Executive Summary

The noise action plan, which is to be published to comply with the Environmental Noise (England) Regulations 2006, is a five-year plan highlighting the actions to be taken by Gatwick Airport Limited to manage and mitigate noise arising from aircraft departing from and arriving at the airport. The plan will be in line with guidance issued by the Department for the Environment, Food and Rural Affairs in March this year (para. 2.1 et seq). The final plan will be sent to the Secretary of State for Transport in November 2009 as part of the adoption process. The plan seeks views on noise relating to Gatwick Airport’s current two-terminal, single-runway operation and is not a consultation on future noise or an expanded airport.

This report informs the County Council of the compliance of the noise action plan with the Defra guidance (paras 3.1 to 3.3) and provides a suggested response to the consultation (Appendix 2).

Recommendation

That the draft response set out in Appendix 2, be approved by the Cabinet Member for Strategic Planning and Transport and submitted to Gatwick Airport Limited as the County Council’s response to the consultation.

1. Background

The Environmental Noise Directive

1.1 The European Directive 2002/49/EC, known as the Environmental Noise Directive (END), came into effect in June 2002. The objective of the END is to define a common approach across the European Union intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. This requires:

- informing the public about environmental noise and its effects;
- preparing strategic noise maps for large urban areas (known as “agglomerations”), major roads, major railways and major airports as defined in the END; and
- preparing Noise Action Plans (NAPs) based on the results of the noise mapping exercise.
Noise Action Plans

1.2 The END was transposed into English law by the Environmental Noise Regulations 2006 (SI 2006/2238). Operators of designated civil airports – of which Gatwick is one – are required by these Regulations to produce NAPs, the content of which were set out by in guidelines published by the Department for the Environment, Food and Rural Affairs (Defra). In particular, the guidance covers the requirement to develop action plans designed to manage noise issues and effects arising from aircraft departing from and arriving at the airport, including noise reduction if necessary.

1.3 The drawing up of Action Plans supports the Government’s aim – as set out in the Aviation White Paper – to limit and wherever possible reduce the number of people in the UK significantly affected by aircraft noise. In line with these commitments, the Government has strengthened and clarified powers to control aircraft noise and emissions and airport operators have been given statutory powers to introduce noise control schemes and fine aircraft operators for any of their departures that breach noise controls.

1.4 For the purposes of the Regulations, the airport operator is the competent authority for airport NAPs. The airport operator must draw up an Action Plan every five years, based on the results of the noise mapping. The Regulations also require the Action Plans to be reviewed from time to time and revised if necessary and whenever a major development occurs affecting the existing noise situation.

Noise Mapping

1.5 In England, the noise mapping of airports is the responsibility of the airport operator although in the case of airports designated under s78 of the Civil Aviation Act 1982 (Heathrow, Gatwick and Stansted) the noise mapping is the responsibility of the Secretary of State (SoS). Defra published the resulting strategic noise maps for 18 airports in England, including Gatwick, in December 2007.

1.6 Airport operators must produce Action Plans based on the Defra guidance and submit them for adoption to the Secretary of State (SoS) for Transport, copied to the SoS for Environment, Food and Rural Affairs, not later than 30th November 2009. Summaries of the adopted plans will be forwarded by Defra to the European Commission as required by the END.


2.1 The Defra Guidance sets out general requirements for airport action planning. These state that NAPs must:
- Meet the objectives of Article 1(c)2 of the Directive;

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1 Guidance for Airport Operators to produce airport noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended), March 2009
2 The adoption of Action Plans by Member States
- Be designed to manage noise issues and effects, including noise reduction if necessary;
- Aim to preserve quiet areas in agglomerations;
- Address priorities which must be identified having regard to guidance;
- Apply to the most important areas as established by strategic noise maps;
- Meet the requirements in Schedule 43 of the Regulations.

2.2 The Defra Guidance sets out the minimum requirements of Airport Action Plans. These state that NAPs must at least include the following elements:
- A description of the airport and any other noise sources taken into account;
- The authority responsible;
- The legal context;
- Any limit values in place;
- A summary of the results of the noise mapping;
- An evaluation of the estimated number of people exposed to noise, identification of problems and situations that need to be improved;
- A record of the public consultations organised in accordance with Article 8(7);
- Any noise reduction measures already in force and any projects in preparation;
- Actions which the airport operator intends to take in the next five years, including measures to preserve quiet areas;
- Long term strategy;
- Financial information (if available): budgets, cost-effectiveness assessment, cost-benefit assessment;
- Provisions envisaged for evaluating the implementation and the results of the Action Plan.

