

## ADDRESSING AIRCRAFT NOISE

### **What this paper is about**

The Department for Transport (DfT) will open the business meeting by updating the members on a number of noise related issues. This paper aims to provide background information on the main topics so that members are briefed on the background and past history including:

- ANASE – a presentation by MVA, the Department’s ANASE consultants and a DfT update on the follow-up work of ANMAC – para 1
- Civil Aviation Act 2006 - DfT to provide an overview of how the new noise powers are being implemented by airports – para 6
- EU Environmental Noise Directive - strategic noise maps and noise actions plans - update and issues arising from process – para 9

### **Points for Discussion**

In relation to the use being made by airports of the new noise provisions of the Civil Aviation Act 2006 (paras 6-8) it will be for Committees individually to respond to the Department. However, the Secretariat have asked Committees to send copies of their responses so that any common themes can be identified for further discussion. The Secretariat will table a note at the meeting

### **Points for Possible Action**

In relation to the new noise provisions of the Civil Aviation Act 2006 the meeting will wish to see if there are any common themes about which the Liaison Group might wish to make representations to the Department

## **Attitudes to Noise from Aircraft Sources in England (ANASE)**

1. This long running study was launched in May 2001. Its aim was to research how people feel about aircraft noise and especially how they perceive the relationship between noise levels and annoyance, or sleep disturbance at night, and how they would value lower noise levels relative to other environmental factors.
2. The results of the Study were finally published by the Department early in November 2007 - the consultants' report, together with peer reviews and Departmental statement papers, have been placed on the DfT website<sup>1</sup>.
3. In the press release issued when the report was published – see Annex A - the Department say two key conclusions emerge from the study. First, that people are more annoyed by all levels of aircraft noise than they were in 1985, when the last major study in this field was carried out. Secondly, there is no identifiable threshold at which noise becomes a serious problem. Even relatively low levels of noise can cause some annoyance, which rises as the noise increases.
4. The Government add they will take these findings into account in developing air transport policy. However, as the peer review makes clear, the study does not provide a reliable way of attaching a monetary figure to the impact of aircraft noise. Pending the availability of a better alternative, the Government will apply the existing valuation for road and rail noise when assessing the economic impact of noise in the cost-benefit analysis of future aviation projects. This, they say, is in line with the procedure introduced for road and rail last year.
5. It is understood the Department is giving consideration to further research and that there are ongoing discussions about this in the Department's *Aircraft Noise Monitoring Advisory Committee (ANMAC)*. This Committee's role is to advise the DfT on policy relating to aircraft noise at Heathrow, Gatwick and Stansted<sup>2</sup> although much of their work is relevant to other large airports. Membership includes representatives from NATS, BAA, the Environmental Research and Consultancy Department of the CAA, the Scheduling Committees and the technical advisers from the Consultative Committees of the three airports. It is understood the Committee last met in March and there was discussion of the follow up to ANASE and related research. The Department will no doubt provide more information on these discussions and other developments

## **Civil Aviation Act 2006**

6. As previously reported, the Civil Aviation Act 2006, which received the Royal Assent on 8th November 2006, implements important White Paper commitments to sustainable aviation and the protection of passenger interests. Among other things the Act:
  - Clarifies and strengthens the measures available to airports for dealing with aircraft noise. This includes a greater ability to introduce and enforce noise amelioration measures beyond airport boundaries and an ability to take economic measures to reflect aircraft straying from routes designed to minimise noise.
  - Provides explicit powers for airports to set charges which reflect local emissions from aircraft. The Secretary of State also has powers to direct airports to levy such charges.
7. In the DfT's December 2006 *Progress Report* on the White Paper *The Future of Air Transport* it was recommended (on page 32) that airport consultative committees should monitor how well the new powers in the 2006 Act are being implemented by airports. It was thus on 8<sup>th</sup> April 2008 that the Department wrote to all Consultative Committees in

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<sup>1</sup> <http://www.dft.gov.uk/pgr/aviation/environmentalissues/Anase>

<sup>2</sup> Heathrow, Gatwick and Stansted are designated for the purposes of s.78 of the Civil Aviation Act 1982 and noise amelioration is thus the responsibility of the Secretary of State.

