



Draft aviation policy framework

Response from Belfast City Airport Watch



September 2012

Executive Summary

We are extremely disappointed with the Draft Aviation Policy Framework. It is quite wrong that the Government should propose that the only real mechanism for the regulation of the noise pollution caused by non-designated airports in the UK – which form the vast majority of the UK's airports – should be better engagement between airports and local communities.

It is inconceivable that the Government would permit the sole mechanism for the regulation of air or water pollution, or pollution from waste, to be left to a laissez faire system of “better engagement” between the polluting company or organisation in question and the local community. These forms of pollution are all subject to strict controls which are monitored and policed closely by the statutory environmental agencies in each of the UK territories.

Moreover nearly all other forms of noise pollution are subject to stricter controls through the statutory powers exercised by local authorities.

We believe that the proposals set out in the Draft Aviation Policy Framework fall far short of what is required to ensure that all airports in the UK minimise the noise pollution which they produce. The adverse impacts of aircraft noise on health, education and quality of life are well established. The DfT needs to take decisive action to produce the better balance which it claims it seeks between the commercial interests of the aviation sector and its adverse impacts on local communities.

In particular, we would like to see the following measures:

- robust and ongoing mapping, monitoring and regulation of noise pollution caused by the all the UK's commercial airports – carried out by the Department for Transport (DfT) (and devolved administrations, where applicable), or by the Civil Aviation Authority (CAA), rather than by the airports themselves
- both the monitoring and the noise regulations must properly reflect the true impact of aircraft noise on health, education and quality of life, as evidenced in the substantive relevant research, and must reflect best practice as set out by the World Health Organisation in its relevant guidance
- the Government should commit itself to a specific reduction in the number of people in the UK significantly affected by aircraft noise over the next 10 years – we suggest a 10% reduction
- airports should be required to reduce the level and frequency of aircraft noise within the areas which are significantly affected by noise – priority should be attached to achieving this objective at the airports affecting the largest populations, and at those which affect large populations, and also duplicate the services of an airport nearby
- no further growth should be permitted at airports which affect large populations in terms of noise, and which duplicate the services of an airport nearby, unless the airport operator in question can prove that any planned growth will not result in an increase in noise pollution
- all airports whose noise pollution affects significant populations (and/or any schools) should be required to meet specified targets for reducing those levels of noise over a five year period – there should be serious penalties for airport operators which do not meet these targets

- the Government should make it clear in its Aviation Framework that it is abandoning its outdated guidance stating that the 57 dB LAeq,16h contour marks the approximate onset of significant annoyance, and should introduce more sophisticated guidance which better reflects the considerable body of recent international research in this regard, and which properly reflects international research on health and education impacts of aircraft noise
- the Government should either refine the current system of air passenger duty so that a higher rate is levied on those flights having the most serious adverse noise impact, or it should use its existing powers to enforce airports to use differential landing fees to reflect the noise impacts of flights
- at airports where aircraft noise affects a significant number of people (and/or affects schools significantly), any noise envelope should only be used as a device to ensure that the level and frequency of aircraft noise pollution does not get worse and/or is reduced over time – it should not be used as a device to permit any increase in the amount or frequency of noise at such airports
- the Government should give serious consideration to the results of the EU-sponsored MIME study, which developed a model of tradeable noise permits for airports, with a view to its possible introduction in the UK
- the Government should require airports to provide comprehensive and robust effective insulation (not just double or triple glazing) to all homes seriously impacted by aircraft noise, and not only those at 63 LAeq 16h
- we support an enhanced noise regulation role for the CAA – but it must have a consistent, proactive and tough regulatory and enforcement role, similar to the Environment Agency
- Belfast International Airport should be earmarked as the regional gateway airport for Northern Ireland at which any further expansion, particularly of international routes, should be focused, if such expansion is deemed desirable

Introduction

We are extremely disappointed with the Draft Aviation Policy Framework. In her foreword to the document, the former Secretary for State says:

A better balance than in the past needs to be struck between the benefits aviation undoubtedly brings and its impacts, both at a global and at a local level.

We would concur totally with the statement. However, she then goes on to say:

This will require much better engagement between airports and local communities, with greater transparency to facilitate informed debate and help to build mutual trust. This is one of the key themes running through our draft framework and the Government is encouraged that some airports are already working to improve local engagement. Nevertheless more needs to be done.

“Better engagement” between airports and local communities is, indeed, the only real mechanism which this document is proposing should be used for the regulation of the horrendous noise

pollution caused by the vast majority of airports in the UK which are not designated “national” airports. This is despite the fact that many of those airports already create noise pollution which affects far larger numbers of people than is the case at two of the three nationally designated airports which are subject to Government noise controls. Many non-designated regional airports also have plans for expansion which are likely to increase the noise pollution they produce.

