

Noise action plan 2013-2018



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1. Foreword

We need to review our Noise Action Plan because of the Environmental Noise Directive (2002/49/EC), under which member states of the European Union must produce 'noise maps' for the main sources of environmental noise – major roads, major railways, major airports and towns and cities with a population greater than 100,000 people and more than 500 people for every square kilometre (km²). Member states must also produce action plans based on the results of the noise mapping.

Our noise action plan was first published in 2011. We need to revise the plan so shortly after its publication because of the Environmental Noise Directive (2002/49/EC).

Although the law on managing noise, together with the framework and guidelines, are set at national and international level, many measures to control noise at East Midlands Airport have been agreed and introduced locally.

In preparing our plan, we have worked with the airport Independent Consultative Committee, surrounding local authorities, airlines and our own air traffic services. We have also listened to those who took part in our recent Sustainable Development Plan consultation.

We have a track record of developing policies and taking action to reduce the environmental impact from our operations. We believe that we have developed an effective strategy for controlling noise. Our strategy pulls together a wide range of policies, ranging from restricting the use of noisier aircraft types to offering assistance with the costs of sound insulation.

This noise action plan sets out how we will manage the impacts of aircraft noise over the next five years. The plan will continue to evolve and our targets, policies and procedures will most likely change, as we carry out reviews over that time. Any change will be aimed at limiting and reducing, where possible, the number of people affected by noise as a result of the airport's activities.



Andy Cliffe

**Managing Director
East Midlands Airport**

2. Noise Action Plan

In its 1996 Green Paper on Future Noise Policy, the European Commission identified environmental noise caused by traffic, industrial and recreational activities as one of the main local environmental problems in Europe.

The report commented that although the established environmental noise policy – largely made up of laws fixing maximum sound levels for vehicles, aircraft and machines – had reduced noise from individual sources, exposure to environmental noise, especially from road traffic, was not showing the same levels of improvement.

Information about noise exposure is very limited, especially when compared to that collected to measure other environmental problems. That information is also often difficult to compare because of the variety of measurement and assessment methods used.

For this reason, it was proposed that a European environmental noise framework should be created. To produce the framework, all countries across the European Community would need to co-operate, and action would need to be taken at a local, national and international level. That work would be built around three main elements:

- standardising information (noise mapping);
- setting targets; and
- monitoring progress.

This proposal resulted in Directive 2002/49/EC, which relates to the assessment and management of environmental noise. That directive was published in June 2002. Widely referred to as the Environmental Noise Directive or END, the directive has since been adopted in this country as the Environmental Noise (England) Regulations 2006, as amended, (the regulations).

Under the regulations ‘competent authorities’ must produce ‘noise maps’ and an associated action plan every five years.

So far noise maps for the following have been produced.

- Built-up areas (known as agglomerations). The first group of agglomerations were identified as areas which have a population of more than 250,000, have more than 500 people for every square kilometre (km²) and are considered to be towns or cities. This second round review also now includes agglomerations with a population of more than 100,000 and with more than 500 people for every square kilometre (km²)
- Major roads
- Major railways
- Major airports – those whose total number of take-offs and landings is more than 50,000 each year.

There is more information on noise mapping on the website at www.defra.gov.uk/noisemapping.

In the case of this Noise Action Plan and its’ associated noise maps, East Midlands Airport is the competent authority. We must develop and maintain a noise action plan that is designed to manage noise issues and also to protect any quiet areas, which may have been identified as a result of the noise mapping process.

This document sets out our noise action plan for East Midlands Airport. Broadly, our aims are to:

- summarise the effect of noise from aircraft landing and departing from the airport;
- set out measures already in place to manage noise and any measures we intend to introduce over the next five years; and
- show how we intend to measure and report our progress against the targets we have set ourselves.

We must review and, if necessary, revise our noise action plan at least every five years and whenever there is a major development at the airport which would affect the existing noise levels.

3. Public Consultation

We prepared the noise action plan with help from our Independent Consultative Committee, our air traffic services and our airline partners.

First round consultation

In 2009, the following bodies were formally consulted by the airport on the first round draft noise action plan:-

- members of the airport's Independent Consultative Committee including the three City Councils of Leicester, Derby and Nottingham and the three County Councils of Nottinghamshire, Derbyshire and Leicestershire;
- the three District Councils of North West Leicestershire, South Derbyshire and Rushcliffe Borough;
- Parish and Town Councils situated close to the airport;
- the five MPs with constituencies close to EMA and all five East Midlands MEPs;
- the Airport Joint Working Group (an ad-hoc group of local authorities chaired by Leicestershire County Council; and on-site businesses.

In total, 155 organisations and individuals were formally consulted by the airport including MPs and MEPs (see Appendix 1). All received a letter from Penny Coates, the then Managing Director, providing details of the consultation exercise, including the consultation period and the time, date and location of four Outreach Events to be held in local communities. The letter requested that comments on the draft noise action plan be forwarded to the airport by letter, fax or e-mail.

Consultative Committee members, MPs and MEPs received a paper copy of the draft noise action plan; other consultees were referred to the Airport's website where the draft noise action plan could be accessed electronically.

Our approach ensured that we consulted a wide range of interests including local Town and Parish Councils; County, City and District Councils; national bodies such as the National Trust and National Air Traffic Services; regional bodies such as the East Midland Development Agency and East Midlands Regional Assembly; local amenity groups; Chambers of Commerce; the airlines; on-site businesses; MPs and MEPs; and most importantly, people living locally.

In addition, the East Midlands Airport Strategic Development Forum (SDF) considered the topic on two occasions; the first before the start of the consultation process and the second at a specially convened meeting to discuss the draft noise action plan. The SDF was formed in 1998 to provide feedback to the airport on strategic issues. Membership includes both private and public sectors including Chambers of Commerce, the CBI, East Midlands Development Agency (EMDA), East Midlands Racing Association, the local planning authority and GO-EM.

We also put the draft noise action plan on the agenda of one of our quarterly tenants' liaison meetings and received useful feedback.

Community Outreach Events

Given the local focus of this exercise as determined by the areas delineated by the strategic noise maps, we were particularly keen to ensure that local communities had every opportunity to be aware of the draft plan and comment on it. We therefore arranged four community outreach events which took place on the following dates:-

- Diseworth Heritage Centre, 14th July 2009;
- Melbourne, Bill Shone Leisure Centre, 21st July 2009;
- Castle Donington Village Hall, 25th August 2009;
- Kegworth Parish Council Rooms, 29th September 2009.

Melbourne is situated in South Derbyshire, the other three Outreach venues being within North West Leicestershire. Airport representatives were present to assist at these events. Immediately afterwards short action notes were prepared listing the main issues raised and other relevant information.

Media/Advertising

The front page of the airport's website contained a direct link to the draft noise action plan. A press release was issued drawing attention to the forthcoming public consultation exercise. This received prominent coverage in several daily and local newspapers and on local radio. Some newspapers ran a series of articles on the draft noise action plan and the consultation process. Posters were placed at key locations drawing attention to the Community Outreach Events. These were supplemented by adverts placed in several local publications. The draft noise action plan process was also highlighted in our community newsletter 'The Flyer', which is distributed to over 45,000 homes.

There was a good response to the draft noise action plan. We received 77 responses from a wide range of interests including County Councils, Parish Councils, amenity groups, the National Trust, employers, local residents and MPs. Most respondents were private individuals. We received 11 responses from Melbourne residents, 6 from Castle Donington, 3 from Kegworth and 2 from Diseworth residents. The largest numbers of responses however, were from residents living outside the NAP Area in places such as Repton, Shardlow, Beeston, Keyham, and Swadlincote. In addition, 65 people engaged with airport staff at the four outreach events. A list of first round respondents is provided in Appendix 2.

Second round consultation

Our existing Noise Action Plan is not that old. However, as requested by Defra, we have carried out a 'light touch' review of the plan with our airport Independent Consultative Committee. Our proposals have also formed part of our recent Sustainable Development Plan consultation.

Proposed revisions to the noise action plan were considered by the Independent Consultative Committee's Monitoring, Environment Noise and Track

(MENT) sub-committee at its meetings in September 2013 and January 2014.

The proposals were also included in the noise chapter of our Sustainable Development Plan.

The Sustainable Development Plan – which replaces the 2006 Airport Master Plan – was published for public consultation in March 2014. The consultation received widespread media coverage in the local newspapers and on regional television. As part of the consultation on the Sustainable Development Plan six community outreach events were held.

These took place on:

- 3rd March 2014 East Leake Academy
- 5th March 2014 Diseworth Heritage Centre
- 10th March 2014 Aston on Trent All Saints Heritage Centre
- 12th March 2014 Kegworth Parish Rooms
- 19th March 2014 Melbourne Assembly Rooms
- 26th March 2014 Castle Donington Parish Rooms

Details of the outreach events were included in the winter edition of our 'Community Flyer', circulated to 34000 homes, across 11 local postcode areas.

A list of second round respondents is provided in Appendix 2.

Following the consultation, our final Sustainable Development Plan is expected to be published by the end of 2014.

4. East Midlands Airport

Our 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 keeping the number of people affected by aircraft noise to a minimum by routinely reviewing our noise-related targets and policies.

East Midlands Airport was developed by the County Councils of Leicestershire, Derbyshire and Nottinghamshire and the City Councils of Derby and Nottingham. The airport opened in 1965, and in its first year handled over 118,000 passengers. By 2008 over 5.6 million passengers a year were using the airport.

Today East Midlands Airport is:

- The 11th busiest passenger airport in the UK, in 2013 handling 4,332,000 passengers
- The UK's largest pure cargo airport, handling 300,000 tonnes in 2013
- The UK's major air mail hub
- The UK's leading express freight airport, with three of the major global integrated freight airlines based at the airport
- The largest single employment site in Leicestershire with some 6,700 people working on the site

The airport is in a strategic location in the centre of the UK, with direct access to the national motorway system. This 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 is within a four hour drive. The airport's location and its catchment area provide an opportunity for its future growth and development.

Aviation and the transport by air of goods, as well as passengers, are of national significance and economic importance. As air freight represented over 40% of UK exports to countries outside the EU in 2012, (by value - according to HM Revenue and Customs), all regions of the UK including the midlands need easy access to global air freight connectivity, if they are to contribute to the Government's objectives of re-balancing the economy and promoting export-led growth. We live in an increasingly global market place and the East Midlands region's central UK location and excellent surface access links, allied to a wide range of global freight and mail connections from East Midlands Airport makes it one of the best connected parts of the UK.

East Midlands Airport makes a significant contribution to the regional economy, particularly to the Three Cities of Nottingham, Leicester and Derby and to the district of North West Leicestershire. These economic benefits are in the form of passenger and cargo connectivity, economic activity (GVA –the value of goods and services produced in an economy) and in direct and indirect employment. East Midlands Airport is estimated to generate £239 million of GVA each year. The Airport is the largest single employment site in Leicestershire and the most recent employment survey (2013) showed that there are 6,730 people employed on the site in 90 companies. Airport employees live in the local area with 42% living in Derbyshire, 23% in Leicestershire and 23% in Nottinghamshire.

East Midlands Airport has significant capacity, capability and the flexibility to grow. This can be achieved by the airport fulfilling its passenger and cargo potential through increased penetration into its

own and adjacent catchment areas and by making full and effective use of its existing runway and infrastructure. Our traffic forecasts show that East Midlands could achieve a throughput of 10 million passengers a year, in the period 2030 to 2040. And a cargo throughput of some 618,000 tonnes during the same period.

In our 2013 Sustainable Development Plan we committed to a policy of encouraging the quieter types of aircraft and imposing restrictions and penalties upon the use of noisier types.

Our 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 reducing 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 affected by our work by further developing our community-relations programme and improvements to our mitigation schemes

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.

You can see more about our Sustainable Development Plan on the East Midlands Airport website at eastmidlandsairport.com.

5. Noise Mapping

What are noise maps?

In the same way as 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 can be used to provide information on noise levels and the number of people affected, their main purpose is to help authorities produce noise action plans designed to manage noise and reduce noise levels where appropriate.

How were the maps made?

Our noise maps have been produced using the Integrated Noise Model (INM). INM is a computer model that takes account of things such as the number and types of aircraft departing and landing, where the aircraft are flying, and the time of day or night, to estimate the noise on the ground around an airport.

Are the noise maps different from the noise contour mapping seen previously?

