



Department
for Environment
Food & Rural Affairs

Airport Noise Action Plans

Guidance for Airport Operators on how to revise Noise Action Plans under the Environmental Noise (England) Regulations 2006 (as amended)

September 2022

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Overview

Purpose

- 1.1 This guidance has been produced for airport operators by the Department for Environment, Food and Rural Affairs (Defra), working in conjunction with the Department for Transport (DfT), to assist them in producing Action Plans required under the Environmental Noise (England) Regulations 2006¹ as amended ("the Regulations"). It includes:
- information on the legislative and policy background behind noise action planning;
 - a list of the information that needs to be included in each Action Plan;
 - details of how to update and submit a completed Action Plan;
 - an annex listing the airports producing Action Plans following completion of round 3 mapping (A);
 - a short glossary of acoustic and technical terms (B); and
 - guidance on meeting the regulatory requirements for Action Plans (C).

Introduction

- 1.2 The Regulations require certain civil airports in England to produce noise maps and Action Plans.

The Regulations operate in 5 yearly cycles known as Rounds, with the current round (Round 4) requiring the operators of these airports to produce noise maps in 2022, using data from the 2021 calendar year. These maps are intended to provide a snapshot of the potential noise impact arising from each airport.

- 1.3 The action planning process uses the mapping results and is designed to manage noise issues and effects arising from aircraft departing from and arriving at those airports. Airport Action Plans need to be published by January 2024.

- 1.4 Due to Covid travel restrictions, however, mapping for 2021 is likely to show a highly anomalous situation for most airports, and action plans drawn up solely on the basis of 2021 data may not result in effective actions within the current and future context

¹ <http://www.legislation.gov.uk/uksi/2006/2238/contents/made>

of Round 4. It is in the interests of airports and communities that Noise Action Plans draw on information which better reflects the situation for the Round 4 Action Plan period as appropriate. As a result, airports may supplement the 2021 data with information from a more representative period when drawing up action plans. This is likely to vary from airport to airport, but, if relevant, may include (but is not restricted to) contours from the most recent previous round; annual contours produced to meet other requirements; summer contours or projections. Decisions as to what data to use should be discussed with the relevant consultative committee or other community groups as appropriate.

1.5 The anomalous nature of 2021 data may also result in difficulties in making comparisons and measuring progress between Rounds. It is recommended that where this is the case these difficulties should be made explicit in the narrative of action plans.

1.6 The process set out in the Regulations supports the Government's aim, set out in the Aviation Policy Framework (APF)², to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise. Action Plans should identify whether there are any particular or additional measures that might be taken to meet this aim at each airport, including noise reduction if necessary.

The importance of managing noise impacts

1.7 There are many different effects of noise, and individuals experience each of them to different degrees. These can include general detection/distraction; speech interference; disruption of work/mental activity; and sleep disturbance. Any of these can lead to annoyance and possibly more overt reactions, including complaints.

1.8 In addition, there are physiological effects that can occur including stress and other health effects. These include an increased risk of cardiovascular and metabolic health outcomes such as heart attacks, hypertension – which is a risk factor for stroke and dementia – as well as the risk associated with sleep disturbance. Annoyance from aircraft noise is believed to act as a risk factor for some of these health outcomes. Research has shown that it is possible to predict the likelihood of an individual or community experiencing significant impacts such as these as a result of different levels of aircraft noise exposure³.

1.9 Noise, however, is an inevitable consequence of a mature and vibrant society. People enjoy and benefit from air transport and this benefit manifests itself in terms of business, leisure, the movement of goods and employment. When managing the environmental noise that arises from aircraft, a balance needs to be struck.

² <https://www.gov.uk/government/publications/aviation-policy-framework>

³ An overview of the adverse effects of aviation noise was included in the Government's 2017 consultation on *Reforming policy on the design and use of UK airspace*:
<https://www.gov.uk/government/consultations/reforming-policy-on-the-design-and-use-of-uk-airspace>

The legal context

- 1.10 Action Plans are a legal requirement under the Environmental Noise (England) Regulations 2006⁴ as amended (“the Regulations”).

The Regulations require strategic noise maps to be made for the main sources of environmental noise, i.e. major roads, major railways, major airports and agglomerations⁵ every five years.

- 1.11 Action Plans must be drawn up by the airport operators and be based on the results of the noise mapping. The Regulations also require the Action Plans to be reviewed at least every five years and revised if necessary and whenever a major development⁶ occurs affecting the existing noise situation.

