

Luton and District Association for the Control of Aircraft Noise Response to Draft Aviation Policy Framework July 2012

Introduction

LADACAN is a residents' group primarily concerned with the noise and safety impacts of Luton Airport on the surrounding communities. It was established in 1968 at a time when Luton Airport proposed a significant expansion of its operations and is represented on the London Luton Airport Consultative Committee (LLACC).

We are pleased to be invited to comment on the Draft APF and, having given evidence for the Scoping Consultation, have taken the liberty of repeating some of what was said then when pertinent to do so.

Overall we welcome the ideas behind the Draft APF, especially those related to noise. However, much of what is said is contradictory - for example the section on noise seems to preclude expansion unless noise levels are reduced - suggesting that the framework has something in it for everyone. The welcome emphasis on enforcement of noise limits as a means of achieving the overall noise objective appears to us to be seriously undermined by the Government's unwillingness to adopt limits (eg World Health Organisation guidelines) and the emphasis on local solutions.

Because of the apparent ambiguities within the Draft APF, we are very concerned that (para 6.5) it might be considered "a material consideration in planning decisions". Whether Local Authority development control officers are able to interpret it as intended seems highly doubtful. This means that far from giving clear guidance, it may confuse matters still further and we suggest that the policy should make clear that it can only inform strategic plans.

A current example has arisen at Luton Airport which is owned by Luton Borough Council (LBC), the Planning Authority, and leased to a Spanish owned operating company. This is currently subject to a Masterplan in name which does not follow the Master Plan guidelines in Annex E but which quotes selectively from the Draft APF in its support while ignoring, for example, the guidance on noise. This is a precursor to a joint planning application to be made shortly which would grow the airport nominally from 10mppa to 18mppa but increases movements by 60%. The MP includes no noise assessment at all but has suggested 6 new noise mitigation measures to be added to its NAP. There is no assessment of the impact of these measures but it appears that local residents are to have perhaps 100 of the noisiest aircraft movements each year discouraged from using Luton (not banned) whilst the number of movements increases by 58,000!

It is difficult to see how the Draft APF as currently worded would provide any guidance to LBC with regard to this Masterplan or the planning application. Should LBC try to limit the number of people affected by noise and thus insist that expansion is only permitted within the framework of aircraft becoming quieter? Or should it accept that new jobs are locally advantageous and therefore hard luck on those residents affected? There is absolutely no guidance in the DAPF, no other national strategy and no PPG24. Even LBC's own Local Plan policy is only "saved" while a new LDF is prepared.

LADACAN is also very concerned that the Government seems to have swallowed aviation industry spin about future noise reductions and employment with enthusiasm, rather than question it independently. We also wonder why there is so much concentration on Heathrow and the hub issue, when this is a national framework? This said, our answers to the questions posed are given below.

Answers to questions

☑ Do you agree with our analysis of the meaning and value of connectivity, set out in Chapter 2?

A: No comment

☑ Do you support the proposal to extend the UK's fifth freedom policy to Gatwick, Stansted and Luton? Please provide reasons if possible.

A: Why limit extension of the policy only to south east airports?

☑ Are there any other conditions that ought to be applied to any extension of the UK's fifth freedom policy to Gatwick, Stansted and Luton?

A: Yes, there should be no increase in night flights (23:00 to 07:00) as a result of this freedom.

☑ Do you agree that the Government should offer bilateral partners unilateral open access to UK airports outside the South East on a case-by-case basis?

