

RESPONSE TO GOVERNMENT CONSULTATION: DRAFT AVIATION POLICY FRAMEWORK

Cabinet Member(s)	Councillor Ray Puddifoot Councillor Keith Burrows
Cabinet Portfolio(s)	Leader of the Council; Cabinet Member for Planning, Transportation and Recycling
Officer Contact(s)	Jales Tippell
Papers with report	Appendix 1 - Hillingdon's response to the Department for Transport's Consultation on a Draft Aviation Policy Framework Appendix 2 – Submission of evidence to the Transport Select Committee on Aviation by the Leader of the Council

1. HEADLINE INFORMATION

Summary	This report provides information to the Cabinet on the Department for Transport's consultation on a Draft Aviation Policy Framework and seeks approval for a proposed response to this document.
Contribution to our plans and strategies	Hillingdon's Local Development Framework: Core Strategy; Sustainable Community Strategy
Financial Cost	No cost to the council
Relevant Policy Overview Committee	Residents' and Environmental Services Policy Overview Committee
Ward(s) affected	All wards

2. RECOMMENDATION

That the Cabinet:

- 1) **Notes the content of this report.**
- 2) **Endorses the officer response to the consultation as set out in Appendix 1 for submission to the Department for Transport by 31st October 2012.**
- 3) **Notes the submission of evidence that has been sent to Transport Select Committee on Aviation by the Leader of the Council as set out in Appendix 2.**
- 4) **Instructs officers to continue to respond to consultations on the future of aviation strategy and potential airport expansion, including joint working with the 2M group and other relevant technical groupings.**

Reasons for recommendation

This consultation sets out the Government's overall objectives for a framework for the future UK aviation strategy, stressing the need for a better balance between the benefits that aviation brings and its impacts at both a global and local level. The Coalition Government's Agreement which promised the cancellation of the third runway at Heathrow is restated. Whilst this consultation does not deal with the issue of how much, if any, extra runway capacity might be needed beyond 2030, especially in the South East, it does state that this matter along with a clear priority for the need to maintain the UK's aviation hub status, will be dealt with by a Call for Evidence to be launched later in the year.

By responding to this consultation, the Council is adhering to its commitment to continue to lobby against any capacity increases at Heathrow and to maintain pressure on the relevant bodies to ensure that there are appropriate environmental constraints on aviation in place to bring about improvements in noise, air quality and public transport for Hillingdon residents. The consultation response is an opportunity to reaffirm the Council position of seeking no capacity increases at Heathrow and to seek clarity as to how the policies in the final Aviation Framework will govern any subsequent calls for future aviation capacity increases.

Since publication of this consultation, the Government confirmed on the 7th September that it would be setting up an Independent Commission, chaired by Sir Howard Davies, former chairman of the Financial Services Authority, to review the issue of future aviation capacity and the role of the hub airport. There are no further details to date apart from an indication that this Commission may not report until post 2015. This has re-fuelled speculation that a third runway at Heathrow will be included within this review. The opportunity will be taken in the response to this consultation to reiterate that the expansion at Heathrow has already been subject to an intense and detailed public consultation and that the Coalition Government did conclude that this is an unsustainable solution and Hillingdon Council will request that this option is excluded from the aviation capacity review.

On the 13th September, the Parliamentary Transport Select Committee launched an inquiry into the aviation needs of the UK, with a deadline for responses of 19th October 2012. In order to influence the outcome of this inquiry, the Leader of the Hillingdon Council has submitted evidence as set out in Appendix 2.

Alternative options considered / risk management

The Cabinet may influence the proposals by:

- 1 Agreeing to the proposed response in full, or in part, or;
- 2 Making any amendments to the response considered appropriate.

Alternatively the Cabinet may choose to make no response to this consultation.

This option would not allow the Council any opportunity to influence future Government aviation policy.

Policy Overview Committee comments

None at this stage.

3. INFORMATION

Supporting Information

Background

1 The Coalition Government set out its programme for Government in May 2010 and this included the cancellation of a third runway at Heathrow. The National Infrastructure Plan, published in November 2011, confirmed plans to improve connectivity at an international level and maintain the status of the UK as an international hub for aviation.

2 In March 2011 a scoping document titled “Developing a sustainable framework for UK aviation” was published for consultation. This document made clear that the previous Government’s 2003 White Paper “The Future of Air Transport” was out of date as it failed to give sufficient weight to the challenge of climate change. The focus of the new way forward was to develop “*a vibrant aviation sector without paying an unacceptable environmental price*”. (Foreword of Scoping Document, page 5).

3 Hillingdon Council sent a submission to the scoping document both as a borough specific response and a joint response as a key member of the 2M group of local authorities. In its detailed consultation response, Hillingdon Council supported the policy of no further expansion at Heathrow Airport either by an additional runway or by a change in operation to mixed mode; it sought an integration between aviation and other transport strategies; and provided detailed evidence on the consequences of the unsustainable growth experienced to date at Heathrow with the ensuing unacceptable local impacts. In addition, the borough participated in responses from expert groupings such as Strategic Aviation Special Interest Group (SASIG) and the Local Authorities Aircraft Noise Council (LAANC).

Overview of draft aviation policy framework consultation

4 The current consultation calls for responses to the proposed high level policies by which aviation will be governed. It restates the Coalition Government’s Agreement of cancelling plans for a third runway and affirms the aim of a genuinely sustainable solution for aviation with a better balance than in the past needing to be struck between the benefits of aviation and its impacts at both a global and local level. The current consultation states that the Government has a specific objective to adopt this policy framework for aviation in the UK by March 2013.

5 The draft aviation policy framework is based on a package of measures to improve the use of the existing runways across the UK and ease pressure on Heathrow as the hub airport in the short term. Beyond 2020 the document gives recognition to the fact that there will be a capacity challenge at the biggest airports in the South East. The National Infrastructure Plan, 2011 made clear that a top priority was to maintain the UK’s aviation hub status, therefore, later in the year, the Government intends to issue a Call for Evidence on maintaining the UK’s aviation connectivity. Since the launch of this consultation, on 7th September, there has been confirmation from Government that the question of additional aviation capacity and options for maintaining the UK’s international hub status will now be looked at by an Independent Commission chaired by Howard Davies. On the 13th September, the Parliamentary Transport Select Committee also confirmed the launch of an inquiry into the aviation needs of the UK, with evidence to be submitted by 19th October 2012. A response was sent by the Leader of Hillingdon Council as set out in Appendix 2.

6 Following this current consultation, the Government’s intention is to finalise the Aviation Policy Framework by March 2013. The adoption of the Aviation Policy Framework, in

conjunction with any relevant policies and potential proposals which arise from the Call for Evidence and Independent Commission review, is expected to fully replace the 2003 Air Transport White Paper and its associated guidance documents.

7 There is no process outlined in the consultation document as to how the policies in the final adopted Aviation Framework will inform the Call for Evidence. There have been no details released to date as to how the adopted Aviation Policy Framework will inform the Independent Commission review.

8 The policies proposed in this consultation on the environmental constraints could help strengthen the evidence that there can be no further expansion at Heathrow. The Council's response will highlight these areas and call for the Coalition Government's Agreement of no further expansion either by mixed mode or a third runway at Heathrow to be taken forward into the final adopted UK Aviation Policy Framework and into the Independent Commission review.

9 The consultation, which ends on 31st October 2012, poses 31 consultation questions grouped under four major headings:

- The benefits of aviation
- Climate change impacts
- Noise and other local environmental impacts
- Working together

Summary of Hillingdon's consultation response

10 This report summarises below the consultation document and the responses to the questions. Where questions may not be relevant to Hillingdon and therefore specific comments have not been made, this is made clear in the response. Details of the consultation questions and full responses are detailed in Appendix 1.

a) General comments

11 There is support for the need for a clear policy framework by which aviation will be governed both for current operations and in the future. There is no information provided as to how the final policy objectives will govern the terms of reference for the Call for Evidence, the recently established Independent Commission or the Transport Select Committee on Aviation for which evidence is requested by mid October 2012. This needs to be clarified by the Government.

12 The consultation document refers to a difficult capacity challenge at the South East airports in the medium to long term. However, there is no information within this consultation as to the extent of any need for extra capacity.

b) Summary of the benefits of aviation as set out in the draft aviation policy framework

13 One of the main aviation objectives is identified as:

“to ensure that the UK's air links continue to make it one of the best connected countries in the world. This includes increasing our links to emerging markets so that the UK can compete successfully for economic growth opportunities”.

14 In terms of connectivity, it is confirmed that London is a well served capital city and its five airports (Heathrow, Gatwick, Stansted, Luton and London City) serve more routes than any other European city. The role of Heathrow as the UK's only international hub airport is identified along with its unique role in supporting the UK's and London's connectivity. The role of regional airports in playing an important role in connectivity is also highlighted.

15 The UK's ability to connect to locations crucial for economic success in the future is identified as important with mention made of the increase in services from Heathrow in recent years to the BRIC countries, i.e. Brazil, Russia, India and China, comparing favourably with its main EU competitors with particularly strong connections to India and Hong Kong.

16 The trend at Heathrow for profitable routes to be operated at higher frequencies but with aircraft operators consequently reducing the total number of destinations served is acknowledged. The considerable scope for airports other than Heathrow to develop long-haul services to a broader range of destinations to support the UK's international connectivity is mentioned as being clear from responses to the previous consultation on the scoping document.

17 The short term strategy up to 2020 is focused on:

- Making best use of existing capacity to improve performance, resilience and passenger experience defined as up to 2020 and
- Encouraging new routes and services;
- Supporting airports outside the South East;
- Better integrating airports into the wider transport network, this includes improving surface access to airports including local rail access.

18 The medium and long term strategy is focused on:

- Integrating airports in the wider transport network. This includes integration into the development of a national high speed rail network;
- The need for effective action in the medium to long term in the South East with regard to a "difficult capacity challenge" which will be addressed through the Call for Evidence to be issued later this year.

c) Summary of Hillingdon's consultation response on the benefits of aviation

19 In terms of connectivity, Hillingdon Council has consistently asked for a truly national aviation policy, not a Heathrow-centric one. We therefore support the recognition in the consultation document that other airports can play a role in maintaining the UK's international connectivity and relieving pressure at the congested South East airports.

20 Hillingdon's experience with Heathrow has shown that extra capacity has not led to extra connectivity, with destination numbers suffering whilst airlines simply seek more frequency on the more profitable routes. We welcome the recognition of this issue within the document. The final Aviation Policy Framework needs to ensure that other airports and airlines do not follow similar lines as Heathrow to the detriment of UK connectivity.

21 The provision of connectivity must not be at any cost and we support the approach for a better balance being struck than in the past, between the benefits of aviation and its impacts at both a global and local level.

22 In terms of making best use of existing capacity, Hillingdon Council remains committed to ensure that any actions taken to improve resilience at Heathrow are not to the detriment of the local communities. This includes aspects such as the operational changes associated with the ending of the Cranford Agreement and the use of operational freedoms currently being trialled, prior to public consultation regarding their implementation.

23 Support is given to the work to be undertaken with regard to slot allocations. We welcome changes to the slot mechanism to ensure that scarce slots are used in the most beneficial way for UK connectivity, rather than just profits for selected airlines.

24 In respect of the short term strategy up to 2020, Hillingdon has consistently asked for improvements to the regional surface access provision to Heathrow, and therefore the confirmation of funding for the new rail line from the Great Western Mainline to Heathrow and the upgrade to the Piccadilly line is supported.

