Comhairle Contae Fhine Gall Fingal County Council

An Roinn um Pleanáil agus Infrastruchtúr Straitéiseach Planning and Strategic Infrastructure Department



Sheelagh Morris, MFGM Millhead St. Margarets Co. Dublin

Date: 4 February, 2021

ACKNOWLEDGEMENT of RECEIPT of SUBMISSION or OBSERVATION on a PLANNING APPLICATION

THIS IS AN IMPORTANT DOCUMENT!

KEEP THIS DOCUMENT SAFELY, YOU WILL BE REQUIRED TO PRODUCE THIS ACKNOWLEDGEMENT TO AN BORD PLEANALA IF YOU WISH TO APPEAL THE DECISION OF THE PLANNING AUTHORITY. IT IS THE **ONLY** FORM OF EVIDENCE WHICH WILL BE ACCEPTED BY AN BORD PLEANÁLA THAT A SUBMISSION OR OBSERVATION HAS BEEN MADE TO THE PLANNING AUTHORITY ON THE PLANNING APPLICATION.

PLANNING AUTHORITY NAME -

FINGAL COUNTY COUNCIL

PLANNING APPLICATION REFERENCE NO. -

F20A/0668

A submission/observation in writing, has been received from Sheelagh Morris, MFGM, in relation to the above planning application.

The appropriate fee of €20.00 has been paid. (Fee not applicable to prescribed bodies).

The submission/observation is in accordance with the appropriate provisions of the Planning and Development Regulations, 2001 -2013 and will be taken into account by the Planning Authority in its determination of the planning application.

AN BORD PLEANÁLA

DO
TO
O I CEL 2007

Les 1 4 2 2 7 7 1

Catherine Egan

for Senior Executive Officer

Area:

Swords

Development:

A proposed development comprising the taking of a 'relevant action' only within the meaning of Section 34C of the Planning and Development Act 2000, as amended, at Dublin Airport, Co. Dublin, in the townlands of Collinstown, Toberbunny, Commons, Cloghran, Corballis, Coultry, Portmellick, Harristown, Shanganhill, Sandyhill, Huntstown, Pickardstown, Dunbro, Millhead, Kingstown, Barberstown, Forrest Great, Forrest Little and Rock on a site of 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

1 2001= 1015

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.

Location: Dublin Airport, Co. Dublin.

Applicant: daa plc

Application Type: Permission

Date Received: 18 December, 2020

THIS IS AN IMPORTANT DOCUMENT!

KEEP THIS DOCUMENT SAFELY, YOU WILL BE REQUIRED TO PRODUCE THIS ACKNOWLEDGEMENT TO AN BORD PLEANALA IF YOU WISH TO APPEAL THE DECISION OF THE PLANNING AUTHORITY.

Reg. Ref. F20A/0668	
Please note that all planning application published on the Council's website.	ions, including submissions/objections will be

Millhead

St Margarets

Co Dublin

K67 A364

The Secretary

An Bord Pleanala

64 Marlborough Street

Dublin 1.

Friday 1st September 2022

Dear Board members

We attach our submission to appeal the grant of permission by Fingal County Council, F20A/0668, for the reasons and information lodged today, with you and respectfully request an Oral Hearing, due to the serious implications for us, living In the runway zones.

This appeal comes to this juncture, following 23 years from the start of the planning process with F04A/1755, to the IAA to ATC, Dept of Transport, Minister for Housing, An Bord Pleanala oral hearing in 2004, (F04A/1755) to the European Parliament, and the High Court, The Transport Committee, The Dail and Seanad sessions on EU598/14, meeting with Minister Shane Ross, then current Minister for Transport.

Notwithstanding the aforementioned information submitted at the initial planning stage with Fingal County Council, the residents now have 'first hand 'experience of the extreme noise effects of the new runway (it has already opened at the time of writing).

beadling

St Margarets

midu@ 60

KG7 AB64

The Secretary

An Bord Pleanala

64 Manborough Street

I nildn0

Friday 1th September 2022

Dear Board members

We attach our submission to appeal the grant of permission by Fingal County Council, FECA/OSSS, for the reasons and information lodged today, with you and respectfully request an Oral insaring, due to the serious implications for us, living in the runway zones.

This appeal comes to this juncture, following 23 years from the start of the planning process with FO6A/1755, to the IAA to ATC, Dept of Transport, Minister for Housing, An Bord Pleana's oral hearing in 2004, (F04A/1755) to the European Parliament, and the High Court. The Transport Committee, The Dail and Seanad ressions on EUS98/14, moeting with Minister Share Ross, then current Minister for Transport.

Norwithstanding the aforementioned information submitted at the mitial planning stage with Fingal County Council, the residents now have 'first hand expensed of the extreme noise effects of the new runway (it has airtady opened at the time of writing).

The effect we are currently experiencing can only be considered an overwhelming wave of noise which is totally deafening. Despite the various methods by which DAA have tried to argue the mitigating effects of Insulation, it will be simply impossible to insulate against the tremendous noise we are currently dealing with in Kilreesk and Millhead. Although the current slot allocation is from 7am to 1pm, the effects are considerable and prohibits any sort of living a normal life.

DAA knew this and they knew that the only option for these homeowners was for them to accept the 'Buy Out' proposals put forward by them. This is especially apparent as the proposed usage of this runway as outlined by Bickerdike Allen & Partners outlines 60% departures and 21% Landings on this runway during full operation. With this level of usage along this flightpath, we must concur with the original inspector's report insofar as the viability of any community in this area will be fully 'relinquished' because of this. Despite the noise issue, the emissions from these aircraft nearby will be fatal for any person choosing to stay. As it stands currently, we can see the plume of emissions emanating from the engines as the planes pass nearby and the air is now continuously polluted with the smell of spent fuel.

I would sincerely ask that the inspector visit Kilreesk Lane to experience what we are dealing with here. The DAA have fooled the planning authority with the issue of multiple contours, model's, scenarios, and assurances. It is extraordinary that we have now been forced into such a corner that the only option is to succumb to the VBO which was agreed in house between DAA and Fingal. I do note however that no Government approval has been formally issued to date.

In relation to the VBO, the DAA have failed to honour the previous Planning conditions and indeed the accompanying planners report which clearly states that it should be dealt with on a CPO basis.

The effective are currently experiencing can only be considered an overwhelming wave of noise which is totally dealening. Despite the various methods by which DAA have tried to argue the mitigating effects of insulation, it will be simply impossible to insulate against the tremendous noise we are currently dealing with in Kilreesk and Millhead. Although the current slot ellocation is from 7am to 1pm, the effects are considerable and prohibits any sort of fiving a normal life.

DAA knew this and they knew that the unit option for these homeowners was for them to accept the 'Buy Out' proposed usage of this runway as ordined by especially apparent as the proposed usage of this runway as ordined by Bickerdike Airon & Partners outlines 60% departures and 21% Landings on this runway during full operation. With this level of usage along this hightpath, we nust concur with the original inspector's report insofar as the viability of any community in this area will be fully 'relinquished' because of this. Despite the noise issue, the emissions from these aircraft nearby will be fatal for any person choosing to stay. As it stands currently, we can see the plume of emissions emanating from the engines as the planes pass nearby and the sir is now continuously golluted with the smell of spent fuel.

I would sincerely ask that the inspector visit Kilnesk Lane to experience what we are dealing with here. The DAA have fooled the planning authority with the issue of multiple contours, model's, scenarios, and assurances. It is extraordinary that we have now been forced into such a corner that the only option is to succumb to the VBO which was agreed in house between DAA and kingal. I do note however that no Government approval has been formally issued to date.

In relation to the VBO, the DAA have falled to honour the previous Planning conditions and indeed the accompanying planners report which clearly states that it should be dealt with on a CPG basis.

This has not been adhered to despite repeated calls and representations from the Residents and their representatives. There is no proper redress for the costs involved in moving, no allowance for inflation since its inception, no provision for cost-of-living crisis, housing crises, legal costs allowance, proper moving costs allowance and a general assurance that all costs to the homeowner will be covered in full. This is only fair and equitable. The DAA have failed to properly address the sacrifice being made by the homeowners. The have also developed a half-hearted scheme to arrive at the market value of the homes by analysing homes in Naul, Ballyboughal etc 20/30km's away and applying a % to equate to our location close to Dublin City. It is simply unprofessional and not in accordance with any accredited methodology. We implore that the Bord proposes a proper scheme providing proper valuation and redress and cost reimbursement. We also ask that the Bord extends the scheme to take account the additional period involved in securing same.

In order however to put our position to An Bord Pleanala in the clearest way possible and in the spirit of transparency, Democracy and the provision of a fair voice to 22 families we hereby request that an Oral Hearing be arranged to deal with the various complex issues as outlined heretofore.

J. Massis

Sheelagh Morris

Greg Farrell & Melisa Gannon

Helena Merriman.

MFGM

This has not been adhered to describ repeated calin and representations mention has been such south the flost and their representatives. There is no proper redress for the costs involved in moving, no allowance for inflation since its incaption, no provision for sost of-living crists, how this criscs, legal costs pilowance, proper intoving costs thirthe and a general assurance that all costs terther homeowner will be covered in fact. This is only fair, are equitable. The DAA have failed to properly address the sacrifice being made by the homeowners, have failed to properly address the sacrifice being made by the homeowners, of the homes by analysing homes to faily boughal etc 20/30km's away of the homes by analysing homes to faily boughal etc 20/30km's away and applying a % to equate to our longing close to Dublis City, it is simply and resisfonal and not in accordance with any accredited methodology, Walmuldors that the Bord proposes a proper scheme providing proper valuation and redress and cost reimbursement. We also ask that the Bord examples and cost reimbursement. We also ask that the Bord examples and cost reimbursement. We also ask that the Bord examples and cost reimbursement. We also ask that the Bord examples and cost reimbursement. We also ask that the Bord examples and cost reimbursement.

a order however to pur our position to An Ford Pleanaus to the provision of a possible and in the spirit of transparency, Democratry and the provision of a fair voice to 22 families we hereby request that an Oral Hearing be arranged to declarity the various complex asserts as outlined heartofore.

stand dissipant?

nanczeń czalebi Subseccione

Helena Werriman.

MARKE

Appendices

Support Documentation.

MFGM

Appendices

Support Documentation. MFGM

- Longitudinal Data finally received from DAA Halloween
 2018 and location map.
- HSE letter received as submission on removing Condition 3
 (d) and 5 in relation to night time sleep and health.
- ABP copy of letter received, following request to meet to discuss Condition 9, and the ambiguous wording and refund of costs.
- Submission from Roderic O Gorman, Minister for Children on F20A/0668 as support to our statement – night time hours 11pm – 7am. (not 12 – 6am)
- Additional information requested from the Board clearly indicating issues with INM methodology and Noise Contours, Night Noise and Ground Operations Aircraft Noise.

- Longitudinal Data finally received from DAA Halloween 2018 and location map.
- HSL letter received as submission on removing Condition 3
 and 5 in relation to night time sleep and health.
- AGP copy of letter received, following inquest to meet to discuss Condition 9 , and the ambiguous wording and refund of costs.
- Submission from Roderic O Sorman, Winister for Children on F20A/0668 as support to our statement — right time hours 11pm — 7am. (not 12 — 6am)
- Additional information requested from the Board clearly indicating issues with INM methodology and Noise Contours, Night Noise and Ground Operations Aircraft Noise.

MFGM

ST MARGARETS

Appeal Decision PF.1692/22 - F20A/0668

Decision Date 8th August 2022.

& Request for Oral Hearing .

TO

AN BORD PLEANALA

In relation to

F20A/0668 - Relevant Action

To remove Condition 3(d) & Condition 5

F04A/1775: PL06F.217429 - August 2007. (ABP)

Relating to the Night -Time Restrictions at Dublin Airport.

Dated: August 30th 2022

280.00

1187 September 1187

Appeal Decision PF.1692/22 - F20A/0668

Decision Date 8th August 2022.

& Request for Oral Hearing.

OT

AN BORD PLEANALA

F20A/0668 - Relevant Acti

To remove Condition 3(d) & Condition 5

F04A/1775 : PL06F.217429 -- August 2007. (ABP)

Relating to the Night -Time Restrictions at Dublin Airport.

Dated: August 30th 2022

This Appeal and request for an Oral Hearing is lodged on behalf of Three Families

Helena Merriman, Kilreesk St Margarets, Co Dublin

Melissa Gannon, & Greg Farrell, Kilreesk House, Kilreesk

St Margarets, Co Dublin.

Sheelagh Morris, Millhead, St Margarets Co Dublin (In the flightpath of Runway 10L-28R)

The townland of Millhead and Kilreesk Lane is now subject to the cumulation of aircraft and ground noise and all other airport operational noise, on the opening of the North Runway, parallel to runway 10R-28L. The impacts of a busy airport with two runways operating fully for 16 hours a day with increased ATMs from 7am – 11pm and then night time with 65 Movements on Runway 10R-28L is now a reality since 24th August 2022. There are 18 homes on Kilreesk Lane with three homes in Millhead, Some of the families living here, are here for 3 generations.

This Appeal and request for an Oral Hearing is lodged on behalf of Three Families

Helena Merriman, Kilraesk St. Margarets, Co Dublin Melissa Gannon, & Greg Farrell, Kilreesk House, Kilreesk St Margarets, Co Dublin.

Sheelagh Morris , Millread. St Margarets Co Dublin (In the Hightpath of Runway 10L-28R)

the cumulation of aircraft and ground noise and all other airport operational noise, on the opening of the North Runway, parallel to runway 10R-28L. The impacts of a busy airport with two runways operating fully for 16 hours a day with increased ATMs from 7am - 11pm and then night time with 65 Movements on Runway 10R-28L is now a reality since 24th August 2022. There are 18 homes on Kilreesk Lane with three homes in Millhead, Some of the families living here, are here for 3 generations.

Millhead and Kilreesk Lane are located at the end of North Runway, and is in the flightpath, now operational with the centre line of the runway used for take off and landings with 7 selected paths under direction of ATC and IAA.

Should this Application be granted by An Bord Pleanala, this will mean the 65 ATM (Aircraft Traffic Movements) will increase with no limit as the methodology of Quota Count does not limit or specify the number of ATMs that will operate on a night basis – 11pm – 7am (night time hours)

Currently only 65 movements are permitted on Runway 10R-28L and NO schedules flight on 10L-28R From 11pm – 7am. (night time hours) per An Bord Pleanala grant of permission PL06F.217429

The mitigation measures put forward are totally inadequate for those adversely affected within 3 km of the runway area and airport. These mitigation measures must be changed to reflect the dire impact on those most affected, in the spirit of fair process and proper planning.

Millhead and Kilreesk Lane are located at the end of North. Runway, and is in the flightpath, now operational with the centre line of the runway used for take off and landings with 7 selected paths under direction of ATC and IAA.

Should this Application be granted by An Bord Pleanala, this will mean the 65 ATM (Aircraft Traffic Movements) will increase with no limit as the methodology of Quota Count does not limit or specify the number of ATMs that will operate on a night basis – 11pm – 7am (night time hours)

Currently only 65 movements are permitted on Runway 10R-28L and NO schedules flight on 10L-28R From 11pm – 7am. (night time hours) per An Bord Pleanala grant of permission PL06F.217429

The mitigation measures put forward are totally inadequate for those adversely affected within 3 km of the runway area and airport. These mitigation measures must be changed to reflect the dire impact on those most affected, in the spirit of fair process and proper planning.

GLOSSARY

ANCA - Aircraft Noise Competent Authority

ABP - AN Bord Pleanala

ATM – Air Traffic Movements (include aircraft taking off and landing aircraft as individual counts)

ATC - Air Traffic Control.

DRD - Draft Regularity Decision - issued by ANCA - the subject of this submission.

FCC - Fingal County Council

FPGOR - Flight Path/Ground Operations Residents.

FDP - Fingal Development Plan.

NAP - Noise Action Plan

NAO - Noise Abatement Objective.

SID - Standard Instrument Departure.

END - European Noise Directive.

CAR - Commission for Aviation Regulations.

SID - Strategic Infrastructure Development.

SID - Standard Instrument Departure - Aviation tool for aircraft take off.

WHO - World Health Organisation.

AQS - Aircraft Quota System.

VDPS - Voluntary Dwelling Purchase Scheme - set up by daa and FCC in December 2016

VDIS - Voluntary Dwelling Insulation Scheme for homes within the 63dB laeq16 contour.



GLOSSARY

NVCF - Aureralt Noise Compatent Authority

A SP - AN Bord Picerain

4" M. Paffic Movements (include aircraft taking off and landing aircraft as Individual count A.

And C - Au Teatlife Control

DRU - Doub Kerularity at cision is swood by ANC4 - the suggest of this advanced.

TOD - Tingel County Council

FREDR - Histor Parh / Cround Operation: Residents.

FOR - Lings Development Plan

HAR BURNSHOP WALL

NACH - Note Observed Objective.

Standard Instrument Department

AND THE REPORT OF THE PART OF

CAR - Control Lot Aviation Resultingues.

SID – Stratégic introdutidam Decelorment.

Stor - Standard Instrument Departure - Aviation location all read take off.

WHO - Want Health Dreamsall.on

AUS -An craft Guera System.

VDPS - Valuataiv Dwelline Purchase Schetne – sollup by dag and FCC in Decombet 2016

VDIS - Valentary Dwelling Involution Scheme for homes within the 63dB as nu6 content



Following grant of permission with the imposition of 31 conditions by ABP in August 2007, the applicant applied to cherry pick the night time restrictions, and request removal under SID. (Strategic Infrastructure Development) Condition 3(d) and Condition 5 in August 2008. This was refused to the applicant by ABP.

An Bord Pleanála.



Inspector's Report.

Case Ref. No:

06F.PC0056.

Issue:

SID Pre-application — whether project is or is not strategic infrastructure development.

Proposed Development:

Revisions to the permission for a new parallel runway granted under PL06F.217429.

Assessment.

Essentially the proposed development involves removing condition 5 and altering the wording of condition 3 of PL06F,217429. The prospective applicant states that this constitutes a material change of use.

Planning permission was granted by the Board for the new parallel runway under PL06F,217429. That application was lodged before the Planning and Development (Strategic Infrastructure) Act, 2006 became operative.

The runway has not been constructed. As there is no existing use of the runway, the alteration of the terms of PL06F.217429 would not constitute a material change of use, in my opinion.

An Bord Pleanala.



Refusal by ABP for SID application to remove Condition 3(d) and Condition 5.

The runway has not been constructed. As there is no existing use of the runway, the alteration of the terms of PLO6F.217429 would not constitute a material change of use, in my opinion.

The above states the fact. There is no runway constructed, no existing use of the runway, therefore the request, at time of lodgement was invalid as there was no structure to base the material change sought. The local authority have given a grant of permission on F20A/0668 on 8th August 2022.

At time of lodging application to remove Condition 3d and Condition 5 in December 2020 , The North Runway has not commenced operation and therefore disrespects the planning protocol and those administering the planning procedures. This change to the planning condition is therefore unacceptable, as it is viewed as an opportunity of entitlement, by the Applicant DAA, to bypass the future process, after the runway opens with the current conditions set out by ABP in August 2007. With the setting up of ANCA, and prior to the commencement of operation of Runway 10L-28R , sought to remove the night time restrictions , to include in the required NAO (Noise action abatement) and the new NAP (Noise Action Plan due to be renewed in 2023) This seriously compromises the affected residents under the flight path, with legal consequences accruing. The Conditions should have to be complied with as per the decision by ABP in August 2007 (Condition 3(d) and Condition 5) on the commencement of operation of 10L-28R.

In 2016 daa announced the new runway construction and operation. (following a lapsed period of 9 years from date of planning permission – August 2007) On December 20^{th} 2020, an application was submitted to FCC to remove the night time restrictions, in place to protect us for 8 hours – night time 1100-0700. (following Variation No. 1 to the FDP, a variation passed by FCC to change zonings in the current development plan).

We are rigorously and ultimately objecting to this decision by ANCA and FCC, based on the adverse affects to our health, both physical and mental to date and going forward. We find this decision by the applicant to be extremely distressing and disrespectful to those involved in the original application F04A/1755 to safeguard the future of their homes and livelihoods and quality of life.

The mitigation solutions put forward have not truly considered the impact on the directly affected residents.

Daa see this as a right to passage ,just a process , to force the community out of their way, to obtain their objective – just as it started in Barberstown Lane in the 1960's and 1970s. Their sense of entitlement to trample on the community and those adversely affected is clearly communicated to the public, by their press releases, all done in a timely fashion.

Repusal by APP for SID application to remove Canalition Hall and Conatton S

The runway has not been constructed. As there is no existing use of the runway, the other arian of the terms of PLOSE 117442 would not constitute a inalmost change of itse, in any opinion.

The above states the fact. There is no runway constructed, no existing use of the runway, therefore the request, at limit of longenism. Was invaid as there was no structure to base the material change sought. The local authority have given a grant of permission on F2CA/0568 on 8th August 2022.

As turner hodging applicable to remove Condition 3d and Condition 5 in December 2020. The Narth Annway has not commenced operation, and therefore disrespects the planning protected and therefore unacceptable, as it is viewed as an opportunity of childement, by the conditions therefore unacceptable, as it is viewed as an opportunity of childement, by the conditions set unit by ABP in August 2007. With the removy opens with the content conditions set unit by ABP in August 2007. With the retaing up of ANCA, and prior to the commencement of operation of flooring 101-238, sought to receive the right time certificans. Its included the required NAO (Noise action abatement) and the right NAO Noise Action Plan due to be received in 2023) This schoolsty compromises the affection regidents under the hight path, with legal consequences actions. The Conditions should have to be compiled with as per the decision by ABP in August 2007 (Confinon 3rd) and have to be compiled with as per the decision by ABP in August 2007 (Confinon 3rd) and the remember of operation of 100-288.

In 2016 data are normed the new normal construction and operation is following a lapsed period of 9 years from date of planning permission - August 2007). On Occember 200-2020 an application was a familited to FCC to remove the night time restrictions, in place to protect us for 8 hours - right time. 1100 - 0700. If following Variation No. 1 to the FDP, a variation passed by FCC to change zonings in the current development plant.

We are necessary and obtainedly objecting to this decision by ANCA and ECE, has adonted adverse affects to our health, both physical and mortal to date and going forward. We find this decision by the applicant to be extremely districting and disrespectful to those awolved in the original application FO4A 1755, to safeguard the future of their homes and inveltionds and must to of life.

The mitugation volutions put forward have not truly considered the impact on the micetly

Dan sou this as a right to passage just a process, to force the community out of their way to obtain their objects on the content of their way to obtain their objects of the content of their sonce of endirient at restrainple on the community and their objects advoisely affected in clearly communicated to the public. By their orest releases, all done in a timely lathon.

This places those living in Dunbro and Millhead and Kilreesk Lane in an uncompromising position, in relation to health and well- being and future uncertainty, and referred to as statistics by the Applicant and ANCA in their reports and draft decision. The mitigation measures fall far short of the health risks and mental anxiety and futures of those directly affected.

What is this Decision about.

This application is part 2 of the original planning application F04A/1755. Part 1 was to obtain the planning permission initially, to proceed with the construction of the runway, with the intention of defying and breaching the conditions in its entirety. The grant of permission was approved subject to the 31 conditions, fully adhered to. This is a legal planning document and all parties subject to the adherence of all 31 conditions. To breach and cherry pick the night time restrictions—removes the health safe guards Condition 3(d) and Condition 5 in favour of economic—benefits and is not acceptable to the human health of the any, one and all, affected residents co-existing on the boundaries of the airport.

Extract from ABP - Board Direction - 27th August 2007

In deciding not to accept the Inspector's recommendation to refuse permission, the Board considered that adequate information had been submitted in the Environmental Impact Statement, in further information submitted both to the Planning Authority and the Board and at the oral hearing to enable it to make an assessment of the significant impacts of the proposed development on the environment and its acceptability in terms of proper planning and sustainable development. The Board considered that in overall terms, the inconsistencies or deficiencies in information referred to by the Inspector were not so significant as to warrant a refusal of permission or could not otherwise be addressed by way of condition. In particular, the Board was satisfied, on the basis of the information submitted and the conditions attached, and, having regard to the fact that there are no planning restrictions on the current operation of the airport runways, that- (1) there would be no significant deterioration in noise conditions at night time in the vicinity of the airport due to the proposed Option 7b operating mode for the runways (non-use of new runway and of cross runway at night) and the restriction on night-time aircraft movements by way of condition, (2) in relation to day time noise, there would be some improvements relative to current or future noise impacts with the existing runway system to be offset against disimprovements in other areas/respects and the net effects would not be significant in terms of public health and safety such as to warrant a refusal of permission

The words – by way of condition, is the key here.

This permission was granted on the above grounds. (Non-use of new runway and of cross runway at night)

this place, the reliving it Dumbre and Milibs ad and Kitreesk Lene in an amorph on sing position, in relation to health and well-being and future uncertainty—and reteried to as manistics by the Applicant and ANCA in their reports and drift decision. The mitigation measures tall far short of the health risks and mental anxiety and intures of those directly offerced.

- What is this Decision about,

This application is part 2 of the original planning application FORAVITES. Park 1 was to sharm the planning permission intrally, so proceed with the construction of the nurvay, with the Intention of defying and preaching the conditions in its entirety. The great of permission was approved subject to the 31 conditions, fully adhered to. This is a legal planning document and parties subject to the adherence of all 31 conditions. To breach and thereby purk the night time instructions, removes the health safe guards Condition 31d) and Condition 5 in favour of economic benefits and is not acceptable to the human health of the any, one and all, officeed residents co-existing on the boundaries of the airport.

Eutract from ABP - Board Citection - 27th August 2007

Our Jecoling not to accept the Inspector's necommendation to refuse permission, the Board considered that adequate information had been submitted in the Environmental Impact Statemory, in further information submitted both to the Planning Authority and the Board and at the cool neading to enable it to make an assessment of the significant impacts of the arcy acceptability in terms of proper planting and assessment of the conviction in a semilitering the matter planting such as seminated devices an information referred to in the instantion were not to significant as to warrant a refusal of parameters at the instantion of condition in admitted by the following such as satisfied and the first their care no partition and the condition in adject to the partition of the information subsented for the condition in adject condition of the ultimation subsented for the parameter are no partition to adject and the proposed Option in adject conditions as an again the material of the remaining or algorithm in adject and all the remaining of the remaining or algorithm in a dependent or algorithm and adject and the remaining or parameter for the relation of the subsented of the following and of the relation of the subsented or the significant in other areas of the significant in the existing represented and the algorithm of the edication of parameter in the parameter and while health and safery such as to warrant a refusal of permission.

The words - by way of condition, is the key here.

This permission was granted on the above grounds. (Non-use of only runway and of cross runway at night!)

- 3. On completion of construction of the runway hereby permitted, the runways at the airport shall be operated in accordance with the mode of operation Option 7b as detailed in the Environmental Impact Statement Addendum, Section 16 as received by the planning authority on the 9th day of August, 2005 and shall provide that -
 - (a) the parallel runways (10R-28L and 10L-28R) shall be used in preference to the cross runway, 16-34,
 - (b) when winds are westerly, Runway 28L shall be preferred for arriving aircraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control.
 - (c) when winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft, and
 - (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.

Reason: In the interest of clarity and to ensure the operation of the runways in accordance with the mitigation measures set out in the Environmental Impact Statement in the interest of the protection of the amenities of the surrounding area.

And replace with the following under a "Relevant Action"

'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

- On completion of transmittion of the runway hereby permuted, the numways at the alirent shall be operated to accordance with the mude of operation During AL as detailed in the Environmental Impact Statement Addundum, Section 16 at received by the planning authority as the 9th asy of August, 2009, and shall present atom.
- the paralyst enoways (108-281 and 101-288) shall be used in prefurer to to the cross non-year, 16-36.
- (Is) when winds are sesserly, Runway 28L shall be preferred for arrang arrent? (I) her Runway 28L or 288 shall be used to departing arrent, as determined by sin territic control.
- (c) when winds are eastedy, eddor Runway Not at 16R as determined over maffix control shad by proferred for arriving aircraft. Funyay 16R shall be oreinful for departing aircraft, and
- Puloway 101 238 shall not be restricted for reforable or analog Lebuson 21011 pairs
 and 87 to hours.

except in cases of safety, maintenance considerables, exceptional hir traffic conditions, adverse weather, technical faults in an maffic control systems or declared emergencies at other airpoins.

Reason: In the interest of clarity and to ensure the operation of the convays in accordance with the mitigation measures set out in the Environmental Impact Scrimment in the interest of the protection of the amenities of the surrounding area.

And replace with the juliowing pilder a "Relevant Annian"

The grant of the state of the s

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

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."

And replace 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

ANCA issued their decision, on 20th June 2022. ANCA have not only considered the requests, but went far and beyond the request, permitting 16,260 noise Quota counts between 2300pm – 6.59 am (8,270 in excess of what was requested) and now the subject of this submission. This consultation is just another process that will be logged and submissions from the victims ignored, as part of the planning process to justify the outcome and a mere tick box exercise.

The amount of 16,260 NQC equals = 44.54 aircraft movements per night - (16260 divided by 365 days) Currently we have over 100 flight per night on the southern runway ,so we need the full and true explanation as to HOW MANY FLIGHTS WILL BE OPERATING AT NIGHT

emergencies at other anyocts or where Runway 1511-286 length is required for a specific concepts that."

The net effect of the proposed change, if describing, would change the normal operation to associate the normal operation.

The Relevant Action also is: To replace condition no. 5 of the North Runway Planning.

Fermission

3. On completion of construction of the runway hereby permitted, the average number of night time arcraft 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 raply to the further information request received by An Bord Pleanala on the 5th day of March. 2007.

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

And replace with the following.

A noise aunita system is proposed for night time noise at the airport. The airport shall be subject to an annual noise quota of 7000 between the bours of 200 Poss and 0600 hrs. 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 Manitoring Framework to monitor the noise performance with results to be reported annually to the Arcraft Noise Competent Authority (ANCA), in compliance with the Aircraft Noise (Dublin Airport) Regulation Act 7019

ANCA issued their ifecision, on 20th tune 2022. ANCA have notionly considered the requests, our were far and beyond the request parenting 15,260 hoise Quota counts between 2300pm — 6.50 am (8,270 in excess of what was requested) and now the subject of this submission. This consultation is just another process that will be logged and submissions from the victims ignored, as part of the planning process to justify the extra end a more rick box syntheses.

The amount of 16,260 NGC equals = 44.54 aircraft movements per night - 11-260 divided by 365 days.) — Currently we have over 100 flight per night on the southern runway ,so we need the full and true explanation as to HOW MANY FLIGHTS WILL BE OPERATING AT MISHT

LTO (Landing and Take off). We note the AQC of 0 is given to aircraft below 81 db
 and there is no limit on the number of that category operating at night.

Daa, funding ANCA, sought approval from ANCA to change the night time hours, imposed by ABP, based on an economic reason to trample on those adversely affected, in terms of health and well being with no meaningful dialog and consultation on a resolution. This leaves those in the direct noise zone of LTOs trapped and powerless, with health implications now and going forward.

The Applicant has assumed the right to direct and instruct ANCA (part of FCC) to produce a NAO (Noise Abatement Objective) under their cNAO proposals with their data, in parallel to removing the night time restrictions, with a dual approach. It is important to note here, that Dublin Airport currently has no restrictions and when the NAO is live, this will then introduce restrictions to Dublin Airport.

So this planning application has three objectives.

- Deal with flight path issues not addressed with the community of St Margarets.
- Introduce a NAO with the least number of restrictions to suit the airport operator and direct its content and procedure and implementation, to the detriment of Dunbro and Millhead and Kilreesk Lane. This will place the airport operator as a regulator as well as the body to be regulated. So the question is, who regulates the regulator. The NAO is required as part of the European Directive 598/2014 and the END. (European Noise Directive). In the Dail, during the debate on the setting up of the new Aircraft Noise Competent Authority, Minister Shane Ross, stated that the residents concerns would be taken care of. This has not been the case, as we find ourselves in this process.
- Remove the night time restrictions non use of schedules flights on runway 10L-28R.
 Should this be granted, night time hours will be defined at Dublin Airport as 12pm to 0600 hrs giving 6 hours sleep to those adversely affected effectively removing 2 hours sleep and tranquil rest time, required for health and well-being. Night time per the WHO is 11pm to 7am in the morning
- Note the Decision from FCC states under :

Conditions and Reasons - Part 1 - Definitions

This propriate and taken with the properties with a larger section with the construction.
 And the second of the properties are the constituted to a region of the construction.

uses funding AMCA. Prograupproval from AMCA to charge the registering transitions, brighted by AMP, based on an economy reason to transition of those of versily affected, so there of the solutions of an economy to the solution of the solu

The Applicant has assumed the Aphton (lend and Instruct ARCA (participation) as MAC (Motive Abarerte in Objective) ander their strAC coupurations with their strAC coupurations with their strAC coupurations with their strAC coupuration in the straint of the appropriate to note interesting the Aphtonius and when the time of the Aphtonius and when the time that the table will man introduce restrictions are the participate.

as propio printeria currentario pre-stini sido est

- Streng and CVE how are presented three bis contributions in a face of the model to be used to be a contributed.
- Introducts a NATO with the local company of permeth in account author observable and the control of the control
- Remove the iniginary allowed to the report of the expect selected estimate on a new 161-299 support this set to enter the center to a transmission of the center to the expect to the ex
 - Note the Sociation from ESS makes under a

Evident and Kewani. Part 1 - Definitions

As part of the planning conditions, a voluntary noise insulation scheme and voluntary buy out scheme were paramount, in the interests of those impacted by the day time noise -16 hours 7am - 11pm - on the operation of the new runway, as a mitigation measure. This was catered for in the interest of the health and well-being of those adversely affected.

7. Prior to commencement of development, a scheme for the voluntary noise insulation of existing dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings predicted to fall within the contour of 63 dB LAeq 16 hours within 12 months of the planned opening of the runway for use. The scheme shall include for a review every two years of the dwellings eligible for insulation.

Reason: In the interest of residential amenity.

8. The runway hereby permitted shall not be brought into use until noise insulation approved under conditions numbers 6 and 7 above has been installed in all cases where a voluntary offer has been accepted within the time limit of the scheme.

Reason: In the interest of the amenities of residences and schools in the area.

9. Prior to commencement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings predicted to fall within the contour of 69 dB LAeq 16 hours within twelve months of the planned opening of the runway for use. Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 months from the commencement of use of the runway.

Reason: In the interest of residential amenity.

As part of the planning continuents, a solution of intribution scheme and voluntary buy out scheme were paramount, in the interests of those impained by the day time noise – 15 hours. Fam – 1 pm. - on the operation of the new runway, as a outgation of consure. Too was caterred for in the interest of the health and well-being of those advancely affected.

7. Prior to commencement of development, a scheme for the valentary noise mation is existing dwellings shall the submitted to and agreed or writing by the planning authority. The schooler shall include all awellings predicted to lati within the contour of 63 dB LAsq tenue within 12 months of the planned spenting of the runway for use. The scheme shall include for a review every two years of the dwellings eligible for loudering.

teason, in the interest of residential aniently.

3. The runway hereby permitted shall not be throught into use until noise invitation approved under conditions numbers 6 and 7 shake has been installed in all cases where a voluntary offer has been accorded within the time limit of the schoure.

For and of standard to see an invasion and for a country of the second o

Prior to commencement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority. The Johnson shall include all dwellings produced to fall within the compact of 69 of LAngua took with the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scape of the scheme and such after shall remain open for a period of 12 months from the commencement of use of the curway.

Reason: in the intensi of residential arrenty.

Now the daa have, in this application breached those conditions by way of moving the planning goalposts, to have 24 hour operation on both runways, (scheduled and unscheduled) and the VDPS and VDIS remain the same, with the applicant claiming entitlement to do so. The interpretation of the conditions enabled the daa and FCC to devise a scheme that has been put forward as a premium of 30% on top of the daa's valuation of homes, that has been put forward creates a perception daa and FCC that is truly false. The extension period of three years will benefit the applicant not the homeowners and place them in a prolonged limbo, causing stress and anxiety with the future uncertain, to eventually force them from their homes. The use of the "Red book Value" plus 30% by way of "looking good" for the public relations, and the public is a clinical way of dealing with people, with very real issues and roots in their environment.

Condition 9 needs to be revised to take the needs of those adversely affected into account .

Condition 7 also needs to be revised with higher standard installation, to cover all costs of high quality products which have increased in price, due to the current environment.

The first media coverage of the proposed change to 24 hour flying, was reported in "The Northside people" - 6^{th} January - 12^{th} January 2021 - front page - Main headline.

DUBLIN AIRPORT WANTS NIGHT HOURS CHANGE

Daa, who own the airport, say they want to change what it claims are "onerous conditions" for the hours during which it can operate.

Daa is proposing that North Runway would only be used between 6am and midnight, meaning that there would be no flights on the new runway during the core midnight to 6am night time hours.

"We had originally wanted to have these two onerous conditions removed entirely" says daa Chief Executive Dalton Philips.

"But having engaged with the local community and listened to their views we have revised our previous position and are now proposing very significant mitigation measures.

Under daa's new proposals the overall effects of night-time noise at Dublin Airport are less than envisaged under the planning permission granted in 2007, and do not exceed those of 2018.

DAA used 2018 as the base line data to project aircraft noise going forward, when in fact, 2019 had the highest volume of air traffic at Dublin Airport, exceeding 32 million passengers.

A service for time at the specified services where remaining by very of troughts relation at postgress, to have the repeature or both remargs. Stretch the unstreading the same, with the emplicant risining entitlement to do so. The interportation of the conditions enabled the dos and result to design antitement to do so. The interportation of the conditions enabled the dos and result to design a character to do so. The interportation of the conditions of the dos's valuation of a characteristic to the following the service was been purificated as a perception day and TCD that is truly late. The extension period of their years will benefit too applicant not the homeowhers and place them in a prolonged limber, causing stress and anxiety with the future uncertain not executed to the period of the positions and the positions of the conditions of the positions.

Conditions. Since de trabaciones de com management de destructions de communitaries de comm

This first media coverage of the proposal change to 24 hour flying, was reported at "this Northside needs" of Johanny - 120 January 2021. Jount page- Mail: heading.

DUBLIN ARPOIRT WARKES ANDERS FROMBER

Bess, white above the displace only help when he has spending is observed in a some smoothing to " "The time terminal of the help at a consecution."

Destination as injudicing a major with an employer and the expension of the application disight, and army forest and according to the control of the expension of the expension

"Nete mar indem dy teamine e metapo e harres taros do colocoles e l'Alimbre no company restranty" sayo quigi Calab "Face o le e team 1805; p.

"See carby employed with the force community and telescoping a commercial factor of the second sector of the second sectors in the second sectors in the second sectors of the second sectors in the sector in the sectors in the sectors in the sectors in the sector in the sectors in the secto

Dinder das Sauss proposable du aucerd" oppete of répréseur care à l'égaler major major par pas Part et la sprélamite des presents dernéssins crances au que à de la demanauncé élément distribue d'élème que L'ARE

TAANSEN 1918 on two base transcent to projekt at each optimity foreignt, which is fast, to at, the first the highest velocity of the telefic at chiefs Aigas k control of ay in mall or control of the first that the highest velocity is the first of the first that the first that

Within the planning application, daa is also proposing a new \in 7million insulation scheme for dwellings that are most affected by night-time noise. The proposed scheme would see grants of \in 20,000 paid to the owners of up to 350 eligible houses.

7 million will no longer cover what was on offer, which is not good enough for those trapped under the flight path and between the runways in the Longitudinal Corridor as Covid and changes to the supply and demand of building products has risen 50% to 100% in many products used for insulation and building.

Daa has already established an insulation programme for about 200 local households and has established a voluntary scheme to purchase up to 38 properties that will be most affected by the operation of the North Runway at a significant premium to their market value if the runway was not being built.

"The new proposal balances the requirements of the Irish economy with the valid concerns of the local community", according to Mr Philips.

The premium of 30% is a coating to cover up the low value, DAA intend to offer, looking good to the general public. Also this 30% is subject to tax implications. The valid position of the homeowners was not a priority in the global project.

This statement to the public is deceitful and simply false information, to create a perception the applicant has the right to change the conditions. Night time core hours are from 11pm to 7am per the WHO. There has been no meaningful engagement with the "community" and daa expect to remove the night time restrictions, placing each adversely affected homeowner in a comprising position.

Anca have agreed, in their DRD (Draft Regulatory Decision) with the wording of UP TO €20,000 and anything over that amount will be borne by the affected homeowner. The article states a different view to the public. So the value of removing the night time restrictions has been placed at €20,000.

In keeping with the conditions, all parties were to adhere to 16 hours scheduled flights on North Runway with NO SCHEDULED FLIGHTS from 1100 to 0700 in the morning. ABP only granted the permission on that basis.

To say that

Under daa's new proposals the overall effects of night-time noise at Dublin Airport are less than envisaged under the planning permission granted in 2007, and do not exceed those of 2018 is simply false, as in 2018 there was no scheduled or non scheduled flights on a North Runway, as there was no North Runway open. So to compare the existance of a runway with assumptions and forecasts v the non existance of a runway in 2018, is creating a false perception to the public and to those affected and distorting the facts.

Within the planning insplication, dae is also increasing a new Chrillian Insulation Scheme for Swellings mai are most affected by night-trace noise. The proposed scheme would see productions of C20,000 paid to the owners of up to 350 engible incuses.

I million will no langer cover what was an offer, which is not good month for those trapped unace the fillight paths and between the runways or the Longitudinal Complex as Lovid and changes to the supply and consund of collising products as then 50% to 100% in many products used for insulations and building.

Una has aiready established an insulation aragramme for about 200 local nauseholds and has established a voluntary scheme to purchase up to 38 properties that will be most affected by the operation of the North Rucwuy of a stonficant arenitan to their morket value if the convey was not being built.

" The risk is proposal balances the regularments of the Irish economy with the valid conservants of the lash conservants."

The progress of 30% is a coaling to cover up the low vidue, DAX in and to offer, looking good to the general public. Also the 30% is subject to the longitudions. The valid position of the homeowners was not a priority in the slobel project.

This statement to the public is deceitful, and simply false intermation, to create a perception the applicant has the right to change the conditions. Night time core nous are from Light to Jam per the WHO. There has been no meaningful engagement with the "community" and deal expect to remove the night time restrictions, placing each adversaly affected homeowher in a compressing position.

Answ have agreed, in their 1930 if their regulators Derislon), with the worst ig a 194 vol. \$23,00-3 and anything over that amount will be bornebly the after editorizationer. The arrival states a different view to the public. So the value of removing the night time restrictions has been placed at 020,000.

In keeping with the conditions, all parties were to adnore to 15 hours scheduled Hights on North Rusway with NO SCKEDULED FLIGHTS from 1100 to 6720 in the morning. ASP only tranted the permission on that basis

72 Sept Plus

Under dan sincer proposals the mental effects of right time naise at Dublin Amport can less than engages amazon to a manufit pure, so a capital in 1965, and da nat proped that a 2053 is mingly false, as in 2015 to make the control of highest price in hord 2053 is mingly false, as in 2015 to make the more strong for the flower and a factor of a manufit when a sum of the manufactor of a manufit when a sum of the county at the county at the property of the county at the county at the property of the county at the property of the county at the co

The Planning Conditions state

(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.

We have seen the disruptions at Dublin Airport this summer, due to increased traffic in the aftermath of the height of covid restrictions, turn into a nightmare for passengers travelling to Europe and transatlantic, due to delays, and issues at other airports, thus causing a domino affect on Dublin Airport with delayed arrivals and take off and late arrivals and late take off. This is considered as disruptions, emergency and safety issues for the airport operator, Dublin Airport.

This will extend into the night time hours, as a resolution, and therefore impact on the health and well being of flight path residents. This is considered acceptable per the conditions but not for those sleeping.

One of our homeowners commences work at 7 am and is up at 6am, going to bed at 10pm So in this case, the sleep time is reduced to 5 hours with the exceptions not included.

So from 10pm – 12pm or perhaps 12.30am the 30db level will not be available for slumber environment, thus losing the first 2.5 hours of sleep time.

The exceptions above and the proposals to breach the planning permission will open runway 10L-28R - 24 hours a day and also 10R-28L. (with the exceptions in place.)

This is a major shift from the legal agreement by Daa initially to obtain the planning permission in the first instance.

NIGHT TIME HOURS IS 1100 TO 0700 AM

The Hanning Conditions state

Runway 191-258 shall not be used for Liverart or Lipiding between 2301 nours.
 and 0700 hours.

exceut in cases of safety, maintenance considerations, exceptional air traffic conditions, exceptional air traffic conditions, educate weather, legitimal foults in air traffic control systems or dictared congregative other angons.

We have seen the disruptions at Dublin Airport this summer, due to increased traific in the aftermath of the neight of covid restrictions, turn into a nightmare for passengers travelling to Europe and transationtic, due to delays, and issues at other airports. This causing a domino affect on Dublin Airport with delayed arrivals and take off and are airlivals and late take off. This is considered as disruptions, emergency and safety issues for the airport operator, bublin Airport.

This will extend into the night time hours, as a resolution, and therefore impact on the broath and well being of flight path residents. This is considered acceptable per the conditions but not for those sleeping.

the of an homeowners committee, word or " an and is up at tarry going to bed un tispin.

So in this case, the steep time is addressed to a hour, with the exceptions not indicated.

So thom 10pm – 12pm or perhaps 14.30pm the 20db lavel will not be evaluable for elember environment, thus Itslag the law 2.5 hours of sleep time.

The exceptrains above and the proposals to be selethe planning permission will open rank up to LaSA. Zo knows a day and also 108-28L. (with the exceptions in place).

It is in a major shift from the legal agreement by baa initially to obtain the planning permission in the first instance.

NIGHT TIME HOURS IS 1100 TO 0700 AM

The WHO guidelines clearly states the night time hours and this was clarified at the oral hearing and corrected.

4.4. WHO Guideline Values

The WHO guideline values in Table 4.1 are organized according to specific environments. When multiple adverse health effects are identified for a given environment, the guideline values are set at the level of the lowest adverse health effect (the critical health effect). An adverse health effect of noise refers to any temporary or long-term deterioration in physical, psychological or social functioning that is associated with noise exposure. The guideline values represent the sound pressure levels that affect the most exposed receiver in the listed environment.

The time base for LAeq for "daytime" and "night-time" is 16 h and 8 h, respectively. No separate time base is given for evenings alone, but typically, guideline value should be 5-10 dB lower than for a 12 h daytime period. Other time bases are recommended for schools, preschools and playgrounds, depending on activity.

The available knowledge of the adverse effects of noise on health is sufficient to propose guideline values for community noise for the following:

- a. Annoyance.
- b. Speech intelligibility and communication interference.
- c. Disturbance of information extraction.
- d. Sleep disturbance.
- e. Hearing impairment.

Extract from the WHO guidelines for community noise 1999.

The applicant is attempting to influence a perception that night time is core hours 12pm - 6am and remove 1100 - 11.30 from any aircraft noise monitoring (30 minutes) as part of the AQS. (aircraft quota system).

Night time is 8 hours -11pm to 7am . The applicant titles the hours 11.00-11.30pm and 0600-0700 as shoulder hours.

Fact is -1100 - 11.30 is night time and 0600 - 0700 is also night time for the purpose of sleep and rest, health and well-being.

This has been stated in Fingal County Council grant of condition on 8th August 2022 (page 10 under Part 1 – Conditions

Night time: Thew hours at night between (23:00 (local time) to 7:00 (Local time)

The WHO goldelines obtainy status the night pare nours and this was starthed at the original nearing and corrected.

entra Candabas Dalad Ask

the falls and the exact of table of an against be reduced by a second to a second and the antide of the same of the exact of the expectation of the exact of the expectation of the exact o

The first have been found for the time to a property or the second of the second of the people of the second of th

i bis med dibis mit eledge en des echeme edicate occurare en nealth , earlicigni no ge ge sa probablist salles excentiments in the element of blocking.

- Fried and F. . .
- a prestoud pure la remadeix y highlandered. It
 - and the first of the control of the
 - L. Shop dynames
 - are-enougher agravable to

Lifter thorothe vision principles for community wave, 1999

The applicant is attempting to influence a perception that hight time is core hours. $12\mu m - 6\pi m$ and remove 1100 - 11.30 from any aircraft noise monitoring (30 minutes) as part of the AQS, (alteraft quotalsystem).

Night dimens 8 hours $\sim 11pm$ to 7am. The applicant vides the hours 11 00-11.30pm and 1600-0.705 as shoulder hours.

Fact is - 1100 - 11.30 it night time and -0500 - 0700 is also night time for the nurpose of sleep and rest, health and well-being.

This has been stated in Fingel County Council grant of condition on 8th August 2022 (page 10 under Part I – Conditions

Wight time: Thew hours at night between (£3:00 (local time) to 7:00 (local time)

Extract from Ruport Thornley Taylor Document - June 2007 - Oral Hearing for F04A/1755

1 The Development currently sought by the Applicants

The EIS considered a range of operational scenarios Between the submission of the EIS and the opening of the hearing, one operational scenario known as Option 7B has been favoured by the applicants and it was confirmed by the applicants to the hearing, through their council Mr O Donnell, that the applicant would be content to be restricted to the use on the new runway in accordance with the assumptions of Option 7b In Summary these Assumption are:

(4) No operations at night defined according to the noise contour period as 2300 – 0700 on runway 10L-28R with very limited exceptions.

The definition of night for these purposes was confirmed by Mr O Donnell as 2300 – 07.00 not 2300 to 0600 as referred to in the EIS Addendum 2. The Exceptions were clarified by Mr Andrew Evans as follows:

Where safety, maintenance considerations—air traffic demand and environmental considerations require the proposed runway at night "is to be interpreted such that in clarification of the term "air traffic demand" this was included to cover broader airline traffic issues not necessarily covered by the safety and Environmental issues at Dublin . These demand might occur as a result of widespread traffic disruption over a large area perhaps as a result of adverse weather , technical problems with Air Traffic Control systems or declared other emergencies at other airports . It does not mean air traffic demand or capability

So it is very clear from the Oral hearing and conditions agreed, daa agreed to the night time restrictions 1100 – 0700 with exceptions – clearly documented as **no scheduled flights due to air traffic demand or capability.**

Dublin Airport will have three runways to operate fully for 16 hours a day and will increased ATMs will follow at Dublin Airport. So the 2018 comparison in terms of ATMs is not true and factual. Night time will permit 65 movements on South Runway, in the interest of local residents sleep, health and well-being.

Extract from Junior Transfer Suito Decement - Junio 2007 - Oral Regular for 154-177 Set.

The Development currently sought by the Applicable

The SIS considered a range or operational scenarios. Retvour are submass an of the DS and the opening of the busing, one operational scenario known as Quaton 38, has been favoured by the applicants and it was confirmed by the applicants to the hearing. Through that council lyle O Dozonti, that the applicant, you'ld be content to be restricted to the use the new times of Option. It is summary these and the restricted are:

15). We escaptions at eaght defined according to the notice contour pedge as 2300 ~0700 and notward 150.288 with very limited exceptions.

The Fig. 1 of the first particular and the investment of the particular and the particula

Where safety, menterance considerations, are unific demand and environmental considerations is equire the projected covery at right. "Is follow interpreted such and in clarific rough of the was included as pover breader authoritation in one not creased by the safety and follows and the following as a solution of materials as essuit of mere pread traile discussion over a large area perturbed as a result of mere pread traile discussion over a large area per trained as a result of adverse meather, technical problems with Air "raile Control was reacted to the create of a result of adverse weather accurate the area of the case, as the field demand of a great line.

So it is very dear from the first houring and conditions agreed, does agreed to the night time restrictions. 15 of - 0.000 with exceptions - clearly documented as no scheduled flights due to eir traffic demand or capability.

Subtin Airport will have three runways to operate July for 16 hours a day and will increased ATMs will follow at Dul-lin Airport. So the 2018 comparison in terms of ATMs is not true and factual. About time will permit 65 movements on South Bunway. In the interest of local restrictures sheep nealth and well-bulng.

Chapter 5

- Consultation as perceived by the applicant to the community and to the local authority and the public.

The applicant Daa give the perception that the community of St Margarets have been engaged with, in the matter of aircraft noise and the impacts considered in their mitigation solution, of a voluntary insulation scheme and voluntary buy out scheme. The term VDIS and VDPS say it all. The homes and lives of residents under the flightpath and parallel to the runways are titled "dwellings" These "dwellings" are homes, some for 3 generations to the families, who have an identity with the area and rural setting, in the shadow of the airport. Over the last three FDP's (Fingal Development Plans) St Margarets has been taken off the rural village list in North County Dublin by FCC. In place of RV (rural Village) St Margarets was first changed to RVI status and then Special Policy area, and then included in the Dublin Airport Masterplan, and finally now the St Margarets Special Policy Area. This has evolved over the last twenty- three years in the formation of the FDP with Dublin Airport. (Daa own Dublin Airport) There are currently plans put forward by FCC for the future of the village, as a cultural area, in conjunction with Dunsoghly Castle.

This is now being actively persued with our Councillors to preserve our village as zoning CI – Community Infrastructure.

The applicant has always used the media to state, the local community were engaged with and considered in the planning for this new runway. The process for the planning of the new runway, has proved to be the opposite, with those directly adversely affected, being considered insignificant in the vision and execution of the runway and airport expansion to date. No meaningful engagement, or consideration has been afforded to the residents most affected. What has been experienced has been roadblocks, frustration and a process that excludes the real issues for us.

All those who actively engaged by DAA to engage with those directly impacted are no longer agents or representing DAA, as the process was flawed and biased.

If we read the press release on the Northside People again on 6th January, two weeks after the applicant applied to breach the conditions on night time restrictions, (Chapter 3 – page 9) and compare it with the words of the CEO of Daa, Mr Dalton Philips, on 14th February 2019 – it relates a very different address to the flight path residents: (now gone)

Chapter 5

 Consultation as perceived by the applicant to the community and to the local authority and the public.

The applicant Diag give the perception that the community of St Margarets have been engaged with, in the matter of aircraft noise and the impacts considered in their mugation solution of a voluntary insulation scheme and voluntary buy out scheme. The least VDFS say it all. The homes and lives of residents under the flightpath and parallel to the interest are ings. These "theolikes" are "the "the first one of a generation to the families, who have an locality with the area and rural setting, in the shadow of the airport. Over the last three FDP's (Fingal Development Plant) St Margarets been laked off the north County Dublin by FCC. In place of RV (cural Village) St Margarets was first changed to RVI status and then Special Policy area, and then included a the Deblin Airport Masterplan, and finally now the St Margarets Special Policy Area. This show over the last twenty three years in the formation of the FDP with Durkin Dublin Airport). There are currently plants put forward by FCC for the future of the village, as a cultural area, in conjunction with Durkenghy Castle.

This is now being actually persuad with our Coarrellors on preserve our villings as coning Ci.

— Community inhous to be to:

The applicant has always used the modia to state, the focul community were engaged with and considered in the planning for this new runway. The process for the planning of the new runway, inspersory affected, being new runway, inspersory to be the conosidered insignificant in the vision and execution of the runway and airport expansion to date. No meaningful engagement, or consideration has been afforded to the residents broats affected. What has been experienced has been roadblocks, frustration and a process that excludes the roal issues for un.

All those who actively longuided by DAA to entrage with those the actly impacted actino inner accords on records on representative DAA. We the process was flowed and braxest.

If we read the press release on the Northside People again, on 61 January, two verticafter the applicant applied to breach the conditions on night time restrictions. (Chapter 3 - page 3) and compare it with the words of the CEO of Dala. Mr Caller Philips, an LE^D February 2019 - a relater a year 15 - each other inches the content. I have greate

Whether it is one household or 200 households under the flightpath, I am really sorry for them, I really am, but that is a matter for them"

He also stated " it was not right that we are not allowed to fly between 6am and 7am" and stating that the M50 is buzzing at that time and so should the airport"



I can assure the reader, this was no laughing matter for those adversely affected by the impact of runway 10L-28R then under construction. In fact, we view it as a veiled threat and deliberate attempt to remove their responsibility and duty of care by the applicant in this application. Once the runway opens, Daa will be relieved of their responsibility as this moves to the IAA and ATC.

