



# INTRODUCTION

This is a Summary of the third Noise Action Plan for East Midlands Airport. A greater level of detail is available in the full Plan, which is published on our web site (https://www.eastmidlandsairport.com/community/local-environmental-impacts/noise/noise-action-plan/) along with a supporting supplementary document which contains many of the more technical elements of the Plan.

This is an exciting time for East Midlands Airport. It is 53 years since East Midlands Airport first opened for commercial flights and since that time the airport has grown to become nationally important serving 4.9 million customers and establishing itself as the largest airport for all-cargo operations in the UK.

We are ambitious for the development of the airport and the region we serve. Our 4.9 million customers currently fly to around 100 destinations across Europe and North America. The airport provides jobs for 8,000 people, and the airport and its on-site partners annually contribute £440 million of total GVA (direct, indirect and induced) to the East Midlands economy.

In our 2015 Sustainable Development Plan we set out our ambition and capability to grow to handle up to 10 million passengers and 1.2 million tonnes of freight and to set East Midlands Airport as an economic powerhouse at the centre of the three cities of Nottingham, Derby and Leicester in the heart of the UK.

Our aim is to deepen the role that we play in the Midlands: driving growth through better connectivity; creating jobs, attracting investment and enabling people from across the East Midlands to do business, visit friends and family and enjoy travel to their favourite destinations from their local airport. We are committed to growing the airport in a responsible and sustainable way. We know that our future development brings challenges, particularly in relation to night flights, which although a vital part of the UK's express freight and mail economy, can be intrusive and disruptive, particularly for those who live close to the airport. Our Noise Action Plan prioritises controls on noise at night.

Our Noise Action Plan supplements our 2015 Sustainable Development Plan (available at https://www.eastmidlandsairport.com/about-us/development-plan/) which has already set a maximum night noise limit, agreed by our local planning authority, within which we will deliver our anticipated growth.

Our Noise Action Plan was published as a draft for consultation in 2018. We have worked with the airport's Independent Consultative Committee, local authorities, airlines and local community representatives. We are grateful to everyone, including local residents, who took the time to review and comment on our Plan. We have made changes in the light of the comments we have received.

We employ a wide range of measures to mitigate the effects of aircraft noise including restrictions on the use of the noisiest aircraft, targets and incentives for the introduction of newer quieter aircraft, financial penalties and a range of measures that ensure aircraft fly in the quietest way possible. We also intend to review our aircraft operational procedures and flight paths within the Plan period, as part of a national programme to modernise airspace.

This Noise Action Plan runs for the next five years. Over that time, we will continue to develop our policies and targets, and it is likely that some of our operating procedures will evolve.

Our approach will continue to focus on limiting and reducing, where possible, the number of people affected by aircraft noise whilst we continue to contribute to the overall prosperity of the East Midlands region.

Since 2011 passenger numbers have increased by 16% growth and cargo by 18%, but with only a 3% increase in flights. Over the same period noise, as assessed by the Department Environment Food and Rural Affairs (DEFRA) noise maps, has remained broadly unchanged and well within our agreed limits.

We remain committed to working towards our aim and, given the relatively high number of night flights at East Midlands Airport, to focus on actions to improve our management and reporting of aircraft noise at night.

The further measures we propose in this Noise Action Plan include:

- The introduction of a new noise surcharge for QC4 aircraft at night
- A more stringent noise penalty scheme
- A commitment to explore the introduction of a fine for departing flights that persistently fly outside of the noise preferential routes from the airport
- A commitment to review our charging structures to further incentivise the operation of quieter aircraft types
- Review and improve our noise reporting with a new 'Quiet Flight Performance' report.

There are a number of opportunities which have developed since our last Noise Action Plan, including performance-based navigation and low noise arrivals. These new opportunities require changes to how the airspace around the airport is used and will require detailed discussion with the communities likely to be affected by this. We are keen to ensure community views on any changes to flight paths are fully considered and are committed to maintaining our well-established noise monitoring systems and our community relations programme. We also believe there is an opportunity to develop and provide educational and skill development material on aircraft noise management. This will include facilitating visits to the airport, creating information materials and supporting our 'Inspiring Young People' programme.

