# **Noise Action Plan** 2023-2028



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## 1. Foreword & Executive Summary by the **Operations Director of Southampton Airport**

This document contains our Noise Action Plan which sets out the actions we are taking to manage and, as far as reasonably practicable, reduce the adverse effects of aviation noise. The preparation of a Noise Action Plan is a requirement of the Environmental Noise (England) 2006 Regulations (as amended). We have produced this Noise Action Plan as an update to our previous 2018-2023 Noise Action Plan. The Noise Action Plan has been updated following consultation with key stakeholders and will operate from 2023-2028.

Southampton Airport supports the growing commercial, leisure and cultural success of the region and provides air services that are valued for both business and leisure purposes. The airport remains one of the region's largest employment sites supporting thousands of jobs both directly and indirectly.

As well as the benefits provided by the airport, we recognise that aircraft noise can be an important issue for local communities. Although the noise generated by an airport cannot be eliminated, we are conscious that it is important to reach a balance that allows growth in a sustainable manner whilst also enhancing the economic and social benefits to the region, and ultimately remaining a good neighbour to local residents. We have reviewed our previous action plan and introduced updates and enhancements to our current actions to build upon the progress we have made over the past five years working proactively and in collaboration with a variety of stakeholders and local communities.

In reviewing our Noise Action Plan, we have modified our long-term objective for the management of aircraft noise, bringing the focus of being a responsible neighbour and minimising noise impacts to the forefront.

The airport will be a responsible neighbour and seek to minimise the impact of aircraft noise on the local community within the framework established by national and local government.

We have developed a package of measures over a number of years which are designed to manage and mitigate the adverse effects of aviation noise. All of our noise mitigation measures are contained in this document, and some of our key proposed updates and enhancements include:

- NO FLIGHTS 2300-0600 a continued commitment to no scheduled flights or helicopters during the night-time period from 2300-0600 (Monday-Saturday) and 2300-0730 (Sunday);
- noise contour area limit;
- of a new Noise Insulation Policy;
- working with Eastleigh Borough Council (EBC) to create a new Noise Forum to improve communication between communities, other relevant stakeholders and the Airport management; and
- working with EBC to create and fund an Airport Community Health and Wellbeing Board to support initiatives with a focus on noise related health and wellbeing issues.

• implementation of a new annual • development and implementation

"In reviewing our Noise Action Plan. we have modified our long-term objective for the management of aircraft noise. bringing the focus of being a responsible neighbour and minimising noise impacts to the forefront."

We believe this Noise Action Plan demonstrates our commitment and importance that the airport places on the issue of noise and our aim to minimise the impact of noise from our airport as far as reasonably practicable.

**Steve Szalay Operations Director** Southampton Airport Ltd.

## 2. Introduction & Summary

This section provides an introduction and summary of the Noise Action Plan covering all the important aspects referred to in Annex V of the Environmental Noise Directive (EC Directive 2002/49).

## 2.1 Purpose of the Noise Action Plan

The purpose of the Noise Action Plan is to set out our approach to management of and, as far as reasonably practicable, reduction of the total adverse effects of aviation noise. This document is an update to the 2018-2023 Noise Action Plan and will operate from 2023-2028. The Noise Action Plan has been updated based on engagement with key stakeholders.

At Southampton Airport we recognise that aircraft noise is an important issue for local communities. We support the Government's objective in Airspace Policy to limit and, where possible, reduce total adverse effects on health and quality of life from aviation noise<sup>1</sup>. This requires balancing the positive social and economic benefits provided by Southampton Airport with any adverse effects on local communities. This Noise Action Plan builds upon decades of progress in developing mitigation measures in consultation with our neighbours and stakeholders and importantly includes updates and enhancements to our current noise mitigation measures.

This Noise Action Plan complies with the Environmental Noise (England) 2006 Regulations (as amended). The airport operator (Southampton Airport International Ltd) is deemed the competent authority for preparing the Noise Action Plan. Guidance from UK Government<sup>2</sup> states that Noise Action Plans should be designed to manage noise issues and effects arising from aircraft departing from and arriving at airports. Although other noise sources (such as 'ground noise' from airport activities) are not required to be included, the guidance suggests that this should not preclude their inclusion. Our Noise Action Plan therefore also covers aircraft taxiing to and from stands and engine testing carried out within the airport perimeter.

2.2 Scope of the Noise Action Plan

The scope of the Noise Action Plan does not include noise from airport construction activities, noise from road or rail traffic, or noise from the Solent Freeport and Navigator Quarter. The legal and Government policy framework for the Noise Action Plan is set out in Section 3. The requirements of the Noise Action Plan include the provision of financial information which is presented in Appendix B.

#### 2.3 Airport Description

Southampton Airport is located in the borough of Eastleigh, just north of the city of Southampton in Hampshire. Over one hundred years ago, in 1910, the first aircraft took off from an area of flat land which has now been developed into Southampton Airport. Routes from Southampton Airport enable passengers to travel to destinations throughout mainland Europe, the Channel Islands and the UK.

Southampton Airport is bordered directly to the south by the M27 motorway which runs east to west and also connects to the M3. To the east of the airport lies the Itchen Valley Country Park. To the north lies a largely industrial area in Eastleigh, which continues to be used by the rail industry as sidings and maintenance depots. There is also warehousing and other heavy industry located in this area. Directly to the west of the airport lies the dual track rail line which serves both passenger and freight trains, including regular services to London Waterloo. Southampton Airport Parkway station is the main rail station to the airport. The A335 Wide Lane / Southampton Road also runs adjacent to the airport, next to which there are university playing fields. There are also some residential dwellings to the northwest of the airport which have been recently expanded. The airport is geographically situated in a natural gentle depression or "bowl" due to the surrounding topography.

1 The UK Government has clarified (in Air Navigation Guidance 2017) that this means the total adverse effects on people as a result of aviation noise should be limited and, where possible, reduced, rather than the absolute number of people in any particular noise contour 2 Airport Noise Action Plans: Guidance for Airport Operators on how to revise Noise Action Plans under the Environmental Noise (England) Regulations 2006 (as amended), Department for Environment Food and Rural Affairs, 2022 "At Southampton Airport we recognise that aircraft noise is an important issue for local communities. We support the Government's objective in Airspace Policy to limit and, where possible, reduce total adverse effects on health and quality of life from aviation noise."



#### 2.4 Results of the strategic noise mapping

Strategic noise maps for 2021 and the estimated number of people exposed to noise are presented in Section 5 and Appendix A.

When comparing the results of the 2021 noise mapping to the 2016 noise mapping undertaken for the previous Noise Action Plan, it is important to note the reduced number of aircraft movements in 2021, primarily due to the COVID-19 pandemic. There were approximately 12,000 aircraft movements in 2021 compared to approximately 43,000 in 2016. This results in a smaller population existing within the noise contours, for example there were 5,600 people in the 55dBLden contour in 2016 compared to 100 in the same contour in 2021. However, it should be noted that this

reduction in population exposed has not resulted in any relaxation of our noise management proposals.

## 2.5 Noise reduction measures A summary of noise management

measures already in force at Southampton Airport is presented in Section 6 and new and updated actions in this Noise Action Plan that will be undertaken in the next five years as well as those that form part of the long-term noise reduction strategy are presented in Section 7. This includes a summary of restrictions and limits such as the noise contour area limit and restrictions on night flights. Each action in the Noise Action Plan includes a description of the performance indicators that will be used to evaluate the implementation of the action plan.

#### **2.6 Future Development**

In April 2021, Eastleigh Borough Council approved the airport's application for a 164-metre extension to the northern end of our runway. The runway extension, which remains fully within our current boundaries, is absolutely critical to our viability as a regional airport. The airport's runway length is no longer suitable for today's modern airline fleets, so there is an urgent and pressing need to attract new airlines to the airport. By extending the runway by 164 metres, the approved application will make the airport economically viable for a wider range of carriers – guaranteeing our viability, safeguarding regional connectivity, and protecting thousands of jobs across the South linked to our operations.



As part of the development of our runway extension proposals, we engaged closely with Eastleigh Borough Council and the public on the topic of noise. Many of our proposed mitigations and actions within this Noise Action Plan were heavily informed by the engagement and as a result new noise controls were introduced, giving Eastleigh Borough Council more control over the airport than it had before.

For more information on the runway extension planning application please visit

#### southamptonairport.com/ planning/runway

#### 2.7 Airspace Change Proposal

Like many airports in the UK, we are currently undergoing an Airspace Change Proposal (ACP).

The airspace in southern England is some of the busiest in the world. The Department for Transport (DfT) has notified aviation stakeholders that, with traffic levels forecast to continue growing, delays are expected to increase sharply if the airspace is not upgraded to introduce additional capacity. In response, the Government tasked the Civil Aviation Authority (CAA) to develop the UK Airspace Modernisation Strategy (AMS), which was published in December 2018. and describes the changes that the industry should make to meet the growing demand for aviation in a safe, efficient and environmentally sustainable way. The overall programme of changes required to implement the AMS is considered one of the most significant airspace and air traffic management (ATM) developments ever undertaken. Some of the most important changes described in the AMS concern the widespread adoption of satellite-based navigation technology. This enhanced form of navigation (commonly known as Performance Based Navigation or

PBN) enables arrival and departure routes to be re-designed with greater precision and flexibility. The UK has agreed to comply with European legal directives requiring the deployment of PBN routes in busy areas of controlled airspace such as the portions above southern England, including around Southampton Airport. The deployment of PBN routes at Southampton Airport, in line with the AMS and European legal directives, is the main driver for our ACP and the reason for our participation in the FASI-South (Future Airspace Strategy Implementation – South) programme.