If you compare the noise maps with the noise contour maps previously produced for us or other UK airports, you may notice some significant differences. The noise maps in this document have been prepared specifically to help us produce our noise action plan. Noise contour maps are produced using aircraft movements for an average summer's day (mid-June to mid-September), and it has been custom to produce separate maps for only the 16-hour day (7am to 11pm) and 8-hour night (11pm to 7am). The contours are presented in terms of the 'A-weighted equivalent continuous noise level' (L_{Aeq}). The A-weighting is designed to represent the human ear's response to sound.

Under the Environmental Noise (England) Regulations 2006, as amended, noise mapping is carried out every five years – most recently in 2011 - for an average day (January to December) for each of the following periods.

- L_{day} – the level in the day, 7am to 7pm
- $L_{evening}$ – the level in the evening, 7pm to 11pm
- L_{night} – the level at night, 11pm to 7am
- L_{den} – 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 considered to be more disturbing at certain times of the day, 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.

As a result of these differences, the two sets of contours are not directly comparable. We recognise that people respond differently to noise, and this makes it difficult to quantify the relationship between noise and annoyance. As a first priority, we need to consider any further measures which we could take in areas which noise maps show have homes exposed to more than 69dB L_{Aeq} from 7am to 11pm. The 2011 noise maps showed that no properties fell within this contour.

6. Noise mapping – results

Areas falling within the 2011 noise maps, produced to help us prepare this noise action plan, are summarised here.

L_{den} contours

The outermost L_{den} value identified is the 55 L_{den} contour. The 55 L_{den} contour extends over six kilometres to the west of the airport, as far as Melbourne. To the east, the contour extends approximately twelve kilometres from the airport and includes parts of Sutton Bonnington, East Leake and Kegworth. To the north, the southerly edge of Castle Donnington is included. The 60 L_{den} contour extends as far as Kings Newton to the west and the village of West Leake to the east, extending as far as the southerly edge of Castle Donnington and Kegworth to the east. The 65 L_{den} contour takes in the Donnington Park circuit to the west of the airport, whilst clipping the southern-most tip of Kegworth village to the east. Other than to the immediate east and west of the airport, where it extends over mainly rural areas, the 70 L_{den} contour largely follows the boundary of the operational areas of the airport. The innermost 75 L_{den} contour remains almost entirely within the perimeter of the airfield.

L_{night} contours

Of the L_{night} contours, the outermost 48dB contour extends as far as the village of Melbourne to the west. To the east, the contour extends just beyond the village of Costock. To the north and east, the contour takes in parts of Castle Donnington and the village of Kegworth. The southern-most tip of the contour extends to the village of Calke. The 51 L_{night} contour reaches out as far as East Leake to the east and to the west, Kings Newton. The 54db contour takes in the mainly rural areas to the east of Sutton Bonnington and to the west of the Donnington Park circuit. To the north and east it touches the tip of Castle Donnington and parts of Kegworth. To the south it remains within the airport boundary. The 57dB contour passes over rural areas to the south of Castle Donnington and clips the southern-most tip of the village of Kegworth. The 60dB contour remains within the airport boundary to the north and south, stretching out over south Kegworth, as far as the A6 to the east. The 63dB contour, again, remains within the airport boundary to the north and south, taking in mainly rural land to the east of the M1 motorway. The 66dB contour remains entirely within the airport boundary, other than to the east, passing just beyond the M1 motorway.

We have sent our noise maps to Defra, who have estimated the population and number of homes exposed to noise above the various levels.

Defra have rounded the number of homes to the nearest 50, except when there are fewer than 50, in which case the total has been shown as 'Fewer than 50'. Defra have rounded the number of people to the nearest 100, except when the population is less than 100, in which case the total number of people has been shown as 'Fewer than 100'. Defra worked out the number of homes and the associated population using Ordnance Survey Master Map Address Layer and information from the 2011 Census, taking account of buildings that contain more than one home, such as apartment blocks.

24 hours

Estimated area of contours, total number of homes and total number of people above various noise levels – L_{den}

Noise level (dB)	Area of contour (km ²)	Number of homes	Number of people
55 or more	37.1	5250	12800
60 or more	13.9	1000	2400
65 or more	5.0	250	600
70 or more	1.9	Fewer than 50	Fewer than 100
75 or more	0.8	0	0

Daytime (7am to 7pm)

Estimated area of contours, total number of homes and total number of people above various noise levels – L_{day}

Noise level (dB)	Area of contour (km ²)	Number of homes	Number of people
54 or more	12.3	850	2100
57 or more	6.8	300	800
60 or more	3.7	150	300
63 or more	2.0	Fewer than 50	Fewer than 100
66 or more	1.2	0	0
69 or more	0.7	0	0

Evening (7pm to 11pm)

Estimated area of contours, total number of homes and total number of people above various noise levels –

L_{evening} .

Noise level (dB)	Area of contour (km ²)	Number of homes	Number of people
54 or more	15.2	1450	3600
57 or more	8.4	550	1500
60 or more	4.5	300	900
63 or more	2.4	150	300
66 or more	1.4	Fewer than 50	Fewer than 100
69 or more	0.8	0	0

16-hour L_{Aeq} (7am to 11pm)

Estimated area of contours, total number of homes and total number of people above various noise levels –

$L_{\text{Aeq, 16-hour}}$.

Noise level (dB)	Area of contour (km ²)	Number of homes	Number of people
54 or more	13.0	900	2300
57 or more	7.2	400	1100
60 or more	3.8	200	400
63 or more	2.1	Fewer than 50	Fewer than 100
66 or more	1.2	0	0
69 or more	0.7	0	0

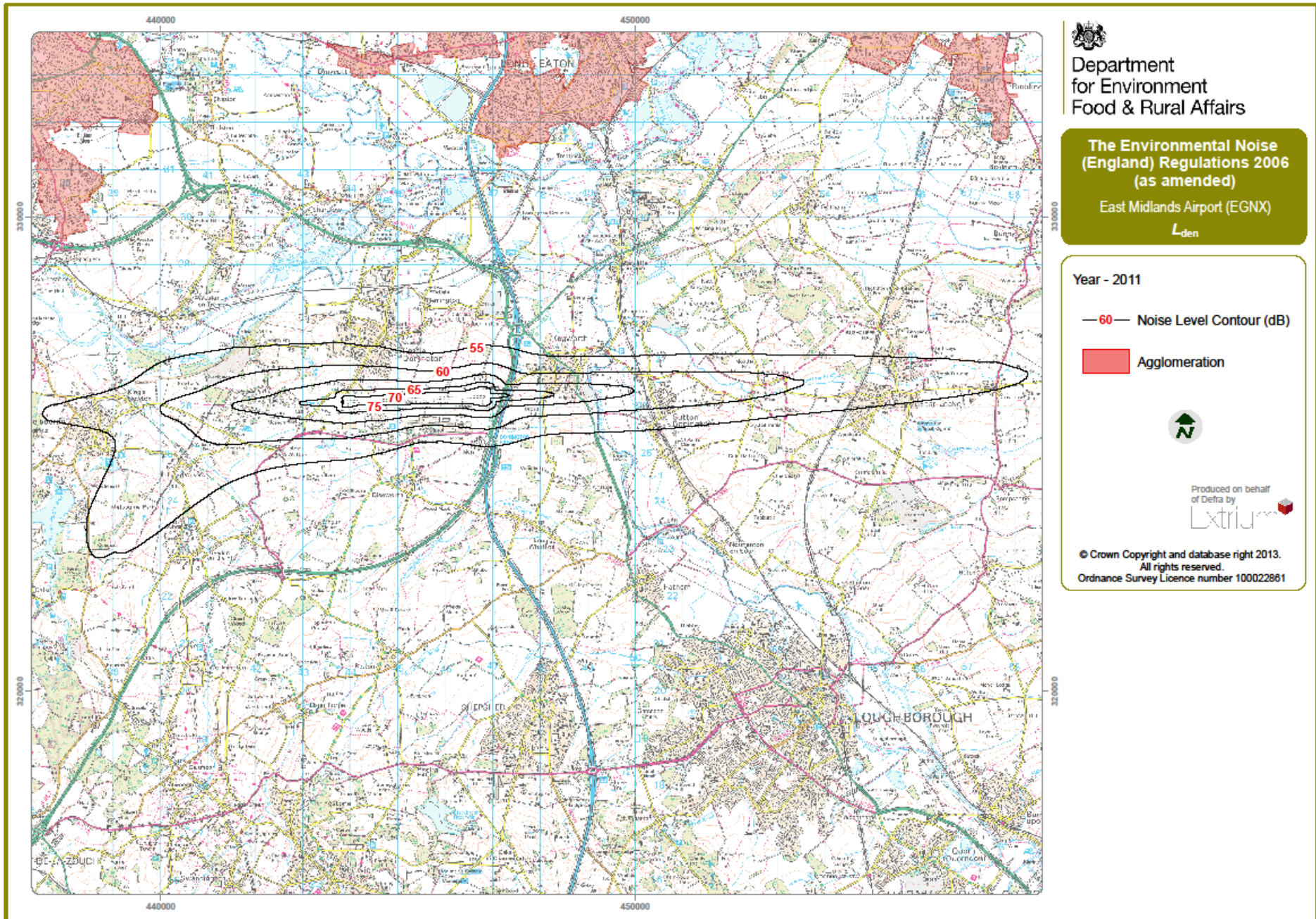
Night-time (11pm to 7am)

Estimated area of contours, total number of homes and total number of people above various noise levels –

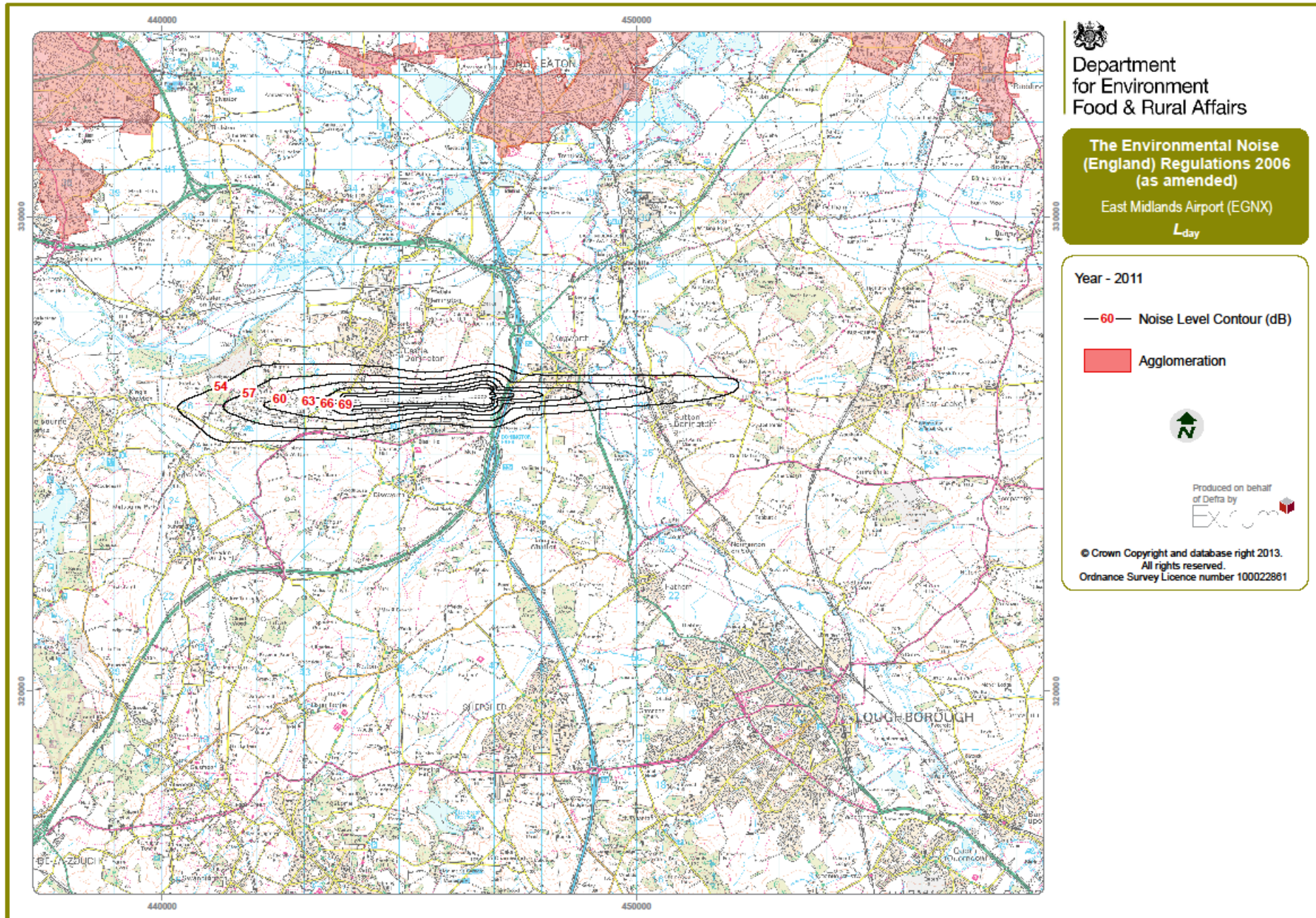
L_{night} .