We will continue to work with our industry partners to deliver on our actions. We will also provide regular progress reports to our Independent Consultative Committee to ensure we remain 'on track' to achieve our aims.





# EAST MIDLANDS AIRPORT

East Midlands Airport is in a strategic location in the centre of the UK, roughly equidistant from the cities of Nottingham, Leicester and Derby. The area around the airport is relatively sparsely populated and as a result, the noise from aircraft operations affects fewer people than airports located in or near large conurbations.

Today East Midlands Airport is:

- A significant UK regional airport, in 2017 handling 4,880,405 passengers
- The UK's largest pure cargo airport, handling 324,216 tonnes of freight in 2017
- A major UK air mail hub, handling 21,963 tonnes of mail in 2017
- The UK's leading express freight airport, with all of the major global integrated freight airlines based at the airport
- The largest single employment site in Leicestershire with some 8,000 people working on-site.

The airport's location in the centre of the UK, with direct access to the national motorway system is a major benefit to the development of the airport's passenger and cargo business. It is estimated that there are over 11 million people that live within a 90-minute drive of East Midlands Airport and 90% of England and Wales is within a four-hour drive.

#### AIRPORT OPERATIONS AND SOURCES OF NOISE

The airport operates 24-hours a day, 365 days a year using a single runway aligned in an east-west direction. Aircraft movements comprise of commercial passenger flights (scheduled and charter), air freight and mail flights plus training and general aviation flights. Over two thirds of aircraft movements at the airport occur during the day with the remaining third occurring at night time (between 23:00-07:00).

Departing aircraft normally take off into the wind. Given the prevailing winds are westerly, the usual mode of operation is for departures to the west and arrivals from the east. All departing aircraft must follow noise preferential routes (NPR's) shown in Appendix B of the full Plan. How the departures are split at the airport and the wider areas overflown by aircraft are shown in Appendix C of the full Plan. This also shows the areas overflown by arriving aircraft. More information about the operation of the airport is contained within Chapter 3 of the full Plan.

Noise is primarily generated by aircraft as they arrive, depart and move around the airport. Other sources of noise at the airport come from activities involved in getting the passengers and cargo to and from the aircraft, from aircraft maintenance and engine tests, from construction activities at the airport and from vehicles coming to and from the airport.

#### APPROACH TO MANAGING NOISE

Information on historic, current and future noise levels at the airport are presented in detail in the full Plan and summarised here, along with existing, modified and new actions the airport intends to implement.

Managing these current noise effects and those arising from future growth is a key focus for the airport. Our long-term aim is to '...limit and reduce where possible, the number of people affected by noise as a result of the airport's operation and development'. We are committed to minimising the number of people affected by aircraft noise by routinely reviewing our noise-related targets and policies. We will also continue to support local communities, with a particular focus on those most affected by aircraft operations. This will include continuing our community-relations programme, noise mitigation schemes and Community Fund, which has now donated over £1,000,000 to local good causes.

We will continue to measure our performance against other airports and to contribute to the sustainable development of the air transport industry at a national, regional and local level. We will also support and contribute to the noise-related commitments contained within the UK's Aviation Policy Framework and emerging national aviation policy.

## THE REGULATION OF AIRCRAFT NOISE IN THE UK

A Noise Action Plan is a five-year plan to assess, consider and manage aircraft noise at the airport. It is a key part of delivering broader UK Government noise objectives that are to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise.

Noise Action Plans are a legal requirement under European Union Directive 2002/49/EC relating to the Assessment and Management of Environmental Noise. This Directive is commonly referred to as the Environmental Noise Directive or END¹. The requirements of the END are transposed by the UK

Government in the Environmental Noise (England) Regulations 20062 as amended ("the Regulations"). More information about noise action plans and their aims are contained within Chapter 1 of the full Plan.