The minimum requirements also state that the Action Plan should contain estimates in terms of the reduction of the number of people affected (annoyed, sleep disturbed, or other).

2.3 The Defra Guidance also states that, as part of the Action Planning process, the airport operator should:
- As a first priority, consider what further measures should be taken in areas shown by the noise maps to have residential premises exposed to more than 69 dB LAeq, 16h;
- More generally, examine the day, evening and night results produced from the noise mapping and consider whether there are any features of the noise impact from departing or arriving aircraft that might be managed further;
- Ensure that there is an effective complaint handling system in place;
- Consider the information from any noise complaint data that is held and whether there are any measures that might be taken to manage further the aircraft noise impact;
- Respond to any feedback from the Consultative Committee on particular issues that might be addressed;
- Consider whether other new noise abatement objectives might be developed with the aim of providing further management of the noise impact;

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3 Minimum requirements for Action Plans
4 Early and effective opportunities to participate in the preparation and review of Action Plans
Reflect the International Civil Aviation Organization’s Balanced Approach for noise management as implemented into UK legislation including proactively engaging with the land-use planning process;

- Consider the opportunities for the protection of quiet areas in agglomerations;
- Consider any other measures that might reasonably contribute to meeting the stated objectives.

3. GAL NAP Compliance with Guidance and Legislation

Defra Guidance
3.1 The GAL NAP is broadly compliant with the relevant points set out in paragraphs 2.1 – 2.3 above. The exceptions are where interpretation and analysis of the basic data is required. For example, there is no identification of problems and situations that need to be improved nor are there anywhere estimates in terms of the reduction of the number of people affected (annoyed, sleep disturbed, or other) as outcomes or objectives of actions.

European END Legislation
3.2 The foregoing paragraph considered the compliance of the GAL NAP with the Defra guidance, i.e., the UK’s interpretation of the European END legislation. However, the EU legislation directs member states to produce NAPs for major roads, railways, agglomerations and airports but does not stipulate which parties within the member state should produce these plans. In the UK, the Government has directed that GAL shall produce that plan for Gatwick Airport. It is, therefore, the UK’s NAP for Gatwick; it is not Gatwick’s NAP. Crucially, it is not intended that it be a plan of actions to be carried out by GAL alone. The Defra guidance is also vague in apportioning accountability of roles.

3.3 Since the UK Government, through the Department for Transport (DfT) and the Civil Aviation Authority (CAA), regulate the airport environment and airspace it is the Government, and DfT in particular, that has the greatest leverage to control noise and achieve reductions. The GAL NAP Executive Summary (page 5 of the consultation document) alludes to this but GAL does not appear to have otherwise addressed the point. The GAL NAP should embrace any new initiatives planned by DfT to reduce noise at and around Gatwick, including identification of appropriate actions and the accountable bodies. For example, it is expected that DfT will begin consultations next year regarding the new Night Flying Restrictions regime and actions associated with the derivation and implementation of new night flight limits should be captured within the Gatwick NAP.

3.4 Comments regarding the compliance or otherwise of the content of the NAP with the legislation are included in the proposed response to the consultation in Appendix 2 together with more detailed observations on the NAP.

4. Consultation

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5 See Appendix 1
4.1 Those whose views have been considered during the preparation of the proposed response to the consultation include members and technical officers of the Gatwick Joint Local Authorities⁶ and the Gatwick Area Conservation Campaign.

5. Resources Implications and Value for Money

None.

6. Risk Management Implications

None.

7. Customer Focus Appraisal

7.1 Following discussion with a Customer Focus Advisor it was decided that a Customer Focus Appraisal was not required in this instance. This was in recognition of GAL as the competent authority for the consultation and of the previous extensive consultation by Defra on the guidelines for the NAP.

Reference: 10081-CC-LM

8. Crime and Disorder Act Implications

There are no foreseeable crime and disorder implications associated with this consultation response.

9. Human Rights Act Implications

None.