Access to information and Understanding a text book impact.

There was great difficulty in viewing the documents on the planning file, for this application , and in receiving them , making it difficult for those adversely affected to receive the planning files. To view the significant data, metrics, assumptions, models, noise metrics , projected calculations as best we could, in our limited knowledge of aviation, we had to purchase hard copies to gain some understanding of what is proposed. The cost was substantial as the files uploaded were not in order and impossible to download properly

with the vast number of pages per document/documents. This raises the question of easy access to the information, that was so negatively significant, in the future health and well being of adversely affected residents. The actual impact of North Runway will only be measured when the ATMs commence, on the granted permission of 16 hours per day, in addition to the South runway. The Applicant is seeking to bypass this real time analysis and assessment, and go direct to 24 hour flights at Dublin Airport (scheduled and non scheduled those being the exceptions) The Health impacts from studies in Frankfurt and Zurich, where night studies were completed, gives a robust account of those impacts.

Sancther It is one incurrenalet or 200 viouseheigs under the fligrigorys, Com really only for Secretives and in our content of a metter function?

the absolute of "ige as not right that we are not adapted to the hermon compact and hard absolute the "450 is braining at that three and su should the adjust".



i can secure the render, this was no laughing marter for chose adversely affected by the impact of runway 10t-23R then under construction. In fact, we view it as a vertex threat and deliberate attempt to commove their responsibility, and duty of care by the applicant in this application. Once the runway opens, Daa will be tolloved of their responsibility as this moves to the 10A and ATC.

Access to information and Understanding a text book impact.

There was great difficulty in viewing the documents on the planning file, for this application, and in receiving them, making it officult for Phose adversely affected to receive the planning files. To view the significant data, motrics, assumptions, models, noise metrics, projected calculations as best we could, in our limited knowledge of aviation, we not to purchase hard copies to gain some understanding of what is proposed. The cost was substantial as the files uploaded were not in order and impossible to download properly

with the vast number of pages per document/documents. This raises the question of easy access to the miormation, that was so negatively significant, in the future health and well oring of selversely affected readers. The retual impact of florth flucture health and well oring of selverse when the ATM seamments, on the pranted permission of 16 hours per day in addition to the fourth narrows. The Applicant is socking to pypass the resisting make is not essentially and the seam gold title to well have flictles at Bublin Amont 1 of status and no a societable those heing the seminal flictles at Bublin Amont 1 of status and no a societable those heing the seminal conditions are dealth at the status of a finite and acceptance of the seminal and acceptance of the status of the analysis.

The planning permission with 31 conditions was imposed on all parties, and daa, due to their position, with a view of entitlement, have chosen to trample on those Health and well being safeguards put in place for the flight path and parallel runway homes that are adversely affected. This application is about four different and separate airport issues.

- 1. Removing the night time tranquillity required for sleep and rest, imposed by ABP in 2007.-8 hours 2300-0700 am . (removing 2 hours sleep time each night x 365 days a year for eternity)
- Introducing the flight paths as part of the runway this should be a separate planning application. Once the runway opens for scheduled flights, DAA will no longer be accountable for noise issues as this will fall on the IAA and Air Traffic Control (ATC). This is not acceptable as this runway and permission is the property of DAA.
- Precursor to application for increasing passenger numbers from 32million to 40 million in 2025. This was originally part of the discussions with FCC and ANCA to be included in this application, but was deferred until 2025, when passenger numbers are due to be at peak again and in anticipation of this planning approval.
- Introduction of the Noise Quota System instead of ATMs at Dublin Airport. Dublin Airport has no restrictions currently. The operation of the new runway brings into place restrictions for the first time . The NQS is a matter for each airport to implement under the NAO and daa have proposed a cNAO to ANCA to agree upon, when in actual fact, there is no NAO in place and is a requirement to do so by ANCA without the night time restrictions in place per the planning permission document. In the DRD Anca have not only approved the 7990 AQC's but increased the figure to 16,260 an increase of 8,270 prior to the NAO or the 2023 Noise Action Plan formulated. This places those directly under the flight path the direct targets of constant maximum aircraft noise 24 hours a day , with no relief, and denies the right to tranquility and the right to a proper nights sleep.

This is not a comparative method as ATMS and NQS are totally opposite. This will mean:

Instead of measuring the actual events, (ATMs) the operator will take noise droplets and place them in a computerised reading to produce a figure, that the programmed NQS computer accepts to transfer to a data report for EASA and covering EU legislation. This will be the justification for increased ATMs which will no longer be considered.

Meanwhile the actual events are ignored, and the NQS becomes the only Aircraft noise baramator recognised.

Meanwhile those adversely affected are subjected to an aircraft taxiing, reaving, powering up, and thrust noise for take off and landing every one to 2 minutes - ground and air - changing depending on weather. Most of the flights take off into the west, leaving St Margarets the most impacted.

The planning permission with 31 condulors was imposed on all carries and dua, due to after position, with a view of establishment, have chosen to be must enable and wall asless astegosed, put to place for the form path and parallel turwing beauty that are aftertied. This applicance is about four different and input are aftertied. This applicance is about four different and input are aftertied or care.

- 3. Removing the maintaine to anguility required to steep and not, imposed by ABC in 2007 - 8 hours 2,000 - 0700 am. I removing Zhours sleep time each marks substance steep age of for atministration.
- 2. Introducing the Hight paths as part of the runnary this should be a separate usual deapproxime. Once the nerway does it for subsidered flights. DAA will go Linger be accountable for coor issues as this will felt on the IAA and the Traffic Tentrol (ATC). This is not acceptable as this introvay and cermission is the acceptable of DAA.
- Preutronic application for inducesing pasterger automores from 32 million to 40 million to 2025, This was originally part of the discussions with PCL and ANICA to be defluited in this application, but was deterred until 2025, when passenger number area due to be above to agency and to autoapation of the placemay approval.
- A inconfiction of the York Coota System wiread of ATTA at Dualin Airport. Dublic Airport has no esticutions convently. The operation of the new runway brings into place required medical for the function. The WQS is a matter for real-superor in actual fact, space or esticition. For the functions of the WQS is a matter for real-superor in actual fact, space in a cYAC and do a have proposed a cYAC or place and is a requirement of as a by ANCA. Will not the night same restrictions or grace per the plane on demandation document. In the DRD Airsa have not only approved the 7990 AQC's not inconsisted the figure to 16,260 an increase of 8,270 prior to the turn of the 1228 Noise Action Plan formulated. This places those directly under the flagingor of the figure of the region of t

note is not a comparative motional at ATMS and Mills are cotally apposite. This will means instead of meaning the near ng the actual events, (ATMs) this approximative make make a capture and approximative of them in a constitutions of making to produce a figure, that the programmed MOS computer accepts to telepholes to a data report for SASA, and covering SU legislatives. This will be the instituted on the incomised ATMs will no former be considered.

Meanwhile the actual sucrets at a lignaned, and the MOS becomes fine only Amunit noise anniunal medgrised.

Structuring those autoryly affected are subjected to an aircraft turing a conting a powering up , and threet more true follows landing everyouse up I vanutes a ground and all a complete depending on weather. West of the flights take off the time they are contagned to biorgarate the roll of the continue. 16 hours a day on North and South runway – maximum that could be : 30 ATMs x 2 runways x 16 hours – Day time.

960 ATMs (ATM every 2 mins)

8 hours x 2 runways x 30 (possible ATM) every 2 minutes as NQS has many aircraft with 0 Noise count

480 ATM (ATM every 2 mins)

Total worst case scenario 1,440 flights per day - excluding the cross runway.

4. Daa have proposed this AQS would be reviewed every five years by ANCA and FCC—when there is a limit of a 6 months season placed on QC points, and this is at the discretion of the airport operator, how they are assigned. The AQS is not designed for those under the flightpath or parallel to the runways, as it does not consider the number of SEL's and lamax levels, envisaged to cause sleep deprivation and health issues. The contours used are the Lnight and Lday to support the noise measurements and this is not acceptable for those trapped in between the runways and under the direct flight path (the Longitudinal contour – 0 – 3000 ft). A grant of permission would present a position of entrapment for those in the Longitudinal corridor with no solution going forward. The Voluntary Buy Out scheme is flawed and not acceptable and does not recognise the loss that will be experienced. The Insulation Scheme, we have been told will not be effective for those in the Longitudinal corridor. Note there is no contour to represent this in this planning application.

In advance of this application FCC had changed the FDP – 2018 -2023 to introduce "Land Use Management" as a tool to apply for a "Relevant Action" to remove the night time restrictions. The Land use management was not part of the planning permission and the removal of conditions 3(d) and 5 effectively deems the whole planning permission invalid, if permitted.

FCC in collaboration with daa have devised a VDPS and VDIS without the meaningful and agreed input from those adversely affected, now leaving them in a future time sensitive limbo with a gun to the head situation. The wording of the conditions relating to the insulation and the Home Buy out were open to interpretation and so, the affected homeowners were excluded and considered collateral damage in the vast economic benefits to the country. — Too Small to matter — insignificant and the Applicant too big to fail.

us become a day on Morth and South convey — maidmont that could be . It writes a discuss to the property of th

estimate (with every 2 miss)

S hours a 2 particular x 30 i passible ATM) every 2 minutes as 0035-but many aircraft with the back could

Limin Conever MTA ListY4 081-

forcal with received steel action is safe filiping over the electroding the erden runnway

The have pregress that ALS would be reviewed every five years by which and FCC wines there is a limit of a months season placed on CC points, and this is at the discretion of the airport operator, how they are assigned. The AQS is not discretion from the control of the figurests of partitle to the conways, as it does not modifier the number of SE's and lamax levels, coveraged to cause sheep depression and health factor. The controls year and the tright and Light to support the noise measurements and this is not acceptable for those trapped in between the numbers of a most tree direct high path (the Longdoutinal Controls—0—3000 Nh. A provide a control of the position of entrapment for these is the thinglitudinal or this is not acceptable and the Veterland Buy On second to be acceptable and controls of the controls of the partition of the test this with the thinglitudinal controls of the controls of the controls of the placed and controls of the control of the controls of the controls of the control of the control of the controls of the control of the controls of the cont

In advance of this application FCC had changed the FDP - 2018-2023 to introduce" Land Use Management" as a tool to apply for a "Relovant Action" to remove the highr time estrictions. The Land use management was not part of the planning Lermission and the nemoval of conditions 3(c) and 5 effectively decres the whole planning permit ovaird, is nerritted.

FECTION collaboration with dat, have devised a MDPS and MDIS without the instantingful and agreed input from those adversely affected, now leaving them in a future time sensitive in provide a good to the best update on. He wantine of the conditions relating to the instantial and the greene Buy out when open to interpretation and so the official for the condition of collaboration and so the official for the condition of collaboration of collaborations and so the confidence of the condition of collaboration of collaboration of the confidence of the condition of t

Dunbro was not initially included in the VDIS until pressurised by the homeowners and finally included in the scheme. Six of the homes are insulated on Dunbro, with my knowledge at time of writing. The property of Sean Fox, the family home has not been insulated to date, due to the questions arising on the future aircraft and ground noise that will impact further, when the North Runway becomes operational.

A Statement of Need was completed by the Applicants consultants, stating the dB level was at 62.6 (just 0.4 of 63dB - the band that permitted eligibility for the insulation scheme)

Foxhill Bungalow - Survey date - 31.5.2018 - from 1100 - to 11.45. - Anderson Acustics.

When one considers that Dunbro was not initially considered a noise zone for insulation and the Statement of Need puts the residence of Sean Fox at 62.6 is important to note. No noise monitor was placed in Dunbro to monitor the noise from the current runway

(showing 62.6 bizarre and raises questions why not?)

THE SETTING UP OF ANCA AND ITS ROLE

(Extract from EIAR Appendix 13A)

As part of aviation legislation, Directive (EC) 2002/49/EC of the European Parliament and of the Council of 25th June 2002 relating to the assessment and management of environmental noise, as amended by the Commission Directive (EU) 2015/996 of 19th May 2015 establishing common noise assessment methods.

The regulations are to be known as the European Communities (Environmental Noise)
Regulations 2018 and came into operation on the 31st December 2018. They require the production of strategic noise maps and set agglomerations, major roads and major airports. They also require the production of subsequent action plans.

The EU introduced EU Regulation 598/2014 in 2016. This repeals 2002/Ec2 which set out procedures and rules for the introduction of noise related operating restrictions to the busiest European airports. This previous regime for managing noise airport noise placed the responsibility with the airport operator. The entry into force in 2016 of EU Regulation 598/2014 represents a shift in responsibility from the airport operator to a separate independent statutory entity or competent authority to oversee the delivery of the new, more prescriptive approach to airport noise management.

NOTE HERE: DAA were responsible for noise management at Dublin Airport.

Ducting was not initially manually in the VDR until pressurised by the higherwhers and unaity methoded in the schenes, e. Six of all amones are insulated on Duched, with my snowledge at now of verting. The propert, of team too, the family humer as not been asolated to date, due to the questions are integer to the questions are integer to the and grained russ that and from the North Remark Successional.

A Statement of Eucydovan consulcted by the Applicants consultants , stating the dB level was in 62.6 fijust 0.4 of 63dts - the band that permitted eligibility for the insolution scheme)

Loshiil Bungalow - furvey uare - \$1.5.2019 - from 1100 - to \$1.45 - Puderson Activities.

When at expressions 4 it. Dunbrows not initially consist red engines for institution and the State with of Net diplot the residence of Scan For at 62.5 is important to nate. We now a months was placed in Junbra to wonlike the noise from the current runway.

(Ason yilw engite sup seelin but, or estill 2.58 grawork)

THE SETTING UP OF ANCA AND ITS ROLE

Lateract from EIAR Apprendix 13A)

As one, of availon legislation, Directives I.C.) 2002/40/E.C.; the European Audianest and of the Council of 25° July 2002 relating to the assessment, and management of province related anise, as amended by the Commission Deprive (TEU), 2015, 995 of 19th May 2015, establishing committee raise assessment autopals.

The resultations are to be known as the European Communities (Engranmentul Noise). Regulations 2018, 1 hey require the ALT December 2018, 1 hey require the production of strategy and set agglones allows, major read major himself they also require the production of succeptions action plans.

The EU introduced EU Regulation SP8/2014 in 2016. This repeats 2007/ErZ which set aut procedures and rules for the introduction of noise related aperating restrictions to the inseries a source or air common related aperating mise argorit noise placed inseries and approximate argorithmy with the almost superated. The entry of occurre is 2016 of his sequination 1960/2014 is some settle or 50% in restraining fruit the almost opportunity or assistant fruit the almost opportunity of source and actively of the new configurations. The approximate are the actively of the new configurations of source of a source of the approximate and a process of the approxima

the policy of the frame grown at a confidence party of the SAR STOM

NOTE: Dublin Airport has enjoyed the monopoly of setting their own standards on aircraft noise and other up to the present day. NOTE: THERE are NO RESTRICTIONS CURRENTLY at DUBLIN AIRPORT

This is set to change with the legislation of the setting up of the ANCA (The Aircraft Noise Competent Authority) reporting to Europe under EU598/2014.

So this application is more than changing the 2 conditions and permitting 24 hour flights at Dublin Airport. The current runway will be permitted to operate 24 hours a day as they currently do. This is to change the way the airport operates 24 hours a day.

This application is about transferring the responsibility for noise and airport activity to ANCA, IAA and ATC – should this application be granted and accepted.

The wording on the application fails to state that this is the setting up of noise regulations by daa, worded and composed by daa for the NAO as daa are the only candidate making the recommendations. This is a biased approach and does not consider those between the runways and in the flight path, where mitigation measures cannot realistically be achieved.

13A2.5

Regulation (EU) No 598/2014 under Article 5 requires that member states shall ensure that the Balanced Approach is adopted in respect of aircraft noise management at those airports where a noise problem has been identified.

To that end, they shall ensure that the Noise Abatement Objective (NAO) for that airport is identified. To that end, they shall ensure that the Noise Abatement Objective (NAO) for that airport is defined. This then allows the measures available to reduce the noise impact to be identified, and the likely cost-effectiveness of the noise mitigation measures to be thoroughly evaluated.

So here we have the role of ANCA to set up a NAO to be thoroughly evaluated, in parallel to this Relevant Action with daa as the only candidate application.

The applicant is using this planning application to influence ANCA with their cNAO projections and assumptions on planning permission that does not currently exist,

to ignore current and legal grant of planning permission, conditions 3(d) and Condition 5 that clearly breaches what was committed to. All parties were subject to the planning permission set out to be adhered to by ABP in August 2007. DAA set the bar, by submitting their preferred base lines, noise mapping, assumptions, projections estimates, for a runway that had not yet opened for operation.

NOTE. Dublin Airport has enjoyed the monopoly of setting their own standards paraircraft noise and other up to the present day. POTE: THERE are NO RESTRICTIONS CURRENTY or DURLIN AIRPORT.

This is set to shange with the legislation of the setting up of the ANCA (The August. Mail is Compatent Authority) reporting to Europe under 5U598/2014.

So this application is more than changing the 2 conditions and permitting 24 hour flights at Bultlin Airport. The current narway will be permitted to opmain 24 hours a day as they currently do. This is to change the very the airport operates 26 hours a day.

This application is about transferring the responsibility for noise and among activity to ARCA, IAA and ATC - should this application be granted and accepted.

The wording on the application falls to state that this is the acting up of noise regulations by dan, woulded and composed by dan for the NAC as dan are the only conditate making the recommendations. This is a himsel approach and does not consider those between the runways and in the flight path, where mitigation measures cannot realistically be achieved.

1.131

Regulation (EU) on SERVACE under Article 5 requires that member states, shall ensure that the Falanced Epitroachus adunted entempers of antiquits in acceptant at those singulars where a note a redlimitar face are necessarilized.

To that end berry shall ensure that the Masse Abasement Objective (NAD) for that amport is consider. To that end, they shall ensure that the house Abasement Objective (NAD) considered to the transmission of the three elements of the mountains available to recipre the hope inspect to be aren't as described, and the disciplinary elements of the measures to be transmission whitevers the filest seness of the reciprocal missions as the thoroughly own asked.

rando de la procesa de la composición La composición de la

i deligitar mangat ng sangar i gara mangan ng misi ng pina. Piggi tinggi i namaran ng masilit Basan di misang mangangan ang atawa nakatangan katanan ng tang ting misi na nahar i na mitang tang tang tang t

A second control of proposed in the application, applicable, for example, and invative state of the proposed in the state of the proposed in the control of the control

This is borne by the fact that daa have placed a €20,000 amount for additional insulation for those homes as the compensatory figure, for the loss of a night time tranquility and health impacts and have failed to change the VDPS, again failing to recognise the consequences for the runway victims of this life changing decision.

NOTE the cost of products has increased, so will the €20,000 amount also increase to cover the materials of high standard that are required.

13A.2.6

The Aircraft Noise Act amends the Planning and Development Act 2000 as amended (PDA) to cater for the situation where development at Dublin Airport may give rise to aircraft noise problem and where an airport wishes to revoke, amend or replace operating restrictions at the airport.

13A2.8

The Aircraft Noise Act was enacted 22nd May 2019. It was subsequently amended on 1st September, following the removal of Airport Infrastructure from the Seventh Schedule of the PDA and thus the strategic infrastructure development planning process is no longer applicable to it.

The amended PDA was put in place by FCC to apply to remove (not replace) Conditions 3(d) and condition 5. ABP refused permission to daa in 2008 to remove the night time restrictions under SID. So an alternative solution was arrived at.

We see in 13A2.8 the Noise act was amended to remove airport Infrastructure for the Seventh Schedule of the PDA and SID planning is no longer applicable to it.

So we see new legislation introduced, through FCC to justify and present a false perception that these conditions 3(d) and condition 5 can just be overturned by the applicant to dictate to the newly set up ANCA – part of FCC to present a future CAO as being legal and acceptable, totally disrespecting the conditions currently in place on PL06F 217429 issued in August 2007.

e de la composition La composition de la La composition de la La composition de la composition della composition de la composition de la composition della c

in a comparation of the second property of the comparation of the second property of the second of t

a Cart

The Arciat Nove Act amends the Planning and Development Act 2000 as amended PDAy to cater for the situation where development at Dublin Airport may give rise to amond not a problem and where an airport wishes to revoke, arrend or replace operating sessitions at the pirport.

S CALL

The second of th

The amended PDA was put in place by FCC to apply to remove I not replace) Conditions 3(d) and condition 5. ABP refused permission to dan in 2003 to remove the night time restrictions under SID. So an alternative solution was arrived at.

We see in 13A2.8 the Noise act was amended to remove sirport Infrastructure for the Seventh Schedule of the PDA and SID planning is no longer applicable to it.

So we see new legislation introduced, through FCC to justify and present a false perception that these conditions 3(d) and condition 5 can just be overtuined by the applicant to dictate to the newly set up ANCA - part or FCC to present a future CAO as being legal and arceptable, totally disrespecting the conditions currently in place on PLOSE 1.7422 issued in August 2007.

13A2.9

FCC have been designated as the competent authority for the purposes of aircraft noise regulation at Dublin Airport by Section 3(1) of the Aircraft Noise (Dublin Airport) Regulations At 2019.

The words of the ANCA Director Ethne Fenton.

There are a few misunderstandings about our function - primarily we are not deciders of whether planning permission for development is granted or refused to Dublin Airport "

The DAA, who are the managers of Dublin Airport pay for the running of the Authority"

This says it all – ANCA have no teeth in respect of the development and noise management of Dublin Airport - therefore just another organised body to get around the European Regulations. DAA will dictate the standards and regulations to the detriment of those most adversely affected. Once set up and passed, daa will be absolved of any responsibility for the health and well being of the runway victims. This will transfer to ANCA (paid by DAA) and IAA and ATC.

Therefore the needs and requirements of those directly affected must be addressed as the decision made by Fingal County Council, as part of ANCA and DAA, was totally based on ANCA Regulatory report received June 2022

This legislation, the Aircraft Noise (Dublin Airport) Regulation Act 2019, allows for the airport to apply for a Relevant Action to amend, revoke or replace operating restrictions. The 2016 consultations made clear that daa would seek a review of Condition 3d and 5. The main focus of the consultations at that time was proposals on runway use and flight paths, and related effects (including noise) and mitigation measures.

The wording used is very important here - There conditions are being REMOVED

It must be noted DAA fund ANCA (Aircraft Noise Competent Authority) and ANCA do not have the power to grant or reject planning permission That is the role of Fingal County Council who benefit from 24% of their revenue from Dublin Airport. (per the planning report submitted)

This is confirmed from the words of the New Anca Director -Ethne Fenton, on the Fingal County Council Website.

"There are a few misunderstandings about our function - primarily we are not deciders of whether planning permission for development is granted or refused to Dublin Airport"

0.6221

RCC has extend to styrated as the competent annually for the perposes of aircraft noise regulation as Aubtin Amount by Section 3(3) of the Aircraft Noise (Cubin Airport). As gulations As 2019.

The words at the SWCA Director Ethne Fernant.

There are a few misunderstandings about our function - primarily we are not decide is of whicher plauning permits and for drivelaument is granted or refused to Dublin Airport.

The DAA, who are the numerics of Dashin Airport pay for the running of the Authority"

This says it ed. "NICA have no reach unrespect or the divisionant and noise management of Liubiin Auport - therefore, just another organised body to get around the European Regulations." DAA will distribe the standards and regulations to the destinent of these most environment. Distributed, Once set up and passed dealwill be absolved of any responsibility for the health and wellbeing of the currency victims. This will usuade to NICA (paid by DAA) and UA and ATC.

Therefore the needs and requirements of those directly affected must be addressed as the decision made by Fingal County Council , at part of ANCA, and DAA, was notally based on ANCA Regulatory report received June 2022.

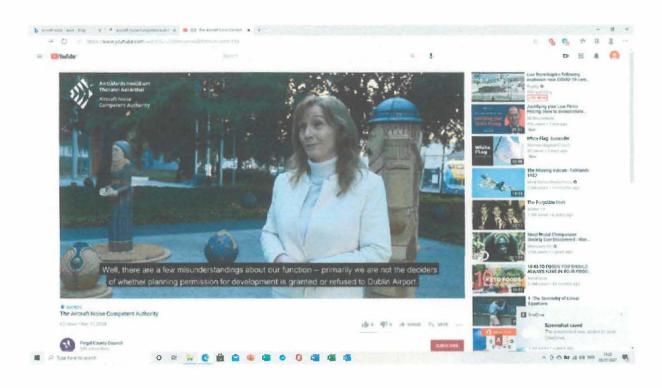
This regularities have all None (Public Abyort) Regulation Att 20.0, allows for the article supply for a Relevant Action to amend, revoke or replace operating restrictions. The 2010 consultations made alex that do would seek a review or Condition 3d and 5. The month out of the consultations at that time was proposals on conway use and flight patition of celested effects (including notes) and mitigation me some.

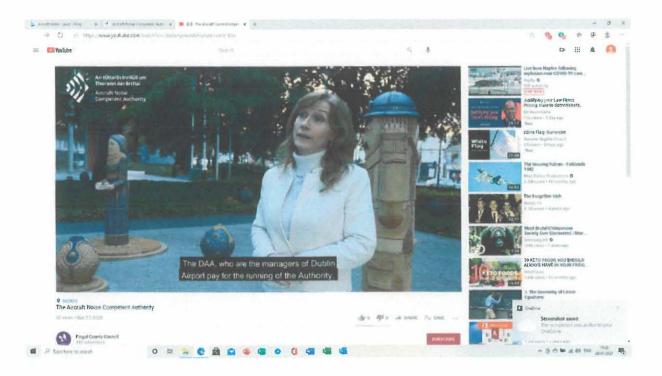
The wording used is very important here. - There conditions are being REMOVED

It must be noted DAA fund. ANCA (Aircraft Volse Competent Authority) and ANCA, do not have the power to grant or reject planning permission. That it the role of Fingal County County who beatefit from 24% of their revenue from Dublin Airport. (per the planning report submitted).

This is confirmed from the words of the New Anca Director - Phine Ferrion, on the Fingel County Chanell Webster.

There are a few misunder transfings about our function - primarily we are not decidens of whereas are not decidens." It where the seasing permission for development is granted or refused to Sublin Airport."









The DAA, who are the managers of Dublin Airport pay for the running of the Authority"

It is DAA who are looking for this planning, now granted by FCC in conjunction with ANCA on the issue of Aircraft Noise.

The setting up of ANCA – a prescriptive body under the payroll of Daa, gives no confidence to us, adversely affected, this body will not give a balanced approach to the noise problem this "RELEVANT ACTION is seeking for us, under the flight path and parallel to the runways. It will in reality give the airport operation full monopoly to do as they want and label us as irrelevant and insignificant.

DAA have used this so called "Relevant Action" as part of the original planning permission to cover three issues.

- Remove Conditions 3(d) and Condition 5.
- As the paymaster, daa, direct ANCA in setting up the NAO per their perceived entitlement to remove the conditions, which is not part of the current grant of permission, with their proposals, assumptions, projections and leaving behind those also impacted in the current permission F04A/1755 that is active and in place.
- 3. Ensure the restriction that will be imposed, following the set up of the NAO will have the least number of restrictions for the operators at Dublin Airport going forward, with selected baselines. (2018 used instead of 2019 in their application)
- 4. Each Union Airport sets up its own NAP and NAO and report to the EU. as part of the END. This is being directed by daa, funding ANCA and collaborating with FCC. This is a long term plan for the future and expected application in 2025 to exceed 32 million passengers and increase to 40MPPA. Where are the residents directed affected in a Voluntary insulation scheme increased up to €20,000 as the figure of justification for losing night time sleep and health implications and no change to the Voluntary Buy out scheme. Dunbro is not part of the VDPS and was not part of the VDIS until pressurised into it. This demonstates the applicants view, that is of insignificance and irrelevance. The most affected residents must be part of this decision, in relation to their future lives and health and not ignored.

the DAN, who are the managers of Dublin Airport pay for the running of the Authority"

it is Davis where we looking to this planatage, now granted by EEC in egujunchien with a MUK on the stage of Ameral's Make.

The seture, up of ARICA is prescriptive body under the payrell of trast gives no confidence to us, adversely affected, this body will put give a backneed approach to the volse problem this "ReceVANI ACTION 10 seeking for us, under the light path and parallel to the runways. It will to trastivigive the air test operation test monopoly to do as they want and label to its melevant and integrificant.

DAK has a user that to called "Relevant Actors" as part of the original planning provisation to cover there issues.

- L. Remark Conditions 3 (d) and Condition 5.
- 2. As the parmaster, dad, dinert ANEA in setting up the NAO per their perceived and themsent to remain the conditions, which is not part of the current grant of permission. Anthone is main armonist are majorans, unapertion, and leaving how not those also injected at the corrunt permission FOAN LTS it that is authorized in place.
- J. Essure the restorction that will be imposed. Joilaving the set up of the NAO will naw the less a normier of restrictions. for the operators of Dublia Almert going forward, with serviced baselines. JETS used instead of 2019 on their application.
- In the Colon shipser sets up its even NAP or a NAO and report to the EU. as part of the FND. This is being directed by doc, funding ANCA and collaborating with FCC this is a long trum plan for the future and expected application in 2025 to exceed 32 million passengers and recease to 46 NIPPA. Where are the residents directed eighterer in a Voluntary in violon cenemic increased by the E20 000 as the figure of justification for losing math it in sich a and heap if implications and no change to the Valuntary Buy nut scheme. Durable is not part of the VDPS and was not part of the VDPS math was not as a of the insignificance and instrument. This demonstrates the applicants show, that is of insignificance and instrument. This demonstrates the applicants show, that is of the insignificance and instrument. The arms and in all and and factors of the decision to their factors and in the factors and instrument and factors are the factors of the continuent and instrument and factors of the continuent and instrument and factors of the continuent and instrument and instrument and factors of the continuent and instrument and i

We appeal to An Bord Pleanala to view the information received in this application , in its entirety and place yourselves in the kitchen of our homes , and balance the economic rationale with the human cost, to us, the loss of our control over our homes and our futures , should the removal of Condition 3(d) and 5 be permitted and a NAO put in place that ignores the true SEL – LAMAX that will bombard us night and day with longitudinal measurements not considered part of the noise maps as key. As the airport develops, the uncertainty of what is to come for adversely affected homeowners , creates an invisible daily stress to each person living in Dunbro and Millhead and under the flightpath.

THE DUAL APPROACH TO SET UP A CNAO AS PART OF THIS APPLICATION.

The EIAR is really a quantity surveyors report to ANCA and FCC, with the entitled assumption that Condition 3(d) and Condition 5 to receive the expected grant of permission from ANCA and FCC. We witnessed this when FCC granted permission in 2004 for the original planning application for the runway. This was subsequently appealed to ABP. The detailed EIAR, which is a complex document, full of graphs, charts, assumptions and projections.

While the EIAR covers the current planning to a lesser degree, it focuses on the removal of the conditions 3(d) and 5 putting forward facts and figures to fall within the broad regulations under the EU Directive and the END.

So the micro affect on a small population becomes lost in the macro development plan- the destruction of the lives of health reduced to a statistic in the report – with a solution of VDPS or Insulation – not fit for purpose.

We appeal to An Bord Pleanala to view the information received in this application, in its entirety and place yourselves in the kitchen of our homes, and balance the economic rationale with the human cost, to us, the loss of our control over our homes and our futures is should the removal of Condition 3(d) and 5 be permitted and a NAO put in place that ignores the true SEL – LAMAX that will bombard us night and day with longitudinal measurements not considered part of the noise maps as key. As the airport develops, the uncertainty of what is to come for adversely affected homeowners, creates an invisible daily stress to each person living in Dunbro and Millhead and under the each person living in Dunbro and Millhead and under the

THE DUAL APPROACH TO SET UP A CNAG AS PART OF THIS APPLICATION.

The EIAR is really a quantity surveyors report to ANCA and ECC, with the entitled assumption that Condition 3(d) and Condition 5 to receive the expected grant of permission from ANCA and ECC. We witnessed this when ECC granted permission in 2004 for the original planning application for the runway. This was subsequently appealed to ABP. The detailed EIAR, which is complex document. full of graphs, charts, assumptions and projections.

While the EIAE cover the nutrent planning to a lesser degree, in focuses on the removal of the conditions 3(d) and 5 purting forward facts and figures to fall within the broad regulations under the EU Directive and the END.

So the micro affection a small population becomes lost in the macro development plan the destruction of the lives of health adjoced to a starts of the report – with a solution of VDPS or insulation – not little purpose.

The END (European Noise Directive) places the responsibility on each union airport to produce their own NAP and CAO as airports are all different. This gives freedom to each airport to compile the noise management and development, once the local authority and respective ANCA – Airport Noise Competent Authority are in agreement. ANCA are the competent authority to regulate and monitor aircraft noise as part of the balanced approach as part of the EU Noise Regulations. But if the scales is not calibrated to start with, there can be no balance for the residents under the flight path and between the runways.

This application has a dual approach, to remove Condition 3(d) and Condition 5 as if already in place, before the runway opens for operation, and set up the limited restrictions going forward to use for 24 hours a day.

As affected homeowners, we are fully aware of the daa strategy to use stepping and incremental planning applications to achieve a significant and potential devastating impact on Dunbro residents and flight path residents who will be adversely affected.

This subject is also covered in other chapters as it interacts with the Insulation and proposed VDPS put forward, and agreed by daa, FCC and now before ANCA to review. These should be rejected and homeowners individually spoken to in a personal and meaningful engagement with regards to the impact on them personally and for their futures with a solution that is satisfactory to the impacted and the relevant authorities.

The planning of the expansion of Dublin Airport has been open ended, since the 1960's with FPDs and Planning Applications to FCC, with no terms of reference for the homeowners and this cannot be permitted in this application to continue, after the decision is reached. The issue of Flight path residents and Dunbro should be dealt with as priority in this application, and not left open ended. We expect ANCA to recognise the fate and uncompromising position this places a small population of people in, for ever more.

ANCA have stated Condition 7 and 9 are enshrined in the planning permission and cannot be changed, and wording interpreted as DAA and other relevant parties decide. But it is acceptable, after bringing in legislation through the planning Act under a "Relevant Action" to remove

The END (European Noise Directive) places the responsibility on each union air part to produce their own NAP and CAG, as apports are all different. This gives incedom to each airport to compile the noise management and development, once the local authority and respective ANCA – Airport Noise Competent Authority are in agreement. ANCA are the competent authority to regulate and monitor aircraft hoise as part of the balanced approach as part of the EU Noise Regulations. But if the scales is not calibrated to start with, of the EU Noise Regulations. But if the scales is not calibrated to start with, there can be no balance for the residents under the flight buth and between the runways.

This application has a dual approach, to remove Condition 3 di and Condition 5 as if already in place, before the runway opens for operation, and set up the inmitted restrictions going torward to use for 24 hours a day.

As affected homeowners, we are fully aware of the das strategy to use are poing as a incremental planning applications to a hiese a significant and cotential devastating impact on Dunbra residents and Pigitt path residents who will be adve. selv attricted.

This subject is also dovered in other chapters as it interacts with the Insuration and proposed VDPS put forward, and agreed by day, ECC and now before ANCA to review. These should be rejected and homeowners individually specien to in a personal and meaningful engagement with regards to the impact on them personally and for their futures with a solution that is setisfactory to the impacted and the relevant authorities.

The planning of the expansion of Dublin Airport has been open enderf, since the 1960's with 6PDs and Planning Applications to ECC, with no terms of reference for the homeowners and this cannot be permitted in this application to continue, after the decision is reached. The issue of Flight path residents and Dunbro should be dealt with as orients in this application, and not left open ended. We expect ANCA to recognise the fate and uncompromising position this places a small propilation of people in, for ever more.

ANCA have stated Condition 7 and 5 are cosmined in the planning permission and cannot be changed, and wording interpreted as DAA and other relevant parties decide. But it is acceptable, after bringing in registerion through the planning Act under a "Kelevant Action" to remove

condition 3(d) and 5. This we consider to be biased and discriminate when only the 2 chosen conditions by daa are set to change, per this decision.

FLIGHTPATHS

Runway Usage.

Table 3: Future Runway Usage Once the North Runway is constructed and operational Dublin Airport will operate during the daytime (07:00 – 23:00) in accordance with Conditions 3a-3c per the mode of operation Option 7b, as detailed in the Environmental Impact Statement Addendum, Section 16 as received by the planning authority on the 9th day of August, 2005.

This provides that:

- (a) the parallel runways (10R-28L and 10L-28R) shall be used in preference to the cross runway, 16-34,
- (b) when winds are westerly, Runway 28L shall be preferred for arriving aircraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control, (c) when winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft, and 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. In practice it is expected that, unless capacity requires mixed mode, the runways will operate in segregated mode during the day with arrivals using either Runway 10L or Runway 28L and departures using either Runway 10R or Runway 28R depending on wind direction. The few movements by Code F aircraft are an exception to this, as they will always use the North Runway. It is also proposed that departures by Category A & B aircraft heading south during westerly operations will use the South Runway, and those heading north during easterly operations will use the North Runway. A method of determining mixed mode runway usage on the main runways (North and South) for modelling purposes has been developed. The modelled runway usage has been determined on an hourly basis

Most of the time the runways will operate in segregated mode, i.e. one runway for all arrivals, the other for all departures.

However, there will be occasions during peak hours when runways will need to operate in mixed mode, i.e. both runways used simultaneously for arrivals and departures. The change from segregated to mixed mode and back to segregated mode will be determined by ATC and once changed to a particular mode the airport is likely to operate in that mode for at least two hours.

condition 3(d) and 5. This, we consider to be hissed and discontinute when only the 2 chasen conditions by day are set to country, set this decision.

ELIGHTPATHS

Runway Usave

Fabre in feature Tainway Meage Oncol in Meath Repayay in crosural edition operational double support with an environment to 2000 20 offs, in an enthouse what Carolitours Tails, in an enthouse what Carolitours Tails, get the made of operation Option in inconsist of ortho Environmental Impact Stationard Aridensform, Section as a state well or caroling and other time of the content of the content

This provides that:

(a) the paradict ransways [107-285 and 106-258] shall sended inquelessate to be a ross ranway, 16-35.

It's when your are western, survey 781 shall no grain as determined by alreading comme, burneway 281 or 283 shall be used for departing access as determined by alreading comme, and then winds are existency, either furneway 101 or 108 at determined by an perfect on the shall be preferred for existing already formation of 108 shall be preferred for existing already and existence of safety, anomaly and existence of safety, anomaly another and existence of safety, arthorized in the familiar and existence of safety, arthorized in the familiar control systems, or declaration of margarithms of the safety and existence of a production of the familiar and existence of a production of the familiar and existence of the safety of th

Most of the time the ramage wild given early present a core marks from it.

Activity switches from segregated mode to mixed mode where activity is such that any of the three following single runway capacity limits are exceeded: 1. More than 35 arrivals in one hour. 2. More than 44 departures in one hour. 3. More than 48 movements (combined arrivals and departures) on one runway in one hour. In mixed mode, where each individual runway handles both arrivals and departures, departures will operate using the compass departure principle. This means that if a departure is using a route that turns to the north then the North Runway will be used, and conversely if it is using a route that turns to the south, the South Runway will be used. For westerly operations when in mixed mode as few arrivals as possible will use 28R, while not exceeding the single runway capacity limit of 48 combined arrivals as possible will use 10R, while not exceeding the single runway capacity limit of 48 combined arrivals and departures on runway 28L. For easterly operations when in mixed mode as few arrivals as possible will use 10R, while not exceeding the single runway capacity limit of 48 combined arrivals and departures on runway 10L.

When using the North Runway most aircraft will not use the full length on departure, and instead join the runway from the 1st intermediate taxiway. The exception are Code E and Code F aircraft, which will typically use the full runway length. All departures on the existing South Runway will use the full runway length. During the night-time period (23:00 – 07:00) for scenarios based on what is currently permitted the South Runway is the preferred runway.

It is worth noting the level of aircraft ATM envisaged on the two runways 35 arrivals and 44 departures in one hour, will then switch to segregated mode – that is 79 movement in 1 hour, 60 minutes – more than one every minute. Code F are the larger aircraft and will use the new North Runway – these will use the new flight path and subject residents under the flightpath to higher levels of SEL and Lamax.

Code F are the larger aircraft and therefore noisier with increased db levels - LAMAX and SEL.

Flight Paths

"Alternative flight path divergence were assessed, and these are included within the 'Alternative Processes – Chapter 4 Reasonable Alternative considered. - Aecom Non Tech. Summary EIA

Alternative flight paths: departing aircraft follow specific paths at take-off

The Aircraft Noise Regulation 568 Assessment identified that the scenario with the lowest number of people exposed to change that potentially cause significant adverse effects caused by the change in noise levels is Scenario 2.

Lowest number of people exposed - that's us.

Constitute of the control of the con

What using the the streamy must success with not use the fall length on duporture, and extend into the training formal succession of the second continued to the second of the second continued to the second of the second continued to the second co

to a worde nouting the toyof in common ATM comenged on the own narranys. In according to a summer of the summer of

As to Fine the larger larger arrand and threefore course with transport in levels. LAVAX and

edight Porns

"Alterrature fright auch invargence were in seveet, and incorpor included within the "Alternative Processes – Chapter 4 - Brasan-bir other store cansidered. – Ancom Non Pesh Summary FIA

Eponomia integritis establica establica de constituit de la constituit de la constituit de la constituit de la

The Areand Neber Arquistion Abit Areastment mentalised text men commit with the familiar norther of people supplied to the equil Lot permit Adjoiners algebra it with no effects consert to our charge in many treatment.

and the state of t

Scenario 2

06.00 – 23.59 When winds are westerly Runway28L shall be preferred for arriving aircraft. (coming in over Malahide, Portmarnock side) Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control. (taking off over St Margarets)

Again the lowest number of people exposed to westerly take off – which is the majority of the time $\,$ - determined by ATC – US

When winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. (Blowing from Malahide side) either runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft.

Runway 10L shall be preferred for departing aircraft

This means that most of the Aircraft take off will take place on 10L - flight path over St Margarets. We are the area identified with the lowest number of people exposed to change that potentially cause significant adverse effects caused by the change in noise levels

DAA are aware we are the minority and therefore it seems Ok to trample on homeowners with no direct meaningful and honest engagement.

2.5 Flight Routes

2.5.1 Flight Routes - Current Airport Layout

For the main runway arriving aircraft have been modelled as using a continuous descent approach with a glide slope of 3 degrees. Based on an analysis of radar data in 2018, approaching aircraft are generally lined up with the extended centreline of the runway at least 17km from the runway threshold. Consequently the main runway approach routes have been modelled as straight out to this point. Before this point arrivals are modelled using 7 routes which cover the broad swathe of directions that the arriving aircraft approach from. The modelled current arrival routes are shown in pink on Figure DR033.

Category A & B Aircraft – Departures The IAA have stipulated that Category A & B aircraft, which are predominantly turboprops such as the ATR 72, are not required to remain within the existing environmental corridors to the same extent as the larger jet aircraft types. They therefore commonly turn off the extended runway centreline to the north or south shortly after the end of the runway. A review of radar tracks for recent activity has resulted in a set of routes for these aircraft types shown in red on Figure DR033.

We are those homes and households adversely affected by the runway take offs and landings on the new flightpaths associated with 10L-28R and also the

E Grannesi.

DELDO - 23.50 White indexistant western, Runnerskill shall be propertied parametring in vary Comming in more blokelightly. Portemannets sellet. Eltiner Runn av Tall at this shall the cost for departing means of the delt in median die his regime author interior off over SEN bengants. I

Again the lowest member of proposition we seem to be effect to the office additional for regionsy method to the compact of the comments of the compact of the comments of the compact of the comments of the compact of

Minen with is die endsteele , etc. en Prouvig 201 av 16% as determined by 40 traffic contral shall be prefer mit for ververig arrands. Piliennur fram 6 to lat late des prints rums ay 10s ar 16% as determinant by air traffic, united shall to preferred as united to preferred as a remagnitude.

Sansoy 101, kuli be parferent forstepas mig alreagr

This means that most of the Aircraft take off will take place on 10th of light path over St Margards. We are the area identified with the lowest number of prople expand to change that patentially rapise significant adverse effects caused by the mange in noise level.

DAA are aware we are the minority and thoreing it seems Oh to framply on businessamers with no dim it meaning for and francia areas ament.

ramoRiztetti Forneri

no jed vegovinom objekt kak

For the right proof proving secret news then code for as using a continuous of vagor specification in the algorithm of the stops of a degrees. Excelling an analysis of rather than 1913, approaching the code are generally for the properties of the major rather than 1916 and 1916 and

Category A is a surgerit — Dana, more if a real none stock me out transpay A & Court in which are produced to remain which are produced for remain within the assistant review of the carbinal carbinal carbinals. The area of the carbinal as a surfaces, parabolar in this assistant as a surfaces, parabolar in this is the carbinal and the carbinal area of the carbinal as a surface and a surface of the carbinal area of the carbinal as a surface and an area of the carbinal as a surface and a surface are a surface of the carbinal and the carbinal area of the carbinal and the carbinal area of the carbinal and the carbinal area of the carbinal and the ca

We have former moreovered major attactors subsected. The could be a some season, the course of the c

current flightpaths and the associated noise and sleep disturbance this will bring. Not required to remain within the existing environmental corridors as the same extent as the larger jet aircraft types - SEL affect on sleeping households.

Category C & D Aircraft – Departures Currently the airport has a total of 11 Standard Instrument Departure (SID) routes for westerly operations and 10 for easterly operations, although in both cases a number are initially the same before separating some distance from the airport. As the point at which they separate is distant from Dublin Airport, the aircraft will have attained sufficient height to not cause significant noise disturbance on the ground by this point. Given this similarity, for noise modelling purposes a set of seven initial departure routes have been created from the western end and four initial departure routes from the eastern end. For departures during periods of easterly operations the INKUR and SUROX routes initially follow the ROTEV route until well beyond the extent of the noise contours, therefore all movements that head north west after their initial turn have been assigned to ROTEV, along with the movements that head north. Additionally the PELIG route is initially the same as the NEPOD route, therefore both PELIG and NEPOD movements have been assigned to NEPOD.

For Category C & D aircraft, which are jet engined aircraft, these routes have been supplemented for departures to the west by routes that turn earlier, although not as early as Category A & B aircraft routes. This assumption originally arose from a detailed study of radar data from 2010, which found that many of the larger aircraft on runway 28 actually performed their initial turn earlier than described by the SIDs. This is because after reaching an altitude of 3000 ft, they are vectored off by ATC. Two additional 'Early Turn' routes were therefore created for each route with initial turns to the north, south, or east, i.e. the ROTEV, NEPOD, LIFFY and DEXEN routes. Traffic has been distributed equally between the three turning points, the two early turns and the SID, for each route. Recent radar data has been reviewed and these assumptions are still considered to be appropriate for current activity at Dublin Airport.

The modelled current Category C & D routes are shown in blue on Figure DR033. This approach is in accordance with EU 2015/996 which states that "The backbone track defines the centre of the swathe of tracks followed by aircraft using a particular routing. For the purposes of aircraft noise modelling it is defined either (i) by prescriptive operational data such as the instructions given to pilots in AIPs, or (ii) by statistical analysis of radar data as explained in Section 2.7.9 — when this is available and appropriate to the needs of the modelling study."

entant as the judicity of antical twocs — attracted noise and sleep distributions is the source of the surface of distribution and the distribution of the same of

accepted to the technology of the control of the co

For Gaveshity C.S. Control to a real construction angined authors, here insuling a few bits in applicable supplier of the Carlot of Carl

The first selection of the contributed by the contribute selection of the plant of the contribute selection of the

2.5.2 Flight Routes

70% of take offs will occur over St Margarets, with Millhead, Kilreesk experiences SEL and LAMAX levels of 80db to 90db as aircraft take off into the wind .

The winds are predominantly westerly around Dublin Airport.

The flightpaths of the runway come under the IAA (Irish Aviation Authority) and the ATC (Air Traffic Control)once operational, so therefore the daa can abdicate responsibility for aircraft noise and sleep disturbance, as is the current case with the current south runway, if these night time restrictions are removed.

North Runway Airport Layout

Aircraft have been modelled as approaching along a glide slope of 3 degrees. Arrival routes for the existing South Runway have been modelled the same as the current routes. Arrival routes have been created for the North Runway which broadly replicate those for the South Runway. The modelled arrival routes based on the future North Runway airport layout are shown on Figures DR034 and DR035.

Category A & B Aircraft – Departures Once the North Runway is in use Category A & B aircraft will continue to turn off the extended runway centreline shortly after the end of the runway, however they will not be allowed to turn across the other runway. A new set of departure routes has therefore been developed for Category A & B aircraft. From the southern runway this replicates the current routes, but with no turns to the north. For the North Runway the routes have been designed to replicate the current routes to a large extent but with no turns to the south as shown in Figures DR034 and DR035.

Category C & D Aircraft — (Jet Engines) Departures For Category C & D aircraft a number of the modelled routes have been used to represent more than one of the SIDs, so combining the traffic on some of the SIDs onto a single modelled route. The departure routes to the west are supplemented by early turn routes, similar to the current routes. In order to achieve a safe minimum separation between flights from the two main runways, when both are in operation, departure routes have been used which include a course divergence of at least 15°. This means that the departure routes from the two main runways differ in course (head in different directions) by at least 15°. A set of departure routes from the North Runway has been developed, taking into account the resulting noise. The result is routes with an early turn to the north. When heading east all of the routes turn 15° at 1.06nm from the end of the runway. When heading to the west the

2.5.2 Erityat Koutest

70% of take offs with occur over 5t Mergarcis, with Millnead, Kilreesk experiences SEL and LAMAX levels of 50db to 90db as aircraft take off into the wind.

the winds are predominantly westerly around Duhlin Airport.

The flightpaths of the sunway come under the IAA (irish Aviation Authority) and the ATC (Air Traffic Control) once operational, so therefore the day can abdicure responsibility for aircraft noise and sleep disturbance, as is the current case with the current south runway, if these night time restrictions are removed.

hopy of training yourself dauly

Falc aftitisve been incdelled at approaching alting algide slope of a distress. Animal routes for the existing factor kenway have been nodelled the same as the concent routes. Armal routes have been created for the North Ronway which broadly roplica. Those for the Louth Runway which broadly roplica. Those for the Louth Runway, for modelled armal routes been done in titure North Bunway airport tayout see crown on fegures DRUS4 and DRUS5.

Cotegory - 8.8 Among the continue Code for an informacy with the fategray A Scalar and will be remore to terms of the extended movey controlled short, yafter the one of the rinks as for year of the attended for the arms the other control for the results and for the results and for the results and for the rinks and the results and the results are the control for the results and the results as the results from the results are the results and the results as the results are the results and the results as the results are results and the results are results.

Category 18 Different — Fact Prepare 11 Pears es For 1 Ingery C is Descent a member of the modelled course have been depresent more than one of the SiOs, so containing the traffic on some of the SiOs ento a single modelled course. The departure course to the west are supplemented by early turn routes, similar to the current routes is order to achieve a safe minimum separation between hights from the two moin curvays, when both are in aperation, departure noutes have been used which lacturies a course divergence of at least 15°. This me as that the departure routes from the two main moves of at least 15°. This me as that the departure routes from the two main moves from the two main moves. The result of the route is route, with an early turn to the north. When heading out all of the course the resulting the result is route, with an early turn to the north. When heading to the west the course to the transaction.

routes to DEXEN, INKUR, NEPOD, PELIG and SUROX turn 30°, while those to ABBEY and ROTEV turn 75°, all at 1.18nm from the end of the runway. The departures on the South Runway continue along the extended runway centreline before turning. The modelled current Category C & D routes are shown in blue on Figures DR034 and DR035. This approach is in accordance with EU 2015/996 which states that "In many cases is not possible to model flight paths on the basis of radar data — because the necessary resources are not available or because the scenario is a future one for which there are no relevant radar data. In the absence of radar data, or when its use is inappropriate, it is necessary to estimate the flight paths on the basis of operational guidance material

Necessary resources are not available to model flight paths on the basis of radar data, the scenario is a future one - so assumptions made in this case which will adversely affect those between the runways and under the flight path. This is not acceptable, to base a CNAO on assumptions. The airport operators strategy – just do it and deal with the fall out later The residents will be expected to be the fall out and considered irrelevant.

2.5.3 Dispersion Aircraft on departure are allocated a route to follow. In practice, this route is not followed precisely by all aircraft allocated to this route. The actual pattern of departing aircraft is dispersed about the route's centreline. The degree of dispersion is normally a function of the distance travelled by an aircraft along the route after take-off and also on the form of the route. When considering many departures, it is commonly found that the spread of aircraft approximates to a "normal distribution" pattern, the shape or spread of which will vary with distance along the route. (Don't turn off until reaching 3000ft at least) - all the longitudinal SEL/ Lamax experienced by Dunbro, Millhead and Kilreesk.

2.5.4- Route Usage

The actual aircraft movement logs for years that have already occurred provide destination airports for each departure movement. This has been combined with an assessment that has been carried out of which departure route is used for each destination which utilise the direction it is from Dublin. The forecasts for future years generally include departure route information for each movement, which has been used. Where departure route information is not available, a departure route has been assigned based on the destination airport.

2.7- AEDT Validation Results from the Dublin Airport Noise and Track Keeping (NTK) system have been used for noise validation purposes. Specifically, the results from Noise Monitoring Terminals (NMTs) 1, 2 and 20 between January and December 2018 have been used. The noise levels from the monitors are automatically correlated with aircraft movements using the radar track keeping system and the average determined by aircraft

rentes to DEVEL INKUR, the DOL 20 is and SUROX turn 201, white those in ASBEY and RITTEY turn 751, all at 1.1 sum from the end of the runway. The deportures on the South Purway continue attag the extended moves controlling before turning. The modellud correct Category Cate

Necessary resources are not available to model flight naths on the basis of radar data, the scenario is a future one is a assumptions made in this case which will adversely affect those between the runway, and under the flight path. This is not acceptable, to base a CNACO on assumptions. The alignet operators strategy—just do it and deal with the fall out later The residence will be expected to be the fall out and considered irrelevant.

2.2. Gioper Con the effect of the effect of an offerend as all a following in practice, the result is not really as practiced of the course of

2.5.1- Noute Usage

The account timerate movement logs for years that have already occurred provide destination along account that along each dubin time movement. This has been combined with an alogsoment that each occurred out or which departure roots is used for each destination which applies the divisor of the count time from the figure of the following restriction of the figure of the following restriction of the figure of the figure of the following restriction of the figure of the fig

The ADD AND STATE OF THE STATE OF THE ADDRESS OF THE STATE OF THE STAT

type and operation. A number of parameters are measured by the system, for this validation the Sound Exposure Level (SEL) of the individual aircraft movements has been used. To take into account the measured levels the AEDT software has been used to predict the level at the NMT locations using the recommended AEDT aircraft type. This has been compared to the measured averages for the aircraft types when separately arriving and departing. Where the differences between the measured and predicted results were found to be significant then adjustments were made to the modelling to minimise the differences. Seventeen aircraft have had modifications made to their arrival and departure noise assumptions. The modifications are detailed in Table 4 below.

Aircraft Type Arrivals Departures AEDT Type Adjustment (dB) AEDT Type Profile Adjustment (dB)

A306 A300-622R -3.1 A300-622R 30KFT +0.6 A319 A319-131 -1.4 A319-131 30KFT +0.9 A320 A320-211 -0.7 A320-211 USER -1.3 A320neo A320-211 -2.0 A320-211 USER -3.2 A321 A321-232 -0.4 A321-232 USER -0.5 A332 A330-301 -1.3 A330-301 30KFT -1.1 A333 A330-301 -1.1 A330-301 30KFT -0.8 ATR72 SD330 +1.5 SD330 STANDARD[2] +0.1 B734 737400 +0.4 737400 30KFT -0.1 B738 737800 -2.7 737800 USER -1.2 B738MAX

737800 USER -1.2 B738MAX 7878max -3.0 7378max USER -1.5 B752 757RR -0.4 757RR 30KFT -2.3 B772 777200 +0.2 777200 30KFT +1.5 B773 777300 -0.8 777300 30KFT -2.4 B787 7878R -0.3 7878R 30KFT +0.1 E190 EMB190 -0.8 EMB190 30KFT +0.5 RJ85 BAE146 -3.3 BAE146 STANDARD[2] -1.6 DH4[1] SD330 0 DHC6 STANDARD[2] 0 [1]

The issue for residents is the SEL noise levels experienced in close proximity of the flight paths which is overlooked and disregarded in the Planning report and not addressed appropriately.