The Noise Action planning process operates in five-yearly cycles. The aim is for each subsequent Noise Action Plan to build on existing progress to manage the effects of aircraft noise on people. This is the third Noise Action Plan for East Midlands Airport and is based on noise maps prepared by DEFRA showing the situation at the airport in 2016.

The primary aim of our airport Noise Action Plan is to limit and where possible reduce the number of people significantly affected by aircraft noise. To do this, we have considered the noise impact experienced by communities living near the airport and explored how this can be better managed in the future. This includes consideration of the anticipated growth at the airport and potential benefits of new aircraft technology and operating procedures, as well as noise controls where necessary. The Plan has been developed in consultation with those affected by the noise.

Following our consultation on this Plan in summer 2018, it was presented to the UK Government for formal adoption and approved by DEFRA in January 2019.

<sup>&</sup>lt;sup>1</sup> See http://ec.europa.eu/environment/noise/directive\_en.htm

# NOISE MAPPING RESULTS: 2006, 2011 AND 2016

In the same way that geographical maps use contours to distinguish between high ground and low ground, noise maps use contours to identify those areas that are relatively louder or quieter.

Although noise maps provide information on noise levels and the number of people affected, their main purpose is to help authorities show the areas and populations affected and to inform Plans designed to manage noise. More information about what noise maps are is contained within Chapter 4 of the full Plan and the detailed results of noise mapping are found in Chapter 5. The findings are also summarised below.

Under the Environmental Noise (England) Regulations 2006, noise mapping is carried out every five years – most recently in 2016 – for an annual average day (January to December).

Maps are produced for each of the following time periods.

- L<sub>--</sub> the level in the day, 07:00 to 19:00
- L<sub>evening</sub> the level in the evening, 19:00 to 23:00
- L<sub>sight</sub> the level at night, 23:00 to 07:00
- L<sub>--</sub> the level over 24-hours

The  $L_{den}$  figures are produced by combining those for  $L_{day}$ ,  $L_{evening}$  and  $L_{night}$ . To take account of the fact that noise is more intrusive at night time, before the  $L_{day}$ ,  $L_{evening}$  and  $L_{night}$  values are combined to produce the  $L_{den}$  level, a weighting of 5dB is added to the evening values and 10dB is added to the night values.

Because of these differences, the noise maps that inform this Noise Action Plan are not directly comparable with other published noise contours.

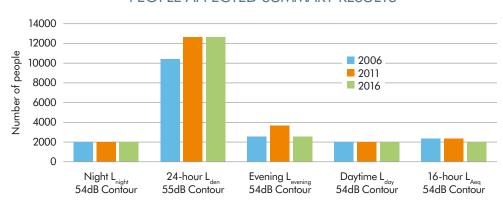
We recognise that different factors affect the way noise is experienced and that people respond differently to noise. This makes it difficult to quantify the relationship between noise and annoyance.

Government policy requires extra support to be provided to those living in homes which are exposed to high levels of aircraft noise (more than 69dB  $L_{\text{Aeq}}$ ). The 2016 noise maps show that there are no properties at East Midlands Airport exposed to this level of noise.

The chart shows the result of the key noise levels from 2006 to 2016 for each noise metric. The results are taken from the DEFRA noise mapping results. The chart shows the 2016 result for the key noise levels for each noise metric. Despite significant growth in aircraft activity between 2011 and 2016, the data indicates noise impacts have remained broadly unchanged.

Using the lowest noise indicator (54dB 16-hour  $L_{\text{\tiny Aeg}}$ ), which is consistent with the Government's latest advice, the results show a small reduction in the number of people affected by aircraft operations in 2016 compared to previous years.

# DEFRA NOISE CONTOUR MAPPING – PEOPLE AFFECTED SUMMARY RESULTS



Using the 54dB night noise contour, that is closest to the agreed night-time noise limit (55dB  $L_{Aeq\,8-hour}$ ), the results show that there has been no change in the number of people affected in the last five years.