A: See comments above

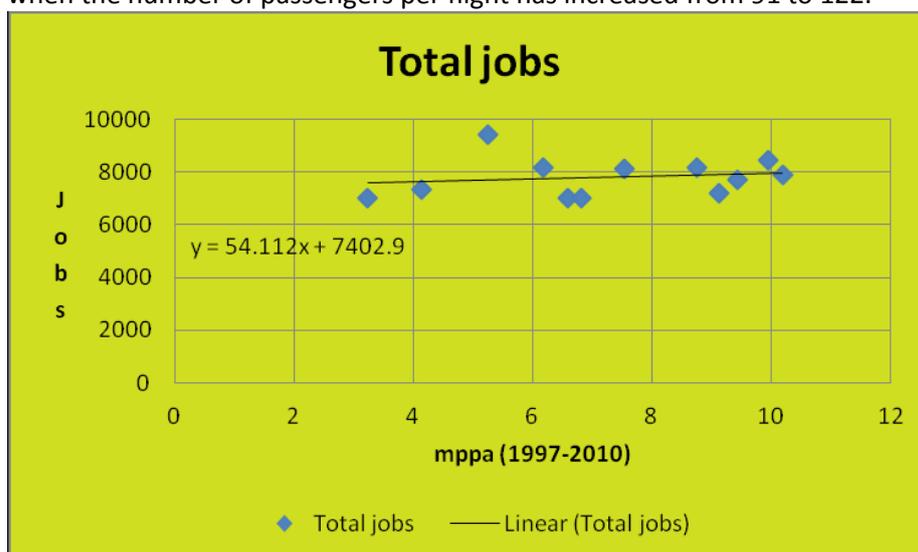
☑ Do you have any other comments on the approach and evidence set out in Chapter 2?

1. There is one myth that needs to be exposed, and that is the rate at which jobs are created as the industry expands.

We feel it is worth repeating the evidence we gave to 5.2 of the Scoping Consultation.

“Luton provides jobs data in its Annual Monitoring Reports (AMRs) going back to 1979. 1995 was the start of easyJet services from Luton and marks the start of the modern era for Luton operations, that is, the predominance of low cost airline operations. Growth was slow in that year but really took hold in 1997. Below we have plotted the number of jobs against number of passengers for each year since 1997 (except 2002 and 2005 for which no data was provided) as stated in the AMRs. The formula for the trend line is shown.

The straight line trend seems like a good correlation for the data except for 1 aberrant year in 1999 (for which the explanation is construction activity that year). As can be seen, the growth in jobs has been approximately 54 jobs for every mppa. Perhaps of relevance, this is over a period when the number of passengers per flight has increased from 91 to 122.



Added to further productivity gains (we concur with paragraph 2.10 of SSE's "Aviation, Jobs & the Economy") it seems unlikely that this sort of number will be exceeded in future. Indeed,

page 3 of the SSE document shows the number of jobs at Stansted fell from 14,000 in 1983 to just 11,700 in 2007, despite a 9 mppa increase in passengers. Though it may be true, that the attraction of other operations like tourism HO's (one is already included in the figures above) can be due to the airport being in Luton, this parochial view ignores the fact that these jobs could be anywhere and are thus not "created", and do not result from airport expansion at all.

LADACAN has, for a number of years, provided projections of employment at Luton Airport based on the analysis method employed by Halcrow for the East of England Regional Assembly. Our projections employ successive annual job figures published in the AMRs by Luton Borough Council and the DfT's revised projections of passenger traffic. The most recent of these can be viewed on our web site (ladacan.org) and predicts that employment will decline substantially over the next 20 years despite traffic increases."

2. We object to the imbalance which the policy exhibits between inbound and outbound tourism. Either they both represent economic impacts or neither. It is irrational to try to pretend that inbound tourism is an economic benefit while outbound tourism is not a cost to the economy.

Do you have any further ideas on how the Government could incentivise the aviation and aerospace sectors to improve the performance of aircraft with the aim of reducing emissions?

A: No comment

Do you have any other comments on the approach and evidence set out in Chapter 3?

A: No comment

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

A: Yes. Luton experience is that local authorities neither have the expertise nor the money required to control noise and that ownership of the Airport is a disincentive to act. This suggests that noise at the designated airports should continue to be controlled by the government.

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

A: If this means, "**to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise**", then Yes. However, we note that this objective is in conflict with the purpose of this Draft Aviation Policy Framework, which is to enable expansion. Expansion means more aircraft movements and more movements means more noise.

Further, this overall policy objective comes from the Future of Air Transport White Paper which was published 9 years ago but we have seen no practical proposals from Government which might start to implement it.

The EU Operating Restrictions Directive 2002/30 arising from the ban on Chapter 2 aircraft which took full effect on 1st April 2002 states that "new measures will be required to prevent a deterioration in the noise climate after 2002". Since then airports around the country have expanded (Luton is a typical example) and the result has been no improvement in noise at all, as all the benefits of the ban have been appropriated by the aviation industry in the form of more flights.

