



**Friends of
the Earth
Scotland**

Friends of the Earth Scotland response to Edinburgh Airport Limited's Consultation: Let's Go Further

6 May 2017

Friends of the Earth Scotland campaigns for everyone to have the right to a healthy environment and a fair share of the world's resources. We:

- Object to Edinburgh Airport's proposed new flight paths;
- Call for the Airport to return to its use of airspace prior to 2012 and to cease all night time flights i.e. from 11p.m. – 6a.m.;
- Strongly object to the numerous and gross inadequacies within this consultation which have undermined the ability of residents to participate in this decision-making process in a meaningful and constructive manner.

Some key Failings of the Consultation

- (1) Edinburgh Airport's headline assertion that "If implemented our preferred options will reduce the number of people overflowed by aircraft up to 7,000ft by 25,000 people and would reduce our CO₂ emissions by over 8,500 tonnes a year" is misleading with the potential consequence that fewer people are responding to this consultation because they are being misinformed over basic facts.
 - (a) The calculations behind the 8500 tonnes CO₂ number are shown in Table 13 on page 141 of the consultation document and reveal that this number is based on the assumption that flights would remain at 2016 levels. However, Edinburgh Airport's flight paths proposals are clearly and explicitly to enable growth of flight and passenger numbers. So, to make a calculation based on a no-growth scenario, which is clearly not on the table here, is grossly misleading;
 - (b) The assertion that 25,000 fewer people will be affected by the flight path changes is simply not borne out. It is derived via a comparison of the proposed flight paths "relative to today's impact" (see Table 3 and onwards). However, since June 2015, use of existing flight paths increased and varied significantly compared with previously without prior warning or consultation. As such, an artificially high baseline comparator has been used, because it does not represent how people have historically

been overflowed, and therefore the 25,000 number is misleading. Edinburgh Airport has also used 2011 census data to feed into its calculations which is problematic for a number of reasons, including that it overlooks hundreds of families who have moved to West Lothian since then.

- (2) Residents of Winchburgh, East Calder, South Queensferry and Echline were informed, via the first stage of this Consultation process, that they would not be affected by proposed changes. However, they now appear through the second consultation to be potentially affected, but residents may be under a false sense of security and therefore may not be feeding into this consultation.
- (3) Edinburgh Airport has omitted vital information in this consultation. The noise contour maps are not included in the main consultation document making it difficult for people to comprehend what the changes could mean. The Airport has not conducted and included health impact assessments, proper carbon assessments based on realistic growth projections, details over frequency and duration of its operations (including how late into the night and how early in the morning operations will be), and traffic impact assessments and therefore, the impact of the proposals on local air pollution. This consultation therefore lacks the most basic key issues that people should have a right to know about and respond to. People are not being permitted to respond to the consultation on an informed basis.
- (4) Analysis by Edinburgh Airport Watch shows that over 71% of West Lothian respondents to the first consultation said that they did not want changes to the flight paths. However, the status quo is not an option on the table, showing that the Airport is not taking the findings of its first consultation into account rendering the process something of a farcical box-ticking exercise. The consultation is set up in a divisive way, asking people to state where they would rather a flight path be put if they disagree with the preferred option.
- (5) Edinburgh Airport started significantly changing the use of its existing flight paths prior to issuing the current consultation, which has muddied waters and exhausted communities prior to this consultation. In June 2015, Edinburgh Airport varied and increased its operations in a number of ways. Firstly, it introduced the TUTUR trial: a new flight path which saw southbound planes take off over Broxburn and Uphall before turning north and east over the Forth, then south over East Lothian. The public was not informed of the trial in advance. The trial ceased in October 2015. Secondly, it started putting much heavier and louder aircraft on the GOSAM flight path. Thirdly, it altered and heavily increased the use of the GRICE flight path. Fourthly, it that the noise level has been as high as 80 decibels when flights are allowed more flights during the night time, with reports of planes taking off and landing as late as midnight and as early as 3:30 am. Hundreds of newly affected West Lothian and Fife residents have reported sleep disturbance, noise nuisance, and associated health impacts including anxiety, stress, and depression. Prior to 2015, the Airport received around ten noise complaints per quarter – it now receives over 600 per quarter. Residents who had previously not been overflowed for generations had a realistic and legitimate expectation that they would not start to be overflowed without being consulted or notified. Whilst the TUTUR trial has ceased, the GOSAM and GRICE changes persist to this day. However, Edinburgh Airport has not provided details over the extent of the changes, making it difficult to scrutinise their activities.

The result of these failings is an opaque process which threatens some of the poorest communities in Scotland, creating environmental injustice.

Airport expansion will harm communities and the climate

The main premise of the consultation is that flight expansion is necessary to enable and foster economic growth. However complete disregard has been given to the health of communities and the climate.

a. Carbon dioxide emissions from the proposals

The Aviation industry is one of the most polluting forms of transport, which is responsible for 28% of Scotland's carbon emissions. The scientific consensus on climate change is beyond dispute, the need for immediate and strong action to reduce emissions is accepted. Scotland must play its part in 'holding the increase in the global average temperature to well below 2 degrees above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 degrees, in line with the Paris Agreement.