It is inconceivable that the Government would permit the sole mechanism for the regulation of air or water pollution, or pollution from waste, to be left to a laissez faire system of “better engagement” between the polluting company or organisation in question and the local community. These forms of pollution are all subject to strict controls which are monitored and policed closely by the statutory environmental agencies in each of the UK territories.

Moreover nearly all other forms of noise pollution are subject to stricter controls through the statutory powers exercised by local authorities.

Why then is the Department for Transport (DfT) proposing that this laissez faire approach, which has patently failed to minimise noise pollution associated with airports to date, should continue?

We believe that the proposals set out in the Draft Aviation Policy Framework fall far short of what is required to ensure that all airports in the UK minimise the noise pollution which they produce. The adverse impacts of aircraft noise on health, education and quality of life are well established. The DfT needs to take decisive action to produce the better balance which it claims it seeks between the commercial interests of the aviation sector and its adverse impacts on local communities.

Below and overleaf, we provide our responses to the Draft Framework’s questions of relevance to the local communities which we represent i.e. those living under or close to the flight paths from George Best Belfast City Airport, which is one of the non-designated regional airports where the current inadequate system of noise regulation and control has led to far more people being affected by what the Government deems to be a serious level of noise pollution than is the case at two of the designated national airports, Stansted and Gatwick.

Chapter 2

Do you have any other comments on the approach and evidence set out in Chapter 2?

This chapter fails to address the strategic issue which we highlighted in our response to the Scoping Document, namely the current duplication of air services at George Best Belfast City Airport and at Belfast International Airport. At present, the former, which has a serious adverse noise impact on tens of thousands of local residents, is being permitted to grow and to become an international airport to the detriment of Belfast International Airport, which is in a greenfield site, affecting a relatively small number of residents.

Since we submitted our previous response, Aer Lingus has announced that it is transferring its Northern Ireland operation from Belfast International Airport to Belfast City Airport. This move would not have been possible if a strategy was in place which earmarked International Airport as the regional gateway airport for Northern Ireland at which the development of international air routes should be focused.

Chapter 4

Do you agree that the Government should continue to designate the three largest London airports for noise management purposes? If not, please provide reasons.

We agree that the Government should continue to designate the three largest London airports for noise management purposes. However, we believe that it is equally important to provide a robust and consistent noise management regime at all the UK's commercial airports. Consultants' reports commissioned by George Best Belfast City Airport show that, in 2010, **11,422** local residents suffered from aircraft noise at 57 LAeq 16h or over. By comparison, in 2010, a mere **1,400** people suffered from noise at the same level close to Stansted airport, and just **2,850** experienced this level of noise near Gatwick, according to figures from the DfT.

At many UK airports, there are a higher (and in some cases far higher) number of people affected at 57 LAeq 16h or over than at either Stansted or Gatwick. The relatively low numbers at Stansted and Gatwick may be, in part, a result of the Government's noise management regime. However, they are not a reason for doing away with designation at those airports. Instead, all the UK's commercial airports should be designated in this way so that there is the right balance between the commercial interests of the aviation sector and the health and quality of life of local communities.

Do you agree with the Government's overall objective on aviation noise?

The wording of this objective, as stated in para 4.22 – "to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise" – leaves open the possibility that the number could actually increase. At the very least, this objective should read:

"... to ensure there is no increase in the number of people in the UK significantly affected by aircraft noise."

However, **we would like the Government to commit itself to a specific reduction in the number of people in the UK significantly affected by aircraft noise over the next 10 years. We would suggest the Government should aim for a 10% reduction.**

At the same time, it is not sufficient to limit the Government's approach to aviation noise to striving to ensure there is no increase in or to reduce the number of people significantly affected by aircraft noise. As the Aviation Environmental Federation (AEF) has pointed out, such a policy can act as an incentive for airports to greatly concentrate noise pollution within the narrowest possible corridor.¹ This policy does nothing for those residents under a flight path and potentially increases the level of noise pollution which they suffer. The report cites the approach to noise management taken by the Australian Government which attempts to ensure that aircraft noise pollution emanating from any airport is spread more evenly over a number of communities, ensuring there are also periods of respite from noise. We commend this approach and believe that, **in addition to ensuring there is an overall reduction in the number of people significantly affected by aircraft noise, airports should also be required to reduce the level and frequency of aircraft noise within the areas which are**

significantly affected. Priority should be attached to reducing the level and frequency of aircraft noise at the airports affecting the largest populations, and at those which affect large populations, and also duplicate the services of an airport nearby.

Do you agree that the Government should retain the 57 dB LAeq,16h contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance?

No. See below.

Do you think that the Government should map noise exposure around the noise designated airports to a lower level than 57 dB(A)? If so, which level would be appropriate?