Timetable

- 1.12 The Regulations require that Action Plans are submitted to Defra by **TBC** for formal adoption by Defra’s Secretary of State. Defra will contact each airport to agree a timetable for adoption and publication of their Action Plan.

What needs to be included in an Action Plan?

- 2.1 An Action Plan must be drawn up for places near the airport which are affected by noise from airport operations as shown by the results of the noise mapping⁷ and meet a number of requirements set out in the Regulations:
- 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, including an evaluation of the estimated number of people exposed to noise;

⁵ <https://environment.data.gov.uk/dataset/4739c0c3-e800-4cb1-89cd-e71115b191e9>

⁶ The term ‘major development’ is not defined in the Regulations but it would include, for example, the use of a new runway.

⁷ Effectively those places within the mapped contours, i.e. with noise exposures of 55 dB(A), Lden or more; and 50 dB(A), Lnight or more.

- identification of problems and situations that need to be improved;
- a record of the public consultations that have taken place;
- any noise reduction measures already in force and any projects in preparation;
- long term strategy;
- actions which the airport operator intends to take in the next five years, including measures to preserve quiet areas;
- financial information (if available): budgets, cost-effectiveness assessment, cost-benefit assessment;
- provisions envisaged for evaluating the implementation and the results of the Action Plan; and
- estimates in terms of the reduction of the number of people affected (annoyed, sleep-disturbed, or other).

2.2 Detailed guidance on how each of the above requirements may be met is provided in Annex C.

How to update and submit an Action Plan

Revising an existing Action Plan

- 3.1 All of the airports listed in Annex A already have an Action Plan in place from previous rounds of noise mapping. It is envisaged that these airports should follow the process set out below to update their Action Plan.
- 3.2 The local context of each airport is different. Airport operators are encouraged to work with the airport's consultative committee, community groups and other stakeholders as appropriate to ensure a range of metrics are used in developing effective actions, and that actions are measured in a meaningful and appropriate way. Consideration should be given to ensuring that actions focus on outcomes and their benefits within the local context, rather than outputs or processes. Further information on public participation can be found in paragraph 3.5.
- 3.3 The current plan should be reviewed and revised to include, as necessary:
 - updated details about the airport and its operation;
 - the results of the noise mapping completed in 2021 supplemented with any data considered more relevant to action planning given the irregular nature of air traffic movements in 2021 due to pandemic travel restrictions;
 - the progress made against the actions described in the current Action Plan;
 - updated information about relevant legislation and standards;
 - updated relevant national and local policies;
 - information about on-going actions;
 - information about any new actions; and
 - estimates in terms of the reduction of the number of people affected as a result of new or revised actions (annoyed, sleep-disturbed, or other).
- 3.4 When revising their plans, airport operators should ensure that all the requirements set out in the Regulations (listed in paragraph 2.1 above and described further in Annex C) are met.
- 3.5 The Regulations require that, in preparing and revising action plans airports must ensure that the public is given early and effective opportunities to participate in the preparation and review of the action plans; and that the results of participation should be taken into account. The public should be informed of the decisions taken.

- 3.6 Where action plans already exist, it is expected that once the plan has been revised for Round 4, it will be presented, and opportunities for participation given, to the Airport's Consultative Committee as a minimum, and to any other appropriate bodies or more widely depending on the extent and nature of the revisions. The Airport Operator should summarise the comments received in the revised plan together with their response to the issues raised.

Submitting an Action Plan for formal adoption

- 3.7 Once the plan has been updated and finalised, the Regulations require that it be sent to the Secretary of State for Defra for formal adoption. Plans should be sent to Defra via the noise@defra.gov.uk email address and must include prominently displayed wording identifying it as a draft subject to formal adoption and approval.
- 3.8 The Secretary of State for Defra, in liaison with the Department for Transport, will form a view regarding whether or not the submitted revised plan meets the requirements of the Regulations and, therefore, whether or not the plan is appropriate for adoption.
- If the Secretary of State for Defra considers that the requirements set out in the Regulations are met, they will notify the airport accordingly that the Action Plan has been adopted. The Action Plan should then be published by the Airport Operator as a public document in an electronic format within 28 days.
 - If the requirements set out in the Regulations are not met, the airport operator will be required to make the necessary changes to the plan. Following revision, the revised plan will need to be resubmitted to the Secretary of State for Defra by an agreed date for further consideration.