25 In terms of the medium and long term strategy, the consultation refers to aviation and high speed rail strategies being aligned but there is no evidence provided to indicate how this will occur. This is particularly unclear given the range of differing timescales, for example, HS2 Phase 1 preferred route (including a spur to Heathrow) already has Government approval; the aviation policy framework will be adopted in March 2013; and options for any additional capacity and how to maintain the UK's aviation hub status are now not likely to be agreed until after 2015, following the Independent Commission review.

26 With respect to the Call for Evidence/Independent Commission Review, it is extremely disappointing to hear about the delay to the consultation on any need for future capacity and the role of a hub airport. With regards to Heathrow, it has been very clearly established that there is no policy support for expansion by a 3rd runway or by a change to mixed mode operations. For local communities this delay simply adds to the uncertainty. The concerns raised over increased noise, pollution and disruption to the surrounding area have not been addressed and a third, short runway is not a long-term solution to maintaining the country's hub capacity. The Government policy position of no expansion at Heathrow should remain a cornerstone of the future aviation policy framework.

27 It is unclear how the policy conclusions from the final adopted Aviation Policy Framework, due in 2013, will govern the terms of reference for the Call for Evidence or the newly proposed Independent Commission. This needs clarity as soon as possible. As Heathrow expansion has already been subject to intense and detailed public consultation and the Coalition Government have concluded this is an unsustainable option, it would be logical that this be excluded from the Call for Evidence and from the Independent Commission review and that all other options be properly assessed.

d) Summary of climate change as set out in the draft aviation policy framework

28 The Government's objective is:
"to ensure that aviation sector makes a significant and cost-effective contribution towards reducing global emissions".

29 Actions to be taken are set out at a global, european and national level with regards to climate change.

30 In terms of national actions, decisions have yet to be made with regard to:

- Including aviation emissions in the UK's national carbon budgets and targets;
- Whether to retain the national 2050 CO₂ target for aviation emissions. The Government will make a decision on this later in the year.

31 Recognition is given to the facilitation of alternatives to air travel such as high speed broadband and mobile connectivity. The decision to develop a national high speed rail network is referred to as a means of promoting an alternative to domestic and short haul aviation.

32 There is reference to a number of programmes on research and technology aimed at developing more fuel efficient aircraft, with resulting reductions in carbon emissions. With regard to the use of biofuels, it is identified that more work is needed to ensure the sustainability of any future biofuel use before a decision on their use, and the extent of their use, is made.

33 New powers are proposed for the Civil Aviation Authority (CAA) to increase and improve the quality of the information available to the public on the environmental effects of civil aviation in the UK and measures taken to limit them so that environmental performance can become a factor informing consumer decisions.

34 The need to better understand and manage the risks associated with climate change to ensure successful long term resilience of the UK's aviation industry and its contribution to supporting economic growth and competitiveness is recognised.

e) Summary of Hillingdon's consultation response on climate change

35 The Government needs to ensure that funded research and development programmes do not result in a reduction of carbon emissions at the expense of other emissions, which may have a detrimental local impact such as noise or local air quality.

36 In 2009 the Committee on Climate Change produced detailed evidence for the future for aviation within a target set to ensure reduction in aviation-related climate change emissions. We are disappointed in the lack of any firm targets or controls on climate change within this consultation document. This issue should be addressed and a target incorporated in the final Aviation Policy Framework.

37 With regards to the alternatives to air travel, there has been no recognition given to the fact that unless the slots substituted by rail from domestic or short haul flights are removed from the system, this approach may not be one of reducing carbon emissions. A domestic flight replaced by a long haul flight will simply add to the aviation emissions burden. This disparity needs to be recognised and addressed. For example, at congested airports any slots substituted by rail trips could be frozen to improve operational resilience.

f) Summary of noise and other local environmental impacts as set out in the draft aviation policy framework

38 Noise impacts are identified as a key concern for local communities living around airports along with the impact on air quality. The Government's policy objective is re-stated from that in the 2003 Air Transport White Paper as:

"to limit, and where possible, reduce the number of people in the UK significantly affected by aircraft noise".

39 The consultation stresses the poor noise climate around Heathrow, which accounts for approximately 70% of people in the UK exposed to average noise from airports with more than one in four people exposed to this level of noise around European airports living near Heathrow. Heathrow's noise impact is identified as easily exceeding the combined impact of all the other hub airports in Western Europe and has a significantly greater noise impact per flight than any other major European airport. The Government's opposition to the building of a third runway at Heathrow is re-stated.

40 The report gives a number of proposed principles for ways to achieve its noise objective. Special mention is made of the imposition of the noise contour associated with T5 which although defining a limited area, does not address minimising the number of people affected within this area. The issues of the importance of creating respite and of the particular concerns over night noise are raised as issues to be addressed.

41 The issue of poor local air quality around airports and the need to meet legally binding EU limits for the protection of human health is identified, along with the commitments from Government to achieving full compliance with European air quality standards.

42 The statement is made that the policy aim of "*looking for the least environmentally damaging solutions to maintaining sufficient airport capacity is still an imperative*" With regard to the Call for Evidence, it is stated that it will make it clear that environmental sustainability is one of the factors which respondents should aim to address. The Government has now set up an Independent Commission to identify and recommend options for maintaining the UK's international hub status for aviation. There are no published terms of reference yet for the Independent Commission.

g) Summary of Hillingdon's consultation response on noise and other local environmental impacts

43 The Government's objective to simply "limit" and where possible "reduce" the number of people significantly affected by aircraft noise is not supported. This objective must be tightened to align with the Noise Policy Statement for England (NPSE) of avoiding significant adverse impacts. It must also be widened to include the total noise caused by aviation activities, including impacts from ground noise.

44 There is concern about the proposal to continue with the current regime of measuring community annoyance to noise. The Council has submitted a technical paper in relation to this issue, which is appended to the detailed consultation response. This provides evidence to support the need to define more appropriate noise metrics and to ensure they accurately represent community annoyance.

45 Any future noise management regimes must ensure that reductions in noise achieved by changes in aircraft technology are used to the benefit of the local communities, not to simply increase flight numbers. In addition, we would support the inclusion of an objective in the final Aviation Policy Framework to reduce, and work towards, a total ban on night flights. With regards to Heathrow, given the unacceptable noise environment for local communities, we would support decreasing the number of permitted air transport movements to allow the airport to operate with a degree of operational resilience, as opposed to imposing "operational freedoms" to gain resilience which could have negative impacts on the local communities in terms of encroaching on respite periods.

46 We support the use of mechanisms such as the setting of more stringent targets for departure noise; a greater investment in noise monitoring around relevant airports; and the establishment of an independent regulator for noise management.

47 Current compensation schemes are woefully inadequate and require a root and branch review. New standards of entitlement should be determined and based upon World Health Organisation and European Union noise standards for the protection of human health.

48 Our experience of residents impacted by the operation of RAF Northolt and also Denham aerodrome, supports our view that general aviation noise levels causes adverse impacts in local communities. There is no effective noise management programme, no noise insulation scheme and no airport consultative committee for RAF Northolt. We support the inclusion in the final Aviation Policy Framework of policies to address the noise impacts arising from the general aviation use of airports such as RAF Northolt.

49 An airport is an uncontrolled source of emissions and, in addition to having noise implications, can also impact adversely on local air quality. At Heathrow this has reached unsustainable levels and the surrounding area is above the legal standards set by Europe to protect human health. Achieving compliance with air quality limits around airports must be a key objective within the final Aviation Policy Framework.

50 The final Aviation Policy Framework must require a process by which there is transparent environmental accountability at airports. This should include a mechanism by which an independent regulator can invoke mechanisms aimed at reducing the impacts on local communities. This is especially vital around airports such as Heathrow where the air quality and noise impacts are at unacceptable levels.

h) Summary of 'working together' as set out in the draft aviation policy framework

51 The Government objective is:
"to encourage the aviation industry and local stakeholders to strengthen the way in which they work together".

52 The importance of local collaboration is stressed with a statement made that a national aviation policy can only be successful if it provides a sensible approach to addressing the concerns of the local communities.

53 It is recommended that the opportunity is taken to review the membership and terms of reference for the various airport related mechanisms in place for engagement to ensure that local interests are fully represented. This review should include the extent of, and the detail of, information that is published including the methodology used. Airports should provide transparency and ensure that sufficient relevant information is provided to reach a wide audience.

54 The Civil Aviation Bill, when enacted, will strengthen the role of the aviation regulator (the Civil Aviation Authority, CAA) by giving it additional power of oversight on airport's noise management policies and procedures and also to ensure airports publish environmental information which is accessible, including to people living in the vicinity of the airport, and in a format which is also useful to passengers when they make their choices.

55 A more effective role is suggested for the system of Airport Consultative Committees as a forum to assess the concerns of individuals living near the airport who may be exposed to significant environmental dis-benefits.

56 Noise is identified as the key issue over which relations between airports and local communities break down. The noise management process needs to include greater transparency, trust and local accountability of airports to impacted local communities with a bigger role envisaged for the CAA in providing independent oversight and transparency.

57 There are recommendations that airport master plans should be produced at least once every five years and should be streamlined with other key documents such as the noise action plans and any changes to master plans subject to consultation and engagement with local communities prior to publication.

58 The value of airport transport forums is recognised along with the opportunity to be taken to review the membership and ensure that the needs of passengers, local employees, residents and freight are fully represented. The continuation of the production of airport surface access strategies is recommended, with targets set for reducing the carbon and air quality impacts of surface access to airports.

i) Summary of Hillingdon's consultation response on 'working together'

59 The presence of an Airport Consultative Committee is of limited value if there are no tangible outcomes arising from it. For such a forum to be useful in terms of engagement with local communities, it must have a remit to deliver outcomes and have responsibility for acting on members views.

60 We believe that effective local engagement is important. The local communities around Heathrow have suffered from a raft of broken promises in relation to the airport operator and the level of mistrust is high. The recent poor engagement process on the introduction of the operational freedoms trials has been a prime example. The key to securing a way forward on this occasion was by means of the CAA who has provided an independent overseeing role between the airport operator, the Government and local authorities.

61 In the UK the Government made the airport operator the "competent authority" for drawing up the Heathrow Noise Action Plan. Hillingdon has consistently stated it is not appropriate for the airport operator to fulfil this role. The proposal for the CAA to have an independent oversight role on noise management is supported.

62 The airport master plans are non-statutory, have no standard format and become quickly out of date, or as in the case of Heathrow, remain in interim or draft status. They do not appear to have any official status within the National Planning Policy Framework. We believe that if airport master plans are to be of any value as a land-use planning tool, these aspects need to be clarified.

63 For areas such as that around Heathrow, effective environmental improvements will only be realised by means of a partnership approach at local, regional and national levels. Key strategies such as noise management plans, surface access strategies, air quality action plans and business plans must be integrated with regard to targets and timescales. They should be updated at regular intervals and take into account aspects such as changing business aircraft

fleet plans which can have an impact of environmental matters such as noise, local air quality emissions and increasing the numbers of passengers and workers accessing the airport. This issue must be addressed in the New Guidance to accompany the final Aviation Policy Framework.

j) Summary of 'planning' as set out in the draft aviation policy framework

64 The Aviation Policy Framework will apply to the whole of the UK and when adopted, in conjunction with relevant policies and potential proposals arising from the Call for Evidence, it will fully replace the 2003 Air Transport White Paper.