For the reasons set out previously, we believe it is imperative that the Government maps noise exposure at all commercial airports in the UK, and monitors noise exposure closely on an ongoing basis. However, it must also properly regulate noise exposure to ensure that it does not increase. Noise mapping should include:

- noise contours, with maps and details of the affected populations, at the following noise levels: 50> LAeq 16h, 54> LAeq 16h, 57> LAeq 16h, 60> LAeq 16h, 63> LAeq 16h and 72> LAeq 16h– and which also includes measurements which allow for and properly reflect the greater annoyance, disruption and health risk experienced by residents in the evening, night-time and early morning, and measures which reflect noise pollution caused by particularly noisy individual aircraft events (using Lden, LAeq 8h and LAMax Fast measurements) [with appropriate adjustments to the 16h metric where airports, like George Best Belfast City Airport, are not fully operational for 16 hours]
- details of all schools within the 54> LAeq 16h contours, and/or which experience noise events at 35> LAeq during class time [with appropriate adjustments to the 16 hour metric as above]

Relevant research and guidance

The World Health Organisation (WHO) recommends that community noise (which includes aircraft noise) should remain below 50 LAeq, averaged over 16 hours (50 LAeq 16h) in outdoor living areas, if moderate annoyance is to be avoided. It further recommends that noise should not exceed 55 LAeq 16h if serious annoyance is to be avoided. ²

WHO makes further specific recommendations with regard to the following:

- The level of community noise in indoor environments should be less than 35 LAeq 16h to preserve speech intelligibility and prevent moderate annoyance
- To avoid sleep disturbance at night:
 - The level of community noise in indoor bedrooms where windows are closed should be less than 30 LAeq 8h and 45 LAMax Fast³ (The latter is a more effective measure with regard to individual noise events)
 - The level of community noise in bedrooms where a window is open should be less than 45 LAeq 8h and 60 LAMax Fast

- The level of community noise in school classrooms and pre-school indoor environments should be less than 35 LAeq during class to preserve speech intelligibility and message communication, and to prevent disturbance of “information extraction”
- The level of community noise in school playgrounds should be less than 55 LAeq during playtime to prevent annoyance

WHO sets out the purpose of these guidelines as follows:

For each environment and situation, the guideline values take into consideration the identified health effects and are set, based on the lowest levels of noise that affect health (critical health effect). Guideline values typically correspond to the lowest effect level for general populations, such as those for indoor speech intelligibility. By contrast, guideline values for annoyance have been set at 50 or 55 dBA, representing daytime levels below which a majority of the adult population will be protected from becoming moderately or seriously annoyed, respectively.⁴

In other words, the WHO guidance recommendations are designed to ensure that adults and children are protected against critical adverse health impacts, the disruption of children’s learning and of social interaction, and moderate or serious levels of annoyance.

In 2009, WHO issued guidance related specifically to night-time noise for member states of the European Union which stated:

... an L_{night},outside of 40 dB should be the target of the night noise guideline (NNG) to protect the public, including the most vulnerable groups such as children, the chronically ill and the elderly. L_{night},outside value of 55 dB is recommended as an interim target for the countries where the NNG cannot be achieved in the short term for various reasons, and where policy-makers choose to adopt a stepwise approach.⁵

Although WHO did not specify the hours within which this guidance should apply, it stated that a period of 8 hours was required for ‘minimal protection’ (protecting 50% of the population) and that, on Sundays, people tend to sleep for an hour longer, probably to catch up on sleep missed during the week.⁶ This implies, therefore, that the period of protection on Saturday night/Sunday morning should be 9 hours.

The Government’s guideline that “significant community annoyance” is likely to be caused at 57 LAeq for daytime (16h) is clearly out of date. As the Government is well aware, it commissioned an expert report into the impact of aircraft noise which was published in 2007, and is known as the ANASE report.⁷ This found evidence that intolerance of aircraft noise has increased and that the proportion of people who are very annoyed by aircraft noise generally starts rising once a level of 43 LAeq 16h is reached.⁸

The study further found that a level of just above 50 LAeq 16h can trigger a significant level of community annoyance (i.e. the average level of annoyance within the community at this point is ‘moderate’) and that, from 56 LAeq 16h, most communities will register an average level of annoyance which is either ‘moderate’ or higher.⁹

However, the study also found that the LAeq measurement was insufficient as a measurement of likely annoyance levels, and that a measure needed to be devised which more accurately captured the actual impact of aircraft noise.