England and Wales to seek their views on how airports have used these powers to date – see Annex B. Committees in Scotland received a similar letter from the Scottish Executive.

8. It will be for Committees individually to respond to the Department who no doubt will want to tell the Annual Meeting about the responses they have received to date. (The Secretariat have likewise asked Committees to send them copies of their responses so that any common themes can be identified for further discussion.)

### **European Directive 2002/49/EC - Assessment and Management of Environmental Noise**

9. This Directive, often known as the Environmental Noise Directive (END)<sup>3</sup>, came into effect in June 2002.
10. The aim of the END is to define a common approach across the European Union with the intention of avoiding, preventing or reducing on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. This involves:
  - informing the public about environmental noise and its effects;
  - the preparation of strategic noise maps for large urban areas (known as 'agglomerations'), major roads, major railways and major airports as defined in the END; and
  - preparing action plans based on the results of the noise mapping exercise.
11. The noise action plans (NAPS) will aim to manage and reduce environmental noise where necessary, and preserve environmental noise quality where it is good.
12. In the UK the noise mapping of airports, and the preparation of the NAPS, is the responsibility of the airport operator although in the case of airports designated under s.78 of the Civil Aviation Act 1982 (Heathrow, Gatwick and Stansted) the noise mapping part of the work (but not the actions plans) is the responsibility of the Secretary of State.
13. Airport technical guidance<sup>4</sup> has been produced for operators of civil airports affected by the Regulations although this does not apply to the designated airports (Heathrow, Gatwick and Stansted).
14. In December 2007 Defra published the noise maps for 18 airports in England - these can be seen on Defra's website<sup>5</sup>. The noise maps for 'agglomerations' were published in May 2008<sup>6</sup>
15. The next stage is the preparation by airport operators of *Noise Action Plans (NAPS)*. Defra will shortly be consulting on draft guidance on how these Plans should be prepared. There has been considerable slippage and timescales for production of the plans will need to be revised. However it remains Defra's intention that NAPS will be submitted to the Commission by the end of 2008. It is expected that airports will be able to draw upon existing material such as master plans in the preparation of the NAPS.
16. The EU Directive requires the NAPs to be prepared in consultation with local communities. The Department's expectation is that this will be through the local airport consultative committee but this will be a matter for airports to arrange. The DfT will only seek to involve itself if representations are made as to the adequacy of the local consultation.

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<sup>3</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0049:EN:HTML>

<sup>4</sup> <http://www.defra.gov.uk/environment/noise/pdf/airport-techguidance06.pdf>

<sup>5</sup> <http://www.defra.gov.uk/environment/noise/mapping/transportation/aviation/index.htm>

<sup>6</sup> <http://www.defra.gov.uk/environment/noise/mapping/index.htm>

17. The END is being separately implemented in Scotland and Wales – for more information visit the Scottish Government website<sup>7</sup> or that of the Welsh Assembly Government<sup>8</sup>

**Stuart Innes**  
**May 2008**

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<sup>7</sup> <http://www.scotland.gov.uk/Topics/Environment/Pollution/Noise-Nuisance/17553/september>

<sup>8</sup> [Click here](#) to see the equivalent page on the Welsh Assembly Government website

**ANNEX A**  
**ANASE – REPORT OF STUDY - DfT NEWS RELEASE**

Friday 2 November 2007

**New research into aircraft noise published**

An independent study of public attitudes to aircraft noise was published today by the Department for Transport.

The Attitudes to Noise from Aviation Sources in England (ANASE) study was conducted by external consultants MVA and underwent an extensive peer review process by an independent panel of leading academics and industry experts.