65 In preparing local plans, local authorities will be required to have regard to policies and advice from the Secretary of State including, where relevant to a particular authority area, the Aviation Policy Framework. The adopted Framework may also be a material consideration in planning decisions.

66 In terms of safeguarding land, the National Planning Policy Framework makes it clear that local planning authorities must "*identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen choice*". This could apply to airport infrastructure. Land outside the existing airports that may be required for airport development in the future needs to be protected against incompatible development in the period until adoption of the aviation policy framework and any relevant policies and proposals arising from the proposed Call for Evidence to be published later this year. The consultation document states that airport operators must prepare safeguarding maps and ensure they are certified by the CAA.

67 All proposals for airport development must be accompanied by clear surface access proposals which demonstrate how the airport will ensure easy and reliable access for passengers, increase the use of public transport by passengers and minimise congestion and other local impacts.

68 The airspace change process remains the remit of the CAA with appropriate consultation.

69 The basic policy objective remains not to increase the number of people living, working or congregating in 'public safety zones' and, over time, for the number to reduce. Airport operators are expected to offer to buy property which lies wholly or partly within those parts of the zones where the risk is greatest.

k) Summary of Hillingdon's consultation response on 'planning'

70 Although there is no specific consultation question relating to this Chapter, we are concerned about the issues arising in relation to the local planning authority's duties and the uncertainty raised, yet again, over the prospect of a third runway.

71 Hillingdon's Local Plan Part 1 has been prepared on the basis that Runway 3 is not going ahead. If the Runway 3 proposal is now being reconsidered as part of the aviation policy review, this will again create uncertainty for the borough during the preparation of Part 2 of the Local Plan. Hillingdon and its neighbouring partner boroughs will be unable to take forward their own development plans whilst there remains doubt as to the future operational extent of Heathrow Airport. They will also be at a disadvantage in attempting to co-operate with the Mayor of

London in preparing a joint Heathrow Opportunity Area Planning Framework. The latter is a requirement of the 2011 London Plan which was subject to Examination by the Secretary of State.

Financial Implications

There are no direct financial implications arising from the recommendations of the report beyond the use of existing officers time to compile and research responses to consultations.

There is no specific budget to address concerns or undertake activities arising from such consultations. Therefore if further resources are required in the future, for example to contribute towards local campaigns or joint activities through 2M, a funding source would need to be identified.

4. EFFECT ON RESIDENTS, SERVICE USERS & COMMUNITIES

What will be the effect of the recommendation?

By responding to this consultation the Council is adhering to its commitment to seek protection for residents from the negative social and environmental impacts associated with capacity increases and/or changes in operational procedures, such as mixed mode, at Heathrow airport.

Consultation Carried Out or Required

There are no external consultations required on the contents of this report. Relevant officers from within the Council have contributed to the consultation response.

In addition, officers have contributed to the 2M consultation response and the response of other relevant technical groupings such as SASIG to ensure a consistent approach.

5. CORPORATE IMPLICATIONS

Corporate Finance

Corporate Finance has reviewed this report and confirms that there are no direct budgetary implications arising from the recommendations included above. As noted within this report, there is no specific budgetary provision to support local campaigns or joint activities through 2M, The Council does however hold unallocated priority growth and general contingency budgets which would provide a potential source of funding for such expenditure.

Legal

This Central Government consultation is being conducted by the Department for Transport. The purpose of the consultation is to seek the views of relevant stakeholders in forming the Government's Aviation Policy Framework. This report seeks approval for a proposed response to this draft document. The response outlined by officer's in the report above, is compatible with the decision of the Council's Cabinet on 3 September 2002 which confirmed that the Council is opposed to further expansion at Heathrow Airport by way of a third runway or mixed mode operations.

When undertaking this consultation, the Department of Transport must ensure plans are still at a formative stage, they must give sufficient reasons to permit the consultee (i.e. the Council or

residents) to make a meaningful response and they must allow adequate time for consideration and response. The results of the consultation must then be conscientiously taken into account by the Department of Transport in finalising any proposals, including those which do not accord with their own proposals.

Fairness and natural justice require that there must be no predetermination by the Department of Transport of a particular decision which goes beyond a legitimate predisposition to a certain conclusion.

Corporate Property and Construction

The Corporate Landlord has reviewed this report and confirms that there are no direct asset or property implications for the Council arising from these recommendations.

6. BACKGROUND PAPERS

NIL

Appendix 1: Hillingdon's consultation response to the Department for Transport's Draft Aviation Policy Framework

Draft text for consultation response to the Department for Transport

Aviation Policy Framework
Department for Transport
Great Minster House (1/24)
33 Horseferry Road
London SW1P 4DR

and by email to: aviation.policyframework@dft.gov.uk

Dear Sir/Madam

Draft Aviation Policy Framework consultation document

Thank you for the opportunity to respond to this consultation. This letter contains some general comments and also detailed responses to the consultation questions as set out in consultation document. Please note that our response has been endorsed by Hillingdon's Cabinet at its meeting on 27th October 2012.

General comments

Hillingdon's long established policy has been to protect local communities from significant adverse environmental impacts of airport operations. To this end the Council welcomes and supports the Government's position within this consultation document of striking a better balance between the benefits of aviation and its impacts, especially at a local level. Given the unsustainable environmental situation around Heathrow and its environs, even at current levels of operation, we remain firmly committed to support the Coalition Government's Agreement of no expansion at Heathrow by means of a third runway or by a change to mixed mode operations at the airport. Given the desire for an Aviation Policy Framework that demonstrates a genuinely sustainable solution, we believe the policy position of no expansion at Heathrow should form the cornerstone of any future aviation policy and strategy.

We are disappointed that the Call for Evidence on any future capacity and the role of the hub airport has not formed part of this current consultation. This has prolonged the uncertainty for many of our residents and has provoked the inevitable call in the media for expansion at Heathrow once again. We would like to take this opportunity to reiterate our position. The concerns over increased noise, air pollution and disruption in the surrounding area around Heathrow remain as valid now as they have always been and a third runway is not a long term solution to any call for long term hub capacity.

Since publication of this consultation the Government has set up an Independent Commission to look at the issue of maintaining the UK's status as an international hub for aviation, which will include evaluation of any need for additional capacity in the short, medium and long term. In addition the Parliamentary Select Committee has also announced a review of aviation.

We would like to take this opportunity to make our position clear. The issue of expansion at Heathrow has already been debated, at length, in the public domain, during a process which called upon experts from all aspects of aviation to inform decisions. The Coalition Government considered all this evidence and rightly concluded that expansion at Heathrow was not a sustainable solution. We call for this stance to be upheld and that the terms of reference for the Independent Commission looking at truly sustainable means of maintaining connectivity and achieving any future capacity needs, for the reasons stated above, should exclude any option for expansion at Heathrow.

On a more general note, we welcome and support the general principles outlined in this consultation to ensure that future aviation decisions are set within strict environmental limits and that priority is given to improving the environmental impacts for local communities. The identification of an independent regulator to ensure transparency on the operation of airports and the setting of environmental standards is also supported. If this is to be the Civil Aviation Authority, its remit will need to be widened into an environmental role, and include all aspects related to airports, not just noise management.

Given our role as the local planning authority, we have very specific concerns about our ability to secure a statutory development plan for the borough in light of continuing uncertainty about the future capacity of Heathrow airport. In November 2012 the Council will be adopting the Hillingdon Local Plan Part 1, which has been prepared on the basis that Runway 3 is not going ahead. If the Runway 3 proposal is now being reconsidered as part of the aviation policy review, this will again create uncertainty for the borough during the preparation of Part 2 of the Local Plan. We are also at a disadvantage in attempting to co-operate with the Mayor of London in preparing a joint Heathrow Opportunity Area Planning Framework, which is a requirement of the 2011 London Plan.

The Secretary of State should be aware of the particular difficulty faced by Hillingdon Council over recent years in preparing development plans for its area due to the presence of Heathrow Airport. This was again evident during the Examination in Public held this spring into the Council's Local Plan Part 1 (formerly prepared as the Core Strategy).

Work on the plan began promptly following enactment of the Planning & Compensation Act, 2004. Key steps in its preparation were publication of:

- Preferred Options (October-November 2005)
- Revised Core Strategy (February-March 2007)
- Core Strategy Consultation Draft (June-July 2010)
- Core Strategy Pre-Submission Draft (Feb-March 2011)

The plan was on course for completion by 2008 when the Runway 3 proposal and subsequent public inquiry effectively prevented further preparation of a planning strategy for the borough, pending the Secretary of State's decision. It was only following that decision and clarification from the Government that Runway 3 was not going ahead that it was possible to move forward with completing and submitting the plan during 2011.

This obviously had major implications for developers, residents and the business community in the borough as there has been uncertainty for some time as to the strategic direction detailed planning policies for the borough would take. The borough has had to rely until adoption of the Local Plan Part 1 this year on its original Unitary Development Plan policies (dating from 1998) together with the London wide objectives of the London Plan for that direction.

This point was made in the Council's evidence at the Local Plan Part 1 Examination in Public. In the subsequent Inspector's Report received by the Council on 26 July 2012 he made clear his support for this view (at paragraph 9) by stating that: "...it is important that the first part of the Local Plan for Hillingdon is put in place quickly so that essential development that will support sustainable economic growth and regeneration is not hindered by continued uncertainty."

The Plan has been prepared on the basis that Runway 3 is not going ahead. If the Runway 3 proposal is now being reconsidered as part of the aviation policy review this will again create uncertainty for the borough during the preparation of Part 2 of the Local Plan. Hillingdon and its neighbouring partner boroughs will be unable to take forward their own development plans whilst there remains doubt as to the future operational extent of the Airport. They will also be at a disadvantage in attempting to co-operate with the Mayor of London in preparing a joint Heathrow Opportunity Area Planning Framework. The latter is a requirement of the 2011 London Plan which was subject to examination by the Secretary of State.

It remains unclear from paragraph 6.6 in the consultation paper what the Council is required to do in the case of Heathrow with respect to the safeguarding of land from "incompatible development" outside the existing airport. The paper requires this safeguarding during the current policy review in case land might subsequently be required for future development of the Airport. In Heathrow's case this would cover an extensive area of the borough and again create doubt over the long term land use strategy for the surrounding area.

Comments on overall strategy

We support the need for a clear policy framework document in which any subsequent investigations into how aviation should be managed would be governed. We do however have very strong reservations on the timeline which appears to be developing.

The recent weeks have seen, as well as the Call for Evidence referred to in this document, the launch of an Independent Commission to review aviation options and the Parliamentary Transport Select Committee has launched its own inquiry into the aviation needs of the country. There is no clarity as to how the policy conclusions and the published Framework following this current consultation will either be incorporated into, or influence the terms of reference of, the Independent Commission or the Transport Select Committee. This needs to be clarified as soon as possible.

The consultation document refers to a difficult capacity challenge in the medium and longer term at our biggest South East airports although there is no evidence presented to confirm this. Until the benefits for capacity and connectivity are realised from the options suggested such as making best use of available capacity, supporting and

encouraging new routes and services from airports outside of the South East, making better use of the slot mechanism, the actual capacity challenge to be met remains unclear.

Chapter 2: The benefits of aviation

Question 1 - do you agree with our analysis of the meaning and value of connectivity set out in this chapter?