In addition, an international team of researchers – the HYENA study – investigated attitudes to aircraft noise in six European countries. This found that annoyance ratings were higher than predicted by the European Union standard curve used to predict the number of people highly annoyed by aircraft noise. It concluded that attitudes towards aircraft noise had changed over the years, and that the EU standard curve for aircraft noise should be modified.¹⁰

For these reasons, we believe that the Government’s guidance with regard to the 57 LAeq 16h noise level is outdated and fails to reflect the actual community impact of aircraft noise.

Moreover, there is plentiful research which shows that, regardless of annoyance levels, aircraft noise has serious impacts on health and education which must be fully taken into account in determining the noise impact which an airport is permitted to make.

Health impacts of aircraft noise

There is an extensive body of international and local research evidence which demonstrates the considerable adverse health impacts of aircraft noise. It must be borne in mind, when considering this evidence, that a considerable proportion of the population which falls within the areas worst affected by aircraft noise relating to George Best Belfast City Airport also suffers from considerable economic and social disadvantage which is known to increase the likelihood of ill health. Thus, any adverse health impacts are likely to further exacerbate the already relative high level of ill health experienced by those in this category. We understand this is also true with regard to the communities worst affected by noise at a number of other UK airports.

These include:

- lack of sleep –
 - in a survey carried out by Belfast City Airport Watch in 2009, more than three-quarters (78%) said that aircraft noise affected their sleep, with almost 1 in 5 (19%) stating that they weren’t getting enough sleep¹¹
 - of those respondents with children, nearly half (46%) said their children weren’t getting enough sleep because of aircraft noise.
- adverse effect on blood pressure – in 2003-5, a major EU-funded international study investigated the impact of aircraft noise on blood pressure. The Hypertension and Exposure to Noise near Airports (HYENA) study examined the impact of aircraft noise on 5,000 individuals, aged 45-70 years, living close to six major European airports. Its findings, reported in 2008, concluded that night-time aircraft noise, including that occurring in the late evening or early morning, caused a significant increase in blood pressure among participants.¹²
- heart problems and abnormally high blood pressure – in 2007, a German study found night-time aircraft noise increased the prevalence of prescriptions for antihypertensive and cardiovascular drugs, irrespective of social class¹³
- an increase in the level of anti-anxiety and blood pressure medication prescribed – the HYENA study found an association between the use of anti-anxiety medication and aircraft noise, both day-time and night-time) in all six countries in which its study was carried out, an association between the use of medication used to treat high blood pressure and night-time

aircraft noise in both the UK and the Netherlands, and an association with regard to the latter medication and day-time aircraft noise in the UK ¹⁴

- an increase in stress and anxiety - the BCAW residents' survey found that:
 - three-quarters of respondents (75%) said they often had to stop talking when a plane flew over because they couldn't be heard
 - 71% said aircraft noise made their gardens less pleasant to be in
 - more than two-thirds (68%) said they often couldn't hear the TV and/or radio when a plane flew over
 - 66% said aircraft noise made their homes less pleasant places to be
 - nearly half (49%) said aircraft noise made their lives more stressful

In addition, the WHO working group which drew up its guidance on night time noise concluded that:

there is sufficient evidence that night noise is related to self-reported sleep disturbance, use of pharmaceuticals, self-reported health problems and insomnia-like symptoms. These effects can lead to a considerable burden of disease in the population. ¹⁵

It carried out a comprehensive review of the relevant research and produced a table which summarises the health impacts of night-time noise.¹⁶ The working group found that adverse health effects are observed at levels of 40 LAeq night, outside and above. At above 55 LAeq night, outside, WHO finds that “..the situation is considered increasingly dangerous for public health”, there are frequent adverse health effects, a sizeable proportion of the population is highly annoyed and sleep-disturbed, and there is evidence that the risk of cardiovascular disease increases.

Educational impacts of aircraft noise

There is a considerable body of research which demonstrates the considerable adverse educational impacts of aircraft noise. The relevant studies include the following:

- a survey of schools, under or close to the Belfast City Airport flight path over the city, undertaken by Belfast City Airport Watch in 2008, which found:
 - 12 schools said pupils' concentration was adversely affected by aircraft noise
 - 9 schools said aircraft noise disrupted teaching and/or classes
 - 11 said aircraft noise made outdoor activities in school grounds less pleasant
 - 8 said aircraft noise made their school a less pleasant place to work in¹⁷
- a comprehensive review of research on the impact of aircraft noise on children's learning, carried out by the Civil Aviation Authority in 2010, concluded:

..there is evidence to suggest that chronic aircraft noise has a deleterious effect on memory, sustained attention, reading comprehension and reading ability. Early studies highlighted that aircraft noise was also implicated in children from noisy areas having a higher degree of helplessness i.e. were more likely to give up on difficult tasks than those children in quieter areas....