Noise level (dB)	Area of contour (km ²)	Number of homes	Number of people
48 or more	41.1	5900	14200
51 or more	22.7	2150	5300
54 or more	12.7	900	2200
57 or more	7.0	400	1100
60 or more	3.7	150	400
63 or more	2.1	Fewer than 50	Fewer than 100
66 or more	1.2	0	0

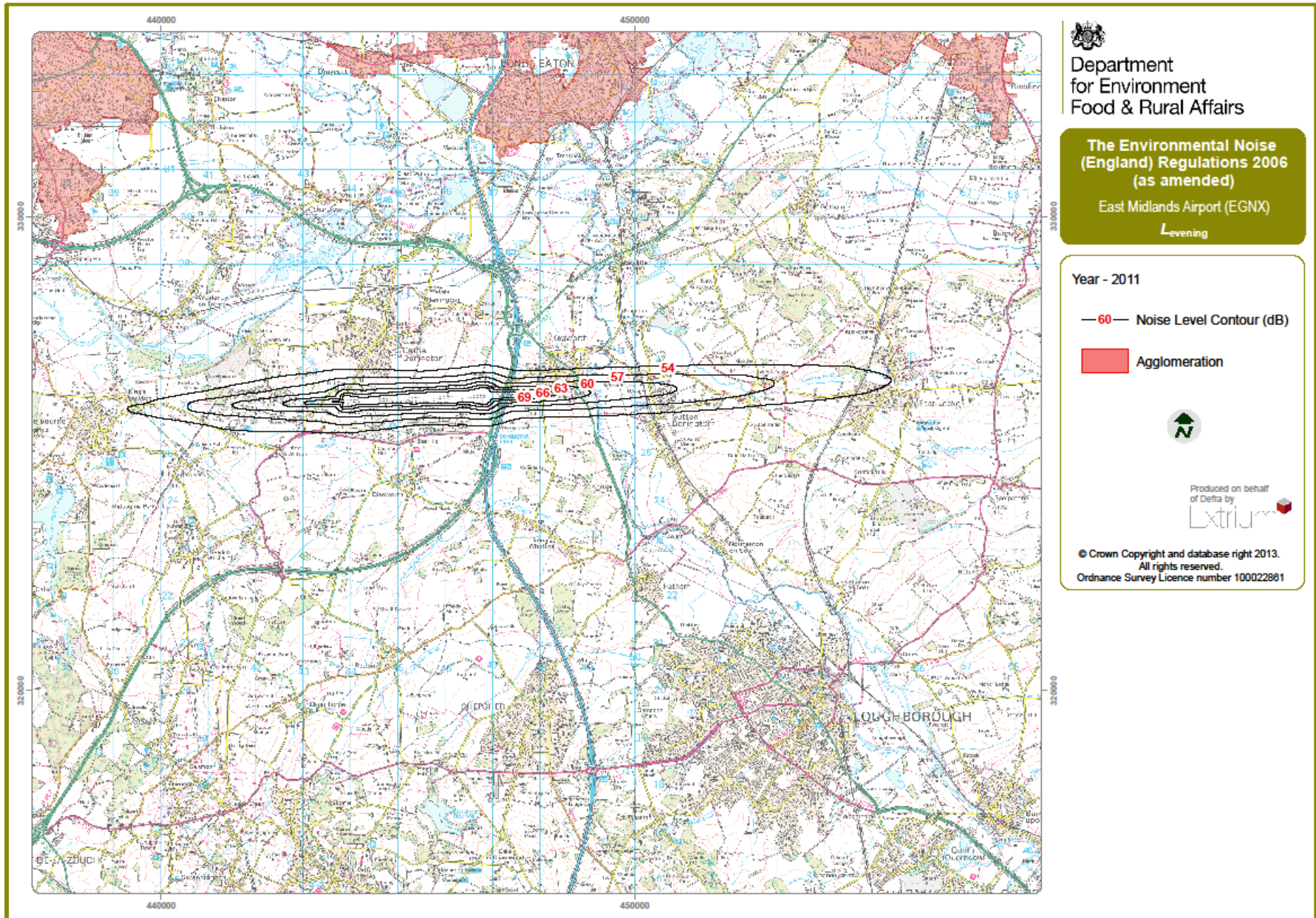
24 Hours L_{den} contours



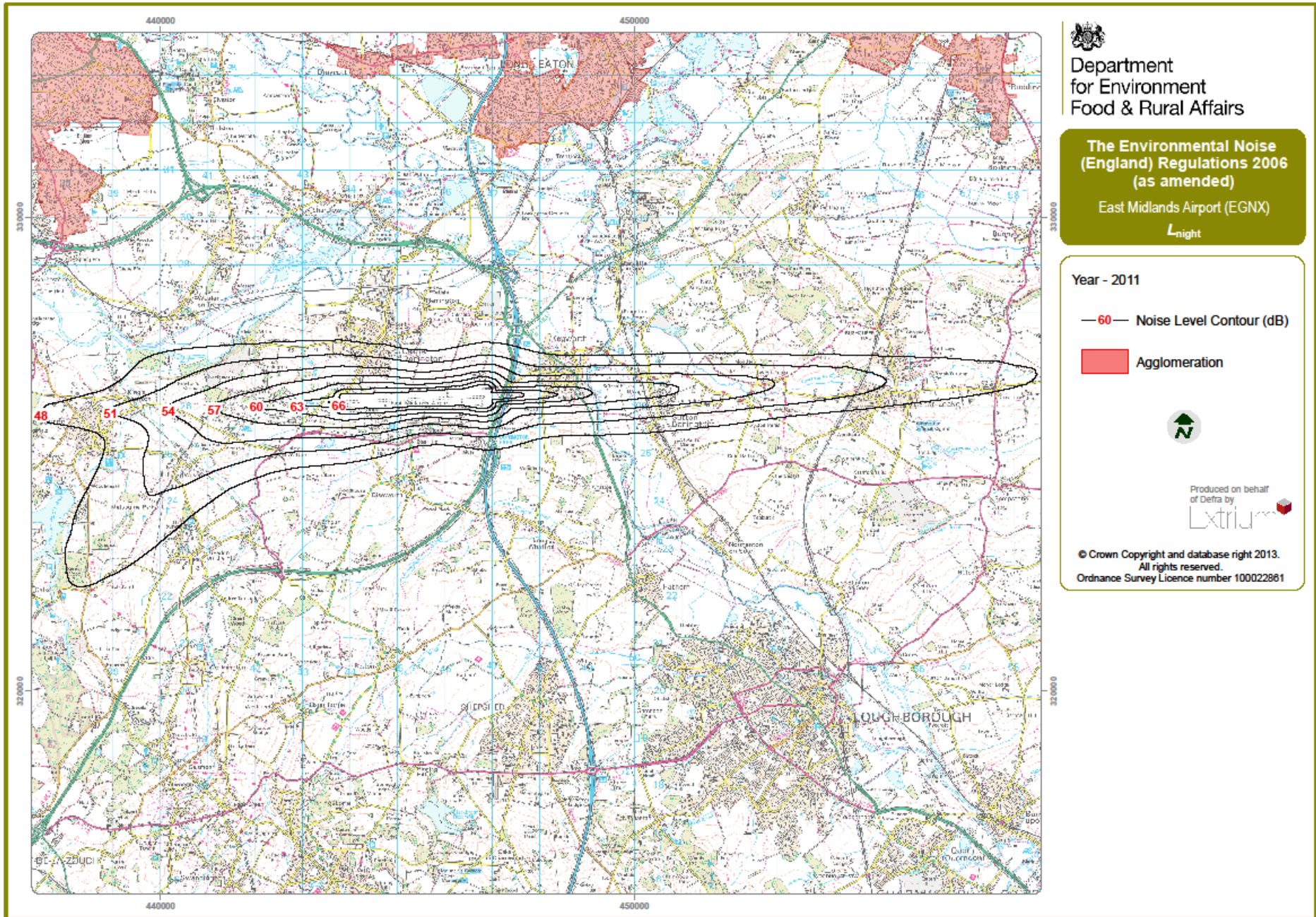
Daytime (7am to 7pm) – L_{day} contours



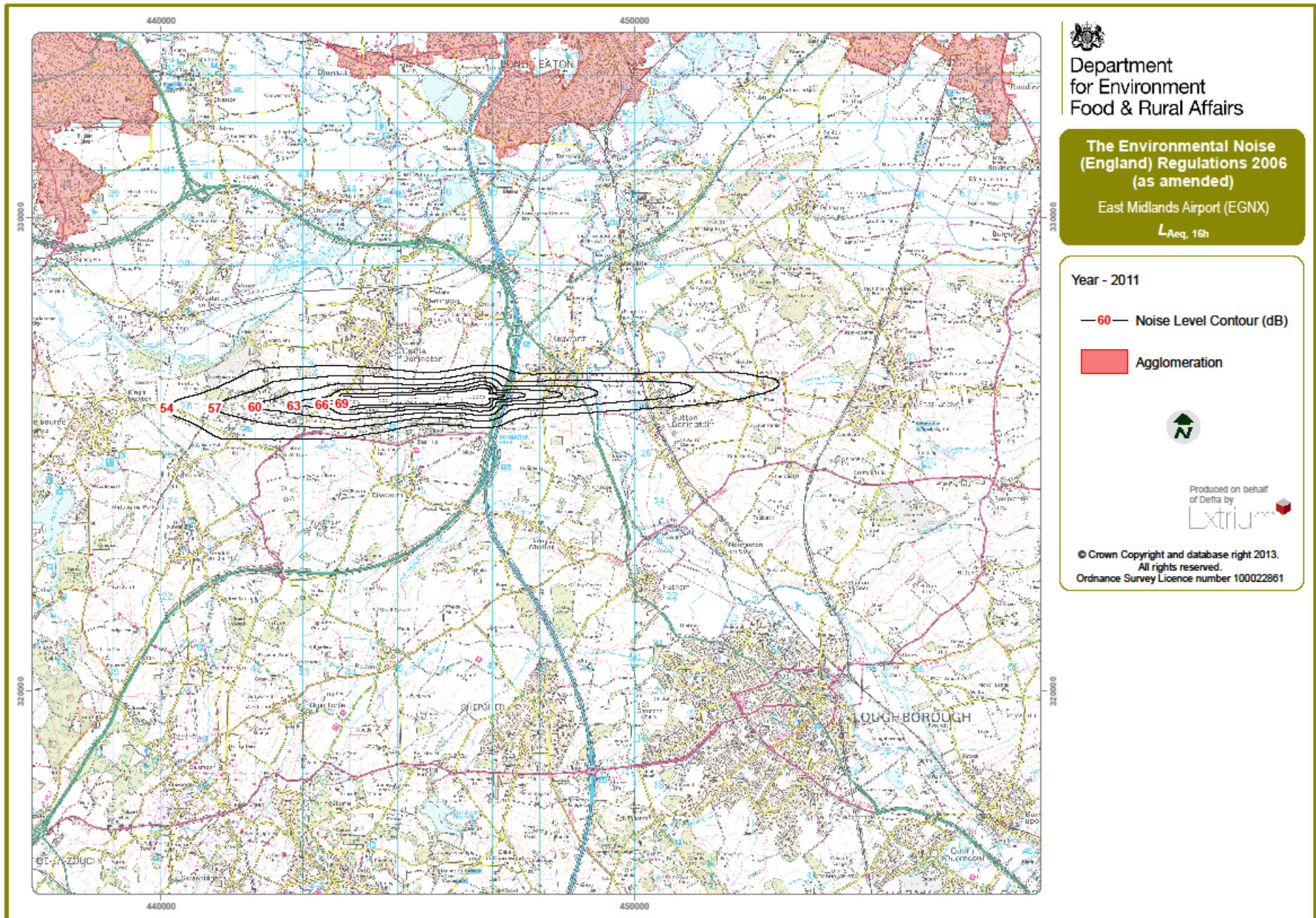
Evening (7pm to 11pm) – L_{evening} contours



Night-time (11pm to 7am) – L_{night} contours



16-hour (7am to 11pm) – L_{Aeq} contours



7. Relevant laws and policies

The laws and policies that relate to controlling aircraft noise come from international agreements, the European Union, national laws and local agreement.