We support the recognition that London is served by five well connected airports. We have consistently asked for a truly national aviation policy, not a Heathrow-centric one, and therefore we support the acknowledgement in the consultation document about the role other airports can play in maintaining the UK's international connectivity.

Our experience with the operation at Heathrow has shown that extra capacity has not led to extra connectivity, with destination numbers suffering whilst airlines simply seek more frequency on the more profitable routes. We support the recognition of this issue within the document. The final Aviation Policy Framework needs to identify mechanisms to ensure that other airports and airlines do not follow similar lines as Heathrow to the detriment of UK connectivity.

The provision of connectivity must not be at any cost and we support the approach for a better balance than in the past being struck between the benefits of aviation and its impacts at both a global and local level.

With regard to future capacity and connectivity, we are disappointed in the delay on the decision for any need for future capacity and the role of a hub airport. There is a very clear and established policy on Heathrow in so much as there is no policy support for expansion by a 3rd runway or by a change to mixed mode operations.

This position was announced in the Coalition Agreement:
"We will cancel the third runway at Heathrow" (Coalition Agreement)

The decision was repeated in the "developing a sustainable framework for aviation: Scoping Document":
"One of our first actions was to cancel plans for a third runway at Heathrow airport.....We also ruled out mixed mode operations at Heathrow to ensure that local residents can continue to benefit from the regular respite from noise provided by runway alternation". (para 1.6)

This is again reiterated in this current consultation:
"As the Coalition Agreement promised, the Government has cancelled plans for a third runway at Heathrow". (Foreword, Draft Aviation Policy Framework, July 2012)

Given the very clearly stated policy decision on no expansion at Heathrow, we believe the Call for Evidence on the stated "very difficult capacity challenge at our biggest South East airports" (para 2.26, Draft Aviation Framework Strategy consultation document) should focus on other airports and the role they can play in increasing capacity, if needed, and in maintaining international connectivity.

The expansion of Heathrow is environmentally unsustainable, and this was confirmed by Theresa Villiers at Transport Times Conference, April 2012:

“The quality of life impact of a third runway with up to 220,000 more flights over London every year, would be massive and there is no technological solution in sight to ensure planes become quiet enough quickly enough to make this burden in an way tolerable. So we need another solution...” (our emphasis)

It is unclear from this consultation how the policies from the final adopted Aviation Framework will inform the terms of reference for the Call for Evidence, and this is a weakness that requires clarity.

The issue of expansion at Heathrow has been debated, at length, in the public domain in a consultation informed by experts from all aspects of aviation. The Coalition Government has already evaluated this evidence and concluded that the environmental burden associated with expansion at Heathrow is not sustainable.

The UK needs a sustainable long term solution and a short third runway at Heathrow is only a temporary measure. It is unacceptable to expect the residents of Hillingdon, potentially threatened by loss of their houses and increased congestion and pollution, and the large swathes of London threatened with intolerably increased noise impacts, to put their lives on hold again until post 2015 for a decision regarding Heathrow, when this threat had been lifted only recently in 2010 by a cross party agreement. The expansion of Heathrow must be excluded from this process.

Question 2 - do you support the proposal to extend the UK's fifth freedom policy to Gatwick, Stansted and Luton? Please provide reasons if possible.

We have no specific comments to make on this question.

Question 3 - 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?

We have no specific comments to make on this question.

Question 4 – 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?

We would support proposals which encourage better use of regional airports for providing additional capacity and connectivity away from the congested South East airports.

Question 5 – do you have any other comments on the approach and evidence set out in Chapter 2

The answer to this question has been divided to allow comments to be made in the key areas of interest to the borough.

- Surface access - general

If the publication of airport master plans is to continue, we would support the need to ensure airport master plans and airport surface access strategies are integrated and

take into account changing airline business plans which may impact on the numbers of both workers and passengers accessing the airport. More detail is provided in the answers to the relevant questions in Chapter 5.

- Surface access - Heathrow specific

The lack of an integrated surface access strategy for Heathrow was a clear flaw in the previous Government's consultation on aviation expansion. We support the confirmation of funding for the Great Western Mainline rail link to Heathrow and for the upgrade work to the Piccadilly line. We welcome the opportunity to work with the DfT and other stakeholders to take forward improvements in regional surface access provision to Heathrow.

- Operational resilience: general

Heathrow has been operated to the point of inefficiency in terms of resilience because it operates virtually at capacity. This has resulted in an airport which is unable to react to changing situations without knock-on impacts in terms of delay. Hillingdon Council has consistently stated that the permitted number of air transport movements at Heathrow has clearly been set too high. We are disappointed that this consultation has not proposed a process by which airports are required to ensure that operational resilience is incorporated into their operation. Processes must be in place to ensure airports do not end up being managed at inefficient operational levels. This issue should be rectified in the final Aviation Policy Framework.

- Operational resilience: Heathrow specific

With regards to operational resilience at Heathrow, the two aspects referred to in the consultation document are the use of operational freedoms and the ending of the Cranford Agreement. Hillingdon Council will continue to work with the 2M Group and other local authorities to ensure that these two aspects of attempting to give an over-managed airport some operational resilience do not impact on communities surrounding the airport by worsening the environmental impacts. This includes ensuring the retention of respite periods which is of great importance to vast swathes of people in London and the surrounding areas. It must be acknowledged in the final Aviation Policy Framework that the provision of operational resilience must not be to the detriment of the local environment and communities.

With regard to the ending of the Cranford Agreement, whilst one of the reasons cited for this decision is extending the benefits of runway alternation to communities under the flight paths during periods of easterly winds as well as operational benefits to the airport, it must be recognised that there are potential detrimental environmental impacts to local communities in Hillingdon. The enabling works to allow this to proceed will require submission of a planning application by BAA Heathrow. Hillingdon Council will be ensuring robust mitigation measures are in place to address any negative changes in relation to noise or emissions resulting from this change in operation. It must be acknowledged in the final Aviation Policy Framework that the provision of operational benefits must not be to the detriment of the local environment and communities.

Slot Mechanism

We are supportive of the work to look at the use of the airport slots mechanism, especially at congested airports such as Heathrow. Currently airlines that use a slot 80% of the time during one season can carry that over to the next season. A perverse

reaction to this is that airlines potentially fly nearly-empty aircraft at off peak times or off-season to preserve prime landing and takeoff rights during peak travel times. We would support changes to the slot mechanism to ensure scarce slots are used in the most economically beneficial way for the UK, and not just for profits for selected airlines.

Medium and long term strategy

There is a lack of coherency between the high speed rail decisions already taken and the aviation framework now being consulted upon. Hillingdon Council has continually called for an integrated transport strategy which incorporates aviation and other transport modes such as rail (including high speed rail) and road. Despite the document stating that aviation and high speed rail strategies will be aligned, there is no evidence provided as to how this will occur. This is particularly unclear given the range of differing timescales. The Government has already given its approval to the High Speed 2 (HS2) Phase 1 preferred route, and it has also given its commitment for a Heathrow spur route and station with a further consultation due in 2013/14. The aviation policy framework will be adopted in March 2013 and yet it is unclear when, or how, fundamental decisions following the Independent Commission Review report in the summer of 2015, with regard to capacity, including specific location of any extra capacity, will be incorporated into any aviation policy. This needs to be clarified and is a major flaw in both this consultation and the High Speed 2 consultation.

The consultation document refers to the Heathrow spur enabling HS2 passengers to travel directly to Heathrow. There has been insufficient information provided throughout the consultation and the decision-making process on HS2 Phase 1 to suggest that there is a robust business case for HS2 passengers wishing to access Heathrow. The reference in this document to a review of the Heathrow Spur proposals in the light of the responses to this consultation and the subsequent Call for Evidence, adds a further level of doubt. With support now being given for the connection to the Great Western Mainline and improved links via Crossrail and an upgraded Piccadilly line, and the reference to a review of the Heathrow spur proposal in the light of any Airport Review, Hillingdon Council would urge that the spur link to Heathrow be cancelled.

We believe that the reference to improved connectivity via high speed rail bringing the ability to “encourage demand at airports” (para 2.94, Draft Aviation Policy Framework consultation document) is contradictory in terms of Heathrow Airport and its proposed high speed rail spur link, given that there is strong policy support for no further expansion at Heathrow. The reasoning behind the Government policy objective of linking airports to high speed rail needs clarity. In addition it is unclear as to what policy will be put in place to ensure that the link to Birmingham Airport, as suggested in this consultation, will reduce pressure on airports such as Heathrow. The final Aviation Policy Framework must provide clearer consistency in relation to the objectives, and integration of, policies between aviation and high speed rail strategies.

Chapter 3: Climate Change Impacts

Question 1 - 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?

We do not have any specific suggestions for this question, although we wish to raise the issue of trade-offs for new technologies. The Government needs to ensure that funded research and development programmes result in new technologies that do not prioritise carbon emission reductions at the expense of other emissions which may have a detrimental local impact such as noise and local air quality. The approach of acknowledging, and addressing trade-off impacts should be incorporated into the Aviation Policy Framework.

Question 2 - do you have any other comments on the approach and the evidence set out in Chapter 3?

We are disappointed in the lack of any firm targets or controls in relation to climate change. It is unclear as to how consultees are expected to give an informed response in areas where the Government has yet to make a decision or a policy commitment. In 2009, the Committee on Climate Change produced evidence on the achievement of a specific aviation target (the 2050 target) in which growth could be accommodated within a set reduction target. The adoption of such a target would form a clear policy objective for the Framework within which the aviation industry could operate. We believe it is a missed opportunity not to have either adopted the target or provided an alternative target for the aviation industry to attain. The final Aviation Policy Framework should incorporate a clear target for the reduction in climate change emissions.

With regards to the alternatives to air travel, no recognition is given to the fact that unless the slots substituted by rail from domestic or short haul flights are removed from the system, this approach may not be one of reducing carbon emissions. A domestic flight replaced by a long haul flight will simply add to the aviation emissions burden. This issue needs to be addressed in the final Aviation Policy Framework.

Chapter 4: Noise and other local environmental impacts

Question 1 – do you agree that the Government should continue to designate the three largest London airports for noise management purposes? If not, please provide reasons.

Yes, we agree that it is appropriate for Heathrow, Gatwick and Stansted airports to be designated for noise management purposes.

Question 2 -do you agree with the Government's overall objective on aviation noise?

No, the Government's existing high level policy is stated in paragraph 4.22 as an *"objective to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise"*. We do not agree with the implication in paragraph 4.24 that this policy is fully consistent with the Noise Policy Statement for England (NPSE) aim of "avoiding significant adverse impacts on health and quality of life". This is because merely to "limit" and "reduce" numbers of people significantly affected will not necessarily "avoid" significant adverse impacts. The Government's existing policy should be updated and rendered fully consistent with the NPSE stated aim of "avoiding" significant adverse impacts on health and quality of life.

The Explanatory Note to NPSE explains the aims of the NPSE by reference to LOAEL (Lowest Observed Adverse Effect Level) and SOAEL (Significant Observed Adverse

Effect Level). The Explanatory Note does not give any actual noise levels to be used for LOAEL and SOAEL. It is stated that SOAEL is likely to be different for different noise sources, for different receptors and at different times. We suggest that the Government should provide guidance on the relevant noise levels to be used in relation to aircraft noise for LOAEL and SOAEL. Knowledge of these noise levels is necessary in order to make a judgement on whether the aims of the NPSE are being achieved. It should be noted that the Government's stated hope in NPSE paragraph 2.8 is that existing policies will be reviewed and revised if necessary to accord with the vision, aims and principles of the NPSE.