Tony Toynton
Director Operations Infrastructure

Appendices

Appendix 1: ICAO Balanced Approach

Background Papers

Defra Guidance for Airport Operators to Produce Airport Noise Actions Plans (March 2009)
www.defra.gov.uk/environment/noise/mapping/action-plans.htm

The Future of Air Transport (DfT, December 2003) – the Aviation White Paper

www.gatwickairport.com/noise

⁶ Surrey County Council, East Sussex County Council, Crawley Borough Council, Horsham District Council, Mid Sussex District Council, Tandridge District Council, Reigate & Banstead Borough Council, Mole Valley District Council
Contact: Ros Howell, Ext. 77605
Appendix 1: ICAO’S Balanced Approach for Noise Management

ICAO’s Balanced Approach consists of identifying the noise problem at an airport and then analysing the various measures available to reduce noise using four principal elements, namely:

- reduction at source;
- land-use planning and management;
- noise abatement operational procedures; and
- aircraft operating restrictions.

The goal is to address the local noise problem in the most cost-effective manner, on the understanding that the solutions need to be tailored to the specific characteristics of the airport concerned. Similar solutions should, therefore, be applied if similar noise problems are identified at different airports.

The Balanced Approach calls for the reconciliation, as far as practicable, of two opposite parameters: on the one hand, noise mitigation measures have to meet local requirements that can vary from one airport to another and on the other hand, the selected measures have to be universal enough to satisfy the global requirements of airlines and manufacturers who cannot modify their services or products beyond certain limits.

According to the Balanced Approach, only airports with documented noise problems are entitled to take specific measures. Furthermore, these measures must be:

- the most cost-effective ones; and
- must fall within the four principal elements of the Balanced Approach.

ICAO also urges States and airports to be transparent when considering mitigation measures, by:

- assessing the noise problem at the airport concerned based on objective, measurable criteria and other relevant factors;
- evaluating the likely costs and benefits of the various measures available and, based on that evaluation, selecting measures that achieve maximum environmental benefit most cost-effectively; and
- disseminating the evaluation results for the purposes of stakeholder consultations, in particular with airlines, and for dispute resolution.

Moreover, ICAO recommends against applying operating restrictions as a first resort. The other elements of the Balanced Approach should be considered first. If operating restrictions are considered, they should:

- be based on the noise performance of the aircraft, according to Annex 16, Volume I;
- be limited to restrictions of a partial nature wherever possible, rather than the complete withdrawal of operations and introduced gradually over time, giving operators a reasonable period of advance notice;
- take the possible consequences for air services without any suitable alternative into account and consider the special circumstances of operators from developing countries.

Q1 To what extent do you think that Gatwick Airport’s approach outlined in its draft noise action plan is targeting the most important issues in relation to aircraft noise?

- Complaints data are included without analysis and actions are put forward without explanation of the problems they seek to resolve or improve. The NAP does not meet the minimum requirements in the Defra Guidance that the Action Plan should contain estimates in terms of the reduction of the number of people affected (annoyed, sleep disturbed, or other). The GAL NAP does not explain how it is targeting the most important issues in relation to aircraft noise. There is no identification of problems and situations that need to be improved nor are there anywhere estimates in terms of the reduction of the number of people affected (annoyed, sleep disturbed, or other) as outcomes or objectives of actions.

- The GAL NAP should, and does not appear to, contain any proposals for new noise abatement objectives nor how noise impacts will be managed.

- There are limits concerning the Gatwick noise environment contained in the 2008 s106 agreement with West Sussex County Council, Crawley Borough Council and GAL. These should be referred to specifically in the NAP rather than by reference to the Gatwick website for details as in the draft NAP (page 19). Specific actions to manage these should be included in the GAL NAP (e.g. regarding engine runs and the Ground Run Pen).

- The actions contained in section 9 are those previously published in the Gatwick Airport Interim Noise Action Plan. Unfortunately, in a significant number of actions, timescales have moved to the right and actions promised for 2009 are now shown for 2010. Other longer term actions have also had their completion dates deferred. This does not give the communities affected by noise confidence that GAL will adhere to the published timescales for delivery of actions. Further reassurance is sought that stringent management techniques will be brought to bear on the delivery of actions in the adopted plan in the promulgated timescales.