During the evening, mapping results indicate fewer people are now affected by aircraft noise above 54dB than in 2011. The shape and population within each noise contour for specific noise metrics has been briefly summarised below with fuller details of the changes provided in Appendix D of the full Plan. In considering the results it is important to recognise that as well as the number and type of aircraft operations, how the weather changes the direction of aircraft arrivals and departures also affects the shape and therefore the area of the noise contours.

For this reason, the results have been interpreted as being unchanged compared to previous years if the results indicate a change in the number of people of 100 or less.

#### INTERPRETATION OF RESULTS

Considering the results of the noise mapping from 2006 to 2016, it is apparent that:

- There has been a small reduction in the 54dB to 60dB noise exposure levels during the day with higher noise level exposure remaining unchanged;
- There has been a significant reduction in the 54dB to 57dB noise exposure level in the evening period since 2011, despite similar or slightly higher levels of activity at the airport;
- Noise exposure during the night time remained the same in the 54dB contour area, with a small
  increase in the number of people within the lowest 48dB to 54dB noise bands since 2011.



Overall, these results show that whilst the airport has continued to grow with passenger numbers and freight volumes increasing significantly, the noise impact has remained broadly unchanged. The airport is committed to sustaining this performance and will continue to focus its efforts on limiting and reducing noise from night flights. This is the principal objective of this Noise Action Plan.

Considering the results presented we believe our noise management process is effective. Noise generated from night flights however remains our priority and this Plan sets out additional measures we plan to take to further improve how this is managed.

Full details of the number of people affected within each contour is published in the full Plan and supplementary information.

#### EAST MIDLANDS AIRPORT NOISE STRATEGY 2013-2018

A full description of our previous Noise Action Plan measures (2013-2018) and performance against these actions is included within Appendix E of the full Plan's supplementary information document.

#### SUMMARY OF CONSULTATION COMMENTS AND RESPONSES

To help us develop the new Noise Action Plan (NAP) views on our draft plan were sought through a public consultation process. This took place over 12 weeks between 8th May 2018 and 30th July 2018.

The objective of the consultation was to give people an early and effective opportunity to participate in the preparation and review of the Noise Action Plan. To ensure the draft Plan was accessible for public consultation, we were careful to explain technical concepts and to provide a glossary of terms. We also published a separate supplementary document so that technical information within the body of the main draft Plan was minimised.

East Midlands Airport has a well-established community engagement and outreach programme, strong relationships with external stakeholders and we are familiar with undertaking public consultation on our strategic plans, including previous Noise Action Plans and the Sustainable Development Plan (SDP). Public consultation played an important part of the NAP process and stakeholder comments were welcomed, encouraged and taken into account. More information about the public consultation process can be found within Chapter 2 of the full Plan.

The airport received over 250 responses to our consultation, of which 30 came from formal stakeholders and a further 223 from local residents across 29 different villages and towns. More details about the summary of responses received, key themes raised and how we have responded are contained within Chapter 16 of the full Plan.

# NOISE ACTION PLAN CONTROLS FOR 2019-2013

At East Midlands Airport we have a long track record of developing policies and taking action to minimise our effect on the environment. In relation to aircraft noise we will continue to work closely with our airline customers and our air traffic controllers so that together we can develop this work to provide real and lasting benefit.

Our long-term noise aim is to 'limit and reduce where possible the number of people affected by noise as a result of the airport's operation and development'. Chapter 7 of the full Plan summarises the airport's performance against our two critical noise controls (see NAP1 and NAP2), and further details of the progress we have made since the publication of our last Noise Action Plan can be found in Appendix E of the supplementary information document.