We also suggest that the Government's policy on aviation noise should be widened to include the total noise caused by aviation activities so as to include ground noise and not merely air noise. This will allow appropriate policy mechanisms to be developed to address issues include both ground noise and air noise.

Question 3 - do you agree that the Government should retain the 57 dB LA_{eq,16h} contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance?

No, we are very concerned at the proposed retention of the 57 dB LA_{eq,16h} benchmark for annoyance in relation to aircraft noise at Heathrow.

The use of the LA_{eq,16h} noise indicator was subject to severe criticism at the Heathrow Terminal 5 public inquiry. The Inspector stated that he considered much of it well-founded. He noted LA_{eq,16h} does not reflect the operation of runway alternation as a noise mitigation measure, nor does it give an indication of how many times activities are interrupted by passing aircraft. Most significantly, he noted that it fails to give adequate weight to the number of aircraft movements. The Inspector commented on the adequacy of the Aircraft Noise Index Study (ANIS) reported on in 1985, which led the Government to adopt the LA_{eq,16h} noise indicator to measure aircraft noise. He noted that the ANIS study had been carried out in 1982, and that the relationship between LA_{eq,16h} and community annoyance was statistically weak even at that time.

Following the criticism of LA_{eq,16h} at the Terminal 5 public inquiry, a Parliamentary Question was submitted in 2001 asking what plans the Government had to carry out a new study to update the ANIS study of 1985. On 8th May 2001, the Parliamentary Under Secretary in the Government's Department of the Environment, Transport and the Regions, said: *"My Department is to carry out a major study to reassess attitudes to aircraft noise. This new study underlines the Government's commitment to underpin our policy on aircraft noise by substantial research that commands the widest possible confidence. It is envisaged that the results of this study will help to show whether the Leq index does in fact have the weaknesses suggested by the Inspector. The results would also inform any future consideration of the Air Transport Movement condition"*.

The promised new aircraft noise study was commissioned by the Government as the Attitudes to Noise from Aviation Sources in England (ANASE), and reported in 2007. However, on the advice of independent peer reviewers, the Government rejected the detailed finding of the ANASE study.

A separate technical paper, attached as Appendix A, presents evidence that there is a useful correlation between the ANASE study and aircraft annoyance studies reported

in European Environment Agency (EEA) Technical report 11/2010 “Good practice guide on noise exposure and potential health effects”. Both sets of studies found a significant shift in that aircraft noise now causes annoyance at much lower levels than it did previously. The significance of this, in relation to the current consultation, is that it provides support for the use of the ANASE findings in the development of future aviation policy. This is important, as without this support, the ANASE findings have been set aside. However, until the ANASE issues can be resolved, we believe the EEA findings in relation to annoyance should be accepted for the development of future aviation policy.

An important caveat to this is that the EEA evidence itself needs to be improved to cover the significance of flight numbers in any noise annoyance assessment. Only once this is resolved can the question of acceptable aviation capacity be fully addressed. Nevertheless, the evidence strongly suggests that aircraft noise now causes annoyance at much lower levels than it did previously, and this issue must be addressed in any future aviation policy.

One of the conclusions of the ANASE study was that there is no threshold level at which there is an “onset of significant community annoyance”. This is supported by the annoyance response relationships in the EEA report, which (over the study range above 45 L_{den}) do not appear to show any point at which there is a sudden “step change” in people’s attitudes to noise as would be evidenced by a sudden sharp increase in annoyance caused by a relatively minor increase in noise level. This suggests that the concept of a noise level marking the onset of significant community annoyance may not be valid.

The technical paper at Appendix A explains that the EEA report suggests that levels of annoyance (expressed as percentage highly annoyed) that occurred at 59 dB L_{den} (approximately equivalent to 57 dB $LA_{eq,16h}$) in pre-1990 studies occurred at around 49 dB L_{den} (approximately equivalent to 47 dB $LA_{eq,16h}$) in the post-1990 studies. It is therefore clear that continued use of 57 dB $LA_{eq,16h}$ to mark the onset of significant community annoyance to aircraft noise seriously underestimates the extent of the aircraft noise problem. We firmly believe that the 57 dB $LA_{eq,16h}$ benchmark has no future value in UK aviation policy.

Question 4 - 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?

We have explained above our view that aircraft noise is an issue at exposure levels below 57 dB $LA_{eq,16h}$. We therefore welcome the proposal to map aircraft noise to lower noise levels.

Annex D of the consultation document proposes two options for mapping noise down to lower levels. The options are to extend noise mapping down to either (i) 55 dB L_{den} , or (ii) 54 dB $LA_{eq,16h}$ together with $LA_{eq,8h}$ night noise contours. Of these two options, we prefer mapping down to 55 dB L_{den} . The main reason for this is to provide consistent use of noise metrics with EU Directive 2002/49/EC, which also requires mapping down to 55 dB L_{den} . However, we believe that mapping down to 55 dB L_{den} should be supported by mapping of L_{night} , and note that the EU Directive requires mapping of night noise down to 50 dB L_{night} .

The EU Directive requires estimates of the number of people exposed to aircraft noise in noise bands commencing at 55 dB L_{den} , and consideration of noise reduction measures commencing at 55 dB L_{den} . This suggests that noise is considered an issue in the directive at 55 dB L_{den} (although it may also be an issue at lower levels than 55 dB L_{den}).

The 55 dB L_{den} contour for Heathrow in 2010¹ covers an area of 222.3 sq km in which 712,100 people live. In contrast, the 57 dB $LA_{eq,16h}$ contour for Heathrow in 2010 covers an area of 106.3 sq km² in which 224,550 people live. Use of the 55 dB L_{den} contour therefore suggests that more than three times as many people are affected by aircraft noise as previously recognised using the 57 dB $LA_{eq,16h}$ contour. We believe that the 55 dB L_{den} contour gives a more realistic indication than the 57 dB $LA_{eq,16h}$ noise contour of the geographic extent of the area in which aircraft noise is a problem.

In view of the above, we support mapping down to 55 dB L_{den} accompanied by mapping down to 50 dB L_{night} , but only as a first step.

Our paper at Appendix A includes a discussion of EEA report 11/2010. The paper notes that the EEA report states use of the current threshold levels for noise mapping of 55 dB L_{den} and 50 dB L_{night} is understandable “as a first step” because of the mega-scale noise mapping required. However, the report points out that Member States are free to choose their own noise thresholds from where to start action planning, and the L_{den} threshold for noise mapping of 55 dB L_{den} does not take into account differences that exist between different noise sources.

Our paper also notes that the EEA report supports the view that the threshold for mapping of aircraft noise may have to be lower than 55 dB L_{den} , and could be as low as 45 dB L_{den} . In fact, section 2 of the EEA report gives 42 dB L_{den} as a general noise threshold above which annoyance effects start to occur or rise above background. It would therefore appear that the EEA report implies that the threshold for noise mapping where aircraft noise is considered to be a problem should be significantly lower than the 55 dB L_{den} as currently used.

We have stated above our support for mapping down to 55 dB L_{den} and 50 dB L_{night} as a first step. In view of the above, we believe that mapping down to lower levels such as 50 dB L_{den} and 40 dB L_{night} should be considered in future. In support of these noise levels, we note that the World Health Organisation (WHO) document “Guidelines for Community Noise” of 1999 gives a limit of 50 dB $LA_{eq,T}$ (over T values of 12 or 16 hours) to protect the majority of people from being moderately annoyed during the daytime (albeit for continuous noise), and the WHO document “Night Noise Guidelines for Europe” of 2009 gives 40 dB L_{night} as the lowest observed adverse effect level (LOAEL) for night noise.

Question 5 - 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?

¹ ERCD1107

² ERCD1101

Paragraphs 4.35 to 4.44 of the consultation document refer to a number of ways of designing a noise envelope.

The first form of noise envelope is referred to in paragraph 4.37. This form of noise envelope is based on restricting the inputs that contribute to noise, such as aircraft numbers or passenger numbers. As that paragraph notes, a noise envelope of this form does not explicitly relate to noise, and provides no incentive for airlines to use quieter aircraft. We are not in favour of a noise envelope based solely on a restriction on flight numbers or passenger numbers.

The second form of noise envelope is referred to in paragraph 4.38. This form of noise envelope is based on measuring the area exposed to a certain noise impact, apparently expressed by a noise contour area. In our response to the consultation of 2011 on the scoping document “Developing a Sustainable Framework for UK Aviation”, we referred to two examples where a noise contour limit had been proposed as a means of noise control at Heathrow.

The first example was the Terminal 5 noise contour limit. In this case, the contour limit was set at an unrealistically high value and provides no effective means of controlling aircraft noise. This demonstrates the importance of the limit of 480,000 air transport movements per annum at Heathrow as a supplementary means of control. The second example was the noise contour limit proposed in the 2003 Government White Paper “The Future of Air Transport” as a means of controlling noise in the context of expanding capacity at Heathrow by either mixed mode runway use or a third runway. The contention was that mixed mode runway use or a third runway was possible while complying with a specified noise contour limit, even though both proposals would have had serious adverse noise impacts. This demonstrates that compliance with a noise contour limit does not necessarily avoid adverse noise impacts.

The third form of noise envelope is referred to in paragraph 4.39 of the consultation document. This form of envelope would appear to be based on the number of people, rather than the area, in a certain noise contour. We recognise that this form of noise envelope is preferable to one based on a noise contour area because it directly relates to the number of people affected. The fourth form of noise contour is referred to in paragraph 4.40. This form of noise envelope is based on the number of people exposed to a certain level of noise divided by the number of air transport movements. This is claimed to be a measure of the noise detriment per flight.

Paragraph 4.5 of the consultation document recognises the magnitude of the noise impacts at Heathrow. For example, Heathrow accounts for approximately 70% of people in the UK exposed to aircraft noise above 55 dB L_{den} . Also, Heathrow’s noise impact easily exceeds the combined impact of all the other hub airports in Western Europe. Heathrow is unique in Europe in terms of the magnitude of the noise impact on the surrounding densely populated area with thousands of people living on a daily basis with an aircraft overhead every 90 seconds and with flights that disturb sleep from as early as 4:30 am. Furthermore, the evidence that the extent of the aircraft noise problem is underestimated can be demonstrated by comparing the 57 dB LA_{eq16h} contour for Heathrow in 2010 which covers an area of 106.3sqkm in which 224,550 people live with that of the 55 dB L_{den} contour as required by the EU Directive which covers an area of 222.3 sq km in which 712,100 people live.

The above information demonstrates that the existing noise impact from aircraft using Heathrow airport is unacceptable. ERCD0705 report contained predictions of future aircraft noise exposure for Heathrow airport. These predictions were used in the "Adding capacity at Heathrow airport" Government consultation document of 2007. The ERCD report predicted that the area of the 57 dB LA_{eq,16h} noise contour will be 77.6 sq km in 2030 with the airport operating with segregated use of the two runways within the 480,000 flights limit. This improvement in aircraft noise exposure is the result of the predicted reductions in noise emission levels of future aircraft types. In view of the magnitude of the existing noise impacts at Heathrow, we believe that it is essential that these improvements in aircraft noise are delivered to residents. Reductions in any noise contour area provided by future quieter aircraft types must not be used to create headroom for increased flights at Heathrow.