Two key conclusions emerge from the study. First, that people are more annoyed by all levels of aircraft noise than they were in 1985, when the last major study in this field was carried out.

Secondly, there is no identifiable threshold at which noise becomes a serious problem. Even relatively low levels of noise can cause some annoyance, which rises as the noise increases.

The Government will take these findings into account in developing air transport policy. However, as the peer review makes clear, the study could not provide a reliable way of attaching a monetary figure to the impact of aircraft noise.

Pending the availability of a better alternative, we will apply the existing valuation for road and rail noise when assessing the economic impact of noise in the cost-benefit analysis of future aviation projects. This is in line with the procedure introduced for road and rail last year.

Aviation Minister, Jim Fitzpatrick said:

"The Government accepts that noise from aircraft is a growing concern and will take into account those people affected by aircraft noise when considering the costs and benefits of future projects.

"The ANASE study also makes clear that it is impossible to identify any particular level at which noise becomes a serious problem.

"One interpretation of this is that Government could abandon the existing restriction on noise levels at Heathrow Airport of 57 decibels and above. But we believe it is right that we retain this as a safeguard for those who are most affected by aircraft noise. We have already said that any expansion of Heathrow must not increase the area where people experience the highest noise levels and this will be fully considered in the forthcoming Heathrow consultation."

While the peer reviewers recognised the "high standard" of the work underpinning the two key findings they did not feel that the valuations produced by the study were conclusive and specifically counselled against "...using the detailed results from ANASE in the development of Government policy."

Mr Fitzpatrick said:

"This report gives us a better understanding of the complex issues surrounding aircraft noise, but as the peer reviewers make clear, it does not give us the robust figures on which it would be safe to change policy.

"Our approach to a sustainable aviation industry remains the one we set out in the Air Transport White Paper in 2003 and the Progress Report of 2006."

#### Notes to Editors

1 The Department for Transport commissioned the ANASE research in 2001 from consultants MVA.

2 The work was peer-reviewed by Peter Havelock, Stephen Turner, Professor Graham Loomes, Professor Mark Wardman, Professor Ian Bateman and Dr Brett Day.

3 Their findings, and the study itself, are published on the DfT website at <http://www.dft.gov.uk/pgr/aviation/environmentalissues/Anase> along with a commentary from the Department's Chief Economist David Thompson.

4 A previous study, Aircraft Noise Index Study (ANIS) was published in 1985.

5 The Department for Transport will launch a consultation into possible future development at Heathrow Airport later this year.

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## ANNEX B LETTER FROM DfT - CIVIL AVIATION ACT 2006

*To all designated Consultative Committees*

8 April 2008

Dear Chairman/Secretary

### **CIVIL AVIATION ACT 2006 - IMPLEMENTATION OF NEW POWERS**

The Department for Transport is currently conducting a review as to the extent to which airports have identified a need to implement any of the new powers they were given on noise and emission controls provided by the Civil Aviation Act 2006 which came into force in March 2007. The Act, among other things, strengthened and clarified powers to control aircraft noise and emissions, in line with commitments in the 2003 White Paper *The Future of Air Transport*. In particular airport operators have been given statutory powers to introduce noise control schemes and fine aircraft that breach noise controls. The Act also provided powers for all licensed airports to introduce charges that reflect the pollution generated by each aircraft type. (A brief summary of the main provisions is attached as an annex to this letter).

In *The Future of Air Transport Progress Report* published in December 2006, the Department recommended that airport consultative committees should monitor how well airports implement the new powers in the Civil Aviation Act 2006. The Progress Report also noted that the Government was continuing to work hard to deliver its aim – set out in the 2003 White Paper - that the number of people in the UK significantly affected by aircraft noise should be limited and, where possible, reduced. The White Paper acknowledged that this was a challenging objective.

