

## Portmarnock Community Association

### Submission in relation to Aircraft Noise Consultation

February 2022

Portmarnock Community Association (PCA) wishes to submit the following comments in relation to the Noise Abatement Objective and the Draft Regulatory Decision and the related supporting reports following review of the documents. We recognise that ANCA is using the ICAO Balanced Approach in their analysis of the noise problem at Dublin Airport and believe that our comments take account of the Balanced Approach with the aim of identifying the noise related measures that achieve maximum environmental benefit most cost effectively. We also believe that our comment will assist in achieving a fair balance that substantially mitigates the impact of airport noise on the residents of Fingal and the wider Greater Dublin area while allowing the continued development of Dublin Airport and the associated economic benefits.

#### Metrics for Measurable Criteria

There are numerous references throughout the Noise Abatement Objective (NAO), the Draft Regulatory Decision (DRD) and the various supporting reports on the importance of noise exposure from 45 dB Lden and 40 dB Lnight to the recommendations of the WHO publication 'Environmental Noise Guidelines for the European Region 2018' (ENG18) relating to reduction of noise levels to below 45 dB Lden and 40 dB Lnight.

As examples, the first paragraph and start of the second paragraph on Measurable Criteria in the NAO state:

*"The NAO will be primarily measured through the number of people highly sleep disturbed and highly annoyed in accordance with the approach recommended by the World Health Organisation's Environmental Noise Guidelines 2018 as endorsed by the European Commission through Directive 2020/367, taking into account noise exposure from 45 dB Lden and 40 dB Lnight. These metrics describe those **chronically disturbed** by aircraft noise.*

*These metrics help articulate the effect of aircraft noise on health and quality of life."*

On Pages 33 and 35 of the DRDR, the following excerpts from ENG 18 are provided:

*For average noise exposure, the Guideline Development Group (GDG) strongly recommends reducing noise levels produced by aircraft below 45 dB Lden, as aircraft noise above this level is associated with adverse health effects.*

*For night noise exposure, the GDG 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.*

It is also noted in Table 2.5 of the DRDR that for average night noise level over a year (Lnight) of 40 to 55 dB "adverse health effects are observed amongst the exposed population. Many people have to adapt their lives to cope with noise at night. Vulnerable groups are more severely affected."

The standing of the WHO guidelines was strengthened by European Directive 2020/367 which states as noted on Pages 34 of the DRD Report:

"At the time of adoption of this Directive, the high quality and statistically significant information that could be used was that of the World Health Organization (WHO) Environmental Noise Guidelines for

the European Region, presenting dose-effect relations for harmful effects induced by the exposure to environmental noise. Consequently, the dose-effect relations introduced in Annex III to Directive 2002/49/EC should be based on those guidelines. In particular concerning the statistical significance, the WHO studies were based on representative populations, and the results of these assessment methods are consequently considered relevant when applied to representative populations.”

However, the second paragraph under the heading of Measurable Criteria in the NAO introduces other metrics for assessment:

*The following will also be used to help identify where noise exposure results in the populations experiencing the harmful effects. These are the number of people exposed to aircraft noise above:*

- 55 dB Lnight (a level of night-time noise exposure described by the WHO as representing a clear risk to health)
- 65 dB Lden (where a large proportion of those living around Dublin Airport can be considered highly annoyed)

These additional metrics are the ones that are the focus of the measures considered in the DRD Report and the Cost Effectiveness Assessment in the DRD Report only considers measures related to exposure to noise exposure of 55 dB Lnight.

We consider that the Regulatory Decision should use as the objective and measurable criteria required for the ICAO Balanced Approach, the strong recommendations from the World Health Organisation, supported by European Directive 2002/367, recommending reducing noise levels produced by aircraft below 45 dB Lden and reducing noise levels produced by aircraft during night time below 40 dB Lnight. These recommendations should be the overriding metrics for consideration in the DRD Report We consider that the DRD Report should be revised to reflect this and that Conditions 1 to 3 of the Regulatory Decision should be amended as necessary to following the revision of the DRD Report.