The ACP process is managed by the CAA and is completely separate to the Noise Action Plan process. Noise impacts however are a key element of the decision-making process as to whether an airspace change should go ahead. In addition, noise is a key feature in several of our airspace 'design principles' that were developed in collaboration with stakeholders and are currently being used in the development of our airspace design options as follows:

- DP7 minimise, and where possible reduce, the total adverse effects on health and quality of life from aircraft noise
- DP8 ensure a predictable, fair and equitable share of traffic across all routes, through multiple route options and respite routes
- DP9 avoid overflying densely populated residential areas, national parks, AONBs, noise sensitive buildings and other areas prized for tranguillity
- DP11 ensure that aircraft operating at Southampton Airport climb and descend continuously to/ from atleast 7000ft For more information on the ACP. please southamptonairport. com/about-us/airspace-changeprogramme

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#### 2.8 Consultation

The first draft of this Noise Action Plan was submitted to the Airport's Consultative Committee (representing local councils, residents and businesses) and Technical Working Group (noise experts for the local councils) for consultation. These groups include representation from:

- Allbrook & North Boyatt Parish Council
- Aurigny Air Services Ltd
- Colden Common Parish Council
- Eastleigh Borough Council
- Hampshire County Council
- NATS Holdings
- Test Valley Borough Council
- Townhill Park Residents' Association
- Twyford Parish Council
- Southampton City Council
- South Western Railway
- West End Parish Council
- Winchester City Council

The feedback received was used to update the draft Noise Action Plan. Details of the comments received and our responses, including where we made changes to the Noise Action Plan as a result, are presented in Appendix D.

Following this update, the draft Noise Action Plan was subject to open consultation. The consultation (see page 9) was launched online on 8th August 2022 and was open until 30th September (a period of 8 weeks). The consultation was advertised on our website and social media. A total of 60 responses containing around 380 individual comments were received.

Details of the comments received and our responses, including where we made changes to the Noise Action Plan as a result, are presented in Appendix E (available as a separate document due to its size).

## 3. Legal & policy framework

The mitigation and management of aircraft noise is heavily informed by national and international initiatives and regulation imposed by:

- The International Civil Aviation Organization (ICAO);
- The UK Government;
- Local authorities: and
- Southampton International Airport itself.

#### 3.1 The ICAO and the 'Balanced Approach'

ICAO is a specialised agency of the United Nations, created to promote the safe and orderly development of international civil aviation throughout the world.

It sets standards and regulations necessary for aviation safety, security, efficiency and regularity, as well as for aviation environmental protection. After a Standard is adopted it is put into effect by each ICAO member state in its own territories.

ICAO recognises that aircraft noise is the most significant cause of adverse community reaction related to the operation and expansion of airports and it requires all of its member states to adhere to an approach to managing aircraft noise known as the 'Balanced Approach'.

The Balanced Approach (see Figure 1) aims to address noise management in an environmentally responsive and economically responsible way,

and encompasses four principal elements.

- 1. Reduction of noise at source; 2. Land-use planning and
- management;
- 3. Noise abatement operational procedures; and
- 4. Operating restrictions on aircraft.

Our Noise Action Plan embraces the Balanced Approach and the plan outlined in Section 7 adopts this format. As we recognise the importance of engagement with our local communities, we have added an additional pillar to the Balanced Approach titled 'working with our local communities'. This is in alignment with the Sustainable Aviation Noise Roadmap<sup>3</sup>.



3 The SA noise road-map: a blueprint for managing noise from aviation sources to 2050, Sustainable Aviation, 2013, www.sustainableaviation.co.uk/quieter/

## The four principal elements



2. Land-use planning and management

ICAO is also responsible for aircraft certification and it has set progressively tighter certification standards for noise emissions from civil aircraft. Aircraft operating in member states must conform to these standards, which are known as 'Chapters'.

The Chapters set maximum acceptable noise levels for different aircraft under specific test conditions. Chapter 2 aircraft have been banned within Europe since 1 April 2002, unless they are granted specific exemptions. The vast majority of civil aircraft now operating therefore fall within Chapters 3, 4 and 14, i.e. they have a smaller noise footprint than the previous Chapter 2 aircraft. All new aircraft manufactured from 2006 onwards must meet the requirements of Chapter 4. In 2014 the ICAO Council adopted the new Chapter 14 noise standard for jet and propeller-driven aircraft. This will be the mainstay of ICAO aircraft noise regulations for the coming years. It is applicable to new aircraft types submitted for certification on or after

31 December 2017, and on or after 31 December 2020 for aircraft less than 55 tonnes in weight.

**3.2 European Union** Whilst the UK has left the European Union, many of its directives have been mapped across to UK legislation. For example, the Environmental Noise Regulations (England) 2006 (as amended) has mapped across the requirements of the Environmental Noise Directive (EC Directive 2002/49) for major airports to produce strategic noise maps and Noise Action Plans every five years.

#### 3.3 UK Government 3.3.1 Current policy framework

The UK Government plays an important role in setting policy for aviation noise management. The Civil Aviation Acts of 1982 and 2006 granted the UK Government the power to introduce mitigation and noise control measures. The 2013 Aviation Policy Framework set out the challenges of noise control at airports and noted the Government's

4 Consultation Response on UK Airspace Policy: A framework for balanced decisions on the design and use of airspace. October 2017. 5 Air Navigation Guidance 2017, Guidance to the CAA on its environmental objectives when carrying out its air navigation functions, and to the CAA and wider industry on airspace and noise management, October 2017.

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3. Noise abatement operational procedures



recognition of the Balanced Approach principle of aircraft noise management. More recently, the UK Government has published, and consulted on, its Airspace Policy framework<sup>4</sup>. The Government has also published the Air Navigation Guidance<sup>5</sup>, which provides guidance to the CAA on its environmental objectives when carrying out its air navigation functions, and to the CAA and wider industry on airspace and noise management. The Government's consultation response on the Airspace Policy provides an update to some of the policies on aviation noise outlined in the Aviation Policy Framework and should be viewed as current Government policy. Whilst the Government has also published recommendations for its long-term plan for sustainable aviation growth in the Aviation 2050 green paper, the Government has yet to fully respond to the consultation, so the recommendations contained within the paper are not yet current Government policy.



Southampton Airport

This long-term vision is supported by the following aims: "Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- avoid significant adverse impacts on health and quality of life
- mitigate and minimise adverse impacts on health and quality of life
- where possible, contribute to the improvement of health and quality of life."

#### 3.3.2 Aviation noise compensation policy

The Government's current policy on compensation and insulation is contained within the Aviation Policy Framework and is modified by the Government's Airspace Policy and consultation response. The Government expects airport operators to offer financial assistance towards insulation for residential properties and noise-sensitive buildings such as schools and hospitals in the 63dBLAeg, 16h or above contour.

Our proposed Noise Insulation Scheme (see section 6) goes above and beyond these requirements.

#### 3.3.3 The Independent Commission on Civil Aviation Noise

The Independent Commission on Civil Aviation Noise (ICCAN) was active from November 2018 to September 2021. During this time, ICCAN's role was to create, compile and disseminate best practice to the aviation industry on the management of civil aviation noise and to advise Government in this area. ICCAN published several reports and guidance documents relating to aviation noise metrics and measurements,

engagement with local communities, links between aviation noise and health and airport noise insulation schemes

Southampton airport, through its partnership in Sustainable Aviation, engaged heavily with ICCAN on several of its initiatives including guidance on noise metrics, the ICCAN noise attitudes survey, future of aviation noise management and handling of noise complaints.

We have carefully considered ICCAN's publications in the development of our noise insulation scheme, the way we engage with our local communities and other noise mitigation measures. We will continue to engage with the CAA who are taking on the majority of ICCAN's former functions from April 2022 and will take into account any best practice and guidance documentation that they publish.

#### 3.3.4 Thresholds for assessing noise impacts

Long term exposure to environmental noise such as road, rail and aircraft noise can lead to adverse impacts on health and guality of life. This is recognised and addressed in Government noise policy which aims to avoid, mitigate and minimise the adverse impacts of noise on health, in the context of sustainable development. Southampton Airport shares these objectives and have adopted them as part of our Noise Action Plan.

Thresholds for noise assessment are defined in current Government policy in terms of the Lowest Observable Adverse Effect Level (LOAEL).

"Southampton airport, through its partnership in Sustainable Aviation, engaged heavily with ICCAN on several of its initiatives including guidance on noise metrics, the ICCAN noise attitudes survey, future of aviation noise management and handling of noise complaints."

In March 2023 the Department for Transport published their new overarching aviation noise policy statement, reproduced below:

"The government's overall policy on aviation noise is to balance the economic and consumer benefits of aviation against their social and health implications in line with the International Civil Aviation Organisation's Balanced Approach to Aircraft Noise Management. This

should take into account the local and national context of both passenger and freight operations, and recognise the additional health impacts of night flights.

The impact of aviation noise must be mitigated as much as is practicable and realistic to do so, limiting, and where possible reducing, the total adverse impacts on health and quality of life from aviation noise."

In addition, the Noise Policy Statement for England (NPSE) sets out the long-term vision of Government noise policy to "Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development."

swissport

6 CAP1506: Survey of Noise Attitudes 2014: Aircraft Noise and Annoyance, Second Edition 7 Guide to WebTAG Noise Appraisal for non-experts, Department for Transport, 2017 8 Methodological guidance for estimating the burden of disease from environmental noise, World Health Organization Regional Office For Europe, 2012

The LOAEL is the level above which adverse effects on health and guality of life can be detected. Current Government policy proposes a LOAEL of 51dBLAeq, 16h based on the most recent large-scale research study in the UK on aircraft noise<sup>6</sup>.

