPNdB</td><td>8.0</td></tr>
<tr><td>96-98.9 EPNdB</td><td>4.0</td></tr>
<tr><td>93-95.9 EPNdB</td><td>2.0</td></tr>
<tr><td>90-92.9 EPNdB</td><td>1.0</td></tr>
<tr><td>87-89.9 EPNdB</td><td>0.5</td></tr>
<tr><td>84-86.9 EPNdB</td><td>0.25</td></tr>
<tr><td>81-83.9 EPNdB</td><td>0.125</td></tr>
<tr><td>Less than 81 EPNdB</td><td>0</td></tr>
</table></td></tr>
</table>

Part 2 – Noise Quota Scheme

2.1 Subject the dispensations described in Paragraph 2.2:

f) A take-off or landing at the Airport shall be determined to fall within the night time based on runway time.
g) No aircraft with a Quota Count of 4.0 or more shall be permitted to take off at the Airport during the night time.
h) No aircraft with a Quota Count of 2.0 or more shall per permitted to land at the Airport during the night time.
i) 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.
j) The Noise Quota at the Airport shall be limited 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:

e) 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.
f) 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.
g) Where a take-off or landing of any aircraft at the Airport occurs as a result of widespread and prolonged disruption of air traffic.
h) 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:

f) 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;
g) The Quota Count assigned to aircraft operating in the Noise Quota Period;
h) The total Noise Quota used during the quarter and in the Annual Period to date;
i) The total Noise Quota used by Quota Count in the quarter and in the Annual Period to date; and
j) 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:

e) 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
f) 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
g) 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

h) 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:

j) Noise exposure statistics and contours as required to facilitate performance review of the Noise Abatement Objective including as a minimum:

- Annual 55dB Lnight
- Annual 65dB Lden
- 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 Lden and 40 dB Lnight.
- Annual Lnight contours from 40 dB in 5 dB increments
- Annual Lden contours from 45 dB in 5 dB increments
- Summer 60 dB LAeq. 16hr, 63 dB LAeq. 16hr and 69 dB LAeq. 16hr (measured averaged across 92-day summer period from 16th June to 15th September).

k) 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.

l) 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

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

n) 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.

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

p) location of complaints; and

q) reason for complaint

r) 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.

4. The existing operating restriction imposed by Condition 3(d) and the exceptions at the end of Condition 3 of the North Parallel Runway Planning Permission (FCC Reg. Ref: F04A/1755; ABP Ref: PL06F.217429) reading:
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.'
shall be amended as follows:
Runway 10L/28R shall not be used for take-off or landing between 00:00 and 05:59 (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.

   REASON: To permit the operation of the runways in a manner which reduces the impacts of aircraft night time noise, whilst providing certainty to communities as to how they will be affected by night time operations from the North Runway, while also providing continuity with the day-time operating pattern set down by Conditions 3(a)-(c) of the North Runway Planning Permission.

5. 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 Initial Eligibility Contour Area as shown in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022.
Eligibility to the scheme shall be reviewed every 2 years commencing in 2027 with residential dwellings situated in the 55 dB Lnight contour being eligible under the scheme as detailed below.

   Part 1 Definitions
   1.1 The following definitions shall apply with reference to the scheme described in Part 2.

Term	Meaning
Approved Contractor	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.
Bedroom	A room other than in an attic or loft within an Eligible Dwelling which is used as sleeping accommodation.
Competent Surveyor	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.
Eligibility Contour Area	The 55 dB Lnight contour area as varied from time to time pursuant to the review process set out in Part 3.2 below.
Eligible Dwelling	A habitable dwelling built in compliance with the provisions of the building regulations and the Planning and Development Act within the Eligibility Contour Area and which otherwise qualifies under the conditions set out under Part 3.1 below.
Index Linked	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.
Initial Eligibility Contour Area	The area shown on the map Figure 3.1 – regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022.
Relevant External Noise Level	The noise exposure level at the relevant Eligible Dwelling.
Statement of Need	The recommended measures identified from those available under the scheme as outlined in Part 4
Target Performance	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 in Figure 3.1 - regulatory decision, Third Condition. Residential Sound Insulation Grant Scheme (RSIGS) - Initial Eligibility Contour Area – June 2022 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 09th December 2019, being the date of adoption of Variation No. 1 to the Fingal Development Plan 2017 – 2023 incorporating policies relating to development within Aircraft Noise Zones and
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 Lnight 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) Primary 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 under this scheme shall otherwise comply with the specification of the measures in place under the RNIS scheme as summarized in Part 5 below.

4.4 Where secondary acoustic glazing is to be installed, this shall meet the following specification, namely, 6.4mm laminated glass with minimum 100mm 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	Minimum Horizontal Distance
Less than 4 mm and not less than 3 mm thick	200 mm
Less than 6 mm and not less than 4 mm thick	150 mm

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 80kg/m3. Where insulation is already present but found to be unsatisfactory additional layers of insulation will be added to increase the total thickness to 200mm.