The proposal of a noise quota system does not equate with actual noise from an aircraft and cannot be considered as like with like when you are woken from sleep or prevented for going to sleep. The data is generated from the aircraft manufacturers as a baseline. The issue for residents is the SEL noise levels experienced in close proximity of the flight paths which is overlooked and disregarded in the Planning report. The longitudinal noise levels will not be covered in the ANQ System.

The QC system was introduced in 1993, aircraft are classified into different categories depending on their ICAO noise certification data. Certified noise levels are measured in Effective PERCEIVED Noise Decibels (EPNdB) a specialised noise unit used for aircraft noise certification tests and are referred to as the Effective Noise Levels (EPNLs). So the noise will be taken from each event from a mechanical noise unit, perceiving and estimating, and not the actual noise experienced by the night time or day time human ear under the flight paths and between the two runways.

Type and apart door if a green of type have the servers of against gather gathers to make a part of the servers of the servers

Airman - Type Anivola Departures AEDT Typa Adjustmont (dit) AEDT Type Profile Adjustment (dit)

ASSOCIATED S22R-3.1 ASSOCIATE BOILT FOR MATERIAL I.A MAIGHIA ADDRES FOR ASSOCIATION OF ASSOCIATION ASS

75-1800 USGN-112 BERMAX 70,8max -8.0 TR78m/x DSER-115 B767 7576R-U.4 7576R 308FF-7:3 B772 777200 4012 777200 90.01 4.3 B773 777300 -9.8 777300 308FF-2.3 D797 7872R-0.5 7878R 30/6F-0.1 E190 EMB190-0.8 FMB190 3/36T-405 RJSS-0AE146-3.3 3461465 STANDARD[2]-116 OH4[3] SO330 0 DHCG STANDARD[3] 0 [1]

The abuse for residents is the SEL noise levels, expenienced in close presumity of the flight paths within to queriod soft and the egarded in the Planning inport and not addressed appropriately.

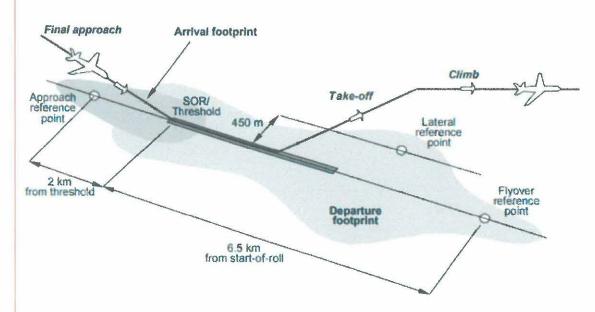
The proposal of a noise quota system does not equate with actual noise from an aircraft and cannot be considered as like with like when you are woken from sleep or prevented for going to sleep. The data is generated from the aircraft manufacturers as a baseling. The issue for residents is the SEI noise levels experienced in close proximity of the flight paths which is overlacked and disregarded in the Planning report. The longitudinal musc levels will not be covered in the ANO System.

The DC system was lattroduced in 1993, arteraft are classified into different categories of coentring on their ICAO noise certification data. Certified noise levels are measured in FRective PCECEIVEO Noise Decideds (EPNdB) is specialised noise unit used for aircrain noise certification tests and are referred to as the Effective Noise Levels (EPNLs) for the noise will be taken from each event from a mechanical noise unit, generaling and estimating, and not the actual noise experienced by the night time or day time human each contraction the two names as

To cast back to DAA 's application to ANCA and to FCC, the Ground noise and the air noise were separated. The accumulation of both ground and air noise for LTOs must be measured on operation, not on QC which is not correct.

The certification procedure, specified in Chapter 3 of ICAO Annex 169, requires the determination of arrival and departure EPNLs, see Figure 1. Three reference measurement points are specified: *approach*, under a 3-degree descent path 2 km from the runway threshold; *lateral*, 450 m to the side of the initial climb after take-off, at the ongitudinal position where noise is greatest; and *flyover*, under the departure climb path, 6.5 km from start-of-roll (SOR).

Figure 1 Aircraft noise reference points (in relation to illustrative noise footprints)



Classifications for departures are based on the average of the lateral and flyover EPNLs, and for arrivals after subtracting 9 EPNdB from the approach EPNL. Further technical details can be found in ERCD Report 0204 10.

Taken from Quota Count validation study at Heathrow Airport CAP1869

So the noise of aircraft taxiing, waiting to depart and ground noise are not included in the QC – and will be very different.

So actual ground noise and LTO combined – do not equate to the QC system as per ICAO for human ear with varied sensitive and health issues.

Children and adults with learning and focus issues with disabilities, health issues, will be severely affected, which has not been considered.

Submissions from Minister for Children and the HSE confirm, in the planning submissions

Fo cast back to DAA 's application to ANCA and to FCC , the Ground noise and the air uplise were separated . The accumulation of both ground and air noise for LTOs must be measured on appreciation, not on OC which is not consist.

The artification procedures spanified in Chapter's of More wife incourant to determination of an varience departure PPN is swelf-guild in Tribes released in the released interest points are specified in a contract upper a subspice descent cain 2 for troming our way threshold lateral and months and of the other side of the major days after toker of the following points and previous positions and a previous points and a position and a previous point and the departure of the position point.

Eligings 1 of most colors efficiency pours of an action to according to the figure facilities



Classifications for departures are buried of the average of the lateral and flyovar EPNLs and for anivers efter subjectioning 9 ETNig5 from the approach EPNL Frether technique retails at an on tourism exist. Exept 1924:19

Taken Jeen Quota Count volidation study at Heathrow Airport CAPIB69

coax and a testing anomalism to darks; increasing a more mostly interest as an

So the noise of aircraft taxing, waiting to depart, and ground noise are not included in the QC - and will be very different.

So ocidal ground haise and LTD combined - do not equate to the CR system as par ICAQ for human par with varied sensitive and buildly issues.

Children and adults with learning and focus issues with disabilities, health issues, will be severally affected, which has not been considered.

Suppressions from Wirelston for Children and the MSE confirm. In the planning submissions

An Bord Pleanála PLANNING AND DEVELOPMENT ACTS 2000 TO 2006 Fingal County Planning Register Reference Number: F04A/1755 An Bord Pleanála Reference Number: PL 06F.217429

Condition 3 and 5 clearly state:

- 3(d) Runway 10L-28R shall not be used for take-off or landing between 2300hours 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.
- (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.

Reason: In the interest of clarity and to ensure the operation of the runways in accordance with the mitigation measures set out in the Environmental Impact Statement in the interest of the **protection of the amenities of the surrounding area**.

The proposed "Relevant Action "removes this protection of the amenities of the surrounding area.

Example of Response from daa following sleep disturbance – abdicating responsibility for the night time disturbance.

An Bord Pleanain PLANNING AND DEVELOPMENT ACTS 2000 TO 2005 Engal Courty Flanning Engister Reservate Number, 1754/1735 An Bord Pleanalla Enformed Number 1st. 665-217476

Combined Land Judgerti, claire

"(d) recovery 100-2 declarity and be used for take off or landing fretwoen 2500 mars and 0700 may a recept to cases of safety, maintenance considerations, exceptional in traffic conditions, afactors weather, teamfoat sailed to air raffic control scatching declared concerns, at other amores.

(d) runway 10t 25t shall not be used for take off or landing between 2500 naura and 6700 hours, except to eases of safety, mainty nance consider atmit, exceptions are traffic or nature, a setteral weather sectional faults in an traffic control systems of declared according to ensure exist other supports.

Reason, to the inversest of darity and locusture the operation of use university and experiment with the mult, then must be confucted by the mult, then ment in the fateres of the serrounding area.

The proposed "figiterant Artion" removes this protection of the ampulties of the surrounding area.

example of Busponse from day following sleep disturbance - abdicating responsibility for the night time disturbance. The Environmental Corridor (noise preferential route) for departing aircraft using Runway 28 extends from the end of the runway in a straight line out to 5 nautical miles and has a height of 3,000ft. The corridor has a width of 180 metres at the runway end extending to 1,800m at 5 nautical miles. This means that an airliner departing Runway 28 must stay within the corridor until it achieves an altitude of 3,000ft. Once this altitude has been achieved aircraft may leave the corridor with the permission of air traffic control and route to their exit point from Irish Airspace.

Your complaint of the 21/07/2020 was the rescue helicopter and are involved in rescue missions 24/7 so don't fall under the normal environmental corridor restrictions.

The Irish Aviation Authority's Air Traffic Control Service makes the decision on what runway is to be used based on meteorological conditions at the time, usually wind direction and strength. For safety reasons aircraft must land and take off into the wind. Dublin Airport is licensed by the Irish Aviation Authority to operate twenty four hours a day and therefore there is no cut off time for flights using the airport.

All aircraft arriving and departing Dublin Airport come under the direction of the Irish Aviation Authority (IAA) who design the airspace, provide air traffic control services in Ireland and it is they who are responsible for the routing of aircraft. Nonetheless, we in Dublin Airport have regular meetings with the Irish Aviation Authority to continuously review the track keeping of aircraft in the vicinity of the airport.

Your complaints have been logged in our noise database. The reduction of aircraft noise on neighbouring communities is the joint responsibility of the airport authority, Irish Aviation Authority and the airlines that operate at Dublin Airport. I can assure you that we take concerns regarding aircraft noise very seriously and strive to do all we can to minimise any adverse impact on both the communities and the environment by the operation of Dublin Airport. In that regard we welcome all feedback concerning aircraft noise.

This response confirms the following;

 Dublin Airport is licensed by the Irish Aviation Authority to operate twenty four hours a day and therefore there is no cut off time for flights using the airport. The Environmental Contains (new preferential cutto for departing arcraft using formally 25 surjoints from the end of the rimwey in a straight fine out to 5 nautical miles and use a paight of 5 000%. The condot is a 3 30% of 150 makes at the national miles and use at 5 nautust oites. This means that an aighter adopting Runkay 28 miles stay within the counto, with a selectors an altitude of 3 000%. One this attribute has been active oil alterate may leave the confider with the properties of the first Airspace.

Your semplaint of the 24 /07/26/20 was the rescue helicopier and are involved in recause measures 24/7 and on 1 full under the number chains of himmanital confidences are necessar.

The fresh Avisition Auditions is Air Traffic Control Service makes the Jerganon on inhall universe to set used needs on melan characterists to set used used needs on melan characterists at the time usually waid uncertain needs from needs and take off tido the wind. Exhibit Auport is used by the firsh Avishon Authoris to operate treaty four wind. Exhibit Authoris to operate treaty four winds. It is used to the first of time for inglus using the entroit.

Air einereit annung and departing Dubia Aiman come under the direction of the high Avintion Authority (EAA) who design the mapace, provide air halfin confrol services in frailand and it. Variethaless in frailand and it. Variethaless with the training of elicinal. Manethaless with a Subba Higher flavor regular madings with the last if notion Authority to confine such frozentials in the airce keeping of presenting this vicinity of the eligibal.

Your sampled have here legged in our noise defences. The reduction of secretical or an aergabouring commandle as the joint rosper schelly of the highest entropy, and acture for Aviation Authority and the airfines had appeared a Subjer Airgott, can assure you that we take concerns regarding energy noise very septemly and strive to do oil we can in minimal any adverse upper on ordinates communities and this enancement by the operation of Explain Amport in that regard we welcome all forthings concerning singraft noise.

This response confirms the following

 Dublin Aircort is licensed by the heat Aviation Authority to operate liventy four hours a day and tierefore there is no out of time for flights using the airport.

- All aircraft arriving and departing Dublin Airport come under the direction of the Irish Aviation Authority (IAA) who design the airspace, provide air traffic control services in Ireland and it is they who are responsible for the routing of aircraft
- So we then note the response:
- Nonetheless, we in Dublin Airport have regular meetings with the Irish Aviation Authority to continuously review the track keeping of aircraft in the vicinity of the airport.
- I can assure you that we take concerns regarding aircraft noise very seriously and strive to do all we can to minimise any adverse impact on both the communities and the environment by the operation of Dublin Airport. In that regard we welcome all feedback concerning aircraft noise.

Lately, the responses have been changed to "Dear Complainant" Our experience here in St Margarets, the issue of Aircraft noise is not of importance to daa. It is easy to spread and place the responsibility on other aviation and local authority bodies. We are considered insignificant.

We have experienced this over the years where daa state issues are for FCC and FCC state issues are for DAA the Dublin Airport Operators.

The reduction of aircraft noise on neighbouring communities is the joint responsibility of the DAA, airport authority, Irish Aviation Authority and the airlines that operate at Dublin Airport and now ANCA

Joint or multiple responsibility does not work for residents, adversely affected in Dunbro and Millhead under the flight path who are not given any priority in this grant of planning permission and proposed removal of condition 3(D) and condition 5. This is DAA's planning approval and the applicant should be made responsible for the health and well being of their closest neighbours, to adhere to the original conditions.

While the Inspector recommended refusal of planning for North Runway, in 2006, the Board however, acknowledged the impacts on the local residents and imposed the night time restrictions as a necessity to protect the residential households, under the flightpaths, in the interest of health and well-being. Night time per the WHO is 1100 to 0700 am not 6am to 12midnight

- All aircraft arriving and departing Dublic Airport come under the
 aircciton of the trish Aviation Puthority (IAA) who design the airspace
 provide air traffic control services in feland and it is they who are
 responsible for the routing of aircraft
 - · So we then note the response:
- Nonetheless, we in Dublin Airport have regular meetings with sha trish Aviation Authority to continuously review the track keeping of all staff in the vicinity of the airport
- I can assure you that we take concerns regarding aircraft noise very seciously and strive to do all we can to minimize any adverse impact on note the communities and the covironment by the operation of Dubhin Airport in that regard we welcome all feedback concerning aircraft noise.

Letaly the responses have been changed to "Dear Complainant". Our experience here in St Margarets, the Issue of Aircraft noise is not of importance to dear. It is easy to spread and place the responsibility on other aviation and local authority bodies. We are considered insignificant.

We have expurienced this over the years where day state issues are for ECC and ECC atere issues are for OAA the Dublin Airport Operators.

The reduction of aircraft noise on neighbouring communities is the joint esponsibility of the DAA, airport surherity, Irish Aviation Authority and the airlines that operate at Dublin Airport, and now ANCA

Joint or multiple responsibility does not work for residents, adversely offected in Dunbro and Willhead under the flight path who are not given any priority in this grant of planning permission and proposed removal of concition 3(D) and condition 5. This is DAA's planning approval and the applicant should be made responsible for the health and well being of their closest reighbours, to adhere to the original conditions.

Winde the Inspector recommended releast of planning for North Runway, in 2006, the Scard however, ecknowledged the impacts on the local residents and imposed the night time restrictions as a necessity to protect the residential households, under the flightnaths, in the interest of health and will-berry. Right time pair the flightnaths, in the interest of health and will-berry. Right time pair the MCC in 1965 to 0700 are not fain to 19molubia.

Should this "Revelant Action " be granted to DAA by An Bord Pleanala the residents impacted in between the runways and under the flight path will be become permanently irrelevant. This will not be acceptable in terms of health and well-being.

Action 5

Request daa to undertake a review of Departure Noise Abatement Procedures and o publish the findings

Subset

Noise Abatement Operating Procedures

Progress

Draft report on NADP completed by DAP with final recommendations being compiled for planned issue in Q3 2021

Exrtracts from the Noise Action Plan 2018 – 2023.

Action 5 request daa to undertake a review of Departure Noise Abatement procedure and publish its findings – final recommendations due in Q3, 2021.

Subset

Noise Abatement Operating Procedures

Progress

daa monitor Engine Ground Running, Preferential Runway Use and Departures Procedures. This is publicly reported on the daa website and via the Annual Compliance report. The monitoring and reporting of Reverse thrust and Take Off Climb Procedures (NADP) is currently under review subject to determining the technology requirements being determined and implemented.

Should this "Revelant Action" be gramed to DAA by An Rord Pleanaln ingresidents impacted in between the nurveys and under the light path will be become permanently undervant. This will not be acceptable in terms of health and well-being.

Congressification of a supervision of a supervision of Diopartices Michael Charlestons Housestaness until Some Appropriate Contract

which the training methods in the commence Albert god

7 41 7

galest efficient manner or an analysis of the first or an effect of the major of th

TORE - STRE wall notice have I was in the Charles

Aution 5 inquest dee to undertake a review of Deporture Volse Abstemet Episcomma and products it, andings - final resonance deficies the in C.C. 2021.

ro edited

grants, payment or provide that the second of the period of

Lagrange A

The second secon

The NAO has now been completed and adopted by ANCA and came into operation in June 2022 – when permission was granted to DAA to remove the night time restrictions. This is prescriptive, biased, and specific to satisfy the ticking of a box for EU598/2014 per END.

(Environmental noise directive) This excludes those in the flight path longitudinal corridor.

At a meeting with ANCA on 23rd August at FCC offices, ANCA stated they did not take into consideration

Condition 7

7. Prior to commencement of development, a scheme for the voluntary noise insulation of existing dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings predicted to fall within the contour of 63 dB LAeq _{16 hours} within 12 months of the planned opening of the runway for use. The scheme shall include for a review every two years of the dwellings eligible for insulation.

Reason: In the interest of residential amenity.

9. Prior to commencement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings predicted to fall within the contour of 69 dB LAeq 16 hours within twelve months of the planned opening of the runway for use. Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 months from the commencement of use of the runway.

Reason: In the interest of residential amenity.

When we asked why Condition 7 and 9 were not part of the NAO, we were told DAA did not request Condition 7 and 9 to be part of it.

the NAO has now been completed and sciopted by ANCA and come into consistion in June 1812 - when permission was granted to DAA to remove the hight time rashrictions. This is prescriptive, brased, and specific to satisfy the ficking of a box for 6U598-20 M per END.

(Euvironmental noise Jiroctivo) This excludes those in the flight peth longifudinal comider.

Af a meeting with ANCA on 23" August at FCIC offices, ANCA stated they did not take into consideration

Condition 7

Prior to commencement of development, a scheme for the voluntary mouse insulation of existing questings shall be submitted to and agrees in verifing by the promise authority. The scheme shall enough all dwellings predicted to left within the contour of 63 del living assessment in 13 mentity of the planned opening as the research for use the success of the dwellings eligible for mestry court two years of the dwellings eligible for mestry court two years of the dwellings eligible for mestry court.

Regions in the interest of residential america,

Effor to commencement of development, a schoole for the infuntary parchase of divellines shall be submitted to and agreed in writing by the planning authority. The schema whall include all dwellings predicted to fall within the context of 59 dB LABQ as each writing twelling months of the planned opening of the curway for use. Prior to the curvature correct of apertural of the runsary, so offer of purchase in accordance with the agreed schema shall have been made to all dwellings coming within the scope of the art one and so is offer that for an open for a period of 12 months train the exertine definite of the runsary.

Reasonable the interest of code, and a commit-

So the health and welfare and future of those trapped in the flight path and between the runway was ignored.

We see in the EIS from DAA for the planning to FCC, the ground noise and Fly over noise (air) noise separated and calculated separately.

The method of reporting aircraft ATMs has be split for the purpose of getting the best result in the NAO and with the Planning Authority.

So the noise from roll, to taxiing to thrust reverse and take off are treated as separate to the turn off at 3000 ft.

So the longitudinal and ground noise has not been captured to reflect the Lafmax and ground noise for the minority of humans living in the flight path corridor.

The contours are an average over as wide area from the noisiest to the quietest.

Action 10

Engage proactively with communities through the Dublin Airport Environment Working Group (DAEWG) and the St. Margaret's Community Liaison Group

Subset

Monitoring & Community Engagement

Progress

Due to Covid restrictions, these community meetings now take place electronically. The DAEWG meets on a quarterly basis (March, June, September, and November), and CLG meets bimonthly (February, April, May, July, September, and December). In addition, special briefings relating to specific issues of interest to local communities also take place. When easement of restrictions permit, Dublin Airport's bimonthly drop-in clinics at local venues will resume, but in the interim, ongoing engagement continues via our dedicated freephone and email.

There has been no face to face meetings, since before Covid with DAA. In the interim the applicant lodged their application to remove the night time restrictions and change the planning permission. The residents and their representative are conveniently were shut out, to permit the applicant to proceed, with no meaningful

So the health and welfare and future of those trapped in the flight path and between the nurway, was ignored.

We see in the EIS from DAA for the planning to FCC, the ground noise and Fly over mise (air) noise separated and calculated separately.

The method of reporting aircraft ATMs has be split for the purpose of getting the best result in the NAO and with the Flanning Authority.

So the noise from roll, to taxiing to thrust reverse and take off ere treated as separate to the turn off at 3000 ft.

So the longitudinal and ground noise has not been captured to reflect the Lafmax and ground noise for the minority of humans living in the flight path comdor.

The contours are an average over us wide area from the noislest to the quietest.

Engages in action of the contract of the contr

Accessed 2

Determination 1 construction 5 of connection Mr.

at the second second

Linera may be an include to force measings , suitor before Coylin with DAA. To the outlines are an included suit to the measure suits before suits and the mepsion that suits before suits and the suits of the suits before a suit to the suits of the suit

engagement in place now or after the lodging of the original planning F04A/1755 in 2004. Emails, on line data and zoom meetings are not accepted forms of consultation when the impact will be life changing for those directly affected.

Subset

Monitoring & Community Engagement

Progress

Noise contours produced for 2018 and 2019. This information will be made publicly available via the daa website. Ongoing annual Noise reports will be completed.

THE NOISE CONTOURS CANNOT BE RELIED UPON WITH 15 DIFFERENT NOISE MEASUREMENT METRICS USED IN THE EIAR. EACH ONE HAS A SPECIFIC MEANING AND CAN BE USED OR NOT USED IN PRODUCING NOISE CONTOURS.

Noise contours are a factual tool based on computer based predictions of noise generation involving various variables including numbers of movements, mix of aircraft types, patterns of runway usage and flight paths.

If any of these variables are changed, then the contours will change. The Noise Zones represented on the Fingal Development Plan are purely a development control tool designed to minimise conflicts between airport operations and new developments. They are based on a scenario of mixed use of both east-west runways. A different scenario would generate different contours

THIS IS THE EXPLANATION WE RECEIVED FROM DAA ON THE LODGEMENT OF THE PLANNING APPLICATION F04A/1755

A FACTURAL BASED TOOL, PREDICTIONS INVOLVING VARIOUS VARIABLES, INCLUDING NUMBER OF ATMS, MIX OF AIRCRAFT AND PATTERNS OF RUNWAY USAGE AND FLIGHT PATHS.

engagement in place now or after the looping of the angual plantum; (FALA-1755-).
2004. Emails, on life data and more meetings are not accepted forms of confudiation when the implicit will be till discount to accepte discount affected.

to make

reservance. A statument at a presentation.

- - App. 5460

Salak strictuts produtes for 25°b and 2049. Pas retemperatural pa inside outside de selector tel des apares este Driggers domais Nako despert est per completed

ICHE NICHE CONFORMS CANNOTER AB DE DOM DETM WEETE IN THE ERRICH NICHE STATE NICHE ERRICH NICHE STATE NICHE STATE IN THE BOOK DE DOMENA DE PRODUCTION DE PART DE SPECIE CONFORMATION DE PART DE

Nowe transord are altectual tool based on computer pased or accidences of consistences and other parameters of transactions of the contract of

If any of these variables are changed then the confours will change the kinse dones removed to the kingar Development Planure purely a privelopment of inputation designed to manchise conflicts between airport operations and cay developments. They are between on a scenario of mixed use of both east west ringuity. A different come is seen anyways.

ANS 12 THE DOPLESSATION OF THE CHARLES AND MAKE DRIVING A DEGREEK OF THE PROPERTY OF THE PARTIES AND THE PARTY.

PURELY A DEVELOPMENT TOOL DESIGNED TO MINIMISE CONFLICTS BETWEEN AIRPORT OPERATORS AND NEW DEVELOPMENTS.

THIS IS NOW DEFUNCT AS ANCA HAVE PERMITTED THE REMOVAL OF THE ATMS TO REPLACE WITH THE AQC SYSTEM (AIRCRAFT QUOTA COUNT SYSTEM) WHICH PERMITS AIRCRAFT UP TO THE AIRCRAFT MANUFACTURERS TO MAKE THAT BAROMETER FROM 0 – 16. NOTE UP TO 81 EPNDB IS CONSIDERED ZERO – 0 SO AS MANY AIRCRACT UP TO 81 DB CAN NOW FLY BETWEEN THE HOURS OF 11PM – 7AM IN THE MORNING WITH NO LIMIT.

So it is quite clear the contours are based on data input into the computers and produces a result best suited to the needs of the operator and misleading in terms of what the human ear hears at 2am in the morning or 5.45 am or 11.45 pm when attempting to sleep. Our Aircraft Acoustic Engineer, Karl Searson, proved at the oral hearing in 2006, the contours did not include the SEL and Lamax the fast and slow constants. This was the reason the Board of ABP inserted the night time restrictions, due to the missing data by daa, in additional information in 2006. Daa only received the grant of permission, subject to the night time restrictions, in the interest of the closely affected residents health and well-being for night time sleep and down time. Daa assume the entitlement to leave all the other conditions as is and change condition 3(d) and 5 as a continuation and open ended planning permission, to achieve their commercial goal. This tramples on the lives and rights of those victimised living parallel, in between, and in the flight paths of the runways.

This was permitted making a change to the FDP – in the form of a variation no. 1 for land use planning.

In the words of Housing Minister Darragh O Brien on the Defective Concrete issue for homes in Donegal, he stated the scheme put in place would permit the Donegal homeowners to "Rebuild their homes and more importantly rebuild their lives - People can move on with their lives"

Since the 1960's the people of St Margarets have been held captive by daa, with uncertainty, and now with the grant of planning permission by Fingal County

PURELY A DEVELOYMENT TODE DESIGNED TO MINIMISE CONF. ACTS BETWEEN MINIOR OPERATORS AND IPW DEVELOPMENTS.

THIS IS NOW DOPING AS ANLA HIVE PERMITTED THE REWIGNAL OF THE WINES TO REPLACE VITH THE ASSISTEMENT ARROTMED COUNT SYSTEMEN. WE IS A PERMITS ARROTMED THE WINDS ARROTMED TO WAKE THAT BARDMETER FROM 9 - 15. WOTE BY TO SE ESTADS IS CONSIDERED ZERO - 0" SO SE MARLY ARROTAGE FROM 19 TO SE ESTADS IN CONFERENCE OF EIRW - TAM IN "HE MORRIMG WITH AND BUYING BUYING.

For this public disor the contours are bested on data-input into the composers and produces a month least suited to the access of two operator and misseading in teams of set as the product earlies and the indempiting to storp. Our contrast forguestic Engineer, fact Searson, proved at the oral business in 2006, also contours often not include the SEL and Lamber the Last end slow constants. This was the mason the Board of AEP assembly to the last storp of the respect the mason the respect to additional information to 2006. Due only received the present of year or the missing detaily and well-being right time steepend down time est of the research to the part time securitions, in the time est of the research to the residence of the right time steepend down time. The assume the milliament of teams of the confliction and change condition 3(d) and S. as a continuation and open enough planeting premission, to achieve their commercial goal. This tramples on the finite converse.

This was percentled as force a course printed file in this course of a subsidering it reclaims wants have

In the words of Housing Minister Darragh O Brien on the Defective Concrete issue for homes in Donegal, he stated the scheme put in place would permit the Donegal homeowners to "Rebuild their homes and more importantly rebuild their lives - People can move on with their lives-

Since the 1960's the people of St Margarets have been held captive by dea, with undertainty, and now with the grant of planning peoplesion by fingal County.

Council and ANCA, this labels those most affected as collateral damage and insignificant in the economic and commercial aviation and business world.

Action 11

Promote the enhancement of the Noise Flight Track System to include where appropriate additional fixed and/or mobile noise monitoring terminals

Subset

Monitoring & Community Engagement

Progress

daa are currently in the process of completing a Noise Flight Track Monitoring System upgrade to ANOMS. Expected completion by 3/5/21 with additional capabilities to be brought online over the short to medium term. A Noise Monitoring Terminal expansion that accounts for the Northern Runway is currently being developed based on the Departure and Arrival paths for the new runway (SIDS & STARS). Expected completion of the study and commencement of placement is expected before end of 2021.

Extract from the NAP states that the Noise Flight Track Monitoring System will be upgraded and this has occurred. We cannot be confident that the factual and correct information is available to the viewer and those adversely impacted. This has already been proved in relation to a call to DAA aircraft noise line, test flight overflying the North Runway, on 16th October 2021, at approx. 01.15 am which was denied by DAA, and then removed from the radar reports. It was subsequently confirmed thereafter in their response letter, dated 28th October 2021.

Copy of email and letter dated 28th October attached to this submission

Email dated 16th October 2021

Response to noise complaint dated 28th October 2021.

The fact the a Noise Monitoring Terminal Expansion that accounts for the Northern Runway was expected to be completed before end of 2021 and in place, based on the departure and arrival paths for the new runway. This time line is conveniently very close to the results of the 2 month consultation process and the issue of reviewing it for affected residents. Also the noise monitoring expansion has not been put in place. There are no

Council and ANCA, this labels those most affected as collateral damage and insignificant in the economic and commercial aviation and business world

TO THE TOTAL TO THE MEDICAL SET OF THE PROPERTY OF THE COMPANY OF THE PROPERTY OF THE PROPERTY

for many

Service and the service of the servi

.

greened to the first two transports that we have a province the province of th

I stract trust the NAP stores that the Norse flight frace Monitoring system will be appraised and this has eccurred. We purpose the confidencial to fact and contect information available to the viewer and chose advancely impacted. This has already been proved in relation to a call to DAA area althorise line, test flight eventiving the North Rusway. In 19th Section 1021, Interprese to 3 and which was depicted by DAA, and there context accurate reports. It was subsequently confirmed the content in their appears letter dispets. Section 2.

Cook at ether and retrect tabed 28°C traher attached to this archivision

POST residents D. Will Travers, named

Francisco de la la la completa de la completa del completa de la completa de la completa del completa de la completa del la completa de la completa del la completa del

Use for the nivolve Marillaning flat malibrasion that account for the Natherin Bunwar cas expected to be completed before one of 2021 and in place, bused on the departure and only if puttic for the sales turkers. Wis time intereventing very dose for the could of the 2 martin consultation are resent the base of recovering it for all actions of them and the description is a consideration of the date of the sales of noise monitors in Dunbro, at date of writing this submission. There are no noise monitors at Millhead or Kilreesk.

I understand a noise monitor has now been placed on the roof of St Margarets National School as confirmed at our meeting with ANCA on Tuesday 23rd August. last

Review of Current NPR corridors

Work is currently ongoing to validate the noise corridors currently set up within the DAP NFTMS for the existing runways. This validation is using the EIDW as the reference document. This states that:

Cat C and D aircraft using Runways 28L., 16 and 34 shall operate within environmental corridors which are based on runway take-off flight path areas. The corridors have a width of 180 M at the departure end of the clearway, diverging at 12.5% on each side to a maximum width of 1800 M, and extending in length to 5 NM from the point of origin. The corridors extend vertically from surface to 3000 ft AMSL.

The corridors apply for departures from each runway and for approaches to the reciprocal runway, except for circling approaches.

25TH OCTOBER 2016 – PUBLIC MEETING – GAA CENTRE ST MARGARETS.

Flight Track Monitoring for new runway with options and preferences put forward by daa's consultants. This was the first time the true impact of aircraft and take off and landings would impose upon Millhead, and Kilreesk with consultants indicating levels of 80-90db. There was significant inconsistancies with the noise experts present - with contours v LDEN and Lmax over our homes. It was stated by the experts the sound insulation will not work.

At a special CLG meeting in the Maldron Hotel on 10th November 2016,

DAA with FCC presented their duel VDPS and VDIS which was the first time, we were informed of its formation.

DAA and FCC utilised this meeting to present the final details , agreed and formulated by DAA and FCC to sign off on Conditions 7 and Conditions 9 on the VDPS and VDIS.

Following up on the Flight Paths meeting with their options and preferences, we requested the Longitudinal data, to align with what the noise consultants had said on 25th October, and this was not available.

nelse mondate in Danten, se date at water, a this submission. There are no more common at Milhers and Millerst.

are a first to the control of North and

Material is presidente productiva valvis del made si se distributo di la comi y soli upi Autoria degli 1489 filipi Mischilando de of digita di material. Plansi producero i di sendis pre Similità del made 1880 estale addicultura i Pris scalles men

Get C and C among handy 25, 12, 16 and 16 and 20 an

The composite discreption insgrams are their agrees not work and the language eyes to greek.

The composite discreption is a second of the composite discreption.

25" OCTOBER 2016 - PUBLIC MEETING - GAN CENTRES) MARGARITS

what track Moditoring for new shows with opnors and preferences per congress versals consultants. The wayshather the time the true impact of aircraft and takenth and takeings would inconse upon Malfert ta, and Kalcresk, with consultants multicating levels of 30-30gb. There was significant in onals and successful in miles experts present - buth contours of the high time experts present - buth contours of their additions on thems. If was started by the experts the council in utation will and wants.

At a special 1.6 monthly in the Maldren Hotel on 10" Nevember 2016,

DAA with PCC presented their due! VDPS and VDIS which was the 'in a time, the ware informed at its formation.

DAA and PCC utilized this minoting to present the final details, agreed and formulated by DAA and FCC to agreed on Conditions 7 and conditions 2 on the VDPS and VDIS.

following up on the Figur Paths wheting with their options and preferences, are requested the Longweif had discussional discussions with what the notice consultance had said on 25° months and this was not available.

This was continuously requested at the CLG meetings and denied and only presented to the Secretary and Chair of SMCRG on $31^{\rm st}$ October , 2018 .

Copy of Document attached to this Submission in Appendix 1.

RFI 119 - CDA Monitoring

Introduction to CDA

CDA refers to Continuous Descent Approach – this is a method of aircraft approach used by airlines operating at airports that is designed to minimize the environmental impact of arrival operations. Operations are in violation of this procedure when they fly distances of level flight that exceed the criteria, on approach to the airport.

Dublin Airport is currently in the process of reviewing and validating the criteria to facilitate CDA monitoring and have implemented CDA rules in line with international best practice into ANOMS. A trial period of implementation will be completed over Q2-Q3 2021 that will advise engagement with relevant stakeholders and interested parties ahead of implementation.

As the EIAR and additional information was lodged in September , this information needs to be added so that ANCA can fully assess the facts , and the real impact on flight path residents. in relation to the operation of the runways - 16hrs a day and 8 hours per night - full 24 hour period on both North and South Runways.

The annual compliance report in relation to

Engine Ground Running

Preferential runway use

Departure Procedures

This Annual Compliance report should be presented to every directly affected homeowner in layman's terms to explain the true impacts **on their daily lives**, 24 hours a day, going forward. It is not enough to have an annual compliance report, published and then responsibility to those affected absolved.

This was continuously requested at the CLG meetings and denied and only presented to the Seutora y and Chall of SMCNA on 31° October , 2018.

Copy of Dat Joseph attached to this Submission in Appendix 3.

ACCOMPAND ACCOUNTS NO CONTROLLING

and the second second

consumer uniform in home in a la discription appring a missell augent in 2 millionin. At 22 after the page of a principle and a series, you seek the principle as principle, you seek the page of the misself of a series of the page of the misself of the page of the misself of the page of the pag

of service will provide the growners to expose eith a principal of the provide the service of th

As the EIAR and additional information was lodged in September, this information needs to be added so that ANCA can fully assess the facts, and the real impact on flight path residents, in relation to the operation of the runways - 15hrs a day and 8 hours per right - full 24 hour period on both North and South Runways.

The annual rompliance report in relation to

Engine Ground Running

Preter antial runway use

Departure Floredures

This Annual Compliance report should be presented to every directly affected to impacts on their daily homeowner in layman's terms to explain the true impacts on their daily lives, 24 hours a day, going forward. It is not enough to have an annual compliance report, published and then responsibility to those affected absolved.

CDA Rules to be applied for trial period

Operations are deemed to have incurred a CDA violation when they fly more than 1 segment of level flight on approach to the airport. In the UK, at the three South East Airports, Heathrow, Gatwick, and Stansted, ANOMS has been used to measure CDA since circa 2005. The image below shows a copy, in the Dublin system, of the rules used in the three airports. Pending review and validation of the rules the trial period detailed above will be implemented with these limits and thresholds. The CDA rules will be applied to all runway approaches with the intent to provide high level overall and individual runway compliance levels. Adjustment over the trial period may be required to facilitate operational constraints.

We don't have easy access to this. Now that DAA operates under the ANCA NAO, These reports will be part of the NAP, The annual statistics, and produced post the noise and environmental effects.

The trial period of implementation will be completed over Q2 and Q3 2021 that will advise engagement with relevant stakeholders and interested parties ahead of implementation.

What are the results in layman's terms and who will be advised of engagement. Are we considered relevant?

ANCA have confirmed in dialog meetings that the balanced approach is not for communities, it is a "balanced approach as set out in perceived European legislation agreed with ICAO, IAA and CAA excluding the human element.

Monitoring and reporting of

NAPD - Reverse Thrust and Take off Climb procedures currently under review – subject to determining the technology requirements being determined and implements .

This is very vague and conveniently under review. Can we see the results of these procedures and what is envisaged for residents parallel to the runway and in the 3000ft flight path.

the property of the property o

The content of places where the content of the cont

We don't have easy access to this. Now that DAA operates under the ANCA VAO. These reports will be used of the NAP, The annual statistics, and produced post the naise and environmental effects.

The trial period of implementation will be completed over Q2 and Q3 1021 that will advise engagement with relivant stakeholders and interested parties ahead of implementation.

What are the results in layman's terms and who will be sovised of engagement. Are wereansidered relevant ?

ANCA have commed to dialog meetings that the balanced approach is not for communities, it is a "paranced approach as set not in perceived European logistation agreed with ICAO DAA and CAA excluding the homor element.

Monitoring and reporting of

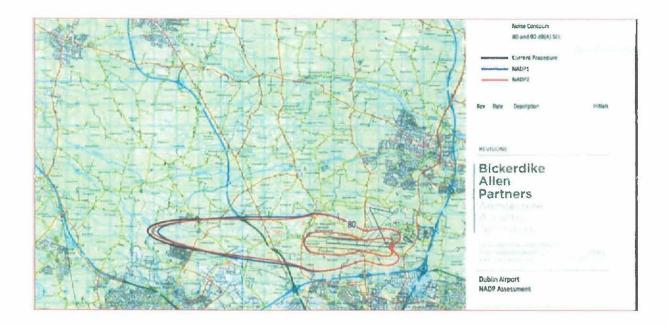
NAND - Reverse Thrust and Take off Climb procedures currently under review -- subject to determining the technology requirements being determined and implements .

This is very vague and conveniently under review. Can we see the results of these procedures and what is envisaged for residents, parallel to the runway and in the 3000st digns path.

The ANOMS system will process all arrival operations for the airport against the proposed CDA rules detailed above to determine if a CDA has occurred. Details will be stored within the ANOMS database, from where the relevant metrics and reports can be generated to advise aviation stakeholder engagement following the trial period completion. Agreed rules will only be applied to ANOMS following this stakeholder engagement for all current operational runway approaches and North Runway.

So Stakeholder engagement, excluding the communities in St Margarets, and Portmarnock is this ethical and moral. Those in the flightpath zone are considered insignificant and collateral damage in the micro zone and diluted as part of the Macro rational presented and unchallenged.

This should be explained in simple details to our impacted residents. It is too technical in nature to understand for the ordinary resident. The result will be following the trial period. Where to the affected home owners fit in on this final process agreed.



A320 Aircraft. - SEL 80 db and 90DB Departure Runway 28L - NADP Assessment.

The ARCHS system will arounce at around operations for the arcset against the proposed CDA rules detailed above to determine to CDA rules occurred Detailed above to determine the rules and reports to street within the ARO'S detailed in front whole the rules and reports on the operated to advise availton cashabide angagement following it a trial beholds completion. Agreed rules with only be applied to AROMS forcoming the standard congression in all current obstational survivary appropriations and stormary.

En Stakeholder engagement, excluding the communities in St Margarets, and Portmainock at this cancel and moral. Those in the flightesty some are considered insignificant and collected damage in the micro rone and diluted as part of the Macco rational presented and richallenged.

This should be explained in simple details to our impacted residents. It is too technical at nature to understand for the ordinary resident. The result will be following the trial period. Where to the affected home owners fit in on this final process agreed.



33.0 Article. - 50 St about 2008, Deporting Runyay 28. - 462 Augustrant.

hight Routes - Current Situation

- 13B.3.28 For the Crosswind Runway straight arrival routes have been used with a set of modelled departure routes for Category A & B and Category C & D aircraft, which have been developed based on the published SIDs.
- 13B 3.29 For the South Runway, based on an analysis of radar data in 2018, approaching aircraft are generally lined up with the extended centreline of the runway at least 17 km from the runway threshold. Consequently, the South Runway approach routes have been modelled as straight out to this point. Before this point arrivals are modelled using 7 routes which cover the broad swathe of directions that the arriving aircraft approach from. Flights have been equally distributed between the 7 routes. The modelled current arrival routes are shown in pink on Figure 13B-2.
- 138.3.30 For departures on the South Runway, the current routes used vary with aircraft type and destination.

We note there are 7 routes that cover the broad swathe of directions that the arriving aircraft approach from. Flights have been equally distributed between the 7 routes.

We have experienced this, now the runway is open with no uniform direction aircraft take off and land on North runway, 10L-28~R.

- 3B.3.31 Category A & B aircraft, which are predominantly turboprops such as the ATR 72, are not required by the IAA to remain within the existing environmental corridors to the same extent as the larger jet aircraft types. They therefore commonly turn off the extended runway centreline to the north or south shortly after the end of the runway. A review of radar tracks for recent activity has resulted in a set of routes for these aircraft types shown in red on Figure 138-2.
- 3B.3.32 Currently the airport has a total of 11 Standard Instrument Departure (SID) routes for westerly operations and 10 for easterly operations, although in both cases a number are initially the same until after they have left the study area. Given this similarity, for noise modelling purposes a set of seven initial departure routes have been created from the western end and four initial departure routes from the eastern end. Table 13B-14 shows which route has been used to model each SID and gives the initial direction of the routes.

So we have 11 standard Departure Routes (SID) for westerly operations and 7 initial Departure routes have been created from the western end and Four initial departures routes from the Eastern end.

So for us at Millhead and Kilreesk, there appears to be no set flight direction, and we have registered from 80db to 94db on a noise monitor from the flights on north runway at Millhead, from 25th August – to 28th August 2022.

- the strength of the strength o

whe have there are 7 makes that, gaver the broses wait and directions that the arriving airtraft approach from a hairs have been requally distributed netween the 4 routes.

were have experienced that, now size ranway is given with no numer malification, dry an take off and land on North transact. LLL – 26 R

is we have it standard Depart we fouter (SID) for westerly op satisfy and 2 termal. Departure represents have been control from the western and and four minul departures outes from the Lastern and

So for us at Millinged and Kilmesk, there appears to be no set flight direction, and are have registered from 80db to SAdb on a noise manitor from the flights on north annway at Millineed, from 25th August – to 28th August 2022.

SID	Madelle			
ano	Westerly Operations	Easterly Operations	Initial Direction	
BAMLI	ROTEV	ROTEV	North	
BEPAN	NEPOD	NEPOD	South	
DEXEN	DEXEN	DEXEN	East	
INKUR	INKUR	ROTEV	West	
LIFFY	LIFFY	LIFFY	East	
OLONO	NEPOD	NEPOD	South	
PELIGIT	PELIG	*	West	
PESIT	NEPOD	NEPOD	South	
NEVRI	ROTEV	ROTEV	North	
ROTEV	ROTEV	ROTEV	North	
SUROX	SUROX	ROTEV	North	

So how do these impact on us residents – what is the real time impact. Obviously each SID will impact the take off noise level and is it possible to forecast the SIDs that will be used?

Is it the IAA, or ATC that determine which take off SID is used, or is it dependant on route.

38.3.33 For Category C & D aircraft, which are jet engined aircraft, these routes have been supplemented for departures to the west by routes that turn earlier, although not as early as Category A & B aircraft routes. This assumption originally arose from a detailed review of 2010 radar data and has been confirmed as remaining appropriate by a review of recent radar data. These reviews found that many of the Category C & D on runway 28 actually performed their initial turn earlier than described by the SiDs. This is because after reaching an attitude of 3000 ft, they are vectored off by ATC. Two additional 'Early Turn' routes were therefore created for each route with initial turns to the north, south, or east, i.e. the ROTEV. NEPOD, LIFFY and DEXEN routes. Traffic has been distributed equally between the three turning points, i.e. the two early turns and the SID, for each route.

3B.3.34 The modelled current Category C & D routes are shown in blue on Figure 13B-2.

A and B Category are turboprops are not required to stay in the flight corridor, in the way jet engine aircraft are. — This Category of aircraft are exempt, for noise related nuisance per the daa in their responses at present. Nonetheless, it must be highlighted that turboprops do fly low over Millhead and Kilreesk and the nuisance noise is very real, particularly at night.

C & D are jet engine aircraft. C and D on runway 28 performed their initial turn earlier that described by the SIDs Standard Instrument departure.

All the property of the Arman State of the Arman St

So how do these impact on as residents - what is the real time impact. Obviously each SiD will among the SiDs that will an exed?

is at the IAA, or ATC, that determine which take off SID is used, or in a dependent or route .

A and It (Lategory are turboprops are not required to may acting flight confider, in the way jet engine among a recall are — This Category of aircraft are exempt, for noise related measure pur the das in their responses at present. Noneth class, it must be highlighted that to haprops do fly low ever whilhead and kilreesk and the runsame moins is very real, particularly at night.

C.S. Diario jet et janeairer alt. Elland Dion narvoy 28 performed their unitations earlier than accorded by the S/Ds. Standard Instrument departure.

The second of the control of the con

and the first of the first and the artists of the first and the first of the first

- 13B.3.37 Once the North Runway is in use Category A & B aircraft will continue to turn off the extended runway centreline shortly after the end of the runway, however they will not be allowed to turn across the other runway, i.e. they cannot turn north off the South Runway and vice versa. A new set of departure routes has therefore been developed for Category A & B aircraft. From the South Runway this replicates the current routes, but with no turns to the north. For the North Runway the routes have been designed to replicate the current routes as closely as possible but with no turns to the south as shown in Figures 13B-3 and 13B-4.
- 13B.3.38 For Category C & D aircraft a number of the modelled routes have been used to represent more than one of the SIDs, so combining the traffic on some of the SIDs onto a single modelled route. The departure routes to the west are supplemented by early turn routes, similar to the current routes.
- 13B.3.39 In order to achieve a safe minimum separation between departures and arrivals performing a go around and based on public consultation and a subsequent detailed safety assessment by the Air Traffic Service Provider, a course divergence of at least 30° is required. As the runways are parallel this necessitated an early turn by departures from the North Runway.
- 138.3.40 An analysis was undertaken to determine the best initial turn angles taking into account the resulting noise, and the local community was consulted on the options. The analysis concluded that that for departures to the west there were limited differences between the various turn angle options, but an initial turn or 15° or 30° to the north was favourable in terms of the overall numbers of sensitive receptors under the flight path. This was supplemented with a 75° initial turn for departures heading to the north or west off the North Runway in westerly departures. For departures to the east an initial turn of 15° to the north was the most favourable option. The public consultation resulted in the 15°/75° divergence to the west off North Runway and 15° to the east going forward for further analysis.

When was this consultation conducted with the local community, what local community. This only meeting to present the preferred and options was on 25th October 2016 to St Margarets Residents and there was no preferred routes – all residents were going to be in excess of >80db due to our location. We were informed that Insulation would not mitigate the Lamax noise.

NOTE NQS has a noise quota count of zero - O for EPNdB up to 81 db. So as many ATMs can take off and land with the 0 figure , therefore those with 0 count (NQC) can take off every two minutes without using any of the 16,200 NQCs that have been set , per ANCA's NAO , funded by DAA, under EU598/2014 legislation and set up by the Dept. of Transport following Dail legislation.

What does that look like initial turn or 15 or 30 degrees to the north was favourable in term of the overall numbers of sensitive receptors under the flight path. The public consultation resulted in 15/75 degrees divergence to the west off North Runway and 15 degrees to the east going forward for further analysis.

Control of the Control of the control of all actions to the Control of the Contro

- plant in the property of providing the company of the providing of the fact of the providing of the contribution of the contri
- to any organization of the construction of the
- product of the program is a series of the product of the product of the control of the product of the control o

When was this consultation conducted with the local community, what local community. This entry meeting to proper the preferred and options was on 25% decreber 2016 to 5t. Manger to Residents undiffuse was no preferred rautes – all residents were joing to be in excess of 580db due to our location. We were informed that historion would not mitigate the earnex noise.

NOTE NOS has a noise quota count of zero - O for EPNdS up to 81 db. So as many ATMs can take off and bind with the D figure, therefore those with 0 count [NOC) can take off every two minutes without using any of the 16,200 NGCs that have been set a per ANCA's NAC, funded by DAA, under EUSS8/2014 legislation and set up by the Dept. of Transport infrom one Dail Ingistation.

What dues that look him mitter of Schegment to a Stategment to the north was a postable in term of the overall numbers of Sension receptors under the flight path. The public consultation of the overall numbers of Sensions to the created Marit numbers in the Lynns barne sent consulted in a SC 5 degrees divergence to the created Marit numbers in the Lynns barne sent going forward for a city or anyous.

- 13B.3.41 The subsequent detailed airspace design indicated that a course divergence of at least 30° was required for westerly departures in order to allow for safety requirements associated with potential missed approaches or go arounds. The final set of divergence was therefore selected to be 30° and 75° to the west and 15° to the east.
- 13B.3.42 A set of departure routes from the North Runway was then developed that replicated the current routes as closely as possible, while allowing for these initial turns. The result is routes with an early turn to the north. When heading east all of the routes turn 15° at 1.06nm from the end of the runway. When heading to the west the routes to DEXEN, INKUR, NEPOD, PELIG and SUROX turn 30°, while those to ABBEY and ROTEV turn 75°, all at 1.18nm from the end of the runway.
- 13B 3.43 The departures on the South Runway continue along the extended runway centreline before turning.
- 138.3.44 The modelled current Category C & D routes are shown in blue on Figures 138-3 and 138-4.
- 138 3.45 This approach is in accordance with EU Directive 2015/996 which states that "In many cases is not possible to model flight paths on the basis of radar data because the necessary resources are not available or because the scenario is a future one for which there are no relevant radar data. In the absence of radar data, or when its use is inappropriate, it is necessary to estimate the flight paths on the basis of operational guidance material".

The approach is in accordance with EU Directive 2015/996 which states that "In many cases is not possible to model flight paths on the basis of radar data – because the necessary resources are not available. So the scenarios are a future one which there is no relevant data. This validates why condition 3(d) and condition 5 should stay in place, per the planning permission from ABP in August 2007.

Dispersion

- 13B.3.46 Aircraft on departure are allocated a route to follow. In practice, this route is not followed precisely by all aircraft allocated to this route. The actual pattern of departing aircraft is dispersed about the route's centreline. The degree of dispersion is normally a function of the distance travelled by an aircraft along the route after take-off and also on the form of the route.
- 38.3.47 When considering many departures, it is commonly found that the spread of aircraft approximates to a "normal distribution" pattern, the shape or spread of which will vary with distance along the route. A simplified mathematical model can be adopted to represent a normal distribution of events, based on standard deviations. EU Directive 2015/996 advises the use of seven "dispersed" tracks associated with each departure route, these comprise the Centreline of each route and the three Sub Tracks either side.
- 13B.3.48 The allocation of movements to each track for this assessment was as follows:

Seven Dispersed tracks with each departure route. So basically there are 7 SEVEN departure routes for St Margarets.

- erform the property of the performance of the complete of the
- Building and representation of the party of
 - NAMES AND ADMITTAL OF THE RESIDENCE OF THE PARTY OF THE P

The approach is in normal activities in the easier of this internal activities and the start of the many cases is not passible to model fillight paths on the basis of radar data. Seconse the necessary resources are not remaind activities are not remaind after a future one which there is no remained atto. This validates why combition 3(d) and condition 5 should stay in place, per the planning permission train ABP in Manasc 2002.

- As the Machine with the set 2. Between 1912 of the published from a control of the project of the representation of the administration of the set of the s

Will be a service of the control of

States Dispersed thatle with each departure route. Se hasically there are J SEVTN Assertime comes for at Marganera. Dublin Airport North Runway Relevant Action

Environmental Impact Assessment Report Appendix 138

- 28.2% of departures along the Centreline;
- 22.2% of departures along each of the two inner Sub Tracks either side of the Centreline and offset by a distance of 0.71 standard deviation;
- 10.6% of departures along each of the 2nd pair of Sub Tracks either side of the Centreline and offset by a distance of 1.43 standard deviation;
- 3.1% of departures along each of the two outer Sub Tracks either side of the Centreline and offset by a distance of 2.14 standard deviations.
- 138.3.49 This dispersion model has been applied with a departure offset profile, which comprises the standard deviations of the magnitude of the dispersion for lengths of straight and curved track. These have been determined from a detailed analysis of radar tracks for operations in 2016 at Dublin. Operations in 2018 have been reviewed and found to follow a similar distribution.
- 138.3.45 This approach is in accordance with EU Directive 2015/996 which states that "In many cases is not possible to model flight paths on the basis of radar data because the necessary resources are not available or because the scenario is a future one for which there are no relevant radar data. In the absence of radar data, or when its use is inappropriate, it is necessary to estimate the flight paths on the basis of operational guidance material".

Note: In accordance with EU Directive 2015/996 which states that it is not possible to model flight paths on the basis of radar data, because the necessary resources are not available or because the scenario is a future one for which there are no relevant radar data. So in the absence or when its use is inappropriate, it is necessary to estimate the flight paths on the basis of operational guidance material.

So we see here – estimated, projected, assumptions – which create noise contours that cannot be relied upon and will be subject to change, once the new runway is operational. In the meantime, the adversely affected residents are expected to accept this data and also ANCA have now made decision to input into their NAO. This is not real time information that can be validated.

13B.3.65 This is in line with EU Directive 2015/996, which requires that "All input values affecting the emission fevel of a source, including the position of the source, shall be determined with at least the accuracy corresponding to an uncertainty of ± 2dB(A) in the emission level of the source".

Performance of Modernised Aircraft Types

- 13B 3.66 For the recently introduced and future aircraft types in the forecasts which are not contained within the AEDT model, assumptions have been made for their expected noise levels. This is based on a companion with either the current generation aircraft that is being directly replaced, or the most similar aircraft type available in AEDT.
- 13B.3.67 The expected changes in noise levels are primarily based on a comparison of average certification noise levels between the current and modernised aircraft types from the EASA Approved Noise Levels database³ undertaken in 2019. A summary of these is given in Table 13B-16. For aircraft whose certification noise levels were not available the assumptions are based on those used by the ERCO for the Airports Commission (2014)⁴.

And the second of the second o

Note, in accordance with on Directive (ALS/996 Which endus tight it is not possible to wood filight some on the lession in the file of the newspanner and and some some file of the newspanner and an advance of the newspanner of the some two advances are not the newspanner of the date. So in the accordance or which is use is inappropriated. It is necessary to and realize the file of the size of the propriational guidance and exist an are proprietable in the posterior of the proprietation.