A night-time LOAEL of 45dBLAeg,8h is also proposed in the Government policy, based on the Government's current monetisation methodology (known as WebTAG)<sup>7</sup> and the World Health Organisation's methodological guidance for estimating the burden of disease from environmental noise8. Southampton Airport supports such proposals to assess noise down to these thresholds and we have reflected this in our noise mapping.

#### **3.4 Local Authorities**

Planning obligations under Section 106 of the Town and Country Planning Act 1990, commonly known as Section 106 agreements, are operational conditions to which Southampton Airport is bound. They are focused on site specific mitigations of the impact of development and operations. The planning obligation is a formal document issued and monitored by Eastleigh Borough Council. A new Section 106 agreement with updated controls has been drafted as part of the runway extension planning application. See Section 6.1.

## 4. Aircraft noise & its effects

4.1 Introduction to aircraft noise Broadly speaking, aircraft noise can be categorised into two different sources: 'air noise' and 'ground

#### 4.1.1 Aircraft 'air noise'

Air noise from aircraft is created by aircraft arriving or departing from airports. It is generally caused by air passing over the aircraft's airframe (fuselage, wings and underframe) and noise from the engines. When air passes over the airframe it causes friction and turbulence which results in noise. Engine noise is created by parts and by the sound of air being expelled from the engines at high speeds. The degree of noise generated varies according to aircraft type and size and the way in which the aircraft is flown.

Aircraft manufactured today are generally much quieter than they have been in the past and ICAO set increasingly stringent certification standards for aircraft noise emissions. As a result, the aircraft fleet operating to and from Southampton Airport is becoming progressively quieter over time. For example, the new A320neo which has started operating at Southampton Airport has been shown to be 2 to 6 dB quieter<sup>9</sup> than the original A320.

Whilst we have no direct control over the aircraft fleet that airlines who fly to and from Southampton

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Airport choose to operate, we can influence the adoption of guieter aircraft technology through wider industry groups such as Sustainable Aviation, an alliance of UK airlines, airports, aerospace manufacturers and air navigation service providers. In this NAP we have also committed to undertake a review and benchmarking of differential landing charges and other methods of incentivisation to determine if it would be viable to introduce additional measures at Southampton

#### 4.1.2 Aircraft 'ground noise'

by aircraft whilst on the ground and

- aircraft travelling (taxiing) between the runway and stands (where they park), including queuing;
- aircraft at their stands with their auxiliary power units (APU) running; and
- engine testing (ground running).

Ground noise impacts tend to be limited to those areas closest to the airfield where they can be more prominent relative to air noise.

Engines need to be tested for safety reasons, and engine running forms part of the maintenance programme for aircraft. We understand that this noise can cause disturbance to

residents closest to the airfield and therefore we adopt strict measures to restrict the location, duration and time of day that engine ground running can occur. We do not allow engine ground running during the night, unless required due to exceptional circumstances.

We have introduced new actions in this Noise Action Plan to minimise noise from taxiing aircraft and the noise from aircraft APUs.

#### 4.2 Measuring aircraft noise

Measuring sound and describing its complex process. Noise is defined as unwanted sound and some individuals find noise more disruptive than others. Any attempt to define and measure sound, particularly as a single number, therefore has limitations, and cannot fully capture the spectrum of personal experiences of noise. However, seeking to quantify sound is essential to managing the noise challenge.

There is not a single metric that meets all needs for assessing, quantifying or communicating noise effects and there is a need to use a number of different metrics. For example, some metrics are better correlated with health effects, whilst other metrics can be more useful for communicating and understanding impacts, or for use in performance management monitoring. The key metrics used in the Noise Action

## Aircraft noise can be categorised in two parts...

## ground noise

Plan are summarised below, but we use a great deal more metrics in quantifying noise at Southampton Airport, for example in relation to our Airspace Change Proposal (ACP) (see Section 2.5).

#### 4.2.1 The LAeg.T (equivalent continuous sound level) metric

There are a range of metrics which are used to describe sound and inform Government policy relating to aircraft noise. The most common international measure of noise is the LAeg, meaning 'equivalent continuous sound level'. This is a measurement of the total sound energy over a period of time. It is easiest to think of this as an average, but important to note that all the sound energy in the time period is captured by this metric.

In the UK, daytime aircraft noise is typically measured by calculating the equivalent continuous sound level in decibels (dB) over 16 hours (0700 to 2300) to give a single daily figure (LAeg, 16hr). Night-time aircraft noise is most typically measured over an eight-hour night period (2300 to 0700). The average noise exposure is commonly calculated for the 92-day summer period from 16 June to 15 September. The summer day period is used because people are more likely to have their windows open or be outdoors, and because aviation activity is generally at its busiest during the summer periods.

Separate assessment for day and night recognises that daytime and night-time noise can lead to quite different effects (principally daytime annoyance and night-time sleep disturbance) and thus it is better to define and measure daytime and night-time noise separately.

9 Measured in Effective Perceived Noise (EPNdB). Source: CAP1869 Quota Count validation study at Heathrow Airport, Civil Aviation Authority 2020

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#### 4.2.2 The Lden (day evening night equivalent sound level) metric

The day evening night equivalent sound level (Lden) noise metric is a 24 hour noise metric that applies a 5 dBA penalty to noise during the evening (1900 to 2300) and a 10 dBA penalty to noise during the night (2300 to 0700), reflecting relatively higher sensitivity to noise during these periods. Lden is frequently used to quantify aircraft noise in Europe as it was adopted as a common environmental noise indicator for the European Union in the Environmental Noise Directive (2002/49/EC) for road. rail and industrial sources, as well as aircraft noise. It is also a requirement in England to use this metric for strategic noise maps under the Environmental Noise (England) 2006 regulations (as amended). It is typically calculated over a full calendar year.

please refer to Section 4.2.

In accordance with the Environmental

Noise (England) 2006 regulations (as

amended), for the NAP these metrics

are calculated over the full 2021

When comparing the results of the

2021 noise mapping to the 2016

the previous Noise Action Plan, it

is important to note the reduced

number of aircraft movements in

2021, primarily due to the COVID-19

pandemic. There were approximately

12,000 aircraft movements in 2021

compared to approximately 43,000

population existing within the noise

contour in 2016 compared to 100 in

the same contour in 2021. However

it should be noted that this reduction

resulted in any relaxation of our noise

contours, for example there were

5,600 people in the 55dBLden

in population exposed has not

management proposals.

in 2016. This results in a smaller

noise mapping undertaken for

calendar year, rather than the

92-day summer period.

#### Table 2 Southampton Airport 2021 Lden contours estimated areas, population and households (see Figure A2 in Appendix A)

Annual L <sub>den</sub> (dBA)	Area (km <sup>2</sup> )	Population	Households
≥ 55	1.1	100	50
≥ 60	0.5	0	0
≥ 65	0.2	0	0
≥ 70	0.1	0	0
≥ 75	0	0	0

Table 3 Southampton Airport 2021 Lday contours estimated areas, population and households (see Figure A3 in Appendix A)

Annual L <sub>day</sub> (dBA)	Area (km <sup>2</sup> )	Population	Households	
≥ 54	1.4	500	200	
≥ 57	0.8	<100	<50	
≥ 60	0.5	0	0	
≥ 63	0.3	0	0	
≥ 66	0.2	0	0	
≥ 69	0.1	0	0	

Table 4 Southampton Airport 2021 Levening contours estimated areas, population and households (see Figure A4 in Appendix A)

Annual L <sub>evening</sub> (dBA)	Area (km <sup>2</sup> )	Population	Households
≥ 54	0.5	0	0
≥ 57	0.3	0	0
≥ 60	0.2	0	0
≥ 63	0.1	0	0
≥ 66	0	0	0
≥ 69	0	0	0

Table 5 Southampton Airport 2021 Lnight contours estimated areas, population and households (see Figure A5 in Appendix A)

Annual L <sub>night</sub> (dBA)	Area (km <sup>2</sup> )	Population	Households
≥ 45	1.1	<100	<50
≥ 48	0.6	0	0
≥ 51	0.4	0	0
≥ 54	0.3	0	0
≥ 57	0.2	0	0
≥ 60	0.1	0	0
≥ 63	0	0	0
≥ 66	0	0	0

## 5. Results of the strategic noise mapping

Tables 1 to 5 show the results of the 2021 noise mapping for Southampton Airport. Maps showing the noise contours can also be found in Appendix A.

The contours have been modelled by the Civil Aviation Authority's (CAA) Environmental Research and Consultancy Department (ERCD) using ANCON version 2.4<sup>10</sup> and Southampton Airport fixed-wing movement data for the 2021 annual period. Helicopters accounted for approximately 1% of all movements at Southampton Airport in 2021 and are not included in the modelled contours.

The effects of the surrounding topography have been modelled using Meridian 2 Gridded Heights terrain data from Ordnance Survey. The models have applied the actual modal split of 64/36 that occurred in 2021. This means that 64% of the time aircraft were departing towards the south and 36% of the time aircraft were departing towards the north.

Population and dwelling exposure statistics for each of the noise contours have been estimated by the Department for Environment, Food and Rural Affairs (Defra) using the 2015 (OS) AddressBase Premium and Topography layers and data attained from the mid-year population estimates from the Office of National Statistics (ONS), June 2015. Population and dwelling counts have been rounded as follows:

- The number of dwellings has been rounded to the nearest 50, except when the number of dwellings is greater than zero but less than 50, in which case the total has been shown as "<50".
- The associated population has been rounded to the nearest 100, except when the associated population is greater than zero but less than 100, in which case the total has been shown as "<100".