Ongoing requirement to review Noise Action Plans

- 3.9 The Regulations contain a continuing obligation on airport operators to review (and revise, if necessary) the Noise Action Plan every 5 years or sooner where a major development occurs.
- 3.10 Airport operators may wish to agree to carry out an informal review of the progress being made on the implementation of the Action Plan as part of their continuing engagement with the local airport consultative committee or other stakeholders. The process and timing for any informal review should be jointly agreed between the Airport Operator and the committee, or other stakeholders, as appropriate. Such reviews could form part of any regular environmental reporting that is already undertaken.

- 3.11 It should be noted that the Regulations give the Secretary of State the power to take action should they believe that a requirement of these Regulations is not being met due to any act or omission by the Airport Operator.

Annex A: Airports producing Round 4 Action Plans

Airport	ICAO Location Code	Current Noise Action Plan
Birmingham International*	EGBB	Yes
Bournemouth	EGHH	Yes
Bristol*	EGGD	Yes
East Midlands*	EGNX	Yes
Leeds Bradford	EGNM	Yes
Liverpool John Lennon	EGGP	Yes
London City*	EGLC	Yes
London Gatwick*	EGKK	Yes
London Heathrow*	EGLL	Yes
London Luton*	EGGW	Yes
London Stansted*	EGSS	Yes
Manchester International*	EGCC	Yes
Newcastle International*	EGNT	Yes
Southampton	EGHI	Yes
Southend	EGMC	Yes

*Major airport as defined in the Regulations (over 50,000 qualifying movements per year)

Annex B: Glossary of acoustic and technical terms

Agglomeration	An area having a population in excess of 100,000 persons and a population density equal to or greater than 500 people per km ² and which is considered to be urbanised
dB(A)	dB(A) is a measure of sound pressure level ("A" weighted) in decibels as specified in British Standard BS EN 61672-2:2013+A1:2017.
L _{Aeq,T}	The A-weighted equivalent continuous sound pressure level which is a notional continuous level that, at a given position and over the defined time period, T, contains the same sound energy as the actual fluctuating sound that occurred at the given position over the same time period, T
L _{day}	The L _{Aeq} over the period 0700 – 1900, local time (for strategic noise mapping this is an annual average)
L _{evening}	The L _{Aeq} over the period 1900 – 2300, local time (for strategic noise mapping this is an annual average)
L _{night}	The L _{Aeq} over the period 2300 – 0700, local time (for strategic noise mapping this is an annual average)
L _{Aeq,16h}	The L _{Aeq} over the period 0700 – 2300, local time (for strategic noise mapping this is an annual average)
L _{den}	The L _{Aeq} over the period 0000 – 2400, but with the evening values (1900 – 2300) weighted by the addition of 5 dB(A), and the night values (2300 – 0700) weighted by the addition of 10dB(A).

Annex C: General requirements for Action Plans and how they may be met

The Action Plan must meet a number of requirements set out in the Regulations. These are reproduced in the table below, together with accompanying guidance suggesting how each requirement may be met.

Requirement	How requirement may be met
A description of the airport and any other noise sources taken into account.	This information should have already been gathered as part of the data that had to be submitted to Defra under the noise mapping process. No other noise sources (such as 'ground noise' from airport activities or helicopter activity) will have been taken into account in the noise mapping. However, that does not preclude the Action Plan covering other airport related noise sources.
The authority responsible.	This is the name of the airport operator, who is defined in the Regulations as the competent authority for preparing the airport Action Plan.
The legal context.	<p>This requires a reference to the "Environmental Noise (England) Regulations 2006" which place the responsibility of preparing the Action Plan onto the airport operator.</p> <p>Action Plans must also include a description and assessment of the existing national and local framework of control directly or indirectly relating to the management of noise from the airport e.g. current government policies, noise preferential routes, Airport Master Plans, any local planning agreements and restrictions, any local voluntary agreements etc.</p>
Any limit values in place.	Reference should be made to any planning conditions or other agreements that set a constraint on the airport's operations that could affect the level of noise generated. These might include any contour area limits, noise limits on departure, or aircraft movement limits etc.
A summary of the results of the noise mapping, including an evaluation of the estimated number of people exposed to noise.	<p>The aim of this requirement is to provide a description of the current noise impact of the airport on its surroundings.</p> <p>The results should include, for the various noise indicators for which mapping was carried out, the number of people</p>