- Action 11, re fining aircraft in breach of DfT noise departure limits, is superfluous under the current regime since few aircraft are in contravention of present noise levels whilst flying quieter aircraft.

- The commitment in Action 32 to evaluate alternative metrics for noise measurement and management is welcomed but what liaison/consultation will there be with DfT and ICAO (to ensure standardisation of data)? Also, there will need to be a sufficient overlap time for any changeover to a new metric. Whilst the $\text{dBA}_\text{Leq}$ is arguably not an ideal metric it is established and any replacement measure should be accompanied by the $\text{dBA}_\text{Leq}$ equivalent during transition of application.

- There is no explanation for the inclusion of the 48 $\text{dBA}_\text{Leq}$ contour in Action 40 nor whether it relates to the 6.5-hour or 8-hour “night”. The Interim Noise
Action Plan referred to publication of the actual contours – does that remain the case for this action? Which annual Leq contours are the subject of action 41 and, again, will these be the actual contours?

- The presentation of complaint data in Annex 4 is misleading in that the schematic and tables on page 49 relate to all complaints yet the map of complaint locations overleaf is superimposed with the NPRs. Many – if not the majority – of complaints are in connection with arrivals and so the approach swathes should be also be shown for completeness.

- The poor definition of the map in Annex 6 and the obscuration of place names (such as Lingfield) reduces the relevance for the public. The representation of NPRs should not blank out the map beneath.

- The maps in Annex 7 require keys so that their significance may be understood. Again, definition in the maps needs to be improved.

Q2 To what extent do you think that the draft noise action plan provides a suitable framework to manage aircraft noise?

- The scope of the GAL NAP: Under the END Regulations, the scope of the Action Plan is stated as “places near the airport, which means those places affected by noise from the airport operations as shown by the results of the noise mapping.” This could be interpreted as not requiring actions for noise management outside the noise contours.

- In Section 3, under Scope, the NAP states that For the avoidance of doubt the scope of this noise action plan does not include a mitigation strategy or specific actions to deal with any new infrastructure such as a second runway or significant airspace changes. This correctly reflects the Defra guidance but unnecessarily prompts further questions. For the avoidance of doubt, the NAP should make clear that:
  - Any new infrastructure such as a second runway would be deemed a material change and in such cases the guidance requires the NAP to be revised accordingly and be subject to further public consultation.
  - Significant airspace changes would fall within the remit of the Civil Aviation Authority’s CAP 725, Airspace Change Process Guidance Document.

- Tables 1-5 inclusive in Section 7 of the NAP all purport, by virtue of their titles, to address Estimated areas, populations and households within Gatwick Airport [specified] noise contours. They do not, since there are only three columns in each table, addressing, by contour, numbers of dwellings and people. Firstly, the headings and contents of the tables in this section should be reconciled. Second, while it is recognized that the Guidance and the NAP place emphasis on numbers of people and properties affected by noise, the population and area within a given contour – particularly 57dBA Leq – is reported by DfT/ERCD in their annual (summer) noise exposure contour reports. The figures, and changes, in the population and area enclosed are of significant interest to local residents as determining factors in the evidence base of the Gatwick noise environment. It is recommended that such criteria would provide valuable PIs in the NAP.

7 Defra Guidance Para 1.09
• The Defra guidance requires that a NAP should generally, examine the day, evening and night results produced from the noise mapping and consider whether there are any features of the noise impact from departing or arriving aircraft that might be managed further. The GAL NAP does not analyse the results of the noise mapping. Although it proposes investigation of further noise management options through action 18, which identifies that the results of a study into the feasibility and cost benefit and environmental implications of operating a runway preference scheme, there is no commitment regarding implementation. This omission should be rectified.

• The Defra guidance requires that the NAP should reflect the International Civil Aviation Organization’s balanced approach for noise management as implemented into UK legislation including pro-actively engaging with the land-use planning process. The GAL NAP mentions the ICAO balanced approach briefly in Section 5 and also refers to PPG 24 by way of including the land-use planning process. There are no specific actions identified with either point although a number could be attributable to the ICAO balanced approach.

• The Defra guidance requires that the NAP should consider any other measures that might reasonably contribute to meeting the stated objectives. The GAL NAP includes a number of actions to conduct studies, alone or in partnership with others such as Sustainable Aviation. The GAL NAP does make clear how or where the outcomes of these studies might be employed nor to what end.