For further information on the noise metrics and how they are derived

Table 1 Southampton Airport 2021 annual day LAeg, 16h contours estimated areas, population and households (see Figure A1 in Appendix A)

Annual L <mark>Aeq,16h (dBA)</mark>	Area (km <sup>2</sup> )	Population	Households
≥ 51	2.3	1,900	850
≥ 54	1.2	200	100
≥ 57	0.7	0	0
≥ 60	0.4	0	0
≥ 63	0.3	0	0
≥ 66	0.2	0	0
≥ 69	0.1	0	0

10 For information on the ANCON noise model, please refer to www.caa.co.uk/consumers/environment/noise/features-of-the-ancon-noise-modelling-process/

## 6. Noise management at **Southampton Airport**

The airport currently has in place a number of mitigation measures to manage and reduce the adverse effects of airport related noise. Alongside this, Southampton Airport has built upon the progress made across the last five years to introduce some significant updates and additions to its current measures in line with the latest developments in Government policy and research relating to noise and extensive engagement with our local communities.

Some of our noise mitigation measures are legally binding controls that are enforced through our Section 106 planning agreement and some of the measures are voluntary measures that go beyond those legal requirements.

#### 6.1 Section 106 Agreement legally binding controls

Southampton Airport adheres to a strict agreement, which since its inception in 1990 has been designed to minimise the impact of the airport operation on the local community. This agreement forms part of our planning agreement with Eastleigh Borough Council and is legally binding. As part of our runway extension planning proposal and extensive engagement with our local communities and the council, our Section 106 legal agreement was updated in 2021 and new noise controls were introduced. giving Eastleigh Borough Council more noise control over the airport than it had before

6.1.1 Night-time closure

closed to scheduled aircraft for the majority of the night, and we will not permit scheduled flights or helicopters during the night-time period from 2300-0600 (Mon-Sat) and 2300-0730 (Sun). There is also a strict limit of no more than 15 scheduled flights or helicopters during the early morning hour of 0600-0700 from Monday to Saturday. Flights between the hours of 0600 and 0700 account for a small proportion of our overall Air Traffic Movements (ATMs). Despite this, these operations are an important part of our business and the economic welfare of the region. Flights between these hours are vital for UK connectivity (i.e. connecting the Channel Island to other UK cities) and to maintain an interconnected global transportation system. Exceptions to this are only allowed for civil aircraft emergencies, emergency response aircraft or aircraft delayed by adverse weather or extraordinary Air Traffic Control procedures. It is not possible for us to put a limit on these operations as they are outside of the airport's control, however these exceptions are very rare, for example there were only around 30 such exceptions allowed in the whole of 2019, all of which were between 2300 and 2330.

Southampton Airport is effectively

#### 6.1.2 Noise contour cap

As well as a cap on the number of annual passengers (starting at 2.4 million and increasing to a maximum of 3 million from 2029) we now must operate within a strict noise contour area cap of 16.1 km<sup>2</sup> for the average summer day 51dBLAeq,16h contour (see section 4.2.1). For the first time this cap is directly related to aircraft noise rather than passenger numbers and will limit the noise that can be

generated by the airport and the number of people that will be exposed to aircraft noise above the Lowest Observable Adverse Effect Level (see Section 3.3.4).

The noise contour cap is legally binding. Noise models and traffic forecasts will be developed for future years to ensure that the noise contour area cap is not breached. These noise models and forecasts will be updated annually and published within an annual noise monitor report (see Section 6.7).

Further details of the noise contour cap can be found in the Section 106 agreement, which can be accessed at the following webpage: southamptonairport.com/ planning/section106

#### 6.1.3 Strict limits on helicopter movements

As well as the restriction on helicopter movements at night as described above, we have a strict limit of 7,500 daytime helicopter movements in any year. We do not permit helicopter training flights other than as required for aircraft familiarisation.

#### 6.1.4 Ban on noisier types of aircraft

Noisier aircraft which do not meet strict industry standards, referred to as ICAO 'Chapter 3', are not permitted to visit Southampton Airport. We will undertake a review and benchmarking of differential landing charges and other methods of incentivisation to determine if it would be viable to introduce additional measures to encourage the industry adoption of quieter aircraft.

6.1.5 Health Strategy and airport

community health mitigation fund We recognise that our commitment to managing the impacts of noise should extend beyond the airport and into our local communities. We have therefore committed to work with Eastleigh Borough Council to prepare and submit a Health Strategy which will set out:

- measures to improve public outdoor spaces in areas affected by aircraft noise;
- measures to promote the use of public outdoor spaces for outdoor recreation and physical exercise which can lead to improved mental health;
- monitoring of health impacts with a focus on noise related health impacts and sufferers of asthma and chronic obstructive pulmonary disease; and
- how this monitoring can be used to improve the measures within the Health Strategy.

In addition, we will work with Eastleigh Borough Council to establish, fund and maintain an Airport Community Health and Wellbeing Board whose role will be to use the funds to support initiatives to reduce health inequalities and improve the health and wellbeing of those residents surrounding the airport in line with priorities identified in the Health Strategy.

#### 6.1.6 Noise insulation policy

We are developing our noise insulation policy which will offer sound insulation to residential properties, care homes and schools that are contained within the 60dBLAeq.16h average summer day contour. This policy will go above and beyond the current UK Government policy which expects airport operators to offer financial assistance towards residential properties and noise sensitive buildings within the 63dBLAeg, 16h contour.

We will arrange for assessment to be

made of properties applying for the scheme which will identify what, if any, insulation would be effective in achieving appropriate noise reduction. Examples of improvements that could be made, and which this noise insulation policy will cover the cost of, are set out below:

- Replacement/enhanced windows
- - Loft insulation Replacement/enhanced external doors

Details of the policy can be found in the Section 106 agreement, which can be accessed at the following webpage: southamptonairport.com/ planning/section106

#### 6.1.7 Noise forum

We understand the importance of transparent communication and engagement with our local communities and so we will work with Eastleigh Borough Council to establish a Noise Forum which will bring together a broad, fair and representative membership of community noise groups, elected councillors and airport operators and airlines. The Noise Forum will provide a channel for communities to feed noise related issues to the Airport management and ensure these are fully understood and so that these groups are kept informed of operational changes which may affect noise in the community.

The objectives of the Noise Forum will be:

- to improve communication between communities, other relevant stakeholders and the Airport management;
- to promote greater understanding of noise, airport operations and airspace:
- to consider practical ways these impacts can be minimised or avoided:
  - to report on and report annually

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• Acoustic air vents or simple wall mounted ventilation systems

to better understand the impact of noise on residential communities;

to the Airport Consultative Committee on the review it has undertaken of the following:

- Airport Noise Action Plan

- Noise Insulation Policy - Annual Noise Monitoring Report; and
- to feedback on engagement material relating to the Airspace Change Proposal to ensure the documentation is accessible.

The Terms of Reference of the Noise Forum shall be reviewed annually to ensure that they remain in accordance with any changes to legislation, Government policy or best practice.

Further details on the Noise Forum can be found in the Section 106 agreement, which can be accessed at the following webpage: southamptonairport.com/ planning/section106

6.1.8 Noise abatement procedures Noise abatement procedures for departing aircraft and for aircraft arriving 'visually' (in good visibility) were introduced in 2007 following a wide scale consultation with local stakeholders, residents and councils. These procedures aim to divert aircraft away from the most densely populated areas where it is possible to do so. The airport ensures, as far as is reasonably practical, that aircraft adhere to the abatement procedures. There are however occasions when the noise abatement procedures cannot be followed by aircraft due to the avoidance of poor weather or other air traffic in the area.

For a description of Southampton Airport's Noise Abatement Procedures, please refer to Appendix C. Please note that this Noise Action Plan does not change any of the Noise Abatement Procedures. Any changes to flightpaths will be delivered through the Airspace Change Proposal, see Section 2.5.

#### 6.1.9 Engine ground running

There are strict limits on the times of day, the location and the number of occasions that aircraft engine ground running can take place. No engine ground running is permitted during night hours or bank holidays and the total duration of engine ground running cannot last longer than three hours per week or one hour per day.

#### 6.2 Quieter aircraft technology

As part of the AGS group (Aberdeen, Glasgow and Southampton Airports), Southampton Airport are represented within Sustainable Aviation, an alliance of UK airlines, airports, aerospace manufacturers and air navigation service providers. AGS group members regularly attend and contribute to the meetings of Sustainable Aviation and work with our partners to promote research and development of even quieter aircraft.

The Sustainable Aviation Roadmap sustainableaviation.co.uk/quieter outlines how the UK aviation industry will limit and, where possible, reduce the impact of aircraft noise. Over the past 50 years, aircraft have reduced their noise output by 75% and this progress continues. Today's aircraft entering service have on average a noise footprint that is 30-50% that of the aircraft they are replacing thanks to new engine and airframe design and technology.

Whilst we have no direct control over the aircraft fleet that airlines who fly to and from Southampton Airport choose to operate, we can influence the adoption of quieter aircraft technology through wider industry groups such as Sustainable Aviation.

#### 6.3 Noise abatement operational procedures

We use aircraft track keeping systems to proactively monitor aircraft routing in accordance with our noise abatement procedures and we investigate off track occurrences. Going forward, we will fine airlines for off track occurrences. Funds raised through these fines will be distributed

#### to the Community Health and Wellbeing Fund.

We are also separately developing, in consultation with local communities and stakeholders, our Airspace Change Proposal which will allow aircraft to use Performance Based Navigation (PBN), allowing aircraft to fly more accurately along departure routes and therefore provide an opportunity to minimise the number of people affected by aircraft noise in line with our noise objective and the airspace design principles developed in consultation with stakeholders and local communities (see Section 2.5).