We are therefore very concerned about the suggestion in paragraph 4.41 of the consultation document that an increased cap on flights could be considered if accompanied by a review of noise limits contained in the envelope. Because the existing noise impact at Heathrow is unacceptable, a noise envelope must not be used to allow an increase in the number of aircraft movements at Heathrow beyond the current limit of 480,000.

We consider that the best protection for communities affected by aircraft noise at Heathrow is to retain the existing 480,000 limit on aircraft movements, and the system of segregated runway use with runway alternation. The existing 480,000 aircraft movements limit is necessary, in noise terms, in addition to any limit in terms of average noise contour area (such as LA_{eq,16h} or L_{den}) because an average noise contour area limit alone fails to protect people from increased flight frequency. If any new noise envelope is proposed for Heathrow, it should ensure continued segregated runway use and incorporate the existing 480,000 limit on air transport movements. It should also ensure that the noise contour area and number of people within the chosen noise contour area reduce with time so that the full benefits of quieter aircraft are delivered to residents. This approach would align with the Government's overall objective to limit, and, where possible, reduce the number of people significantly affected by aircraft noise.

Our paper at Appendix A refers to further work required to meet the objectives of the ANASE study. These objectives include the suitability of LA_{eq,16h} (and by implication L_{den} based on LA_{eq,T}) as an indicator of community annoyance, the relative importance of numbers of aircraft flights (the mathematical trade-off of event noise levels against flight numbers), and the relative importance of different times of day. We believe that no meaningful discussion on the issue of a noise envelope is possible until these objectives have been answered. As part of a new, sustainable aviation framework, the Government must develop a robust and accurate method of assessing and measuring community impacts of aircraft noise

Question 6 - do you agree that noise should be given particular weight when balanced against other environmental factors affecting communities living near airports?

Noise is the key issue identified in the consultation document as a major concern for communities living near airports and therefore requires significant interventions to ensure this is improved. With regards to the section of flights up to 5,000ft, we believe efforts should be prioritised for securing improvements in noise.

In respect of the local communities around Heathrow, local air quality is a significant issue where levels in the surrounding communities are above set European health standards. These standards were required to have been met by 2010, and the recent UK Government submission to the European Commission suggests this area will not be in compliance until at least 2020. Given the legal significance of the UK Government being currently in breach of the legislation to meet European Union limit values for local air quality, this aspect needs to be given sufficient weight where local communities are impacted by the activities arising from the operation of large airports.

Question 7 - what factors should the Government consider when deciding how to balance the benefits of respite with other environmental benefits?

The issue of balancing the benefits of respite with other environmental benefits is currently an issue with the operational freedoms trial currently underway at Heathrow. Encroachments into respite periods may occur as the airport attempts to improve operational resilience by cutting stacking and hence carbon emissions. This illustrates the importance of setting airport capacity in terms of air transport movements, at appropriate levels well below full capacity in order to ensure operational resilience of the airport and environmental improvements for the local communities.

The provision of predictable periods of respite is an effective noise amelioration measure widely supported by communities living under the flight-paths at Heathrow. Maintaining respite periods must be one of the key objectives of any environmental management process around airports. For Heathrow, we support decreasing the number of air transport movements to ensure benefits for the operation of the airport, for reducing carbon emissions from stacking and also achieving reliable periods of respite for local communities.

Question 8 - do you agree with the Government's proposals in paragraph 4.68 on noise limits, monitoring and penalties?

Yes, we welcome the Government's recognition that the relatively small number of infringements of departure noise limits indicates that the departure noise limits are too high, and that noise reductions could be achieved with more stringent targets. To this end, we welcome a review of departure noise limits to derive more stringent targets, and achieve noise reduction.

We support the Government's call for much higher penalties for breaches of departure noise limits in order to reflect the cost to local communities of aircraft breaching these limits. Penalties need to be set at a meaningful level in order to be effective deterrents to airline operators, to more accurately reflect the cost to local communities, and to incentivise the industry to develop and operate quieter aircraft.

We share the Government's concern that there is a risk of conflict of interest with the airport being responsible for enforcing the noise management regime because of the effects on customers of the airport. We therefore support greater transparency of the noise management process, and the use of an independent body in the noise management role.

We welcome the Government's call for greater investment in noise monitoring. This basic requirement is essential to ensure greater availability of noise exposure data.

Question 9 - in what circumstances would it be appropriate for the Government to direct noise designated airports to establish and maintain a penalty scheme?

We agree with the Government that a penalty scheme should be considered by airports where there are no clear overriding safety reasons for failure to comply with Continuous Descent Approach procedures and the requirement to maintain a minimum height when joining the final approach.

Question 10 - 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?

We suggest that an order would be appropriate if there were a failure of the airport operator to respond to requests for specific noise monitoring by representatives of the relevant airport consultative committee backed up by a request from the regulator.

Question 11 - how could differential landing fees be better utilised to improve the noise environment around airports, particularly at night?

The introduction of a meaningful difference in landing fees between the day and night period could be effective in helping to improve the night noise environment around airports. To this end, we propose increasing landing fees for all aircraft 23:00 to 07:00. During the most sensitive times of the day (06:00 - 07:00 and 22:00 - 23:00), an additional landing fee could be added to all but the quietest types of aircraft (Quota Count (QC) 0.25). Aircraft of QC 0.25 and below that flying with at least 90% loading could be rewarded by a reduced landing fee.

Our comments on the use of differential landing fees to improve the night noise environment are without prejudice to our view that the single most effective long term solution for improving the noise environment at night is the banning of night flights.

Question 12 - do you think airport compensation schemes are reasonable and proportionate

No, the UK airport compensation schemes are inadequate and require a thorough review, to be carried out by the regulator in consultation with other stakeholders. New standards of entitlement should be determined and based upon WHO and EU noise standards for the protection of human health and should ensure that all aspects of air and ground noise are included.

In May 2011, BAA launched a public consultation "Review of Heathrow's noise mitigation schemes". This proposed a revised outer boundary for the residential noise insulation scheme of the 2014 63 dB L_{den} contour. We believe that the proposed outer boundary of 63 dB L_{den} does not protect all those who are affected by aircraft noise. We believe that a much larger outer boundary than the 63 dB L_{den} contour is appropriate. Following the recommendations of the EEA report³, we believe the outer boundary of the residential daytime noise insulation scheme should extend to at least

³ European Environment Agency Technical report No. 11/2010 "Good practice guide on noise exposure and potential health effects"

the 55 L_{den} noise contour. Also, BAA should pay the full cost of double glazing in proposed zones 2 and 3 (2014 66 dB and 63 dB L_{den} contours respectively), rather than the proposed contributions of 50% and 25% respectively. This is because it is appropriate for the airport operator to pay the full cost of mitigating noise from aircraft using the airport.

We noted that no specific changes were proposed by BAA for the current Night Noise Insulation Scheme at Heathrow. We are concerned that BAA considers that the proposed residential noise insulation scheme incorporates a measure of night noise because it is based on L_{den} . We believe that use of L_{den} does not provide adequate protection against night noise because L_{den} can conceal night noise within a weighted total. We believe that separate specific provision should be made for insulation against noise from night flights. We support extension of the present night insulation scheme in which bedroom noise insulation is based on a "worst night noise event" criterion.

In view of the proximity of residential areas to sources of airport ground noise at Heathrow, we believe that specific provision should be made in the residential noise insulation scheme for insulation against all forms of airport ground noise including aircraft taxiing noise and aircraft engine testing.

Question 13 - 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?

Some residents of Hillingdon borough are affected by noise from general aviation flights at RAF Northolt or Denham Aerodrome, although the latter is situated outside the borough. Our experience of dealing with complaints about noise from aircraft using Denham Aerodrome supports the view that in some circumstances the public perceive general aviation noise levels as more disturbing than similar levels around major airports. Denham Aerodrome has a Consultative Committee which is attended by a Hillingdon representative.

Although RAF Northolt is essentially a military airport, it is also used by a substantial number of civil flights. The latest year for which we have flight statistics is 2009. It was reported to us that in that year there were a total of 11,459 flights of which 5,728 were civil flights. In some previous years, the number of civil flights has reached the set limit for civil flights of 7,000. Because RAF Northolt is situated very close to residential areas, noise from civil aircraft using the airport causes serious disturbance to residents under the associated flight paths. Despite this, the airport has no effective noise management programme, no noise insulation scheme and no airport consultative committee. We therefore do not believe that there are sufficient powers for adequate local resolution of noise from general aviation use of RAF Northolt.

Question 14 - what other measures might be considered that would improve the management of noise from these sources?

Improved controls on helicopter noise are required. Given that helicopter noise has different characteristics and can affect a wide range of communities close to heliports and further away, the Government should address helicopter noise through specific policies rather than within the general context of reducing noise from aviation.

Question 15 - do you have any further ideas on how the Government could incentivise the aviation and aerospace sector to deliver quieter planes?

We suggest consideration of the following measures: tax breaks for investment in new quieter rotor craft; support for further development of Turbo Prop short-haul aircraft suitable for travel within EU destinations; a requirement for Airport Noise Action Plans to have an objective to encourage quietest fleet; and a landing slot regime which discriminates against noisy aircraft and rewards fuel efficient quieter aircraft.

Question 16 - do you believe that the regime for the regulation of other environmental impacts at airports is effective

No, despite a national legislative process in place for achieving air quality compliance, this issue remains a problem around Heathrow airport. In regards to the local communities around Heathrow airport, achieving compliance with local air quality limits is an important health issue. Given that for the area around Heathrow, the UK Government is now in breach of their legal obligation to meet European Union limit values for local air quality, this issue needs to be given sufficient weight in the Aviation Policy Framework where local communities are impacted by the activities arising from the operation of large airports. More detail is given below.

The 2003 Air Transport White Paper made clear the Government obligations in regard to local air quality:

“There are mandatory EU limits for levels of these pollutants (NO₂ and PM₁₀) in the air irrespective of the source. These limits come into effect in 2005 for particulates and 2010 for NO₂. We are committed to meeting these standards, and it is clear that major new airport development could not proceed if there was evidence that this would likely results in breaches of the air quality limits”. (para 3.29, Air Transport White Paper, 2003)

We, therefore, support the inclusion of the statement in this consultation document:

“the government is committed to achieving full compliance with European air quality standards” (para 4.94 Draft Aviation Policy Framework, 2012).

This statement, and a process by which it will be achieved, must be reiterated in the final Aviation Policy Framework and must form one of the key criteria for the Call for Evidence and the Independent Commission when evaluating current airport operations and any future airport development, either increasing existing use or the establishment of new airports.

Heathrow as a Case Study - current operations

An airport is an uncontrolled source of emissions, and specifically Heathrow:

- Is an air quality hotspot, currently not meeting the legal limits set for local air quality to be met by 2010, nor expected to meet these until at least 2020;
- has a large surrounding population subjected to unacceptable noise levels far worse than other airports in the UK or in western Europe;
- is surrounded by congested roads and over-crowded transport; and
- accounts for nearly half of all the UK's aviation carbon emissions.

Despite current control mechanisms at Heathrow airport such as an Air Transport Movement limit, a car park cap and a noise contour limit, plus a legislative process in place for air quality, governed by European law, the area around Heathrow is still above legal health-based standards for air quality.