In Scotland, aviation forms 15% of the CO₂ emissions from the transport sector, despite the fact that half of the population do not fly in any given year. Just under half of passengers travel in and out of Edinburgh Airport. It is clear that new flight paths will mean more flights, and more passenger numbers. Edinburgh Airport has provided no lower and upper growth projections as part of this consultation. However, it has separately made assertions that it would handle up to 40 million passengers by 2050 which would no doubt mean a dramatic uptick in the amount of carbon dioxide being emitted by the aviation industry in Scotland, undermining Scotland's ambition on climate change.

It is unacceptable that Edinburgh Airport has not provided a robust carbon dioxide impact assessment, but instead has included a wholly misleading and erroneous claim that the net result of the changes would mean fewer CO₂ emissions.

b. Noise and health impacts

Noise from aircraft can be seriously detrimental to health. According to the World Health Organisation, "Excessive noise seriously harms human health and interferes with people's daily activities at school, at work, at home and during leisure time. It can disturb sleep, cause cardiovascular and psychophysiological effects, reduce performance and provoke annoyance responses and changes in social behaviour."¹

The World Health Organisation has summarised the evidence linking environmental noise with five major detrimental health outcomes²:

- a. Annoyance
- b. Sleep disturbance
- c. Tinnitus

¹ World Health Organisation, "Noise" <http://www.euro.who.int/en/health-topics/environment-and-health/noise>

²² WHO, "Burden of disease from environmental noise: Quantification of healthy life years lost in Europe" (2011)

- d. Cognitive impairment in children
- e. Cardiovascular disease.

Adverse health effects have been demonstrated reliably by the European Environment Agency, as follows:³

- 42dB Lden for annoyance and disturbance and 42dB Lnight for self-reported sleep disturbance through
- 50dB Lden for hypertension and “reported health – clinical health” and 50dB Leq for effects on learning and memory, to
- 60dB Lden for ischaemic heart disease

According to the WHO, people annoyed by noise may experience a range of consequences, including anger, disappointment, dissatisfaction, withdrawal, helplessness, depression, anxiety, distraction, agitation or exhaustion. Furthermore, stress-related symptoms such as tiredness, stomach discomfort and stress are linked with noise exposure as well as noise annoyance.⁴

The number of complaints to Edinburgh Airport in the past few years due to the alternated use of airspace, demonstrate that people’s health and wellbeing are already suffering from increased flights and noise. Edinburgh Airport should have, on the back of these complaints, conducted a health impact assessment, but it has failed to do so. The WHO notes that it is possible to conduct health impact assessments, either directly, or indirectly.

A direct approach would involve carrying out a population-based study, using standardized questionnaires, and some classification of noise exposure (either measurements, or a simple indicator such as proximity to flight path).

An indirect approach would involve establishing the noise levels associated with being in or near the flight path, then using literature to identify exposure-response relationships linking environmental noise with the probability of experiencing a high level of annoyance, and then linking these together with the size of the exposed population. The WHO Regional Office for Europe has published a methodological guidance for conducting these kinds of indirect studies.⁵

It is unacceptable that Edinburgh Airport has not conducted a health impact assessment into health already experienced or expected to be experienced by affected residents, despite having enough information to hand based on nuisance reports and its own noise envelopes to carry out either a direct or indirect health impact assessment.

c. Road traffic and air pollution

³ European Environment Agency, “Good practice guide on noise exposure and potential health effects” (2010), Table 2.1, p8

⁴ WHO, “Burden of disease from environmental noise: Quantification of healthy life years lost in Europe” (2011)

⁵ WHO, “World Health Organisation (WHO, 2012). Methodological guidance for estimating the burden of disease from environmental noise. Edited by Tomas Hellmuth, Thomas Classen, Rokho Kim and Stylianos Kephalopoulos. WHO Regional Office for Europe; Copenhagen, Denmark.

Road traffic and associated carbon emissions and air pollution can also be expected to worsen as a result of the increased flights. There are two Air Quality Management Areas near the airport which carry a lot of traffic coming to or from the airport: the Glasgow Road AQMA, and the St John's Road AQMA. St John's Road is one of the most polluted streets in Scotland, with levels of NO₂ well above legal limits long after a legal deadline, threatening the health of local residents.

Air pollution, albeit invisible, causes significant harm to health and at levels measures on St John's Road, has been linked with increased risk of heart attacks, strokes, lung cancer, children's lungs not growing to their full potential, mothers giving birth prematurely and/or to low-birthweight babies, dementia, diabetes, and obesity. Given the growth projections provided elsewhere, it is unacceptable that the Airport has given no thought to how its operations in the sky will impact on traffic on the ground. The residents of St John's Road are not included in the consultation and no traffic impact assessment has been included in the overarching consultation document.

Conclusion

Due to the numerous and gross failings in the consultation, the certain harm to the climate, to local residents' health, and to local air quality, Edinburgh Airport should return to the use of airspace prior to 2012.