Our aim for 100% of night flights to be operated by aircraft complying with the requirements of ICAO Chapter 4. To reduce noise at source ICAO has set progressively tighter certification standards for noise emissions from civil aircraft, known as chapters. The chapters set maximum acceptable noise levels for different aircraft during landing and take-off. For example, aircraft falling within Chapter 2 have been banned from operating within the EU since 1st April 2002, unless they are granted specific exemptions. Most civil aircraft, currently operating, fall within Chapters 3 and 4, which are quieter than the previous Chapter 2 aircraft. All new aircraft manufactured from 31st December 2017 onwards must now meet the requirements of Chapter 14. The standard for Chapter 14 has been set at 7dB cumulative margin below that of Chapter 4.

The percentage of aircraft operations at night that meet the requirements of Chapter 4 continues to increase rising from 70% in 2011, to 89% in 2016 and 96% in 2017. Creating the right incentives to address the remaining operations by aircraft that do not meet the requirements of Chapter 4 is important and in our actions (NAP 3 and NAP 5) we have brought forward actions to ensure that the cost to airlines to operate these older and noisier aircraft increases. We anticipate that these measures will eliminate all Chapter 3 operations within the lifetime of this Noise Action Plan.

Secondly, we have a commitment, formalised in a planning condition on an extension to our runway set by North West Leicestershire District Council, that our 'night noise envelope' (based on the 55dB  $L_{\text{Aeq 8-hours}}$ ) will not exceed an area of 16 square kilometres. The airport is operating well within this limit and annual reports on compliance with this planning condition are submitted to the local planning authority and the airport's Independent Consultative Committee. Airport growth has been delivered sustainably, with only a slight increase in the noise contour area of  $0.5 \text{km}^2$  during the last 10 years. We also have entered into a legal agreement with North West Leicestershire District Council (under section 106 of the Town and Country Planning Act) to formalise the requirement for, and the operation of, the airport's Sound Insulation Grant Scheme, which provides financial support to those most impacted by aircraft noise.

## NOISE ACTION PLAN 2019-2023

The future growth of aircraft activity will remain within the agreed noise envelope at all times. In 2013, the forecast we prepared to inform our Sustainable Development Plan indicated that there would be some growth in the contour area in the next few years and that, in the longer term, the transition to quieter 'Chapter 14' aircraft would return the contour to today's levels and then further reduce its size below today's level. We will prioritise actions that create the right incentives for airlines to switch to quieter aircraft. We expect these measures will make sure this transition is as fast as can be practically achieved and that any increase in the noise contour is kept to a minimum. We will update our assessment of the future noise contour when we next update our Sustainable Development Plan.

This new Noise Action Plan sets out 36 measures, listed below in full. In combination, we believe that these measures will ensure the we deliver against our environmental objectives. Appendix H of the Supplementary Information details the impact area of each action, the number of people affected, the expected costs and benefits of each action, its performance indicator and reporting mechanism and the timescales for delivery.

#### **NOISE CONTROLS**

New action

Modified action from previous Noise Action Plan

Retained action from previous Noise Action Plan

STATUS	CONTROL	ACTION
	NAP 1: Night Noise Envelope	Monitor, manage and annually report on performance against the airports 55dB $L_{\rm Aeq}$ (8-hour) summer night time noise contour, aiming to progressively reduce it and ensuring it does not exceed $16 {\rm km}^2$
	NAP 2: Chapter 4 operations	Introduce new actions to ensure that the cost to airlines to operate older and noisier aircraft increases to accelerate progress towards our target of 100% of night flights to be by aircraft meeting the requirements of Chapter 4. We will publicly report the progress we have made.

As noted in the early sections of the Noise Action Plan, we recognise that night time noise from aircraft operations is often the most intrusive. So, it is important that our controls for night noise strike a difficult balance between the economic and social benefits that night operations bring to the East Midlands region and the wider UK and the local disturbance they create. Chapter 8 of the full Plan provides further details of how the airport mitigates against night noise.