Reports often indicated that children exposed to chronic aircraft noise showed a higher degree of annoyance than those children from quieter areas. Evidence has been presented to suggest that children do not habituate to aircraft noise over time, and that an increase in noise can be correlated with a delay in reading comprehension compared to those children not exposed to high levels of aircraft noise.¹⁸

- a major international study, carried out in 2002, found that exposure to aircraft noise is related to impaired performance in reading comprehension in primary schoolchildren. The RANCH Project – which examined the academic performance of 2,010 children aged 9-10 years in three countries, including the UK - found that exposure to aircraft noise was correlated negatively with children’s reading comprehension and recognition memory, even when other factors were taken into account. No similar effect was found with regard to road traffic noise. The results of this research were published in 2005 and 2006.¹⁹
- a smaller follow-up study, carried out six years later in the UK with a sample of 461 of the original participants, now aged 15-16 years, found that, although no significant long-term effect of aircraft noise exposure at primary school or secondary school on reading comprehension was found, there was a trend for both types of exposure to be associated with poorer reading comprehension. The authors concluded that the findings indicated that exposure to aircraft noise at school may have long-term implications for children’s cognitive development.²⁰

While we accept that the conclusions of the smaller, longitudinal study are more tentative as regards the long-term impact of aircraft noise on reading comprehension, the adverse effect on both the reading comprehension and recognition memory among the 9-10 years olds examined in the original RANCH study was very marked. The findings of the original study have particular relevance for primary schools in areas of Northern Ireland affected by noise, as the children in question will be at a disadvantage compared to their peers in schools unaffected by noise if they sit the unofficial transfer tests still used by most grammar schools in Northern Ireland. (These tests are normally undertaken at age 10.).

Do you agree with the proposed principles to which the Government would have regard when setting a noise envelope at any new national hub airport or any other airport development which is a nationally significant infrastructure project?

As stated previously, the Government must monitor and regulate noise properly and effectively at all commercial airports in the UK, and not just airports deemed to be of national significance. It must also regulate noise robustly at existing airports – and not just with regard to new airports or new infrastructure at existing airports.

The noise envelope proposals, as set out, are too vague. The UK should be seeking to make use of its existing aviation capacity in the most efficient and noise-efficient way possible, without further expanding the number of people affected by noise at a significant level.

We believe the Government should give serious consideration to the results of the EU-sponsored MIME study which developed a model of tradeable noise permits for airports.²¹ If this was implemented by the UK, it would have the potential to act as a real incentive for airlines to take mitigation measures which would minimise or reduce the degree of noise exposure for residents. The permit scheme could also take into account the type of traffic generated by a particular route; for example, flights on 'bucket and spade' routes to 'sunshine' destinations outside the UK, which merely suck tourist revenue out of the local and national economy, could be subject to a higher 'price' under this scheme.

We would strongly oppose the use of a noise envelope as a device to permit any increase in the amount, level or frequency of aircraft noise where a significant number of people are currently affected or will be affected at a level which is likely to have adverse health, education and/or quality of life impacts. The impact on schools must also be taken into account in this regard.

We would support the use of a noise envelope as a device to ensure that the level and frequency of noise pollution did not get worse and/or was reduced over time.

We believe that a noise envelope must include a mixture of both maximum noise levels and noise event thresholds, and restrictions on the number of flights and passengers (or, as with George Best Belfast City Airport) seats offered for sale. We believe it is totally unsatisfactory that airports are currently permitted to monitor and report on their own noise levels. However, while this system of self-monitoring pertains, it is essential to have in place tangible restrictions on the scale of airport operations which can be easily monitored and regulated externally.

It is also vital that any noise envelope contains additional restrictions on flight numbers, average noise levels and noise event thresholds for early morning, evening and night-time which properly reflect the additional negative impact on health and quality of life.

We believe that the following system of noise regulation should apply and should be implemented by the DfT (and by the Department for Regional Development in Northern Ireland):

- **The DfT's Aviation Framework should identify those regional airports which are duplicating services at another airport nearby, and which are affecting a significant population (e.g. greater than 10,000) at 54> LAeq 16h [or equivalent] and above and/or any schools at 54> LAeq or more and/or which experience noise events at 35> LAeq during class time.** The Framework should clearly state that **no further growth in traffic is permitted at those airports** unless the airport operator in question is able to prove that any planned growth will not result in an increase in noise pollution.
- **The DfT and, in Northern Ireland, the Department for Regional Development (DRD) should use their existing legal powers to require all airports which cause significant noise pollution (i.e. which are affecting a large population at 54> LAeq and above (e.g. greater than 10,000) and/or any schools at 54> LAeq or more, and/or which experience noise events at 35> during class time) to meet specified targets for**

reducing those levels of noise over a five year period. The precise requirements for each airport would depend on the strategic importance of that airport as measured by the indicators (routes, duplication of services, purpose of trip) as outlined previously. **All airports which fail to meet these targets should be subject to significant fines, commensurate with the scale of their revenues.**

- Date collected from monitoring noise near all airports should be collated and published on an annual basis. The DfT and DRD should review this data after five years and set targets for all airports which meet the above criteria and/or which have failed to meet targets which were previously set. **If an airport operator fails to meet these targets on more than one occasion, its licence should be revoked.**

Do you agree that noise should be given particular weight when balanced against other environmental factors affecting communities living near airports?