#### 6.4 Land-use planning and management

Southampton Airport engages directly with the local planning authorities to ensure awareness of aircraft operations is considered in the development of noise-sensitive land use. We contribute to local development plans and monitor planning applications within the vicinity of Southampton Airport. We also actively contribute to improving aircraft noise information in local planning policy and seek to influence Government policy where appropriate.

#### 6.5 Noise complaint and enquiries procedure

We operate a dedicated email inbox sounoisecomplaints@ southamptonairport.com through which we log all complaints. We aim to respond to 100% of complaints and enquiries within five working days with at least initial findings of an investigation where appropriate, if not a complete response. We will publish our performance against this target at the Airport Consultative Committee along with any trends in noise events in the previous reporting period.

Noise complaint investigation is the process by which the airport will check that the existing agreed rules are being adhered to. Changing flight paths is a highly regulated process which we manage through our Airspace Change Process which is explained in more

detail in

Section 2.5. Being made aware of concerns and trends from our communities is very important to us. The complaints process enables us to investigate particular noise events to ensure that aircraft have adhered to the approved flight procedures. We are currently undertaking a review of our approach to noise complaints. We have employed a specialist contractor to review and improve our approach, looking at aspects such as the investigation and understanding of aircraft activity for any specific flight reported to us alongside simplifying reporting by introducing online forms and a visualisation app showing aircraft tracks. We are also reviewing the data that we report externally.

#### 6.6 Noise and sustainability

The Government confirmed, via the 2017 Air Navigation Guidance. that up to 4000ft the Government's environmental priority is to minimise the noise impact of aircraft and the number of people on the ground affected by it. Nonetheless, Southampton Airport is dedicated to reducing carbon impacts as well as noise impacts, noting that there is a careful balance to be struck.

In 2021, Southampton Airport was ranked as the best performing UK airport (and second best in Europe) according to the Global Real Estate Sustainability Benchmark, receiving a five-star rating for its sustainability performance, and being recognised as "airport transport sector leads".

Southampton Airport is committed to sustainable development and environmental management, and this is recognised by independent auditors through our ISO 14001 - Environmental management certification.

For more information please see the AGS Airports sustainability strategy



#### 6.7 Monitoring and reporting progress

To evaluate the effectiveness and delivery of the Noise Action Plan. we have established performance indicators, timescales and targets as outlined within Section 7. In addition, we are committed to monitoring our progress each year through a comprehensive Annual Noise Monitoring Report which will contain:

- noise contours for the previous year based on actual aircraft movements and predicted noise contours for the next three years;
- information on the number of air transport movements for the previous year and projected air transport movements for the next 15 years;
- information to demonstrate that the noise contour cap will not be exceeded;

- progress against actions in the • Noise Action Plan; and
- information on the implementation of the Noise Insulation Scheme (such as number of properties offered insulation, number of acceptances and number and

The Annual Noise Monitoring Report will be provided to the Airport Consultative Committee, the Noise Forum and Eastleigh Borough Council. We will provide funding to the council each year to ensure that they have the appropriate resource to review the Annual Noise Monitoring Report and the airports compliance with the Section 106 agreement.



details of completed installations).

Noise Action Plan 2023-2028

# 7. Noise Action Plan

Action		Performance Indicators	Timescale	Estimated No. of People Affected
w	orking with our local communities			
1	We will prepare and submit a Health Strategy to the council to improve public outdoor spaces, promote their use for outdoor recreation and exercise and monitor health impacts with a focus on noise related health issues.	Adoption of Health Strategy	Health strategy to be adopted by 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
2	We will establish, fund and maintain an Airport Community Health and Wellbeing Board whose role will be to use the funds to support initiatives to reduce health inequalities and improve the health and wellbeing of those residents surrounding the airport in line with priorities identified in the Health Strategy.	Creation of Health and Wellbeing Board	Health and Wellbeing Board to be established by end of 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
3	<ul> <li>We will establish and maintain a Noise Forum whose objective is to:</li> <li>improve communication between communities, other relevant stakeholders and the Airport management;</li> <li>promote greater understanding of noise and its impact on residential communities; and</li> <li>consider practical ways to minimise or avoid these impacts.</li> </ul>	Creation of Noise Forum	Noise Forum to be established by 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
4	<ul> <li>We will publish an Annual Noise Monitoring Report which will contain:</li> <li>noise contours for the previous year based on actual aircraft movements and predicted noise contours for the next three years;</li> <li>information on the number of air transport movements for the previous year and projected air transport movements for the next 15 years;</li> <li>information to demonstrate that the noise contour cap will not be exceeded;</li> </ul>	Publish Noise Monitoring Report	Annual publication starting in 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)

Ac	tion	Performance Indicators	Timescale	Estimated No. of People Affected
W	orking with our local communities			
4	<ul> <li>progress against actions in the Noise Action Plan; and</li> <li>information on the implementation of the Noise Insulation Scheme (such as number of properties offered insulation, number of acceptances and number and details of completed installations).</li> </ul>			
5	We will make a noise report available on our website annually, which will include our annual noise contours and detail of our annual performance on noise.	Published report on our website	Annual publication starting in 2023	Communities within the 51dBLAeq, 16h contour (estimated 2,000 people)
6	We will publish a new dedicated noise webpage with information on key noise initiatives and strategies.	Publication of new webpage	New webpage to be published by end of 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
7	We will present key noise issues to the Southampton Airport Consultative Committee and Noise Forum as appropriate.	Meeting minutes	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
8	We will log and respond to all noise complaints and enquiries and commit to respond within 5 working days. We will use our noise and track keeping systems to investigate and seek further explanation from ATC and airlines where required.	Number of noise complaints	Ongoing	Communities within the 51dBLAeq, 16h contour (estimated 2,000 people)
9	We will deploy aircraft track visualisation modelling software and make it available for communities to view modelled aircraft noise information.	Software deployed and publicly available	Software to be available by end of 2022	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
10	We will establish a policy to deploy noise monitoring in locations to supplement the track keeping systems and contour modelling. The locations, metrics and objectives of the noise monitoring will be developed in consultation with the Community Noise Forum.	Completed policy	Policy in place by end of 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)

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Action		Performance Indicators	Timescale	Estimated No. of People Affected
Re	duction of Noise at Source			
11	We will undertake reviews of the differential aircraft charging system on an annual basis to encourage the industry adoption of quieter aircraft.	Number of Chapter 3, Chapter 4 and Chapter 14 aircraft operating at the airport	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
12	We will undertake a review and benchmarking of differential landing charges and other methods of incentivisation to determine if it would be viable to introduce additional measures at Southampton Airport.	Completed review	Review completed by end of 2023	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
13	As part of AGS group we will work with our partners in Sustainable Aviation to achieve the visionary noise goals of FlightPath 205011 which seek to achieve a 65% reduction in perceived noise, or 15dB, from aircraft by 2050 compared to 2000.	Progress against the EU Flightpath 2050 target of 65% reduction in perceived noise, or 15dB, from aircraft by 2050 compared to 200z0.	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
14	We will support the development of Sustainable Aviation's updated Noise Roadmap and will encourage the development of electric and hybrid electric aircraft and consider the noise implications of future aircraft technology.	Sustainable Aviation targets	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
15	We will continue to impose strict limits on the times, location and numbers of occasion that aircraft engine ground running can take place and to not permit ground running during night- time hours or bank holidays. We will also review and modernise ground running monitoring process.	Number of engine ground runs	Ongoing	Communities in close proximity to the airport
16	We will replace all diesel powered ground power units (GPUs) with Fixed Electrical Ground Power (FEGP) at all stands to allow aircraft to take electricity directly from the local grid, helping to reduce noise by limiting the amount of time that aircraft will need to run their engines at stands.	Publication of policy	Policy to be published by 2024	Communities in close proximity to the airport
11 5	ee: op.europa.eu/en/publication-detail/-/publication/7d834	1950-1f5e-480f-ab70-ab96e4a0a0ad		

<b>4</b> с	tion	Performance Indicators
Re	duction of Noise at Source	
17	We will develop a policy in the use of single engine taxiing and aircraft towing with a view to minimise noise emissions from aircraft on the airfield.	Publication of po

Roadmap and will encourage the electric aircraft and consider the technology."



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#### Timescale Estimated No. of People Affected

olicy

Policy to be published by 2024

Communities in close proximity to the airport



Southampton Airport

Ac	tion	Performance Indicators	Timescale	Estimated No. of People Affected
No	ise Abatement Operational Procedure	es		
18	We will use aircraft track keeping systems to proactively monitor aircraft routing and fine airlines for off track occurrences. Funds raised through these fines will be distributed to the Community Health and Wellbeing Fund.	Number of infringements and fines levied	Ongoing	Communities within the 51dBLAeq, 16h contour (estimated 2,000 people)
19	We will continue to implement best practice on aircraft noise management according to guidance that was published by the Independent Commission on Civil Aviation Noise whilst the commission was still active. We will review and implement any future best practice guidance issued by the Civil Aviation Authority where appropriate.	Number of guidance documents reviewed	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
20	We will continue to apply and monitor the Noise Abatement Procedures until we have successfully implemented our Airspace Change Proposal.	Adherence to Noise Abatement Procedures	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
21	We will continue with our Airspace Change Proposal and seek to develop a design that minimises, and where possible reduces, the total adverse effects on health and quality of life from aircraft noise, in line with our agreed airspace design principles.	Progression through Airspace Change gateways	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
22	We will promote adherence to the Arrivals Code of Practice (ACOP) and in particular the achievement of Continuous Descent Operations (CDO) where possible.	Percentage of approaching flights achieving CDO	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)