4.9 Any ceiling overboarding shall comprise of a continuous layer of mass to provide at least 12kg/m2 added above joists in attic, for example 22mm 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 kg/m2, i.e. 15mm 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 Building Survey as described in Step 4
b) Identify the potential improvement in the existing sound insulation performance for each Bedroom as can be 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-bedroom basis
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.
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 this Schedule B shall be deemed to be amended accordingly. Upon completion 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 reasonable 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 mitigate the impact of aircraft night time noise as a result of the use of the Airport's runways.

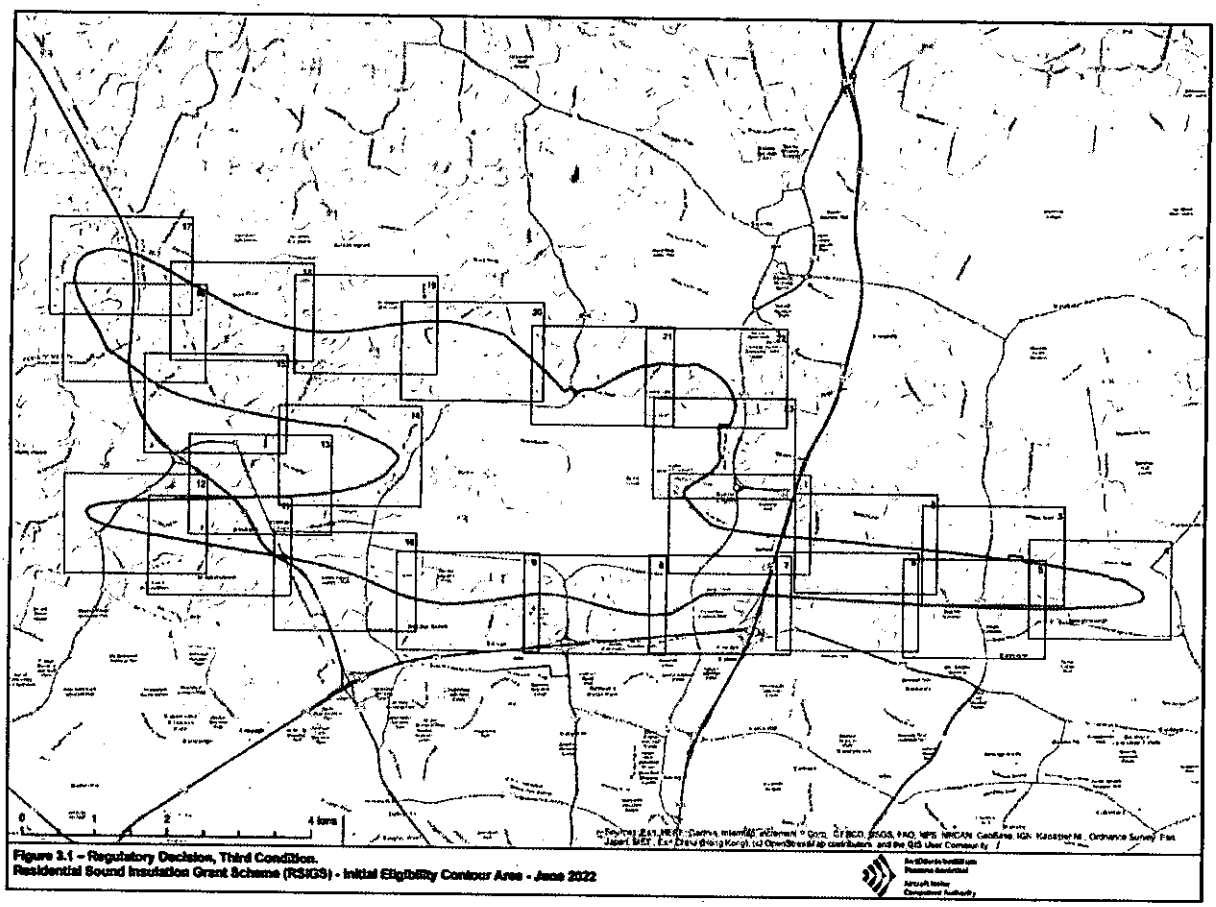

Figure 3.1 of Regulatory decision

Note: All such necessary, consequential and ancillary steps arising from this Order and Decision are hereby so further ordered.

Dated 8th August, 2022

Matthew McAleese

Matthew McAleese
Director of Services

Thereunto empowered by order of the Chief Executive, Fingal County Council C.E. No. 8278 delegating to me all powers, functions & duties in relation to the council of the County of Fingal in respect of this matter.