This is apparent at Luton even using the discredited L_{eq} metric. The table below shows that the numbers of people affected by noise at Luton has increased significantly since 2001 and that the number of departures recorded as exceeding 70 dBA at the monitoring points has risen.

	2002		2010	
Total movements by aircraft over 16 tonnes	64653		83378	
Departures over 70dB	29520		33235	
	Day	Night	Day	Night
Population within 57/48dB L_{eq} contour	2341	6264	4598	11800

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

A: No. Many people are disturbed well outside the area of this contour and average noise metrics are completely discredited as indicators of disturbance. They suit the aviation industry because, when presented as noise contours, they enable unrestrained increases in air movements by barely-perceptibly quieter aircraft to be represented as neutral in terms of disturbance of those on the ground.

The Draft APF must, therefore, place more emphasis on using more appropriate metrics in the control of noise disturbance in line with Directive 2002/49/EC and not just for information purposes (paras 5.9 to 5.11).

If average noise indicators are to be retained, the summer-only measures currently in use must be replaced by those mandated by Directives 2002/49/EC and 2002/30/EC to reduce confusion. Contours must also be produced for the WHO guideline levels to indicate exposure to unacceptable and unhealthy noise levels.

Government must accept that the unrelenting increase in disturbance from aviation is driven by the escalating number of aircraft movements and must focus on operational constraints, mitigation and compensation to protect the health and well-being of its citizens.

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

A: See answer to previous question.

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?

A: Why is this only applicable to NSIP's? There are many airport expansion proposals (of which Luton is considered by some to be one) that may not involve an extra 10mppa and yet will double the throughput of the airport. The principles should be applied to any proposed expansion otherwise it is not consistent with the broad policy objective.

We do not understand why Government does not adopt the World Health Organisation (WHO) recommended noise limits for all UK Airports as a "noise envelope" within which people are not expected to live or work. These are supported by a substantial evidence base. It may be the case that these would represent challenging targets at some airports but this could be accommodated by establishing a timetable for compliance through a combination of operational constraints, mitigation measures and compensation to householders. This would provide consistency between airports and avoid any commercial advantage which the current piecemeal approach confers on some airports over others.

As an example of the inconsistency which currently exists, residents closest to Luton Airport are overflowed by aircraft at similar altitudes to those living near London City Airport. However, Luton's aircraft are often larger and, hence, noisier because it has a longer runway and the dwellings near to

Luton were, in the main, built in or before the early 20th century while those near London City are modern and, we hope, incorporate noise insulation. While Luton has no constraints on hours of operation, London City has a night curfew and a 24-hour closure at weekends.

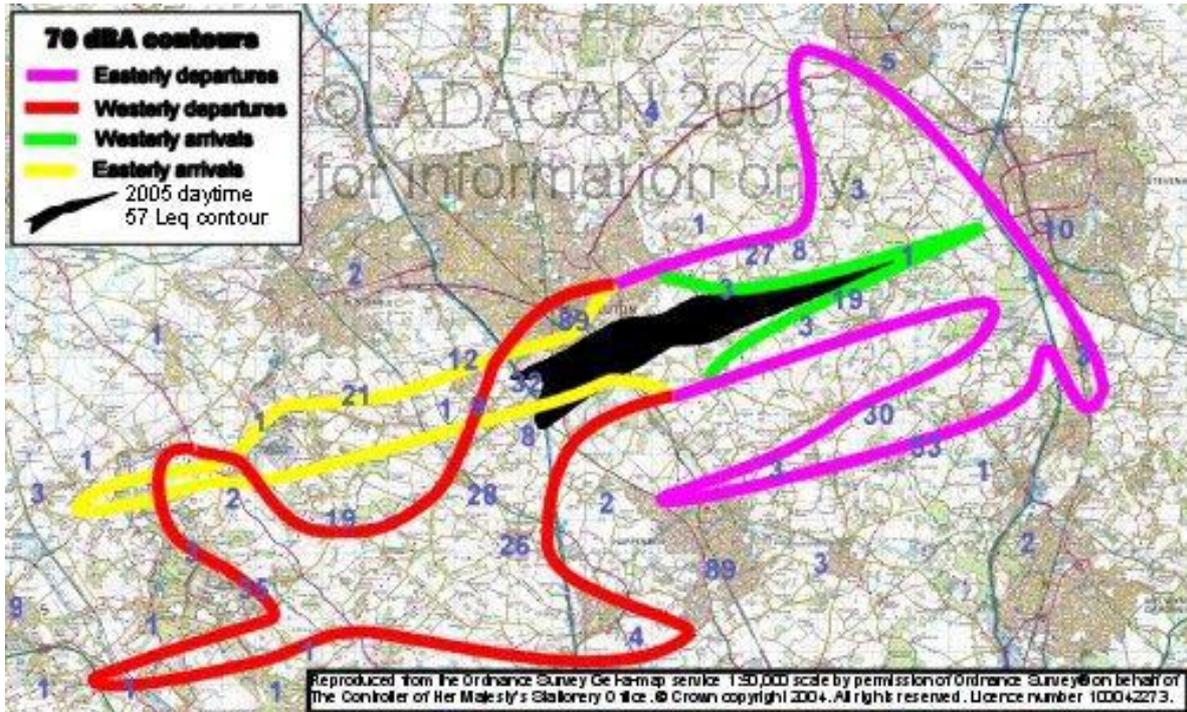
We feel that our response to the scoping consultation is worth repeating here.