Given that the Act has been in force for a year, we are proposing to review implementation of the powers so far. We are therefore contacting airport consultative committees - in respect of those airports designated under section 35<sup>9</sup> of the Civil Aviation Act 1982 - to seek their views on how airports have used these powers to date. We appreciate that circumstances

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<sup>9</sup> Airports/Aerodromes to which section 35 of the Act applies have a responsibility to provide adequate facilities for consultation.

vary from airport to airport both in size and type of usage. Accordingly noise control and mitigation measures introduced by one airport may not be appropriate for another. Local circumstances are the key factor.

During the passage of the Bill the Government emphasised that where existing arrangements were working satisfactorily the expectation would be that such arrangements would carry on but that the enabling provisions were designed to help those airports which may be looking to refresh or enhance arrangements in the future. Although the Government recognised that noise control arrangements were frequently incorporated into planning conditions/agreements or as part of an airport's conditions of use it had given a commitment to clarify and enhance airports powers in statute. The Department had been aware of one major airport for example which was awaiting statutory powers before imposing discretionary financial penalties for aircraft deviating from noise preferential routes. We would therefore welcome your views in respect of your airport both in respect of noise and charging. Given the cyclical nature of consultative committee meetings, it would be helpful to have responses by the end of June.

I trust that this is all reasonably clear but should you have any questions please do not hesitate to contact me on the above number or one of my colleagues Roy Strapp (020 7944 4856) or Jerry Harrison (020 7944 3953). We will do our best to answer any questions that you may have. I am copying this letter to the airport operator.

Yours sincerely,

Frank Evans

## **ANNEX**

### **Civil Aviation Act 2006: Environmental Provisions**

#### ***Section 1: Aerodrome charges***

Section 1 replaces section 38 of the CA Act 1982 with a new section on aerodrome charges. Section 38 applies to licensed aerodromes. These are aerodromes licensed by the Civil Aviation Authority under an Air Navigation Order for the landing and take-off of aircraft which can be used for the public transport of passengers, or for giving instruction in flying to a person, or for conducting a flying test.

The new section 38(1) empowers an authority owning or managing a licensed aerodrome to fix its charges by reference to:

- the noise caused by an aircraft or the inconvenience resulting from that noise;
- the amount or nature of emissions produced by an aircraft or the atmospheric pollution resulting from those emissions;
- the effect of an aircraft on noise or atmospheric pollution in the vicinity of the aerodrome; or
- any failure of an aircraft operator to comply with noise or emission limits.

The new section 38(2) sets out the purposes for which such charges can be made, namely:

- to encourage the use of quieter aircraft and reduce inconvenience from aircraft noise;
- to encourage the use of aircraft which produce lower emissions;
- to control noise and atmospheric pollution in the vicinity of aerodromes; and
- to promote compliance with noise and emission limits.

The new section 38(4) empowers the Secretary of State to direct specified aerodrome authorities to fix their charges using the powers in subsections (1) and (2) of the new section 38. In determining whether to make use of this power, and if so how, the Secretary of State

will be required by new section 38(5) to have regard (amongst other things) to the interests of people who live in the area of the aerodrome.

### ***Section 2: Regulation by Secretary of State of noise and vibration from aircraft***

This section amends section 78 of the CA Act 1982. Section 78 enables the Secretary of State to take steps to limit or mitigate the effect of noise and vibration connected with the taking off or landing of aircraft at designated aerodromes (currently Heathrow, Gatwick and Stansted).

*Subsection (2)* inserts a new subsection (6A) after section 78(6) of the CA Act 1982, to augment the powers of the Secretary of State to give to the manager of a designated aerodrome such directions as the Secretary of State considers appropriate for the purpose of avoiding, limiting or mitigating the effect of noise and vibration connected with aircraft landing or taking off. The manager is placed under a duty to comply with any such directions. New section 78(6A) will allow directions under subsection (6) to be given for the purposes of avoiding, limiting or mitigating the effect of noise and vibration either generally or in any particular area, for example arising from use of a particular runway.