### **Cost Effectiveness Assessment**

The Cost Effectiveness Assessment considers various costs and losses both within the aviation sector and in the wider economy due to capacity constraints, reduction in economic activity etc. However, no consideration has been given to the potential costs and losses due to spending on health measures by people whose health would be impacted by noise exposure or the wider indirect costs to the economy arising from payments for sick leave and /or benefit and loss of productivity due to sleep disturbance. We consider that consideration of these potential costs and losses and the savings that would be made by implementing the recommendations from the World Health Organisation in ENG18 are essential to a comprehensive Cost Effectiveness Assessment

### **Proposed Conditions of the DRD**

In addition to our overall comment that Conditions 1 to 3 of the Regulatory Decision should be amended as necessary to following the revision of the DRD Report, we have the following particular comments on the conditions

#### **Condition 1**

We consider that the use of noise quotas instead of setting limits on aircraft traffic movements without reference to the noise impact of the aircraft is a positive measure in principle. We would agree strongly with the application of the quota to the full night time hours of 23.00 to 07.00 as per the EC

directive. We would however propose the following adjustments to the detail of the proposed noise quota system

- A system should be put in place for a phased reduction of the noise quota total as noise performance of aircraft improves in order to encourage use of the best performing aircraft in relation to noise performance
- The fleet mix for Dublin Airport in 2019 as given in Table 7.1 of the DRD Report indicates that the vast majority of aircraft using Dublin Airport have a Noise Quota Count of 1 or less based on information available from the UK Civil Aviation Authority (SUP 010/2018-1). We therefore consider that it is reasonable to revise the condition so as not to permit any aircraft with a Quota Count of 1.0 or more to land or take off at the Airport from 1 January 2024 rather than not permitting any aircraft with a Quota Count of 2.0 or more to land or with a Quota Count of 1.0 or more take off at the Airport from 1 January 2030 as presently proposed
- We would note the statement on Page 5 of Appendix G that "*Generation 0 aircraft (out of production aircraft types, typically from 1970s and 1980s) represent a small and declining proportion of flying at Dublin. Generation 1 aircraft (current aircraft types) dominate PATMs, while Generation 2 (latest aircraft types) are starting to enter the fleet.*" The accompanying graph also indicates that the majority of passenger ATMs in Dublin Airport in 2019 were on Generation 1 aircraft. This does not tally with Table 7.1 of the DRD Report which indicates that the majority of passenger ATMs in Dublin Airport were on Generation 0 aircraft. We would request clarification of this apparent conflict.
- For avoidance of doubt and clarity for the general public, Condition 1 should include a clear statement that "*Night time flights shall cease until the end of the Annual Period immediately on exceedance of the annual limit of the Noise Quota Scheme for the relevant Annual Period.*"
- The quarterly reports on the Noise Quota Scheme should include a summary spreadsheet stating the types of aircraft operating during the quarter and Annual Period, the Quota count assigned to the aircraft type for take-off and landing, the number of take-offs and landings for each aircraft type during the quarter and cumulatively in the Annual Period and the Noise Quota Count for each aircraft type during the quarter and cumulatively in the Annual Period. This summary spreadsheet should be available on the planning authority and DAA websites within 7 days of the submission of the quarterly report to the planning authority. This will give greater transparency and clarity to the public on the operation of the scheme.

#### Condition 2

Operating hours of Runway 10L-28R should be set to best facilitate reducing noise levels produced by aircraft below 45 dB Lden and reducing noise levels produced by aircraft during night time below 40 dB Lnight.

#### Condition 3

The Residential Sound Insulation Grant Scheme should be revised to address the recommendation of ENG 18 that noise levels produced by aircraft during night time should be reduced below 40 dB Lnight.

Submitted by

Finbarr Quigley

Chairperson

On behalf of Portmarnock Community Association