	<p>and dwellings that lie within the various contour bands.</p> <p>This information will be provided to airport operators in the form of Airport Noise Action Planning Data Packs.</p> <p>Airport operators may also include information about other noise sensitive premises such as hospitals, schools, other premises or specific types of land use depending on local circumstances and priorities.</p>
Identification of problems and situations that need to be improved.	<p>Airport operators will primarily have two pieces of information available to them for action planning:</p> <ol style="list-style-type: none"> The current noise impact of their operations as shown by the results of the noise mapping; and The current noise control measures they have in place. <p>The Government's overall objective on aviation noise is to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise. The Action Plan process requires operators to consider whether there is scope for implementing additional noise management measures in pursuance of the Government's policy objective.</p> <p>When considering any new noise management measure within the Action Plan, airport operators should consider in a proportionate manner the following:</p> <ul style="list-style-type: none"> The benefit that would be achieved from the measure; The impact of the measure on other environmental factors, such as air quality and climate change; The costs of implementing the measure, both direct and indirect; and The implication of failing to implement a particular measure, both direct and indirect. <p>Any new noise management measure in the Action Plan must reflect the wider context of local and national sustainable development plans and policies, including any Master Plans. Further guidance is provided in the "long term strategy" section below.</p>

Commented [R1]: Confirm order of events

<p>A record of the public consultations that have taken place.</p>	<p>The Regulations specifies that, in preparing and revising Action Plans, airport operators must ensure that:</p> <ul style="list-style-type: none"> • the public is consulted about proposals for Action Plans; • the public is given early and effective opportunities to participate in the preparation and review of the Action Plans; • the results of the public participation are taken into account; • the public is informed of the decisions taken; and • reasonable time frames are provided allowing sufficient time for each stage of public participation. • It is important that the Action Plan process does not contribute to an “overload” in community engagement, and that the consultation is sufficiently long for interested parties to formulate their responses, taking account of other consultations which may be taking place over the same time period and placing a burden on consultees’ resources. It is also important that the issues raised by consultees are demonstrably given thorough consideration by airport operators. We shall be looking for evidence of how you have ensured this is the case in your submitted Plans.
<p>Any noise reduction measures already in force and any projects in preparation.</p>	<p>Airport operators will have existing measures in place to mitigate noise impacts. This requirement can be met by describing the current noise control measures, including those set out in any existing noise Action Plan and updating them as appropriate.</p>
<p>Long term strategy.</p>	<p>Airport operators should describe the likely development of their airport in the future. It is expected that reference would be made here to any Master Plan developed by the airport and the provisions of the Government’s Aviation Policy Framework (APF). Note that the Government has</p>

	<p>recently consulted on proposed changes to the Aviation Policy Framework⁸ and airport operators should be aware that updated provisions may be published during the course of the action planning process.</p> <p>As part of the action planning process, airport operators should:</p> <ul style="list-style-type: none"> • 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 $L_{Aeq,16h}$⁹; • Consider what further measures should be taken to assist the management of aircraft noise affecting noise sensitive buildings, such as schools and hospitals; • 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; • Be satisfied 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 Consultative Committees 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; • Consider how best to ensure transparency and engagement around operational changes which affect noise; and • Reflect the International Civil Aviation Organisation's balanced approach for noise management. <p>Any proposed new actions must take account as necessary of the requirements of Statutory Instrument</p>
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⁸ <https://www.gov.uk/government/consultations/reforming-policy-on-the-design-and-use-of-uk-airspace>

⁹ As the data are taken from the strategic noise maps, this is the $L_{Aeq,16h}$ annual average value

	2003 No.1742 – The Aerodromes (Noise Restrictions) (Rules and Procedures) Regulations 2003.
Actions which the airport operator intends to take in the next five years, including measures to preserve quiet areas.	<p>This may be linked to the section above.</p> <p>At the time of publication of this guidance (July 2022, no quiet areas had been designated within agglomerations affected by any of the airports that are in scope of the Regulations Round 4 mapping and action planning requirements. Defra will inform any airport concerned if this situation changes before finalisation of their Action Plan.</p>
Financial information (if available –): budgets, cost-effectiveness assessment, cost-benefit assessment.	Any new noise control measure that is considered for inclusion as part of the Action Plan must take into account the cost of implementation and the likely benefit expected to be accrued.
Provisions envisaged for evaluating the implementation and the results of the Action Plan.	The Action Plan must show how the outcome expected from any measure that is to be implemented will be monitored. Airport operators should consider providing an update, locally, on a periodic basis that takes any changes in local circumstances into account.
Estimates in terms of the reduction of the number of people affected (annoyed, sleep disturbed, or other).	<p>The Action Plan should contain an indication of the expected outcome(s) of any measures that will be put in place as a result of having this Action Plan. At the most basic level this could include an estimate of the number of people affected with and without the measures set out in the Action Plan.</p> <p>Measures should be challenging; objective; quantified where reasonably practicable; subject to specific timescales, and have taken account of the views of local communities.</p>