Solice soe here in estimated, projected, ascengitions in which projecte nows contents that contents are contents that contents are restrict and applications of an experimental and applications of the subject of the new contents of this dutination of this dutination of ANCA have now model degrees to input into their MSC. To a since that up a content of the content

A control of the contro

Common Commo Common Commo Common Commo

The second of the paper of the second of the

Table 40D 40	0 / / / / /		A	en	
Table 136-10.	Summary of Entries in	LASA	Database for	: Relevan	Aircraft Types

Aircraft Type	# Entres in EASA	Average of EASA Neise Certification Levels (EPNeB)		
	Database	Lateral	#Iyove!	Approach
737700	1206	93.3	83 2	95.8
Airbus A321	1757	96.0	86.6	96.5
Airbus A321neo	561	88.7	84.1	94.5
Airbus A330-300	811	98.3	91.1	98.4
Airbus A330-900neo	5	92.4	88.9	98.4
Airbus A350-900	40	91.0	85 0	96.5
Bombardier CS300	16	87.1	808	92.4
Embraer E190	89	92 3	84 0	92.5
Embraer E190-E2	30	86 1	76.8	91.4

13B 3.68 For arrivals the approach level was utilised. For departures the average of the lateral and flyover levels was utilised. For each modernised aircraft type where an assumption was needed, the arrival and departure noise levels were separately compared with the relevant current aircraft type. These differences were then added to the adjustments set out in Table 13B-15 to give the resultant adjustments presented in Table 13B-17.

13B.3.68 For arrivals the approach level was utilised. For departures the average of the lateral and flyover levels was utilised. For each modernised aircraft type where an assumption was needed, the arrival and departure noise levels were separately compared with the relevant current aircraft type. These differences were then added to the adjustments set out in Table 13B-15 to give the resultant adjustments presented in Table 13B-17.

Table 13B-17: Expected Change in Noise Levels between Current and Modernised Aircraft Types

Current Alecraft Type	Modernised Averaft Type	Expected Change in Noise Levels between Carren and Modernised Alexaft Types (dB)		
		Arrival	Departure	
737700	Bombardier CS300	-34	-4.3	
Airbus A321	Airbus A321neo	-2.4	-5.4	
Airbus A321	Airbus A321LR ^[1]	-2.4	-54	
Airbus A330-300	Airbus A330-900neo	-1.1	-48	
Airbus A330-300	Airbus A350-900	-30	-7.5	
Boeing 777-300	Boeing 777X ⁽²⁾	-0.8	-3.8	
Embraer E 190	Embraer E190-E2	-1.9	-62	
Based on A321neo certification Based on ERCD assum				

The db level at night per the conditions, will have dB level of zero for scheduled flights as no

The reduction in aircraft noise is welcomed for the 16 hour operation on both runways and the 65 ATMS only at night on the South runway.

Noise prediction

ATMs are permitted between 1100 - 0700 am .

13B.4.6 Each dwelling and community building has been included in the AEDT model as a receptor. A representative set of receptors has been created for each permitted development and zoned land area based on site plans and other publicly available information. Noise levels have been predicted at each of these receptor locations.

and the first of the second se

The second of th

one of gifts the second companies. The second control of the secon

and programme and a second programme of the contract of the co

	4 4 4	

plane and the fact that the fact of the fact that is

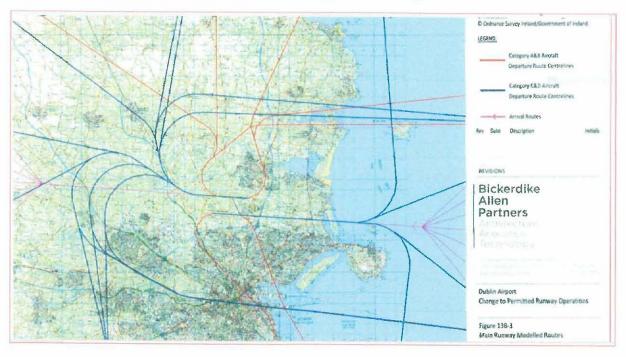
The distance as neglicine in the sandiams, will have distance of overfice acceduled Mightoner of ATM, or painting between Lide-5/00 and

encrediction in arcraft poise Livelageard tering 10.1 curios marion person, a margy, and come of anists only achigns on the basish-organia.

A second of the second second



This is the current routes for take off and landing aircraft – August 2021



Change to permitted runway operations. — North and South runways. Centre line over Millhead and right hand side of Kilreesk Lane.



(KRE Stage 4) Percent gods of time No in at late words from an anti-hard



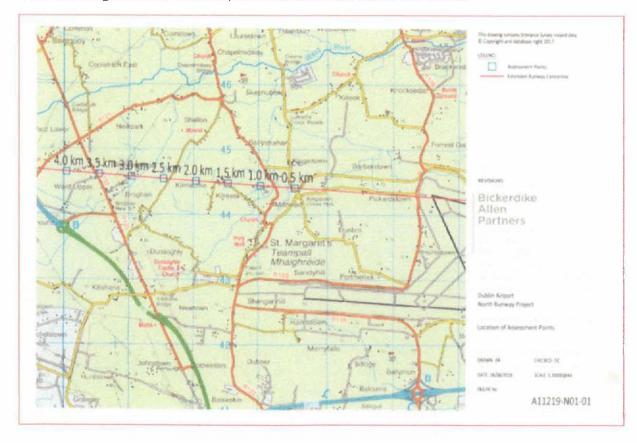
Promprise per printedramasy operations — secreptud Scutt. Lucasinyo, democratur sensity and value of the sensity and value of the contributions.



Change to permitted runway operations – future mixed mode.

For those under the flight of the runway, in St Margarets, it would appear from the data put forward none of the data will make a difference, as we look at the Longitudinal data finally received on 28^{th} October, 2018.

The following refers to Millhead, Kilreesk Lane and out to the Ward.



Chapme to permitted rooway approximals - future misub music

for unceep under the flight of the runway, in St Margarets , it would appear from the data pur forward units of the data yaltmake undiference , as we took at the congruencial data brially receives on 23° October, 2013

The following reters to Milligue, idineosiciane and out to the Ward.



And the corresponding Lamax and SEL levels.

The fact that daa withheld this information, and agreed a VDPS and VDIS with FCC, with full knowledge of the impact of the North Runway and its flight paths, without our meaningful participation and meaning engagement, with those most impacted, between the runways, and parallel and in the flightpaths, highlights how the DAA view our position in our community and our homes. These night time restrictions cannot be permitted, on the basis of the above. Daa expect those adversely affected to be forced out of their homes by default under their "voluntary scheme" There is nothing voluntary about what has been proposed in Condition 7 and Condition 9 of the Planning PLO6F .217429.

The fact that ANCA granted DAA everything in the planning application F20A/0668 and more, in June 2022 in the NAO and then FCC granted Planning permission on 8th August, giving no priority to the health and welfare of those trapped in the Longitudinal corridor and the confines of the runways is both immoral and irresponsible.

DAA are a developer and will expand their lands for airport development, commercial profits when homes have been acquired, as happened to the 8 families, forced to move, for the construction of North Runway in the late 1960s. There was no consideration for those 8 families and there is no serious consideration given to those now trapped, and forced to choose with living in an 80-10db aircraft noise zone or sacrifice their lives, their homes, their identity, into the future.

It is not acceptable to remove the two conditions that permitted the grant of planning permission, by ABP in August 2007, by eradicating anything and everything, in their way, by using all and every updated legislation, at their disposal. This is **the Imbalanced Approach** not - **the Balanced Approach**- and discriminates against just and fair democratic process,

And the corresponding tarrax and SEL levels.

The fact that das withheld this information, and agreed a Voe's and VolSwith ECC, with full lenowledge of the impact of the North Purway and its flight paths, without our meaningful participation and incaming engagement, with those most impacted, between the nurways, and parallel and incan flightpaths, highlight how the DAA view our position in our community and our homes. These night time restrictions cannot be nemitted, on the basis of the above. Dat except those advantaly affected to be furced out of their comes by default under their "voluntary scheme". There is nothing voluntary about what has been default under their "voluntary scheme". There is nothing voluntary about what has been group, and in Condition 7 and Condition 2 of the Planming PLORE (201422).

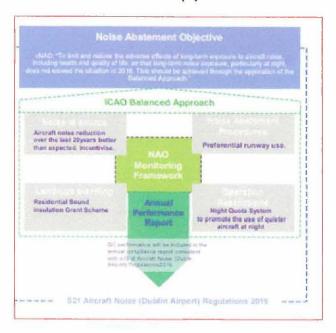
The fact that AWCA granted DAn everything in the planning application F20A/0668 and moon, in turn, 2022 in the PAO and then FDT granted Planning permission on 8th August, giving no priority to the health and welfare of those trapped in the Longitudinal corridor and the confines of the runways is on himmoral and prosponsible.

DAA are a developer and will expand their lands for surport development, commercial profits when homes have been acquired, or supposed to the Standber, found to move, for the construction of North Burnary in the face 1850s. There was no construction for this as Santaurus and there is no scrious consideration given to those now trapped, and forced to choose with living in an 80-10db aircraft reflect, one or sucrifice their lives, their homes, their identity. Into the future

It is not an occurable to remove the two conditions that are milited the grand of clanning pormissions by ABP in August 2007, by predicating anything and everything, in their way, by using all and every updated legislation, at their disposal. This is the imbalanced Approach not—the Balanced Approach—and discriminates against just and fair democrafic process.

Health Impacts

Aircraft Quota System proposed as mitigation tool for NAO – Balanced Approach.



The applicant is proposing to use the Aircraft Quota System as part of their mitigation process, along with the above.

At point of updating this document for ABP, we were informed by ANCA that they are not aware if DAA are going to operate the NQC system, prior the this appeal.

To replace Condition no. 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

TO: A noise quote system is proposed for night time noise at the airport . The airport shall be subject to an annual noise quota of 7990 between the hrs of 2330 and 0600 hrs.

Health Impacts

Aircraft Quota System proposed as mitigation tool for NAO – Balanced Approach.



The applicant is proposing to use the Aircraft Quota System as part of their mitigation process, along with the above.

At point of updating the document for ABP, we were informed by ANCA that they are not aware if DAA are going to operate the NQC system, prior the this appeal.

To replace Condition no. 5

On completion of construction of the runway hereby permitted, the average number of night time aircraft mavements at the authort shall not exceed 65/night (between 2300 hours and 0700 hours) when measured over the 92 day modelling perion as set out in the reply to the further information request received by An Bord Fleandia on the 5th duy of Morch, 2007

Repson: To control the frequency of night flights at the auport so as to protect residential amenty having regard to the information submitted concerning future aight time use of the existing parallel runway.

10. A noise quate system is proposed for night time make at the airport. The organishall be subject to an annual noise quata of 7990 between the his of 2330 and 0500 hrs. ANCA have granted the total of 16,260 Aircraft Quota counts, an increase of 7,990 as part of their DRD.

This application is about four different and separate airport issues.

- 1. Removing the night time tranquillity required for sleep and rest, imposed by ABP in 2007 with disregard for the WHO guidelines.
- 2. Introducing the flight paths as part of the runway this should be a separate planning application.
- Precursor to application for increasing passenger numbers from 32million to 40 million in 2025. This was originally part of the discussions with FCC and ANCA to be included in this application, but was deferred until 2025, when passenger numbers are due to be at peak again and in anticipation of this planning approval.
- 4. Introduction of the Noise Quota System instead of ATMs at Dublin Airport. Dublin Airport has no restrictions currently. The operation of the new runway brings into place restrictions for the first time. The NQS is a matter for each airport to implement under the NAO and daa have proposed a cNAO to ANCA to agree upon, when in actual fact, there is no NAO in place and is a requirement to do so by ANCA without the night time restrictions in place per the planning permission document. Daa have proposed this AQS would be reviewed every five years by ANCA and FCC—when there is a limit of a 6 months season placed on QC points, and this is at the discretion of the airport operator, how they are assigned. The AQS is not designed for those under the flightpath or parallel to the runways, as it does not consider the number of SEL's envisaged to cause sleep depravation and health issues.

The following statement is now key, in this grant of permission by ANCA and FCC.

The NQS is a matter for each airport to implement under the NAO - so DAA have can devise their own measurement that ticks the boxes for EU Legislation and the END.

Please refer to Condition 10 on the planning conditions – F04A/1755 – PL06F.217429 where it states:

A noise and flight track monitoring report shall be submitted to the planning authority on a quarterly basis and shall be made available for public inspection. The results of the noise and flight track monitoring shall be used to re-evaluate noise impacts and the application of mitigation measures, including (a) the Noise Insulation Scheme (including residents and schools) and (b) the property buy out scheme bi-annually.

Reason: To protect the amenities of the area and to ensure ongoing monitoring and verification of the proposed noise mitigation measures.

APICA have granted if a total of \$5,260 Alectain Gusta counts, an increase of 7,250 is nort ut their DRD

This application is about four different and separate airpoin insues.

- Barnoving the right time transpilling required for sleep and lest, imposed by ABP or 2007 with disregard for the WHO guideliers.
- Introducing the flight paths as part of the runway this should be a stiourne planning application.
- 3. Precursor to application for increasing passenger numbers front 32 million to 40 million in 2025. This was ariginally part of the discussions with FCC and 4NCA to be included in this application, but was deferred until 2025, when passenger numbers are due to be at neak again and in anacipation of this planning approval.
- All port has no restrictions currently. The operation of the new runway brings into place restrictions for the first tithe. The NQS is a matter for each all port to implement under the NAO and data have proposed a cNAO to ANCA to agree upon, when in actual fact, there is no NAO in piace and is a requirement to to so by ANCA without the night inner remoders in place per the permitty permission document. Dee have proposed this AQS would be reviewed every two years by ANCA and FCC—when there is a limit at a 6 months season placed on QC points, and this is at the discretion of the amport operator, how they are assigned. The AQS is not designed for those under the hightpath or parallel to the minway, as it does not consider the number of SEL's onverged to a use design department and health issues.

The following statement is now key, in this grant of permusion by ANGA and FCC.
The NQS is a matter for each alread to implement under the NAO — so DAA more can do he that own measurement that locks the boxes for EU tegistrion and the END.

Please refer to Condition 10 on the planning conditions—804A/1755—BLOSF 217429 Where it states:

A noise and flight truck monitoting report shall be submitted to the plenning authority on majuratedly basis and shall be made available for public inspection. The results of the noise and flight track monitoring snalt be used to re-evoluat, noise impacts and the application of minguitan measures, notating (a) the Naise. Insulation Severe (insulating residents and schools) and (b) the property buy out school blumoutly.

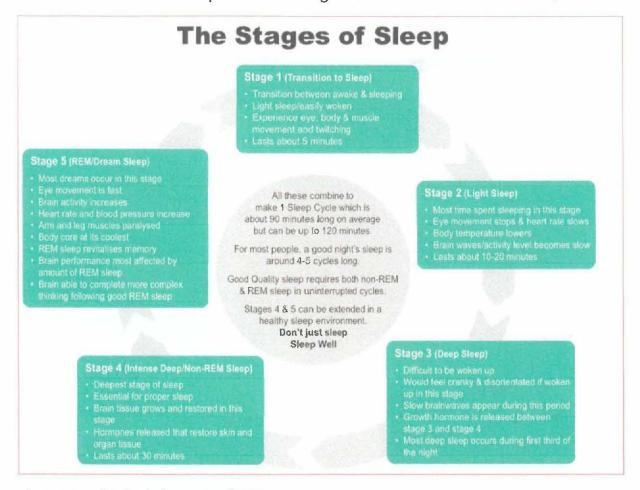
Reason: To protect the amenities of the area and to ensure angoing manitoring and verification of the proposed naise miligation measures.

An extreme example put forward by the AEF (Aircraft Environmental Federation - UK)

One Concorde on departure has the same equivalent noise energy to 120 Boeing 757's taking off every 2 minutes for 3 hours and 58 minutes.

The Concorde noise energy lasts for 2 minutes

3 hours disturbed sleep instead of 1 large aircraft with a 2 minutes disturbance.



The EIAR and Submission F20A/0668

The full documentation covers many subjects ranging from the economic need, to the operations at night and day – 24 hours x 365 days, to aircraft noise and the mitigation proposals of the aircraft quota system, to operate for the unforeseeable future of Dublin Airport. Also the Candidate Noise Abatement Objective proposals to include the land use management – agreed on by FCC and the Noise Quota System in place, for ANCA to agree with, prior to FCC making a decision on this legally invalid planning application in Irish line with the EU598/2014 Directive. The EU598 directive was only brought into Irish legislation on 29th May 2019 with the President of Ireland signing off on the **Aircraft Noise Regulation**

An extreme example pur forward or tip: ARE i Andromer on Euderstein - UKI.
The Concrete on durations has the same equivalent for unergy to 130 today ARE.
Its og all avery 1 allnows for 3 addressed \$8 minutes.
The Concrete only a service land on the same land.

I have distantant sleep instead of 1 large birarit with a 2 minute. I distribution if

The Stages of Sleep



The EIAR and Submission F29A/0568

The full documentation covers many subjects ranging from the accordance need, to the operations at night and day – 2% hours x 36% days, to aircraft noise and the mitigation proposals of the aircraft quota system, to operate for the unforesceable future of Dublin Airport. Also the Candidate Noise Abatement Objective proposals to include the land use management in agreed on by ECC and the Noise Quota System in place, for ANCA to agree with prior to ECC making a decision on this legally involve promise application in little include the EUGPS/2014 Direction on this legally involve promise application in this line with a EUGPS/2014 Direction of the Lord aircraft was only promise lagislation on JCC with the PUGPS/2014 Direction to the Successive only promise hapitation on JCC with the Provident of the Successive of the Aircraft No. 20 Regulation

Act 2019 . Prior to that a NAP (Noise Action Plan) was passed in January 2019 that will overlap with the opening of the new runway, due to expire in quarter 2023.

Also in the mix is the Voluntary insulation and Voluntary home buy out scheme, (VDPS) which is already part of the planning conditions, with very ambiguous wording, conveniently open to interpretation of the applicant and FCC. This was agreed to, without the meaningful consultation with the adversely affected homeowners, under the new flightpath, placing a gun to their heads. So we see the current conditions being used for a new planning application to breach the health safeguards imposed on the airport operators, daa by ABP in August 2007.

The conditions relating to the School and home insultation and the home buy out were part of the Laeq16hr metrics used in the original planning, F04/1755 in 2004 - 2006.

AIRCRAFT NOISE

Page 38 of Volume 4 – Inspectors report. –from the Oral Hearing 2007.

Mr. K. Searson (Disc 2 – 09/10/06 Submission BB and BB1) detailed noise measurements taken at a number of homes of persons in St. Margaret's Concerned Residents Group. He raised issues relating to the further information submitted in response to the Board's request, the INM model and use of fast and slow time weighting. The prediction package is incapable of predicting arrival LAF,max levels at, or close to any of the appellants' properties. Reliance on this prediction method means that it is not known how many decibels will need to be attenuated. Any buy-out of properties should take into account the creeping background levels which the expansion of the airport has caused to date. Modern up to the minute acoustical engineering criteria and radical thinking needs to be employed.

Mr. Searson answered questions on the noise measurements he undertook and the WHO document to which he referred (1995 document). He confirmed that the properties at which he took the measurements did not receive insulation from the original scheme. Mr. Searson stated that the SEL and LAeq are not affected by fast or slow. To get a reduction by 1 or 2 decibels would be relatively easy however it gets progressively more difficult in getting a further reduction. He confirmed that the phrase 'creeping background' is used in a conventional sense and not with reference to LA90 levels

Mr. Walsh answered questions on his submission including clarification of how frequency of flights at night would not affect LAmax levels and stated that the LAeq and A weighting is not ideal for aircraft noise and stated that the D or E scale would more accurately reflect human perception. He also clarified that he referred to the 2000 WHO document.

ięt 2019 – Process tint " 1445 jitolos – Luon Plan į vai pasara in Junuory 2019 Francois Sveilap vitteuro opening of the new runway , duena espira jo guarter 2023.

Also in the mix is the Voluntary insulation and Voluntary home buy out scheme, (VDPS) which is already part of the planning canditions. With very ambiguous wording, conveniently open to interpretation of the applicant and ECC. This way agreed to without the measurement plant consultation with the adversely affected homeowners, under the new flightpoth, planting agent to their heads. So we see the current conditions being used for a new planning application to breach the health safeguards imposed on the airport operators, drainy ABP in August 2007.

The conditions inclating to the School and home insultation and the home buy out were part of the Lieq (6hr maters used in the original phonony, 104/1755 in 2004 – 2006.

AIRCRAIT NOISE

Fage 38 of Volume 4 - Imperiors report - from the Oral Breating 2017.

wir. It. Searson (Disc 2 – 09/10/06 Submission Bittend BB1) detailed noise measurements taken at a number of homes of persons in St. Margaret's Concerned Residents Stoup. He raised issues relating to the further information submitted in response to the Board's request, two tolds model and use of fest and stow time weighting. The prediction package is increable of predicting artical LAR, max levels at, or give to any of the appeal ants' properties. Pelance on the prediction method means that it that thrown how many decibels will need to be attenuated. Any buy-ont of properties, frozio (a), who account the recomit the recognitive that resident has reused to date. Musicus it expends many or or or write it engineers which the expension of the apport has reused to date. Musicus to the manage to be employed.

We so, not answered questions on the none mousewers by undertook and the WHO document to which he referred (1995 document). He committed that the properties at which we took the construction and of receive in utation train the original where with Searche stated that the SEL and Liked are not streeted by fast or slow. To get a reduction by Limit decided would be rejetively easy however if gets progressively more difficult in getting a further reduction. He confirmed that the phase fare plug beforeard is own in a conventional carry to not with television to LASS where

Mr. Wald, an sweeping que thous on his submission recording classification of how frequency of highes at night smulp not affect Library levels and scated that the Ding and A weighting is obtideed for effected noise and scalad that the D or Escale world mare accountly reflect human perception. He also do it for the reference to the 2000 Wird document.

Page 41 of 60 - Vol. 4 inspectors report. - Oral Hearing

Questions to Planning Authority Mr. Flanagan stated that Mr. O'Kelly's review of both the proposal and the planning authority's assessment of the issue of noise is independent and unsolicited. He stated that by reason of the documentation submitted to the planning authority, further information and clarification of further information it is the Council's understanding that Option 7B is the preferred use of the runways. Conditions 5 and 7(c) reflect this preferred option. In terms of engine testing the Council feels constrained by its commitment in the LAP and a cautious approach to be taken to engine testing. Therefore it would still recommend its removal from the northern part of the site prior to commencement of development. It is accepted that some form of criterion is appropriate in terms of night time use of the runway and that the planning authority's decision is not explicit in this regard. Mr. O'Kelly's recommendations for an LAeq 1hr. 55dBA level are considered practical. Mr. O'Kelly stated that the EIS quotes SEL levels. The LAmax is assessed under fast time constant. He accepted that the LA f max would give higher readings than the LAs max for a given variable trace and that it is possible that there could be deviations between the two of between 3 and 5 dB. He accepts that the INM uses the LAs max but doesn't apply to the SEL from which the LAeq contours are derived. He accepts that the British Standard and WHO Guidelines recommend that the fast time constant be used for LAmax. Mr. O'Kelly stated that ISO 1996, which advocates the A weighting and the LAeq being the best descriptor for environmental noise, was voted and accepted by 27 countries including Ireland. The LAmax may supplement it. He does not necessarily accept that the LAmax is a more likely descriptor for sleep disturbance. Mr. O'Kelly notes that the measured levels at monitoring station 20 are considerably lower than the predicted levels. He also gave details as to the location of the monitor in Portmarnock. He accepted that it is relatively close to the DART station. The issue of independent monitoring was raised. He accepted the computations provided by the applicant as satisfactory. Mr. O'Kelly accepts that it is possible that inside bedroom levels of over 45dB LAeq could be recorded at night at properties of the St Margaret's Concerned Residents Group. While it would be desirable to have it lower such comparable levels prevail for 1000's of properties. He stated that the NRA Guidelines for the construction of new roads sets a Lden of 60dBA and note that in many cases this may not always be attainable. It is a design goal. Mr. O'Kelly stated that the INM model is considered to be one of the best in the world. It is automatically calibrated 4 times a day. He would reject Sharps Redmore's recommendation that the measurement be treated with caution. Actual noise measurements are being taken at 7 locations. Mr. O'Kelly stated that it would be desirable that noise levels be monitored at particular schools. He accepted that windows and ventilations units in schools must be treated properly. He accepted that a baseline study is useful but that the contour for 2003 is useful. Mr. Walsh noted that could be a difference of +/- 1 km for a 1dB difference. Mr. O'Kelly would like to see night-time flights limited. He considered that there would be difficulties having an absolute night curfew at the entire airport. He confirmed that night-time is seen as 11.00 -7.00 and not 11.00 - 6.00 as written. He stated that the conditions attached to the grant of permission should be clear and that operational use of the proposed runway as outlined in Option 7B should be explicitly stated. Mr. O'Kelly is not aware of the number of deviations from flight paths and he confirmed that he did not look at St. Margaret's in terms of flight deviations.

Page 41 of 60 - Vol. A inspectors report. - Drai Hearing

Dr. Hogan (Submission BJ) gave details of the health impact assessment carried out. He stated that there is no risk of noise induced hearing loss due to aircraft outside the airport. He also addressed the issues of interference with speech communication, conversation, sleep disturbance, health impacts including mental health, effects on residential behaviour and annoyance and impact on schools. Noise insulation of schools within the 60dB contour is recommended. He concluded that in terms of the health effect of environmental noise there is some limited evidence of effects on blood pressure, cardiovascular risk, school performance, mental health and sleep disturbance. Many effects are only demonstrated with ambient noise in excess of 70dB. Given the number of residences within this contour the effect is negligible. There are few, if any, residences exposed to these noise levels and therefore the human health impact of noise from the proposed facility is assessed as negligible. Dr. Hogan also commented on the submissions made by Dr. Staines and Prof. Stansfeld on behalf of the Portmarnock Community Association. He stated that there is enormous common ground between a Health Impact Assessment and an EIS. The assessment of health effects cannot be performed by medical people alone. There would be input from noise and air experts, toxicologists etc., all of whom had input into the EIS.

Flight path residents will experience non restricted flights from 7am – 11pm on both runways when the new runway becomes operational with non use permitted on the new runway for 8 hours 11pm - 7am and reduction to 65 movements (includes both take-offs and landings in this figure) when the new runway opens – to permit rest and sleep in the interests of human health.

DAA fully agreed with this, and then submitted an application to squash these night time restrictions in August 2008 under SID (Strategic Infrastructure Development) which was refused (See documents attached from ABP file)

PER THE WHO (WORLD HEALTH ORGANISATION) - NIGHT TIME IS CLEARLY DEFINED AS 1100 TO 0700 - 8 HOURS.

DAA never intended to abide by this permission, and have cherry picked what they don't like and expect residents to abide in full. This demonstrates the view of DAA towards those adversely affected, deeming them insignificant, and trampling on them, with the power of entitlement, using the tools of planning and legislation, tailor made to suit all their requirements. (Variation No 1 to the FDP – December 2019).

At the Oral Hearing in 2006 Mr Kelly stated the INM which derived the noise contours used (Laeq 16 hour) was based on the Las max (slow) which gives lower readings. Compared to the Laf max (Fast) this gives a different reading 3-5db higher. So the applicant used the metrics giving a more favorable result for the creation of their contours used at the Oral Hearing.

On Hogan (submission St) price results or the nealth implict assessment carried in the street that there is no risk or noise induced meading has due to alcurath autside the august to didn't see their see the second silential and didn't see the second silential part and didn't see the second silential part annoyance and impact on schools. Yourse instract, affects on residential behaviour and annoyance and impact on schools, Yourse instract, affects on residential behaviour to encountered and impact on schools, would be sufficient of environmental health and sleep disturbance, Wany of order an only denous rath pulse with ambient rolse mexics of 30 disturbance, Wany of order and only denous rathed with ambient rolse or excess of 20 disturbance, when of residences within this context the color of noise from the number of residences within this context the registry big. There are few, a any, residences exposed to these noise seeks and the capagible. On Hogan also commented on one submissions made by Dr. Stantes and Professional Dr. Hogan also commented on one submissions made by Dr. Stantes and Professional Dr. Hogan and are the context of health of the Portmanuck Community Association. He stated that the ce is normally corner from ground between a Health impact Assessment of health of the Mortmanuck Community assessment of health of the Mortmanuck Community and are EIS. The experience of health into the EIS. The report of community into the EIS.

Flight path revidents will experience non restricted flights from Tam - 11pm on Bath runways when the new runway becomes operational with non-use permitted on the now runway for 8 hours. I fam - Zam and reduction to 65 mays ments (includes both take-offs and landings in this figure), when the new runway opens - to permit rest and sieca in the numerats of ruman health.

The fully agreed with tells, and then submitted an application to sensish there might their vestrictions in August 200 is under SID (stritegic infrastructure Development pwinch was unlike and - (See Jocument) attached from ABP. Me)

PERTHE WHO (WORLD HEALTH ORGANISATION) - NICHT THAT IS CLEARLY DEFINED AS 110H TO 0700 - RHOURS.

DAA never intended to ablide by this permission, and have cherry placed what they don't like and expect residence to abuse in rad. This demonstrates the view of DAA towards those adversely affected, attending them insignificant, and trampling on them, with the nower of contillement, using the tools of planning and legislation, tailor made to sait all their constraints. (Variation No. 1 to the EDP - December 2019).

At the Oral reacting in 2006 Mr Kelly streed, the INM which derived the noise contours used (see a 16 hour) was based on the Lis max (slow) which gives lower condings. Companed to the Laf max (Fastilitis gives a different reading 3-5db higher. So the applicant used the dischars giving a more favorable result for the dreation of their contours used at the Oral Francing. Night time hours - is 11pm - to 7 am - and the introduction of a AQC (Aircraft Quota Count) does not change that fact. To overturn the conditions – and replace with an Aircraft quota count system tramples on the residents directly affected with other so called mitigation measures already agreed by Fingal County Council, excluding most of those impacted. This effectively removes the two conditions, not replaces them.

Aircraft Quota System may have a plausible argument, that aircraft will become quieter in the next 5 years, but this QC will allow more ATMs, and therefore no benefit to flightpath residents and those parallel to the runways. It is the manufacturers who certify the QC on their aircraft. So this raises many questions:

So who will independently verify the valid QC count?

How will this be done?

What happens if an airline / aircraft goes over their quota? Will there be sanctions, and penalites for airlines who breach their limits as encouragement does not guarantee compliance.

What happens in this case?

Will Airlines/ aircraft be prohibited from using Dublin Airport.

There are currently 9 cargo aircraft operating schedule at Dublin Airport. Cargo Aircraft tend to be older and noisier aircraft.

Are there any penalties for airlines, cargo carriers for breaching the count?

Where is the process and procedures in this scenario?

Where is the independent and balanced approach for residents?

How many aircraft are permitted to retain the lower QC rate as the EPNdB borders the next barometer – eg. 82db - will be it considered below 81 and left at QC - O instead of the next 0.025

The Aircraft manufacturer sets the QC to each aircraft on their own criteria. It is our understanding that the manufacturers can be incorrect and select a lower QC that does not reflect the decibel level actually produced when operating and flying. The operation EPNdB can also vary greatly.

ANCA have agreed this is the case – so the Aircraft noise implications and experienced technically can be incorrect and therefore a heath and safety issue.

Wight time hours - is 1 Lpm - to 7 am and the introduction of a Auto (autorat Cubbo Count) does not change that fact. To overturn the conditions - and replace with an A recalt quote count system tramples on the residents directly affected with other so culod with about a sure stready agreed by fingat County County Council, excluding most of those impacted. This effectively removes the two conditions, not colleges them.

Aircraft Quoto System may have a plausible argument, that aircraft will become quieter in the next 5 years. But this QC will allow more ATMs, and therefore no benefit to flightpath, residents and those parallel to the runways. It is the manufacturers who certify the TC on their aircraft. So, this raises many questions:

So who will independently verify the valla OC count?

Four 3d and live work

What happens if an airtine Favoraft year over their quata? Will there be sanctions, and penalites for airtines who preach their limits as encouragement does not guarantee compliance.

What begans in this case?

Will Ahlaes/ arcroft be pobibited from using Cublin Almort.

There are currently 9 range already operating schedule of Dublic Alexant - Corgo Aircraft Lend to be older and noisier vircuit.

Are there any penalties for airlines, cargo corners for breaching the count?

Where is the process and procedures in this scenario?

Where is the independent and balanced approach for residente?

Now many circroft are permitted to retain the lower QC rate as the EPNaB barders the next barometer – eq 82db - will be it ransidered below 81 and left at QC - O instead of the next 0.0.25

The Aircraft manufacturer sets the DC to rach aircraft on their own critaria. It is aurunderstanding that the manufacturers can be incorrect and select a lower. GC that does not reflect the decibel level actually produced, when operating and flying. The operation EPNSB can also vary greatly.

ANCA have agreed this is the case — so the Aircraft noise implications and expenenced securically can be incorrect and therefore a heath and safety issue.

ANCA have now set up their NAO for Dublin Airport (June 20th 2022).

The NAP report has been a written report with facts and figures and does not reflect the true impact, as single events on those adversely affected. This is produced by daa to FCC and now, will be reviewed by ANCA – part of Fingal County Council.

DAA produce the data- DAA are the managers of the airport – A CNAO framework proposed to be set up by ANCA - DAA fund ANCA - ANCA are part of Fingal County Council – despite the aspiration , that both are independent. We as residents see this all part of DAA and there is no independent Aircraft Noise Competent Authority for the health and well being of those trapped in the Longitudinal Corridor. The "balanced Approach " we are told by ANCA is a prescriptive directed European organisation, to bridge the gap, for airport operators, DAA being Dublin Airports . European Airports have the full control to set up a specific, tailor made individual format to suit their particular operation. ANCA do not consider the communities around the airport. There is no balanced approach for the areas that are not densely inhabited.

Runway Usage.

Table 3: Future Runway Usage Once the North Runway is constructed and operational Dublin Airport will operate during the daytime (07:00 – 23:00) in accordance with Conditions 3a-3c per the mode of operation Option 7b, as detailed in the Environmental Impact Statement Addendum, Section 16 as received by the planning authority on the 9th day of August, 2005.

This provides that:

- (a) the parallel runways (10R-28L and 10L-28R) shall be used in preference to the cross runway, 16-34,
- (b) when winds are westerly, Runway 28L shall be preferred for arriving aircraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control, (c) when winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft, and 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. In practice it is expected that, unless capacity requires mixed mode, the runways will operate in segregated mode during the day with arrivals using either Runway 10L or Runway 28L and departures using either Runway 10R or Runway 28R depending on wind direction. The few movements by Code F aircraft are an exception to this, as they will always use the North Runway. It is also proposed that departures by Category A & B aircraft heading south during westerly operations will use the South Runway, and those heading north during easterly operations will use the North Runway. A method of determining mixed mode runway usage on the main runways (North and South) for modelling purposes has been developed. The modelled runway usage has been determined on an hourly basis

Most of the time the runways will operate in segregated mode, i.e. one runway for all arrivals, the other for all departures.

ANCA bave row set up their NAO for Dublic Airport, 1 June 201 20220.

The NAP rapart has been a written report with larts and figures and does not milect the time impact, as single events on those advectely affected. This is produced by dae to FCC and now, will be reviewed by ANCA — part of Fingel County County.

DAA produce the fata- BAA are the managers of the alignet HA CNAO frameworf proposed to be set up by ANCA - DAA fund ANCA - ANCA are part of fingal County Council - despite the aspiration, that both are independent. We as residents see this all part of DAA and their is no independent Alteraff Noise Competent Authority for the health and well being of those trapped in the Langitudinal Corndor. The "balar ded Approach" we are told by ANCA is a preservative directed Lurapean organisation, to infulge the gap for apport open and a preservative directed Lurapean organisation, to infulge the gap for apport open and the father of the full control to set up a specific, failor made individual format to suft their particular op ration. ANCA do not a neither accommunities are upon the areas and a constructive areas the areas.

Runway Usage.

Table 3: Future Runway Usage Once the North Runway is constructed and operational Euchlin August will operate during the daytime (07:00 = 23:00) in accordance with Conditional in-Super the mode of operation Option 7b, as detailed in the Environmental Impact Statement Addendum, section 16 as received by the planning authority on the 9th day of August, 2005.

This provides that

- (a) this partitle runways (10th-28t and 10th-28R) shull be used in preference to the cross runway, 16-34.
- (b) when winds are westerly, florwey 28L shall be preferred for anying artraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control, (c) when winds are easterly, either Runway 10L or 30R as determined by air traffic control (c) when winds are easterly, either Runway 10R shall be preferred for departing aircraft, shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft, and except in cases of safety, maintenance considerations, exceptional air traffic centrions adverse weather, technical faults in air traffic control systems of declared emergencies at other arguments in segregated that, unless chaosity requires inition move, the runways will control in segregated mode during the day with ardvals using either framway the or flurway 28R depending on wind distriction. The tear movements by Code Fahrard are an exception to this, as they will always use the North flurway, it is also proposed that department by Catagory A B B amoral always use the North surway, it is also proposed that department by Catagory A B B amoral always use the North surway, it is also proposed that department by Catagory A B B amoral are as such during western opening which can't direct control of resembning mix of the first are collect runway assign on the way and those hearth during a starty developed. The recollect runway usage on the North and S rethern modelling purposes are residenced as a received on an Fourly have a controlled runway usage on the way as a second runway assign runway usage on the way and the runway are an exception on Fourly have.

interest of the time the numbers will operate in tegregated mode, i.e. one tunway for all universe, if the other for all departures.

However, there will be occasions during peak hours when runways will need to operate in mixed mode, i.e. both runways used simultaneously for arrivals and departures. The change from segregated to mixed mode and back to segregated mode will be determined by ATC and once changed to a particular mode the airport is likely to operate in that mode for at least two hours.

Activity switches from segregated mode to mixed mode where activity is such that any of the three following single runway capacity limits are exceeded: 1. More than 35 arrivals in one hour. 2. More than 44 departures in one hour. 3. More than 48 movements (combined arrivals and departures) on one runway in one hour. In mixed mode, where each individual runway handles both arrivals and departures, departures will operate using the compass departure principle. This means that if a departure is using a route that turns to the north then the North Runway will be used, and conversely if it is using a route that turns to the south, the South Runway will be used. For westerly operations when in mixed mode as few arrivals as possible will use 28R, while not exceeding the single runway capacity limit of 48 combined arrivals as possible will use 10R, while not exceeding the single runway capacity limit of 48 combined arrivals and departures on runway 28L.

When using the North Runway most aircraft will not use the full length on departure, and instead join the runway from the 1st intermediate taxiway. The exception are Code E and Code F aircraft, which will typically use the full runway length. All departures on the existing South Runway will use the full runway length. During the night-time period (23:00 – 07:00) for scenarios based on what is currently permitted the South Runway is the preferred runway.

It is worth noting the level of aircraft ATM envisaged on the two runways 35 arrivals and 44 departures in one hour, will then switch to segregated mode – that is 79 movement in 1 hour, 60 minutes – more than one every minute. Code F are the larger aircraft and will use the new North Runway – these will use the new flight path and subject residents under the flightpath to higher levels of SEL and Laf max (fast constant)

Code F are the larger aircraft and therefore noisier with increased db levels - LAF - MAX and SEL.

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

Now INCREASED TO 16,260 in ANCA's DRD.

However, there will be docusions during perichancs when it may no will seed to operate in mosed and a rich change mode, up, both conveys used standards on the properties of departures. The change from segregated mode and back to segregated mode will be duter mined by ATC and once thanged to a particular mode the aimore is likely to operate withat mode for at loast two haves.

Activity switches from segregated mode to mixed mode where activity is such that any of the three following single number of appartures or excoded. If the result is an web in one nour. It where man \$4 departures in one hour. It where then 48 movements (combined arreads and departures) on energy in one nour. In mover ands, where such in two at runway I andles both arrivals and departures, departures will operate using the compass departure annotable. This means that if a departure is using a route that turns to the right then the North Runway will be used, and conversely if it is using a route that runs to the south, the looth Runway will be used. For westerly operations when in mixed mode as few arrivals as possible will use 28R, while not exceeding the single runway capacity Innitiof 48 combined arrivals and departures on runway 18t. For casterly parations when in mixed mode as few mode as few arrivals as possible will use 10%, while not exceeding the single runway transport manyay capacity limited 48 combined arrivals and departures on runway 100.

When using the North Runway most aircraft will not use the full length analeparture, and instead Johnson reaway from the Tet interpredicte taxion in. The enception are Coder Eland Coop Elarge turns to which will replicate use following length. All departures on the ensury South Reaway will use the full runway length. Thirmy the eight that prevent (2 900 - 12 60) for sometime have any will use the full runway length. Thirmy the eight that prevent (2 900 - 12 60) for sometime have any will use the full runway to continue many.

If its words record the level of articalt of its provinged on the two conveys. To are used and deptertures a non-court will then average to aggregated mode. Then is 35 movement to a hour, of members — more than and every minute. Code Fitte the larger articals and will use the new North Fitters way — these will use the new high path and unifer residents under the fitters of the last constant.)

Lode Fiare the larger attends and therefore nower with increased distovels. -UNF -MAX and its.

7 aplace updae system is proposite to transpla transcourse at the objects. The objects such as tableto to able to a committee queste of 27 determinent that he so guide to mad 0,600 hay.

Now Indicated to 16,250 manage's DRD

October, 2005

A briefing was prepared for MPs by the AEF on the 'Night Noise Quota Count Scheme'. The briefing was prepared in connection with the Civil Aviation Bill in Oct 05, but is of general relevance to the night flights issue.

(Aircraft Environmental Federation)

Summary

The Night Noise Quota Scheme professes to be a regime that will encourage the uptake of quieter aircraft but its numerous shortcomings in fact allow far more planes to fly at night, while maintaining the same supposed 'noise climate'.

While these planes may indeed be marginally quieter, it is the number of noise events, rather than a token reduction of a few decibels, that causes the misery of sleep deprivation to residents living under flight paths. It is essential, therefore, that the cap on numbers of movements at night is retained.

Although the Bill [Civil Aviation Bill] as currently worded merely enables the Secretary of State to set a limit based on noise rather than movements, given the strong business lobby for a quota-only system AEF suspects it will only be a matter of time before the movements limit is abolished altogether.

Explanation

The Scheme rates all aircraft types according to their respective noisiness of landing and and take-off using a measure called EPNdB 'effective perceived noise' in decibels. Band of EPNdB are assigned a Quota Count (QC) rating, this being done on an exponential scale.

For each reduction of 3 in EPNdB the QC is halved:

EPNdB over 101.9 is QC/16

EPNdB 99 - 101.9 is QC/8

EPNdB 96 - 98.9 is QC/4

EPNdB 93 - 95-9 is QC/2

EPNdB 90 - 92.9 is QC/1

EPNdB 87-89.9 is QC/0.5

EPNdb 84-86.9 is QC0.25

EPNdb 81-83.9 is QC 0.125

EPNdB less than 81 is exempt (ie QC of zero).

A limit is placed on the total number of QC points per 6 month season (how these are assigned per night is at the discretion of the airport operator). Thus under a pure

October, 2006

A briefing was prepared for MPs by the AEF on the 'hight Noise Quoto Count Schome'. The briefing was prepared in connection with the Civil Aviation Bill In Oct 05, but is of general relevance to the night flights issue.

(Aircraft Environmental Federation)

Summary

The Night Moise Such Scheme professor to be a regime that will enducing and upfalls of a refer allow for name of this of a refer allow for name planes to fly at night while maintaining the same surposed more climater.

While the epishes have noted the marginally quoter. It is the number of noise events, rather than a token reduction of a few docthels, that causes the misery of storp deprivation to residents living under hight paths. It is essential therefore, that the cap on numbers of movements at night is retained.

Annually the Bill (Civil Aviation Bill) as currently worded merely enables the Secretary of Sinte its set a virit passed on noise rather than movements, given the serving business lookly for a quote-only system ALP stispects it witt only be a matter of time before the movements that is abolished altogether.

Explanation

The Scheme rates all about types according to that respective no siness of language and take of because the color sold take of because decided EPNdB (effective pecasived noise) in decideds. Band of EPNdB are assigned a Quota Count, GC) retain this being Jone to an exponential scale.

For each reduction of 3 in EPNd6 that QC is halve EPNd6 over 101.9 is QC/16 EPNd8 the - 101.9 is QC/3 EPNd8 the - 101.9 is QC/8 EPNd8 96 - 96 9 is QC/4 EPNd8 93 - 25-9 is QC/4 EPNd8 94 - 97 9 is QC/4

EF Note BA-88 9 or CCC 25

EPNdb 61,83 s is DC 0 125 EPNd8 less dian B1 is exempt (le QC of curp...

A first is placed an the total number of QC points paint according to a south searon this without an according place of the atmost engineers indicate page.

quota count system, if planes rated at 96 EPNdB were replaced with planes rated at 95 EPNdB, twice as many could be flown during the restricted period.

The environmental objective is to keep within a given 'average noise' limit for the whole night, measured in Leq. Leq stands for Level equivalent and is calculated by adding together the noise energy of all the noise events across a given time period and then taking the continuous level (ie. it irons out the peaks and troughs).

An extreme case will illustrate the way Leq works. One concorde on departure had equivalent noise energy to 120 Boeing 757s – so one [Boeing 757] plane every 2 minutes for 4 hours, produced the same Leq as 2 mins of concorde followed by 3 hrs 58 mins of silence.

There is no official noise index for showing night noise in the UK (although Leq is officially recognised during the day period between 0700 and 2300). However, the Government believes that producing 'noise maps' for airports at night using Leq contours is an adequate way of expressing aircraft noise, and has produced maps for the London airports in its recent consultation on the night noise regime.

This method is an inadequate as a way of assessing the impact of a small number of noisy events distributed over a long and otherwise tranquil period. This is explicity stated by the World Health Organisation in their guidelines for noise levels:

"Where there are no clear reasons for using other measures, it is recommended that LAeq, T be used to evaluate more-or-less continuous environmental noises. However, when there are distinct events to the noise, as with aircraft or railway noise, measures of individual events such as the maximum noise level (LA Max) or the weighted sound exposure level (SEL) should also be obtained in addition to LAeq, T.") [NB: 'LAeq, T' is simply a fuller description of 'Leq' – the 'A' indicating the weighting scale used and T specifying the time period] (WHO Guidelines for Community Noise, Executive Summary, p2.)

As planes get marginally quieter many more will be allowed to fly at night under a pure quota count scheme. But it is the frequency of noise events that can ruin a night's sleep. If I am woken up by all noise events over 90 dB, I will not be pleased to hear twice as many, even if they are 92 dB rather than 95 dB. Hence it is essential that a numbers limit on night movements is retained.

Other problems with the QC system:

It is misleading to equate a 3dB reduction with a halving of 'annoyance', even for the individual event. EPNdB is a measure of 'noise energy' and it is by no means certain that a halving of noise energy results in a halving of noise heard by the human ear, despite the name.

Research over many years has show that halving the noise energy, ie reducing the noise level 3dB, by no means halves the perceived noise. The ear detects it only as

mote count system, it planns rated as Uh EPNdB series aplaced with as one shoul as ES EPNGE, systemation as many could be flown during the restricted period.

The consumerical objective is to keep within a diversity raisof trail for the whole night, measured in Leq. Leq stands for Level equivalent and is calculated by aidring agents the noise energy of all the noise events across a given time period and then taking the continuous level field mans out the peaks and usughs).

An extrane case will illustrate the way i.eq works. One concords on departure had aquivalent noise energy to 120 Bosing 157s – so one [Bosing 757] plane every 2 minutes for 4 hours, produced the same Leg as 2 mins of concerts followed by 3 hrs 58 mins of silence.

There is no officed noise index for showing right scale in the UK (atthicum lequitionally readgrissed number the day period between 07 00 and 2300). He cover, the Sovermont behaves that producing botse maps for expensive high using long continues is an abequate very of expressing an oraticulise and has produced maps for the London soppose in us repent consultation on the night necessaring.

Africa fronte et al ain confloraceta de et de justificaciones de la compactificación de la confloración de l

Where there are no clear cashus for asting one measures, it is recommodent that LAec. The used to caliform modes and execution or set to caliform my district events to the reset and are alway however when there are district events to the reset as with are not or alway need moved moverness of trainables or sets such as the movement mase lovel (LA Max) or the creighted sound excession law (SEC) strengt also be obtained in addition to LAeq. "I wills "LAeq. I is simply a title discription of Loq.— the "A" indicating the very him y Mose Caec. that I specifying the time period) (Vitio Guidelines to:

As planes get marginally quicter many more will be allowed to fly at night under a pura quota count scheme, dut it is the frequency of nuise events that can nun a night's closp. If I am worken up by all noise ovents over DC dR. I will not be pleased to hear twice as many, even if they are 92 up rather than 85 da. Hence it is assertfall that a numbers timb on sight movements is retained.

Other problems with the QC system.

It is misteading to equate a 3dB reduction with a helving of 'annoyance', even for the individual event. EPNdB is a measure of 'noise vinergy' and it is by no means certain that a halving of noise energy results in a halving of noise beard by the human ear, despite the name.

Respands over many years are show that uniming the noise arising, is reducing the roles fever. Attack to remnal the relationship the relationship to the set detection on the set of the set detection on the set of the set

a slight reduction. For noise to sound half as loud, the noise level must be reduced by about 10dB.

It is because the perceived loudness is not proportional to noise energy that the 'logarithmic' scale of decibels was introduced into the science of acoustics.

QCs are assigned according to certified rather than actual measured noise. There is evidence that actual practices are often noisier – sometimes one whole QC band noisier. DfT applies a reduction on arrival noise by 9 EPNdB. This has some justification given the way noise is certified, but it fails to account for the different quality of noise and the different set of people affected by departures. It has the effect of artificially lowering the QC of arrivals – and most of the movements at night are arrivals.

A fuller explanation, with reference to the most recent change in quotas at Heathrow, Gatwick and Stansted is given on the <u>DfT web site</u>. While this is informative and factually correct, it does not (of course) explain the flaws inherent in the system.

Take note of extract from the above – which demonstrates our point of incremental change to get over this hurdle of removing the night time restrictions.

This method is an inadequate as a way of assessing the impact of a small number of noisy events distributed over a long and otherwise tranquil period. This is explicity stated by the World Health Organisation in their guidelines for noise levels:

"Where there are no clear reasons for using other measures, it is recommended that LAeq, T be used to evaluate more-or-less continuous environmental noises. However, when there are distinct events to the noise, as with aircraft or railway noise, measures of individual events such as the maximum noise level (LA Max) or the weighted sound exposure level (SEL) should also be obtained in addition to LAeq, T.") [NB: 'LAeq, T' is simply a fuller description of 'Leq' – the 'A' indicating the weighting scale used and T specifying the time period] (WHO Guidelines for Community Noise, Executive Summary, p2.)

Ref: AEF 2005 report (Aircraft Environmental Federation (UK).

2. ANCA RFIs							
Request No.	Document Reference	Request					
1	EIAR Chapter 1 - It appears that the noise quota count does not apply for the 1.5 hours of shoulder period.	The Applicant is requested to clarify why the noise quota count does not apply for the periods 23:00-23:30 and 06:00-07:00.					

The applicant refers to Section 4 for discussion.

a slight reduction. For noise to sound helf as load, the noise level input he reduced by about 10dB.

It is because the perceived loudness is not proportional to noise energy that the logarithmic scale of recibes was introduced into the science of accustics.

QCs are assigned according to certified rather than actual measured noise. There is evidence that actual practices are often noisier – sometimes one whale QC band noisier. Off applies a reduction on arrival noise by 9 EPNdB. This has some justification given the way noise is certified, but it fails to account for the different quality of noise and the different set of people affected by departures it has the effect of artificially lowering the QC of arrivals – and most of the movements at right are arrivals.

A fuller explanation, with retarence to the most recent change in oddas at Heathrow Gatvick and Stansled is given on the highest this is intomistive and flactually connot. If does not (of course in a pain the taws inherent to the system

Take note of extract from the above - which demonstrates our point of incremental change to yet over this hurdle of removing the night time restrictions.

This method is an inadequate as a way of eseassing the impact of a small number of noisy evenus distributed over a long and otherwise tranquit period. This is explicity stated by the World Health Organisation in their guidelines for noise levels.

Where there are no deal readons for using arter measures if is recommispose that LAEQ. The used to evaluate more-or ross continuous any cumental noises. However, when there are distinct evants to the noise, as web aircraft or rollingy noise incosures of individual or onto such as the maximum noise level (LA Maximi the weighter) sound exposure level (SEL) should also be obtained in addition to LARQ. If (NB Liver I is simply a taller description of 'Lag' - the 'A' indicating the visibilities scale used and I apecifying the time pendal ('MHO Guidelines for Community Noise, Executive Summary, p2.)

Ref: AFF 2005 report | Alreant Enwironmental Federation | Life

The applicant refers to Section 4 for dispussion

The Noise Quota System is designed to limit the overall amount of noise produced by aircraft using an airport based on the Noise Quota Allowance for a given time period.

There is a restriction in place on runway 10L -28R with NO scheduled night flights between 2100 and 0700 per the planning permission F04A/1755 as defined in a legal planning document in August 2007 by ABP following an intense Oral hearing by residents from St Margarets and Portmarnock. (SMCRG and UPROAR)

DAA proposals are based on the system currently in operation at the UK London Airports

Why UK airports and no European airports such as Schipol, Berlin, Frankfurt – European airports - UK has now exited the EU. Are there comparisons for other EU airports put forward.?

A QC (Quota count) value is assigned to each individual aircraft movement, based on noise levels provided on the aircrafts Noise Certificate . Current QC Bands are

0.125 - quota count of zero - less than 90dB	<u> </u>
0.25 Quota count of 0 -less than 90 dB	
0.5 less than 90 EPNdB	
1	
2	
3	
4	
8	
16	

a lower QC for aircraft with lower noise levels, higher QC for noisier aircraft.

For each reduction of 3 in EPNdB the QC is halved:

EPNdB over 101.9 is QC/16

EPNdB 99 - 101.9 is QC/8

EPNdB 96 - 98.9 is QC/4

EPNdB 93 - 95-9 is QC/2

EPNdB 90 - 92.9 is QC/1

EPNdB less than 90 is QC/0.5

EPNdB less than 87 is exempt (ie QC of zero).

The Mode Cubus System is destrined to limit the overall amount of noise produced by amorativising an amount based on the Noise Quota Allowance for a given time period.

there is a restriction in place on runway 101 -28% with NO scheduled night flights between 2100 and 0700 per the planning permission F04A/1755 as defined in a legal planning document in August 2007 by ABP following an intense Oral hearing by residents from St Margarets and Portmarnock. (ISMCPG and UPROAR)

DAA proposals are based on the system ruggerily in operation at the UKL porton Acron's

Why UK amports and no European airports such as Schlool, Berlin, Frankfurt - European airports - UK has now exited the EU. Are there comparisons for other EU airports put forward.?

A-QC (Counta count particle is assigned to each individual arcealt movement, based on hoise levels provided on the aircrafts Noise Certificate . Current QC Rands are

```
0.125 - sueta count el 19 dess than 90 dB
0.25 Queta count el 19 dess than 90 dB
0.5 less than 90 tPNdB
1
```

a lower QC for aircraft with lower noise levels, higher QC for noisier aircraft.

```
For each reduced of 3 in EF Mas Me QC 3 haved EP Massaver 101 9 is QC/16
EP Mats 99 - 101 9 is QC/16
EP Mats 90 - 98 P is QC/16
EP Mats 90 - 98 P is QC/16
EP Mats 90 - 98 P is QC/16
EP Mats 10 - 22 9 is QC/16
```

There is no Correlation to explain what the relationship is between Lafmax, SEL, Lasmax SEL Laeq 16hr - Lden Lnight This appears to be another noise measurement, simply for the airport operator to have as many ATMs as they decide to.