INTERNATIONAL

ICAO regulatory framework

The International Civil Aviation Organisation (ICAO) is the United Nation's body that oversees the worldwide civil aviation industry. The ICAO's regulatory framework aims to strike a balance between the need to reduce aircraft noise around airports and the needs of airlines and aircraft manufacturers. This is called the 'balanced approach'.

The main elements of the 'balanced approach' were incorporated into UK law as part of the Aerodrome (Noise Restrictions) (Rules and Procedures) Regulations 2003. Those main elements include the following.

- Reducing noise at source

Developing quieter aircraft. This is achieved worldwide through there being increasingly strict ICAO noise standards for new aircraft.

- Land-use planning

Controlling how land can be used and managed to discourage or prevent inappropriate developments around airports.

- Operational procedures

Procedures designed to reduce the noise nuisance associated with aircraft.

- Operating restrictions

Measures that limit aircraft access to airports (for example, night restrictions or gradually withdrawing the noisier types of aircraft).

At present the framework applies to all city airports and other civil airports with more than 50,000 take-offs or landings a year

The ICAO puts aircraft in categories known as 'chapter'. The chapter an aircraft is in is based on noise measurements taken at the time of its noise certification, taking account of its size and number of engines. The chapters provide an effective and consistent way of controlling noise, with the most recent (and strict) chapter 4 standard applying to aircraft certified after 2006.

Many chapter 3 aircraft currently in use already meet the chapter 4 standard. However, restrictions are now being placed on the use of noisier chapter 3 aircraft, which have become known as 'marginally compliant chapter 3'.

A new chapter 14 noise standard, to be applied to aircraft types, entering service after 2017 was agreed in 2013.

Environmental Noise Directive (2002/49/EC)

The Environmental Noise Directive has two main aims.

Firstly, to define a common approach to avoiding, preventing or reducing the harmful effects, including annoyance, of being exposed to environmental noise.

Member states must do the following.

- Carry out noise mapping to determine people's exposure to environmental noise.
- Make sure that information on environmental noise and its effects are made available to the public.
- Adopt action plans, based on the results of noise mapping, with a view to:
 - preventing and reducing environmental noise, particularly where noise levels can have harmful effects on human health; and
 - maintaining the level of environmental noise where it is good.

Secondly, to provide a basis for developing community measures to reduce noise from major sources, particularly road and rail vehicles and networks, aircraft, outdoor equipment, industry, and mobile machinery.

NATIONAL

The Environmental Noise (England) Regulations 2006, as amended

In October 2006, the Environmental Noise Directive was put into practice in England through The Environmental Noise (England) Regulations 2006, as amended.

The regulations state that for the purpose of producing noise maps at 'non-designated airports' (including East Midlands), the airport operator is considered to be the competent authority.

Noise maps for East Midlands Airport have been produced and the Secretary of State for Environment, Food and Rural Affairs adopted these in 2007. They can be found on the website at www.defra.gov.uk/noisemapping.

Under the regulations, we must produce a noise action plan.

The Environmental Noise (England) Regulations 2006, as amended, say that the action plan must:

- be drawn up for places near the airport that fall within the 55 dB(A) L_{den} contour or the 50 dB(A) L_{night} contour on noise maps;
- be designed to manage noise levels and effects, including reducing noise if necessary; and
- aim to protect quiet areas in agglomerations against an increase in noise.

The Civil Aviation Act 2006

Under this act, each airport authority can establish a 'noise control scheme' which may limit the numbers or types of aircraft that can be used in any given period. It also gives airport authorities the power to introduce

charges and penalties designed to encourage the use of quieter or less-polluting aircraft.

The Aerodromes (Noise Restrictions) (Rules and Procedures) Regulations 2003

These regulations were taken from EC Directive 2002/30/EC. The regulations introduced the 'balanced approach' to managing aircraft noise.

The Aviation Policy Framework

As part of its long-term plan for the future of the aviation industry, the UK Government's overall policy on noise is to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise.

Some of the measures are as follows.

- Promoting research into and development of new low-noise technologies.
- Recognising the 'balanced approach' (the regulatory framework for controlling noise, as agreed by ICAO in 2001).
- Confirming that, apart from the designated airports (Heathrow, Gatwick and Stansted), appropriate noise controls should be agreed locally.
- Airports should consider using differential landing charges to incentivise quieter aircraft.

Future Airspace Strategy for the United Kingdom 2011 to 2030 (FAS)

In 2011, the Civil Aviation Authority published its view of how UK airspace should be modernised to further improve safety and efficiency.

The FAS vision is to establish:

"Safe, efficient airspace, that has the capacity to meet reasonable demand, balances the needs of all users and mitigates the impact of aviation on the environment."

The strategy has three main drivers: safety, capacity and environment.

National Planning Policy Framework

The National Planning Policy Framework sets out the Government's planning policies for England and how it expects those policies to be applied by local authorities

The framework says that when considering planning applications for developments that could be affected by noise and those which could generate noise, authorities should aim to do the following:

- prevent noise arising as a result of new developments from having a major negative effect on people's health and quality of life;
- keep other negative effects which noise from new developments has on people's health and quality of life to a minimum;
- recognise that developments will often create some noise and a business, in order to grow, should not have unreasonable restrictions placed upon it because

of changes in land use that have arisen since their business was established;

- identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.
- The Noise Policy Statement for England (NPSE)

The NPSE sets out the long-term vision of the Government's noise policy.

Noise policy's vision:

Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.

Noise policy's 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

Sustainable Aviation

Launched in 2005, Sustainable Aviation is a long-term strategy for the UK aviation industry. It brings together airlines, airports, manufacturers and air traffic service providers. Its main aim is to make sure the industry can perform well over the long term. It sets out a number of targets to reduce the environmental effects of UK aviation and makes a commitment to report progress.

We have signed up to the strategy and will continue to play our part in achieving its commitments, particularly those about controlling aircraft noise.

In 2013, Sustainable Aviation launched its' Noise Road-Map.

The Road Map has been conceived around the four elements of the ICAO's 'balanced approach', adding communication and community engagement to the key principles of:

- Reducing noise at source
- Planning and managing land use
- Operational procedures for reducing noise
- Operating restrictions

The Road-Map looks at how the aviation industry can manage aircraft noise between now and 2050. It also acts as a toolkit for airports to introduce measures to reduce the effect of noise impact from aircraft operations.

LOCAL

Sustainable Development Plan

After publishing its national policy for aviation in The 2003 Air Transport White Paper, the Government required airport operators to produce master plans which set out their approach to developing the airport.

Planning authorities will take master plans into account when preparing regional and local policies and making planning decisions.

Our 2013 Sustainable Development Plan is supported by four detailed plans covering community, ground transport, land use and environment.

In our 2013 Environment Plan, we set out a clear framework designed to guide the development of our environmental policy and management. In it we identify the main environmental issues likely to influence the development of the airport and set short-, medium- and long-term targets and actions that form a part of our environmental programme.

The chapter on noise in the Environment Plan is entirely consistent with and compliments this noise action plan.

The 2013 Aviation Policy Framework repeats the requirement for such master plans, their scope and how they are applied.

London Airspace Management Programme (LAMP)

A product of the Future Airspace Strategy, the LAMP project will modernise and simplify airspace across the south of England providing significant environmental, safety and service improvements.

By simplifying structures and procedures that have evolved over many years, this process has the potential to greatly improve the noise performance of aircraft operations. For instance, it is often the complexity of airspace use that reduces the ability to fly continuous descents and continuous climbs.

Planning policy

We work closely with local planning authorities when they are preparing their local development plans. This supports the balanced approach and helps to make sure that local planning policies are in line with guidance set out in the National Planning Policy Framework. Such policies are included in the emerging North West Leicestershire, South Derbyshire and Rushcliffe Borough Council Local Plans. Ensuring that the requirements in the previous Planning Policy Guidance 24 (PPG24) continue to be met.

Independent Airport Consultative Committee

The East Midlands Airport Independent Consultative Committee (ICC) is made up of 35 members representing local authorities, community groups and user groups. It meets every three months to consider progress reports on current community issues, including results of environmental monitoring, analysis of community complaints, development proposals, environmental management initiatives and traffic statistics. The Committee has two sub-groups.

- The TEP (Transport, Economic Development and Passenger Service) is responsible for providing advice on matters involving running the terminal, passenger comfort and the facilities and services offered to passengers.
- The MENT (Monitoring, Environment, Noise and Track) concentrates on looking at ground transport, environmental controls and policy, airline performance and work on the airfield.

8. Noise Controls

When setting out its aim to 'limit and where possible reduce the number of people in the UK significantly affected by aircraft noise', the Government stated that a number of measures would be needed to achieve what was recognised as a 'challenging objective'.

The measures the Government identified included:

- promoting research into and developing new low-noise technologies;
- introducing the ICAO regulatory framework or 'balanced approach';
- putting the Environmental Noise Directive into force;
- keeping the current regulations on noise at the three London airports, and considering applying these to other airports where local controls are not being effective; and
- supporting the increased use of financial incentives and penalties at airports where there is still a significant noise issue.

At East Midlands Airport we have a track record of developing policies and taking action to reduce our effect on the environment.

Our long-term aim relating to noise 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 believe that we need to continue to work closely with our airlines and our air traffic controllers so that we can effectively influence behaviour and provide real and lasting benefit.

In developing our environmental objectives we have made sure we have adopted a balanced approach, as required by the ICAO regulatory framework.

We have taken into consideration the Government's position as stated in the Aviation Policy Framework that "... the industry must continue to reduce and mitigate noise as airport capacity grows. As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements."

The Government recognises that a fair balance has to be struck between local disturbance, the limits of social acceptability and the economic benefit.

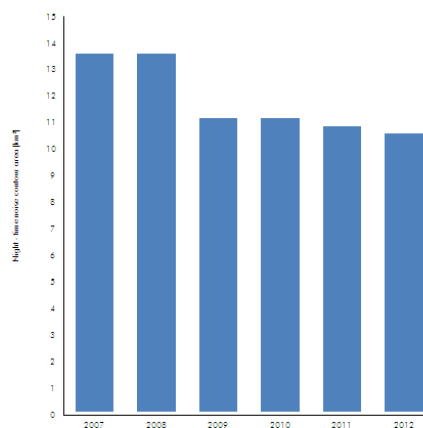
Our current noise controls include almost 30 measures designed to reduce the effect that aircraft noise has on surrounding communities.

We believe that our noise controls are consistent with the Government's aim to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise. For example in 2007, after the publication of the last Master Plan, the area of the night-time 55 L_{Aeq} noise contour was 13.7 $_{km^2}$, by 2012 this had fallen to 10.7 $_{km^2}$. The area of the daytime 57 L_{Aeq} contour also reduced from 11.2 $_{km^2}$ to 8.4 $_{km^2}$ over the same period.

Our Environmental Objectives are to:

- Make sure that the area of the 55dB (L_{night}) noise contour does not exceed 16 square kilometres;
- Encourage the use of quieter aircraft and;
- Meet any noise-reduction objectives that are introduced from time to time

Area of the night-time (11pm – 7am) noise contour



We have reviewed our predictions of future noise impact, with a particular emphasis on night-time operations. Whilst there remains some uncertainty about the rate at which newer and quieter aircraft types will progressively enter service, we believe that is possible to provide greater reassurance to the local community and that our future noise impact will be lower than was previously predicted.