“The scoping document does not explain the ‘noise envelope’ concept although the use of the word ‘envelope’ suggests that the intention is that airport growth is to be constrained by some measure of its noise impact. Such concepts have been in operation for some years: the Government set a limit on the area of the 57 L_{eq} dBA daytime noise contour of 127 sq km at Heathrow (Future of Air Transport White Paper) and the planning permission granted for Luton Airport specifies a limit of 31.52 sq km for the same indicator.

The difference between these constraints illustrates the problem with such an approach: the area of such a contour bears no relation to the noise experienced by those living near the airport. They could be more closely related to community disturbance by specifying the number of people within the contour rather than the area but the number would remain arbitrary.

The only satisfactory approach to noise is the application of limits which are mandatory at all airports to be achieved by statutory mitigation and compensation and through operating restrictions. There is now ample guidance, particularly from the World Health Organisation (WHO), based on a growing body of scientific evidence about the health and disturbance effects of noise. The difficult decision is about the indicators to be used to specify the noise limits. Average noise indicators (L_{eq} , L_{den} , L_{night} , etc.) may be useful for fairly continuous noise sources but where the noise source is erratic or infrequent they are poor indicators. Indeed, they are widely discredited as indicators of disturbance from aviation as they equate doubling of noise energy, the limit of discrimination of human hearing in normal circumstances, with twice the number of noise events, a change which humans can hardly ignore. The Attitudes to Noise from Aviation Sources in England (ANASE) study sponsored by the DfT produced evidence of this weakness.