A limit is placed on the total number of QC points - (how these are assigned per night is at the discretion of the airport operator). Thus under a pure quota count system, if planes rated at 96 EPNdB were replaced with planes rated at 95 EPNdB, twice as many could be flown during the restricted period.

THERE ARE 9 different QC values put forward.

Aircraft have a separate QC values for arrival and for departure.

Arrival		
Departure.	Part	

Will the quota counts be based on ATOW or Aircraft Landing weight.

(Aircraft Take off Weight)

The proposals for a Night Quota System are for an Annual Night Quota (ANQ) applied to a 6.5h Night Quota period (23.30 – 05.59) ANCA have now agreed 16, 260 for the applicant ahead of any CAO being formulated.

Draft implementation proposals are provided in Section 5 (refer to another Section) and are based on those in Stansted currently.

THESE WILL BE FINALISED IN ADVANCE OF THE ANQ COMING INTO PLACE SHOULD THE RELEVANT ACTION APPLICATION BE GRANTED PERMISSION -,making assumption of grant of permission. The bar has been set now at 16,260 an increase of 8,270 per annum with the DRD.

So has the ANQ been finalised at this date of writing this submission. Is Condition 5 now currently being breached, with a pending appeal to ABP. We have not received any notification on this.

So DAA are redefining the night hours by reducing night time, thus removing 91 minutes from the night time hours per the WHO and standardised and accepted night time sleep and rest hours.

The applicant is dictating the terms, redefining the hours, and dictating to ANCA a system, that is in place in the UK, now outside the EU in relation to the ICAO and EU END (European Noise Directive) as a result of Brexit.

There is no Correlation to explain what are relationship is between Lofanox , SEL, Lusmon SEL targets in Communication of the communication of the dependence of the annual content of the deponsion of the december of the hore as many ATMs as they decide to.

A their is placed on the total number of QC points. - (how these are sesigned per night is at the discretion of the sirpart operator). Thus under a pure quote count system, if planes rated at 96 EPNdB were represent with planes rated at 95 EPNdB tweether the restricted period.

HERE ALES different OC values ducterward

Acres of have a separate QC values for arrival and for departure

SVIDA

Departure.

Will the quote counts be based on ATOW or Aircraft Landing weight.

(Aircraft Take off Weight)

The preciosals for a Night Quote System are for an Annual Night Duote (AMO) applied to a 6.5h Night Quote parlod (23.30 - 05.50) AMCA have now agreed 16, 260 for the epolicem shead of any CAD being formulated.

Oraft implementation proposals are provided in Section 5 (refer to another Section) and are based on those in Stantod currently.

THESE WILL BE FINALISED IN ADVANCE OF THE AND COMING INTURLACE SHOULD THE RELEVANT ACTION APPLICATION BE GRANTED PERMISSION—making assumption of grant of permission. The bar has been set now at 16,260 an increase of 8,270 per aroun with the DRD.

So has the ANC, been Shalleed at this date of writing this submission. It Condition 5 now currently being breached, with a pending appeal to ABP. We have not received any externation on the.

So DAA are redefining the night hours by reducing night time, thus removing 91 minutes from the night time hours per the WHO and standardised and accepted night time sieep and rest hours.

The applicant is dictating the terms, redefining the hours, and dictating to ANCA a system, that is in place in the UK, now outside the EU in relation to the ICAO and EU END (European Noise Directive) as a result of Brexit.

The DAA consider that a movements based constraint would not promote the use of quieter aircraft during the night consistent with achieving the effects based outcomes of the cNAO

They state that use of the QC system will incentivise airlines to modernise. This is purely a statement to justify the AQS, as this would be a natural progression with new generation aircraft getting better anyway.

The cost of a new A321 neo (supposed to be quieter) is approx. 118.3 million dollars and \$129million. Wide body A330 -200 is listed at \$238.5 million while the freighter version costs \$241.7 million (taken from 2018 prices from website) The Boeing aircraft used by Ryanair – took delivery of 65 Boeing 737max in 2022 - price of each \$124.8 million

737-200 max - reduces emissions but what does that mean in LAf-max to us under the flight path and experiencing from 80 – 94db with aircraft take off and landings at Millhead and Kilreesk, St Margarets.

What the QC does is to say to airlines, the quieter your aircrafts the more ATMS you can have, thus increasing the night time activity per 8 hour period. Remember the current restrictions in the planning only permits 65 movements on the current runway with ZERO - no flights on the new runway in the interests of the health and well being of the nearby communities, and those significantly and adversely affected by SEL levels of take off and landings, during night time hours 2100-0700.

Considerations for the development of the Night Quota include:

The implementation of EU598.

Development of an Annual Noise quota Allowance

The duration of the Night Quota period and shoulder hours?

Implementation and management processes

Other special cases such as allowances by runway, or by night

So the applicant is making assumptions around their proposals on a NQS that is UK based, outside the EU now, for implementation by ANCA under the EU598/2014 Directive in their NAO – to satisfy ICAO with wording and format to suit the criteria of the END

The above states the following:

A noise quota allowance annually has to be developed, and that is up to the DAA.

The DAA consider that a movements based constraint would not promote the use of quieter also aft during the night consistent with achieving the effects based outcomes of the cNAC

They state that use of the QC system will incentivise aidlines to modernise. This is purely a statement, to justify the AQS, as this would be a notural progression with new generation aircraft getting better anyway.

The cost of a new A321 non (supposed to be quieter) is approx. 118.3 million dollars and \$129million. Wide body A330-200 is listed at \$233.5 million while the freighter version costs \$241.7 million. (taken from 2018 prices from website). The Boeing aircraft used by Ryanair – took delivery of 65 Boeing 737max in 2022. - price of earth \$124.8 million.

737-200 max - reduces emissions but what does that mean in LAI max to us under the flight path and experiencing from 80 - 94db with aircraft take off and landings at Millihead and Rifroesk , 5t Margarets.

What the QC does is to say to airlines, the quieter your aircrafts the more ATMS you can have, thus increasing the night three activity per 8 hour period. Remember the current restrictions in the planning only permits 65 movements on the current runway with ZERO - no flights on the new runway in the interests of the health and well being of the nearby communities, and those significantly and adversely affected by SEL levels of take off and landings, during night time hours. 2100 – 0700.

Considerations for the development of the Night Bunta Includes

the implementation of ELS98.

Development at an Annual Noise quota Allowance

The ducation of the Night Queta period and shoulder hours?

coccession arramosamera bus, nuttatus resignat

thin of to viewout of reasonable as itsus vere license rentification

So the applicant is making assumptions around their proposals on a NOS that Is UK besed, outside the EU now. For implementation by ANCA under the EU598/2614 Directive in their NAO – to satisfy ICAO with wording and format to suit the criteria of the END.

The above states the following,

A source quota allowance acrountly have to be developed, and that is up to the DAA

Decision and confirmation on the NQ night quota period and the shoulder hours - which should be $10-11pm \ (2200-2300)$ and not 1100-1200, as night begins at 2300 and lasts until 0700.

How will this implemented and managed – by who – who will validate the process and who will oversee it independently.

We have been informed by ANCA that these reports and Monitored by ANCA under the EU regulation of EU598/2014 and the END. But reports and figures and statistics from computer monitors have no relation or comparison to what the human ear hears and the disruption to sleep experienced. **Computers and humans are not the same.**

FCC are part of ANCA – DAA fund ANCA and the balanced approach must be equally for residents and for DAA and airlines. So there is a conflict of interest there

We have the triangle affect

DAA to ANCA To FCC

Controlling Noise acceptance, planning applications data to comply with EU598/2014 and all interacting with IAA, ATC, Dept of Transport EPA, ICAO, - with no one body responsible for the HEALTH and WELFARE of those in the Flightpath zone around St Margarets and those adversely affected in Portmarnock . We note that Malahide has been spared . So we see the 2 communities that originally brought the Appeals to the Oral Hearing in 2006 now been targeted. We are considered insignificant by EU598/2014 by the actions of ANCA and DAA and FCC in their mitigation schemes, which is totally that their discretion.

If we look at condition 9 issued by ABP in PLO6F. 217429 it states:

9. Prior to commencement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings predicted to fall within the contour of 69 dB LAeq 16 hours within twelve months of the planned opening of the runway for use. Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 months from the commencement of use of the runway.

Reason: In the interest of residential amenity.

Decision and confirmation on the NQ night quote period and the shoulder frame which should be 10-11pm (22-30 - 2305) and 1700 - 1700 , at might begins at 2301 and lasts and 0700.

How will this amployment of and managed - by who will vandate the process and who will oversed it independently.

We have been informed by ANCA that the reports and Montres et by ANCA under the Ed regulation of EUS98/2014 and the ENC But reports and figures and statistics from computer maritars have no relation or companion to what the human can have and the discupling to sleep experienced. Computers and numans are not the same.

FCC are pret of ANCA - DAA fund ANCA and the balanced approach must be equally for the sidents and for DAA and alrilines. So there is a conflict of interest there

We have the triongle affect

DAM TO ANICA TO FCC

Controlling Noise acceptance, planning applications data to comply with EUS98/2014 and all interacting with IAA, ATC, Dept of Transport EPA, ICAO, - with no one body responsible for the HEALTH and WEIFARE of those in the Flightpath zone around St Margarets and those adversely affected in Portmarnock. We note that Malahide has been apared. So we see the 2 communities that originally brought the Appeals to the Oral Hearing in 2006 now been targeted. We are considered insignificant by EUS98/2014 by the ections of ANCA and DAA and ECC in their mitigation schemes, which is totally that their discretion.

If we look at condition 9 issued by ABP in PLOST, 217420 it states it

Stiller to commonement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings prodicted to rail within the contour of 69 da taken to have within twelve mornly of the planned opening of the runway for use. Prior to the communication of operation of the runway, an offer of purchase in accordance with the agreed set among shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a penied of 12 mornlys from the commencement of use of the runway.

Mason: In the Interest of residential amenity.

- Prior to commencement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority.
- So the wording is ambiguous and open to the interpretation and discretion of the planning Authority and DAA the Airport Developer and operator.
- On 19th September 2007 and reminder letter dated 1st October 2007, we requested a meeting with DAA to discuss this wording and also costs that should have been returned to us.
- This is the response received (copy of letter included in Appendix) Paragraph 2.
- Once the Board has made its decision on an appeal, its jurisdiction is spent. The interpretation and enforcement of the terms of the Boards order is the responsibility of the planning Authority in this instance, Fingal County Council.
- So FCC were the custodians of this condition to ensure that those trapped in the noise zone, where noise insulation will be totally ineffective but the scheme put forward, excluded the very families targeted. It was agreed with Daa and FCC, despite contact from our legal representatives, prior to the formation of it. We were totally ignored and considered insignificant. Note the FDP was changed to allow a variation to overturn condition 3d and Condition 5 but the other conditions remain the same. Once the conditions change, all affected conditions change.
- In relation to the planning issues it would not be appropriate for the Board to comment beyond what is contained in the decision as set out in the order, nor therefore address your concerns regarding enforcement of conditions and interpretation regarding maps to the planning authority.
- (ABP Letter dated 5th Oct. 2007 to Helena Merriman St Margarets Concerned Residents Group)
- There has been no enforcement by the planning Authority, as the planning for T2 was breached and an addition 10 year extension was permitted to DAA. Also the breach of 12(d) where a Waste Management Plan was not signed off prior to precommencement of the development to construct the runway by the planning Authority was considered just an error and excused by Justice Max Barrett in the Commercial Court in 2017. So where is there any enforcement to protect familes, in the flightpath area. There are none. There has not even been a noise monitor set up in Millhead and Kilreesk to gather vital data. We are now experiencing 80 94 db with aircraft ATM since 24th August 2022.

- Prior to commensation and development to a charms for the autoritiesy purchase of diseasings shall be submitted to and secretal in reducing by any grant ring automatity.
- So the vanding is ambigue is and open to the interpretation and discretion of the planning Authority and DAA the Airport Developer and aperator.
- On 1914 September 2007 and remard enletter dated 14 October 2007, we requested a meeting with DAA to discretible wording and also costs that should have been returned to us
 - This is the response-scened (capy of it der included in Appendix) Paragraph 2.
- Once the Board has mode its decision on an appeal, its jurisdiction is spent. The interpretation and enforcement of the toma of the Hounds grains in the responsibility of the planning Authority in this instance, Engal County Countil.
- So FCC were the custodines of this condition to ensure that those trapped in the noise zone, where units insulation will be totally melfective but the scheme put forward, excluded the very families rangeted, it was righed with that and FCC, despite contact from our tagal representatives, prior to the formation of it. We were totally ignored and considered insignificant. Note the FDP was changed to allow a variation to everture conditions during Condition 5 but the other conditions remain the same.

 Once the conditions change, all afforced conditions change.
- In relation to the planning usines it would not be appropriate for the Board to comment beyond what is contained in the decision as set cur in the order, nor therefore address your concerns regarding enforcement of conditions and interpretation regarding maps to the planning authority.
- (ASP Letter dated St Oct. 2007 (a Helena Merriman St Margaret: Garcemed Residents Group)
- There has been no enforcement by the planning Authorsty, as the gloming for 12 was breached and an addition 10 year extension was remitted to DAA. Also the breach of 12(d) where a Waste Management Plan was not signed off prior to precommencement of the development to construct the tunway by the planning Authority was considered just on error and excused by Justice Nias Barrett in the Commercial Court in 2017. So where is there any enforcement to protect families, to the flight fath onea. There are none. There has not even been a noise monitor set up in Willhead and whereast to gather shall do to. We are now experiencing 20—4 do with arciselt ATM time 24th August 2022.

The scheme shall include all dwellings predicted to fall within the contour of 69 dB LAeq 16 hours within twelve months of the planned opening of the runway for use. Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 months from the commencement of use of the runway.

There has been no offer of purchases made , as we were considered outside the 69db zone so while the scheme was set up, it was Voluntary – VOLUNTARY

Now the Decibel levels are an issue for health and well being, Daa and the planning authority have isolated and trapped those impacted into 2 choices

Live with the noise – with a Sound insulation scheme that will be totally inadequate for our night time and day time requirements

OR

take an unacceptable and paulty buy out scheme set up the DAA and FCC — that discounts the trauma, the loss of identity, the ties with our families , the area, the past generations, the homes and lives we have built up, the sweat and hours spent in raising the deposits, the payment of mortgages , the fragmentation of our community , the trauma of having to uproot and start again somewhere else as strangers . The price of our homes and lives cannot be quantified in monetary terms. While we are not against progress and airport expansion, the manner in which this scheme and the Insulation Schemes , considering us insignificant is inhumane and commercial theft by all concerned — with the tools of legislation.

In the 1960s 8 familes were forced out of their homes in the same way, with no consideration for their health and well being and their replacement of their homes.

The stress levels of each of those families trapped cannot be measured with health implications in trauma alone in monetary terms. To DAA we are insignificant

The scheme shall include all divellings predicted to fall within the contour of 69 d8 LAPQ is is used within twelve morths of the planned opening of the runway for use. Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 montos from the commencement of use of the runway.

There has been no offer of purchases made, as we were considered outsine the 69th zone to while the scheme was situp, it was Voluntary - VOLUNTARY

Now the Becibel levels are an issue for health and well being. One and the planning authority have isolated and prapped those impacred into 2 choices.

Live with the noise - with a Sound insulation scheme that will be totally inadequate for our right time and day time requirements

RC.

take an unacceptable, and prolly buy out schame set up the DAA and PCC - that discounts the tractrauma, the loss of identity, the tier with our families, the area, the past generations the homes and lives we have built up, the sweat and hours spent in raising the deposits, the payment of mortgages—the fragmentowen of our community, the trauma of having to uproof and start again somewhere else as strangers—The price of our homes and lives cannot be rejentified in mionetary terms. While we are not against progress and airport expansion, the manney in which this scheme and the insulation Schemes, considering us insignificant is inframere and commercial field by all concerned - with the tools of legislation.

in the 1960s. 2 familes were forced out of their homes in the same way, with no consideration for their health and well bring and their regioneent, of their homes.

The starss levels of each of those families trapped cannot be measured with health implications in trauma alone in monetary terms. To DAA we are insignificant

What are the Special cases - Allowances per runway - or by night - this needs to be expanded on in the interest of the adversely affected residents.

Whilst analysis indicates that source, operating procedure and land use measures meet the CNAO – proposed by daa - (Candidate Noise Abatement Objective) , Daa is proposing an NQS to provide further assurances around the control of noise at night and to encourage the continued update of the fleet operating at Dublin Airport to comprise of quieter aircraft (consistent with the ICAO balance approach)

So what assurances are always there, and defines this as further control of noise at night?

The QCS encourages more flights per hour with quieter aircraft to fit into the now increased 16,260 granted by ANCA in their Draft Regulation Document over the original request of the 7990 figure. So how many flights, ATMs do DAA see in the 16,260 figure in 2023, 2024 and 2025 and 2026 2027 2028 2029 and 2030.

What is the actual figure of night time ATMs - actual SEL events in the figure of 16260 AQC.

With an appeal pending DAA will control the ATMs at night until this heading and decision has been reached. DAA have indicated they do not have to adhere to Condition 5 and the NAO is now in place, since June 2022. This flies in the face of proper compliance of ABP conditions on PLO6F 217429

SO THE QUESTION – DOES THE NAO supersede this planning permission, and if so , this is totally in conflict with the planning laws and democratic position of Fingal Citizens.

Notwithstanding the above overwhelming policy support for the proposed Relevant Action, the potential for impacts on local communities as a result of the proposed Relevant Action has been assessed in great detail through the course of preparing this application . In this regard, the proposed, the Relevant Action seeks to apply the balanced approach to aircraft noise management at the airport and by introducing new noise mitigations and transparent monitoring safeguards . As a result, it is considered that the **proposed Relevant Acton will provide an acceptable balance for all stakeholders** and ensure that noise will continue to be controlled at the airport upon the commencement of use of North Runway.

In the DAA application, we are labelled as receptors. (those homes affected)

What are the Special cases - Allowances per runway - or by night - this needs to be expanded on in the interest of the adversely affected residents

While, analysis indicates that source, operating procedure, and land use measures meet the CNAD – proposed by dealer Candidate Noise Abatement Objective). Dealet proposing an NIQS to provide further assurances around the control of noise at night and to encourage the control of update of the fleet operating at Dublin Airport to comprise of quieter already consistent with the ICAO balance approach)

So what assistances are always there, and deliver this as burrier control of nowe or night?

The QCS encourages male flights per hour with quieter aircraft to fit into the now increased 16,260 granted by ANCA in their Oraft Regulation Document over the original request of the 7990 figure. So now many flights, ATMs do DAA see in the 16,260 figure in 2024 and 2025 and 2025 and 2030.

What is the actual figure of night time ATMs - actual SEL events in the higger of 16260.

VGC.

With an appeal pending DAA will control the ATMs at night until this heading and necision has been reached. DAA have indicated they do not have to adhere to Condition 5 and the NAO is now in place, since June 2022. This Illes in the face of proper compliance of AAP conditions on PLOSE 217429.

SO THE QUESTION - DOES THE NAO supersede this planning permission, and if so , this is totally in conflict with the planning laws and democratic position of Fingal Cristers.

Notwithstanding the above overwhelming policy support for the proposed Relevant Action, the potential for impacts on local communities as a result of the proposed Relevant Action has been assessed in great detail through the course of preparing this application. In this regard, the proposed, the Relevant Action seeks to apply the balanced approach to aircraft noise management at the airport and by introducing new noise mitigations and transparent monitoring safeguards. As a result, it is considered that the proposed Relevant Actor will provide an acceptable balance for all proposed Relevant Actor will provide an acceptable balance for all proposed Relevant Actor will provide an acceptable balance for all proposed Relevant Actor will continue to be controlled at the airport upon the commencement of use of North Runway.

to the DAA application, we are tabelled as receptors, I those homes affected)

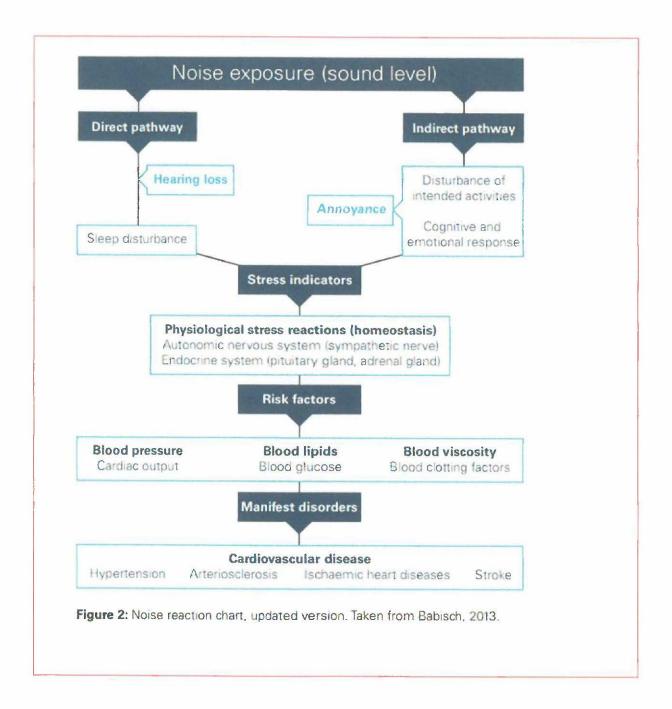
The above taken from the Planning report – makes a statement to the humans living directly under the flight path on the boundary of daa lands.

- Only those significantly and adversely affected on the flight path, with aircraft take off and landings at 1000 – 3000ft altitude and experiencing up to 90db - SEL measures and more, can answer that statement. No meaningful consultation has taken place with those persons/humans.
- Are homeowners considered as stakeholders, living under the flight paths. – insignificant in the masterplan?
- Noise will continue to be controlled at THE AIRPORT when North Runway opens - so Daa control, report, monitor the data, the perception, the Noise problem, and the actual incident noise impacts all will continue to be tailor made reports by the Authors and also the approvers (ANCA)

The above taken from the Planning report – makes a statement to the humans living directly under the flight path on the houndary of day lands.

- Only those significantly and adversely affected on the fright path, with aircraft take off and landings at 1000 3000ft altitude and experiencing up to 90db SEL measures and more, can answer that statement. No meaningful consultation has taken place with those persons/humans.
 - Are homeowners considered as stakeholders, living under the flight paths. — insignificant in the masterplan?
- Naise will continue to be controlled at THE AIRPORT when North Runway opens so Dao control, report, monitor the data, the perception, the Noise problem, and the actual incident noise impacts all will continue to be tailor made reports. By the Authors and also the approvers (ANCA).

Health Impacts



Health Impacts



All the subtract of the same subtract of the subtract of the same of the subtract of

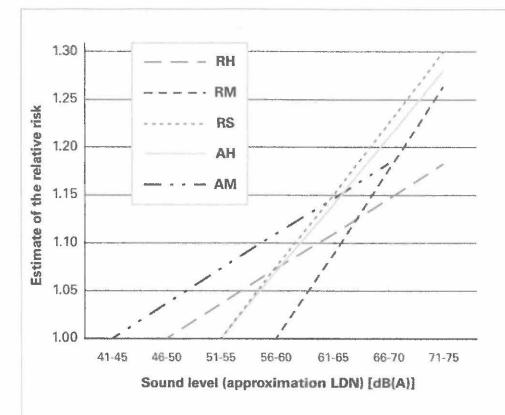
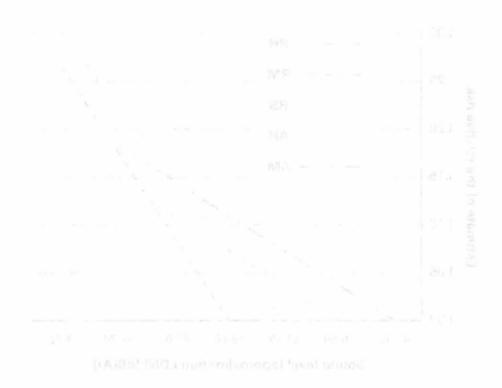


Figure 3: Exposure-response curves of the association between transportation noise and cardiovascular diseases. RH = road traffic noise – hypertension, RM = road traffic noise – myocardial infarction, RS = road traffic noise – stroke, AH = aircraft noise – hypertension, AM = aircraft noise – myocardial infarction.

3.33 Clearly, potential moderators and confounding variables need consideration in such research. These include location of rooms, windows being open or closed, length of residence, age, gender, and type of housing. Babisch suggests that future work should improve the noise assessment to consider secondary road networks and side streets, and quiet side dwellings should be included in the assessment. It is important that day-night differences should be investigated further, in relation to noise-induced sleep disturbance and development of cardiovascular diseases. Air pollution as a confounders or co-exposure also needs to be included in future work.



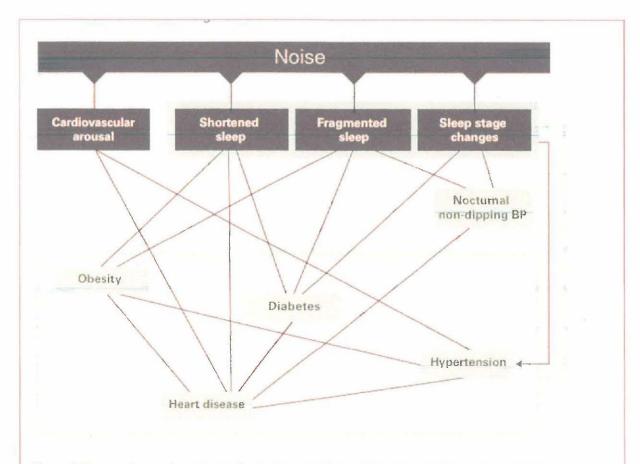
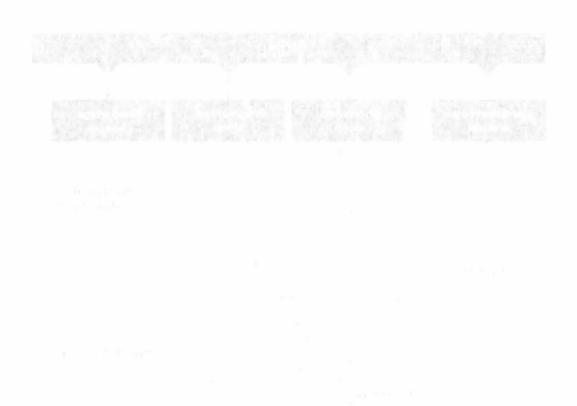


Figure 5: Proposed potential pathways for the health effects of noise through sleep disturbance. Reproduced without permission from the PARTNER report, 2010. Non-dipping blood pressure refers to the absence of a nocturnal decrease in blood pressure that usually occurs during sleep.



e mage

Internoise 2013

- 3.34 Various other papers that are relevant to aircraft noise exposure and health effects were published or presented at Internoise 2013 since the last literature review. Matsui from Hokkaido University in Japan reported findings on psychosomatic disorder due to aircraft noise. The study re-analysed previous data obtained from a study in Okinawa around Kadena and Futenma military airfields. This study had shown a dose-response relationship between the prevalence of psychosomatic disorder (PSD) and Ldn of aircraft noise based on responses from the Total Health Index (THI) questionnaire. PSD was diagnosed from a Discriminant Function (DF) score calculated from the answers to the THI questionnaire. The purpose of this study was to re-analyse the data to examine the causal pathway of this relationship and the answers on disturbances to daily life due to aircraft noise (which was obtained from another questionnaire given to the same subjects). The DF score of PSD was analysed with sleep disturbance and speech interference, in relation to day-time and night-time noise exposure. The results indicated that the PSD score around Kadena airfield was significantly associated with sleep disturbance, and the annoyance score was more highly associated with speech interference than sleep disturbance. The conclusion given by the author was that in this location, PSD due to aircraft noise is actually a result of sleep disturbance. These results corroborate those found from a new Narita study, and analysis on hypertension observed around Kadena airfield, which also found that night-time noise was correlated with prevalence of hypertension.
- 3.35 It should be emphasised that military aircraft is typically somewhat different to that associated with civil airports, being composed for louder, but less-frequent events. Historical annoyance surveys around military airfields have tended to show elevated responses for a given noise exposure level.

AGE GROUP

Newborns (0-3 months)

Infants (4-11 months)

Toddlers (1-2 years)

Preschoolers (3-5)

School-age children (6-13)

Teenagers (14-17)

Young adults (18-25)

Adults (26-64)

Seniors (65 and older)

RECOMMENDED NUMBER OF HOURS OF SLEEP



- The report covers the study designs and methodologies used in noise effects research, an introduction to the physiological aspects of sleep and it describes in considerable detail the mechanisms by which sleep loss, deprivation or fragmentation may link to potential health outcomes. These include heart rate changes, alterations in sympathetic tone, connection of sympathetic tone with glucose mismanagement, obesity, the appetite regulating hormones leptin and ghrelin, immune effects of sleep loss, glucose regulation and diabetes, and cardiovascular non-dipping. The effects of noise that are included are memory, noise sensitivity, the relationship between annoyance and cardiovascular disease, performance decrements and task interference.
- The methodologies used for the cost-benefit analysis of noise are discussed, with the consensus being that the use of Disability Adjusted Life Years (DALYs) is at present the most appropriate method for valuing the effects of noise. Because this measure is used widely to predict and evaluate the cost of other health outcomes, it is considered useful when making comparisons between the total impact on health of various exposure increases or interventions. For example, for communities near airports, the health effects cost of chemical and particulate exposure can be compared to the health effects cost of noise. Some drawbacks concerning this system include, for example, that it is seen as focusing disproportionate attention on measureable outcomes and poses difficulties for dealing with co-morpidities.

Newborns (0-3 months)
Infants (4-11 months)
Yoddlers (1-2 years)
Preschoolers (3-5)
School-age children (6-13)
Teenagers (14-17)
Young adults (18-25)
Adults (26-64)

10-13 hours
9-11 hours
8-18 hours
1-9-13 hours
1-9-14 hours
1-9-15 hours
1-9-16 hours

These Extracts have been taken from the a report by the CAA - Aircraft Noise, Sleep Disturbance and Health Effects - CAP1164 — 33 pages.

The diagrams and the report clearly show the impact of aircraft noise on a sleeping person and households. We do accept there will be 16 hours of operation on the North Runway, but that will be relieved with 8 hours to refresh and regenerate for the next day.

The cumulative long term effect of aircraft noise over a 24 hour period x 7 days x 365 days a year, with the knowledge, it is going to increase, in ATMS. The reduction in aircraft will do little to balance the increased number of aircraft taking off and landing at Dublin Airport and increased ground activity - over the next 3 years -5 years and 10 years.

There's good evidence to suggest that more people are annoyed at lower levels of aircraft noise today than in the past, despite the introduction of relatively less noisy planes. The CAA's 2014 study into attitudes towards aircraft noise showed the same percentage of respondents highly annoyed at 54dB Leq as were previously affected at 57dB Leq (in 1982).

Some researchers agree with the view of many communities that this could be, in part, related to the increase in the number of noise incidents experienced. While airport noise maps may show noise 'contours' shrinking over time there has been no evidence of a reduction in community concerns.

Changes in exposure as a result of flightpath changes or intensification of use also appear to be a significant factor in explaining community annoyance. This is particularly relevant given the current reorganisation of UK airspace to accommodate precision navigation being pursued as part of a Europewide reform of air traffic management. Given the greater accuracy of satellite-based navigation, flight paths have become narrower. This can have advantages and disadvantages: while it could lead to a decrease in the number of people overflown compared to a more dispersed approach, it tends to concentrate more flights over communities living directly under the flightpath.

These Extracts have been taken from the α repair by the CAA β are aft Noise, Siren Disturbance and M with Effects β CAPILES β and M edges.

The degrams and the report clearly snow the impact of aircraft noise on its North Runway and households. Me do accept their will be 15 nous of operation on the North Runway but that will be relieved with 8 hours to refresh and regenerate for the next day.

The sumulative long term effect of sincraft noise over a 24 hour period x 2 days 1, 365 tays a year, with the knowledge it is going to increase, in ATMS. The reduction in aircraft will do to balance the national number of aircraft taking off and landing at Buhlin Airpon, and increased ground artisty - over the next 3 years - 5 years and 10 years.

and the second of the second o



Aircraft noise is a public health issue. It can impact memory and learning in children, disturb sleep, and cause serious long-term health problems including cardiovascular disease. A large scale study around Heathrow Airport found that people living under the flightpath were 10-20% more at risk of stroke and heart disease than those not living under the flight path. There is also emerging evidence of impacts on mental health, linked to increases in stress and anxiety. A large body of health evidence is reviewed in AEF's 2016 report Aircraft Noise and Public Health: the Evidence is Loud and Clear. The World Health Organisation (Europe Region) issued its Environmental Health Guidelines in October 2018 which make specific health-based recommendations for limiting night and daytime exposure to aircraft noise.

Aircraft noise can impact memory and learning in children, disturb sleep, and cause serious long-term health problems including cardiovascular disease.

Actions to tackle noise

Because aviation is exempt from noise nuisance claims, there is little legal protection for people affected by aircraft noise. AEF's published guides explain the relevant legislation and role of regulators and other bodies, how to complain about aircraft noise, and how to make your views known in the airspace change and planning processes. With the exception of Heathrow, Gatwick and Stansted where the Secretary of State uses discretionary powers to impose noise regulations, most airports and airfields in the UK are regulated by the planning system, with variable results. Some airports have planning conditions or agreements limiting operating hours and numbers of movements for example, but others can operate under established use rights with few restrictions. In some cases, certain activities or developments can operate under deemed or temporary permissions that don't even require a planning application. This means that many ongoing noise issues are dependent on local resolution between communities and airports.



Appears in a mobile would be as a man crumes in among soil rearming in children all took above, and cause serious long-sen mentionpass, and inc. along cardiovasconer disease, the second between the fugligation and second disease that proude wing a most the fugligation are along the modification of an account disease that these and in market in resease and the fugligation in the party of the first rearming availance of an access to the first took and the first rearming and the second access to the second and the first rearming and the first rearming and the first rearming and the first rearming and the second access to the first rearming and the first rearmin

at traff room, can improve example of learning a californ, default on a place of social second and partition regularly entired.

Autions to tackle noise

Recorded by Constitution of the constitution of the separate blands, then its burners of the constitution of the separate by Constitution of the separate by Constitution of the separate by Constitution of the separate s

The Independent Commission on Civil Aviation Noise (ICCAN) became operational in January 2019, with a remit to be "an impartial, authoritative voice on aviation noise matters". However, following an independent review of ICCAN's objectives, functions and outcomes, the Government took the decision to dismantle the Commission in September 2021.

AEF's role

AEF is calling for the introduction of quantitative noise limits and targets including delivery of the WHO's recommendations to protect health. We also support the introduction of quieter technologies through the imposition of tougher noise standards for manufacturers (we play an active role in the UN ICAO's Committee on Aviation Environmental Protection where these standards are set), as well as incentives and regulations to remove old, noisy technology from the fleet. We provide a voice for communities on national policy matters, and currently attend the Department for Transport's Airspace and Noise Engagement Group (ANEG) and its Airspace Strategy Board, which oversees the modernisation of UK airspace.

The Applicant has used the UK as their comparison to put forward their assumptions, projections, operating data, for a runway that is not yet open. Looking at health studies in Germany (The Sleep Study -STRAIN Cologne and Frankfurt Airport) it is very clear the health impacts of removing Condition 3(d) and Condition 5 as set out by ABP in the planning permission. The effects on health were robustly presented by UPROAR at the Oral Hearing in 2006, thus leading to these night time restrictions.

While our school, in St Margarets may have the best sound insulation possible, indoors for teaching and learning, this will be cancelled, if a child, student is denied a full nights sleep and restful night time period, or study environment with ambient noise levels for learning.

Air Quality and GHG (Green House Gases)

As a homeowner, it is very difficult to understand this subject and even more so the chapter in the EIAR.

To make a submission on this issue of Air quality that impacts on those humans under the flight path and on the ground, parallel to the runways, a study was undertaken to under the pollutants around Dublin Airport and the impact of them. References were taken from the WHO (World Health Organisation) and other information, available online. Surprising, was the lack of information on Benzene, a harmful pollutant to human health and note the applicant has not included this pollutant in this EIAR.

All seconds of the first transfer of the displace of the displace of the first of the first of the second of the displace of the second of the first of the second of the

AEP's role

After a policy to the production of a social second length of the second appears in a second appears in a second appears in a second and a second appears and a second appears and a second appears and a second and a second appears a second appears and a second appears are second as a second appears and a second appears are second as a second appears a second appears and a second appears are second as a second appears and a second appears are second appears and a second appears are second as a second appears and a second appears are a second appears and a second appears are a second appears and a second appears and a second appears are a second appears and a second appears and a second appears are a second as a second appears and a second appears and a second appears are a second as a second appears and a second appears are a second as a second and a second appears are a second appears and a second appears are a second as a second appears and a second appears are a second as a second appears and a second appears are a second as a second appears are a second appears and a second appears are a second appears are a second appears and a second appears are a second appears are a second appears and a second appears are

The Applicant has used the UK as their compansion to but forward their assumptions, projections operating data, for a runway that is not yet operating an health studies in Germany (The Sleep Study - STRAPA Conognic and Frankfurt August) if is very diractive health impacts of removing Condition 3(d) and Condition 5 as second by ARP to the planning permission. The effects on health were robustly presented by UPROAR at the Oral Hearing in 2005, thus leading to these mebritime restrictions.

White our school in St Margarets may have the best round incutation possible, indoors for tracking unit learning, this will be concelled, if a child, student is donied a full nights sleep and restful night time pariod, or study environment with ambient roise levels for tramming

Air Quality and GHG (Green House Gases)

As a homeowner, it is very difficult to understand this subject and even more so the chapter in the EIAR.

To make a submission on this issue of Air quality that impacts on those humans under the flight path and on the ground, parallel to the runways, a study was undertaken to under the pollutants around Dublin Airport and the impact of them. References were taken from the WHO (World Health Organisation) and other information , available online. Surprising, was the lack of information on Benzene, a harmful pollutant to human health and note the applicant has not included this pollutant in this EIAR.

Page 36 – Vol. 4 Inspectors report.

Mr. Bailey stated that noise has less compounding factors than air quality in terms of studies. Prof. Heffron answered questions on epidemeology vs. toxicological studies of airports. He confirmed that benzene is the most dangerous compound but is not an airport specific emission. Protection factors are used when extrapolating what is acceptable in terms of impact on human health and a conservative policy is adopted in setting standards. It is being reduced by 1 ug per year until it becomes nought in 2010 thereby giving a setting of 5ug/m 3. There is a 100% margin of tolerance included. As such a reading over 5ug/m 3 would not be a material concern as the protection factor set for levels of benzene are significantly below the level at which concerns in terms of human health would arise. Ms. Lawton noted that benzene levels were recorded at 5.18 at St. Margaret's in 2003. Mr. Bailey stated that the annual average of benzene is the correct measurement not a monthly measurement.

Appendix 11A Required Aircraft Model Substitutions

11.1.1. As outlined in Chapter 11 Climate and Carbon, some aircraft models were not available with the Aviation Emissions Calculator or the Atmosfair Flight Emissions Calculator which were used to calculate GHG emissions associated with Air Traffic Movements (ATM) In these instances, the closest available model produced by the same manufacturer was selected s proxy.

In the Fleet Mixes Annex 2

The Boeing 737 freighter is not a scheduled flight.

The A380 – 800 and A350 – 900 are not scheduled and included the GHG models. .

Page 35 - Volvid Inspectors reports

Mr. Bailey stated that noise has less compounding factors than air quality in terms of studies. Prof. Heffron unswered questions on epidemeology vs. low-cological studies of airports, the confirmed that benegue is the most dangerous compound but is not an airport specific amission. Protection the orsere used when extrapolating what is acceptable in terms of impact on human health and a conservative policy is adopted in setting stundards. It is being raduced by 1 ug per vivar until it becomes nought in 2010 thereby giving a setting of Sug/m 3. There is a 100% margin of tolerance included. As such a reading over Sug/m 3 would not be a material concern as the protection factor reading over Sug/m 3 would not be a material concern as the protection factor set for levels of benzene are significantly below the level at which concerns in term of human health would area. Margaret's in 2003. Mr. Bulley stated that the annual average of house he in borrest measurement has a monthly annual average of house he in a line conserved measurement has a monthly measurement.

again. Patagaile de sud-eag, alle consegue colo d'accident arquis

Color of a supposed to dealber 10. Consule and Classen some and color of a supposed some supposed for the color of the supposed for the fight of the color of the supposed for the fight.

**Control of the color of the color of the color of the color of the fight.

**Control of the color of t

and the special property of the

whatter many goes must work in 1985, gained to all

and the state of t

When you fly atmosfair, your emissions are calculated as precisely as possible. The calculations include the effects of the different pollutants according to the latest scientific knowledge, especially to their impact at high altitude. At the same time every consumption of a given flight. A plane may have to take a detour because of fog, the load may be higher or lower than average. Variations like these cannot be included in the calculation.

So we note from the Atomosfair Flight Emissions Calculator, the results are based on assumptions of future weather forecasts, scientific knowledge on different pollutants put forward.

Note in the Oral hearing - Angela Lawton stated that the Benzene levels were recorded at r St Margarets at 5.18 in 2003
What is the level of Benzene at St Margarets and at the receptors in 2018 and 2021, and project in 2022 and 2025.

(Extract taken from the Atomsfair Flight Emissions Calculator)

Emissions calculator

When you fly atmosfair, your emissions are calculated as precisely as possible. The calculations include the effects of the different pollutants according to the latest scientific knowledge, especially to their impact at high altitude. At the same time every calculation has its limits: one can only calculate a presumably fuel consumption of a given flight. A plane may have to take a detour because of fog, the load may be higher or lower than average. Variations like these cannot be included in the calculation.

Data on airplane types, engines, flight routes, etc., was generated in scientific research projects and verified by the Federal Environmental Agency in Berlin.

The experience of the experience of the first of the constitution of the first of the constitution of the

And the facilities and a complete some of the first test of the complete some some of the complete some of the com

What factors are used in the calculation of emissions?

Not all flights are the same. It is obvious that a flight from Frankfurt to Honolulu causes more environmental damage than a flight from Hamburg to Cologne. In short, a number of factors other than the distance of a flight must be taken into account to calculate the impact of one single air-passenger on the world's climate, and thus to determine how much an "atmosfair ticket" should cost.



The emissions calculator contains stored data on all relevant information. Because the calculator uses data sets of high scientific quality, a Pi-mal-Daumen, or rough result is completely avoided. The data that is embedded in the calculator has been verified by the German Federal Environmental Agency.

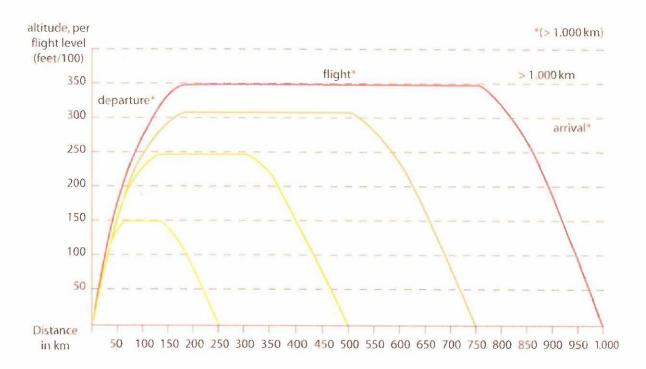
VDPS

There is nothing onerous about Condition 3(d) and Condition 5 -as the wording is very clear.

The Onerous conditions, were condition 7 and 9. The flight path residents have been excluded from the start to clarify these, and to participate in a meaningful way

There is nothing oncrous about. Condition 3(d) and Condition 5. - is the wording is very

The Orienaus conditions, wore condition? And 9. The tlight path residents have been excluded from it a start to clarify these, and to participate in a meaningful way.



Source: TÜV 2000

			Air Quality date	from E	AR relivsed	- Septe	mber 2021		
		Relevant Acti	on to remove nig	ghttime	restriction	s - Condit	tion 3(d) an	d Condition	5.
Receptor No		Year	102		PMIO	PM2.5			
	13 Kilreesk	2018 Baseline		18.8	11.1	6.5	8		
	11 Millhead	2018 Baseline		19.08	11,1	6.5	9		
	29 Dunbro	2018 Baseline		20.07	11.2	6.9	9		
	36 Portmellick	2018 baseline		24.5	11.4	7.	1		
	34 Harristown	2018 Baseline		23.7	11.2		7		
			No2 permitted.		No2 prope	sea.	Change	Impact	
	13 Kireesk	2022		16	16.2			Negligible	
	11 Millhead	2022		15	17.1			Negligible	
	29 Dunbro	2022		17	17.2			Negligible	
	36 Portmellick	2022		19.1	19.4		19	Negligible	
	34 Harristown	2022		19.6	19.7		19	6 Negligible	
		Receptors modelled	at a height of 1.	5m					
	13 Kilreesk	2025		15.2	15.3		19	Negligible	
	11 Millhead	2025		16.5	15.5			L Negligible	
	29 Dunbro	2025		16.7	16.8		/1	Negligible	
	36 Portmellick	2025		19.7	19.6		7.6	Negligible	
	34 Harristown	2025		20.2	19.8		5.	L Negligible	
					2018				
						PM2.5	PM10	pm2.5	
	13 Kilreesk	2018 Baseline			11.1				All predicted to reduce minute
	11 Millhead	2018 Baseline			11.1				in 2025
	29 Dunbro	2018 Baseline			11.2		-		
	36 Portmellick	2018 baseline			11.4				All predicted to reduce minutel
	34 Harristown	2018 Baseline			11.2		7 10.	7 6.6	in 2025 (ug/m3 measurments) and 2035

Analysis 1

The following extract from the EIS with levels extracted for particular receptors relevant for our submission.

- 13 Kilreesk Lane
- 11 Millhead
- 36 Portmellick
- 34 Harristown (take off point on South Ruway Western side)
- 29 Dunbro

			4	Air Quality o	tata from El	AR reivsed	- Septembe	r 2021
		Rele	vant Action	to remove	night time	restrictions	s - Condition	3(d) and Condition 5.
Oagur resu	its							
Predicted (Odour Concentr	ration (Oue/m3)	(98th Perc	entile)a				
		Permitted.	Proposed	Permitted	Proposed	Permitted	Permitted.	
receptor	Area		2022	2025	2025	2035	2035	
11	Millhead	0.2	0.2	0.3	0.3	0.2	0.2	
13	Kilreesk	0.1	0.2	0.2	0.2	0.1	0.1	
29	Dunbro	0.1	0.1	0.2	0.2	0.1	0.1 A	rcraft on runway rolling.
36	Portmellick	0.3	0.3	0.4	0.3	0.2	0.2 Ta	ake off / climb position.
34	Harristown	0.5	0.5	0.6	0.6	0.4	0.4 Ta	ike off point on South runwa
	and the second s							
	so why is Harri							
	The figures ner	ed to be explaine	ed in actual	noise smel	l and how t	hey are deri	ived.	

Analysis 2.

What is Particulate Matter (PM)?

Particulate matter, or PM, is the name given to fine dust or liquid particles that are suspended in the air we breathe. These particles can come from natural sources (such as pollen), or from human activities (such as fuel combustion).

Large PM (think: sand, pollen, or smoke) can be seen by the naked eye, but PM with a diameter of less than 10 micrometers (or PM10) is often too small to be perceived. That said, when fine PM exists in exceptionally high concentrations (as it does in Delhi and Beijing), it can form a visible haze. Regardless of whether or not we notice any visual changes in our air quality, inhaling high levels of fine particulate matter can have

Dublin Airport experiences many weather issues with fog, during the winter months. .

Fire following exerces from the LiS-wich levels as tracted for particular reconstance relevant to not submission.

- 13 Offices Land
 - the Millione
 - SE Promodina
- 34 Handdown Litake off noord on South Royalv Westernschol
 - andri in no

Cause on

SEASON SE

La ser la comparta de la comparta del comparta de la comparta del comparta de la comparta del la comparta del la comparta de la comparta del la comparta

addition between the constraint of the engaging of the edition of the production of the constraint of the edition of the editi

PM2.5 Basics

When scientists, doctors, politicians, and environmentalists talk about particle pollution, they're usually talking about PM2.5 (particulate matter with a diameter of less than 2.5 microns). This super-fine, largely invisible pollutant is more than 30 times smaller than a single stand of human hair.

Due to its microscopic size, PM2.5 is easily inhaled and has the potential to travel deep into our respiratory tracts. Once there, it can cause chronic irritation, trigger allergies and asthma, and increase our risk of developing serious infections and disease such as COPD. More recent studies have also linked high particulate pollution levels to fertility complications and reduced life expectancy rates.

In addition to the density of air pollution, our sensitivity to PM2.5 depends on the nature of the chemicals or organic compounds present. Although we know high levels of PM2.5 are unequivocally bad for our health, the exact level at which they become problematic and the severity of the health effects of ambient PM2.5 are still being explored. Less severe symptoms of elevated PM2.5 include chronic skin, eye, and throat irritation, headaches, persistent allergy symptoms, and more frequent respiratory infections.

Be in the Know

Is the "fresh air" you're letting into your home truly healthy? Will opening a window help or hurt your asthma? Should you consider buying an air purifier, humidifier, or fan?

It's easy to feel overwhelmed by information about air pollution if you don't have the tools to change your environment. If you live in an area with high particle pollution, don't panic. Monitoring your indoor air quality at home and work is one way to take control of your health and the air you breathe.

When it comes to air quality, knowledge is power.

email Silvania

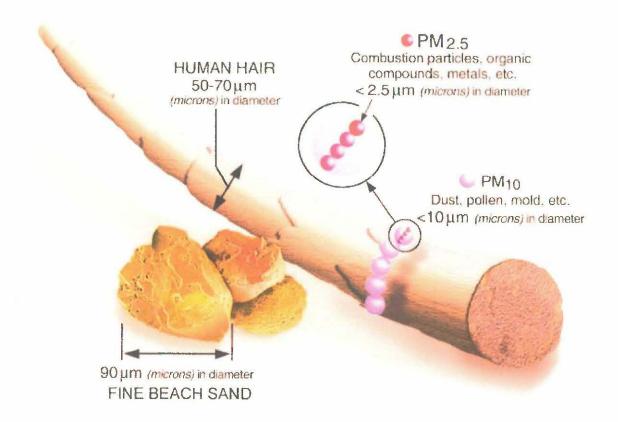
— proper all and who happens were above senting and on the contribution of a settlement of the contribution of the contribu

Aby to perfect the first of the substitution of the property of the substitution of

Se in Jackton v

agaran kabupatèn Kabupatèn Marin Kerili N

What is PM, and how does it get into the air?



Size comparisons for PM particlesWhat is PM, and how does it get into the air?

PM stands for particulate matter (also called particle pollution): the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope.

Particle pollution includes:

- PM₁₀: inhalable particles, with diameters that are generally 10 micrometers and smaller; and
- PM₂₅: fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.
 - How small is 2.5 micrometers? Think about a single hair from your head. The average human hair is about 70 micrometers in diameter – making it 30 times larger than the largest fine particle.

What is PM, and how does it get into the air?



Size comparisons for PM particlesWhat is FM, and how does it get into the air?

PM stands for particulate is utor (also called particle pollution), the term for a minimum of solid particles and illouid druptets found in the air. Some particles such as this diff, soct or knoke, are large or dark arough to be seen with the maked by a. Others are so anall they can only be detected using an alaction microscope.

Paracle pollution includos

- PM :: mhalable particles, with dianteto's that are generally 10 micrometers and singular and
 - PML: fine inhalable particles, with diameters thehare conerally 2.5 micromaters and another.
- How small is 2.5 micrometers? Think about a single hall from your total. The average human hair is about 70 micrometers in districtor making the making it 30 filmes faced than the lightest fine particle.

Sources of PM

These particles come in many sizes and shapes and can be made up of hundreds of different chemicals.

Some are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks or fires.

Most particles form in the atmosphere as a result of complex reactions of chemicals such as sulfur dioxide and nitrogen oxides, which are pollutants emitted from power plants, industries and automobiles.

Particulate matter contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Some particles less than 10 micrometers in diameter can get deep into your lungs and some may even get into your bloodstream. Of these, particles less than 2.5 micrometers in diameter, also known as fine particles or PM_{2.5}, pose the greatest risk to health.

What are the Harmful Effects of PM?

Particulate matter contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Some particles less than 10 micrometers in diameter can get deep into your lungs and some may even get into your bloodstream. Of these, particles less than 2.5 micrometers in diameter, also known as fine particles or PM_{2.5}, pose the greatest risk to health.

Sources of PM

These particles come in many sizes and shapes and can be made up of bundreds of different chemicals.

Some are emitted directly from a source, such as construction sites, unpayed coads, fields, smokestacks or fires.

Most particles form in the atmosphere as a result of complex reactions of characters such as sulfur dioxide and nitrogen codes, which are polluter to amitted from power plants, industries and automobiles.

Particulate marter contains microscopic solids or liquid droplets that are so small that they can be intured and cause senous realth problems. Some particles less than 10 micrometers in diameter can get deep into your tungs and some may even get into your biportstream. Of these, particles less than 2.5 micrometers in turneter also known as fine particles or P.M., pose the greatest risk to heathn.

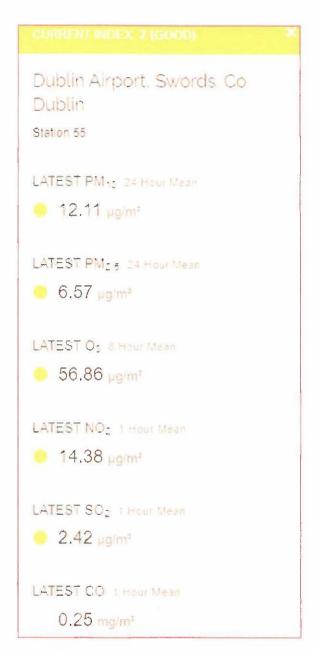
What are the Harmful Effects of PM?

Parhoulars matter centains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Some particles less than 10 micrometers in diameter can get deep into your lungs and some may over get into your bloudstream. Of these particles less than 2.5 micrometers in diameter, also known as fine particles or PM., pose the greatest risk to health



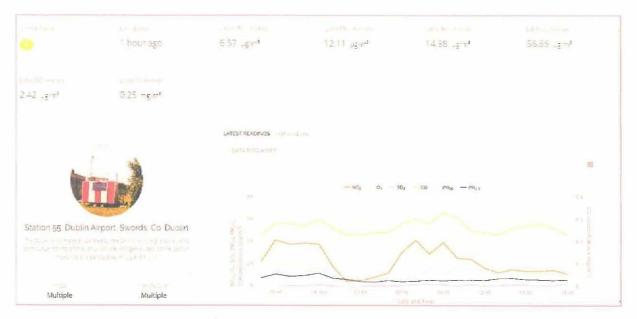
Extract from EPA report - reading on 14th October 2021

<u>STE de Maria de Para de la compacta del compacta del compacta de la compacta del la compacta de la compacta de</u>



Where is the Station and how far from the receptors?
Station 55 Dublin Airport Swords, Co Dublin.

Alberta is die Station und have für ment ihre reduptors ? Spiere 155 der 155 August 1555 auch in 1557 für



Extract from EPA website - 14th October 2021.

What We Monitor

The Environmental Protection Agency manages the national ambient air quality monitoring network. We also measure the levels of a number of atmospheric pollutants. The pollutants of most concern are those whose main source is traffic such as Particulate Matter and Nitrogen Dioxide.

Particulate matter (PM10 and PM25)

PM are particles in the air typically measured as PM_{10} and PM_{25} with diameters of $10\mu m$ (microns) or $2.5\mu m$. In Ireland, the main sources are solid fuel burning and vehicular traffic. Other sources are soil and road surfaces, construction works and industrial emissions or natural sources such as windblown salt, plant spores and pollens. These direct emissions are known as primary PM. Particulate matter can be formed from reactions between different pollutant gases (secondary sources).

Small particles can penetrate the lungs and cause damage. There are high levels of PM₁₀ in many cities and towns.