What factors should the Government consider when deciding how to balance the benefits of respite with other environmental benefits?

In general, there is no conflict between attempts to reduce aircraft noise and attempts to reduce carbon emissions and other harmful aircraft impact. However, where aircraft need to take a flight path which produces more CO₂ in order to reduce noise pollution, we believe the latter is by far the most important consideration, where a significant number of people are affected by aircraft noise at a serious level.

We do not understand the question about respite – because there is nothing in the Draft Aviation Framework to indicate that providing respite for residents from aircraft noise is likely to have any harmful environmental impacts.

We are very disappointed that the section on respite refers solely to Heathrow. Most UK airports provide no such respite for residents and we would like the Government to include provision for respite within the far more robust system of noise regulation which we would like to see.

Do you agree with the Government's proposals in paragraph 4.68 on noise limits, monitoring and penalties?

In what circumstances would it be appropriate for the Government to direct noise designated airports to establish and maintain a penalty scheme?

In what circumstances would it be appropriate for the Government to make an order requiring designated airports to maintain and operate noise monitors and produce noise measurement reports?

Paragraph 4.68 states “Local communities need to have confidence that airport owners take noise impacts seriously.” That is not correct – what local communities need to have is the confidence that *the Government* takes noise impacts seriously. If the Government did take the impact of aircraft noise seriously, it would be designing and implementing a robust system of noise regulation which would actually address the problem properly.

Airports are commercial entities which exist to make a profit. It is unrealistic to expect airports to voluntarily implement an effective system of self-regulated noise management – and it is quite unfair to expect local communities to rely on the goodwill of their airport in order to have that effective regulation. As previously stated, it is the clear responsibility of the Government to regulate noise pollution effectively, just as it does with others forms of pollution, such as air and water pollution (and, indeed, other forms of noise pollution).

Moreover, paragraph 4.68 appears only to apply to the three designated airports as it refers to departure noise limits which do not apply, as far as we are aware, at most other airports and certainly not at George Best Belfast City Airport.

We would certainly welcome the introduction of a robust system of departure noise limits for all airports which have a serious noise impact which affects a significant number of people. However, the system should be completely transparent and should be implemented by the Government rather than the airports.

Similarly, the Government should carry out its own monitoring and reporting of noise in affected areas around commercial airports. However, this should be carried out at all airports – whether or not they appear to affect significant numbers of people, and whether or not they are nationally designated. This is because only a transparent and fully independent system of monitoring is reliable. It may well be the case that some airports do not have sufficiently accurate systems of noise monitoring and modelling, and under-reporting of the full extent of noise pollution may occur as a result. Airports and airlines should pay for the costs of the monitoring.

How could differential landing fees be better utilised to improve the noise environment around airports, particularly at night?

We are aware that some airports, such as Luton and Stansted, already operate differential landing fees, designed to encourage airlines to use quieter aircraft. However, it is unlikely that an airport such as George Best Belfast City Airport would take such a step voluntarily, as it is in strong competition with both its neighbouring and longer-established Belfast International Airport and with Dublin Airport. Low landing fees are one means of attracting the airlines required for commercial survival. Doubtless, there are a number of UK airports which, due to being in close proximity with a neighbouring airport offering similar routes, compete on landing fees.

However, the current system of air passenger duty (APD) could be refined so that a higher rate is levied on early morning and night-time flights from airports which have a serious adverse noise impact on a significant number of people. In addition, flights from these airports which use quieter planes could be subject to a lower level of APD.

Alternatively, we note in para 4.76 that the Government does have the power to require airports to use differential landing fees to reflect environmental impacts and we therefore believe that, if APD is not used as an instrument in this regard, the Government should use its power to require airports to employ differential landing fees.

The term “night-time” must include the early morning period during which it can be assumed that most people would still be asleep i.e. “night-time” should include 11pm to 7am, and 11pm to 9am at weekends. Evening flights which disrupt children’s sleep should also be subject to differential APD or a differential landing fee.

Do you think airport compensation schemes are reasonable and proportionate?

