**Recommendations for consideration at the Aircraft Noise Consultation**

1. **Decibels and Noise monitors**
2. The dB scale is logarithmic. Thus, an increase of 10 dB corresponds to a sound intensity multiplied by 10; an increase of one dB indicates that sound pressure has increased by about 1.26 times; a doubling of sound power corresponds to an increase of 3 dB.
3. **World Health Organisation**: 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. To reduce health effects, the GDG 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 GDG recommends implementing suitable changes in infrastructure.
4. **Noise monitors** need to be installed across Tyrrelstown, Hollystown, Hollywoodrath and Ongar to get a real-time understand of levels of noise.
5. **Health implications**

The evidence of the health implication of noise from night flights cannot be ignored.

1. **Hyena-Study** was carried out by Dr Lars Jarup and his team at Imperial College in London (2008). Cohort N= 5000, aged between 45 -70years who had lived near Heathrow, Berlin Tegel, Amsterdam Schiphol, Stockholm Arlanda, Milan Malpensa and Athens Elephterios Venizelos airports for at least five years. The study found that noise from **night flights** causes immediate increases in blood pressure in sleeping people, even if they are not woken up by the noise. It discovered a **14% increase in the risk of high blood pressure (hypertension) for each 10 decibel increase** in night-time aircraft noise. Hypertension can lead to heart problems and even early death.
2. The **Greiser-Study** was carried out by the German Federal Environmental Authority and published in 2010. It covered the area around Köln-Bonn Airport and showed a significantly **increased risk of coronary heart diseases, strokes and cancer** due to aircraft noise.
3. These studies do not however factor in the detrimental health effects for women in perimenopausal stage of life who already are suffering from sleep disturbance.
4. **Aircraft noise quota numbers (0-6):**

Transparency required as to how the 0-16 quota numbers are calculated and which needs to be accessible to the public.

1. **The depleting quota each time an aircraft lands and takes off between 11pm and 7am**

Noise quota management must be transparent, available to the public in real-time, with defined parameters for the noise point system coupled with spot check audits and noise point fines.

Dublin Airport must be held accountable if they are to run the Noise Quota System.

1. **Reduce the long-term impact of aircraft noise by 30% by 2030, 40% by 2035 and 50% by 2040**

These timescales are fall too prolonged and should be reduced.

1. **ANCA recommended Noise Quota Budget for Dublin Airport = 16,260 per annum:**

The noise quota budget should not reflect 2019 which was the busiest year. Using 2019 as the baseline for the noise quota is overly generous. A year when Dublin airport breached the cap on journeys. I would therefore suggest setting a lower baseline for the noise quota.

1. **50% reduction in people highly sleep disturbed by 2040 compared to 2019:**

2019 was one of the busiest years and therefore is the least favourable year to be chosen for a comparison.

1. **DAA can spend noise quota budget as they wish, but once it is gone planes are grounded**

Transparency to the public is essential with evidence that the planes are grounded immediately once the quota is 0. I would recommend a live update accessible to the public.

1. **Restricted Night Operating House on new north runway**

Be aware that Tyrrelstown residents are already experiencing night operation from the other runway which for some reason is not complying to EU recommendations on Night Operations. (Night time is 11pm to 7am according to legislation)

As an example, **November 14th 2021 night operation experienced from my home:**

**00:33am, 1:17am, 4:50am, 5:04am, 5:11am, 5:31am and then a deluge of planes from 6am onwards**

This level of sleep disruption is unsustainable.

1. **New residential sound insulation scheme does not extend in to Dublin 15**

WHO recommends a **40 dB Lnight** limit. The New residential sound insulation scheme is only available to dwellings exposed to levels at or above 55db Lnight. Even so,using recorded figures from 2019, some of these areas of Dublin 15 experienced the level of noise within the area of the proposed new scheme. I would therefore recommend a widening out the area within which households can apply for the new noise insulation scheme. It should be linked at least to the Lnight 50-54dB contour.

Best Regards,

Fiona Debtuch

Resident of Tyrrelstown, Dublin 15