Nitrogen dioxide (NO₂) and Nitrogen oxides (NO₂)

Emissions from traffic are the main source of nitrogen oxides in Ireland along with electricity generating stations and industry. Nitrogen dioxide can affect the throat and lung. The main effects are emphysema and cellular damage.

It impacts visually as it has a brown colour and gives rise to a brown haze. Oxides of nitrogen contribute to the formation of acid rain and of ozone.

Levels in Ireland are moderate but are increasing due to growth in traffic numbers.

Ozone (O3)

Ozone is a natural component of the atmosphere. Most ozone is found high up in the stratosphere, the layer of the atmosphere between 12km and 50km above sea level. Stratospheric ozone is essential to life on earth as it protects us from harmful rays from the sun.



POS into as 7 TeX workshops a 5 may 1 text and

What Ver Worklan

graduation and a regression of the

and the state of the second second and the second s

City and company a year (NG) stars a registed

And the second state of the second The second second

The control of the co

any favorantia and a membrana and a suppression of the superior of the superio

.

Ozone is also found in the troposphere, the layer of the atmosphere next to the earth. Exposure to high concentrations of tropospheric ozone causes chest pains, nausea and coughing in humans.

Long term exposure to moderate concentrations causes a reduction in lung capacity and can worsen heart disease, bronchitis, emphysema and asthma. Tropospheric ozone contributes to the greenhouse effect and subsequent global climate change.

Levels of ozone in Ireland are moderate.

Sulphur dioxide (SO₂)

The main source of sulphur dioxide in Ireland is burning coal and oil to heat homes and industries and to produce electricity.

It is an irritant gas which attacks the throat and lungs. Prolonged exposure can lead to increases in respiratory illnesses like chronic bronchitis. It contributes to the formation of acid rain which damages vegetation and buildings.

Levels in Ireland are low to moderate. Levels have decreased over recent years due to increased use of low-sulphur "smokeless" coal, increased use of natural gas instead of solid fuels and reduced industrial emissions through IPC licensing.

Carbon monoxide (CO)

The main source of carbon monoxide in Ireland is traffic. It is absorbed into the bloodstream more readily than oxygen, so the relatively small quantities in inhaled air can have harmful effects.

Prolonged exposure can cause tissue damage and individuals suffering from cardiovascular disease are particularly at risk. Levels in Ireland are low.

Benzene (C₆H₆)

Benzene comes from petrol emissions and the evaporation of petrol at petrol stations. It is a carcinogen.

Acute short-term inhalation may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritations, and, at high levels, unconsciousness. Levels of benzene are low in Ireland.

Lead (Pb)

The main source of lead in air has historically been from petrol engine exhaust emissions. High concentrations can affect mental and physical development in children. Long-term exposure to low levels of lead can affect the nervous system.

These is no details on Benzene levels around Dubin Airport. This does not appear to be addressed. So where are the Benzene levels for the receptors included in this submission.

Following taken from East Midlands Airport

Benzene is **present in aviation fuels** and the operation of aircraft (and vehicles) at the airport all contribute to the ambient concentration of

provide a company of the company of

as the tips of own teach of the con-

COST burst mouse

To programme and the higher design of the complete the stood and design and the larger than a display the control of the contr

i mengangan permenangan menganan di permenangan di permenangan menganan permenangan mengan mengan menangan men Permenangan permenangan permenangan permenangan permenangan permenangan permenangan permenangan permenangan pe Permenangan permenangan permenangan permenangan permenangan permenangan permenangan permenangan permenangan pe

and the property of the proper

A. The same of the same

om metalle skatelen et i til et e store en en i miller har omfant fra mem ble kommente heter i eller i trans-Smegne har en store om eller er fante en englet en skatelen heter en en gelek gener betek en en en gelek gener

and the second of the second o

Section 1984

De la completa de la constitución de la completa de la constitución de la constitución de la constitución de l Establismente

and once a

These is no details on Bernsons levels around Dubin Airport. This does not apprar to be authorsed. So where are the Bonzene levels for the condition collected and this submission.

Solio vegy rates from East Mydenes Arrupal

Be trane is present its avietion fuels and the operation of aircraft (and vehicles) at the aircraft all contribute to the arrivers concentration of

benzene. The Government's Air Quality Strategy establishes a very stringent target to safeguard health.

Reducing aircraft emissions

The way in which we control aircraft whilst they are on the ground and in the air can significantly affect emissions.

Our Air Traffic Controllers and airline partners work together to adopt rigorous measures, ensuring that emissions to air are minimised. This includes delaying an aircraft from starting any engines until it is known that take-off clearance will not be delayed. When taxiing to and from the runway many of our airline partners also manoeuvre using just one engine.

The technique which we promote among arriving aircraft also contributes to reduced aircraft emissions

Jet emissions contain particulate matter that affects the environment. According to studies, combustion of jet fuels culminates into the release of benzpyrene as a byproduct of incomplete combustion that normally comes out with soot (Rojo, 2007). This chemical is highly carcinogenic and has been shown to be a causative agent of many cancers as well as tumors in human beings culminating from skin and lung adsorptions. Besides, combustion of jet fuel has been associated with the production of high amounts of sulphur dioxide, a harmful gas that can cause severe irritation of the eyes and airway tracts. Literature indicates that jet fuel contains high concentrations of sulphur, nearly 1000ppm as compared to 10ppm in diesel (Mark J. & Mark W., 2000). During combustion, this is converted into the harmful sulphur dioxide, which is transmitted into the atmosphere thereby compromising quality of air.

Other harmful emissions include volatile organic compounds (VOCs) and carbon dioxide. VOCs can include, for example benzene, which is carcinogenic, and some forms of aldehydes that can cause forms of skin, eyes, and air tract irritation (Mark J. & Mark W., 2000). Volatile organic substances usually originate from vaporized fuel or incompletely combusted material that exits as exhaust gas. In some instances, the volatile compounds attach to particulate materials and escape into the air, culminating into compromised air quality around the airport. Carbon dioxide emanates from the combustion of organic fuels. It is a major contributor to climatic deterioration and global warming.

pear one. The Covernment's Att Quality Stratugy setablishes a very annual tracelegan dihealth.

the state of the s

at a second transformer to make that contains a climical material of the properties of the contains of the contains and the c

Other necessary and single residents within arganic compound in a COC carefrest bear should be to R search related for example it enough of the consignation of the same in the bearing at the consideration of the same at the bearing at the same and the same in the same in the same at the same in the same at the same in the same at the same a

Sources indicate that this chemical is produced in large quantities from aircraft activities in the United States and other highly developed airports that have a lot of jet activity (Rojo, 2007). The resulting emissions find their way into the environment, adversely affecting the quality of air. This readily predisposes the populations living around airports, air travel personnel, and travellers, to dangerous environmental and health concerns. According to the Danish Ecocouncil (2012), jet emissions usually affect a radius of twenty-five miles around the airport area. This implies that communities, animals, and crop plants are dusted with toxic jet emissions within a distance of twenty-five miles away from the airport every day.

Typically, airports spew toxic pollutants in hundreds of tons annually all over the world. Flow of air currents ensures that the toxic pollutants also reach water bodies where they negatively affect marine life.

Conclusion

Various pollutants caused by aviation practices affect the quality of air around airports posing a real health problem. Aircraft movements while on the ground, during landing and taking off, produce significant pollutant emissions, which affect the quality of air around airports. Besides, road traffic, other machinery, such as forklifts, cranes, and others, are also significant sources of air pollutants around the airport, posing a health risk to surrounding communities, air travel personnel, and travellers. Nitrogen dioxide, benzpyrene, sulphur dioxide, carbon dioxide, and volatile organic compounds are examples of harmful environmental pollutants caused by aviation. It is important to establish positive mitigation policies by all stakeholders, governments, and aircraft manufacturers to come up with proactive approaches aimed at air pollution reduction around airports.

Above from Reference: BohatALA.com - website research. 14th October 2021.

Benzene is a proven <u>carcinogen</u>. Its synergistic action with other <u>pollutants</u> can damage different components of the <u>biosphere</u>. Literature comparing the <u>air quality standards</u> of benzene, its monitoring methods and global concentrations are sparse. This study compiles the worldwide available air quality standards for benzene and highlights the importance of strict and uniform standards all over the world. It was found that out of the 193 United Nation member states, only 53 countries, including the European Union member states, have ambient air quality standard for benzene.

The other of the strong property of the strong and continues of the form to be a second of the strong of the stron

's wheelig, supports sques, one-could come at his relocity or many and extra view in:

acadal three of agrees condenses as each below swill, pointent cases seed, such absolute

somethic cases, it is straightful across the

noisadasso?)

Arrange of the contract of the

tigs, which is the control of the description of the control of th

Bencements a proven agreeming in the symmetric action with the biospham at the apply to the analysis of the biospham of the remaining of the arms of the biospham of the remaining the remaining arms of the arms of the arms of the arms of the remaining tradeous and placed and arms of the arms of

Even where standards were available, in most cases, they were not protective of public health. An extensive literature review was conducted to compile the available monitoring and analysis methods for benzene, and found that the most preferred method, i.e, analyzing by Gas Chromatography and Mass spectroscopy is not cost effective and not suitable for real-time continuous monitoring. The study compared the concentrations of benzene in the indoor and outdoor air reported from different countries. Though the higher concentrations of benzene noticed in the survey were mostly from Asian countries, both in the case of indoor and outdoor air, the concentrations were not statistically different across the various continents. Based on the analyzed data, the average benzene level in the ambient air of Asian countries (371 µg/m³) was approximately 3.5 times higher than the indoor benzene levels (111 µg/m³). Similarly, the outdoor to the indoor ratio of benzene level in European and North American Countries were found to be 1.2 and 7.7, respectively. This compilation will help the policymakers to include/revise the standards for benzene in future air quality guideline amendments.

Addressing Air Pollution resulting from Aviation

The International Civil Aviation Organization (ICAO) is mandated with the setting up of international standards that govern the emission of certain pollutant gases and smoke for new aircraft engines. That notwithstanding, only minimal improvements have occurred in the aviation industry in the reduction of harmful gases and emissions, as compared to other sectors that also use fuel (ICAO, 2014). Consequently, there is a need for more proactive approaches to mitigate the problem. For example, the adoption of better engine types that encompasses selective catalyst reduction mechanisms and the recirculation of exhaust gas to ensure maximum combustion. Most gaseous and vapor emissions have been associated with incomplete combustion of fuels (Environmental Protection UK, 2012).

Therefore, increasing the number of recirculation cycles will ensure complete combustion and a reduced amount of harmful emissions.

It is also important to develop proactive policies that are consistent with specific concerns associated with air quality and environmental conservation similar to related approaches in other industries, such as automobile.

The content of the second and the second and the second and the second and the second are the second and the second are the second and the second are the second and the second and the second are the second and the second as the second and the second are the second as the second as the second are the second as the secon

idebras ing Air rolletion resulting from Aniccion

The international conducts that govern the consistence of article of the time of the international conducts that govern the consistence of article politics in gosts and sunche for new alternational contact. That netwiths booking contyminated in granesses at most normalist in the conduct of the internation industry in the reduction of factor internation granes and make the quarter as a made for presential too that the first article is a made for presential too that contact the present of the conduction of the present of the conduction of the condu

Peruon esclus e entre des misedes de la seltenda como de restlume en essena la serencia en la serencia de la se Aprobablica e aproprieda sed avada se de la selección de la selección de la selección de la selección de la se

Kalimagi. Mare kangarenne enakundi ekspilera erratusa ajante esti etere anagun ekspiri el ajanten na agingangi erra kangaran palangian dagar bibagi kangaran bibagi kangaran kangaren na anahan dagaran erratusa alaman na bibagaran kangaran kangaran kangaran kangaran kangaran kangaran kangaran

Currently, policies governing aircraft activities and environmental concerns are less stringent than those that govern other sectors of the economy involved with fuel combustion, such as factories and the automobile industry (Kularatna & Sudantha, 2008). This could be partly because most pollution by aircrafts takes place in the higher atmosphere compared to automobiles and other engine activities on the earth's surface. Integrating related aviation policies with those of the transport industry will achieve a common approach to environmental conservation.

Stakeholders, governments, and aircraft manufacturers should also review, develop, and adopt better aircraft technologies on a continuous basis to reduce the extent of air pollution and environmental concerns. In addition, plans should be in place to cater for expansion activities to reduce the overstretching of existing limited resources with increase in air travel demand

1.1. General

Volatile organic compounds (VOCs) are generally defined by the physicochemical properties like vapor pressure, molecular structure, air/water partition coefficient and boiling point. American Society for Testing and Material have defined VOCs by vapor pressure; "VOCs are organic compounds that have vapor pressure greater than 0.0133 kPa at 298 K"). The European Union have also defined VOCs with respect to vapor pressure; "VOCs must have a minimum vapor pressure of 0.01 kPa at 293 K" (). World Health Organization (WHO) have defined VOCs with respect to boiling point; Very volatile organic compounds (VVOCs) have boiling points in the range of <0 to 50–100 C, Semi-volatile organic compounds (SVOCs) have it in the range of 240-260 °C to 380-400 °C and the Volatile organic compounds (VOCs) have boiling points in the range of 50–100 °C to 240–260 °C (). The VOCs emitted in the atmosphere include saturated and unsaturated hydrocarbons, organic alcohols, aromatic hydrocarbons, halogenated organic compounds and sulfur compounds (). Out of these, organic compounds like benzene, toluene, ethylbenzene and xylene, commonly called as BTEX compounds, are found to be higher in the ambient air (). Among the BTEX compounds, Benzene demands special attention. The US EPA risk assessment guidelines of 1986 had classified benzene as a "known human carcinogen" (Category A) (). The current carcinogenic risk assessment guidelines given by US EPA in 2005 has characterized benzene as a known human carcinogen based on human exposure evidence along with other supporting evidence from animal studies. Occupational based human exposure studies have concluded that exposure to benzene leads to toxic effects, both by oral and inhalation exposure (). Considering the toxic profile and the ubiquitous nature, it is necessary to monitor and regulate benzene in the ambient air.

1.2. Properties of benzene

Benzene remains in the <u>vapor phase</u> in the air. The lifetime of benzene in air ranges from a few hours to days and is dependent on the environmental conditions and the presence of other <u>pollutants</u>. The most important mode

set a offered formation of the first of adictional and the set of the control or and the extension of the extension of the control of the first of the extension of the control of the extension of the extension

Substitution of process continues arrangly menting energy being also entired processing. The substitution of the continues of

ALCOHOLD CONTRACT

Addition of the problem of the state of the state of the plant of the plant of the plant of the plant of the problem of the problem of the plant of the plant of the plant of the plant of the problem of the plant o

Landard Tolking Strong Str. L. L.

Bestweete actualitschiche sapor phayers cha day. Tha latella seaffeen englin sin master finne actes become malays and it dependancem the expiramental contraints and the presence of other golfets dis. The most important mode of degradation of benzene in the environment is through <u>oxidation</u> by <u>hydroxyl</u> radicle and subsequent removal by rain (

). The physicochemical properties of benzene are shown in

2.4. Europe

It is suggested that all the 28-member states in Europe should comply with the limit set for benzene at 5 µg/m³ (annual) as per the Directive 2008/50/EC on ambient air quality and cleaner air for Europe. Among the European Union countries, France has the lowest long-term objective limit for benzene at 2 μg/m³ (Annual) (). Scotland and Northern Ireland set out an objective value of 3.25 µg/m³ (), Sweden and Malta have a standard for annual mean with upper threshold: 3.5 µg/m³ and lower threshold of 2 μ g/m³ (). Among countries of Europe other than the EU member states, Albania has a permissible limit of 5 µg/m³-8h in primary and secondary standards () and Belarus has limits 10 µg/m³ (calendar year) and 40 μg/m³ (24h) (). Certain countries like Moldova and Ukraine follows standards of the Russian Federation with a maximum allowable concentration of 100 μg/m³ (24 h) (

WHO Guidelines .

Benzene in air exists predominately in the vapour phase, with residence times varying between a few hours and a few days, depending on the environment, the climate and the concentration of other pollutants. Reaction with hydroxy radicals is the most important means of degradation. It can also be removed from air by rain. Sources Benzene is a natural component of crude oil, and petrol contains 1–5% by volume. Within the European Union the maximum allowable concentration is 5%. Benzene is produced in large quantities from petroleum sources and is used for the chemical synthesis of ethyl benzene, phenol, cyclohexane and other substituted aromatic hydrocarbons. Production in 1988 was estimated to be 20 million tonnes worldwide and 5 million tonnes within the countries of the European Economic Community. Production in the USA and Japan in 1990 was estimated to be 5.4 million and 2.8 million tonnes, respectively (1). Benzene is emitted during its production and from coke ovens. Besides these industrial sources, emission also occurs from different combustion sources, such as motor engines, wood combustion and stationary fossil fuel combustion. The major source is exhaust emissions and evaporation losses from motor vehicles, and evaporation losses during the handling, distribution and storage of petrol.

et degua art en et be receau la vide au siperennant in. Enteregla guider en leg 19<u>55 berei</u> mulle ar unit erbeiegen en rennaval im egene L'iliae physicalisation pre present per personal and se

abserted a contributed for

expected parameters

It is suggested that all the 28-member varies in theraps aboutdoningly with the limit set for henvens at a pg (m) (amount) as per the Directive zond, set/fit on ambient tin quality and cleaner six to diamone. According the feature of mid-for a count one is anced as the towest long term objection half for her sene at a ng/mo(Armon)).

). Scotting and Marusetta regiants set out in objective values a large of the content of the set of

), Amorg countries of flurepy offer than the flif neather states Albanis lasts promisely is finited by pathness in printers and second up standards t

) and Belarus has findes at asymmetaleralar pen), and so gains (24b) (). Cert an count has have haddone and Penine fallower condensated the Rassing Endandion with a maximum downblucarrown atom at the same estables.

- enabling QUIV

However, in the solid procured view, the expense phase with residence times varying between a few bounds and a few days, depending on the antimentary, the climest and the active enterior of concentration of other politions. Hence on with hydroge reticutes a the most important means of degradation. It can also be removed from an by rain. Some Hencene is a matural cast, meet it and the Within the European Union the maximum allowable concentration to 5%. Beneaue is preduced in large quantiles from maximum allowable concentration to 5%. Beneaue is preduced in large quantiles from petroleum sources and their substituted around to a senties, of other beneaue, physical to be 5.0 million tomes worldwide and 5 million tomes within the countries of the frampeant author and 2.8 million tomes, respectively (1), therefore is entited during its production and non-color overs. Besides and conference is entitled during its production and non-color overs. Besides and compact also occurs from different combustion sources such as motor engines, wood combustion and starter, different motor engines, and evaporation beses from motor engines, wood combustion and starter, different motors, and evaporation beses from motor. I permit

Cigarette smoke is an important source of benzene in indoor air, and median benzene levels have been found to be higher in the homes of smokers (10.5 µg/m3) than those of nonsmokers (7 µg/m3) in the USA. Corresponding figures from Germany were 11 and 6.5 µg/m3 , respectively. The levels in the USA were higher than the corresponding median outdoor concentration, 6 µg/m3 , and the mean personal exposure was also higher at 15 µg/m3 (2, 8). The mean concentration of benzene in indoor air in homes across Canada was 7.4 µg/m3 , with a maximum value of 68 µg/m3 . The mean concentration in outdoor air was 4.4 µg/m3 (3). Passive sampling in households in Germany (Duisburg) showed an average concentration of benzene in children's bedrooms of 9.5 µg/m3 compared to 1.8 µg/m3 outside the windows (9). Indoor air concentrations are enhanced in dwellings near petrol stations (10). Studies of benzene concentrations in the interior of vehicles while driving have shown values of 10–120 µg/m3 in Germany, 37–57 µg/m3 in Sweden, 30–115 µg/m3 in the Netherlands, and mean values of 12–50 µg/m3 in the USA (5). Conversion factors 1 ppm = 3.19 mg/m3 1 mg/m3 = 0.313 ppm

The study area has been defined modelling study include a selection of residential properties and other sensitive locations such as schools and community facilities. A total of 52 existing receptors were modelled that may be affected by the operation of the runway system.

- How do we know the baseline used for Air quality and greenhouse gases is correct
 for this assessment. If the information is correct, then the LTO cycles will double
 when the new runway opens for operation. Residents will experience CO2 (
 nitrogen dioxide) and Particulate Matter (PM10 and PM2.5) with hydrocarbon (HC)
 emissions have been derived based on the anticipated aircraft operations in idle
 mode.
- The Air Quality states that APU emissions have not been assessed.

The assessment also considers the additional surface passenger journeys as a result of the relevant action.

This will increase road traffic from the south and west -with the growth of cargo and the relocation of Dublin Port to the western side of Dublin Airport, with DHL, TNT UPS and other carriers, increasing cargo activity at Dublin Airport- Currently there are nine (9) scheduled cargo ATMs at Dublin at night.

As a result of a second runway operating, this will increase the number of Aircraft related activity, Aircraft equipment, aircraft stands etc.

Cigarette sende es an imporrant source of benzene in indoor nit, nitd median benzent levels nave been found to be higher in the homes of smokers (10.5 µg/m3.) then howe of nonsmokers (7 µg/m3.) in the USA. Corresponding figures from Garmany wore at aprificial pg/m3. respectively, the levels in the USA were higher than the corresponding median authors concentration, 6 µg/m3, and the areas personal exposure was also higher at 15 authors concentration, 6 µg/m3, and the areas no personal exposure was also higher at 15 µg/m3. (2.8). The mean concentration of benzene in innovation are not applied. With a maximum value of 68 µg/m3. The mean concentration in outdoor are exactly used an average concentration of benzenean children's bedrooms of 9.5 µg/m3 compared to 1.8 average concentration of benzenean children's bedrooms of 9.5 µg/m3 compared to 1.8 per 2 cutside the windows (9), industrial concentrations are enhanced in dwelbings near period stateons (10), studies of 10–100 µg/m3 in Germany, 37–57 µg/m3 in Swieden, 30–115 per/m3 in the Netherlands, and mean values of 12–51 µg/m3 in the Netherlands, and mean values of 12–51 µg/m3 in the Netherlands, and mean values of 12–51 µg/m3 in the USA (5). Conversion factors 2 ppm = 4.12 mg/m3 in mg/m3 = 0.318 ppm

The study area has been defined modelling study include a selection of cattlemed. Emperior and other sensitive locations and as schools and concountry laudines. In resall of 52 arising exceptors were modelled that may be affected by the operation of the runway system.

Ę

- i. How do we know the baseline used for Air quality and greenhouse gases is correct for this assessment. If the information is carrect, then the LTO cycles will double when the new noway opens for operation. Residents will experience CO2 (nitrogen dioxide) and Particulate Matter (Pivitio and Pivit s) with hydrocarbon (HC) emissions have been derived based on the unticipated aircraft operations in ideal mode.
 - The Air Quality states mat APC an assorts have not been assessed.

The assessment also considers the additional surface passenger journeys as a result of the relevant action.

This will increase road traffic from the south and west-with the growth of cargo and the relocation of Dublin Port to the western side of Dublin Airport, with DHL, TMT UPS and other carriers, increasing cargo activity at Dublin Airport. Currently there are nine (9) scheduled cargo ATMs at Dublin at night.

As a result of a second runway operating, this will increase the number of Aircraft related activity. Aircraft equipment, aircraft stands etc.

The GHG assessment study area considers all GHG emissions from fuel used by aircraft during the additional LTO and climb cruise descent (CCD) phases and from additional surface access passenger journeys as a result of the proposed Relevant action.

There is no specific criteria for determining the significance of GHG emissions. As such, the projected National Emissions Inventories for Ireland (EPA 2019) as compiled by the EPA have been used for the level of effect of GHG emissions as a result of the proposed Relevant Action on the global climate.

None of the affects are of major significance as the GHG emissions associated with this Relevant Action to not represent >1% of the projected National Emissions Inventory for either of the assessment years.

The total amount of GHG for 2018 was 60.51million tonnes of GHG and aircraft emissions are not recorded and are exempt. This equates to 605,100 tonnes representing the >1 % that is stated in this application.

60.510,000 divided by 52 = 11,636.53 per week = 1,662.36 per night.(Tonnes)

The EIS states: The significance of GHG emissions impact of the Revelant Action considering the receptors sensitivity (global climate) is anticipated to be minor, which is considered to be of low significance.

DAA offset carbon levels under the EU Emission Trading Scheme and the ICAO Carbon Offsetting and reduction Scheme for International Aviation (CORSIA)

This issue for residents living parallel to the runways and in the flightpaths needs to be addressed appropriately.

The GHS assessment study area considers all GHS emissions from fuel used by altered during the additional LTO and climb make descent (CCO) phases and from idditional surface access passenger journeys as a result of the proposed fieles and action.

There is no specific entertal for determining the agraticance of GMG consulons. As such, the projected Notional Emissions investories for Ireland (EPA 2019) an compiled by the EPA have been used for the level of effect of GMG emissions as a result of the proposed delevant Action on the global climate.

Name of the affects are of major significance as the GHG emissions associated with this Relevant, Action to not represent a L'Eci the projected National Emissions to ventory for ether of the assessment years

The total amount of GMG for 2018 was 60.51million connes of 6H5 and aircraft emissions are not recorded and are exempt. This equates to 605,160 tonnes representing the >1% that is stated in this application.

NO \$10,020 division by 52 = \$1,636,53 per we alc = 1,652,35 per algorithmes)

The ES states? The significance of side emissions impact of the Reveiont Action consciences in receptors sensitivity. Epichal climate) is anticleated to be minor, which is considered to be disconficure.

EAA affict carbon fercis under the to Emission Trading Schenic and the ICAD Carbon Offsetting and recustion Schenze for International Aviation (CORSIA)

This issue for residence (wing populier to the runnings and in the frightnocks needs to be addressed appropriately

Table 2.2. Historical and projected emissions for the non-ETS and ETS sectors (kt CO₂eq³²) for With Existing Measures and With Additional Measures scenarios

		Non-ETS sector	ETS sector	Total		
	2005	47098.82	22396.21	69495.03		
	2008	46918.03	20383.79	67301.83		
	2009	44330.87	17216.36	61547.23		
	2010	43750.07	17354.78	61104.84		
_	2011	41230.35	15758.84	56989.19		
Historical	2012	40757 66	16853.87	57611.53		
isto	2013	41713.48	15696.73	57410.21		
I	2014	41130.01	15968.53	57098.54		
	2015	42363 41	16848 41	59211.81		
	2016	43517.55	17752.65	61270.20		
	2017	43830.35	16913.37	60743.73		
	With Existing Measures scenario					
-	2018	44463.01	17357.08	61850.55		
	2020	44568 69	16933 27	61532.48		
pot	2025	44264.39	19512 53	63807.62		
	2030	43989.73	20306.00	64326.67		
	2035	43394 59	17893.20	61319.01		
	2040	42813.54	18802.95	61647.70		
Projected	With Additional Measures scenario					
٥	2018	44361.77	17080.26	61472.49		
	2020	43978.22	16524.17	60532.91		
	2025	43047.27	18352 96	61430.94		
	2030	41076.24	13448.26	54555.44		
	2035	39499.58	15671.85	55202.65		
	2040	37901.73	17133.05	55066.00		

Note: Totals excludes Land Use, Land Use Change and Forestry (LULUCF)

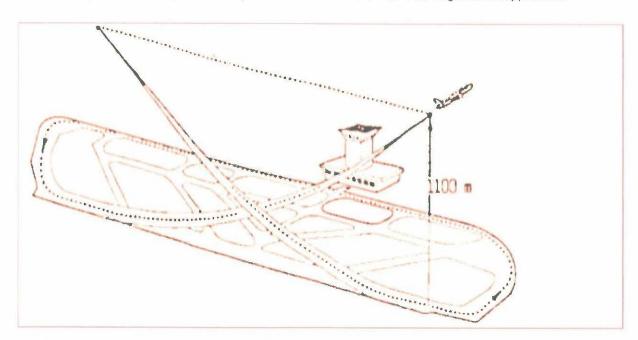
order i 25. met 19. and 19. and 19. and 25. and 25. and 25. and 25. and 26. an

Comparison of typical LTO-Cycle emissions with aircraft engine- and airportspecific emissions for greek airports

August 2005

INTRODUCTION

Aircraft and airport related emissions have received considerable attention in recent years, both on national and international agendas. Although most of aircraft emissions are released during cruise at altitudes higher than 1.000 m (outside the atmospheric boundary layer), the effect of aircraft emissions at ground level is of major importance since most airports are close to urban areas [1]. In this work, ground-level emissions are estimated for three representative Greek airports, in Thessaloniki, Rhodes and Kavala for the year 2000. The LTO cycle defines the aircraft activity of interest. Emissions during flight at cruising altitude are not within the scope of this study. In the first step of an LTO cycle the aircraft descends from cruising altitude, approaches



the cycle: taxi out/idle, take-off and climb out. These five LTO cycle operating modes are defined by the existence of standard power settings for a given aircraft, so the modes represent an appropriate basis for estimating emissions. A schematic view of an LTO cycle is presented above – Aircraft activities during the LTO cycle.

Up to now, aircraft emissions in Greece have been estimated using average emission factors (in kg/LTO) per aircraft type based on standard/typical LTO cycles in terms of thrust settings and time spent in the specific mode [2]. This work focuses on the calculation of aircraft engine-specific emission factors, developed for selected airports. The resulting emissions are compared with the results of the simple methodology and the differences are discussed.

Companies of typical CO cycle emissions with archeft on massard alignostspecific sometions for greet airports



the cycle. Und out/felle, take-off and climb out. These five UCD cycle operating modes are defined by the redstence of standard power settings for rigived aircraft, so the modes represent an appropriate basis for estimating emissions. A schematic view of an UTO cycle is presented above. Not reft a condess during the UTO cycle.

Up to answ, aircraft emissions in Greece have been estimated using average emission factors (in kg/LFC) per aircraft type based on standard/typical LFC cycles in terms of thrust settings and time spent in the specific mode [2]. This work focuses on the culculation of virtuals engine-specific emission factors, neveloped for selected aircraft. The resolution are conspicted with the results of the simple methodology and the differences are discussed.

In conclusion *This issue for residents living parallel to the runways and in the flightpaths needs to be addressed appropriately*.

Extract from Oral hearing - 2006.

Volume 4 - Inspectors report - page 32.

Dr. Staines stated that it is the purpose of the EIS to show whether any health effects would occur. He stated that Health Monitoring such as that carried out by the RIVM (Dutch Environmental Health Agency) in the region of Schipol Airport entails two elements including detailed environmental monitors including noise, emissions and flight patterns and ongoing health studies of the populations. The programme has been built up gradually over time. Dr. Staines stated that in terms of the National Air Quality Standards the theory is that the levels are set below the level at which effects on human health are detectable. Emission levels are set at what can be achieved not at a level at which human health would be affected.

Mr. Stanley (Submission AA) stated that St. Margaret's is within the zone affected by the flight path during take-off/climb out and approach/landing and so will be the main location where aircraft emissions may impact on air quality beyond the site boundary.

What is the total LTO (in kg/LTO) for Dublin Airport for 2018 and 2019 when Dublin airport had 31.5 million passengers As stated above it is the projected National Emissions Inventories for Ireland has been used in this application. This includes CO2 emissions.

Extracts taken from ABP Oral Hearing 2006.

Questions to Planning Authority (Disc 1-05/10/06) Mr. Stanley stated that the airport and airlines are working to best international standards. The standards are an amalgam of opinions of various interested parties including the medical profession and aircraft manufacturers. With advancing technology aircraft become more efficient and pollution will decrease. Aircraft are less polluting than 20 years ago. Technology can only move at a certain rate. Every aircraft has to be registered and ensured that they are safe. By being safe they are less polluting. It does not pay to economise on maintenance grounds. He suggested that the WHO guidelines are taken into account in establishing the international standards.

Aviation Authority through Air Traffic Control. The operation of the runway is under the control of the DAA. Mr. Stanley stated that the Stakeholder's Committee could influence how the runways are used and issues relating to fumes/odours should be raised with same.

In conclusion. This issue for residents living parallel to the nurways and in the Hightyceths needs to be addressed againgnately.

Court from Oral heaving - 2006.

Volume A - Inspection report - page 32

In. Staines stated that It is the purpose of the BIS to show whether any health effects would occur. He stated that fleaith Monitoring such as that carried out by the RIVM (Dutch Environmental Health Agency) in the region of Schippi Airport entails two elements including detailed environmental monitors including noise, emissions and flight potterns and oncome health studies of the populations. The programme has been built up gradually over time. Dr. Staines stated that in terms of the National Air Quality Standards the theory is that the levels are set below the level at which effects on human health are detectable. Emission levels are set of twhat can be achieved not at a level at which human health would be affected the affects of set which human health would be affected the affected.

Mis. Stanley (Submission AA) stated that St. Margaret's is within the zone affurced by the flight path during take-off/climb out and approach/landing and so will be the main location where aircraft emissions may impact on air quality beyond the site boundary.

What is the total (10 (In leg/LTO) for Dublin Airport for 2018 and 2019 when Dublin airport had 31.5 million passengers. As stated above it is the projected National Emissions Inventories for Ireland has been used in this application. This includes CO2 notistions.

Extracts taken from AUP Omi Hearing 2006.

Guestions to Planning Authority (Disc. 1 = 05/10/06) Min Stanley stated that the airport and airflures are working to best international standards. The standards are an ampligam of opinions of various interested parties including the medical profession and aircraft memoriations of various interested parties including the medical profession and aircraft memoriations of decrease. After all various to be polluting than 30 years ago. Technology can only more at a corrain rate. Every aircraft has to the registered and ensured that they are safe. By name at a two various less colluting, it does not bey to economise on maintenance grounds. He suggested that they guidelines are taken into occount in establishing the international standards.

The appearant of the running expect that the appearant of the running is under that a the control of the following of the fol

He stated that the application of fines to the airline for deviations off the flight path does not benefit the community.

Air Quality - Page 35 of 60 Volume 4 of Inspectors reports

Prof. J. Heffron addressed the potential human health effects of air pollutants arising from aircraft emissions (submission AM). The relevant limit concentrations of benzene, carbon monoxide, nitrogen dioxide and PM10 are within the relevant limit concentrations for the protection of human health as set out in (a) Air Quality Standards Regulations 2002, S.I. No,271 of 2002 based on EU Air Quality Directive, Dublin 2002 and (b) Air Quality Guidelines for Europe, 2nd edition, WHO, Copenhagen 2000. The EU has been relatively conservative in terms of PM10 levels. The EU standards take into account the extra sensitivity of children and elderly and have a high safety factor built in.

Page 36 - Vol. 4 Inspectors report.

Mr. Bailey stated that noise has less compounding factors than air quality in terms of studies. Prof. Heffron answered questions on epidemeology vs. toxicological studies of airports. He confirmed that benzene is the most dangerous compound but is not an airport specific emission. Protection factors are used when extrapolating what is acceptable in terms of impact on human health and a conservative policy is adopted in setting standards. It is being reduced by 1 ug per year until it becomes nought in 2010 thereby giving a setting of 5ug/m 3. There is a 100% margin of tolerance included. As such a reading over 5ug/m 3 would not be a material concern as the protection factor set for levels of benzene are significantly below the level at which concerns in terms of human health would arise. Ms. Lawton noted that benzene levels were recorded at 5.18 at St. Margaret's in 2003, Mr. Bailey stated that the annual average of benzene is the correct measurement not a monthly measurement. Mr. Bailey stated that Portmarnock is downwind of the airport and would not generally be affected by pollutants from aircraft which would be at altitudes in excess of 200m over the area. In the instances of inversion where there are foggy conditions with light winds the mixing layer would be at c.150 metres which would prevent pollutants from aircraft at the higher altitude from descending. Ozone formation generally takes place considerable distance downwind of urban areas as have to have chemical processes going on.

Mr. O'Faircheallaigh stated that the operation on an individual day is controlled by the Irish Aviation Authority through Air Traffic Control. The operation of the runway is under the control of the DAA. Mr. Stanley stated that the Stakeholder's Committee could influence how the runways are used and issues relating to fumes/odours should be raised with same. He stated that the application of fines to the airline for deviations off the flight path does not benefit the community.

Air Quality - Page 35 of 60 Volume 4 of Inspectors reports

Prof. J. Heffron addressed the potential human health effects of air pollutants arising from aircraft emissions (submission AM). The relevant limit concentrations of benzene, carbon monoxide, nitrogen dioxide and PM10 are within the relevant limit concentrations for the protection of human health as set out in (a) Air Quality Standards Regulations 2002, S.I.

He stated that the application of flors to the sinfor for deviations off the flight pain door not benefit the community.

au Duality - Prepaid of 60 Valums A of this conform reports

Prof. 3. Helicon addressed the potential human health effects of air pollutants arising from aircraft emissions (submission AM). The relevant limit concentrations of benzene, carbon mor arite, nitrogen dioxide and PW10 are within their elevant limit concentrations for the profit of human health as set out in (a) Air Quality Standards Regulations 2002–3.1 No. 2.71 of 2002 based on EU Air Quality Directive, Oublin 2002 and (b) Air Quality Guidelines for Europe. 2nd edition, WHO, Copenhagen 2000. The EU has been relatively conservative in minns of PM10 levels. The EU standards take into account the extra sensitivity of children and effectly and have a high rafer. Inclor halft in.

Page 36 - Vol. 4 Inspectors report

Mr. Balley stated that noise has less compounding factors than air quality in turns of studies. Prof. Helth on answered nucstions on epidemeology vs. toxicological studies of aliques. He continued that beautive is the most dangerous compound but is not an author specific emission. Factor on factor, or used when excuapolating what is acceptable of specific emission. Factor on factor, or used when excuapolating what is acceptable of the continued to a support an acceptable of the continued to the second by 1 agree; year extil it becames encluded as such a readily given a return of height is. There is a 100% margin of tobroance encluded as such a readily of servence are usually below the level of which concerns in crant of height would arise. No suggestion to the level of which concerns in crant of height would arise. No Balley stated that Portmannock is downwind of the airport and would measurement. Wr. Balley stated that Portmannock is downwind of the airport and would not generally be differed by pollutarity from aircraft which would be at elittudes in excess of allegit winds the mains layer would be at c.150 metres which would prevent pollutarits from aircraft at the higher altitude from descending. Ocone formation generally takes place considerable distance downwind of urban areas as have to have chemical processes going on.

Mir. C.F. uncheallaigh stated that the operation on an individual day is controlled by the firsh Aviation Authority through Air Traffic Control. The operation of the minuses is under the control of the DAA. Mir. Stanley stated that the Stakeholder's Controltee rould influence how the turnways are used and respectively to furnes/outside that the angle and all the first times and that the angle attended the prince of the problem of the fight path does not benefit the community.

Alt Busilly - Page 55 of 80 Volume & of Impediencements

ment programment in the state of the state o

No,271 of 2002 based on EU Air Quality Directive, Dublin 2002 and (b) Air Quality Guidelines for Europe, 2nd edition, WHO, Copenhagen 2000. The EU has been relatively conservative in terms of PM10 levels. The EU standards take into account the extra sensitivity of children and elderly and have a high safety factor built in.

Page 36 - Vol. 4 Inspectors report.

Mr. Bailey stated that noise has less compounding factors than air quality in terms of studies. Prof. Heffron answered questions on epidemeology vs. toxicological studies of airports. He confirmed that benzene is the most dangerous compound but is not an airport specific emission. Protection factors are used when extrapolating what is acceptable in terms of impact on human health and a conservative policy is adopted in setting standards. It is being reduced by 1 ug per year until it becomes nought in 2010 thereby giving a setting of 5ug/m 3. There is a 100% margin of tolerance included. As such a reading over 5ug/m 3 would not be a material concern as the protection factor set for levels of benzene are significantly below the level at which concerns in terms of human health would arise. Ms. Lawton noted that benzene levels were recorded at 5.18 at St. Margaret's in 2003. Mr. Bailey stated that the annual average of benzene is the correct measurement not a monthly measurement. Mr. Bailey stated that Portmarnock is downwind of the airport and would not generally be affected by pollutants from aircraft which would be at altitudes in excess of 200m over the area. In the instances of inversion where there are foggy conditions with light winds the mixing layer would be at c.150 metres which would prevent pollutants from aircraft at the higher altitude from descending. Ozone formation generally takes place considerable distance downwind of urban areas as have to have chemical processes going on.

In Conclusion, the projections put forward based on the Atmosfair calculations, and data supplied by the airlines with proxy models used, and considering the variances that occur due to weather, verification of aircraft load details, the results are not acceptable to those most adversely affected, in this submission and are only projected.

Also the omittance of the Benzene levels which was a key issue in the Oral hearing in 2006, must now be addressed with levels validated for the receptor areas surrounding the runway and under the flightpaths. What are the levels at the receptors currently?

This should be supplied to the Planning Authority for completeness sake, in the full interest of the health and welfare and should be validated independently.

The lack of information, raises concerns for those adversely affected by approach to change the night time restrictions while this is not permitted under the Planning conditions as set out by ABP in August 2007.

The night time impact of Benzene and other harmful air pollutants, CO2 and PM2.5 and pm10 must be fully explored.

No.271 of 2002 hand on EU Air Quality Directive, Pushs 2002 and (b) Air Quality Standlings "or Europe, 2nd edition, WHS, Copenhagen 2000. The critical beautierly conservative in terms of PMED levels. The EU standards take into account the victor sensitivity of children and olderly and have a high safety factor built in

Page 35 - Vol. & Inspect on report.

Note Bailey stated that noise has less compatinding lactors than air diplicy in terms of studies. Profesive from answered quest one on epidemeology vs. toxicological studies of airports. The conformed that benedon is the most dangerous compound but is not ensirped airports. The conformed that benedon is an exclusive whose is are profesion, specific emission. Protection factors are used whose collection are proposed in security standards. It wieselve conforms are profesionally and are retrieved to the entry school of the profesional of the security of the entry short of the entry short of the entry short of the entry of th

in Conclusion, the projections put forward based on the Armostair cutculations, and data supplied by the airlines with grown models used, and considering the variances that occur day to weather, ventication of aircraft load details, the results are not neceptable to those most adversely affected, in this submission and are only projected.

Also the unistance of the Benzene levels which was a key issue in the Oral hearing in 2006, must now be addressed with levels validated for the receptor areas surrounding the runway and under the flightpaths. What are the levels at the receptors currently?

This should be supplied to the Planning Authority for completeness sake, in the full interest of the health and welfare, and should be validated independently.

The lack of information, raises concerns for those adversely affected by approach to change the night time restrictions while this is not permitted under the Planning condition as set out by ARP in August 2007.

The right time impact of Bonzene and other harmful air pollutants, CO2 and PM2.5 Aug ports) must be fully evaluated.

No,271 of 2002 based on EU Air Quality Directive, Dublin 2002 and (b) Air Quality Guidelines for Europe, 2nd edition, WHO, Copenhagen 2000. The EU has been relatively conservative in terms of PM10 levels. The EU standards take into account the extra sensitivity of children and elderly and have a high safety factor built in.

Page 36 – Vol. 4 Inspectors report.

Mr. Bailey stated that noise has less compounding factors than air quality in terms of studies. Prof. Heffron answered questions on epidemeology vs. toxicological studies of airports. He confirmed that benzene is the most dangerous compound but is not an airport specific emission. Protection factors are used when extrapolating what is acceptable in terms of impact on human health and a conservative policy is adopted in setting standards. It is being reduced by 1 ug per year until it becomes nought in 2010 thereby giving a setting of 5ug/m 3. There is a 100% margin of tolerance included. As such a reading over 5ug/m 3. would not be a material concern as the protection factor set for levels of benzene are significantly below the level at which concerns in terms of human health would arise. Ms. Lawton noted that benzene levels were recorded at 5.18 at St. Margaret's in 2003. Mr. Bailey stated that the annual average of benzene is the correct measurement not a monthly measurement. Mr. Bailey stated that Portmarnock is downwind of the airport and would not generally be affected by pollutants from aircraft which would be at altitudes in excess of 200m over the area. In the instances of inversion where there are foggy conditions with light winds the mixing layer would be at c.150 metres which would prevent pollutants from aircraft at the higher altitude from descending. Ozone formation generally takes place considerable distance downwind of urban areas as have to have chemical processes going on.

In Conclusion, the projections put forward based on the Atmosfair calculations, and data supplied by the airlines with proxy models used, and considering the variances that occur due to weather, verification of aircraft load details, the results are not acceptable to those most adversely affected, in this submission and are only projected.

Also the omittance of the Benzene levels which was a key issue in the Oral hearing in 2006, must now be addressed with levels validated for the receptor areas surrounding the runway and under the flightpaths. What are the levels at the receptors currently?

This should be supplied to the Planning Authority for completeness sake, in the full interest of the health and welfare and should be validated independently.

The lack of information, raises concerns for those adversely affected by approach to change the night time restrictions while this is not permitted under the Planning conditions as set out by ABP in August 2007.

The night time impact of Benzene and other harmful air pollutants, CO2 and PM2.5 and pm10 must be fully explored.

teo 273 of 2002 based on EU Air Quality Directive, Or blur 2002 and (b) Air Quality 6-liquilines for Surgery 2nd callifor, AFFO Copperhagen 2000, The EU has been relatively conservative in came of PMIO levels. The EU standards take into account the extra sensitivity of children and elderly and have a right safety factor built in

Plant 36 - Vol. 4 Inspectors report

Mit Bailoy stated that noise has lets compounding factors than alr quality in terms of studies. Prof. Halfron answered questions on epidemeology vs. Coacological studies of augocits. He confirmed that because is the most dangerous compound but is not an airport specific enjasion. Protection factors are used when extrapolating what is acceptable in terms of impact on human remith and a coasonvalive policy is adopted in satting standards. It is being reduced by ung compliant until the owners mought in 2010 thereby giving a certing of sug/m 3. There is a 100% are just in other conducted. As such a reading over 5 (g/m 3 vertified to a material concern as the protection factor set for levels of benzene are significantly below the level of which concerns in terms of human health would arise. Measing it has been referred at 5.18 at St. Margaret is in 2003. Mn.

Caviton noted that benzene levels were recorded at 5.18 at St. Margaret is in 2003. Mn.

Bailey stated that benzene levels were recorded at 5.18 at St. Margaret is in amountly measurement. Mn. Isaley stated that Portnament is to which would be at althoughts in excepts of processes in the instance of the instance of human areas are loggy conditions with another being making layer would be at c.150 metres which would prevent pollutarits from anceralt at the highest attitude from descending. Ozone formation generally takes place considerable distance downwind of orban areas as have to have chemical processes going on.

In Conclusion, the projections put forward based on the Atmosfar calculations, and data supplied by the airlines with proxy moduls, used, and considering the sumances that occur due to whather, weithertion of aircraft load details. The results are not acceptable to those troost adversely affected, in this submission and are only projected.

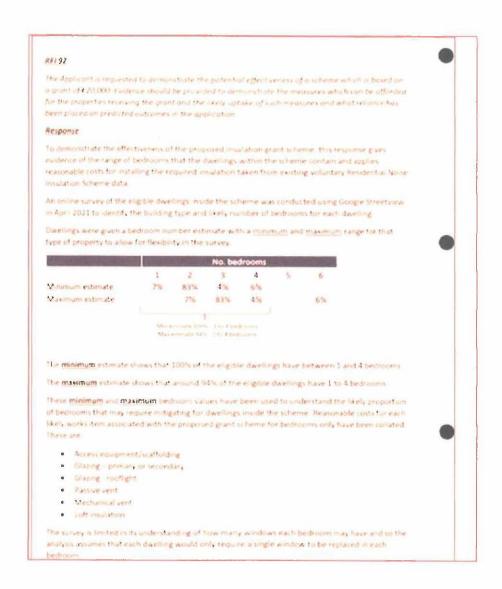
Also the omittance of the Benzene levels which was a key issue in the Oral heading in 2006. Thust now be addressed with levels validated for the receptor areas surrounding the runway and under the flightpaths. What are the levels at the receptors currently?

Illis Should be signified to MetPlerning Authanty for ear pletenes; sake, to the follonterest of the bealth and welfare and should be valuated heliapendently.

The lack of Information , dises concerns for trass advarsely affected by approach to change the hight time restrictions while this is not purertial under the Planning conditions as set out by 189 in aug. 3, 2007.

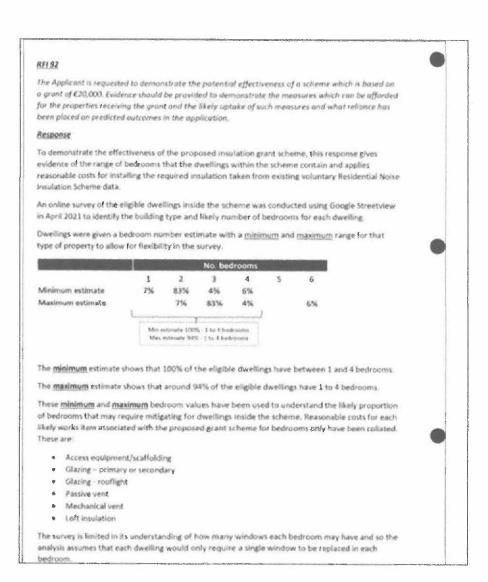
The night time impact of Europie and other harmful ampointants . 402 and PM2 Land pm.10 must be filty exports:

This chapter should be viewed in conjunction with the Flight Path Data and the impact of health and the proposed AQS as part of the sound insulation scheme put forward by daa and FCC.



This chapter should be viewed in conjunction with the Slight Fath Data and the impact of health, and the proposed, AQS as part of the sound inselation scheme put forward by das and CCC.

This chapter should be viewed in conjunction with the Flight Path Data and the impact of health and the proposed AQS as part of the sound insulation scheme put forward by daa and FCC.



This chapter should be viewed in conjunction with the Hight Fath Data and the impact of halitin and the proposed AQS as pair of the sound insulation achemic put forward by due and ECC.

Loft insulation

The survey is limited in its understanding of how many windows each bedroom may have and so the analysis assumes that each dwelling would only require a single window to be replaced in each bedroom.

The analysis shows that it is not unreasonable to state that a typical one to three bedroom house could be insulated with a £20,000 grant using high specification acoustically-rated glazing to replace existing units (timber or PVC) in bedrooms. Using the stock data, this shows that the majority of

dwellings inside the scheme could afford to insulate a single-window and install ventilation in every bedroom.

Figures show that 64% of eligible households are currently participating in the voluntary Residential Noise Insulation Scheme, with a further 17% opting to defer works until the biennial reviews for various reasons such as having recently undertaken insulation works themselves, timing of works unsuitable, wish to undertake other structural works before new insulation, purchase/sale of the property incomplete, legal title of house in dispute, awaiting result of planning application]. 17% of households did not participate because of ongoing legal action at the time, and their later request to extend the opt in deadline could not be accommodated); 2% of households have been purchased by day and did not require works).

if we assume that the 17% who sought the opt-in extension wish to have works done as part of the biennial reviews, this indicates that participation in the overall scheme will be 100%.

The proposed grant scheme once fully developed will offer a streamlined approach to granting the funds for insulation works directly to the homeowner should they choose to participate in the scheme. While participation rates may not be as high as the expected 100% for the existing scheme it is hoped that there would be significant participation.

To focus on the wording and proposal of 20,000 grant.

The analysis shows that it is not unreasonable to state that a typical one to three bedroom house could be insulated with a €20,000 grant using high specification acoustically-rated glazing to replace existing units (timber or PVC) in bedrooms. Using the stock data, this shows that the majority of

dwellings inside the scheme could afford to insulate a single window and install ventilation in every bedroom.

This is an assumed cost once again and the specifics of a scheme are not available. It is envisaged that daa will have a set of contractors selected, and the contractors will be responsible for the works and results. The applicant only refers to bedrooms, our living rooms and kitchens are areas of activity for reading, working etc. particularly with the

To focus on the wording and proposal of 20,000 grant.

This is no assumed made care again artifice, specific, of a subjection and auditibles are in a subject of comments as a carefact, and the marticage with have a said to comments a search of the fact of a water and subject the grandition of the fact of a contract of the fact of the f

Loft insulation

The survey is limited in its understanding of how many windows each bedroom may have and so the analysis assumes that each dwelling would only require a single window to be replaced in each bedroom.

The analysis shows that it is not unreasonable to state that a typical one to three bedroom house could be insulated with a €20,000 grant using high specification acoustically-rated glazing to replace existing units (timber or PVC) in bedrooms. Using the stock data, this shows that the majority of

vt Classification Class 1 - General

dwellings inside the scheme could afford to insulate a single window and install ventilation in every bedroom.

Figures show that 64% of eligible households are currently participating in the voluntary Residential Noise Insulation Scheme, with a further 17% opting to defer works until the biennial reviews for various reasons such as having recently undertaken insulation works themselves, timing of works unsultable, wish to undertake other structural works before new insulation, purchase/sale of the property incomplete, legal title of house in dispute, awaiting result of planning application). 17% of households did not participate because of ongoing legal action at the time, and their later request to extend the opt-in deadline could not be accommodated); 2% of households have been purchased by daa and did not require works).

if we assume that the 17% who sought the opt-in extension wish to have works done as part of the biennial reviews, this indicates that participation in the overall scheme will be 100%.

The proposed grant scheme once fully developed will offer a streamlined approach to granting the funds for insulation works directly to the homeowner should they choose to participate in the scheme. While participation rates may not be as high as the expected 100% for the existing scheme it is hoped that there would be significant participation.

To focus on the wording and proposal of 20,000 grant.

The analysis shows that it is not unreasonable to state that a typical one to three bedroom house could be insulated with a €20,000 grant using high specification acoustically-rated glazing to replace existing units (timber or PVC) in bedrooms. Using the stock data, this shows that the majority of

dwellings inside the scheme could afford to insulate a single window and install ventilation in every bedroom.

This is an assumed cost once again and the specifics of a scheme are not available. It is envisaged that daa will have a set of contractors selected, and the contractors will be responsible for the works and results. The applicant only refers to bedrooms, our living rooms and kitchens are areas of activity for reading, working etc. particularly with the

eminate Sampanja jah jam jajoja, lingsaka izili (Mais ed esplantia) kun in eden systekting sambalang selekti. Jangsak ayes shirting si kun ayang kun ayan sambalan kulturi dan dan kun ing alam sambalang kun sambalan kun k

A continue of the property of the property of the first terms of the property of the proper

and grown a field for the second of the Agricology and the Agricology

The later of the l

The first state of the first state of the control of the state of the control of the state of th

To focus on the wording and proposal of 20,000 grant.

The state of the state of the second of the second of the state of the

replace in ...

This is an assumed cost case again and the specifies of a sufreme are not praffable. It is envisaged that dea will have a set of contractors salected, and the contractors will be re-possible for the work: and security. The applicant only return to bear occurs, our living re-possible for the work: and security. The applicant only refers to bear coloring, our living reports of actions of actions lost reading, working, etc. particularly went to

changes Covid has brought with working from home. This is aspirational and needs to be specified in full. This is in addition to the VDIS, so that than means that those with no insulation at present, who have deferred or still waiting, will have up to an additional amount of €20,000 added to the cost for their home to insulate every room, window, door and velux roof window. The scheme is very vague.

This scheme should be an additional to the current conditions when the North Runway opens leaving no flights on North runway from 11pm to 0700 am as per the conditions.

The scheme aspires up to 10db of a reduction in aircraft noise. When one looks at the longitudinal data received from daa in October 2018, this insulation will be considered useless to achieve a noise decibel level at night of 40db and 45db during the day.

4.4. WHO Guideline Values

The WHO guideline values in Table 4.1 are organized according to specific environments. When multiple adverse health effects are identified for a given environment, the guideline values are set at the level of the lowest adverse health effect (the critical health effect). An adverse health effect of noise refers to any temporary or long-term deterioration in physical, psychological or social functioning that is associated with noise exposure. The guideline values represent the sound pressure levels that affect the most exposed receiver in the listed environment.

The time base for LAcq for "daytime" and "night-time" is 16 h and 8 h, respectively. No separate time base is given for evenings alone, but typically, guideline value should be 5-10 dB lower than for a 12 h daytime period. Other time bases are recommended for schools, preschools and playgrounds, depending on activity.