We also recognise the Government's desire that airports '...pursue the concept of noise envelopes as a means of giving certainty to local communities about the levels of noise which can be expected in the future and to give developers certainty on how they can use their airports'. In our Noise Action Plan, we said that we thought that there was 'merit in adopting a target based on the 55 decibel night noise contour' and that this '...issue will be examined again in future reviews of the NAP, particularly when the Master Plan is reviewed and rolled forward'. We propose therefore to establish a long term noise envelope to provide greater reassurance to the local community.

NAP1: 'noise envelope'. From 2014, our 'noise envelope' will be based on the lower 55 decibel night-time noise contour (55 dB L_{night}) and we will ensure that this contour does not exceed an area of 16 square kilometres.

This new noise envelope, which is consistent with the view taken of our local planning authority when determining our application to extend the runway, represents an improvement of 27% on our previous limit and we will continue to closely monitor and publicly report our performance by calculating noise contours annually.

9. Departing Aircraft

Although improved engine design has dramatically reduced the level of noise generated by aircraft immediately after take-off, noise on departure can still be a major source of disturbance to our neighbouring communities.

Like many other airports, to control aircraft noise on departure we operate a system of what are known as 'noise preferential routes' (NPRs).

Reflecting current UK Government policy, our NPRs are designed to concentrate departing aircraft along the lowest possible number of departure routes, and away from more densely populated areas, whenever this is possible. This reduces the number of people aircraft are flying over.

The number of flights following our NPRs has become a very important performance indicator for us. We routinely report performance against this indicator to airlines, air traffic control and our Independent Consultative Committee. Through working with our airlines and air traffic controllers, over a number of years we have increased the number of flights following NPRs. In 2013 just 3% of departures left our NPRs (that is, flew 'off track').

By 2015 we will review the width of our NPRs and carry out formal trials to investigate the use of new operational procedures and technologies, to see if changes could bring significant noise benefits to local communities. We will not make any changes without consulting the public through the Independent Consultative Committee and the surrounding local authorities.

NAP2: 'off-track' departures. We have an annual limit of no more than 10% off-track departures. We will routinely review the width of our NPRs and investigate the use of new operational procedures and technologies to see if changes could bring significant noise benefits to local communities.

Sometimes, for instance as a result of bad weather, air traffic control may cancel the need for an aircraft to follow an NPR. Such a departure is described as being 'non -standard'. We understand that because non-standard departures can result in aircraft flying over more densely populated areas, they can be particularly disturbing. For this reason we keep the number of this type of departure to a minimum.

Departing aircraft normally take off into the wind. However, if there are clear benefits to departing in a particular direction, a limited amount of wind from behind may be acceptable. By specifying our preferred runway direction as westerly (that is, aircraft approaching to land from the east and taking off to the west) we can further reduce the number of departing aircraft flying over more densely populated areas to the north and east of the airport.

NAP3: preferred runway direction. Where conditions allow, we prefer aircraft to take off in a westerly direction.

The Sustainable Aviation, Departures Code of Practice highlights the potential environmental benefits of avoiding or reducing periods of level flight as an aircraft climbs to its cruising altitude. This is referred to as Continuous Climb Operations (CCO). Whilst CCO is the ideal practice for airlines and air traffic control, local airspace restrictions and traffic conditions can often prevent their use

Locally, through the newly formed Collaborative Environmental Management group and the Pilot Liaison group we will work to identify and introduce more efficient departure procedures including the possibility of 'continuous climb departures' (CCD).

NAP4: continuous climb departures. By 2014 we will develop the ability to monitor CCD and will report upon how well we are doing.

We understand that training flights can be particularly intrusive and we already place tight controls on their scheduling.

Training flights need the prior approval of air traffic control. Permission is only given between 8am and 9pm in the winter and 7am and 8pm in the summer. Training flights are only permitted by based operators, regular users of the airport or small propeller aircraft. Training is not permitted at weekends or on UK Public Holidays, except by small propeller aircraft.

Currently, training flights by jet aircraft are not allowed at weekends and Bank Holidays or by airlines that do not operate commercially from the airport.

However, we are mindful of the Government's policy aim to make best use of the airport capacity available in the UK and in particular the demands placed on airports in the south east. We have received feedback from airlines that, due to the stringent nature of the airport's controls, they have had to fly to other UK airports to undertake training. As a result, we intend to review our controls in this area to consider whether there is a case to allow greater flexibility to airlines in some circumstances.

NAP5: training flights. We want to better understand how the development of a pre-defined training circuit might potentially further reduce the number of people affected by training activity. Therefore a review of the definition and controls that are applied to training aircraft will commence in 2015.

10. Arriving Aircraft

Historically, noise from aircraft landing has not been as big a problem to local communities as the noise from aircraft taking off. However, the improved technologies that have significantly reduced noise levels on departure have delivered relatively small benefits to the level of noise when an aircraft approaches touchdown, making it an area of growing concern.

Unlike take-off, where the bulk of the noise is produced by the engines, when an aircraft is on approach, engine noise and 'airframe' contribute equally to the noise level. Airframe noise comes mainly from the aircraft's undercarriage and wings and is proportionate to the aircraft's speed as it passes through the air. Low-power/low-drag is a technique designed to keep airframe noise on approach to a minimum by making sure that the landing flaps are extended and the aircraft's undercarriage is lowered as late as possible. This reduces drag and means that less engine power is needed to compensate for that drag. As a result, noise is considerably reduced, both in terms of level and time. All aircraft approaching East Midlands Airport are expected to use low-power/low-drag procedures.

Through our Pilot Liaison and Collaborative Environmental Management Groups, we will try to identify opportunities for reducing noise by specifying the best point at which the aircraft's landing flaps should be used and the undercarriage lowered. We will also consider having improved navigational performance (P-RNAV) used on arrivals, with the intention of introducing the procedure if it would lead to noise benefits.

NAP6: low-power/low-drag. Aircraft approaching the airport are expected to keep noise disturbance to a minimum by using a low-power/low-drag procedure.

Continuous descent approach (CDA) is a technique designed to further reduce noise levels from landing aircraft. Typically, aircraft land by reducing their altitude in a series of steps towards an airport. For each of these steps there needs to be a noisy burst of engine thrust to level out the aircraft after it has moved to a lower level. This can be noisy and potentially intrusive. With CDA, air traffic controllers give pilots accurate information on the distance to touchdown so they can work out the best possible continuous rate of descent. This means that the aircraft stays as high as possible for longer and reduces the need for periods of engine thrust to keep the aircraft level.

All aircraft approaching the airport are expected to use continuous descent procedures. We have a target for CDA compliance of 80% of arriving aircraft. In recent years this target has been achieved by a considerable margin. CDA compliance was 93% in 2013.

NAP7: continuous descent approach. In keeping with commitments made in the Sustainable Aviation Noise road-map delivery action plan, from 2014 our CDA compliance target will rise to 95%.

Through our Pilot Liaison and Collaborative Environmental Management Groups we will also investigate the potential benefits of publishing a minimum distance for joining the final approach and limiting the use of visual approaches.

Aircraft engines can produce huge amounts of thrust. Thrust is used to fly the aircraft in the air and to taxi the aircraft when it is on the ground. With all of an aircraft's engines running, even at very low power settings, the thrust produced is often more than enough to move the aircraft along the ground.

Because of this 'surplus' of power, in the right conditions an engine can be turned off while the aircraft is taxiing to and from the runway. Some airlines already do this at East Midlands and this has benefits both to local noise, air quality and CO₂ emissions.

NAP8: reduced-engine taxi. Through our work with our Sustainable Aviation partners and through our own stakeholder groups, we will try to develop a better understanding of the impediments to RET at East Midlands and assess, promote and monitor take-up.

For a period of time immediately before take-off, shortly after landing and while loading, an aircraft may still need electrical power to maintain on board systems or provide ventilation to the cabin. To maintain that power while the main engines are turned off, most modern jet aircraft are fitted with an auxiliary power unit (APU). The APU is a small engine. Like all engines, an APU can be noisy, affect air quality and contribute to climate change.

The Sustainable Aviation Departures code of practice sets out a 'ground-power hierarchy' which says that – in the absence of fixed electrical ground power – mobile Ground Power Units (GPUs) should be used in preference to an aircraft APU, delivering significant savings both in cost and emissions.

We restrict APU run time to 5 minutes after an aircraft arrives on stand and to 30 minutes before its departure.

NAP9: ground power. Through our stakeholder liaison groups we will improve our understanding of ground power use, promote the ground power hierarchy and reinforce the policing of our APU restriction.

One of the ways to slow an aircraft down immediately after landing is by using 'reverse thrust'. This is where the thrust from the engines is directed forwards to produce a braking action. Although the brakes of modern aircraft are far more efficient than they once were, reverse thrust may still be needed and can cause a noise disturbance to communities close to the airfield. To try to keep the disturbance to a minimum, we discourage the use of reverse thrust, particularly at night.

NAP10: reverse thrust. To keep noise disturbance to a minimum in areas next to the airport, pilots should avoid using reverse thrust after landing.

11. Night Noise

We know that night-time noise is often the most disturbing. So it is important that our controls for night noise clearly demonstrate a balance between the economic and social benefits that the airport brings and the disturbance that noise can cause.

The level of noise generated by each aircraft as it departs is measured at a number of fixed points around the airport. Beneath each Noise Preferential Route, noise monitors are positioned at a standard distance after take-off. The levels recorded at these points are used to help set our noise performance indicators and policies.

We recognise that noise can bother people more at night. Therefore, to encourage departing aircraft to be flown in the quietest possible way, for flights that generate noise levels above published limits we issue the airline with a financial penalty known as a noisy aircraft penalty.

The size of the penalty depends on the level of the noise recorded. The maximum level of noise a departing aircraft is allowed to make depends on the maximum take-off weight of the aircraft – limits for smaller aircraft types are lower.

NAP11: noisy aircraft penalty. Between 11pm and 7am, departing aircraft must operate within a noise limit. The penalty for going over the permitted noise level is currently £750 plus £150 for each decibel above that level.

We donate any penalties to the East Midlands Airport Community Fund. We will review our noisy aircraft penalty every year, in consultation with the Monitoring, Environment, Noise and Track sub-committee.

To ensure that our Noise penalty scheme remains relevant and appropriate, we will review the scheme, annually beginning in summer 2015.

An essential part of our night-period noise controls is a system of classifying aircraft according to their 'quota count'.

The system gives each aircraft a 'quota count' depending on the noise they generate on take-off and when landing (based on the noise levels measured at the time that aircraft was first introduced).

There are seven categories of quota count and these double with each increase of three decibels. Aircraft are given a quota count (QC) as follows.

Certified noise level (decibels)	Quota count
More than 101.9	QC16
99 to 101.9	QC8
96 to 98.9	QC4
93 to 95.9	QC2
90 to 92.9	QC1
87 to 89.9	QC0.5
84 to 86.9	QC0.25
Less than 84	None

We have placed restrictions on the use of aircraft with higher quota counts. Aircraft with quota counts of QC8 or QC16 may not be scheduled to operate between 11pm and 7am and will only be allowed to take-off in exceptional circumstances. These flights are charged at the highest night supplement rate and are also subject to an additional noise surcharge of £5000 or £10000 for QC8 or QC16 aircraft respectively. We donate all of the money from these surcharges to the East Midlands Airport Community Fund.

NAP12: QC8 and QC16 surcharge. We will continue to penalise off-schedule operations by the noisiest aircraft types.

Flights between 11.30pm and 6am are subject to additional charges based upon the QC category of the aircraft. In the case of passenger flights, this is a 25% surcharge applied to aircraft that do not meet at least QC2 on departure. For cargo flights – arrivals and departures - the surcharge is based upon both the weight and the QC category of the aircraft. Cargo flights departing between 9pm and 11.30pm and between 6am and 7am are subject to additional charges based upon the weight of the aircraft.

NAP13: supplemental charges. We will continue to apply noise-related supplements to flights that operate during the night.

The continued use of relatively small numbers of noisier aircraft types can have a significant effect on our performance indicators for noise. We know that often, it is these aircraft which also cause the most disturbance for our local communities. In our Master Plan 2006 – 2030 we said that we would make sure that by 2012, all night flights would be by quieter aircraft types, achieving at least the requirements of the Chapter 4 standard. Our Sustainable Development Plan restates the objective to achieve 100% chapter 4 operations at night.

By 2013 83% of flights used Chapter 4 compliant aircraft. We believe it is now important to consider how we might better incentivise airlines to help us to achieve this target.