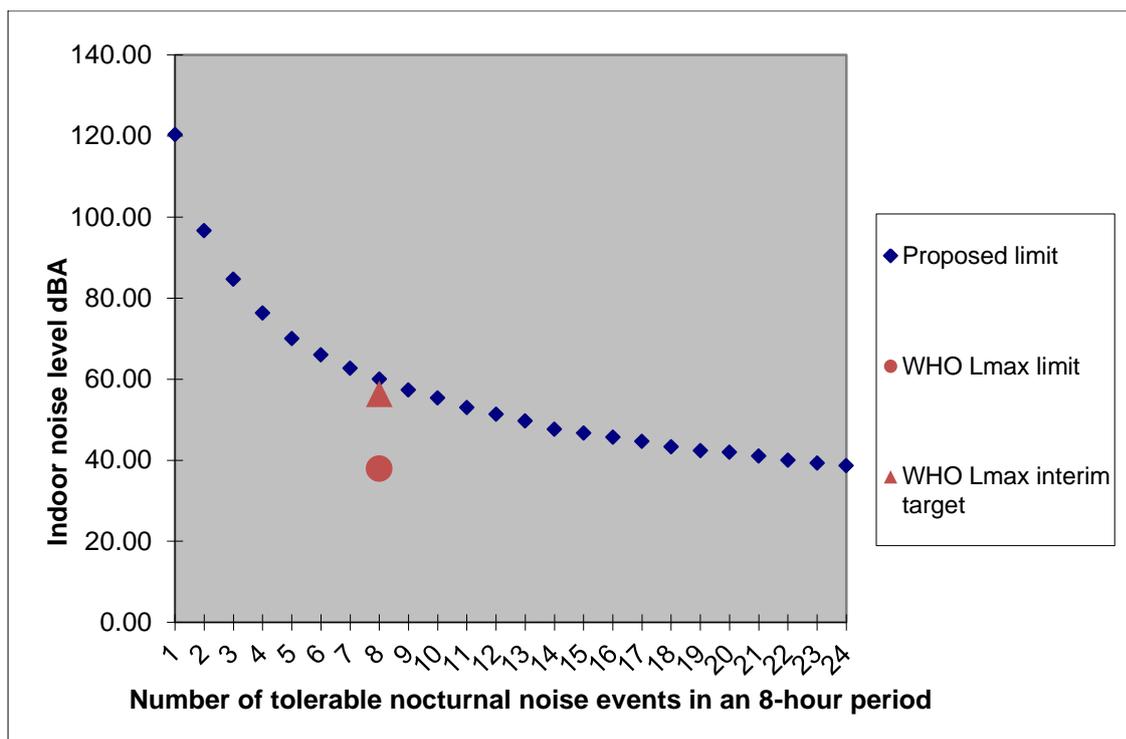
The evidence from Luton, and many other airports (see GACC evidence) is that noise disturbance as indicated by complaints, is far more widespread than L_{eq} contours suggest. Luton Airport’s Annual Monitoring Report (AMR) 2010 day (57dB L_{eq}) and night (48dB L_{eq}) contours exhibit virtually no correlation with the number and location of complaints shown on page 65. It was for this reason that LADACAN undertook a study in 2005 to identify a contour based on the point at which the most frequent aircraft would generate less than 70dBA L_{Amax} , the same noise threshold used at the Airport’s own fixed noise monitoring points. The results shown on the map below clearly correlate better than the L_{eq} contour with the annual complaints figures for 2005 (shown in blue).



Those living outside the contour will never experience noise events louder than 70dB (assuming an unchanged fleet mix) regardless of the number of flights. But disturbance is also caused by the frequency of noisy events, and this will affect all those within the contour. A noise envelope therefore needs to have a limit on the number of movements as well. It has often been quoted that if aircraft made no noise no-one would mind how many flights they made. So there must be targets which limit the number of movements at all locations in all noise bands above, say, 70dBA L_{Amax} .

Having examined a large number of noise indicators, LADACAN has concluded that the search for a single indicator which could provide a useful limit quantifying a noise envelope is doomed to failure. We conclude that universal noise limits must be specified as a trade-off between a maximum noise measure (L_{Amax}) and the number of events in a noise period (eg the 8-hour night) which can be permitted to exceed the specified level.

We have found a proposed limit of this kind for night noise (Griefahn B, Scheuch K, Jansen G, Spreng M. Protection goals for residents in the vicinity of civil airports. Noise and Health 2004;6:51-62) which is shown in the figure below. The graph also shows the equivalent WHO night noise limits (WHO Night Noise Guidelines for Europe 2009) transcribed to maximum indoor levels."



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

A: Yes. Noise is by far the most often cited objection to airport operations and there is a growing body of evidence that its impact on health is more serious than is usually understood (see, for example, Burden of disease from environmental noise, World Health Organisation, 2011).

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

A: There can be no respite without closure on any single runway airport where dwellings are, as at Luton, overflown before departing aircraft are permitted to turn.

For locations further along the flight paths, routing to spread the load would result in even more people not knowing where to choose to live to avoid overflying and more people being subject to noise which conflicts with current aims to minimise the number of people affected by noise. On balance, we favour minimising the number of routes to provide certainty and so that mitigation and compensation can be concentrated where they are needed.

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

A: In principle, yes. However we would note that Luton might say that it is already an industry leader in communicating clear information about the airport's noise performance, and yet it continues to avoid addressing noise issues brought to its attention and the worsening environment it has created (see earlier question).