#### NIGHT NOISE

STATUS	CONTROL	ACTION
	NAP 3: Noisy aircraft penalty	Apply correction factors to the monitored noise results to take account of the fixed noise monitors not being at the ideal position of 6.5km from the start of the aircraft take off run. This is to enable the most accurate recording and the implementation of noise penalties. Reduce the maximum noise limit for departing aircraft less than 100 tonnes from 83dB to 81dB. By April 2019 Aircraft exceeding this maximum limit will pay £750 for the first dB over the limit and a further £150 for each additional dB over the limit. The noise limits for other aircraft will remain the same.
	NAP 4: QC4, QC8 and QC16 surcharges	Maintain the existing ban on scheduled QC8 and QC16 aircraft operating at night. By April 2019, introduce a new noise surcharge of £2,500 per QC4 aircraft departure between 23:00-07:00. This is in addition to the existing noise surcharges for any QC8 and QC16 night departures approved under exceptional circumstances. Recognising the practical challenges faced by airlines which may need to upgrade their fleets, for scheduled services this charge will be phased in over the course of the Noise Action Plan. For ad-hoc operators the charge will be effective in full from April 2019. All proceeds from the charge are to be donated to the Airport Community Fund.
	NAP 5: Review effectiveness of noise related charges to incentivise the use of Chapter 14 compliant aircraft at night	Review our existing noise charges and change them where required to incentivise the operation of aircraft in the daytime wherever possible and to ensure that, where night time operations are necessary, they are undertaken by quieter aircraft types. The principles we propose to inform the review are:  1. Night-time operations should incur a premium, 2. Chapter 3 aircraft that continue to operate at night should incur a premium, 3. Chapter 14 aircraft that operate at night should receive an incentive.  It is proposed that the review is completed within 12 months and the effectiveness of the revised arrangements is reviewed at the end of the Plan (i.e. 2023). During the review we will continue to apply noise-related supplements to flights that operate during the night, detailed in the Airport Schedule of Charges.



Noise from arriving aircraft is mainly generated from how the air flows over the structure of the aeroplane. This is because the engines are normally operating at quite a low thrust setting. The noise increases the lower the aeroplane is and the closer it gets to the airport. It also increases as the pilot lowers the landing gear and flaps, in readiness for landing.

Chapter 9 of the full Plan summarises the airport's arrival noise performance in recent years. Further details can be found in Appendix E.

## **ARRIVING AIRCRAFT**

STATUS	CONTROL	ACTION
	NAP 6: Continuous descent approach (CDA)	Improve our CDA performance to achieve a target of 98% for arrivals by 2023. This will include a review of the continuous descent approach criteria once the Sustainable Aviation 'low noise arrival' study is complete (anticipated in 2019)
	NAP 7: Steeper approaches	Work with airlines, air traffic control and regulators to evaluate the feasibility and noise benefits of steeper approaches by 2023. Then, if proven, take forward an airspace change proposal with the operators and communities' support.
	NAP 8: Specified arrival routes	Starting in early 2019, explore with the communities the options for specified arrival routes to the airport using new satellite-based navigation technology, seeking to reduce noise impacts. Then, if proven, take forward an airspace change proposal with the operators and communities' support and implement by 2023.
	NAP 9: Low power, low drag approaches	Work with operators to improve compliance with the published low power, low drag procedure. This includes reviewing operating instructions following the outcome of the Sustainable Aviation 'Low Noise Arrival' work anticipated in 2019.

Chapter 10 of the full Plan refers to aircraft ground movements, once they have left the runway. This is the first time we have separately considered these operations. At present there are a number of regulations in place to reduce ground noise at the airport. These are published in the AIP (The UK Aeronautical Information Publication) and cover the use of reverse thrust on landing, engine testing and the use of the aircraft auxiliary power unit (APU). Emerging opportunities to reduce noise from aircraft ground operations are also being explored.