Section 78(8) empowers the Secretary of State to require the manager of a designated airport to install, operate and maintain noise measuring equipment and to provide noise measurement reports as specified by him. The manager is placed under a duty to comply with any such requirements.

Where an airport manager fails to perform any of the requirements set down in an order under subsection (8), section 78(9)(a) empowers the Secretary of State to take such steps as he considers appropriate to remedy that failure, including the provision, operation and maintenance of equipment. The Secretary of State may recover any expenses he has incurred in so doing: section 78(9)(b). Where the airport manager has failed to provide reports to the Secretary of State, he is guilty of an offence: section 78(9)(i) and (ii).

*Subsection (3)* amends section 78(9) to provide that the maximum fine laid down in subsection (9)(i) is increased to level 5 on the standard scale (currently £5,000) and the daily fine in subsection (9)(ii) is not to exceed 10% of level 5.

### ***Section 3: Penalty schemes***

This section inserts into the CA Act new sections 78A and 78B.

Section 78 of the CA Act does not explicitly provide for aerodromes to impose financial penalties on aircraft operators for breaches of noise requirements set under section 78.

The effect of new section 78A is to confer on the manager of a designated aerodrome a power to levy financial penalties on an aircraft operator in respect of any breach by that aircraft operator of noise abatement requirements imposed by the Secretary of State under section 78.

New section 78A(8) requires the aerodrome manager to make payments, equal to the amount of penalties received, for the benefit of persons who live in the area in which the aerodrome is situated.

New section 78B(1) to (4) enables the Secretary of State to direct an aerodrome manager to make, amend or revoke a penalty scheme and sets out the duty to consult before doing so.

New section 78B(5) makes it an offence to fail to comply with a direction given under section 78B(1) with a provision for a daily fine if failure continues after any conviction.

### ***Section 4: Power of aerodrome authorities to make noise control schemes***

This section inserts into the CA Act 1982 new sections 38A, 38B and 38C.

Although the CA Act 1982 contains a number of provisions relating to environmental issues, those provisions do not include any explicit statutory provision for aerodrome operators to implement noise control schemes.

New section 38A(1) to (5) provides operators of non-designated aerodromes with powers to regulate noise and vibration from aircraft similar to those conferred on the Secretary of State by section 78 of the CA Act 1982 (as amended by *section 2* of this Act).

New section 38A(8) excludes any aerodrome already designated under section 78 of the CA Act 1982 because in that situation the noise control regime would be set by the Secretary of State rather than the aerodrome operator.

New section 38A(10) provides that the use of the powers contained in the new sections 38A, 38B and 38C does not prejudice the use of any other power at the aerodrome operator's disposal to control aircraft noise.

New section 38B makes supplementary provision for noise control schemes.

New section 38B(2) defines the maximum area within which the aerodrome operator's powers to control aircraft noise apply. There is also provision for the Secretary of State to define (by order) this maximum area, in respect of individual aerodromes.

New section 38B(5) provides for consultation by the Secretary of State before making an order under subsection (2).

New section 38C provides aerodrome operators with the power to impose penalties where the noise control scheme it is permitted to establish is not complied with.

New section 38C(2) and (3) provide for a financial penalty to be imposed on an aircraft operator if he breaches the requirements of a noise control scheme.

New section 38C(4) and (5) ensures that the scheme will provide for aircraft operators to be able to make representations to the aerodrome operator as regards the imposition of penalties and for the aerodrome operator to take such representations into account.

New section 38C(6) requires the aerodrome authority to make payments, equal to the amount of penalties received, for the benefit of persons who live in the area in which the aerodrome is situated.

### ***Section 12: Scotland***

Section 12 amends the Scotland Act 1998 (Transfer of Functions to Scottish Ministers) Order 1999 to reflect the amendments to the CA Act 1982 being made by *sections 1, 3 and 4*. The Order provides that certain functions conferred on a Minister of the Crown by the CA Act 1982 are, in or as regards Scotland, exercisable by the Scottish Ministers instead.