We assume that paragraph 4.68 refers to maximum noise levels produced by departing aircraft as measured by monitoring equipment placed at the "standard" location 6.5 km from start-of-roll. There may be some value in attempting apply limits to such noise measures around large airports but where the airport is small, such as at Luton, these noise measures are rendered irrelevant as the aircraft have passed over the significant centres of population long before they reach the monitors.

It is vital to public confidence that the measurement of noise is conducted at locations which may have some relevance to those being disturbed by the noise. We advocate the placing of monitors at the airport fence so the measurements represent the maximum exposure outside the airport fence. The limits to be applied must be related to the distance from start-of-roll to the first dwellings or other occupied land subjected to noise.

A further concern is that the regime of limits, monitoring and penalties applies only to departing aircraft at most airports. At Luton, arriving aircraft impose higher levels of noise on settlements close to the runway ends than departing aircraft.

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

A: All commercial airports should be required to operate a standard regime of limits, monitoring and penalties for departures and arrivals.

☐ 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?

A: See previous answer.

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

A: The powers already exist with the Civil Aviation Act but airports are loathe to use them on commercial grounds. Long term commitment to noise reduction at night to WHO limits, will encourage airports to use the existing powers.

Our submission at 5.47 of the Scoping Consultation is repeated here.

“The health impacts of aircraft noise at night are so serious (see evidence submitted by AirportWatch) that, in advance of settling the issue of effective metrics (see our answer to question 5.43), the Government must make plans to impose, over time, the noise limits recommended by the WHO, an interim target (IT) of 55 dB $L_{\text{night, outside}}$ followed by a health-based limit of 40 $L_{\text{night, outside}}$. These limits have to be supported by statutory requirements to achieve them (or their indoor equivalents as we are dealing with night noise) through noise insulation schemes, monetary compensation for displaced households and constraints on night operations. At Luton, up to 1,000 dwellings (AMR 2010) are subject to noise in excess of the interim target so it should be possible to achieve this level by 2015 without undue cost to the industry. The health-based limit, 40 $L_{\text{night, outside}}$, is probably exceeded for tens of thousands of dwellings because Luton Airport is ringed by seven large towns which are under flight paths so imposition of this limit may have to be deferred to 2030. It is, though, important to announce this target as it will inform the work now being conducted by NATS to redesign the airspace in the south of England. We accept that a number of factors such as modal split can influence the detail of noise contours from year to year and that airports and airlines need to be able to plan their responses to tightening noise limits so we propose that progress from 55 dB $L_{\text{night, outside}}$ in 2015 to 40 $L_{\text{night, outside}}$ in 2030 be achieved in 5 dB steps every 5 years. We do not accept that users of night flights should transfer the costs of doing so onto the community as they do now.”

☐ Do you think airport compensation schemes are reasonable and proportionate?

A: No. Airport expansion still permits huge intrusion into nearby homes without redress. The full environmental cost of expansion cannot be loaded onto local residents. Luton has never had a

compensation scheme and current Government policy (para 4.80) would not deliver an adequate one.

Do you agree with the approach to the management of noise from general aviation and helicopters, in particular to the use of the section 5 power?

A: No comment

What other measures might be considered that would improve the management of noise from these sources?

A: A minimum height above structures and people should be established at least at 1500 feet height. The 500 foot rule is an anachronism given the population density of, say, SE England, particularly in locations such as at Luton where helicopter operations are concentrated over residential areas as a result of airspace restrictions.

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

A: We assume this is a broader question than one restricted to noise from GA and helicopters.

The aviation industry faces a huge problem over the next 40 years as technological progress on reducing noise has almost reached its limits. We note the glowing terms in which the policy framework (paras 4.32 and 4.33) presents industry targets for noise reductions but the reality of, for example, the EC's Flightpath 2050 claims (para 4.32) is that in 2050 new aircraft will be only 4.5 decibels quieter than those of equivalent size which were delivered in 2000. This reduction is only just above the minimum change perceptible by someone on the ground so, as the commercial aircraft fleet is likely to comprise larger aircraft, we expect the average aircraft to be no quieter over the 50 year time period even if the promised technical improvements are realised.