The more pertinent question is not what we think of the compensation schemes offered by those few airports which go beyond what they are required to do by Government, but what we think of the Government’s requirements with regard to compensation. Like many airports, George Best Belfast City Airport takes the position that it will only offer to pay for noise insulation to homes affected at 63 LAeq 16h or above, in line with the Government’s requirement on insulation. There is ample evidence, as already outlined previously, that people suffer tangible health, quality of life and, in the case of children, educational impacts at levels well below 63 LAeq 16h.

Insulation does not solve the problem of aircraft noise, because people still need to open their windows. However, it can help to mitigate the adverse impacts of noise, and it is ridiculous that homeowners and landlords are currently forced to foot the bill where insulation is required primarily because of aircraft noise. As with other forms of pollution, the ‘polluter should pay’ principle should be followed – and required by Government. Where airports are required to fund insulation programmes, these should include a comprehensive package of noise insulation measures, and not just double or triple glazing.

Do you have any further ideas on how the Government could incentivise the aviation and aerospace sector to deliver quieter planes?

As noted previously, we believe the Government should give serious consideration to the results of the EU-sponsored MIME study which developed a model of tradeable noise permits for airports. If this was implemented by the UK, it would have the potential to act as a real incentive for airlines to take mitigation measures which would minimise or reduce the degree of noise exposure for residents. The permit scheme could also take into account the type of traffic generated by a particular route; for example, flights on ‘bucket and spade’ routes to ‘sunshine’ destinations outside the UK - which merely suck tourist revenue out of the local and national economy - could be subject to a higher ‘price’ under this scheme.

Do you believe that the regime for the regulation of other environmental impacts at airports is effective?

No. We would like proper regulation and monitoring of air pollution from aircraft and of fuel dumping.

Do you think that noise regulation should be integrated into a broader regulatory framework which tackles the local environmental impacts from airports?

Yes. We would also like to see robust regulation of localised air pollution from aircraft, and of fuel dumping.

Do you think Airport Consultative Committees should play a stronger role and if so, how could this be achieved?

As stated previously, it is quite inappropriate for airports to effectively regulate themselves via Airport Consultative Committees which are run by airports. Airports are commercial entities and the noise pollution they cause needs to be regulated externally in the same way that any other form of pollution is regulated.

Is there a case for changing the list of airports currently designated to provide consultative facilities?

We would like all commercial airports to have consultative committees, but it is vital that noise pollution at all commercial airports is effectively monitored and regulated by the Government.

Do you agree that the Civil Aviation Authority should have a role in providing independent oversight of airports' noise management?

This role, as set out in paras 5.19 – 5.24 is certainly an improvement on the current situation. However, it does not go far enough. What is required is a body which acts like the Environment Agency, and has tough powers to monitor and enforce a consistent system of noise regulation properly. Given the body of expertise within the CAA, it may well make more sense for the CAA to take on this role. It should be responsible for noise monitoring and reporting, as well as enforcement. This cost should be borne by airports and airlines – and it may well make sense for these costs to be met through a system of differential aircraft noise levies and/or tailored APC as described previously.

Do you agree with the Government's overall objective on working together?

No – as we have already argued, aircraft noise pollution must be subject to a robust and consistent system of external monitoring, reporting and regulation, operated by the Government and paid for by the industry.

Is the high-level guidance provided in Annex E sufficient to allow airports to develop local solutions with local partners?

This is not an option in our view.

Do you agree that master plans should incorporate airport surface access strategies?

Yes.

Do you agree that, where appropriate, the periods covered by master plans and noise action plans should be aligned?

Yes. However, airport noise action plans are no more than token documents. For example, the current Noise Action Plan for George Best Belfast City Airport merely restates the existing steps taken by the airport at the time of writing or already planned, and the existing regulations to which it is subject. It further stated that it did not expect the number of people affected by aircraft noise to reduce over the period covered by the Plan (2008 – 2013).²² In fact, it increased significantly to 2010.

Noise Action Plans do have the potential to form part of a robust system of noise regulation – but not unless relevant airports are required to have targets for reducing noise, and to commit themselves to the necessary steps needed to meet those targets.

About Belfast City Airport Watch

Belfast City Airport Watch (BCAW) is an umbrella organisation which represents 21 affiliated organisations, 20 of which are residents associations or community groups in areas affected by aircraft noise linked to George Best Belfast City Airport (see Appendix). BCAW also has 550 individual associate members.

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Appendix

The 21 organisations which have affiliate membership of BCAW are as follows:

1. The Bridge Community Association
2. Carew II Family and Training Centre
3. Connswater Community Centre/Connswater Community Group
4. Cultra Residents' Association
5. Dee Street Community Centre/The Klub
6. Dee Street Computer Group
7. Dee Street Mums and Tots Group
8. East Belfast Healthy Living Project
9. East Belfast Toddler Group
10. GMB Trade Union Branch 252
11. Hampton Park Residents' Association
12. Holywood Airport Action Group
13. Lagan Valley Group Residents' Association
14. Lower Woodstock Community Association
15. Marlborough Park Residents' Association
16. Newtownards Road Women's Group Ltd.