In the Aviation Policy Framework, the Government has encouraged the use of landing charges, as one of a range of options for reducing noise.

At East Midlands we already have a system of runway charges, which offer airlines an incentive to use the quietest types of aircraft at night. However, to support and reinforce our target of 100% Chapter 4 night time operations, we intend to review our noise related charging mechanisms.

NAP14: chapter 4 operations. We will continue to work towards our annual target of 100% of night flights to be by aircraft meeting the requirements of chapter 4 and will publically report the progress we have made.

NAP15: noise-related charges. During 2015/16, we will review our system of noise-related charging to further encourage the operation of quieter aircraft types.

To further reduce noise disturbance to local communities at night, aircraft taking off in a westerly direction (Runway 27) are expected to use an 'intersection departure', entering the runway from taxiway Whiskey. This moves the aircraft further from the village of Kegworth, reducing their impact.

NAP16: intersection departures. We will continue to promote and encourage the increased use of intersection departures.

12. Mitigation Schemes

Our Sound Insulation Grant Scheme (SIGS) was first set up in 2002 to offer financial support for the sound insulation of the properties most affected by aircraft noise.

Following the consultation of the 2006 Master Plan, the Sound Insulation Grant Scheme was made more generous and homeowners saw their grant values increased. Those properties eligible for the grant can use the money for window, doors and loft insulation. Grants are worked out on a location basis with three different bandings. It is the most generous sound insulation scheme at any airport in the UK.

NAP17: sound insulation grant. We will continue to run a Sound Insulation Grant Scheme to provide support to those people that are most exposed to aircraft noise at night.

We will continue to donate all the money we raise as a result of our environmental penalties to the East Midlands Airport Community Fund. The fund awards grants to local groups to support community, social or environmental projects and concentrates on the areas most affected by aircraft. Each year we donate £50,000 to the fund. The donations we have made so far amount to about £722,000.

NAP19: Community Fund. We will continue to donate all the money we raise as a result of our environmental penalties to the East Midlands Airport Community Fund.

Arriving aircraft can cause disturbance (or vortices) in the air just before they touch-down. In certain conditions, these can lift or dislodge roof tiles. In the 2006 Master Plan we made a promise that from January 2007, any property that suffered roof damage due to an aircraft vortex would then be eligible to have their property re-roofed. A vortex strike can occur to the roof of a property when aircraft pass by at lower levels, particularly on days where the weather is calm. There is only a very small area of Kegworth that is potentially affected by aircraft vortices.

NAP18: vortex damage. We will continue to operate a vortex damage repair and re-roofing scheme in its current format.

13. Monitoring and reporting on our progress

We will continue to develop our ability to monitor and report on aircraft noise and we are committed to improving the ways in which we share that information with others.

Our noise and track system monitors and reports on noise from aircraft and checks and records the path of every aircraft arriving at or taking off from the airport. As well as recording individual events, it helps us to understand trends, compare performance and provide robust data for noise modelling.

We have continually improved our monitoring system to meet best practice. We will continue to develop our ability to monitor and report on aircraft noise and we are committed to improving the ways in which we share that information with others.

NAP20: Noise Monitoring System. We will upgrade NTMS, our monitoring system by 2015. We will also take this opportunity to review the number and location of our fixed noise monitoring sites.

Following the improvements to our noise and track systems we will also review the content and format of those reports.

Our 'Webtrak' facility will be upgraded in 2014 and the track-keeping performance of arriving and departing aircraft will continue to be made available through the airport's website.

We have found that effectively sharing information on our performance is vital to the success of many of our initiatives to manage noise. To help us share information we are developing a web-based resource where we will make performance information available to airlines and pilots.

It is increasingly accepted that using L_{Aeq} or L_{den} noise contours are not easily understood by non-experts. To help people understand the noise climate around the airport, from 2014 we will start to publish 'Number Above' contour maps showing the number of times aircraft noise was louder than a given level.

We will also publish the first flight-path maps. These will show the number of flights into and out of the airport and where they flew. They allow people to see which areas are flown over and how frequently this could be expected to happen.

Following the improvements to the noise and track monitoring systems, the ability to record aircraft noise complaints through our website will be introduced by 2015.

14. Effective Communication

We try to be a good neighbour and we recognise our responsibilities to the local community

We are committed to staying in touch with our community through 'outreach' events that visit the towns and villages around us. By giving people the chance to meet us we can greatly improve our understanding of any issues that they may have and gather accurate information.

NAP21: Community Relations Team. We will keep in touch with local people so that we can act on their comments and continue to respond to community concerns.

We aim to provide at least six outreach events each year. We talk to our neighbours to share information and help us develop our policies.

NAP22: outreach centres. We will continue to run our community outreach centres in communities around the airport.

We meet with councillors and officers from county, city, district, town and parish councils, so they can pass on the concerns of residents and recommend ways in which we can help the people they represent.

We believe that we can respond to many of the noise complaints that we receive by giving people a better insight into the way we work – what we do and why we do it.

We are particularly proud of our record in making information about how we operate available to our local community and customers.

The 'Community' area on our website provides useful background information on many of the more common issues. It also lets people make a complaint online.

NAP23: complaints and enquiries. We will continue to offer a range of ways for people to make enquiries or complaints about aircraft noise.

Contact details for our Community Relations Team are as follows.

Community Relations Department
Building 34
East Midlands Airport
Castle Donington
DE74 2SA

Freephone: 0800 0 967 967

Email: community@eastmidlandsairport.co.uk

Website: eastmidlandsairport.com/community

Complaints about aircraft noise provide valuable information that helps us to work with airlines, air traffic control and pilots to keep disturbance to a minimum and encourage the highest standards of work. Each month we give our Independent Airport Consultative Committee reports on the types of noise complaints we have received and where from.

Since the publication of the 2006 Master Plan, complaints have reduced considerably. During 2013 we received 734 complaints compared to 7978 in 2006. It is our aim to investigate and respond to all complaints within 10 working days.

NAP24: responding to complaints. We respond to all noise complaints within ten working days.

In order to help local community members to identify aircraft that may have been the cause of noise disturbance, we offer an online system, WebTrak. This facility enables anyone to enter in the date and time of their disturbance and run radar replays of the aircraft in their area. The Airport is upgrading its noise and track system to incorporate the latest technology, and the new system will also include a better way of presenting its output and its report. This will help the noise data be more accessible to local people.

We have been producing and distributing the Community Flyer, our quarterly community newsletter, to up to 34,000 homes since 2006. It is designed to communicate the most recent community and environmental activity at the airport.

NAP25: Community flyer. We will produce and distribute the Community Flyer at least three times each year to homes in the local area.

Our Community Survey is currently produced and distributed on a bi-annual basis. It gives us the opportunity to gather feedback in a formal way from a wide variety of local sources, including people we have worked with during the years, as well as those with whom we have not. The results of the survey help us to gain an understanding of the issues that are affecting the local area. They also help us in identifying potential gaps in our programme or areas in the community that could benefit from the airport's support.

NAP26: Community survey. We will continue to produce and distribute the Community Survey, increasing its frequency to an annual survey and we will ensure the content of the survey and list of stakeholders is reviewed to keep it current.

15. Noise complaints

In 2013 we responded to all complaints about aircraft noise within the timescale we set ourselves.

Community members that are concerned by aircraft noise or other airport operations can contact us by phone or email to pass their concerns on to the Community Relations team. Each concern is fully investigated using our noise and radar track monitoring system. This system can help us to identify the aircraft in question and whether it was operating as it should. The number of noise complaints has reduced considerably. During 2013, we received 734 complaints compared to 7978 in 2006. It is our aim to investigate and respond to all complaints within ten working days.

In order to help local community members to identify aircraft that may have been disturbed by aircraft noise, we offer an online system, WebTrak. This facility enables anyone to enter in the date and time of their disturbance and run radar replays of the aircraft in their area. The airport is upgrading its noise and track system to incorporate the latest technology, and the new system will also include a better way of presenting its output and its report. This will help the noise data be more accessible to local people. We remain committed to responding to complaints fully and comprehensively, within a minimum of ten working days. We will also complete the installation of a new noise and track monitoring system by 2015.

16. Consultation responses

This is a review of the responses to the consultation on the noise action plan that was undertaken in 2009 and 2013. It also includes the Sustainable Development Plan consultation carried out in 2014.

First round consultation 2009

We received 77 responses from a wide range of interests including County Councils, Parish Councils, amenity groups, the National Trust, employers, local residents and MPs.

Most responses were from private individuals. We received 11 responses from Melbourne residents, 6 from Castle Donington, 3 from Kegworth and 2 from Diseworth residents.

The largest numbers of responses however, came from residents living outside the noise action plan area in places such as Repton, Shardlow, Beeston, Keyham, and Swadlincote.

In addition, 65 people met with Airport staff at the 4 Outreach Events. The list of respondents is provided in Appendix 2.

The majority of those who responded thought that we should be taking further action to control noise from aircraft landing and taking off at night.

Some considered that the draft noise action plan should put forward a wide range of new night noise control initiatives, irrespective of the results of the noise mapping exercise, or the fact that noise controls at East Midlands Airport were reviewed and updated as recently as 2006. It would seem that the noise action plan process has raised expectations, perhaps unrealistically. Many respondents are therefore disappointed that the airport, having had regard to the tests required by the guidance, did not put forward new initiatives in the Draft NAP.

A number of suggestions were made that had been made previously at the time of the consultation on the Master Plan. Those which were not accepted by the Airport at that time have been reconsidered, but generally the Airport has not changed its mind on such matters. Also some suggestions are made which do not fall within the purview of the Airport.

Finally, some respondents considered that the night noise levels should be reduced from current levels. These suggestions however were generally made without having regard to the National strategy set out in the Air Transport White Paper and as firmed up in the Master Plan. The Guidance required the draft noise action plan to take account of both documents.

We approached the analysis by examining every response received and considering the implications for the draft noise action plan. This examination provided the basic information which helped us prepare this report and key sections of the next iteration of the noise action plan and the accompanying summary report.

In addition we took account of the points raised in the feedback notes prepared immediately after the Outreach Events.

In order to assist discussion the many detailed comments/suggestions contained in the responses to the consultation, plus feedback from the Outreach Events, have been distilled into the 25 themes or topics. These are considered below.

The responses included many individual points. In a few cases a unique point was made by an individual respondent but more commonly the same or a similar point was made in varying ways by several or more respondents. In fact what was striking was the similarity of many of the responses. The themes summarise the vast majority of points made by respondents. Although it has not been possible to include every response, in our view the list below provides an accurate overview of the vast majority of comments received on the draft noise action plan and how we have addressed them.

An indication is given of those aspects that the airport accepted and incorporated into the draft noise action plan, those which we did not accept, and those which do not seem to have any implications for changing the draft plan. The reasons behind the airport's approach are also indicated, as is the strength of response on the various issues, including those raised at the Outreach Events.

Most comments were received on the airport's 1996 night noise contour and related issues. Other "high scoring" topics were the Sound Insulation Grant Scheme (SIGS), the Strategic Noise Mapping exercise, the need for an independent body, freight payload, format and readability of the Draft NAP, the target that by 2012 all aircraft operating at night will comply with "Chapter 4", and the need for a long-term strategy. After these there were 10 topics which received several responses each, followed in turn by 4 topics which generated a few responses each.

In general we have tended to refer to responses from organisations rather than named individuals in the discussion on the topics below.

1996 night noise contour and related issues

Some 44 respondents, including visitors to the Outreach Events commented on this topic or related issues. Many expressed concerns about the airport's key night noise control limit which aims to ensure that night noise, as measured by the 57 decibel night noise contour, remains at or below the 1996 level (14.6km²), until at least 2016. On the other hand a few supportive comments have been made such as that by Environmental Protection UK and UPS; the latter welcomes the reduction of 65% of the 1996 limit as of 2008, thus suggesting that there is therefore no need for designation of the Airport.

Criticism on this limit has taken many forms: "Why was the 1996 contour chosen as the benchmark date when clearly the noise impact is so much lower now than then?" "Surely this choice is arbitrary and cannot be justified by technical assessment?" "Is there a rational basis for the choice of 1996?" The reasons for the choice of 1996 should be stated and justified." "Why is there no assessment of whether or not the 1996 limit was acceptable then or will be in 2016?" "What happens if the 1996 limit is reached and what happens after 2016?" "People living close to the Airport are not benefiting

from aircraft technological improvements and quieter aircraft as any 'benefit' is being used to 'fuel' an ever-increasing number of flights." "EMA should not be allowed to expand from current night noise levels." "EMA should commit to a long-term target to reduce night noise rather than increase it from current levels." "By taking the 57 decibel contour limit the Airport is misrepresenting PPG 24 and the Defra Guidance, and is being deliberately misleading. The 48 decibel night noise contour should be the benchmark, not 57 decibels."