• The NAP should include both daytime and night-time noise infringement information.

• It is a matter of disappointment that the NAP lacks a clear objective to reduce the noise environment around Gatwick. While it is recognized that GAL is restricted to an influencing role with regard to the types of aircraft operating from the airport, they can encourage the use of quieter aircraft through penalties for non-compliance with noise criteria which, if made available to the Gatwick Trust, could give some compensation to the community surrounding the airport. For this reason, aircraft approach noise and the reduction in night quota points should be action points in the plan.

• Since the UK Government, through DfT and the CAA, regulate the airport environment and airspace it is the Government, and DfT in particular, that has the greatest leverage to control noise and achieve reductions. The GAL NAP Executive Summary (page 5) alludes to this point but GAL does not appear to have otherwise addressed the point. The GAL NAP should embrace any new initiatives planned by DfT to reduce noise at and around Gatwick, including identification of appropriate actions and accountable bodies. For example, it is expected that DfT will begin consultations next year regarding the new Night Flying Restrictions regime.
Q3 Gatwick Airport’s draft noise action plan proposes a number of performance indicators to measure progress in implementing the action plan. To what extent do you think that these performance indicators are sufficient?

- Performance indicators: the introduction of performance indicators (PIs) to measure delivery of the action plan is to be welcomed. Unfortunately, a large number of such PIs are no such thing. Some are metrics but many are items such as “publish a report” or “minutes of meetings”. For PIs to have a value they need to be seen to drive a specific action and many of those proposed do not. In many cases they are the source of the data, e.g. CDA Performance Statistics rather than the percentage compliance or trend analysis contained within the source.

- Specific suggestions for PIs are:
  - **Action 5**: FEU reports show the CDA compliance statistics, including trend analysis (i.e., history). PI(s) should be produced as targets, to be reviewed every three years with the aim of raising the degree of CDA compliance.
  - **Action 10**: The ACARE goal of 50% reduction in external noise by 2020 relative to equivalent new aircraft in 2000 should have targets set in three-year steps, identified quantitatively as another PI. NB: the action refers to “our partners in Sustainable Aviation”. Gatwick Airport is currently included in Sustainable Aviation through BAA Ltd’s membership. Does GAL intend to join Sustainable Aviation in its own right post sale? If so, such a statement of commitment would be welcome in the NAP.
  - Other meaningful PIs should be developed for actions 22, 29, 32 (in conjunction with DfT and ICAO), and 44. The PI for action 48 would need to be re-stated given the selection of appropriate PIs as suggested.

Q4 As part of its objective to limit and where practicably possible reduce the impacts of aircraft noise, Gatwick Airport’s long-term goal is to be within the top fifth of airport companies for best practice in international noise management compared to other airports of a similar size and operation. To what extent do you think this goal is sufficiently challenging?

- The degree of challenge would be determined by the meaning of the definition “other airports of similar size and operation”, especially with the caveat of “international noise management”. Since Gatwick is often described as the “busiest international single-runway airport in the world” there would appear to be no challenge at all and certainly no aspiration for improvement. This goal should be re-stated with more meaningful figures and the degree of challenge made clear.

Q5 Do you have any other comments on Gatwick Airport’s draft noise action plan?

- In Section 5 and in the Glossary, the NAP explains that decibels are a logarithmic measure. It is suggested that most people would not normally understand nor think easily in such a scale and it would be helpful to give examples. For example, **0dB is the threshold of human hearing, 50dB is around the level of normal conversation and 120-140 dB is the threshold of pain.** A 3dB
increase is equal to a doubling in sound pressure but, if the sound is steady, will only just be noticed by a human. A 10dB increase equates to a doubling of the perceived loudness.

- Similarly, the GAL NAP mentions Chapter 4 aircraft without explaining their significance. It would be helpful to aid understanding of the import of action 1 to include the following explanation (from ICAO): “Chapter 4 aircraft are at least one third quieter than those currently certified to the Chapter 3 standard.”

- Minor/typos:
  - P1 “Foreward” should be Foreword
  - P43 BAA has not been a plc since it was de-listed from the LSE following its purchase by Ferrovial
  - P44 NATS is NATS Ltd

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8 POSTNOTE July 2009 No. 338, issued by the Parliamentary Office of Science & Technology