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Action	Performance Indicators	Timescale	Estimated No. of People Affected	Action	Performance Indicators	Timescale	
Land-use Planning & Management				Operating Restrictions			
23 We will actively contribute to improving aircraft noise information in local planning policy and seek to influence policy where appropriate. We will encourage the use of good acoustic design to avoid and minimise adverse impacts arising from the development of new noise sensitive buildings and encourage the adoption of the principles advocated by the Professional Practice Guidance: Planning & Noise – New Residential Development.	Number of planning applications reviews and number of responses issued to local planning authorities.	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)	25 We will not permit scheduled flights or helicopters during the night-time period from 2300-0600 (Mon-Sat) an 2300-0730 (Sun), with exceptions onl for emergencies or aircraft delayed by adverse weather or extraordinary Air Traffic Control procedures. We will als restrict the number of scheduled fligh or helicopters that can occur during the 'shoulder period' of 0600-0700 (Mon-Sat).	Number of nights (2300-0600) without any flights or helicopters	Ongoing	Communities within the 45dBLAeq, 8h contour
24 We will develop and implement a Noise Insulation Scheme to mitigate noise for residents most affected by aircraft noise.	Number of eligible properties	Annual review Year 1 - immediately post runway extension	Communities within the 60dBLAeq,16h contour	26 We will not permit more than 7,500 helicopter movements a year (during the day). We will not permit helicopter training flights other than f aircraft familiarisation.	Number of annual helicopter movements or	Ongoing	Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
				27 We will ensure the effects of noise are minimised and reduced as far as reasonably practicable by staying with the annual noise contour area limit of 16.1km <sup>2</sup> for normally scheduled aircraft traffic.	e Annual noise contour area in	Annual revie	w Communities within the 51dBLAeq,16h contour (estimated 2,000 people)
				<b>7.1 Estimating the reduction in the</b> <b>number of people affected</b> The Environmental Noise (England) Regulations 2006 require that Noise Action Plans must meet the requirements in Annex V of the Environmental Noise Directive (EC Directive 2002/49) which includes the requirement that each action plan should "contain estimates in terms of the reduction of the number of people affected (annoved, sleep disturbed, or	The noise insulation scheme 24) will reduce annoyance a sleep disturbance for those v eligible for the scheme. At t of producing this Noise Action no households are exposed 60dBLAeq, 16h and therefor for the noise insulation sche currently. However, the eligifi will be assessed each year boon updated noise modelling forecast data and the numb	e (action and who are he time on Plan, above re eligible eme bility ased g and er of	Actions 11 to 13 will drive the industry to continue to improve aircraft noise performance with a Sustainable Aviation target of 15dB reduction from aircraft by 2050 compared to 2000. This equates to a reduction in the percentage of highly annoyed persons by approximately 29% and a reduction in the percentage of highly sleep disturbed persons by approximately 20% <sup>12</sup> .

other)."

forecast data and the number of eligible households and the associated reduction in annoyance or sleep disturbance will be reported in the Annual Noise Monitoring Report.

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12 Reductions estimated using Formula 6 and Formula 9 of Commission Directive (EU) 2020/367 amending Annex III to the Environmental Noise Directive (EC Directive 2002/49)

## Figure A1 - 2021 annual day LAeq,16h 51-69 dB contours Actual runway modal split 64% RWY 20 / 36% RWY 02



# Appendix A Noise Contour Maps

Noise Action Plan 2023-2028



# Figure A3 - 2021 L<sub>day</sub> 54-69 dB contours Actual runway modal split 65% RWY 20 / 35% RWY 02



# Figure A2 - 2021 L<sub>den</sub> 55-75 dB contours Actual runway modal split 64% RWY 20 / 36% RWY 02







# Figure A5 - 2021 L<sub>night</sub> 45-66 dB contours Actual runway modal split 61% RWY 20 / 39% RWY 02





EASTLEIGH

Figure A4 - 2021 L<sub>evening</sub> 54-69 dB contours Actual runway modal split 63% RWY 20 / 37% RWY 02



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# **Appendix B Financial Information**

Description Туре Staff Environment, communications and Ai Director's time. AGS central team sup Computer/Software Noise Track Keeping Software, noise development and computer equipmer Research, Events and Research on noise and operational per Subscriptions Stakeholder conferences, venue costs Consultative Committee, other noise Consultancy Preparation of annual noise contours implementation of noise improvemen Publications Airport noise literature and Southamp Action Plan.





	Approximate Cost
irside Operations team. port.	£90,000
footprint software, website nt	£50,000
erformance matters. and expenses. Airport meetings. Subscriptions.	£2,500
and support on It measures.	£30,000
oton Airport Noise	£7,000

# Appendix C Southampton Airport noise abatement procedures

#### Northern Operations Aircraft Departing to the North (Runway 02)

Aircraft departing in a northerly direction are required to continue along the runway heading until reaching two and a half miles from the end of the runway. This avoids overflying the village of Bishopstoke to the north east, and densely populated areas of Eastleigh and Chandler's Ford to the north west. After this point aircraft will then route towards their next navigational waypoint.

#### Aircraft Arriving from the North (Runway 20)

Non-Visual Approach (using specialist navigation equipment – Instrument Landing System) Aircraft will join the standard approach path from no less than 8 nautical miles and at a constant 3° angle of approach.

#### Visual Approach

Aircraft making a visual approach will be aligned with the centre line of the runway from not less than 2 nautical miles when arriving from a southerly point of origin, and at 5 nautical miles when from northerly, easterly or westerly directions.

#### Southern Operations Aircraft Departing to the South (Runway 20)

Aircraft taking off to the south will climb straight ahead to 500ft above mean sea level, and then turn right to follow a 217° heading. This heading will direct aircraft towards the path of the River Itchen and the track will be maintained until reaching Southampton Water or 2000ft above mean sea level, whichever is reached first. The exact point, at which aircraft reach 500ft and subsequently turn, will vary depending on many factors, such as engine type, aircraft weight and weather conditions.

#### Aircraft Arriving from the South (Runway 02) Visual Approach

The point at which aircraft are required to be on alignment with the runway's centre line, when making a visual approach, is four miles. Aircraft join the approach path over the less densely populated Southampton Water area to manoeuvre onto the runway centre line for arrival. The aircraft are then required to follow a 3° angle of approach for operational reasons.

## Exclusions from noise abatement procedures

The UK Civil Aviation Authority has a strict consultation process in place to ensure that all stakeholders are made aware of and given an opportunity to feedback on any proposed permanent flight path changes. It is important to note that Southampton Airport will not permanently change any flight paths without following this process of consultation. However, there are conditions when noise abatement procedures will not be flown on a temporary basis, including those below.

#### Type of aircraft

These routes only apply to commercial aircraft above 5700kg and to all jet aircraft. Smaller aircraft types, such as the Trislander aircraft, smaller propeller aircraft and helicopters will not follow these routes as this would result in significantly increased journey times and increased fuel usage.

#### **Operational activity**

Occasionally aircraft will be directed by NATS not to fly the noise abatement procedures due to weather conditions, other air traffic in the area, or for aircraft performance reasons. In addition, communities around the airport are likely to see and hear aircraft even if they do not fly directly overhead.

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# Appendix D Consultation Feedback

This Noise Action Plan has been submitted to the Airport Consultative Committee for consultation. Below is a summary of the comments received and our response to the comments, indicating where we have made changes to the Noise Action Plan in response to feedback. Responses to feedback received from the public consultation are presented in Appendix E.

NAP Section	Comment	Airport Response
1	The first bullet point on page 1 advises no night flights. However our understanding is that 'night' is defined as 2300-0700. Can you please clarify this, particularly with reference to Monday to Saturday operational hours.	We have added clarification that this statement refers to flights from 2300-0600. We continue to assess and report night-time noise across the full 2300-0700 period.
	Broadly conventions considers 'night time' to fall between 2300 and 0700am i.e. the period of time when the majority population is expected to be asleep. The NAP states that there is a continued commitment to NO NIGHT FLIGHTS and yet flights are permitted between 0600 and 0700 Monday to Saturday.	Change made to WAP Section 1
	Is the statement "continued commitment no night flights" in BOLD and uppercase print misleading? The current arrangement is 10 scheduled flights per month.	
	Implementation of new annual noise contour area limit is not explained until the map section in appendix a. This is technical and not understandable. What is the change?	This is explained in detail in Section 6.1.2 including specifying the key change "For the first time this cap is directly related to aircraft noise rather than passenger numbers and will limit the noise that can be generated by the airport and the number of people that will be exposed to aircraft noise above the Lowest Observable Adverse Effect Level (see Section 3.3.4)."
2	2.1 – It would be helpful to expand on what is meant by 'reduce total adverse effectsfrom aviation noise'. The section above has the aim to 'reduce the adverse effects of aviation noise', and the Noise Action Planning Guidance refers to 'where possiblereducing the number of peoplesignificantly affected by aircraft noise'. It would be helpful to have greater clarity around these definitions and what is meant by them in the context of this Action Plan.	We have adjusted language to show this is the same consistent objective in line with Government policy that the total adverse effects on people as a result of aviation noise should be limited and, where possible, reduced, rather than the absolute number of people in any particular noise contour. <b>Change made to NAP Section 2.1</b>