The first point we wish to stress is that the choice of the 1996 footprint was not arbitrary but was the outcome of considered technical assessment. It represented a balance between seeking to protect the local noise climate and providing sufficient "head room" to meet the forecasts set out in the Air Transport White Paper. We came to the conclusion that, despite our best endeavours to control noise at source and the use of modern operational measures, we could not meet the Air Transport White Paper forecasts within a 57 decibel night noise contour of less than 14.6km² by 2016.

The reason why the noise climate has improved since 1996 is mainly because of improvements in noise amelioration – particularly the introduction of quieter aircraft – which has been encouraged by the airport.

Even with our best endeavours, EMA cannot make its contribution to national air transport policy on the basis of the current noise footprint. Adopting a long term noise contour target has given the airlines confidence that they can make long term investment decisions in quieter aircraft types. The approach that has been suggested would restrict our growth severely and would reduce the benefit of these investments in quieter aircraft and other noise control and mitigation measures. This is unacceptable to the airport and is, in our opinion, inconsistent with the ATWP.

We therefore do not accept that the airport should not be allowed to expand from current night noise levels. Such an approach would severely restrict the growth of the airport. It would not in our view be in the national or regional economic interest or consistent with the Air Transport White Paper.

As noted above, all aspects of the noise action plan including the long-term night noise contour target will remain subject to review in light of any changes in circumstances including when the Master Plan is reviewed and rolled-forward, when from time to time new official forecasts of passenger and freight growth are published and when the full impact of our developing controls, such as those to do with Chapter 4 aircraft and operational procedures, become evident. The present night noise footprint remains well below

the target level of 14.6km² and is not forecast to grow substantially in the near future.

We have considered a number of comments that were put to us which suggested that the noise contour target should be based on a lower night noise contour than 57 decibels, perhaps using 48 or 55 decibels. The Airport sees merit in adopting a target based on the 55 decibel night noise contour, particularly as this would align with the noise contour which is taken account of (along with other factors), in determining eligibility for our basic Sound Insulation Grant Scheme. This issue will be examined again in future reviews of the noise action plan.

The noise action plan has been amended to reflect the discussion above particularly the justification for the 1996 footprint and the developing agenda to be considered when our noise controls are reviewed and rolled forward in 2011.

Sound Insulation Grant Scheme (SIGS)

We received 25 comments expressing a wide range of views. These included: "SIGS should be seen as a last resort, not a first line of control"; the noise footprint which determines eligibility for SIGS is out of date and should be reviewed; the noise limits should be lower and based on single noise events; the Plan should list all types of buildings eligible for this type of assistance; people should not have to sleep with their bedroom windows shut in summer; any payment of SIGS should be conditional on the work being done and not used as a compensatory payment; houses with dormer windows located outside the pertinent noise contour but close to the Airport should be eligible for grant assistance as such houses are more vulnerable to noise penetration; the scheme should be extended to places of worship, libraries and village halls; the scheme should be extended to the Woodlands and Spinney Hill estates in Melbourne and Kings Newton and consideration should be given to Aston-on-Trent and Weston-on-Trent.

We agree that SIGS should not be seen as the first line of control. The airport is required to follow the framework known as the "balanced approach" which is described earlier in this document. Reducing noise at source, land-use planning and operational practices are all required to be pursued before mitigation measures are considered. Also, we agree that single noise events should be taken account of in determining eligibility for SIGS and, as stated in the draft noise action plan, that is why we incorporate houses in the 90dB (A) SEL contour limit of the noisiest aircraft in frequent use at night, into the basic SIGS. Finally, we agree that grants should be implemented rather than being used as a compensatory payment.

The EMA SIGS is the most generous of any UK airport. The Airport has carefully considered the offer and operation of the SIGS, the evidence offered by the Strategic Noise Maps, and the comments and suggestions made on this topic arising from the consultation process. In our view a convincing case to extend and/or enhance the scheme has not been made. We therefore do not propose to extend or enhance the scheme at this stage. We also now list the types of building eligible for grant assistance in this report.

Strategic Noise Maps and Related Issues

We received 16 comments on the noise mapping exercise. The main comment was that the maps are based on “averages” and therefore understate noise particularly that from individual aircraft. One respondent has commented “They are pretty pictures, but pretty useless at conveying information.”

Leicestershire County Council have requested that the NAP refer to the future application of the novel night noise measure -which the Council and the Airport have developed in partnership - for monitoring and target-setting purposes. This is agreed and has been incorporated into this report.

In our opinion, noise maps are an appropriate way to show geographically the incidence of noise. Also the Strategic Noise Maps have been balanced using empirical data. The contours therefore show “average” noise and single events. In any event, as stated in the Draft NAP, all major airports within Europe are required to use identical noise mapping in the NAP process; this is one of the fundamental points that underpins the entire exercise.

Independent Body to set Targets/Commitments and Monitor Performance

14 respondents suggested that noise policy and controls should be set by an independent body; others suggest that monitoring and compliance should also be undertaken independently. These suggestions are invariably made without any reference to the 6 monthly independent audits required by ISO14001 certification undertaken by the Airport.

Mark Todd MP put “flesh on the bones” of this suggestion and indicated how it might be achieved. He suggested that although he was not a strong believer in designation an alternative model could involve the development of the ICC from a consultative model along a genuinely independent path, independently resourced, with clear accountability links to local communities and others and empowered to challenge the Airport and force action.

The Guidance however makes it clear that the competent authority for drawing up NAPs is the relevant airport operator. The establishment of an independent authority to set airport noise policy and controls and oversee compliance and monitoring could require legislation and would presumably have to apply to all airports. A new quasi-autonomous non-governmental organisation (QUANGO) could have to be established which would have financial implications.

As this suggestion is not within the purview of the Airport it is not included in this Submission Draft NAP.

Reference to Noise Control Targets being set by Local Agreement

13 respondents suggested that the reference in the Draft NAP to EMA’s noise control targets being determined by “local agreement” is misleading as it implies that they have been agreed by local residents and/or their political representatives. Comments have been made along the lines that “local residents are powerless” and the Airport has “no obligation on it to take into account the opinion of local communities.”

The term “local agreement” used in the Draft NAP was intended to mean determined by EMA having regard to the results of consultation on the Master Plan and consideration by the ICC. This point has now been made explicit in the text of the NAP.

Freighter Payload

13 respondents commented along the lines that the efficiency of the freight flying operations should be improved and that the Airport should take measures to ensure that this happens.

This comment seems to be based on information which indicates that the load factors on freight aircraft have declined, that is, on average they are flying with lower payloads and more vacant space than would have been expected. Of course to some extent this may be a temporary phenomenon due to the current recession.

The Airport will continue to discuss this matter with the operators and the ICC and use its influence to address this issue. However, payload factors are primarily a matter for the industry. The operators have a great incentive to operate efficiently and to optimise their operations on a global basis, namely, the competitiveness of the international marketplace for these services. It would be inappropriate in our opinion for EMA to attempt to unilaterally regulate this practice.

Format and Readability of the Draft NAP

Although the Draft NAP is described as “a solid document” by Environmental Protection UK, some 13 consultees considered that it was not suitable for the purposes of public consultation as it was too long and technical and not therefore readily comprehensible to the general public.

Perhaps this point is most strongly expressed by Kegworth Parish Council who say that it “is almost incomprehensible to a layman and it is the Parish Council’s suggestion that it is rewritten and a new one published that allows for proper consultation.” The Parish Council continues “the plan is written in industry jargon” and “as it stands, it is best incompetent and irresponsible and, at worst, a devious attempt to confuse the surrounding communities with its jargon so that they find it impossible to give a sensible critique of it”.

We accept that the subject is technical. We also agree that the document is somewhat repetitive, not least due to the format and headings which are required by the END, which often requires similar information to be repeated albeit in a slightly different way. We can also appreciate that someone, having taken the time to read the document, could be disappointed to find that the Airport is not putting forward any new initiatives over and above those listed in the Master Plan.

On the other hand we tried to make the document readable. A Technical Glossary was included and we tried to minimise the use of technical terms. Although we accept that it is repetitive for the reader we considered it is better that something is repeated rather than being left out. It is true that we did not prepare an “easy-read” version for public consultation, but there are dangers in over-simplification. Also the Airport came to the considered view that no additional measures were required having carefully considered the tests required by the Guidance. Finally, the scale of response and the length and content of some responses – one of which extends to 18 pages – suggests that many have been able to read the document and respond to it.

We therefore do not agree that the document should be rewritten and reissued for another round of consultation. In our view it is very unlikely that another round of consultation would uncover any significant points which have not already been raised. We tried to improve further the readability of the document prepared for submission to the Secretary of State. This version however is longer than the Consultation Draft NAP as it includes additional information requested by respondents. We hope that readers find our summary report, which only extends to the required 10 pages more accessible.

Target that by 2012 all aircraft scheduled to operate at night will comply with the requirements of Chapter 4

13 responses were received on this topic. They fell into several groups. First, it was suggested mainly by local residents and other respondents that the target should be achieved earlier, at least by January 2012. Second, it was suggested that information be provided on the rate of improvement from the Master Plan base and on what mechanisms are in place to ensure that compliance will be achieved. Third, the view was expressed that progress so far suggests that the fleet replacement target is unlikely to be achieved. Finally, industry representatives saw the target as too ambitious and considered that it does not represent a “balanced approach”.

On the latter point, instead of phasing out Chapter 3 aircraft, it is suggested that more effective operational measures be adopted such as “greater use of CDA’s, and advanced avionics (Flight Management Systems coupled with GPS accuracy to develop energy efficient RNAV Standard Instrument departures and arrivals), which could allow airspace designers more flexibility and creativity in developing noise mitigation procedures.” This has been suggested by the Association of International Courier and Express Services and UPS.

We have provided additional information as suggested above and it is our intention that we publish regular reports setting out our progress against this target. In our view our target remains very demanding but achievable. We have reconsidered it in the light of the comments received but on balance we have concluded that it should remain as it is. The suggestions on advanced avionics have been noted. We consider that this is best progressed on an industry-wide basis; however we will keep abreast of new developments and ensure that we continue to be at the forefront in the adoption of leading-edge technology.

Long-Term Strategy

10 respondents commented that the Airport did not have a long-term strategy to control noise and therefore the Draft NAP was deficient in this respect. The Airport does not agree with this comment. EMA has a long-term strategy which is set out in the Master Plan and has been confirmed by the NAP process. The strategy runs from 2006 to 2016. There are several years for the strategy still to run. We have made these points more explicit.

The position is clearly explained in the Master Plan, Appendix 2 page 18, which reads “*However, given the degree of uncertainty that remains regarding the aircraft types that may be operating beyond 2016; the operational and technological advances that may also have a material effect upon how aircraft are operated; and the potential changes that would arise should a second runway be required, impacts beyond 2016 are best considered in the quinquennial reviews of the Master Plan.*”

More Information should be provided on Surcharges

10 comments were received on the Noise Penalty Scheme and the Night Noise Environmental Surcharge. In general more information was requested on these schemes such as do these schemes only apply to cargo operations? Are the schemes proving to be effective and can more information be provided on charges etc? We were also requested to provide information on surcharges levied by other airports.

Some information on surcharges was included in the Consultation Draft NAP. We have expanded this along the lines suggested. We have not provided information on other airports as we believe that this would not be within the scope of the NAP process.

Castle Donington Parish Council wants an immediate and significant increase in the Night Noise Environmental surcharge whereas industry representatives on the other hand are concerned about changes that could lead to an unreasonable and unsustainable increase in charges. In the circumstances, the Draft NAP does not propose any changes.

Provisions Envisaged for Evaluating the Implementation and the results of the action plan

Several comments were received along the lines that the Airport has not made provision for evaluating the implementation of the Draft NAP, or provided quantified outcomes and it is, therefore, deficient in these important respects.