The poor air quality around Heathrow airport has been an acknowledged problem for a number of years and it is clear from local (borough-specific air quality modelling and analysis), regional (Mayor of London air quality modelling and analysis) and national (Defra air quality modelling and analysis) that the area around Heathrow is in breach of the relevant EU limit values for the health-based standard set for annual mean NO₂. The UK Air Quality Plan submitted by the UK Government to the European Commission in response to its legal obligations under the Ambient Air Quality Directive, predicts that this is likely to be the case until at least 2020. It is currently unclear as to how the European Commission will respond to this issue, and actions could include imposing financial sanctions and requiring immediate and long term actions to ensure the limits are met as soon as possible.

The Aviation Policy Framework must incorporate a process by which there is transparent environmental accountability at airports. There must be a procedure by which an independent regulator can invoke mechanisms aimed at reducing the impacts on local communities. This is especially vital around airports such as Heathrow where the air quality, noise environment and surface access congestion are all at unacceptable levels. The remit of an independent regulator will need to include all aspects influencing issues such as local air quality including aircraft operations, on-airport activities and surface access emissions in the surrounding environs.

Question 17 – do you think that noise regulation should be integrated into a broader regulatory framework which tackles the local environmental impacts from airports?

Yes, any regulatory framework needs to ensure that each environmental impact is acknowledged and addressed. If the CAA are to be appointed as a regulator just for noise it is unclear how the other environmental impacts such as local air quality will also be addressed and how any trade-off issues will be either identified or addressed.

Chapter 5: Working together

Question 1 - do you think Airport Consultative Committees should play a stronger role and, if so, how could this be achieved?

The presence of a Consultative Committee is of limited value if there are no tangible outcomes arising from it. Such a forum is only useful if it has a remit to deliver outcomes and has responsibility for acting on members views. It should not be possible for the wishes of democratic decisions taken by the relevant consultative committee to be ignored or over ruled by the airport operator without being independently reviewed by the regulator (CAA).

Question 2 - Is there a case for changing the list of airports currently designated to provide consultative facilities?

Please see our response in Chapter 4, Question 13 with regard to RAF Northolt.

Question 3 – do you agree that the CAA should have a role in providing independent oversight of airports’ noise management?

In the UK the Government made the airport operator the “competent authority” for drawing up the Heathrow Noise Action Plan. Hillingdon Council has consistently stated that it is not appropriate for the airport operator to fulfil this role.

Paragraph 4.11 of the consultation document refers to the European Commission's Better Airports Package which includes a proposal for an EU Regulation on noise to repeal the current Directive 2002/30/EC. Annex C explains that this involves a proposal for Member States to designate a competent authority and an appeal body that is independent of any organisation which could be affected by noise-related action. It is stated that this means that no organisation linked to or affected by an operation of an airport can be a competent authority, and implies a new role for national authorities or some other independent body. We support use of an independent body for the purposes of Directive 2002/30/EC, and believe that the airport operator must be excluded from performing this role. We believe that similar arguments apply to the choice of competent authority for Noise Action Plan under the the Environmental Noise Directive 2002/49/EC, and that airport operators should also be excluded from performing this role.

The use of an independent regulator is supported. If this is to be the CAA then the role of this organisation must be extended appropriately from its primary role ie to protect consumer’s interests to encompass a wider environmental role which includes the protection of local communities.

Question 4 - do you agree with the Government's overall objective on working together?

We agree that effective local engagement is vital. The local communities around Heathrow have suffered from a raft of broken promises from the airport operator and the level of mistrust is high. The recent poor engagement process regarding the introduction of the operational freedoms trials has been a prime example. The key to securing a way forward on this occasion was by means of the CAA who has provided an independent overseeing role between the airport operator, the Government and local authorities. This illustrates the need for independent control and transparency for information. A better engagement process for local authorities and local communities is supported. To be effective this must have transparency and ensure that local forums are action-oriented and local concerns addressed.

Successful local collaboration is when partners identify the key local issues and then work together towards the attainment of shared objectives. In this respect Hillingdon Council agrees that there is a need to strengthen and streamline the current fora following a review of the terms of reference, so that it can then begin the process of pooling effort around common goals. To help foster partnership working, the airport operator should not lead the different fora, but they should provide a facilitating role.

Question 5 - is the high-level guidance provided in Annex E sufficient to allow airports to develop local solutions with local partners?

Airport master plans are currently non statutory and have no standard format and can quickly become out of date. It is unclear whether they have any official status with the National Planning Policy Framework which is essential if they are to be of any value as a land use planning tool, and this must be clarified in the Guidance.

The role of the airport transport forum is to facilitate the implementation of the airport surface access strategy. Appropriate challenging targets must be set for achieving modal shift from private car to sustainable forms of transport. This is of high importance for large airports such as Heathrow where the surrounding road and public transport networks are already at capacity and must include employees accessing the site, passengers accessing the site and servicing vehicles such as freight deliveries. The Guidance should ensure targets are challenging, appropriate to the surrounding conditions and that there is quantification of the environmental improvements arising from the implementation of the strategy. Review dates must be incorporated into the strategy and must be flexible so that they can be re-adjusted with changing conditions such as a significant change in airline fleet plans to the use of larger aircraft.

We recognise the importance of local collaboration, particularly in situations where different parties each with their own agenda agree to work together towards a common goal. Properly managed, Airport Transport Forums can be the vehicle for delivering this. Unfortunately the benefits gained from the Council's participation in the Heathrow Area Transport Forum are limited. Members appear unclear regarding the Forums' role and it does not have any shared objectives. At these meetings the airport operator reports percentage surface trip generation by modal split, but this is of little use to us as the Highway Authority. It does not provide information about changes in traffic flows on the surrounding local roads. No knowledge is gained regarding pressures on the transport network. These issues need to be addressed in any review of the Guidance.

Question 6 – do you agree that master plans should incorporate airport surface access strategies?

We believe that if the system of airport master plans is to continue, then this is essential. There must be a regular update mechanism by which airline business plans involving changes to aircraft fleet mixes are incorporated into the process. An airline business plan change, for example, to the operation of larger planes, will lead to more passengers accessing the airport. This leads in turn to a requirement for the provision of more surface access provision and may also lead to other increases in local environmental impacts. The plans must therefore be flexible and subject to regular updates in line with changing circumstances.

Question 7 - do you agree that, where appropriate, the periods covered by master plans and noise action plans should be aligned?

Yes, see above.

Should you have any comments regarding this consultation response please do not hesitate to contact me.

Yours sincerely

Jales Tippell
Head of Planning Policy, Transportation and Community Engagement

Appendix A

New evidence on aircraft noise annoyance

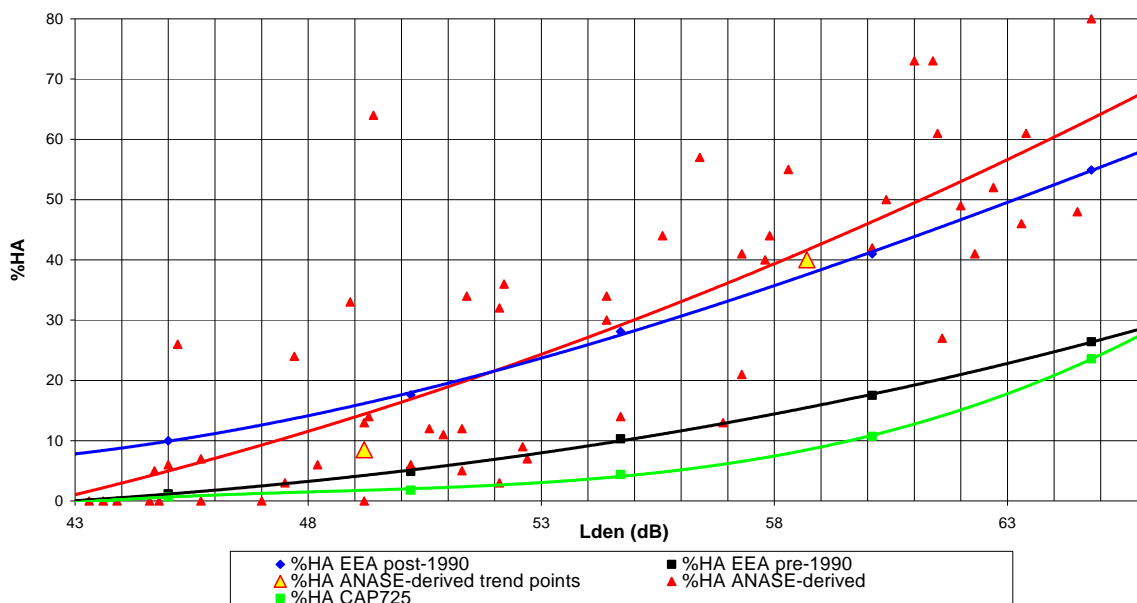
Introduction

This paper presents evidence that there is a useful correlation between the aircraft noise annoyance studies reported in European Environment Agency (EEA) report 11/2010 and the UK Government's ANASE study. Both sets of studies have found a significant shift in that aircraft noise now causes annoyance at lower levels than it did previously. The significance of this, in relation to the Draft Aviation Policy Framework consultation, is that it provides some support for the use of the ANASE findings in the development of future aviation policy. This is important, as without this support, the ANASE findings have been set aside. However, until the ANASE issue can be resolved, the conclusion is that the EEA findings should be accepted for the development of future aviation policy, in relation to annoyance. There remains an important caveat to this, in that the EEA evidence itself needs to be improved by including the significance of flight numbers in any noise annoyance assessment. Only once this is resolved can the question of acceptable aviation capacity be addressed fully. So, in spite of the various study deficiencies, the message remains clear, that aircraft noise now causes annoyance at lower levels than it did previously, and this issue must be addressed in any future aviation policy.

EU and UK models for aircraft annoyance

European Environment Agency report 11/2010 [1] is a good practice guide intended to assist policy makers and competent authorities in understanding and fulfilling the requirements of Directive 2002/49/EC [2], commonly referred to as the Environmental Noise Directive, relating to the assessment and management of environmental noise. It summarises the latest European view on issues such as exposure-response relationships and thresholds for health endpoints (annoyance, sleep disturbance, cardiovascular effects and cognitive impairment). Individual annoyance relationships with the noise metric Lden are given for road, rail and aircraft noise.

Figure 1: Comparison of EU and UK aircraft noise annoyance models



HA = "Highly annoyed"

The EEA report gives a previously used European aircraft noise annoyance relationship based on studies carried out prior to 1990. This is the same relationship as given in the 2002 EU Position Paper [3]. The relationship gives an estimate of the percentage of persons highly annoyed at a given Lden noise exposure. The EEA report mentions studies showing a trend change in

annoyance around 1990, and gives an updated European annoyance relationship based on aircraft noise studies carried out after 1990. These were all European studies (Switzerland, Germany, Netherlands) regarded as more appropriate for the EU than the pre-1990 studies, which were mainly carried out in the USA and Australia. Figure 1 gives the results for the pre-1990 and post-1990 studies in terms of percentage highly annoyed in relation to Lden. It can be seen that levels of annoyance at a given noise level are much higher for the post-1990 studies than for the pre-1990 studies. The analysis given in Figure 1 is confined to the range of noise levels in the ANASE study (40.9 to 64.2 dB LAeq,16h).

At 59 dB Lden, for example, the relationship adopted for the pre-1990 studies in Figure 1 gives 16% highly annoyed. In the case of the post-1990 studies, the relationship adopted gives the same percentage highly annoyed at around 49 dB Lden. Thus, the EEA report suggests that levels of annoyance (expressed as percentage highly annoyed) that occurred at 59 dB Lden in the pre-1990 studies occurred at around 49 dB Lden in the post-1990 studies, a reduction of around 10 dB Lden.