Comment	Airport Response	NAP Section	Comment	Airport Response
Section 2.5 Would comment that the noise abatement route currently covers both the SDNP and the densely populated area for Colden Common. How does policy DP9 reconcile between the two in regard to Colden Common?	DP9 is an airspace design principle and related to the ongoing Airspace Change Proposal (see Section 2.5). Any changes to the airspace design (including changes to routes over Colden Common) will be assessed against this design principle.	4	4.2 – Reference is made to metrics used in considering noise in the Airspace Change Proposal (ACP) and reference is made to s2.5 – however these metrics are not given or explained? Can you clarify what these are and how they are used? Lden is not something that can be measured directly, rather it is calculated from measurements of other metrics.	The Airspace Change Process is a separate process and is still being developed, including specifics of which noise metrics will be used and how they will be used. For information on the ACP and guidance from the Civil Aviation Authority on noise metrics, please refer to their guidance
the Noise Policy Statement for England, and it aims and objectives? As it is the overarching policy document covering all types of noise in England?	England has been added. Change made to NAP Section 3.3.1		Is it proposed that aircraft noise will be monitored	document: CAP1616. Action 9 has been updated to clarify that
<ul> <li>3.3.4 – In terms of discussion around LOAELs it would helpful to understand how the WHO Environmental Noise Guidelines for the European Region 2018, have been considered, especially in the light of their recommendations of reducing noise levels below 45 dB Lden, and 40 dB Lnight.</li> <li>3.3.4 The 2018 WHO Noise Guidelines for the European Union strongly recommends a 45dB Lden and a 40dB Lnight as aircraft noise above these levels is associated with adverse health effects.</li> </ul>	The NAP follows UK Government noise policy. The Government has stated as part of its draft Aviation Strategy: 'The government is considering the recent new environmental noise guidelines for the European region published by the World Health Organisation (WHO). It agrees with the ambition to reduce noise and to minimise adverse health effects, but it wants policy to be underpinned by the most robust evidence on these effects, including the total cost of action and recent UK specific evidence which the WHO report did not assess'. The WHO guidelines themselves state that 'data		at the airport? If not, why not? We note Action 9 refers to 'a programme to deploy noise monitoring in locations to supplement the noise track keeping systems.' It would helpful to expand on this to clarify precisely what actions and methods are proposed and the metrics to be measured. Have other metrics been considered, e.g. LAmax, for those dwellings very close or under the flightpath? And in the context of Action 9? Do noise measurements take place in Colden Common? If not can noise measurement take place in Colden Common? No mention on where the noise measurement are taken.	a policy will be developed to deploy noise monitoring in locations to supplement the track keeping systems. The locations, metrics and objectives of the noise monitoring will be developed in the policy in consultation with the Community Noise Forum. Change made to NAP Section 7 Action 10
	and exposure–response curves derived in a local context should be applied whenever possible to assess the specific relationship between noise and annoyance in a given situation'. The 51dB LAeq, 16h LOAEL for day-time used in the NAP is derived from exposure-response curves		4.2.1 – refence to night time noise, see comment above about SIA operational hours including flights from 0600.	Noted, change has been made to NAP Section 1 in response to comment above. Change made to NAP Section 1
	<ul> <li>derived from a UK study.</li> <li>For the NAP, the LOAEL values for aircraft noise exposure are set by Aviation Policy at 51dB LAeq,16h for day-time and 45dBLAeq,8h for night-time. These policy thresholds take precedence over the WHO recommendations because they are formally incorporated in UK Policy.</li> <li>It is important to note that the guidelines do not set threshold for significant health effects and do not set limits or caps.</li> <li>It is also important to note that many of the actions in the NAP are implemented to reduce noise in its totality, so will benefit those in the 45dBLden and 40dBLnight contours referenced in the WHO guideline.</li> </ul>		4.1.1 states that the airport has no direct control over the aircraft fleet that airlines using SIA operate. Surely that is not strictly true as AGS can stipulate that their airports as managed will only accept certain Chapter category aircraft, favouring quieter aircraft.	Given the international nature of aviation, any 'ban' on aircraft types (including particular Chapters) must legally follow the requirements of Regulation 598 which stipulates that noise related operating restrictions cannot be introduced as a first resort – the other mitigation measures in the Balanced Approach (see Section 3.1) must be considered first. If a noise related operating restriction is considered necessary, it can only be imposed after the 'cost effectiveness' of the restriction has been considered which must consider impacts on other airports. For this reason ban on aircraft within particular chapters is typically introduced at an international level rather than at individual airport level, i.e. EC Directive 92/14/EEC which banned Chapter 2 aircraft from landing in the EU from 1 April 2002.

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NAP Section

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NAP Section Comment

NAP Section	Comment	Airport Response
	4.2.1 The operational hour of 0600-0700 falls within 'night time' period.	We have added clarification to section 1 that this statement refers to flights from 2300- 0600. We continue to assess and report night-time noise across the full 2300-0700 period.
		Change made to NAP Section 1
	LAmax levels have not been considered for individual overflights, which will affect properties close to the airport but also further away in low background noise environments. This is of relevance when considering types of aircraft accessing the airport and at what times i.e. not before 0700.	The Environmental Noise (England) Regulations 2006 specify the noise metrics to be used in NAPs. However, we do use additional noise metrics, for example within the ACP noise assessment.
	No mention of enjoyment of leisure space such as gardens?	Aircraft noise is measured, modelled and reported as outdoor noise levels as it is recognized that people are affected by aircraft noise outdoors (this is mentioned in Section 4.2.1).
		The improvement of public outdoor spaces in areas affected by aircraft noise is a key component of the proposed Health Strategy (see Section 6.1.5)
5	5 and T1 to T5 A clearer definition of the tables would be helpful and cross referencing to the noise contours of Appendix A.	Further information has been added to this section for clarity and cross references have been added to the tables and appendix figures.
		Change made to NAP in Section 5
	T1 refers to LAeq, 16hr, is this the 'average summer day' referred to in 4.2.1?	This has been clarified – all modelling is for the calendar year as required for the Environmental Noise Regulations.
	It would be helpful to clarify what time period that the tables refer to as it is not clear from their descriptions (as previous section refers to LAeq, 16hr, in the context of summer flight and the noise insulation scheme.	Change made to NAP Section 6
	Has a 'summer' contour been produced? (Is this page 26 '2021 annual day contour'?)	
	Are estimates of the population or households within contours to the nearest 100 appropriately fine scaled?	This is standard industry practice and in line with CAA guidance which specifies population to be rounded to the nearest 100.

Is there benefit in quoting figures for Eastle Borough and Southampton City separately
The Tables stipulate overall populations and households affected to the nearest 100, bu not differentiate as to which Local Authori jurisdiction they are found. Can this be refe and reflected in the appendices?
The text refers to comparison with 2016 at pre Covid activity (which has affected the or underlying the 2021 contours), it would be helpful to provide more expansive consider of this as the 2016 data is not included for comparison purposes.
NAP states that the noise contours were modelled using 2021 data and then compa- them with 2016 noise mapping data, notir there is a reduced number of aircraft due t continued effects of the Covid pandemic; in 2021 vs 43000 is 2016. This presents a reduction on the 2016 movements which w have a major impact on the corresponding contours effectively reducing noise impacts thereby affected populations as shown in T to 5. This is misleading as to likely impacts forward?
What modal spilt of aircraft movements be

What modal spilt of aircraft movements bet the north and south was used for the gener of these figures, it would be helpful to refer this, and if an average has been used, over period. (I note that the contour plots include modal split of 64/36. Has the same split bee used for the 'summer LAeq' plot and the ar plots? If so why is this, as we understand the model spilt can vary between summer and a movements?

Equally it is unclear from these numbers wh modal affects are between the north and so

Given the likely change in aircraft types and movements following the runway extension and as aircraft movements recover post Cov lockdown, it would be helpful to advise of regular, say annual, updates to the figures in Tables 1 to 5 (is this included in Action 4?) to reflect these changes.

	Airport Response
eigh ? d ut do ty erenced	It is industry practice and in line with policy to present total number of people within each noise contour to represent the total adverse effects of aviation noise.
ares ag that o the 12,000 72% will noise and fables 1 going	We have discussed the impact of Covid with the Department for Environment Food and Rural Affairs (DEFRA) who provide guidance on Noise Action Planning. They have confirmed that we must still model 2021 despite the reduced traffic as a result of Covid. We recognise that 2021 is heavily impacted by Covid and we have added further statistics from 2016 for comparison and context purposes. <b>Change made to NAP in Section 5</b>
etween eration er to what de a een nnual he annual hat the outh.	The actual modal split that occurred in 2021 has been applied. This has been clarified. Change made to NAP Section 5
d n, vid in to	Noise contours for the previous year and following three years will be produced annually and published in the Noise Monitoring Report (see Section 6.7).