The available knowledge of the adverse effects of noise on health is sufficient to propose guideline values for community noise for the following:

- a. Annoyance
- b. Speech intelligibility and communication interference.
- e. Disturbance of information extraction.
- d. Sleep disturbance.
- e. Hearing impairment

Following the grant of planning permission in 2007 and recommencement of the construction programme in December 2016, homes were identified within the 63 – 69db contour (Laeq) from the Oral hearing.

The Statement of Need completed a survey by Daa's Noise Consultants Anderson Acoustics.

changes Covid has brought with working from home. This is expirational and reads to be appearable in This is in addition to the Vitts is a that than means that those with no insulation at present, who have deferred or still waiting, will have up to an additional amount of £20,000 added to the cost for their home to insulate every room, window, door and volus, not window. The scheme is very vague.

This stricting should be an additional to the current conditions when the North Runway opens leaving no flights on North runway from 11pm to 1700 am as por the conditions.

The scheme aspires up to 10ab at a reduction in arrown noise When and looks at the tangitudinal data received from data in October 2018, this insulation will be considered unless to unitary a noise decided level at night of 40db and 45db during the day.

Following the grant of planning permission in 2007 and recommencement of the construction programme in December 2016, homes were identified within the 63—69db contour (Laeq) from the Oral hearing.

The Statement of Need completed a survey by Daa's Noise Consultants Anderson Acoustics.

The aircraft noise measurement – externally were measured under Laeq16hr (from INM Intergrated Noise Model) 2022 summer noise levels at dwellings.

Together with the external noise level from INM these have been used to estimate the overall sound insulation performance of the building envelope and the internal aircraft noise level using the method set out in BS EN 12354-3:2000 Upgrade measures have been applied with estimations of the subsequent improvement in sound insulation performance.

Where possible the daa Noise Insulation programme aims to achieve a 5 to 10 db improvement in sound insulation performance and to meet the World Health Organisation and BS8233:2014 recommended daytime internal ambient noise levels of 35to 40dB laeq16h within dwellings, depending on room type.

Anderson Acoustics (Contractor) for the applicant carried out a statement of need, for a home at Dunbro Lane, giving a reading of 62.6dB – just 0.4 below the 63dB. – externally.

At Dunbro, a mobile NMT conducted a test and reported 33% of aircraft at 72dB Lamax between 22July to 7th August at Dunbro Lane in 2019. The average was 60-63dB laeq.

Note: The year 2018 was chosen for the EIAR and this application as a benchmark to project, analysis and assess future data for the INM software to produce assumptions to

The aircraft naise measurement — externally were measured under Laeq16hr (from INNI Intergrated Naise Madel) 2022 summer noise levels at dwellings.

Together with the external noise level from INM these have been used to estimate the overall sound insulation performance of the building envelope and the internal pircroft naise level using the method set out in BS EN 12354-3:2000 Upgrade measures have been applied with estimations of the subsequent improvement in sound insulation performance.

Where possible the doa Noise Insulation programme aims to achieve a 5 to 10 db improvement in sound insulation performance and to meet the World Health Organisation and BS8233:2014 recommended daytime internal ambient noise levels of 35to 40dB lacq16h within dwellings, depending on room type

Anderson Acoustics (Contractor) for the applicant carried out a statement of need, for a home at Dunbro Lane, giving a reading of 62.6dB – just 0.4 below the 63dB. – externally.

At Dunbro, a mobile NMT conducted a test and reported 33% of aircraft at 72d8 Lamax between 22July to 7th August at Dunbro Lane in 2019. The average was 60-63d8 laeq.

Note: The year 2018 was chosen for the EIAR and this application as a benchmark to project, analysis and assess future data for the INM software to produce assumptions to

work with for the purpose of North Runway. Why was 2019 not chosen, as more aircraft activity was recorded at Dublin Airport in terms of ATMs. was 2018.

Dunbro was initially not included in the VDIS and only added to the programme, following pressure from the residents originally left out of the programme. Clearly the 63dB contour included the area between the two runways following the grant of permission in 2007.

One household is awaiting a real time up to date noise measurement when the north runway becomes operational as the current VDIS is not suitable.

In 2006, Searson Associates, (Acoustic Engineer) for SMCRG using the same equipment as DAA in Dunbro in July-August 2019 conducted a noise measurement at one of the homes.

The readings revealed the Laf max meaurements that gave the true result.

This was taken prior to the Oral hearing using a Bruel & Kjaer real time analyser.

So the daa's data of real noise level is questionable and can be argued with as depending on interpretation of dBs and use of different noise metrics.

So taking into consideration the readings from 2006, with the South Runway only in operation to the west, can daa

work with for the purpose of North Runway. Why was 2019 not chosen, as more aircraft activity was recorded at Dublin Airport in terms of ATMs, was 2018.

Dunbro was initially not included in the VDIS and only added to the programme, following pressure from the residents originally left out of the programme. Clearly the 63dB contour included the area between the two runways following the grant of permission in 2007.

One household is awaiting a real time up to date noise measurement when the north runway becomes operational as the current VDIS is not suitable.

In 2006, Searson Associates, (Acoustic Engineer) for SMCRG using the same equipment as DAA in Dunbro in July-August 2019 conducted a noise measurement at one of the homes. The readings revealed the Luf max meaurements that gave the true result.

This was taken prior to the Oral hearing using a Bruel & Kjaer real time analyser.

So the dea's data of real noise level is questionable—and cen be argued with as depending on interpretation of dBs—and use of different noise metrics.

So taking into consideration the readings from 2006, with the South Runway, only in operation to the west, can dea stand over their noise insulation programme, in its current form and specification for Dunbro, and up to 3000 ft on the flight path.

Once the NAO comes into effect and we are told it is now in place, DAA no longer are responsible for the Aircraft Noise, as this will be the responsibility of ANCA under the EU598/2014 that is not specific, and open to interpretation by Dublin Airport to set their barometer to massage the figures for approval by ICAO and the END

The level of noise on the runways and flightpaths is now the responsibility of ATC and IAA – so DAA walk away.

This have been strategically formulated and the process arrived at today is considered trampling on those considered collateral damage.

VDPS - "Voluntary Home Buy out Scheme"

The extreme mitigation measure of offering a Home Buy Out Scheme to those adversely affected by 10L – 28R will be part of the NAO formulated with daa and ANCA. The Inspector was fully aware of the compromised and check-mate position those under the flightpath would find themselves in. The Board on receiving additional information did grant the

stand over their noise insulation programme, in its current form and specification for Dunbro, and up to 3000 ft on the flight path.

Once the NAO comes into effect and we are told it is now in place, DAA no longer are responsible for the Aircraft Noise, as this will be the responsibility of ANCA under the EUS98/2014 that is not specific, and open to interpretation by Dublin Airport to set their barometer to massage the figures for approval by ICAO and the END

The level of noise on the runways and flightpaths is now the responsibility of ATC and IAA – so DAA walk away.

This have been strategically formulated and the process arrived at today is considered trampling on those considered collateral damage.

VDPS - "Voluntary Home Buy out Scheme"

The extreme mitigation measure of offering a Home Buy Out Scheme to those adversely affected by 10L - 28R will be part of the NAO formulated with dat and ANCA. The inspector was fully aware of the compromised and check-mate position those under the flightpath would find themselves in. The Board on receiving additional information did grant the

planning for 10L-28R on the basis of restricted night flights to give a respite of 8 hours for sleep and rest and also allowing for a Home purchases buyout scheme which was to be totally voluntary.

We note in the analysis of the noise impact in the various aircraft noise metrics used, understate the impact - the effect is not significant (as daa are using the day time data, as if the runway is operating and extending it to night time. — based on the operation of North Runway.) The Lafmax and SEL are used very sparingly with 15 different noise metrics used in different formats and scenarios. So the impact of night time aircraft disturbance is being minimised.

9. Prior to commencement of development, a scheme for the voluntary purchase of dwellings shall be submitted to and agreed in writing by the planning authority. The scheme shall include all dwellings predicted to fall within the contour of 69 dB LAcq is been within twelve months of the planned opening of the runway for use. Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 months from the commencement of use of the runway.

Reason: In the interest of residential amenity.

The VDPS was crafted by DAA and FCC – without the real and meaningful engagement of those whose homes were blighted in the flightpaths of the North Runway.

The VDPS was presented at a special CLG meeting in November 2016, signed off December 2016, the same day the pre-commencement works started on North Runway.

planning for 101-28R on the basis of restricted night flights to give a respite of 8 hours for sleep and rest and also allowing for a Home purchases buyout scheme which was to be totally voluntary.

We note in the analysis of the noise impact in the various aircraft noise metrics used, understate the impact - the effect is not significant (as daa are using the day time data as if the runway is operating and extending it to night time, based on the operation of North Runway.) The Lafrax and SEL are used very sparingly with 15 different noise metrics used in different formats and scenarios. So the impact of night time aircraft disturbance is being minimised.



The VDPS was crafted by DAA and FCC - without the real and meaningful engagement of those whose homes were blighted in the flightpaths of the North Runway.

The VDPS was presented at a special CLG meeting in November 2016, the same day the pre-commencement works started on North Runway.

The Applicant has left this VDPS unchanged, apart from extending the period from one year to three years to accept their offer, from the date of operation of the runway. The additional €20,000 added to Insulation is a PR exercise and the public think it is a cash incentive, which distorts the truth to the benefit of DAA, where the Public are not aware of the true facts and health impacts. This may be the additional ANCA requested – as a further mitigation measure. But this will do nothing for those trapped in the flight path area.

The Daa plan to lodge an application for expanding Dublin Airport from 32mppa to 40mppa in 2025 - 3 years from the opening of the runway.

During that time the flight path residents will be subjected to 16 hour ATMs on both runways with the current conditions adhered to and if permitted to breach the night time conditions, 24 hour flights on both runways with the "NQS" that we cannot translate into ATMs.

The Applicant has left this VDPS unchanged, apart from extending the period from one year to three years to accept their offer, from the date of operation of the runway. The additional £20,000 added to insulation is a PR exercise and the public think it is a cash incentive, which distorts the truth to the benefit of DAA, where the Public are not aware of the true facts and health impacts. This may be the additional ANCA requested—as a further mitigation measure. But this will do nothing for those trapped in the flight path area.

The Das plan to lodge an application for expanding Dublin Airport from 32mppa to 40mppa in 2025 - 3 years from the opening of the runway.

During that time the flight path residents will be subjected to 16 hour ATMs on both runways with the current conditions adhered to and if permitted to breach the night time conditions, 24 hour flights on both runways with the "NQ5" that we cannot translate into ATMs.

Condition 9 also states:

Prior to the commencement of operation of the runway, an offer of purchase in accordance with the agreed scheme shall have been made to all dwellings coming within the scope of the scheme and such offer shall remain open for a period of 12 months from the commencement of use of the runway.

Reason: In the interest of residential amenity.

It is important to highlight, the runway is now open for full operation since 24th August last, and the daa have failed to engage with those adversely affected in any meaningful way. The daa scheme is totally rejected as it does not include the loss of a home, an identity, our deeply rooted past, and aspirations for the future. The health impacts of this causing huge distress, for fight path residents faced with a gun to their heads – to surrender their homes and disappear, like the 8 families forced from Barberstown and Kington in the 1960-1970s or live in a noise vacuum of aircraft noise.

Pondering on the words of Dalton Philips – Chief Executive of daa –

Whether it is one household or 200 households under the flightpath, I am really sorry for them, I really am, but that is a matter for them"

Condition 9 also states:

Unor to the commencement of operation of the may by, an offer of numbers in occanion with the agreed scheme shall have been made to all dwellings coming within the scope or the scheme and such offer shall remain open for a pence of 12 months from me commencement of use at the mowey.

Causer in the interest of residential amonth,

It is important to highlight, the runway is now open for full operation since 24th August last, and the daa have failed to engage with those adversely affected in any meaningful way. The daa scheme is totally rejected as it does not include the loss of a home, an identity, our deeply rooted past, and aspirations for the future. The health impacts of this causing huge distress, for fight path residents faced with a gun to their heads — to surrender their homes and disappear, like the 8 families forced from Barberstown and Kington in the 1960-1970s or live in a noise vacuum of aircraft noise.

Pondering on the words of Dalton Philips – Chief Executive of daa –

Vetresher in a om statistere of 200 haussholds under me flightnish, kam really samefrir Them, Freully inn, but "those a matter for them" Speaking at a Oireachtas Joint Committee on Health on Wednesday 6th October, the Health Minister, Stephen Donnolly, stated, "people do not resist change, they resist loss."

The loss in terms of detrimental significant health and well being is being considered as collateral damage, by daa who are fully aware of the significant impact, for a small number of the Fingal citizens, too small to matter, to Dublin Airport, in this EIAR.

Vortex Impact

- 13.3.37 The other potential effect from airborne aircraft vibration is vortex damage to buildings.
- 3.3.38 Aircraft in flight creates vortices, circulating currents of air that are shed from the aircraft wings. For the most part, these vortices are dissipated by the effects of the wind and atmospheric turbulence before they reach the ground and, whilst they may more often be heard after an aircraft has passed, they seldom have any physical impact at ground level. Occasionally, however, vortices may persist long enough to make contact with buildings underneath the flight path. In extreme cases, the variation in pressure within these vortices can cause some damage to roofs if tiles or slates are not sufficiently firmly secured. In practice, such events may be encountered due to the passage of larger wide-bodied jets which create the largest vortices and during landing when aircraft are relatively close to the ground.
- 13.3.39 The issue of wake vortex damage was considered in some detail in the 2004 EIS²⁸ that supported the application for the permitted North Runway. The previous EIS was based on an assumption of 348,358 movements per annum, significantly higher than the number now envisaged in 2025 for the proposed Relevant Action which is 236,000 movements per annum. In granting permission for North Runway under those assumptions, the wake vortex impacts of that number of operations was evidently.

Chapter 14 gives details of another impact from airborne aircraft – vortex damage to buildings Roof tiles or slates may be damaged due to the passage of larger wide-bodied jets which create the largest vortices and during landing when aircraft is relatively close to the ground.

The noise level of 97dB C max occurring on average at least once over 24 hour day over the year has been taken as a threshold for potential significance of vibration effects due to airborne aircraft events.

This needs to be tested in real time, as the baseline threshold again is very high indeed and exceeding what is expected in DB levels take off or approach to North Runway.

Speaking at a Dissibitas Joint Committee on Nearth on Wednesday 6th October, the Health Michigan, Stephon Donn offy, stated , " people do not resist change, they resist loss."

The loss in terms of detrimental significant health and well being it being considered as collaboratidamage, by dea who are fully aware of the significant impact. For a small number of the Tingal citizens, too small formatter, no Dublin Airport, in this EIAR.

Vortex impact

agricultural design work regions a profession for not behave the second of the potential posterior. We first the

and the complete of an appropriate of the property of the property of the control of the property of the control of the contro

graph meaning that had state and in later on an in-malarity management of the animal order of the control of th

Chapter 14 gives details of another impact from airbome arcraft - vartex dantage to buildings. Roof tiles or slates, may be damaged due to the passage of larger wide bodied jots which create the largest vortices and during landing when aircraft is relatively, close to the ground.

The noise level of 97dB C max occurring on average at least once over 24 hour day over the year has been taken as a threshold for potential significance of vibration effects due to althorne arcraft events.

This needs to be tested in roal linte, as the baseline threshold again is very high indeed and cocceding what is expected in DB levels take off or approach to North Runway.



The potential risk of vortex damage is very real. What will be the process, to report and make application in respect of damage caused by aircraft taking off and landing close to homes in that area to DAA - As this has been identified as a potential risk, provision must be made. There are a number of homes, close to the end of the runway.

arportwatch

The potential nsl. of vortex damage is very real. What will be the process, to report and make amplication in respect of correspondenced by asserting of and senting close to have a to that area to DAM - As this has been identified as a potential risk, provision may be used. Then any an animalist of human colours of the part of the provision may be suited.

How the damage is caused:

On a clear day it is possible to see the path of an aircraft high in the sky, travelling to some far off destination. The path is clearly marked by a vapour trail that has a defined width, and remains in the sky for a long period after the aircraft has passed. The vapour trail is technically known as an aircraft wake vortices. At many hundreds of miles per hour, the strength of the vortices generated by the wings and fuselage cutting through the air and added too by the thrust from the jet engines; are enormous



The disturbance generates spiralling cones of air (the vortices), much like a tornado. The force of the vortices takes a long time to dissipate as there is little in the upper atmosphere to slow it down.



Closer to the ground large aircraft travel much slower, and the atmosphere is much thicker, so the vortices that are generated are less powerful and dissipates quicker. The most critical period is when a large aircraft is coming into land, when it is common for the aircraft wake vortex to reach the ground. The force of the vortex can suck tiles or slates off the roofs close to the flight path.



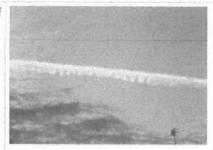
The main risk factors

The risks of being affected by an aircraft wake vortices can be assessed by looking at various know factors

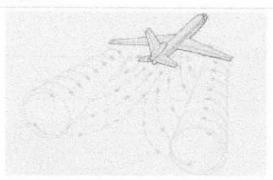
 Is the location of the building under the flight path into a major airport or military air base? The flight path can be up to 10 degrees either side of the centre line and up to 6Km from the touchdown point

How the damage is caused:

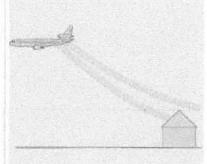
On a clear day it is possible to see the path of an aircraft high in the sky, travelling to some far off destination. The path is clearly marked by a vapour trail that has a defined width, and remains in the sky for a long period after the aircraft has passed. The vapour trail is technically known as an aircraft wake vortices. At many hundreds of miles per hour, the strength of the vortices generated by the wings and fuselage cutting through the air, and added too by the thrust from the jet engines, are enormous.



The disturbance generates spiralling cones of air (the vortices), much like a tornado. The force of the vortices takes a long time to dissipate as there is little in the upper atmosphere to slow it down.



Closer to the ground large aircraft travel much slower, and the atmosphere is much thicker, so the vortices that are generated are less powerful and dissipates quicker. The most critical period is when a large aircraft is coming into land, when it is common for the aircraft wake vortex to reach the ground. The force of the vortex can suck tiles or slates off the roofs close to the flight path.



The main risk factors

The risks of being affected by an aircraft wake vortices can be assessed by looking at various know factors

 Is the location of the building under the flight path into a major airport or military air base? The flight path can be up to 10 degrees either side of the centre line and up to 6Km from the touchdown point.

BROWN BOOK OF THE RESIDENCE



the property of the property o

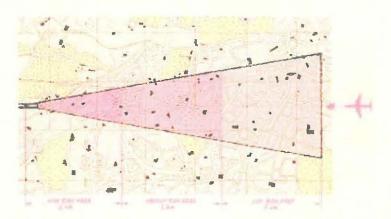
aconcitability many wars.

green all the control of the explicit region for the region of state of the control of the contr

a figure in the second of the properties of the figure of the second of the second

The risks of being affected by an aircraft wake vortices can be assessed by looking at various know factors

 Is the location of the building under the flight path into a major airport or military air base? The flight path can be up to 10 degrees either side of the centre line and up to 6Km from the touchdown point



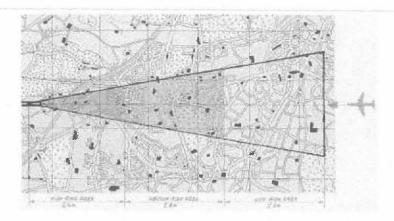
- The direction of landing. More damage is created by aircraft coming in to land than taking off, due to the shallow rate of decent, relative to the steep rate of climb when taking off. Coming in to land the aircraft are lower beyond the end of the runway
- The size and weight of the aircraft and the speed at which they land can make a big difference. It is the widebodied aircraft that record the most strikes, as there are more surfaces on the aircraft to generate the vortices.



The weather conditions have a major effect. Windy and wet weather breaks
up the structure of a vortex quicker than still clear conditions.

The risks of being affected by an aircraft wake vortices can be assessed by looking at various know factors

 Is the location of the building under the flight path into a major airport or military air base? The flight path can be up to 10 degrees either side of the centre line and up to 6Km from the touchdown point.



- The direction of landing. More damage is created by aircraft coming in to land than taking off, due to the shallow rate of decent, relative to the steep rate of climb when taking off. Coming in to land the aircraft are lower beyond the end of the runway
- The size and weight of the aircraft, and the speed at which they land can make a big difference. It is the widebodied aircraft that record the most strikes, as there are more surfaces on the aircraft to generate the vortices.

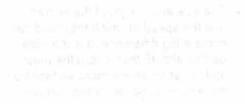


 The weather conditions have a major effect. Windy and wet weather breaks up the structure of a vortex quicker than still clear conditions. The Property of Control of Street and Street and Control of the Control of the Street and Control of the Contro

In the Society of Ministry of March Indian property and the control of March Indian Control of March Indian Property of March Indian



In a most constitute of the property of the prope





The conflict conditions are investigated in the conflict of th

Vortex strikes

Unlike hurricane force winds, which affect the perimeters of a roof (especially the ridge and verge), aircraft wake vertices damage occurs in the centre of a roof slope as the edges of the roof break up the vortices rather than help it. The average vortex is approx 500mm wide, will travel at about 5 Knots, and last for approx. 3 minutes in clear air. Once it comes into contact with a roof, the vortices can exert their total force of up to -1200N/m² on just one or two slates or tiles for a fraction of a second, before they break up and loses their energy. If the tiles or slates are not fixed securely, the sucking and twisting action of the vortices can lift them out of place.

Fixing specification

To resist the force of the vortices it is essential that the tiles and slates can not lift at the tail of the tile or slate, and can not rotate. This can be achieved with tiles by being head nailed to the batten and tail clipped with a rigid clip. The smaller the tiles the more fixing can be installed per square metre of roof. Plain tiles should be fixed with either ring shank nails with a thick strong nail head or screwed. For double lap slate, centre nailing with ring shank nails should be adequate. Roofs clad with metal sheeting or built up systems do not appear to be vulnerable to aircraft wake vortices damage as the small footprint of a vortex relative to the large surface area of the panel will allow the load to spread to a greater number of fixings.

Program of repairs

The existing roofs that are under the flight path into major UK airports, starting with London Heathrow, are likely to be subject to a planned or programmed roof replacement scheme. However for all new buildings under a flight path it is the responsibility of the designer/ specifier to ensure the correct fixing specification is used to ensure no roof damage is caused by the effect aircraft wake vortices. In most instances the airport authority will be able to advise if the size of aircraft using the airport is an issue, and the exact line of the flight paths. With this information, the assistance of the roof tile or slate manufacturer should next be sought to determine the correct fixing specification for the roof.

This potential risk of damage to our homes must be assessed fully and residents assured of a planned or programmed roof replacement scheme for North Runway.

A comment of the same

-9-

Forth Same State of the Persons

eracin so included

This protection programmed rept replacement of least for between stronger and residence councid or a least form

Vortex strikes

Unlike hurricane force winds, which affect the perimeters of a roof (especially the ridge and verge), aircraft wake vortices damage occurs in the centre of a roof slope, as the edges of the roof break up the vortices rather than help it. The average vortex is approx. 500mm wide, will travel at about 5 Knots, and last for approx. 3 minutes in clear air. Once it comes into contact with a roof, the vortices can exert their total force of up to -1200N/m² on just one or two slates or tiles for a fraction of a second, before they break up and loses their energy. If the tiles or slates are not fixed securely, the sucking and twisting action of the vortices can lift them out of place.



Fixing specification

To resist the force of the vortices it is essential that the tiles and slates can not lift at the tall of the tile or slate, and can not rotate. This can be achieved with tiles by being head nailed to the batten and tail clipped with a rigid clip. The smaller the tiles the more fixing can be installed per square metre of roof. Plain tiles should be fixed with either ring shank nails with a thick strong nail head or screwed. For double lap slate, centre nailing with ring shank nails should be adequate Roofs clad with metal sheeting or built up systems do not appear to be vulnerable to aircraft wake vortices damage as the small footprint of a vortex relative to the large surface area of the panel will allow the load to spread to a greater number of fixings.

Program of repairs

The existing roofs that are under the flight path into major UK airports, starting with London Heathrow, are likely to be subject to a planned or programmed roof replacement scheme. However for all new buildings under a flight path it is the responsibility of the designer/ specifier to ensure the correct fixing specification is used to ensure no roof damage is caused by the effect aircraft wake vortices. In most instances the airport authority will be able to advise if the size of aircraft using the airport is an issue, and the exact line of the flight paths. With this information, the assistance of the roof tile or slate manufacturer should next be sought to determine the correct fixing specification for the roof.

This potential risk of damage to our homes must be assessed fully and residents assured of a planned or programmed roof replacement scheme for North Runway.

Solida Live V

The property of the control of the patential profit of the patential object of the patential of the patentia

herronifewaya palan F

The second section is a second of the least of the second section of the section of the section is a second section of the section of the section is a second section of the section of th

Process of respect

The interesting of the control of th

This potential risk of demage to our homes, must be assessed fully and residents assessed of a planned or programmed roof replacement scheme for North Runway

SUMMARY

Conclusion

We are appealing to An Bord Pleanala, following up on the Oral hearing in 2006 to respect our position and uphold the planning permission FOA.1755 -PL06F217429 to make a "Balanced Decision" that includes us.

This is a journey that began in 1997 and continues to your Door today for this Appeal, for the health and well-being of the flight path residents and those parallel to the runway

We respectfully request this application for night time restrictions fully includes those in the Longitudinal Corridor, the missing contour, until those flight path residents are treated as significant stakeholders for the sacrifice that is expected of them, on the grounds of fair process. For 23 years we have sought meaningful engagement, taking us to the High Court and Europe.

and just engagement for the commercial and profiteering future on the grounds, those most adversely affected have been disregarded.

The Concerns of affected Fingal citizens, struck between the runways must not be minimised and all their concerns and issues dealt with recognition, respect for them as human individuals not just labelled as dwellings or receptor reference numbers as with those under the flightpaths.

The Conditions imposed by ABP in August 2007 should remain in place, in full, until residents are dealt with fairly and appropriately.

Meaningful engagement is required for those directly affected by airport development, runways and flightpaths now and for the future.

VSFAT/AMELE

Conclusion

We are appreling to An Hold Pleanain I following up on the Oral branking in 2006 for respect our position and uphala the planning permission EDA 1755 - 21066217A23 for evaluring that such the us.

This is a journey that began in 1997 and continues to your Door today for this Appeal, for the realth and well-being of the flight path residents and those garabelto the rullway.

We respectfully request this application for night time restrictions fully includes those it the I ongradical Corrigor, the missing contour, until those flight path residents are treated as significant stateholders for the southine that is expected of Them, on the grounds of fair process. For 23 years we have sought meaningful organizations taking us to the Highs contours.

and just ungage nontries the commercial and profiteering fusions couthe grounds, shows and just ungage nontries and commercial have been discograded.

The Concerns of affected Fingal citizens, struck between the runways must put be unintrolsed and at their concerns and issues dealt with recognition, respect for them as from an individuals not just tabelled as dwellings or receptor reference numbers, as with them, individuals not just tabelled as dwellings or receptor reference numbers, as with

The Conditions Imposed by ABP in August 2007 should remain in place , in full, antill remaining place , in full, antill fairly act argregately.

Meaningtul ungagement is required for those directly affected by airport, lavelooment, runways and flubtpaths now and for pro-toruse.

References:

Irish Civil Aviation - Aircraft Noise, sleep disturbance and Health effects - CAP1164 2014.

AEF – Aircraft Environmental Federation UK - Data on Health and Aircraft Quota System

Aircraft Noise (Dublin Airport) Regulations Act 2019

Searson Associates - Northern Parallel Runway - Likely Impact on residents of Kilreesk Lane.

WHO Guidelines 2019

NAP - Noise Action Plan 2018 - 2023.

ABP - Letter received re: costs and meeting to discuss conditions on 5th October 2007.

Longitudinal Data – received from DAA, dated November 1st 2018.

Planning Conditions; PL06F:217429



Badger's fatal end following removal from habitat on construction of runway.

References:

Instituti Avianna - Amerik Noise, sleep disturbance and Health effects - CAPLE4 2014.

AEF - Arecolt Environmental Enderstion UK - Decaportically and Amirak Quota system.

Aircraft Noise (Bublin Airport) Regulations am 2017.

Seamon Associates - Northern Parallel Runway - analy Impact on residents of Kilicosk Lane. What Gordelines 2019

NAR - Velse action Plan 2018 - 1023.

ASP - Letter acceived remosts and overang to discuss conditions on SIGOstober 2007.

Maching Conditions; and Particular





The ghost town of Cloghran Village between the two runways - Only the Boot Inn Remains.

Submitted by:

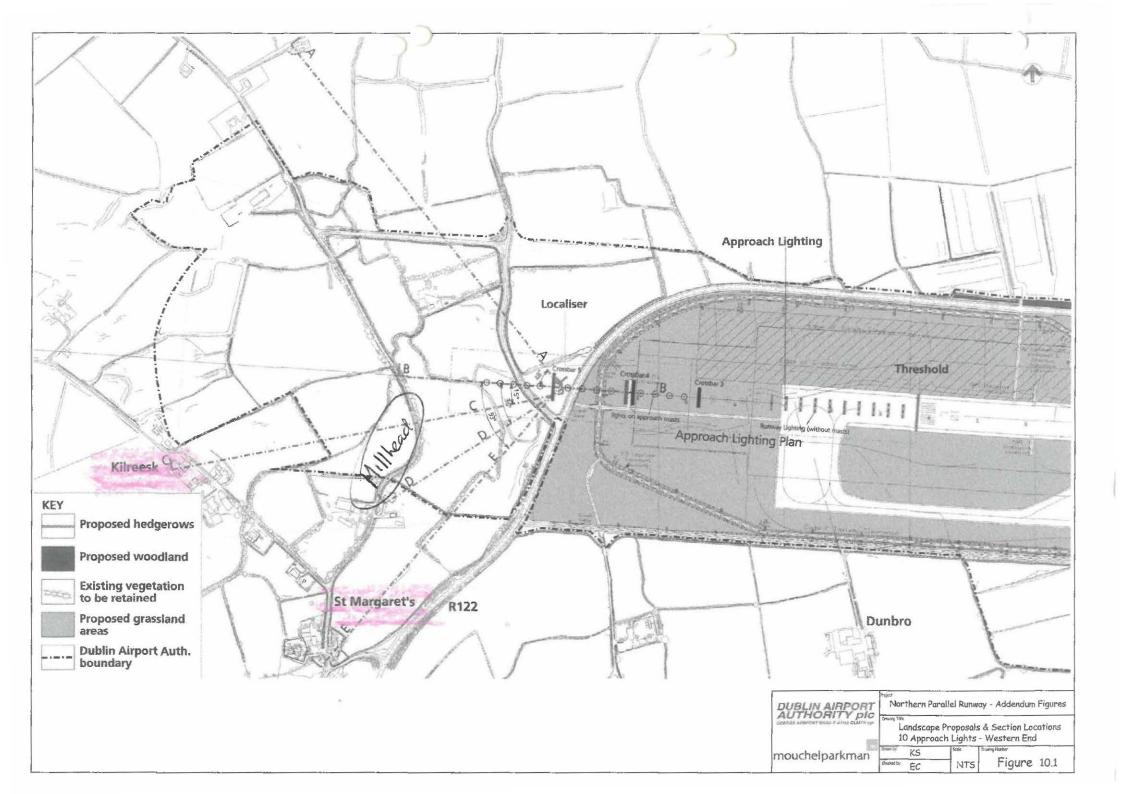
Sheelagh Morris Millhead St Margarets Co Dublin

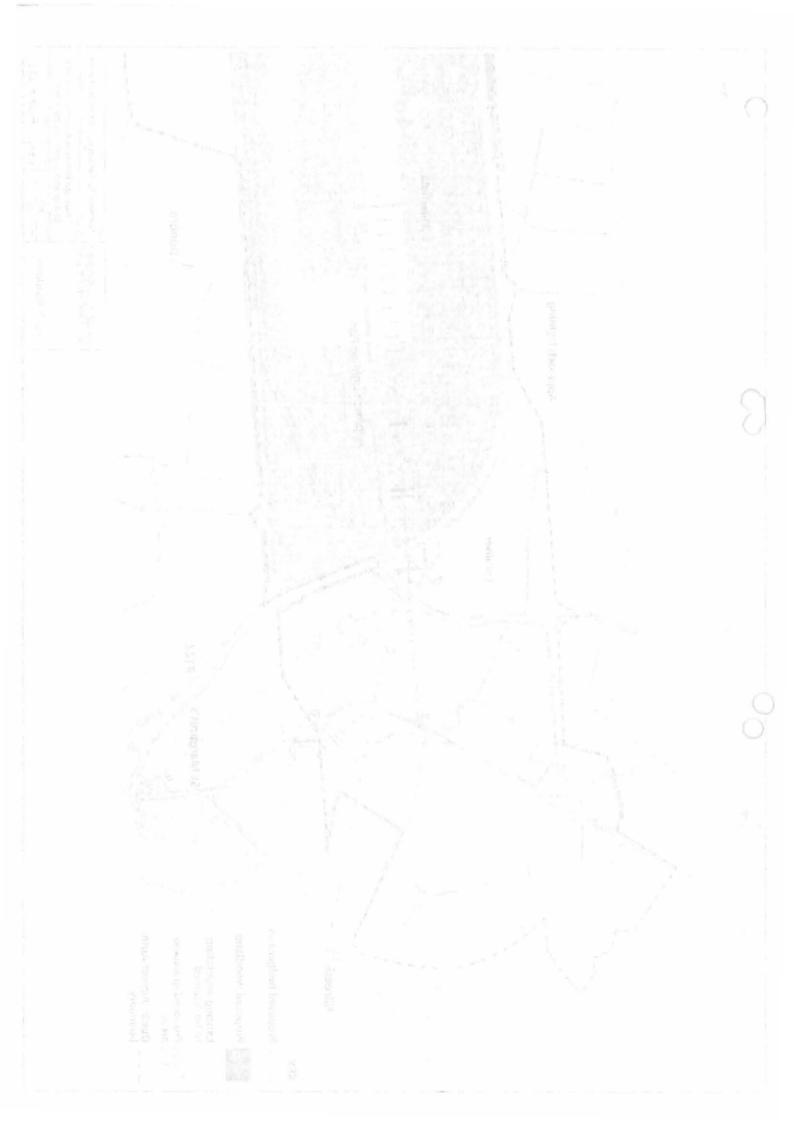
Greg Farrell and Melissa Gannon Farrell, Kilreesk House, Kilreesk, St Margarets Co Dublin Helena Merriman, Kilreesk, St Margarets, Co Dublin.

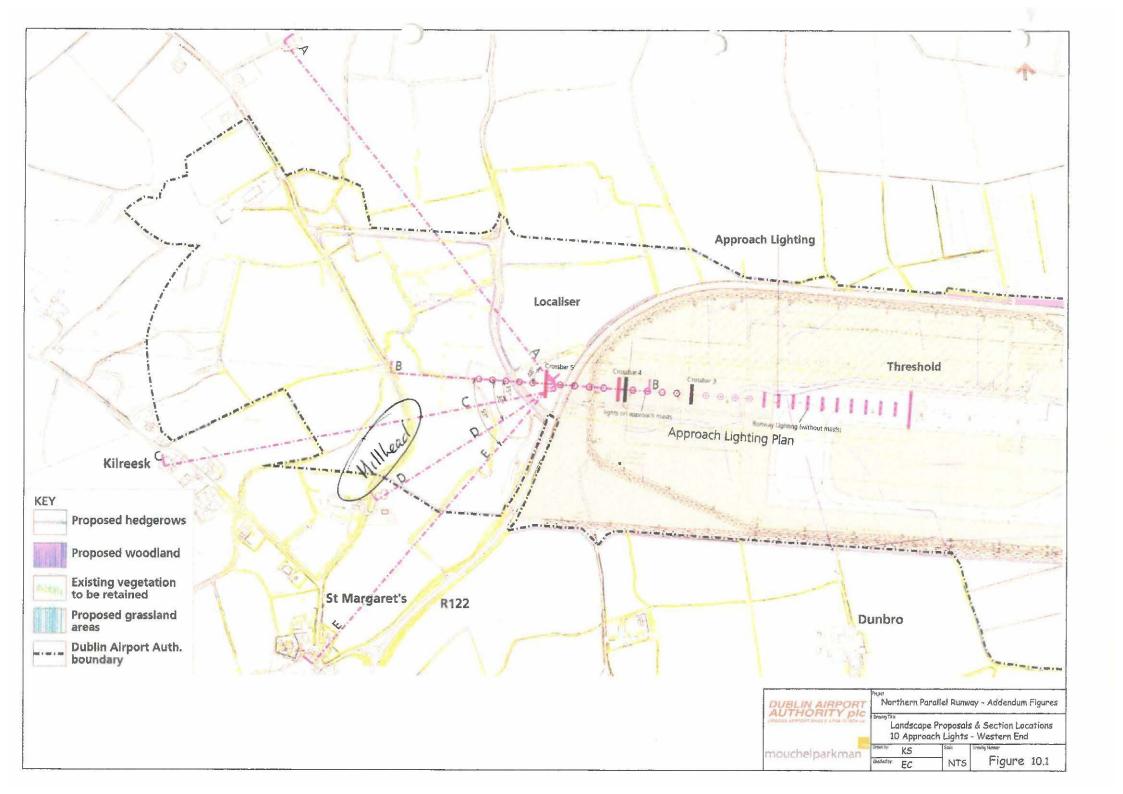
, yd hetrimdu?

Snortagh Monds Willhead St. Garmen, v.Co Dublin

Greg Farmit and Wellins Condon Farnell fülrebslichbuse. Kilnedsk, St Margarets. Co Buglin Relena Merriman. Brimsell, Su Margarets, Co Bublia.







Longitudinal Data

Recewed Oct 2018. (Halloveau)

Recewed Oct 2018. (Halloveau)

Bickerdike
Allen
Partners
Architecture
Asoustics
Technology

Submission

DUBLIN AIRPORT

A11219-N01-DR

01 November 2018

'LONGITUDINAL ANALYSIS' - LAMAX AND SEL NOISE LEVELS

1.0 INTRODUCTION

Bickerdike Allen Partners LLP (BAP) have been retained by daa to predict the levels of airborne aircraft noise from individual movements close to the airport. That is from departing aircraft shortly after take-off and from arriving aircraft shortly before landing. This information has been provided in accordance with a request from the St. Margaret's Concerned Residents community group.

BAP have predicted the noise for six key aircraft types that either currently operate, have operated, or are forecast to operate in the future at Dublin Airport. The noise levels have been predicted for both arrivals and departures at eight points ranging from 0.5 to 4 km, in 0.5 km steps, from the west end of the permitted North Runway along the extended runway centreline. The points are shown in the attached drawing A11219-N01-01. This note reports these predicted noise levels and details the methodology used in their calculation.

2.0 METHODOLOGY

Noise levels have been calculated using the Federal Aviation Administration (FAA) Integrated Noise Model (INM) version 7.0d. The same software was used for the noise mapping of Dublin Airport undertaken for the Environmental Protection Agency (EPA) in 2017.

Noise levels have been calculated in terms of both L_{Amax} and Sound Exposure Level (SEL). L_{Amax} is the maximum instantaneous sound pressure level of an aircraft movement. SEL is a measure of the total noise from an aircraft movement. The SEL noise level for an aircraft movement is the sum of all the noise energy for the event expressed as an average noise level for 1 second. This is shown in the figure below. By adding the SELs of all of the operations at the airport over either 16 hours or 8 hours for the daytime and night time periods respectively and then averaging you get the L_{Aeq,T} average noise contours.

TROPERS MARKET

SOUTHWEST LITTE

D. Bernemburg 2013

CONSTRUCTION AT A CONTRACT OF THE PROPERTY OF THE PARTY.

TO PROPERTY DUE

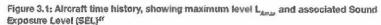
Bickurdling alien Pertoess LLP (SAP) have been retained by Jap to prodict the levels of automate an architection noise from individual incovernents closer to the airport. That is from departing aircraft shortly affectaive off and from arriving aircraft shortly before landing. This information has been provided in recordance with a request from the St. Marganet's concerned Residents community group.

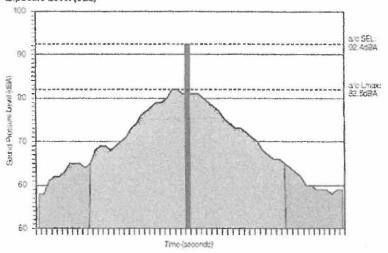
SAP have predicted the noise for an key arcraft types that either currently operate, have apparated, or are forecast to operate in the first on the forecast to operate in the first one of the predicted for both arrivals and departures at eight noists range grown 0.5 to 1 km, in 0.5 to stops, from the west and of the permitted footby Romany along the extended norway contreined the prints are shown in the attached drawing ALICES-NOT Of. This note reports these predicted noise levits and details the methodology used in their calculation.

YOULDRONISM D3

Noise fereit have been calculated using the Federal Aviation Administration (EAA) integrated Noise Model (INM) unrison 7.0d. The same software was used for the noise mapping of Dublin Airbott undertaken for the Environmental Protection Agency (EPA) in 2017.

Noise levels have been calculated in terms of both Land Sound Laposure pavel (SEL). Lands the maximum instantaneous sound pressure level of an alicual time cament. SEL is a measure of the total noise from an aircraft movement. The SEL noise level for an aircraft movement in the cumulabilithe noise energy for the event expressed as an average noise level for 2 second. This is shown in the figure below. By adding the SELs of all of the operations of the airport over either 16 hours of 8 hours for the daytime and night time nethods tears clively and their averaging you get the Land overage noise contours.





Source: CAA data

The predictions assume the permitted North Runway is in operation. Arrivals have been modelled as using Runway 10L and departures have been modelled as using Runway 28R, both of these overfly the area to the north-west of the airport. Arrivals and departures have been modelled using straight routes, that is along the extended centreline of the North Runway.

Noise levels have been calculated for six key aircraft types:

- The Boeing 737-800 and the Airbus A320, which are the current most common aircraft types at Dublin Airport and in 2016 they performed around 37% and 23% of the total movements respectively;
- The Boeing 737 MAX8, which is forecast to be the most common type in the future, but doesn't yet operate in significant numbers;
- The Airbus A330-300, which is the current most common wide-body aircraft and in 2016 performed around 2% of the total movements;
- The Airbus A380, which is the largest aircraft forecast to operate at Dublin, but doesn't currently operate at Dublin;
- The Boeing 737-200, which is an older aircraft type that used to operate in large numbers, but no longer operates at Dublin. Noise levels have been provided for the Boeing 737-200 to illustrate how aircraft technology improves over time and that each generation of aircraft is quieter than the previous.

Physics and American Barring and one of American many many from the physics and appropriate from the control of the control of



The predictions assume the permitted North Runway is in operation. As well have been modelled as using Runway 101, and department have been modelled as using Runway 102, both at these overfly the area to the north-wast of the pioper. Activable of department have been uncalled using straight course, that is along the extended centraline of the North Runway.

Wolse levels have been calculated for six key aircraft type:

- The Boring 137 800 at 4 the Arcus A 320, which are the current must common averalt types of Cubia Arport and in 2016 they perform it around 17% and 25% of the rotal mavements benefitiely.
- The Bosing 737 MOVE, which is consist to be the most consison type in the future, but doesn't yet operate in significant numbers:
- The Airbus #230-200, which is the current most communicade-body already and in 1016 performed around 2% of the total movements;
- The Airbus A380, which is the largest sucress to operate at Dublin, but doesn't currently operate at Dublin;

The Izaang 737-200, which is an older arreaft type that med to operate in large numbers, but no longer aperates at Oribin. Solve levels have hear provided for the dowing 737-200 to fluctrate how aircraft technology improves over time and that each governation of aircraft and originar than the present.

The INM noise modelling software includes a database of aircraft types and associated noise performance data. It is possible to refine this default data by a validation procedure to better predict aircraft noise around an airport based on actual noise monitoring data where this is available. At Dublin, the permanent noise monitoring and flight track keeping system provides this opportunity.

BAP have validated the default INM noise predictions for the most common aircraft at Dublin by comparing predicted noise levels with the noise levels measured at the airport's noise monitoring terminals (NMTs). Based on the validation exercise modifications have been made to the default INM noise predictions for the Boeing 737-800, the Airbus A320 and the Airbus A330-300. An aircraft type for the Boeing 737 MAX8 is not included in the INM, therefore the noise levels have been predicted for the Boeing 737-800 with an allowance made for the lower noise levels of the MAX8. This allowance has been based on the assumptions used by ECRD in their work for the Airports Commission in the UK¹.

Departures by the single aisle aircraft have been modelled as using intersection take-offs, whereas departures by the wide-body aircraft have been modelled as using the full runway length, as is expected to be case once the runway is operational.

3.0 RESULTS

The L_{Amax} and SEL noise levels rounded to the nearest decibel are given in Tables 2 and 3 below. The approximate heights of the aircraft are summarised in Table 4, rounded to the nearest 50 feet.

¹ Baseline and Local Assessment Methodology Addendum, December 2014: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/38 9579/noise_methodology_addendum.pdf



The 1914 name madelling software includes a database of entrall synce and assessmed noise performance data. It is nexcible to refine this defical data by a validation procedure to better credict arrows noise around an alignar hazed on around arrive monitoring data where this a livalished At Dublin, the permanent rules monitoring and flight track become syntem provides this apportunity.

SAP Layer yalldated the default MNs rosse predictions for an most common alteruft at Dublin by comparing predicted down in the with the trade in with it element at the cityouth house organizating terminals (MMTs). Sesed on the validation excress much sate been made to fire default INM noise predictions for the Boeing 737-300, the pirtus A120 and the Arbus A221-700. As aircraft type for the Boeing 737-MAXS a not included in the INM, therefore the noise levels have been predicted for the Boeing 737-800 with an elementary made for the fower noise levels of the MAXI. This Min-sence has been based on the assumptions used by ICCRI in their work for the Africans used by ICCRI in

departures by the single wile micraft love been modelluit as using intersection take effs, whereas departures by the wide-body afront bare been model, due using the first nursely acceptance.

S.O. RESULYS

The forms and SEI maps levels countried to the camput double or given to Tables 2 and 2 below. The approximate heights at the surcestive countries in Table - countries out a new or feet.

Marking and condition or over the burdeloss with reduced the surface 2014.

to a contrata de la companya de la c La companya de la comp

				No	ise Lev	el, dB L	max		
Operation	Aircraft Type	0.5 km	1.0 km	1.5 km	2.0 km	2.5 km	3.0 km	3.5 km	4,0 km
	Airbus A320	86	83	78	78	77	77	76	76
	Airbus A330-300	91	90	89	88	87	87 83		81
	Airbus A380	89	88	87	86	85	84	83	83
Departure	Boeing 737 Max8	87	84	81	79	78	77	77	76
	Boeing 737-800	90	87	83	81	80	80	79	79
	Boeing 737-200	96	94	93	92	90	87	86	85
7 17	Airbus A320	94	94 90		85	83	81	80	79
	Airbus A330-300	97	93	90	87	86	84	83	82
	Airbus A380	95	91	89	87	85	83	82	81
Arrival	Boeing 737 Max8	94	90	87	85	83	81	80	79
	Boeing 737-800	94	90	87	85	83	81	80	79
	Boeing 737-200	94	90	88	86	84	82	81	80

Table 2: L_{Amax} Noise Levels at Assessment Locations

				No	se Leve	, dB(A)	SEL		
Operation	Aircraft Type	0.5 km	1.0 km	1.5 km	2.0 km	2.5 km	3.0 km	3.5 km	4.0 km
	Airbus A320	94	92	89	88	87	87	86	86
	Airbus A330-300	99	98	97	96	96 95 92		91	90
Danishina	Airbus A380 Boeing 737 Max8 Boeing 737-800		96	95	94	93	92	92	91
Departure			93	89	88	87	86	85	85
			95	92	90	89	88	88	87
	Boeing 737-200	104	103	101	100	97	95	94	93
	Airbus A320	99	96	94	92	90	89	89	88
	Airbus A330-300	101	99	97	95	94	93	92	91
	Airbus A380	100	98	96	94	93	92	91	91
Arrival	Boeing 737 Max8	96	94	92	91	90	89	88	87
	Boeing 737-800	97	95	93	91	90	89	88	88
	Boeing 737-200	97	95	94	93	91	90	90	89

Table 3: SEL Noise Levels at Assessment Locations

Operation	Altered Type			0.8 mul		
	Best VET grand					
	Boxton 137-200					
	Booking 757-200				13	

Table 2: Land Noise Levels at Assessment Localitons

				0.1/1		332	
		0.5 Int	0.1 onl				
			9.6				
	Air bus A330-300						
			30				
	Bureing 732-850						

professor treatments as a relevant enion FEZ of which



		Approximate aircraft height, ft							
Operation	Aircraft Type	0.5 km	1.0 km	1.5 km	2,0 km	2.5 km	3.0 km	3,5 km	4.0 km
	Airbus A330-300	1,000	1,100	1,200	1,250	1,350	1,500	1,700	1,850
Departure	Airbus A380	1,000	1,100	1,200	1,250	1,350	1,450	1,500	1,550
	Other aircraft	1,050	1,400	1,550	1,600	1,700	1,800	1,850	1,900
Arrival	All aircraft	150	250	350	400	500	600	650	700

Table 4: Aircraft Heights at Assessment Locations

4.0 SUMMARY

The noise levels for arrivals and departures by six key aircraft types have been predicted for operations on the permitted North Runway.

Duncan Rogers

David Charles

Peter Henson

for Bickerdike Allen Partners LLP Associate

Partner

Alesanti Type				
	1091			

Bickerdike Allen Partners

4.0 SUMMARY

The noise levels for arrivals and departures by six key aircraft types have been predicted for operations on the permitted North Runway.

Duncan Rogers

David Charles

Peter Henson

for Bickerdike Allen Partners LLP

Associate

Partner

4.0 SEINDARKY

The noise levels for arrivals and departures by six liby affects; types have been predicted for operations on the permitted North Burkey.

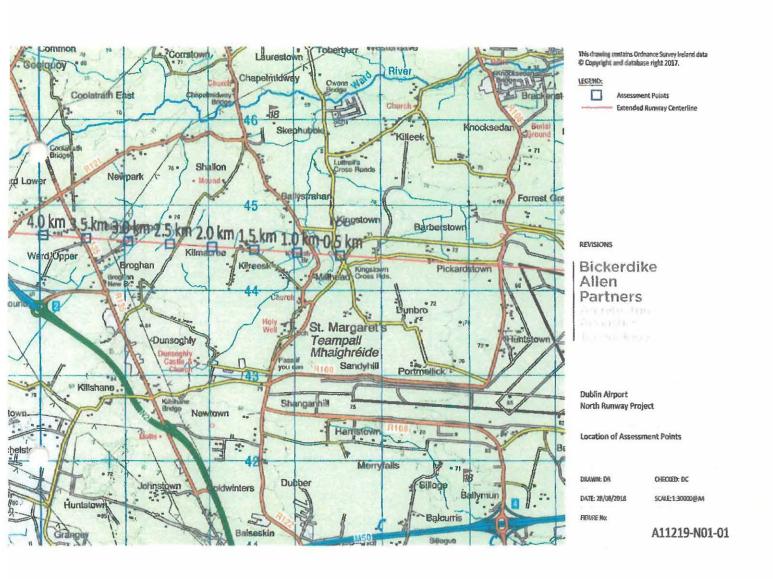
Dunier Rogers

David Chartes

Pater Henson

A 1 - 1001 - 10

H16-50-5



D.5Km - 1000 ft.



Suppost Doc. No. 2





Environmental Health

Unit 4 & 5, Nexus Building,

Block 6A, Blanchardstown Corporate Park,

Dublin 15

Tel +353 (0)1 8976140

E-mail: Geraldine.ocallaghan3@hse.ie

Date:

28/01/2021

Our reference:

1516

Licence Type:

Planning Application

Name and address of applicant:

DAA PLC.

Location of facility:

Dublin Airport, Co. Dublin

Reference No:

F20A/0668

EIS/EIAR submitted:

Yes

Planning Authority to whom EIS/EIAR has been submitted:

Fingal County Council

Dear Sir/Madam

Please find enclosed the HSE consultation reports in relation to the above planning application. If you have any queries regarding any of this report the initial contact is Ms Geraldine O Callaghan, Principal Environmental Health Officer, who will refer your query to the appropriate person

Yours faithfully,

Geraldine O Callaghan

Principal Environmental Health Officer





Environmental Health

Unit 4 & 5, Nexus Building,

Block 6A, Blanchardstown Corporate Park,

Dublin 15

Tel +353 (0)1 8976140

E-mall: Geraldine.ocallaghan3@hse.ie

Date:

28/01/2021

Our reference:

1516

Licence Type:

Planning Application

Name and address of applicant:

DAA PLC.

Location of facility:

Dublin Airport, Co. Dublin

Reference No:

F20A/0668

EIS/EIAR submitted:

Yes

Planning Authority to whom EIS/EIAR has been submitted:

Fingal County Council

Introduction

The following HSE departments were notified of the consultation request for the licence application on 7th January 2021

- Emergency Planning Brendan Lawlor
- Estates Helen Maher
- Assistant National Director for Health Protection Kevin Kelleher / Laura Murphy
- CHO Mellany McLoone

This report only comments on Environmental Health impacts of the licence application.

Environmental Health Submission

EHS Ref: 1516

Planning Ref: F20A/0668 Fingal County Council



Padamentalis in Solding Science Health Service Boreaty

When on the stry

contact control & Association

Signal by Herbel a rational Community Policy

25 OF B.

OF FAT HOLY DON'T

- singganinang spilangt dibud

620.0

Consider of

incorne i pps. Playming application

the objects adults are income?

Adult religion of her files to a stream of the formation of the files of the files for the files of the files

Marijatika svim meninga

25/ ELAR submittents (Vos

Planeting 46 thanks to weary at the latest Colonia Colonia.

Shirring as need and Salida St.

modulational

der fallowing Hält dagen, meds verwood i Saad There zin undbewierung fas Unditieren upglieden. De 24 december 19

- referred test to the Surrow is sometiment.
 - istaliani, vita estatut v
- Reservant Scribtoni Director in Chemids Postportion Forte Holicher Physica has robe.
 - w 1040 Mallary McLorne

The sent in entre or armits on builtoning the incluments of the income a simplication

and a simple of the of but on any it is

ATZL Self-CHI

Printed Service Council Editor & Council Council

Description of Project:

The proposed Relevant Action is to remove the numerical cap on the number of flights permitted between the hours of 11pm and 7am daily that are due to come into effect in accordance with the North Runway Permission and to replace them 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 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 Permission, in accordance with the proposed annual night time noise quota.

Air Quality:

The EHS have assessed chapter 10 which looks at Air Quality with particular attention on concentrations at nearby human health sensitive receptors. For the EIAR an air quality impact assessment was undertaken to assess the impact of emissions on local air quality primarily due to the proposed change in aircraft movements.

The assessment focuses on the impact and effect of changes to long-term and short-term concentrations of nitrogen dioxide (NO2) and Particulate Matter (PM₁₀ and PM_{2.5}). These are considered to be the pollutants of greatest concern from aircraft emissions

The first thing the EHS noted was Dublin airport's own pollution monitoring which is outlined in section 10.5.1.1. From this data we can see that the annual mean NO2 and PM10 concentrations monitored at Dublin Airport are consistently below relevant air quality standard values, typically representing around 50 - 60% of those values, as displayed in Table 10-4.

The DAA have also undertaken the measurements of NO2, and benzene (C6H6) using passive sampling by diffusion tubes at several offsite locations in the vicinity of Dublin Airport. The annual data for these measurements are shown in Tables 10-5 to 10-7 and they demonstrate that the Air Quality Limit Values for the pollutants monitored are not being exceeded.