17. Old Stranmillis Residents' Association
18. Park Road and District Residents' Association
19. Ravenlink Residents' Group
20. Ulidia Residents' Group
21. Wise Men of the East Network (network of nine affiliated east Belfast mens' groups)

¹ AEF (2010) *Approach Noise at Heathrow: Concentrating the Problem* (London: AEF for HACAN)

² The specific World Health Organisation guidance on noise levels is available at: <http://www.who.int/docstore/peh/noise/Comnoise-4.pdf> (section 4.3.1). The full report WHO *Guidelines for Community Noise*, 1999, is available at: <http://www.who.int/docstore/peh/noise/guidelines2.html>

³ LAmax Fast measures the sound pressure level averaged over 0.125 seconds.

⁴ WHO, op. cit., pp. 55-56.

⁵ WHO, *Night time noise guidelines for Europe*, p. vi.

⁶ WHO, op. cit., p. 7.

⁷ MVA Consultancy et al. *Attitudes to noise from aviation sources in England*, 2007.

⁸ op. cit., para. 11.3.9, Figs 7.2 and 7.3, and para. 7.3.4.

⁹ op. cit., para. 7.3.6 and Fig 7.4.

¹⁰ Babisch, W. et al. 'Annoyance due to aircraft noise has increased over the years – Results of the HYENA study' in *Environment International*, November 2009, Vol. 35, Issue 8, pp. 1169 – 1176.

¹¹ The survey was carried out by BCAW between March and June 2009. 412 respondents were questioned in a door-to-door survey. Each respondent was from a different household. Of the 412 respondents, 281 lived in east Belfast, 99 respondents were from south Belfast, while 32 were from Holywood. All respondents lived in areas which are either under or close to flight paths in and out of George Best Belfast City Airport.

¹² EC News Alert Issue 103. Available at: <http://ec.europa.eu/environment/integration/research/newsalert/pdf/103na1.pdf>. See also Haralabidis, Alexandros S. et al. (2008) 'Acute effect of night-time exposure to aircraft noise on blood pressure in populations living close to airports' in *European Heart Journal*. Available online at: <http://eurheartj.oxfordjournals.org/cgi/content/full/ehn013v1>

¹³ Greiser, E., Geiser, C. and Janhsen, K. 'Night-time aircraft noise increases prevalence of prescriptions of antihypertensive and cardiovascular drugs irrespective of social class—the Cologne-Bonn Airport study' in *Journal of Public Health*, Vol. 15, pp. 327 – 337.

¹⁴ Floud S. et al. Medication use in relation to noise from aircraft and road traffic in six European countries: results of the HYENA study, *Occupational and environmental medicine*, Vol. 68, pp. 518 – 524. Abstract published online at: <http://oem.bmj.com/content/68/7/518.abstract>

¹⁵ Op. cit., p. xi.

¹⁶ Op. cit., Table 3, p. xvii.

¹⁷ 35 nursery, primary, post-primary and special schools responded to the survey. All are situated under or close to City Airport flight paths. The survey was carried out in June 2008. 45 schools were sent postal survey forms. Non-respondents were followed up by telephone.

¹⁸ Jones, K., (2010) *Aircraft noise and children's learning*, CAA, p. 18.

¹⁹ Clark C. et al. 'Exposure Effect Relations between Aircraft and Road Traffic Noise Exposure at School and Reading Comprehension, The RANCH Project.' In *American Journal of Epidemiology*, 2006, vol. 163, no. 1, pp. 27 – 37, and Clark C. et al. 'Aircraft and road traffic noise and children's cognition and health: a cross-national study' in *The Lancet*, Vol. 365, 1942 – 49.. Latter available at: <http://aje.oxfordjournals.org/cgi/reprint/163/1/27>

²⁰ Clark, C., Head J., and Stansfeld, S. 'The long-term effects of aircraft noise exposure on children's cognition: findings from the UK RANCH follow-up study' in *The Journal of the Acoustical Society of America*, April 2012, Vol. 131, No. 4.

²¹ Gühnemann, A., Nellthorp, J. and Connors, R. 'Designing a market model to analyse tradable noise permit schemes for airports'. Institute for Transport Studies, University of Leeds. 2010 conference paper. Available at: <http://intranet.imet.gr/Portals/0/UsefulDocuments/documents/02815.pdf>

²² George Best Belfast City Airport *Environmental Noise Directive Noise Action Plan* September 2009. Available at: http://www.doeni.gov.uk/george_best_belfast_city_airport_action_plan_-_final_agreed_plan_for_adoption-2.pdf