# ON THE GROUND

STATUS	CONTROL	ACTION
	NAP 10: reduced-engine taxi	Continue to promote the use of reduced engine taxi at the airport where it is practical and beneficial to do so.
	NAP 11: Use of Aircraft Ground Power	Work with our industry partners to identify and encourage quieter ways to service aircraft, for example through the use of alternatively fuelled vehicles and equipment.
	NAP 12: Use of intersection departures	We will continue to promote and encourage the increased use of intersection departures, especially from Runway 27 at night to reduce ground noise for local communities.
	NAP 13: Review effectiveness of ground noise procedures	We will carry out a review into the effectiveness of our ground noise procedures and explore options for how these can be improved by end 2020.
	NAP 14: Night time vehicle noise	We will work with our business partners to identify and implement measures to minimise noise from vehicle movements on the airport at night. This will be informed by consultation with our immediate community representatives and be established by the end of 2019.

Noise from departing aircraft is generally the most intrusive for people living near the airport. The largest source of departure noise is from the aircraft engines which are operating close to their maximum on take-off and initial climb out. Chapter 11 of the Noise Action Plan summarises the airport's departure noise performance in recent years. Further details can be found in Appendix E of the full Plan.

# NOISE ACTION PLAN 2019-2023

# **DEPARTING AIRCRAFT**

STATUS	CONTROL	ACTION
	NAP 15: Departure track keeping	Increase our departure 'on-track' keeping performance target to 98% by 2023 at the latest. Continue to monitor and report performance.
	NAP 16: Explore options to improve the effectiveness of NPR's	Work with stakeholders, local authorities and the ICC to identify priorities for changing the route or reducing the width of the airport NPR's to minimise people overflown. This is to create a priority list of noise reduction options based on the community view of the most noise sensitive areas first. This will form the basis of an airspace change options analysis proposal and be implemented as soon as possible in a priority order agreed between the airport and ICC. With the aim for all changes to be complete by early 2022.
	NAP 17: Continuous Climb Departures (CCD)	Explore with airlines and air traffic control, the opportunities to increase use of continuous climb departures through airspace change. Prioritise with communities and seek to implement airspace changes as required as soon as possible and be complete by early 2022. Continue to monitor and report CCD performance.
	NAP 18: Off track departure fines	We will seek to extend our system of noise fines to penalise airlines that persistently fail to meet the requirements of our departure flight paths. Within the first year of this updated NAP, we will work with stakeholders to ensure that any changes to our penalty systems are fair to all parties and deliver the right incentives.
	NAP 19: Noise study into preferential runway use policy	We will undertake a study to understand the noise effects of our policy into the preferential use of runway 27 by 2020.

Despite the application of the techniques and actions discussed so far, we accept that there are areas around the airport still affected by aircraft noise. This is why the airport has developed a range of mitigation and compensation measures for the noise. Noise mitigation is provided through the provision of grants for installing noise insulation for the buildings most affected by noise. Additional compensation is provided through funding support for local community projects.

Chapter 12 of the full Plan summarises the airport's mitigation performance in recent years. Further details can be found in Appendix E of the full Plan.

# MITIGATION SCHEME

	STATUS	CONTROL	ACTION
		NAP 20: Sound Insulation Grant Scheme	Continue to operate a Sound Insulation Grant Scheme to provide support to those people that are most exposed to aircraft noise at night.
		NAP 21: Community Fund	Continue to donate all the money raised as a result of our environmental penalties to the East Midlands Airport Community Fund. The airport will continue to carry out regular reviews of the Community Fund the ensure it remains effective.

To ensure that progress is made in tackling aircraft noise, MAG has invested  $\mathfrak{L}1$  million in a sophisticated aircraft noise and tracking system across its three airports, including East Midlands Airport. Chapter 13 of the full Plan summarises the airport's monitoring and reporting in recent years. Further details can be found in Appendix E of the full Plan.