Southampton Airport

NAP Section	Comment	Airport Response	N	IAP Section	Comment
	Section references modelling of noise contours using ANCON Version 2.4 and Southampton Airport fixed wing movement data for the 2021 annual period. There is no explanation as to what ANCON Version 2.4 is nor any explanation provided as fixed wing data is terms of the proportion of overall traffic using the airport. Naturally assume that most if not all aircraft using the airport are fixed wing, excluding helicopters?	Further information on the ANCON noise model has been provided with reference to the CAA website where additional information can be found. The proportion of helicopter movements in 2021 has been provided. Change made to NAP Section 5			Has the impact on those nearest or under fi paths of aircraft flying more accurately been assessed in terms of whether this increases noise levels, and what were the results of th assessment? 6.1.1 Night Time Noise Although there is a cited 'strict' limit of 15 aircraft scheduled flight between 0600 and
	Can we have some further explanatory detail? This section we cannot understand.	Further clarity has been added on the noise model used (with reference to the CAA website for further information), the metrics used and their time period.			0700, this equates to an average of one own minutes (seems a lot). In order to contextual this it would be useful to cite the average h movements between 0700 and 2300?
		Changes made to NAP Section 5			6.1.2 Noise Contour Map
6	6.1.2 Reference to the annual noise contour limit. It would be helpful to include this with the other contours for context.	As required by the Environmental Noise Regulations, the contours in the NAP use a different time period (annual instead			No explanation as to how the 51dB(A) 16h standard is monitored and what penalties the are for non compliance.
		of summer day) and so are not directly comparable.			6.7 Monitoring and reporting process
	6.1.3 Do we have a figure for current helicopter movements for context against the limit value?	The total number and proportion of helicopter movements in 2021 has been provided.			never be exceeded, a confident claim?
	6.1.3 Helicopter Movements NAP gives no information of actual numbers	Change made to NAP Section 5			6.1.7 Noise Forum No timescales for set up/delivery
	of helicopter movements for context and the associated modelled noise impacts.				6.1.1 This section talks about 15 schedule flights which is up from the current 10 and
	6.1.6 Is the commitment to the Noise Insulation scheme (and Health Strategy and Community	These commitments are embedded in the new Section 106 legal agreement associated with the runway extension. Should that			contradiction to the statement in the introd
	the JR of the planning permission not being successful? Is there a timescale for establishing and rolling out the policy with milestones for delivery?	development not proceed then the Noise Action Plan will be revised. Timelines and milestones will be reviewed and published annually in the Noise Monitoring Report (see Section 6.7).	7		We would like to see more definitive dates the 'Actions' / deliverables, rather than end starting in, established by, etc. Without defi dates there is a danger that these are more to slip.
	6.3 Is fining off track aircraft deliverable?	We already use aircraft track keeping systems			Deadlines quite broad. Any likelihood of mo
	6.3 Noise abatement operational Procedures Although fines are already possible for non- compliant aircraft, to my knowledge none have ever been levied only warnings as AGS won't want to upset its operators. Is this a realistic proposition?	accordance with our noise abatement procedures and we investigate and review off track occurrences with airlines. We have consulted with airlines on this new action and will continue to do so as we develop the principles. We therefore consider this to be deliverable and realistic.			refined dates i.e. pegged to a month and ye

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	Airport Response
inder flight Iy been reases their ts of this	This will be assessed through the Airspace Change Proposal (see Section 2.5)
of 15 00 and one over 4 htextualise erage hourly 0?	Average hourly movements from May to July 2022 were between 1 and 6 per hour from 0700 to 2300. The highest average of 6 per hour occurred in the hours between 0800-0900, 1500-1700 and 1900-2000. It is important to note that the limit of 15 aircraft scheduled between 0600-0700 is a strict limit rather than an expected average number of movements.
A) 16h alties there	The noise contour area cap is legally binding. Information has been added to how this will be monitored through annual noise modelling. The commitment to forecast modelling of future years in the section
s ur cap will i?	106 agreement are designed to avoid any breaches before they occur. Change made to NAP Section 6.1.2
	Action 3 in Section 7 provides a timescale – by 2023.
edule 0 and a • introduction	We have added clarification that the introduction refers to flights from 2300-0600 Change made to NAP Section 1
dates for an end of, out definite e more likely	Timescales will be reviewed and updated in the annual reporting against the NAP and more definitive dates will be provide as proposals advance.
d of more and year?	

Southampton Airport

ion	Comment	Airport Response	NAP Section	Comment	Airport Response
	Action 4 – it would help to be clearer on what the provided 'information on the implementation of the Noise Insulation Scheme' will actually entail.	This is expected to include the number of properties that should be offered insulation in accordance with the Noise Insulation Scheme, the number have been offered insulation in accordance with the Noise Insulation Scheme, the number of acceptances of the offer of insulation and the number of acceptances.		The noise contour maps do not show Colden Common and no information is included on the noise abatement routes over Twyford and Colden Common.	The 2021 noise contours do not extend as far as Colden Common. The Noise abatement procedure for aircraft arriving from the north and departing to the north are described in Appendix C.
		which have been insulated including details of the method of insulation used. This has been clarified. Change made to NAP Section 6.7 and Section 7, Action 4		Appendix C (noise abatement procedures) appears to be unchanged from the current arrangement, could this be made clearer to avoid having to check the current document against the appendix to spot the difference.	Clarification has been added that this Noise Action Plan does not change any of the Noise Abatement Procedures. Any changes to flightpaths will be delivered through the Airspace Change Proposal.
	Actions 5 and 6 – it might be useful to give figures	The figure is cumulative and so includes			Change made to NAP Section 6.1.8
_	within the contour areas and not just the 51 contour.	people within the 51dBLAeq,16h contour and all those in the contours above.		Colden Common has a relatively low number of complaints but complaints do happen when aircraft seem to deviate from the noise	We use aircraft track keeping systems to proactively monitor aircraft routing in accordance with our noise abatement
	Action 9 – It would helpful to have greater clarify over the monitoring proposed, where it will be deployed and the metrics to be collected. Is monitoring which can be directly related to predicted noise contours to be carried out, if not, why not?	Action 9 has been updated to clarify that a policy will be developed to deploy noise monitoring in locations to supplement the noise track keeping systems. The locations, metrics and objectives of the noise monitoring will be developed in the policy in consultation		abatement procedure, sometimes significantly. This can cause them to fly directly over the village and extremely close to the school creating a great deal of noise pollution. Can you review the route and introduce something to ensure more accurate conformance to the	procedures and we investigate off track occurrences. Going forward, we will fine airlines for off track occurrences. This is explained in Section 6.3 Any changes to flightpaths will be delivered
	Further clarity of what Action 9 will entail i.e. locations and metrics and whether this will be undertaken in consultation with the Technical Working Group?	with the Noise Forum. Change made to NAP Section 7 Action 10		noise abatement procedure?" Residents have complained in the past when jet aircraft don't seem to have followed the noise abatement procedure at all turning right way before they should've done (see	through the separate Airspace Change Proposal (see Section 2.5).
	Section 4.2 refers to metrics, but other than LAeq, 16hr, no further clarification is given as to	The LAeq and L <sub>den</sub> metrics are presented in the NAP and both are explained in detail in Section 4.2. Other metrics are not included		screenshots below). Both were horrifically noisy.	
	appropriate.	in the NAP and are therefore not described to avoid confusion. If further metrics are introduced (i.e. as part of the ACP) they will be described in detail.		Can you introduce a noise complaint app for quick and easy way to report aircraft noise? A lot of U.K. airports, including big airports like Heathrow and small ones like Bournemouth	In Action 8 we have committed to deploy aircraft track visualisation modelling software (a similar system to WebTrak) and make it available for communities to view aircraft
	Action 19 – we would like to see how more tightly followed flight paths would alter the noise environment for those nearest to the flight path and how noise increases could be managed.	This will be assessed as part of the ACP.		use something called WebTrak. It is like flight radar 24, but is more accurate and it has a built in complaint function for individual flights. I believe it is endorsed by the airports themselves, so we could request Southampton	noise information. Complaints can be logged online via our website or dedicated email inbox (see Section 6.5)
	Colden Common suffers from noise pollution from smaller aircraft that do not have to follow the noise abatement route. Why can smaller aircraft not be included and asked to follow the noise abatement route.	Noise Abatement routes only apply to commercial aircraft above 5700kg and to all jet aircraft. Smaller aircraft types, such as the Trislander aircraft, smaller propeller aircraft and helicopters will not follow these routes as this would result in significantly increased journey times and increased fuel usage. This is explained in Appendix C		Airport subscribe to it. webtrak.emsbk.com Most major airports in the U.K. use it so why can't Southampton	

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Comment	Airport Response
Given the likelihood of significant changes in the noise climate around the airport compared to the baseline year of 2021, as flight numbers return to 'pre covid' levels and the runway extension leads to changes to aircraft mix and numbers we would like to see some acknowledgement of this sin the Plan with anticipated changes outlined in terms of noise contour change and number of people and dwellings affected.	This information will be provided in the annual noise modelling which will provide forecast noise contours for the next three years and will be updated each year.
It would also be helpful to expand more on how the Airspace Change may, or may not change noise levels near to and further from the airport and how this 'fits' with the Noise Action Plan.	The Airspace Change Proposal is in early stages of development. The potential noise impacts of the airspace change will be fully assessed, reported and consulted on at a later date in line with Civil Aviation Authority guidance (see Section 2.5).
Overall a good NAP and very much welcomed. However is it possible to include more details on the future changes to the noise contours based on the predicted increase in air movements and change in aviation profile using the airport's extended runway, over the next 5, 10 and 20 years?.	Forecast noise modelling and traffic data will be provided in the Annual Noise Monitoring report (see Section 6.7).
It is unclear if this new draft plan noise action plan changes the route which aircraft fly over Colden Common. We would like reassurance it is unchanged and if possible, a narrower noise abatement route to avoid flying over the village and the village school (preventing noise and pollution) for the children and the population in this area.	Clarification has been added that this Noise Action Plan does not change any of the Noise Abatement Procedures. Any changes to flightpaths can only be delivered through the Airspace Change Proposal (see Section 2.5). Change made to NAP Section 6.1.8
	Comment Given the likelihood of significant changes in the noise climate around the airport compared to the baseline year of 2021, as flight numbers return to 'pre covid' levels and the runway extension leads to changes to aircraft mix and numbers we would like to see some acknowledgement of this sin the Plan with anticipated changes outlined in terms of noise contour change and number of people and dwellings affected. It would also be helpful to expand more on how the Airspace Change may, or may not change noise levels near to and further from the airport and how this 'fits' with the Noise Action Plan. Overall a good NAP and very much welcomed. However is it possible to include more details on the future changes to the noise contours based on the predicted increase in air movements and change in aviation profile using the airport's extended runway, over the next 5, 10 and 20 years?. It is unclear if this new draft plan noise action plan changes the route which aircraft fly over Colden Common. We would like reassurance it is unchanged and if possible, a narrower noise abatement route to avoid flying over the village and the village school (preventing noise and pollution) for the children and the population in this area.

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