The claimed 65 per cent reduction in "perceived" noise is misleading because noise certification of commercial aircraft employs a noise metric which has the word "perceived" in its name. However, this refers to an adjustment to the noise frequency characteristics for human perception. Human response to sound is measured on a different scale in which a 10 decibel reduction represents a halving of loudness and 15 decibels is equivalent to a 65 per cent reduction.

The only possible answer to this question is, therefore, that Government could underwrite the £20 billion cost of developing a prototype based on the silent aircraft project. This is claimed to produce an aircraft which is 25 dBA quieter, an 82% reduction in loudness.

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

A: No. Unfortunately, the implementation of the Public Safety Zone policy in the planning system has been reduced to a "fig leaf" which enables the DfT to claim that it is controlling risk to populations living and working near airports (see evidence submitted by Aviation Environment Federation to "Developing a sustainable framework for UK aviation: Scoping document March 2011). We regret that the current draft APF (paras 6.12 and 6.13) simply reiterates the DfT's position on this without making any proposals to ensure that its policy objective can be achieved.

As DfT appears to have no understanding of the issue, we believe that responsibility within the planning system for safety in the vicinity of airports must be placed with the Health and Safety Executive in line with the position for other hazardous installations.

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

A: A regulatory framework for noise is needed before it can be integrated into any wider framework – see our earlier answers.

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

A: Yes.

Part of our submission at 5.41 to the scoping Consultation is repeated here.

“As for Airport Consultative Committees, LADACAN has sat on Luton’s for almost 20 years. To say they are ineffective is an understatement. We see their value mainly as a means of gaining information. Influencing the airport is negligible and the airport operator seems to see the committee as a marketing opportunity. Few of the attendees make a contribution (a very expensive waste of Councillors’ and Officers’ time) with the only active and technical input being by local residents’ groups. Even the airlines seem to be distant from its activities as their representatives often fail to attend.

The administration is also an issue. Not only does Luton Borough Council have a vested interest as it leases out the airfield but the Chairman is chosen and paid by the Airport, and secretarial services are provided by the Airport. Minutes are produced by and edited by the Airport before publication, hardly an independent exercise.

We would suggest that Consultative Committees be established on a statutory basis, paid for by the airport, including representatives from neighbouring authorities, aviation interests and residents and environmental groups in equal numbers, and with independent secretariats and Chairmen elected annually by the Committees from among members.”

We would like to hear more about “existing good governance and working arrangements” (para 5.17) as we have heard of nothing but frustration with ACCs from our colleagues at other airports.

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

A: No comment

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

A: As the CAA appears to be struggling to integrate environmental responsibilities with its safety and regulatory roles, the Environment Agency might be a more appropriate body for this task.

However, this would simply be a waste of resources in the absence of nationally-agreed standards for protection of the public from aircraft noise. Independent oversight of how the standards might be achieved would then be valuable.

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

A: It is a nice idea but assumes that everyone wants to achieve environmental improvements. This is far from the case. At Luton the LA wants to create extra jobs. The airport operator wants to maximise income. It is very difficult for residents to apply any pressure once the LA will not represent them.

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

A: No. Where is the reflection of the overall policy aim “**to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise**”?

As we have observed in earlier answers, developing “local solutions with local partners” without any national guidelines for what is to be achieved in the way of environmental protection is pointless. It is also a recipe for unfair competition between airports (see our answer to the earlier question on noise envelopes).

Master Plans were originally conceived in the Future of Air Transport White Paper as the means whereby airport operators could communicate how Government policy for their airports could be implemented. Without specific Government policy for individual airports, Master Plans are now reduced to being marketing brochures (see examples produced for Luton Airport in 2012). It is, therefore, very disturbing that Government continues to see them as having any influence over local strategic planning, particularly in respect of safeguarding areas of land for airport development.

If airport Master Plans are to be retained as part of the planning system, they must go through an inquiry process which has the rigour of the local plan process.

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

A: Yes, on condition that Master Plans are more than airport wish-lists (see previous answer)

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

A: This seems an unnecessary shoe-horning of two separate activities into one timetable, one of which is determined by the EU.