The Government's aviation policy uses 57 dB LAeq,16h as the level of daytime noise marking the approximate onset of significant community annoyance. This level is based on the Aircraft Noise Index Study (ANIS) [4] carried out in the UK in the 1980s. The CAP725 document [5] produced by the Civil Aviation Authority in 2007 outlines methodologies for environmental assessment of an airspace change proposal. It gives an aircraft noise annoyance response relationship for calculating percentage of people highly annoyed using LAeq,16h noise levels. The relationship is based on the Schultz curve produced in 1978 [6]. The document states that the ANIS results exhibit the same general trend as the aircraft studies in the Schultz analysis. The EU annoyance relationships use the Lden noise metric rather than the LAeq,16h noise metric used in the UK. Analysis of data [7,8] relating to Heathrow airport in 2006 shows that Lden is typically around 1.7 dB higher than LAeq,16h. This 1.7 dB adjustment has been used to convert LAeq,16h to Lden to give the CAP725 annoyance relationship shown in Figure 1.

The Attitudes to Noise from Aviation Sources in England (ANASE) study [9] reported in 2007 that annoyance with a given level of aircraft noise is much higher than when the ANIS study was carried out. The ANASE study made a direct comparison with the ANIS study in terms of "mean annoyance" with aircraft noise. This showed that the level of mean annoyance found at 57 dB LAeq,16h in the ANIS study was found in the ANASE study at a level of just over 50 dB LAeq,16h, a reduction of just less than 7 dB LAeq,16h.

The Government accepted that the ANASE study demonstrated that annoyance with a given level of aircraft noise is higher than found in the ANIS study. However, on advice contained in an independent peer review report [10], the Government decided that the detailed findings of the ANASE study should not be relied on.

Most of the analysis in the ANASE report related to "mean annoyance", and trend lines were fitted to graphs of mean annoyance versus LAeq,16h. Figure 7.2 of the ANASE report gave a graph of percentage "at least very annoyed" versus LAeq,16h, but no trend line was fitted to the plotted data points. In the ANASE study, responses from respondents were recorded using an annoyance scale of (i) "Extremely annoyed", (ii) "Very annoyed", (iii) "Moderately annoyed", (iv) "Slightly annoyed" and (v) "Not at all annoyed". The annoyance scale did not include a response of "Highly annoyed" as used in the EEA and CAP725 reports so comparison of the results of the different studies is not straightforward.

However, section 6 of the ANASE peer review report [10] assumes that the ANASE term “at least very annoyed” is equivalent to the term “highly annoyed” used in other studies. This assumption allowed the peer reviewers to deduce (apparently by eye) two trend points for the plotted ANASE data points. The two ANASE trend points given in the peer review report are 8.5% highly annoyed at 47/48 dB LAeq,16h, and around 40% highly annoyed at 57 dB LAeq,16h. These trend points relate to the corrected version of ANASE report Figure 7.2 given in the Erratum dated 1st November 2007 contained in the ANASE final report dated October 2007.

The two ANASE derived trend points are plotted in Figure 1, after converting LAeq,16h to Lden by adding 1.7 dB, derived from Heathrow data for 2006. Using the same assumptions that (i) the ANASE term “at least very annoyed” is equivalent to “highly annoyed” in other studies, and (ii) Lden can be estimated from LAeq,16h by adding 1.7 dB, the results derived for all ANASE sites have been plotted in Figure 1. That figure also shows a third order polynomial trend line fitted to the ANASE derived results. The relatively poor agreement between the plotted data points and the fitted trend line ($R^2 = 0.67$) reflects the spread of the data points, but this is not unusual in social surveys of this kind.

It is important to note that Figure 1 shows that the annoyance levels at a given noise level are much higher for the EEA post-1990 studies than for the EEA pre-1990 studies. For example, percentage highly annoyed at 57 LAeq,16h (approximately equivalent to 58.7 dB Lden) is more than doubled from around 15% for the pre-1990 studies to around 37% for the post-1990 studies. It can be seen from Figure 1 that the annoyance levels for the UK’s CAP725 relationship are generally lower than given by the EEA pre-1990 studies relationship, and much lower than given by the EEA post-1990 studies. This implies that continued use in the UK of the CAP725 annoyance relationship will seriously underestimate levels of aircraft annoyance. The ANASE trend line is generally similar to the EEA post-1990 studies relationship, and certainly in much better agreement with the EEA post-1990 studies relationship than is the CAP725 relationship.

The Government rejected the detailed findings of the ANASE study and continues to rely on the ANIS, Schultz and CAP725 aircraft noise annoyance relationships, even though these relationships are based on social surveys carried out more than 25 years ago. It seems doubtful that these relationships remain in calibration for current public attitudes, flight numbers, aircraft fleet mixes and aircraft noise characteristics. The EEA report supports this doubt on the continued validity of these relationships. This is because the EEA report suggests that levels of annoyance at a given noise level are much higher than suggested by previous European guidance. Furthermore, these EEA findings of much higher levels of annoyance seem to be replicated by the results of the recent ANASE study.

Objectives and findings of the ANASE study

The ANASE study was commissioned by the Government in 2001 in order to update the ANIS study of 1982 which led to LAeq,16h noise index being adopted by the Government for measuring aircraft noise. The ANASE report recognises that the amount of air traffic has increased significantly since 1982 whilst the sound levels generated by individual aircraft events have been significantly reduced as older, noisier aircraft have been replaced by more modern aircraft types with quieter engines and much improved climb performance. It is also recognised that attitudes to aircraft noise may have been changed due for example to the general growth in personal income, higher expectations of a peaceful living environment and less tolerance of environmental intrusion.

The main findings of the ANASE study are reviewed below against the study objectives.

Objective 1: Re-assess attitudes to aircraft noise in England

The study found that the annoyance level of respondents increased as the noise indicator LAeq,16h increased, and that a large proportion of measured variation in annoyance can be accounted for by LAeq,16h. However, for a given LAeq,16h, there is a range of reported annoyance indicating that annoyance is not determined solely by the amount of aircraft noise as measured by LAeq,16h. The main additional influences on the level of annoyance were found to be respondent's household income and socio-economic group.

The study found that for the same amount of aircraft noise, measured by LAeq,16h, people were more annoyed in 2005 than they were in 1982.

The study showed that people are much more sensitive to aircraft noise at night (particularly around midnight and the early hours thereafter). In contrast, people are least sensitive to aircraft noise in the morning and early afternoon. Ideally, therefore, a noise indicator for aircraft noise should reflect these times of day sensitivities. In contrast, LAeq,16h does not reflect weighting for sensitivities by time of day.

Objective 2: Re-assess their correlation with the LAeq,16h noise index

The study considered whether LAeq,16h is the appropriate measure of aircraft noise for predicting annoyance. The study found that while LAeq,16h continues to be a good proxy for measuring community annoyance at a given point in time, the relationship between LAeq,16h and annoyance is not stable over time. Because of this, use of LAeq,16h to predict future levels of annoyance may be misleading. In particular, where numbers of aircraft are increasing significantly, the ANASE results suggested that under-prediction of annoyance is likely.

The study recognised that the LAeq,16h noise index incorporates a mathematical trade-off of 10 between event noise level and number of noise events⁴, which means that each doubling or halving of the numbers of aircraft noise events counts as equivalent to a 3 dB increase or decrease in average noise levels⁵. The results from the study suggested that the LAeq,16h noise indicator gives insufficient weight to aircraft numbers, and a relative weight of 20 appears more supportable from the evidence than the relative weight of 10 inherent in LAeq,16h.

Objective 3: Examine willingness to pay to remove aircraft noise

The study was required to examine (hypothetical) willingness to pay in respect of nuisance from aircraft noise, and whether attitudes might be affected if cash transfers or, for example, noise insulation grants were made available. The study found that aircraft event noise level, aircraft type, time of day and personal characteristics (in particular household income) influence annoyance and willingness to pay.

Aircraft noise action plans

The EEA report 11/2010 [1] provides the dose-effect relationships intended to be used to assess the effects of noise on populations as required by the Directive [2]. Section 6 of the EEA report suggests that the lower noise thresholds for mapping are intended to delimit the area where noise is "considered to be a problem". These thresholds are noise levels above which health effects start to occur.

The EEA report accepts that use of the current threshold levels for noise mapping of 55 dB Lden and 50 dB Lnight is understandable as a first step because of the large scale noise mapping required. However, the report points out that Member States are free to choose their own noise

⁴ $LA_{eq,T} = SEL + 10\log N - 10\log T$, where SEL is event noise level (dB) for N events in T seconds

⁵ $10\log(2/1) = +3$ and $10\log(1/2) = -3$

thresholds from where to start action planning, and the Lden threshold for noise mapping of 55 dB Lden does not take into account differences that exist between different noise sources. These differences are illustrated in Table 6.1 of the EEA report giving respective percentages highly annoyed at 45, 50 and 55 dB Lden for road, rail and aircraft noise. Table 6.1 of the EEA report is reproduced here (in part) as Table 1.

Table1: Transportation noise annoyance (reproduced from EEA report)

Lden	Percentages of highly annoyed		
	Road	Rail	Aircraft
55 dB	6%	4%	27%
50 dB	4%	2%	18%
45 dB	1%	0%	12%

The EEA report states that while 55 dB Lden is a “fair” threshold for rail noise, use of 55 dB Lden for other noise sources leads to an underestimate of the actual burden. Table 1 gives the percentage highly annoyed at 55 dB Lden for rail noise as 4%, while the percentage highly annoyed at 45 dB Lden for aircraft noise is given as 12%. This means that to achieve annoyance levels approaching that regarded as “fair” for rail noise, the threshold for aircraft noise may have to be lower than 45 dB Lden. In fact, Section 2 of the EEA report gives 42 dB Lden as a general noise threshold above which annoyance effects start to occur or rise above background. It would therefore appear that the EEA report implies that the threshold for noise mapping where aircraft noise is considered to be a problem should be significantly lower than 55 dB Lden as currently used.

Conclusions

The EEA report recognises that levels of annoyance with aircraft noise are much higher for post-1990 studies than for pre-1990 studies. This paper compares the results for different annoyance models over the range of noise levels in the ANASE study (40.9 to 64.2 dB LAeq,16h). This analysis shows that annoyance levels predicted by the UK’s CAP725 relationship are generally lower than given by the EEA pre-1990 relationship, and much lower than given by the EEA post-1990 relationship. In contrast, the analysis shows that the much higher annoyance levels in the EEA post-1990 studies seem to be replicated by the ANASE study. Despite this, the Government continues to rely on the ANIS, Schultz and CAP725 aircraft noise relationships derived from social surveys carried out more than 25 years ago.

Until the issues of the ANASE study are addressed, it is suggested that Government policy should be based on guidance in the EEA report, including the specified relationship between annoyance and aircraft noise level. Although the EEA report gives increased levels of aircraft noise annoyance, it does not address all the objectives of the ANASE study. These objectives include the suitability of LAeq,16h as an indicator of community annoyance, the importance of numbers of aircraft flights, the relative importance of different times of day, and determining willingness to pay to reduce annoyance from aircraft noise. Further work is necessary to address these objectives.

It is concluded that there is an urgent need for updated guidance from the Government on the annoyance relationship for aircraft noise, and the threshold level at which aircraft noise is considered to be a problem.

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