EHS notes that for the detailed modelling study a total of 52 existing receptors were modelled that may be affected by the operation of the permitted North Runaway, the details of which can be found in Table 10-11 and Figure 10-1 of the EIAR.

Section 10.6 outlines the predicted annual mean NO2, PM₁₀ and PM_{2.5} concentrations for Permitted and Proposed scenarios and associated impacts. All of the predicted NO2 levels fall well below the Limit Values. There was no exceedances of the annual mean Limit Values for PM₁₀ and PM_{2.5} the values for which were all well below the annual mean Limit Values.

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 have assessed chapter 12 which looks at the likely significant effects on the water

Constituted of Conferm

The proposal Selevant Accorded denotes the number of the number of figure permitted be made of the number of the major of the number of the mean form of the number of the

swiften Onlik

The PSE freeze numbered observer 10 which books at Aschingler with particular attention on concentrations at nearby number healthnesses his increptors. For the EAR an airquellist consett accessivem was undergalantee assessible support of emissions on local air quality arimatoy due to the proposed connector at all and annually are not the proposed connector at all and annually are not the proposed connectors and annual movements.

The issection of focuses on the inspect and other of charges (a rung-term and mort-cent) consequents in our literage should be configured within (PMs) and PMs). These are considered to on the post times of get times concern more provided endistance.

The first or agid, this nation was Dubna and art to own poliubon monitoring which in introved in section 10 5 to 1. From this that we can see that the samual mass 1002 and PM10 copasymentations are made as at hubble stepon are constituently below retained at quality translated waves, as that we received the substitution of the solution and the substitution of the solution and the substitution of the solution of the solution and the substitution of the solution of the soluti

The DAAL service undertaken the measurements of VOZ, and benzen. (Little) using postud sampling by differior tubes at earner offer also in our fine reality of Dablin Afrond. The annual date for these measurements are shown in Tables. If it is 10-10 and they commission that the North Land Walter for the adding an area of the real order of the date of th

EHS notes that for the detailed partiting study a total of 52 wisting receptors were noticible that may be affected by the equivation of the permitted factor for away, the details of which can be broad a Table 10.15 and those 10.15 and the 10.15 and the

Seption into notings the predicted requal meet NOT PM and PM., concentrations for Permitted and Proposed scenarios and associated enperts. All of the predicted NOZ levels fall well below the Mark Valgos. Early one exceedances of the annual reservants since for PM, and PM, the values for William well and PM, the values for William Values.

The SHS is satisfied with the conduction of the first which states that the model was based on a concentrations or contitive assessment and count with this worst case second the annual mean concentrations of all the pollutions considered are below the clevent time Values for all of the assessed receptor locations. Concentration through between the period and propored Relevant Action show residual offects to be Net-Spalificant.

SECTION.

is the seal of a classification of the property of the classification of the classification of the contraction of the contraction of the classification of

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

Noise:

The EHS have based their assessment on Chapter 13 - Air craft noise and Vibration (Air) on The World Health Organisation's Environmental Noise Guidelines 2018, as endorsed by the European Commission through Directive 2020/367.

The WHO 2018 Noise Guidelines strongly recommends reducing noise levels produced by aircraft below 45 d8 Lden, as it states that aircraft noise above this level is associated with adverse health effects.

The EIAR based its Noise surveys on future forecast scenarios for the selected years of 2022 and 2025. It compared the situation with the Relevant Action with three situations, that in 2018 (2018 Baseline), that in the corresponding future year with the North Runway operational and the current conditions in place (2022 or 2025 Baseline).

With the above in mind the EHS looked at the results of the noise surveys in Section 13.4. The World Health Organisation's Environmental Noise Guidelines 2018, provide a method for calculating the number of people highly annoyed by airborne aircraft noise which has been used in the EIAR. The aim of this method is to give an overall picture of the noise exposure by assessing a percentage of people as being highly annoyed at different noise levels. For example, around 10% are assessed as being highly annoyed at a noise level of 45 dB Lden, increasing to around 67% at a noise level of 75 dB Lden.

The EIAR states that the number of people exposed to aircraft noise increased from the 2018 Baseline to the 2019 Baseline. Consequently, the number of people assessed as highly annoyed by aircraft noise also increased, specifically by 5% from 110,234 to 115,740. The number of people exposed to at least a high level of noise (i.e. 65 dB Lden or above) increased from 251 to 285.

However when the EIAR compares the 2018 baseline and the forecast 2022 Baseline the number of people exposed to alrcraft noise is forecast to reduce for all contour levels. Consequently, the number of people assessed as highly annoyed by aircraft noise also decreases, specifically by 41% from 110,234 to 65,227. The number of people exposed to at least a high level of noise (i.e. 65 dB Lden or above) decreases from 251 to 133.

This number is further reduced in the 2025 Baseline scenario to 63,316 people assessed as highly annoyed and 128 people exposed to at least a high noise level.

The EIAR also identifies the number of non-residential receptors exposed to the thresholds. There is a reduction of one between 2018 and 2019, and a further reduction of 3 is forecast in the 2022 baseline scenario. There was no change in the 2022 and 2025 Baseline scenarios.

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

environs and the proposed development, the LTE is abilited that the deponent of velopmental and travelessed in

oaksN.

The ESS have based their assistment on Chapter 13 - Arroralt noise and Vibration (Chr. on The World Health Organization's Susjection consist Moise Guidel new 1918. As endonress by the European Courts Letter (South Letter through Directive 1920/362).

The WHO 1013 Haise Gullevious strangly recommends reducing naise love's produced by alterally before the WHO 2013 Haise produced by alterally naise about the secretarian will take accent to the secretarian secretarians.

The wide based in State survey on future forecast scenarios for the behaved years of 1922 and . 055. It conquired the situation with the Releast Action with three situation, that in 2223 (2213 Basellou), that in the sacresuland Albure year with the Next Curvey operational and the current collines in other (2022 or 2025 Durellon).

When the above in minor the FRS looked at the results of the naive surveys in Section 2.1 if the world. Head to the above the surveys in Section 2.1 if the world. Head to the amorphy to the surveys of people highly averaged by amooning afractit noise which has been account to the EAR. The sim of this method is to give an overall in the wilther ages construction by assessing a percessing of percent of propose or bring in the analysis of the different noise levels, for mangre, around 10% are attracted to the fightly accurated an analysis of the different noise levels, for mangre, around 10% are attracted as in the Europe Burghly accurated an analysis of the different noise account it is an analysis of the different account it is a manage of the first later.

The CAP states that the number of people a pose of a force introduction the 2015 Baseine to the 2019 Baseines, Consequently, the number of progressive envisors at highly among the order of native and more acid, specifically by 3% from \$10,234 to \$15,440. The number of primile regressed to at learn at 19th level of noise (120,45 dt 130,244 to \$15,440. The number of primile regressed to at learn at 19th level of noise (120,45 dt 13de) represent from \$250 to \$155.

reviewer when the files, ompress the 2010 bands is and not forcust 2022 direction the number of geople exposes to plot the notice of preschiption for recovery for all continual lives. Consequently, the number of people are based as highly and ayears by aircraft notice also deep set improving by sircraft notice also deep set improved by \$150 brands to \$2.227. The number of people supposes to at task which have afford the continual to a shadown of the continual to \$3.10 and \$3.

this much sets for reduced in the 2025 Baseline scenario to 63,316 people statemed as highly transversand T28 to out the sets of the national reduced to at least a latent national level.

The FIAR elections the number of non-residential receptors reprised in the hit scholds. There is a midurum of one belonger 2018 and 2016, and a further reduction of one belonger 2018 and 2016, and a further reduction of a formar to the 2018. Busilians scenario. These was an election in the 2022 and 2025 Buselia a serinado.

While the BIS violatings the significant reduction in the people exposed to calling make between the 7018/2017 be clien and the 2010/2015 for exact hat allowed it till administration in the committee that a significant or or maple, namely 63,316 people ascring as highly among distribution of the ple, namely 63,316 people ascring as highly among distribution.

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 World Health Organisation's Environmental Noise Guidelines 2018 provide a method for calculating the number of people highly sleep disturbed by airborne aircraft noise which has been used by the EIAR. This aim of the method is to give an overall picture of the noise exposure by assessing a percentage of people as being highly sleep disturbed at different noise levels.

The EIAR states that the number of people exposed to aircraft noise increased from the 2018 Baseline to the 2019 Baseline, for all contour levels. Consequently, the number of people assessed as highly sleep disturbed by aircraft noise also increases, specifically by 11% from 42,260 to 47,044. The number of people exposed to at least a high level of noise (i.e. 55 dB Lnight or above) increases from 753 to 1,533.

However when the EIAR compares the 2018 baseline and the forecast 2022 Baseline the number of people exposed to aircraft noise is forecast to reduce for all contour levels. Consequently the number of people assessed as highly sleep disturbed by aircraft noise also decreases, specifically by 53% from 42,260 to 19,690. The number of people exposed to at least a high level of noise (i.e. 55 dB Lnight or above) decreases from 753 to 284.

This number is further reduced in the 2025 Baseline scenario to 19,464 people assessed as highly sleep disturbed and 281 people exposed to at least a high noise level.

The EIAR also identifies the number of non-residential receptors exposed to the thresholds, of these, only residential healthcare facilities are highly sensitive to noise at night. There is a reduction of 2, from 4 to 2, between 2018 and 2019, the forecast is to remain the same in the 2022 and 2025 Baseline scenarios.

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.

The World Health Organisation's Environmental Noise Guidelines 2018 summarise the research into the impact on health and exposure to aircraft nose. The critical health outcomes identified were:

For average noise exposure

For night noise exposure

1. Cardiovascular disease

1. Effects on sleep

- 2. Annoyance
- 3. Cognitive impairment

expressed to abticase a high patical layer based on the 2022 (resolve occurring will spit be exposed to crime natice shows the WHO recommendations of 45 Laten.

The WeiG 2013 Note Guideline: strongly recommends reducting right note expound levels producted by except during night time hallow AD diff. Linght, as it states since for note obers, this need is a total with a tive on a flocts, an there.

The Arc for Hawith Department of Environments Fleis discretized 2013 accords a method for advisory the number of people region states according to a November and people regions to the number of people regions and the notice of the motival in the notice of the notice of the notice of the number of people and the number of t

The LAR exploy coatable in addition of programming global against again maps, in from the 2015.

He efforms the 2015 Sename, for 10 entry, larve, distributed a promining of programming as a programming to programming the control of the control of

is the way the still compared the 20% between the forecast 2012 income the combenies applied approach to the compared to the c

i kis autorio di funtario nella edi la fine 202 la Bandant suo nucle (di 12,664 penglic benerued de literaly i L'armetichi i avel una 281, (ne. più mi più mi benti casti a baptario ile 1884.

The filts also the White the surages of new medicinal brackpures terms on in the bresholds, of three and restricted the street teams as the filters at reducibities? In the first the street teams and the force of the street that it, returned 2016 and 2019, the force of the remainsting case, in the 2012 and 2019 are seen to sense our sense.

Winter the Fifty welcomes that applificant reduction in the people appears to aid instruction the 2018/1039 broading and one 2023/2023 largest baseline argumin it and action wholes a demire properties of people and 2023/2023 largest baseline argumin in highly arranged and 2012 people appeared to at least a high or are level travel on the 2029 baseline scenary, will attil be exposed to still as once along the WHO recommendation of 40% year.

the World Health Organization? Environmental Yolsh Suidelines 1818 symmetric test seasons the North Health outcomes identified as a report of a crisical health outcomes identified work:

For a straige naise industries

- accountly individual or the CLT.

National Section (1997)

110-21-31-31-31-31

- 4. Hearing impairment and tinnitus
- 5. Adverse birth outcomes
- 6. Quality of life, well-being and mental health
- 7. Metabolic outcomes

As already outlined above the WHO strongly recommends reducing aircraft noise levels to below 45 dB Lden, and for night noise exposure to below 40 dB Lnight, as aircraft noise above these level is associated with the above adverse health effects.

in order to reduce these health effects, the WHO strongly recommends that policy-makers implement suitable measures to reduce noise exposure from aircraft in the population exposed to levels above the guideline values for average and night noise exposure. For specific interventions the WHO recommends implementing suitable changes in infrastructure.

The EIAR also looked at the number of dwellings exceeding the threshold for potential vibration effects due to airborne aircraft. The EHS is satisfied that there will be no dwellings which experienced noise levels in excess of 97 dB LCmax at least once per day. This is down from 4 dwellings identified in the 2018 baseline scenario.

With WHO's recommendation on specific interventions on implementing suitable changes in infrastructure in mind the EHS the has assessed how the EIAR outlines ways in which the airport is reducing noise. These actions are welcomed by the EHS, they are out lined in section 13.5.2. They include the following.

- Land Zones: These are areas of land identified by the DAA to restrict unsuitable development in the noise zones. The EIAR states that with the north runway set to become operational in 2022, updated information has become available relating to aircraft noise performance and flight paths. Due to this it was considered appropriate to update the noise zones for Dublin Airport to allow for more effective land use planning for development within airport noise zones. The Noise Zones and policies relating to development in Noise Zones are set out in Variation No. 1 to the Fingal Development Plan 2017 2023.
- Residential Sound Insulation Schemes: Dublin Airport operates an insulation scheme for dwellings exposed to 63 dB LAeq,16h or greater. The 63 dB LAeq,16h contour eligibility as part of the North Runway scheme will be reviewed every two years following the opening of the North Runway as required by the planning conditions.
- <u>Schools Sound Insulation Scheme</u>: A voluntary insulation scheme is on offer for all schools and registered pre-schools which fall within the predicted 60 dB LAeq,16h contour.
- <u>Dwelling Purchase Scheme</u>: Eligibility for the Scheme is based on the predicted 69 dB
 LAeq,16h contour. Five dwellings are currently located in this contour, however the daa has voluntarily extended participation in the Scheme to a further 33 dwellings.

- AND THE SALE PROPERTY AND A STATE OF
 - a material and a control
- it thealist of the coefficient and municiplified
 - To tylebolic discovery cost

As also, dy cubliced above the systill stangly recomminde reducing situath notes swell to below. As 45 then, and for eight police report to being 40 dB tright, as areas in himse clove there area. In standard with the above covers health of toos.

in or to confine the or realth offects, the WHO strongly recommends that units makers in or the content of the

Now SIGH also broken are to a number of devallings on ending the threshout to potential vitration effects due to algebra cannaft. The Loss is suitabled that there will be the charge which some absorbtions less an except of this common toward one previously. The increase of contract of the common the contract of the 2013 for telline sources.

With MindEgreegy in material on specific intervention that immercently is status through inrefragmicture in anni fifty the time assessed line the PMS outhers start to which the wrotes in distribution once there outsing up welcomes by the EHS, they are set into any it is at the 1. Set Trup include the following.

- * Link Type 3 has been are proved and atended by the link to a star constains dissergnment of the collections. The links starts that with the north constain set to be come as a substantial with the north collection and the restains the collection and the line for the restains and the restain
- quadential is the middles acherny. Dublin August operates an insulation whence for
 yourseless superviolents as the LACL, Take or greater. The 61 dR Lacques confour eligibility as
 noted that there is supervise with the relative overly lave years lobaring the operational
 that World inchway as required by the pulsaring conditions.
 - * State of the formal and a state of the state of the
- Dysoling Parabase patience. Ulgibility for the Scheme Is Land on the predicted 60 clb
 Using 16h consume Five developp and concernly freshock withs canonic, however the size live
 value we calculate belongs that is the Scheme to a territors 22 down loss.

Additional noise mitigation measures are outlined in section 13.7. Again these are welcomed by the EHS. They include.

- An Annual Noise Quota (ANQ) system to replace the limit of 65 flights per night.
- · A preferential runway use system.
- A night noise insulation scheme. This scheme will provide a grant of €20,000 to fund sound insulation improvement works, for dwellings meeting either of the following criteria:
 - Forecast to be exposed to night-time noise levels of at least 55 dB Lnight in the 2025
 Relevant Action scenario, or
 - Forecast to be exposed to noise levels greater than 50 dB Lnight in the 2022 Relevant Action scenario, accompanied by an increase of at least 9 dB when compared to 2018.
- Noise Monitoring Framework. The proposal is to implement a framework for monitoring the
 noise performance with respect to any Noise Abatement Objective (NAO) set by the Aircraft
 Noise Competent Authority (ANCA). Performance will be reported annually to ANCA, in
 compliance with the relevant sections of the Aircraft Noise (Dublin Airport) Regulation Act
 2019. While this is welcomed by the EHS the proposal doesn't outline what measures can or
 will be taken if poor performances are identified.

Ground Noise and Vibration:

The EHS have assessed Chapter 14 — Ground Noise and Vibration, which assesses the likely significant effects from ground noise. Ground noise specifically includes noise associated with aircraft on the ground at Dublin Airport. 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. The main aircraft ground operations include aircraft taxling and aircraft using auxiliary power units (APUs) when on stands.

The EHS are satisfied with the EIAR's statement that "Aircraft ground activities do not typically produce any significant vibration effects at sensitive receptors outside of the airport site, and therefore the assessment of vibration due to aircraft ground operations has been scoped out of the EIA."

Section 14.3.4 looks at Methodology for Determining Baseline Conditions and Sensitive Receptors. The EIAR states that "the study area contains all receptors exposed to ground noise levels of at least 50 dB Lden or 45 dB Lnight. This includes all of the receptors that experience potential significant effects. Although significant effects can in theory be found down to 45 dB Lden and 40 dB Lnight, the change in noise level required for this finding was not experienced at any of the assessed receptors."

The EHS if of the opinion that The World Health Organisation's Environmental Noise Guidelines 2018 should also have been used for ground noise. As stated already in this report The WHO strongly recommends reducing noise levels produced by aircraft to below 45 dB Lden, as aircraft noise above this level is associated with adverse health effects and for night noise exposure, the WHO strongly recommends reducing noise levels produced by aircraft during night time below 40.dB Lnight, as aircraft noise above this level is associated with adverse effects on sleep.

Made Consequence en arganismo e amentos entre destrucción securdos (A.C.). Againste de um secuedor de barron. Color Desentados

- ofers you condition to confine more and mesone (Spice could construct our expenses on
 - with the same of t
- A night space management that the property and provided property at the following persons.
 If a state of the following persons in the following persons.
- Foresteat on the control of the higher than each to have been the talk on the control of the COPs.
 Endowed the control of the cont
 - Orașial foi por escurrituro manternessele unuminatului analidă a april 16 abril 2022
 Orașial Alfred Alfred a comunication and a april 17 au marcante color la actifică a dunt economică în 20 abril 16 abril 16
- biggs in the contract of the c

Control Object on Section 5

The Entit have at an establishington 1st. Communication of Whentour avoids accesses the Hade against and construct your prover noise. Chound notes the officere includes noise astrobuted with as unit on the considered as trading around 11 is excluded any start of real necroverse branch note the which are considered to be not be not being an another pround operation. The considered to be not account pround operation. The test sense that communication which levels who are started operations.

The fitte considerability the statement with the continue of the control of the c

Section 14 of Pools at Mathadology for Determining Burning Constraints and Smarthy Noncology of Section 14 of Section 14 of Section 14 of Section 15 of Sect

The ENS if of the opinion that The World Heelfs Organisation's Environmental Naire fulfacilines 2018 should are have been used for ground note. As stated already in this regard the Unito strongly recomments security related to the produced by aircraft to below 63 dB Udea, as alreaft none above this hard is associated with adverse bealth effects and for tight note represent, the WARD strongly resonanted seducing notes bealth produced by after off during highs time below. The EIAR first looks at the baseline Lden modelling comparing the 2018 baseline and the 2022 Baseline the following was found. The number of people exposed to at least a low level of ground noise (i.e. 50 dB Lden or above) decreases from 26,361 to 23,826, and the number of people exposed to at least a high level of ground noise (i.e. 65 dB Lden or above) decreases from 6 to 3. Going forward to the 2025 Baseline Scenario, there is a small increase compared to the 2022 Baseline to 24,518 people exposed to at least a low ground noise level and no change to the 3 people exposed to a high ground noise level.

While the EHS welcomes the reduction in the people exposed to ground noise between the 2018 baseline and the 2025 forecast baseline scenario it still acknowledges that a significant proportion of people, namely 24, 518 people assessed as being exposed to 50dB Lden or above and 3 people exposed to 65dB Lden or above.

The results from the Lnight modelling comparing the 2018 baseline and the 2022 Baseline the following was found. The number of people exposed to at least a low level of ground noise (i.e. 45 dB Lnight or above) decreases from 3,424 to 631, and the number of people exposed to at least a high level of ground noise (i.e. 55 dB Lnight or above) decreases from 29 to 6. Going forward to the 2025 Baseline Scenario, there are further reductions to 578 people exposed to at least a low ground noise level and no change to the 6 people exposed to a high ground noise level.

While the EHS welcomes the significant reduction in the people exposed to ground noise between the 2018 baseline and the 2025 forecast baseline scenario it still acknowledges that a significant proportion of people, namely 578 people assessed as being exposed to 45dB Lnight or above and 6 people exposed to 55dB Lnight or above.

Section 14.5 outlines the measures already in place at Dublin Airport that reduce or mitigate the ground noise effects of aircraft operations. This include:

- · Reducing the noise at source by the increased use of new guieter airplanes;
- Land use, planning and management which looks at noise zones and residential sound insulation schemes;
- Operational procedures where Dublin Airport have in place a range of operational procedures which serve to minimise ground noise and;
- Operating restrictions relating to the North Runway Permission.

Section 14.6 of the EIAR looks at the assessment of effects and significance.

While the EHS assessed all the scenarios covered in the EIAR it was decided to only address the Worst-case Year 2025 Apron 5H Lden Metric and Lnight Metric in this report as these scenario have the potential to effect more people and as such mitigation measure to best counter this should be implemented. For clarification Apron 5H is a separate planning application which has been submitted to the planning authority that seeks to develop an area in the north east of the airport site, which will result in 10 aircraft stands being located there.

The EIAR states that comparing the 2025 Apron 5H scenario with the 2025 Baseline, the number of people exposed to at least a low level of ground noise (i.e. 50 dB Lden or above) is forecast to

The UAP more last had the base true to en mane true and per provide and so a 10.25 and the following was found. The manifered per providence of cast a low level of providence (i.e., Six 48 address or blower) of comments from the description of blower of prophe appoints to a 1.850, and the dominer of prophe appoints to a 1.850 at 1.850, and the dominer of prophe appoints to the following forward to the 2015 Bosellan Schnang, they be a made for a recommendation the 2013.

*Assigne to 24, * 18 people exposed to at least a low yound noise level and no change to the school and the property of the street and providence to the school and the property of the school and the province of the school and the province of the school and the province of the province of the school and the province of the

Anile tise ESS welcomes the reduction in the puople exposed to ground noise between the 2018 barch to 2025 forecast has discussed in 2013 education sometimes sometimes and the 2018 of puople namely 24, 518 except exacts of some exposed to 51/18 tide not above and 3 people exposed to 51/18 tide not above and 3 people exposed to 51/18 tide not above.

(no results from the lingible modelling consumer (see 2016 baseling and the 2027 Sassisse the following was found. The number of people expased it, as feast a low revolutionand name that its bloods or above) decreases from above) decreases from John both the number of people exposed to at least a high level of ground naise lim. So the lingible or above) decreases from John to those fureard to the 2025 has line scenario, there are in the reductions to 578 people expansed to at least a low ground note in a fact or above expansed to a high ground note forest.

White the EHS welconcestly symble on reduction in the mood-respond to ground noise between the 2018 baseline and the 2018 haveline sensition is the notionaledge that a significant proportion of neaple, namely 573 people assessed as being expendent to 45 distribution above and 6 people assessed as being expendent of 45 distribution above and 6 people assessed as being expendent of 45 distribution above and 6 people assessed as being expendent of 45 distribution and 6 people assessed to 45 distribution.

series 11 Singularithe measuring aroundy to place at Cubbin Airpoint out resource of militarishing and make affects of business affects of busines

- Redisting the name at source by the represent our of now building aimisensy.
- Lond use; planning and menagement which looks at nonriconus and resignable solution schemes.
 - Operational procedures who a Dublic Argent have in place a range of operational or orderes which serve to minimize promit noise and.
 - as a Connection restroyment entering an entering the track of the course terrolication

to mention to the advisite by Anne account of the Anne SALT of the AAA weeks.

Whele the EHS assessed all the somenous covered in the EFAR II was decided to only address the Worst-case Year 2012 Agree SN Ldon Matrix and Inight Metric in Ehit report as these scenario have the preential to effect more people and as such mitigation measure to best counter the should be implemented. For clarification aprox 51° is a separate planning application which has been submitted to the planning authority that seems to develop as area in the parth east of the elevate which will result in 10 are saft stands being located there.

The FIAP states that comparing the 2005 Apron St. Commiscratic are Substituted based on the number of people responsed to at least to four levels of general name (i.e., St. 40, Liten or above he downsed to

increase from 24,518 to 31,430, and the number of people exposed to at least a high level of ground noise (i.e. 65 dB Lden or above) is forecast to increase from 3 to 6.

The EIAR states that comparing the 2025 Apron 5H scenario with the 2025 Baseline, the number of people exposed to at least a low level of ground noise (i.e. 45 dB Lnight or above) is forecast to increase from 578 to 10,623, and the number of people exposed to at least a high level of ground noise (i.e. 55 dB Lnight or above) is forecast to increase from 6 to 35.

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.

Land/Soil including groundwater:

The EHS have assessed chapter 18 which looks at the likely significant effects on Land and Soil impacts as a result of the proposed Relevant. The EHS is satisfied that the proposed development will not have any significant effect on land and soils.

Conclusion:

The EHS makes the following observations in relation to this proposed development:

- 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 if 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.

All correspondence or any queries with regard to this report, including acknowledgement of this report, should be forwarded to Ms. Geraldine O Callaghan, Principal Environmental Health Officer, at the above address

Stallylan

Geraldine O Callaghan
Principal Environmental Health Officer

Thomas Mangan Environmental Health Officer

Environment OU

n and it for any any frame an encount of the contract of the second and the second and the second is the second and the second of the second and the second and the second as the second

Fig. U.N. States that comparing the 3070-2009 SH seems to virtue 2021 freeher, for number of provide copared to at least or ow level of ground more virtue virtue at least or business to increase from 575 to 16,122, and the number of despise experious so at least a nightly in of ground provide. Notified this halp a provide despise the 15 of this provide.

The ELS action-Workes that the latterstein; repty expured to 50 d8 tilen and 45 d0 unificingly reaver in adverse hours affects as authored in The Neurila Health Organisation's prepayed mark he Make Goldenoes 2018. Our to this the ERI healthest too miligation measured proposed mark he reflected in these receives primition in order to notice as much as possible the number of people exposed. The ERI also feels that the WINO levels of 48 dB bein and 40 do taught should be used as seven as assisting aligned by for whereas party of the sound insulation innovernment works.

sample of indulars promibations

One difference assessed character AS with the absent the Bloghy significants offerer on the absolute for instance amplitudes as a resolute the proposed delicated. The EdS is satisfied that the proposed development without more only significant offerer relicant and radio.

r observatory

The EMS coulder alter faith suing at sechnification in reliebour to faith programe? the relicanies of

- Add officets abroado becamade by the DAA to minute as many people to postable and ordered from the adverse negrit officets associated with alteralt noise in outlines above in this report. This most recome reducing morality names levels to below 45 also den, and for night noise proposure to breaw 40 als Inlight.
- The EHS if of the agricum that The World Haush Organization's Environmental Noise Guideburs of 45 of 5 den and 40 air in physical Paint been used for greened noise assessments

All correspondence on the queries with enjoyed to this cape, it, including acknowledge, sent of this report, should be to have bed to his, Garaldon C. Callaphan, Principal contraminated Health Office, at the above address.

Jan Jes

Geraldine is Cellagian Principally promocerity in the Others Thomas Mangan Anystonur niar Arabit Lifteer Carlmanneri Cal Support document (3)

Our Ref.: 06F.217429 Reg. Ref: F04A/1755



Ms. Helena Merriman, Chairperson, St. Margaret's Concerned Residents' Group, Millview, Millhead, St. Margaret's, Co. Dublin.

5th October, 2007

Appeal Re:

Construct on airport lands, a minway, 3.110 metres in length and 75 metres in width 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.

Dear Madam,

I have been asked by An Bord Pleanála to refer to your two letters dated the 19th September, 2007 and your further reminder letter dated the 1st October, 2007 in relation to the above-mentioned appeal.

Once the Board has made its decision on an appeal, its jurisdiction is spent. The interpretation and enforcement of the terms of the Board's order is the responsibility of the planning authority, in this instance, Fingal County Council. In relation to the planning issues it would not be appropriate for the Board to comment beyond what is contained in the decision as set out in the order, nor would it be appropriate to meet with participants in the appeal. You should, therefore, address your concerns regarding enforcement of conditions and interpretation regarding maps to the planning authority.

In relation to your letter regarding costs, with respect no undertaking was given by the Inspector at the oral hearing though it is acknowledged that the issue arose. The Board's decision not to grant costs in this case is final.

I trust this is of assistance.

Yours faithfully,

Josephine Hayes,

Senior Executive Officer.

r alsp tik 000/T000728

graduates and a second

A CO

No. of Contract

o diese in strano fitolo in scritti de com munico con de com mante en la come de como en la compania de compania de como en la compania de compania de como en la compania de como en la compania de compania del compania de compania del compania de compania del compania del compania de compania de compania de compania del com

(ii) yelloyddig yelloyddig yyd gyddigon o'r bu y gannar o'r digyddigod (florigaeth).
(iii) Y gyfrifellogaeth y gyddigolygaeth y familet flori buyy y channol a channol y gyddigolygaeth y channol a channol y gyddigolygaeth y channol a cha

The state of the second contract the supply in the transmitted of the second field of the second of

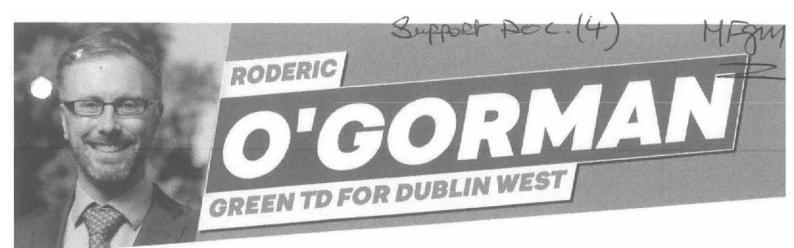
the region of the first terminate of the property of the prope

Displaced and the Control of the Con

Physical No. 48 14

A 2-17 MIR. L. L.

.



29th January 2021

Re: Planning application F20A/0668

To whom it may concern,

We would like to make the following submission in opposition to the application by DAA PLC, reference F20A/0668, proposing the amendment of two planning conditions (attached to the planning permission for the new North runway).

We have paid the submission fee.

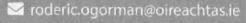
Kind regards,

Roderic O'Gorman, TD, Cllr Pamela Conroy and Cllr Daniel Whooley

Change in Time Restrictions goes against European Directive 2002/49/EC

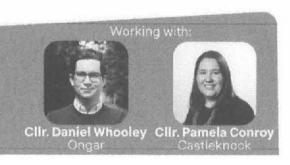
Dublin Airport Authority's proposal to amend condition no. 3(d) of the North Runway Planning Permission (Fingal County Council Reg. Ref. No. F04A/1755) from the following:

'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.'



daniel.whooley@cllrs.fingal.ie

≥ pamela.conroy@cllrs.fingal.ie







1500 yearman 5031

Re: Planning application 1-204/0568

Townsom it may concern,

We would like to make the following submission is opposition to the application by DAA PLC, reference 130A/1668, proposing the amendment of two planning conditions (areached to the planning permission to the new Mer'b amendment).

We't are good the submission fee

abreses built

Rock de Difference - The Cite Ramatian some warreld the Burdan allow

Litango la Tima Rest not que gons against nunopean Directive 2002/49/EC

Bucklin Airport Authority's proposal to amend condition in a 3(d) of the North Rumpay Planning Permitsion (Fingal County Count (Rep. Sef. No. 2044/1755) from the following:

Her way 10t-25H shad not be used for take-off or landing between 230f -lours and 0200 hours exceptional air matter considerations, exceptional air naffic conditions, adverse weather, rechnical public in air maffic control systems are decreasing at other as other arounds.

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.'

Violates Directive 2002/49/EC of the European Parliament and the Council relating to environmental noise assessment and management. According to Directive 2002/49/EC, the definition of the day-evening-night level Lden states that:

- the day is 12 hours, the evening for four hours, and the night eight hours. The Member States may shorten the evening period by one or two hours and lengthen the day and/or the night period accordingly, provided that this choice is the same for all the sources and that they provide the Commission with information on any systematic difference from the default option,
- the start of the day (and consequently the start of the evening and the start of the night) shall be chosen by the Member State (that choice shall be the same for noise from all sources); the default values are 07.00 to 19.00, 19.00 to 23.00 and 23.00 to 07.00 local time,
- a year is a relevant year as regards the emission of sound and an average year as regards the meteorological circumstances.

The redefinition of a night-time noise quota between 11.30 pm and 6 am is not legally sound as it violates the directive's definition of "night" being 8 hours and it "night" unless provided the European Commission with a change from the default option by member states, is between 23.00 and 7.00 local time. This proposal must be adapted to fit within the Directives boundaries.

who exist it do no

Annway 161-288 shall not be used for take off at landing between 1600 haus and 0550 hours except no reves of safety, maintenance considerations, exceptional nic naffic conditions, odvietse weather, technical faults in air traffic control systems or decrared emergencies at other nignores or where hursway 101-288 length is required for a specific already type.

visities Directive at AZAAPEC of the European Pathaniant and the Council relating to environmentalism a systemment and management. According to Directive 2002/19/EC, the derivition of the day-evening-night level Law states that:

the day is 12 hours, the evening for four hours, and the highs eight nows, the Mirabor States may shorten the evaluing period by one or had hours and lengthen the day and/or the right neriod accordingly, provided that this choice is the sense for all the sources and that they provide the Commission with offermation on any systems the difference from the default option.

the start of the day (and convequency the start of this evening and the shall of the wight) shall be chosen by the Member State (that choice shall be the lone for note for note from all sources), the distant values are 07.00 to 15.00, 19.00 to 7 tiple and 25.00 to 17.00 to 15.00 that.

a year is a videvant year as regards one emission of sound and an average year as regards the more indocreal discunstances.

The redeficition of a night bind nuise quals between 13.30 pm. and 6 ain is not legally shared as a violency the directive's definition of "right" being 8 hours and it "night" valess provided the European Containssion with a change from the default option by member states, is between 23.00 and 2.00 local time. This proposal must be adapted to fluiding the Directives boundaries.

Switching from a Noise monitoring system to a night-time flight restriction system

The planning application aims 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) which provides as follows:

'On completion of construction of the runway hereby permitted, the average number of night-time aircraft movements at the airport shall not exceed 65/night (between 2300 hours and 0700 hours) when measured over the 92-day modelling period as set out in 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 to protect residential amenity regarding 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.'

This proposal does not follow the standard for similar passenger traffic Airports (see the grid below) where Tegel Airport in Berlin has a blunt flight policy during their "night-time" period of 22.00 to 5.00.

n Mess nother that and ingerious many amountment about a men unlighted

The planning application aims to replace condition not not the North Burnay PL image Portision (Engal County Council Reg. Ref. No. 1983/1755, ABP 4of. No. PLOSE,11429 as amended by Dings County Council (1987/1971) which provides as allows:

"On completion of construction of the runway hareby permitted, the overage number of mathematical materials in the airport that not exceed 65/night (browsen 2300 hours and 0700 hours) when minestrad over the 34-day modelling period as set out in colly to the further information sequest received by An Pard Piermala on the 3th day of Watch 2007. Peasure: To control the frequency of algorithm flight of the airport to protect residential order of the control that information submitted convening future algorithms use of the costing varieties convening future algorithms use of the costing varieties convening future algorithms use of the costing varieties convening future algorithms.

gatworks) tobal 10%

'A naise quota system is prapased for right-time naise at the ninport. The alignst shall be subject to an annual noise quota of 7990 between the hours of 2330hts und 0630hts. In addition to the proposed algorithms noise quota, the relevant action also proposes the following axise minigation measures. A noise insulation grant scheme for eligible divisitings within specific night noise contours; A detailed Noise (Nonitaring Frantework to monitarity ansite people manes with results to be reported annually to the Aircraft Molse Competent Authority (AWCA), in compliance with the Aircraft Molse (Dablin Airport) Regulation Act 2010

In a proposal coes not inflow the standard for similar parameter traffic Arports (see the god nelow) where Tegul Arport in Berlin are a blant hight come series time, "mg it time" period of 22 do to 5.00.

AIRPORTS WITH SIMILAR PASSENGERS PER YEAR

Airport Name	Country	Passengers/year	No restrictions	Noise based	Flight cap	No flights
Berlin Tegel Airport	Germany	35.6 million	Take-offs and landings are not permitted between 2200 (2150 off blocks) and 0500.			
Dublin Airport	Ireland	32.6 million				
Orly Airport	France	31.8 million	Total night curbeen implement of arrival may and 6:15, and to 06:00.	ented since / be schedu	e 1968: uled betw	een 23:30
Vienna International	Austria	31.6 million	Flight movements between 23:30 and 05:30 must be gradually decreased until a maximum of 3,000 flight movements per year (an average of four landings and four take-offs per night)			
Lisbon Airport	Portugal	31.1 million	Night-time flig movements d			
Palma de Mallorca	Spain	29.7 million	x			
Manchester	UK	29.3 million	Flight curfew into a quota (Ex.: Boeing 7 planes that exbetween 23.0	count (QC) 47) and fir cceed 81 d	over QC4 es for	

A similar airport in passengers/year is Vienna International. The airport is considered best practice in terms of efforts of community engagement and mediation. This engagement has led to several paths of dialogue with residents. One tool is "Neighbourhood Committee", which provides communication with the residents. This committee is composed of the airport managing director and the mayors and district heads of the surrounding neighbourhoods. Another non-profit organisation called "Verein Dialogforum" functions as an information and communication platform financed by the airport.

The mediation agreement handles several important topics, like night flight restrictions, noise caps, and environment fund and noise prevention programmes. The Forum discusses all these

REPORTS WITH SIMILAR PAUSEMOURS FOR YEAR

	Country	/ser//mgnassea			
Serilo Tegel Airpon					
		3.2 Similion			
			Flight authorinto a grant of the state of th		

A similar arrow in massengerapy is Vierna international. The airpaints candidated the simple of carried that practice in terms of effects of the minumby engagement and minutes in This engagement has been in several paths of distingue with residents. One that its "Arrighbourhood Committee", which provides commission with the residents. This commission compact is the support managing director and the mayors and distinct heads of the surrunning reignbourhoods. Another non-profit organisation railed "sepain Distingtorium" numbrons as an information and committee and arrived by the airport.

the med-inner, greath, it benetics coveral important copies, like night ingill restrictions, noise cass, and environment from and noise prevention or ogrammes. The forum discusses all those topics in order to reduce the nuisance from air traffic to a minimum. Municipalities and citizens have the opportunity of putting in place actions that go much further than the measures indicated in the law.

A consequence of the "Verein Dialogforum" is a flight movement cap between 23.30 and 5.30 pm with a maximum of 3,000 night-time flight movements per year (4 movements per night)

These proposals by the Dublin Airport Authority on the implementation of a noise-based monitoring system are not standard practice among airports of similar passengers per year, where most have either a direct stop on night-time flights (Tegel Airport, Orly Airport) or a maximum flight movement cap (Vienna International, Lisbon Airport). Rejecting this proposal and maintaining the current restrictions is what residents prefer and standard among similar airports.

Dublin Airport Authority is also not following the best practice, as set out by Vienna International's "Verein Dialogforum" & "Neighbourhood Committee", and aggravated residents who will be affected by the proposed changes. If the Airport Authority is to bring residents along with their proposed chances, they are doing so with great failure. Using more tools to create dialogue among communities where feedback is having an influence on decisions is key to greater harmony between both groups. The DAA should look at Vienna as an example of successful Airport-Community dialogue and take some of the successful policies and implement them in Fingal.

Noise impact in Dublin 15

As things currently stand, the opening of the North runway, in conjunction with the restrictions which were made a condition of the planning permission for that runway, would result in a reduction in noise levels experienced by many people living in Dublin 15. Those living in areas like Hollystown experience excessive noise as a result of current operations at the airport, so a change which would have resulted in a reduction in noise is a welcome one.

topics in order to reduce the managedring to restre to a present or Samithenium and (lifteens have the oppositually of putting in price actions may go much because than the masseum total aredinates lay.

A consequence of the "Veccon Dialogracium" is a flight intresentation between 25.30 and 5.30 are 5.30 are 125.10 are 125.

there progressly by the flubilis Argert Authority on the implementation of a colse-based socialization progressly by the flubility of the implementation of an absence of the second property of the second property of the second property of a second property of a second progressly of a second progressly of the second property of the second progressly and a second progressly alminer are second.

Digition Alignot Adherity is also not following the best practice as side out by foreign internationally and according to the proposed phane of the alignotic formation and appropriate the proposed phane is if the alignotic full or a bright of the proposed phane is a true alignotic full or a proposed chances, they are define to with great alliance. Summer that the proposed chances, they are defined with great alliance. Summer that the proposed chance of the proposed phane is the proposed and are accepted to the proposed phase the proposed phase and an according to successful depose down and the proposed to the proposed phase and are successful an according to successful deposed down and the proposed phase and an according to the proposed down and the successful posture and the proposed phase and an according to the proposed phase.

Maise impact in Dublin 15

As then is substituted which were made a condition of the North survey, recome some as the income restrictions which were made a condition of the planning activity iconic that nurves it would be expected by mery people being infinition to the bose by the Hobystown expensions of bose points at a confidence of a contractions of the second bose of the manufacture of the contraction of the second bose of the contractions of the second bose of the contraction of the second bose of the

However, if the current restrictions are changed, as per this planning application, then those living in this area will not benefit from a reduction in noise levels when the north runway is opened. Instead, the level of noise that they are experiencing will remain the same and they will experience new night noise. This is unacceptable.

Grants for noise mitigation

Despite the fact that those living in Dublin 15 will experience longer periods of noise than they do at the moment, if this application is approved, it is unclear from the maps submitted as part of the application if they will qualify for noise mitigation grants to insulate their homes. The maps are of extremely poor quality and hard to read. It is unclear what process has been used to decide which homes are to be insulated and which are not.

Additionally, from reading some of the submissions already made in relation to this application it is clear that noise mitigation measures are not successful. We would therefore argue that the best way to mitigate noise is to leave the planning conditions as they are and refuse this application.

Delay in documentation being made available

Although this planning application was lodged and went live on Fingal's website on the 18th December 2020, there has been a significant delay in some of the documentation going online. A large quantity of information relating to the application did not go online until 11/12th January which means that those submitting observations did not have the full time period to consider all documentation. We would raise a query as to whether this failure to follow fair procedures could open up the final determination to the risk of a successful judicial review challenge.

Howevery if the culcount replications are usuaged, or pur this planning application, then the eliminary is living in this meanwill not beneath from a contribution or used levels when the north runns ay is specificated, the level of color that they are experienced by it remainstrates and they are experienced by the remainstrates and they are experienced to the contribution of the source of the contribution of the contribution of the contribution.

Counts for move that dusting

Despite the first that there living in Davin 15 will experience larger benedic of roles than their distribution is approved, it is under from the maps submitted as part of the epphandon if they will qualify for roles midgation grants to insulate their livings. The maps are of exceeding part quality and hard to read it is underly will process have been used budgetide which brones are to be resulted and which are not

Additionally, from making some of the submissions about make a relation to this application is clear that noise militarian measures are not subsensible. We would interefate argue that the nost way to militaria outsets to leave the obtaining conditions as they are and refuse this application.

Delay in documentation point made available

Although this plagning application was lodged and used live on Fingal's website on the 18". December 2020, there has been a significant order in some of the documentation going order A large quantity of information relating to the application aid not go online until 12/12" ranger, which are not so that those submitting observations aid not have the full time period to consider all the unitentation. We would not a query as to whether this failure to follow the procedures could open up the first determination to the distribution of the distributions.

Lack of public consultation

As part of the Dublin Airport Management Plan, dated May 2018, the DAA states at section 5.3 that they are "committed to engaging with the local community in order to inform and discuss developments relevant to the airport". The last public consultation undertaken by the DAA was in 2016. At that time, many of the homes in Dublin West which will be affected by the proposed application had not yet been built.

It is paramount that DAA engage in a proper, full public consultation ahead of any changes to their planning conditions being granted.

References

Boeing, 2016. Airports with Noise and Emissions Restrictions. [Online] Available at: https://www.boeing.com/commercial/noise/list.page [Accessed 01 2021].

European Parliament and of the Council, 2002. Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise. [Online]

Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32002L0049 [Accessed 01 2021].

Jean-Paul Desgranges, R. H., 2004. Study on the different aspects of Noise Limits at Airports. [Online]

Available at:

https://ec.europa.eu/transport/sites/transport/files/modes/air/studies/doc/environment/2 004 10 aspects noise limits.pdf [Accessed 01 2021].

Ted ELLIFF, M. C. V. H. E., 2020. Impact of aircraft noise pollution on residents of large cities. [Online]

Available at:

https://www.europarl.europa.eu/RegData/etudes/STUD/2020/650787/IPOL STU(2020)650

act or public consolvation

As part of the Dutch Airport Management Plan, dated May 2018, the DAA status at section 5.3 that they are committed to ongaging with the local committently in order to inform and discuss developments injuriant to the altigort. The last public consultation undertained by the track was in 2016, at that time, many of the homes in Dutch West smith well in affected by the processed application had not yet been built.

is a paramount that DAA expage in a proper, full public consultationalised of any changes with a paramount plant of any changes.

Additional Section

Enring, 2016. Airports with Noise and Entit Sons Restrictions. [Online]

Available at https://www.isoring.com/commercial/heise/listpage

| Accessed 01 2021]

European Parliam on and of the Council, 20v2, Bulecoin 2002, 19/14 in Futerean Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental rase. I Chillian

Available as http://eur-lex.curopa.cu/legal-content/Ett/OC, /utt=celex/32003.0049 [Auto-seed 01.2021]

Jean-Paul Desgranges, R. H., 2004. Study unline different aspects of Noise Limits of Airpoits. (Onine)

ric almotious.

ricos//es europa, eu transpari/stor/transpari/files/mpdes/fr/aludies/dos envirspineni/A DDA LD aspects notes amis, pdf

Ted Et 15:F, M. C. V. H. E., 2010. Impact of plactoff raise pollution on revidents of large coless. [Online]

the mideline A

ortos://www.europ.gl.europ.gl.europ.eu/Austrate/etudes/STUD/2/20/650,87/PD. 510020.91650

787 EN.pdf [Accessed 01 2021].

Dublin Airport Authority, 2018, *Dublin Airport - Noise Management Plan*.

[Online]

Available at:

https://www.dublinairport.com/docs/default-source/airport-noise/dublin-airport-noise-management-plan.pdf?sfvrsn=c8e73047_2

[Accessed 01 2021]

Ibe #3 583 Accessor to the SEE

Embin: Altre of Authority, 2018, Dublin A your - Noise Mevicagin of Pan. (Online)

www.afereta.com

https://www.dubinargont.com/docs/default-sours-/argort no sessuble-aran-heastemanagement plan od75% on 55-7304 / 2

[Americad 01 2041]

Support Rocument 5

MFgM =

An Bord Pleanála

Our Ref: PL 06F.217429 P.A.Reg.Ref: F04A/1755

Your Ref:

Helena Merriman

St. Margaret's Concerned Residents Group

Millview

Millhead

St. Margaret's

Co. Dublin

9th January 2007

Appeal Re:

New runway including associated taxiways, internal road network, substations, navigational equipment, site works. Demolish derelict house and outbuildings. Relocate monument. Remove halting site.

Dublin Airport, Co. Dublin.

Dear Madam,

Enclosed for your information is a copy of a statutory notice issued by the Board in relation to the above-mentioned appeal.

Yours faithfully,

Brid Tiernan

Executive Officer

Direct Line:01-8737131

Encl:

BP77

64 Sráid Maoilbhríde. Baile Átha Cliath 1.

Tel: (01) 858 8100 LoCall: 1890 275 175 Fax: (01) 872 2684 Web.http://www.plcanala.ic email:bord@plcanala.ic

64 Marlhorough Street. Dublin 1.

Our Lot- Pl. dolf 217439 Pl.A. Geg. Roll, 179-A/1755 Your Moff

An earl Econolis.

Barrio Mercantili

St. Margareth Concurred Dear mer Group-

waiy liny

headthis

A total Williams

retord at

Tools ground my

Appendix

Nec annous including associated fortways, interval rota movement, and the value of the second dependent of the second second of the second of

Dear Washen.

Enclosed for some intermedien as a copy of a statutory neture stated by the Board in relations to the about sometimeal regions.

and hat not

rs area T bank

1517572-1 Description (C

lon?l

BP 77

1 1 1 1 M

A STATE OF

Our Ref: PL 06F.217429 P.A.Reg.Ref: F04A/1755

·Your Ref: Dublin Airport Authority PLC

RPS Planning & Environment Block E, Fifth Floor Iveagh Court Harcourt Road Dublin 2

9th January 2007

Appeal Re:

New runway including associated taxiways, internal road network, substations, navigational equipment, site works. Demolish derelict house and outbuildings. Relocate monument. Remove halting site. Dublin Airport, Co. Dublin.

Dear Sir/Madam.

I have been asked by An Bord Pleanála to refer to the above-mentioned appeal.

The Board has examined the appeal and is of the opinion that certain information is necessary for the purpose of enabling it to determine the appeal.

In accordance with section 132 of the Planning and Development Act, 2000 you are required to submit, on or before 5th March, 2007 the following further information:

NOISE

INM Methodology

1) Your response to question 1 of the Section 132 notice received by the Board on the 30th August, 2006 relating to INM methodology and the information provided at the Oral Hearing between October 2nd and 4th including withdrawal of details submitted are noted. Please submit revised details regarding comparison of the measured noise events recorded at the monitors situated 6.5km from start of roll on runway 10R/28L with the INM predictors for key aircraft types. In addition please include data on landings.

Noise Contours

- 2) With respect to the airborne aircraft please submit revised noise contours in the following 3 dB steps ie. 48, 51, 54, 57, 60, 63, 66 and 69 dB using appropriate settings for Refinement and Tolerance in the Run Options of the INM model and allowing for dispersion:
- a) Figure 44, Part 4 of the EIS as amended by Figure 4.2.1 of the Section 132 response Current Noise Exposure:Daytime.
- b) Figure 46, Part 4 of the EIS as amended by Figure 4.3.1 of the Sections 132 Response Future Noise Exposure: Daytime (No second runway).

An Bord Pleanál

64 Sráid Maoilbhríde. Baile Átha Cliath I.

Tel: (01) 858 8100 LoCall: 1890 275 175 Fax: (01) 872 2684 Web.http//www.plcanala.ie email:bord@pleanala.ie

This contour should take into consideration the replacement of Boeing 737-200 aircraft by Boeing 737-800.

c) Figure 57, Part 4 of the EIS as amended by Figure 4.4.1 of the Sections 132 response - Future Noise Exposure: Night-time (No second runway). This contour should take into consideration the replacement of Boeing 737-200 aircraft by Boeing 737-800.

d) Figure 58, Part 4 of the EIS as amended by Figure 4.5.1 of the Section 132 response - Future Noise Exposure (With second runway). This contour should take into consideration the replacement of Boeing

737-200 aircraft by Boeing 737-800.

e) Appendix 1 as amended by Figure 4.6.1 of the Section 132 response - Noise Contour for Option 7B in the Applicant's response to Grounds of Appeal received by the Board on the 12/06/06. The said contours should be on the same ordnance base map as the figures above.

Population Statistics

- 3) The population and household statistics provided in response to point 4(e) of the Section 132 notice as mentioned above which were discussed at the oral hearing would appear to be inaccurate. Submit revised population and household statistics for each of the 3dB contour bands.
- 4) Please detail a criterion for which 'significant effects' on schools should be assigned (a) without noise insulation and (b) with noise insulation.

Night Noise

- 5) Quantify the potential for increase in night flights on the existing 10R/28L runway which could derive from the growth of air traffic at the airport arising from the proposed runway relative to that which would occur without the new runway.
- 6) Paragraph 16.1.2.35 of the EIS states that a system of assessing the increase in noise level would be used to assess night-time noise impact. As there appears to be a noise change when comparing night-time use of the existing runway between "with development" and "no development", please detail which category in the accompanying table to which significance should be attached.

Ground Operations Aircraft Noise

7) Your response to question 6 of the said Section 132 notice received by the Board on the 30th August, 2006 relating to ground operations aircraft noise and the information provided at the Oral Hearing between October 2nd and 4th are noted. The correction given at the hearing would appear to be incomplete as the distances stated would appear to be in error. The distance from engine start-up to noise sensitive location NSL 1 is given as 7007 metres and to NSL 6 as 15,007 metres. The distance from aircraft taxiing to NSL 6 is given as 165 metres with a noise level shown being less than the noise level at 200 metres. Please clarify and submit revised details and figures.

Environmental Protection Agency

8) The applicant is advised/requested to consult with the Environmental Protection Agency to ascertain if there is any requirement to obtain an IPPC licence for the relocation of the engines testing area. In the event of a licence being required this fact should be referred to in the revised

An Bord Pleanála

64 Stàid Maoithhride, Baile Átha Cliath 1.

Tel: (01) 858 8100 LoCall: 1890 275 175 Fax: (01) 872 2684 Web.http://www.pleanala.re email:bord@pleanala.ie

64 Marlhorough Street Dublin 1. This contour smooth lake into consideration are representant or isoeing to 2-200 nitroothly forcing 727-500.

c) Figure 57, Pen 4, a flux all as autended by Figure 4.4.1 of the Sections between Figure 52 response - rution. No see Expressive: Pigure age, 256, second right fitte cultural risotal tiene into considering the line collection of Eucling P. 2.400 current by Housing P. 2.400.

d) Figure 58. Part -t of the EIS at autoided by Figure 4.1, in the Sustain 132 response - Future Noise Exposite (Neals second conveys). The compart should take into consideration the reprocessed to Basing 152-210 success for Region 731-400.

et Appenite. I as imended by Figure 4.6.1 of the Second 132 reponse.

Notes Contain for Option '8 in the supplicant aregorise to decinds of

A speak received by the Reard on the LANGTO. The state communication of the one file state communication of the state options.

Populari in Particol

For the preputation and household we convex provided in response to point feet at the propose of the feet at the control of the appearance of the control of the appearance of the control of the feet and househood devices not on the above and househood devices not on the above and househood devices not on the drawn of the feet and househood devices not on the drawn of the feet and househood devices not on the drawn of the feet and househood devices not one to the state.

A Please Settil a antenun for Words Significam etficus, on schools should be usatglied (a) waltenun role: perlimen e. d. Tr. with source rapidition.

Sain's Jalgo's

5) Quantify the printing for adverse or right highly up the masing IUR/16th meany which and derive from the growth of no author a the property from the property service to the winch while express services to the winch while express services to the winch while express exclusive the new annexy.

is largered, 10.1.2.25 of the LLS states that a secretic of asserting the acres of asserting the acres in a state in a state in acres in acres in a state in a

County Coeraffeet Alected No.

To Your exposure to question 6 of the said Service 122 action received by decree on the 50th August 2006 relating to ground of cuttons arrestly ages and the information provided at the drait fearing networn October 2nd and 40th are noted. The conception group at the hearing would appear to be incomplete as the distances stated would appear to be in arter. The distance from engine stant-up to notice sensitives foretien with 1 is given at that metres and to 1551, 6 as 15,000 metres of the distance from methal treating to 1851, 6 as 15,000 metres. The distance from several treating to 1851, 6 as 3000 metres. The distance from submit to dead the contract from an action to the contract from an action to the contract from an action to the contract from the contrac

reasonals made sales "I factorise society a grant

I The applicant is adviced/requisited to cert in with the finite manner of mathematical residence to the content of the conten

A Book Paragraph