# MONITORING AND REPORTING

STATUS	CONTROL	ACTION
	NAP 22: Peak noise events report	Establish and share a new report that identifies the noisiest 10% of aircraft night operations by mid 2019. This report will be used to challenge performance with operators and explore options to reduce noise.
	NAP 23: Preferred runway direction	Where conditions allow we prefer aircraft to operate in a westerly direction. Regular reports on runway usage will continue to be produced.
	NAP 24: Training Flights Report	Monitor and report performance to identify trends and any compliance issues. Address issues as necessary
	NAP 25: Low noise arrivals report	We will review the current continuous descent approach (CDA) reporting procedures in light of a Sustainable Aviation 2018 'Low Noise Arrivals' study. Implement changes where agreed and report progress by end of 2019.



# Monitoring and reporting continued

STATUS	CONTROL	ACTION
	NAP 26: Initiate a 'Quiet flight performance' reporting system	Establish and publish a new airline noise performance report by mid 2019, based on a range of key noise criteria, including complaints received, continuous descent arrivals, continuous climb departures, adherence to noise limits, departure track keeping and percentage of Chapter 4 and 14 aircraft in the operator's fleet. An annual award for the highest performing airline is also proposed. This effectiveness of this report will be reviewed on a regular basis with the ICC and prior to producing the next Noise Action Plan.
	NAP 27: Identify smarter ways to work with industry partners in reducing noise	We will review the effectiveness of the Pilot Liaison Group at East Midlands Airport. Specifically looking at identifying the root causes of common environmental impacts and to evaluate and manage potential solutions. Any revisions to the terms of reference for the group, including how it will work with the ICC, will be agreed by mid 2019.
	NAP 28: Review community noise monitor programme	Review and agree a programme for community noise monitoring in consultation with the ICC by end 2019. This includes installing an additional noise monitor at Melbourne ahead of any possible changes to airspace.

Working with our neighbours, local communities, colleagues, customers and on-site businesses is an important part of our business. We fully recognise the importance of carefully listening and discussing any noise concerns. Chapter 14 of the full Plan summarises the airport's communication in recent years and further details can also be found in Appendix E of the full Plan.

# **EFFECTIVE COMMUNICATION**

STATUS	CONTROL	ACTION
	NAP 29: Stakeholder reference groups	Establish new stakeholder reference groups as and when necessary to inform any airspace change proposals, as we seek to modernise airspace arrangements. These will include the airport, operators, air traffic and community representatives to develop options and, where relevant, take forward airspace change proposals to reduce noise. Agree the terms of reference for these groups with the ICC by early 2019.

# Effective communication continued

STATUS	CONTROL	ACTION
	NAP 30: Continually improve noise complaint and enquiry process	Regularly review the airport process for handling noise complaints and enquiries to improve the transparency and effectiveness of the system. This will include consultation with the ICC. First review to be complete by mid-2019 with agreed actions implemented by end 2019.
	NAP 31: Provide and regularly review effective engagement with communities	Continue to provide regular opportunities to engage with local people to understand their concerns and respond effectively to them, to include community outreach events and a community newsletter. Develop and review the effectiveness of our engagement programme regularly through benchmarks like the BITC Community Mark and our own annual Community Impact surveys.
	NAP 32: Carry out regular Community Survey	Carry out an annual community survey to collect views on how effectively the airport is managing aircraft noise issues as well as other issues. Results from the survey will be shared with the ICC, operators, air traffic control and community groups and used to inform any future noise actions.
	NAP 33: Noise related community investment	Provide specific information on aircraft noise related community investment as an appendix to the annual airport Community Investment Report. This will aim to clearly show how noise fines are used to support the communities affected.
	NAP 34: Provide educational and skill development material on aircraft noise	Develop educational material on aircraft noise management. This will include facilitating visits to the airport and information materials and is proposed to support our 'Inspiring Young People' programme.
	NAP 35: Noise Action Plan Progress Report	We will produce at least two reports to the ICC summarising progress made by the airport against this Noise Action Plan. First report to be produced by mid 2020.
	NAP 36: Improve access to noise information on the airport website	Review and implement changes by mid 2019 to improve the accessibility of noise information on the airport website.