Again we do not agree with these comments. When our Master Plan was prepared in 2006 we placed great importance on establishing arrangements for monitoring, evaluation and the

tracking of progress on implementation. We committed to producing a biannual Master Plan Monitoring and Implementation Report. The first edition covered all the Master Plan topics including a chapter on "Noise and Training Flights". One of the strengths of our Draft NAP is that this up-to-date work has been available to inform the Draft NAP. It is set out in summary form in section 3.9 of the Draft NAP headed "Targets and Assessment".

A related comment is that the Draft NAP did not indicate the impact of its proposals. In fact the impact of our proposals is implicit in our strategy. Para

3.6 of the Draft NAP states *"We are committed, as set out in the Master Plan, to ensure that night noise (measured as the 57 decibel night noise contour) remains at or below the 1996 level (14.6km²), until at least 2016, even with the further substantial growth that is forecast and this will only be achieved by continued investment by the cargo companies in newer quieter aircraft."*

So the maximum impact will be the area delineated by this contour at 2016.

Information on the impact in terms of number of dwellings affected is provided in this report.

It is true that the Airport has not assessed the impact of any new proposals put forward by the Draft NAP, as would be required by the END. However, the Airport, having carefully considered the evidence and applied the tests set out in the Guidance published by Defra, came to the view, as stated in the Draft NAP, that no additional measures were necessary.

We have however included the 2016 night noise contour map as provided in our Master Plan Annex 12, (Appendix 1A).

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Complaints

Several comments were made on complaints and these focused on two issues. First, the decline in the number of complaints on noise should not, it is suggested, be interpreted by the Airport as indicating a decline in the level of concern about noise disturbance experienced by local residents and others. Second, it is suggested that information on complaints be provided on a day/night basis.

On the former, it was not the Airport's intention to imply that falling numbers of complaints indicated a decline in the level of concern. To make the position clear we have therefore included a comment in section 3.12 to make it clear that the Airport accepts that a falling number of complaints do not necessarily suggest a commensurate fall in concern about the local noise climate.

We accept the second point, and the information has been provided.

Further Restrictions on Training Flights to avoid Villages

The several suggestions received on this topic were mainly to do with avoiding overflying specific settlements, such as Aston on Trent and Gotham, by training flights. Some are accompanied by detailed supporting technical evidence. We will progress these issues outside the NAP process and are currently trialling a tighter circuit. It is also suggested that a programme of training flights be approved with the Local Authority. We do not consider that this is an appropriate matter for the Local Authorities.

Replace "Targets" with "Commitments"

Several responses were received suggesting that the Airport's approach *"to encourage other airlines to replace their existing fleets with quieter models"* is *"too soft"* and therefore needs to be more prescriptive and instructional by being expressed in the form of a *"commitment"*. Similar comments were made in regard to other targets such as those to do with Chapter 4 aircraft and CDA.

The Airport's general approach is to do what works best as this will bring the greatest benefit to residents. We have found from experience that the most effective way to proceed on these matters is to have regular meetings with the airlines and pilots, provide support and encouragement and obtain buy-in. Information on compliance is then put into the public domain, made transparent and open to scrutiny. The replacement of aircraft fleets by the airlines, however, is not of course within the direct control of the Airport. Encouragement and a more nuanced approach can often achieve better results than a more formal and official approach. This would certainly seem to be the case given recent successes as discussed in the Draft NAP.

We therefore have not accepted this suggestion.

Noise Preferential Routes

Some general comments were received on this topic from several respondents. The main point made was that the Airport should reduce the width of its Departure Routes.

This point is not accepted. EMA has the most stringent requirements of any UK airport. Other UK airports operate routes extending to 1,500 metres either side of the runway whereas at EMA the routes extend to just 1,250 metres either side of the runway. In our opinion any further tightening would be inappropriate.

As pointed out in the Draft NAP even operating under such exacting limits compliance is excellent and is now running at 98%. This shows what can be achieved by working closely with the pilots and obtaining goodwill and buy-in.

Continuous Descent Approach (CDA)

Again several respondents commented on this topic. We received requests to include further information on CDA. The information requested includes why was a target of 80% chosen? How is it being achieved? Is it possible to have a steeper descent than 3%? Also, some have commented that CDA is primarily a fuel saving device and any noise benefits which arise will exclusively benefit areas outside those shown on the strategic noise maps. The 80% target emerged as a demanding, challenging, quantifiable but achievable target following discussions with the pilots. As stated in the Draft NAP it has now been surpassed, reaching 84% in 2008 compared with 75% in 2006. This has been achieved by working closely with the pilots, supporting them with a view to consolidating continuous, incremental improvement. Information on progress is placed in the public domain where it can be subject to the rigours of public scrutiny.

We are having ongoing discussions with the pilots with a view to increasing the target, perhaps to 90%.

The issue of the angle at which aircraft approach has previously been considered at an industry level. We believe that the approach at EMA is appropriate but we will closely monitor development of policy in this area.

Further information on CDA on the lines indicated above has been included.

Safeguarding

The reference to the Airport *"working with the local planning authority to ensure that no further noise sensitive development is allowed in areas that might be affected by aircraft noise in future"* was misinterpreted by several respondents. A few even consider that this represents a bid by the Airport to take on the responsibilities of local planning authorities.

The Airport's statutory role as formal consultee on safeguarding and related measures is now outlined in Section 3.8. We hope this clarifies any misunderstandings.

Quota Count (QC) System should be adopted by EMA

Several comments were received on this topic. In addition to the proposal that EMA adopt the Quota Count (QC) system, it was also suggested that our assessment of the QC system in the Draft NAP is partial and unbalanced.

The Airport believes that the noise contour target and the quota count system are analogous in that both are affected by the number of movements and the noise of each individual operation. Given that both measures behave in a similar way we do not consider it necessary for the Airport to adopt the QC system. Our preferred approach of targeting, measuring and reporting a night noise contour has a number of important advantages, not least that it is more easily presented by showing a geographical display.

Community Fund

We received several comments on the Community Fund. Some suggest that it is perhaps rather *"tokenistic"* and does not address the real issue of night noise. Others, like Derbyshire County Council, were more supportive. The Council would like to see a substantial increase in funding to offset the reduction in income arising from surcharges and penalties. Leicestershire

County Council suggested that the Community Fund could be more directly used in noise mitigation and prevention.

We consider that the focus of the Community Fund should continue to be on assisting community projects. There are other appropriate measures in place to control and mitigate noise. We will consider enhancing the Fund once again when the Master Plan is rolled forward but a substantial increase in funding will be difficult in the present economic climate.

Designation

Several respondents raised this topic. Views were expressed for and against designation; members of the public tend to express support for designation whereas the freight integrators are against. It has been the policy of successive governments that the issue of noise controls is best addressed locally and the Airport believes that this is appropriate. Any decision to designate the Airport would be taken by the Secretary of State and therefore we consider that, strictly, the comments received are outside the scope of the NAP process.

The Consultation could have been better publicised

6 comments were received criticising our consultation arrangements: some respondents stated that they did not know about the consultation because they do not read local papers; there were insufficient copies of the document available; and/or insufficient emphasis was given to the Draft NAP at one or more of the Outreach Events.

Compared with the Master Plan, our consultation arrangements were less high profile, but in our view more than met the requirements of the Guidance. Whilst we accept that no consultation meets everyone's aspirations, we are pleased with the scale of response, their detail and the number and variety of points raised, as well as the feedback from the Outreach Events.

Research and Local Studies

The Airport has been asked to recommend to Defra that the Government undertakes further research into noise. In addition, it is suggested that the Airport undertakes local surveys into noise.

We consider that the relevant Government Departments are in the best position to come to an informed view on what research they should sponsor. The Airport has an open mind about local surveys and will consider this outside the NAP process in conjunction with the ICC. It would seem sensible that any local surveys into noise should be related to the Master Plan and NAP monitoring and implementation processes.

Attitudes to Noise from Aviation Sources in England (ANASE)

Four respondents commented on ANASE. One point made was that our assessment of ANASE in the Draft NAP is partial mainly because it takes account of the views of the "peer reviewers". We note this point but do not accept it. Taking account of the views of peer reviewers and indeed the Government's related decision on Heathrow as outlined in the Draft NAP, are essential considerations in coming to a considered and balanced assessment.

Tranquillity

This topic was raised by the National Trust and Environmental Protection UK. We agree that tranquillity is an important consideration especially in the context of the Regional Spatial Strategy and Calke Abbey. The National Trust has asked to meet the Airport and discuss options. We agree; and will continue to progress this matter as part of the ongoing review and assessment of our noise amelioration programme.

Monitoring

A few respondents raised this topic. With regard to the suggestion in the Draft NAP that it would be sensible to bring the Master Plan and the NAP processes together, Melbourne Civic Society comment *"We object most strongly to this proposal. The two plans have quite different status, objectives and audience, and we believe they must remain separate documents"*.

We remain of the view that there should be one comprehensive over-arching approach for the reasons set out in the Draft NAP.

Feedback from Outreach Events

10 visitors attended the Diseworth event and made general comments and enquiries. The Melbourne event was attended by 24 visitors; the key issues raised were night noise levels; the need for a permanent noise monitor in Melbourne; suggestions for aircraft to depart in a block rather than every few hours; and Sound Insulation Grants. 20 visitors attended the Castle Donington event. Key issues raised were night noise levels; the need for designation; restriction on number of night flights and time of departure; and odours. 11 visitors attended the Kegworth event and the key issues raised were Sound Insulation Grants and vortex damage.

Changes to the Draft NAP

The following principal additions and changes were made to the Draft NAP following the 2009 consultation exercise:

- 1996 night noise contour: background explained and justified;
- 2016 night noise contour: *map included*;
- novel noise measure jointly developed with Leicestershire County Council: stated in Plan that work will proceed to apply measure for monitoring purposes and target-setting;
- local surveys into noise: will be considered outside the NAP process;
- developing agenda: reference made to outline issues which NAP process suggests should be reviewed in 2011 when new forecasts are available;
- SIGS: explicitly stated that the scheme has been reconsidered but not changed and justification set out;
- categories of buildings eligible for SIGS assistance: list provided;
- strategic noise maps: made clear that all 5 maps shown in Appendix 1A are Defra maps;
- chapter 4 target: supporting information expanded;
- local agreement: term explained;
- whole document: edited to improve readability;
- advanced avionics: the need to keep abreast of developments outside NAP process is stated;
- MPs and MEPs: included in list of consultees;
- EMA's noise control strategy: made clear that this is long-term, up to date and will be reviewed and rolled forward to 2021 in 2011;
- noise penalty scheme and night noise environmental surcharge: more information provided particularly on explaining what the schemes are, whether they only apply to cargo operations, how effective we think they are, and the scale of charging;
- complaints: information provided by day/night split and comment included which accepts that falling number of complaints does not necessarily reflect a decline in concern about the local noise environment, or words to that effect;
- training flights: stated that any suggestions to fine-tune routeing will be pursued outside NAP process;
- CDA: more information provided particularly on how the 80% target was chosen and how progress is being achieved etc;
- Airport's statutory role as formal consultee on safeguarding: explained in text;
- tranquillity issues involving Calke Abbey: stated that this will be progressed outside NAP process;
- runway extension approval referred: reference made to this and assessment;
- page 7, Section 2.3, delete "Membership of both bodies is listed in Appendices 2A and 2B and substitute "Membership of the ICC is given in Appendix 2".
- page 25, figure 4 should read "should **not** be regarded as a desirable level.";
- page 28, second sentence change to "Five such noise maps..." and delete "by EMA.";

- page 29 , fifth paragraph, insert "*Draft*" before "*NAP*"; and
- page 32, last sentence change to "*110,900*".

We consulted widely on the Draft NAP. There was a good response and we received 77 responses. In addition, 65 people engaged with Airport staff at 4 Outreach Events. Many suggestions and comments have been put to us. We have carefully considered these in a professional, considered, responsive and even-handed manner. We have been able to group the points made into 25 topics.

We have accepted many comments and suggestions put to us which have been included in this report.

Second round review consultation 2013

For airports, such as East Midlands, which already have a noise action plan, government guidance suggests that any revised plan should be presented to the airport's Consultative Committee for their comments, and to any other appropriate bodies, depending on the nature and extent of the revisions.

As so little time has passed since we published our first Noise Action Plan, the 2013 review has resulted in only minor revisions and we have not introduced any new commitments. The changes we proposed focussed on including laws, regulations, policies and so on that have been published or introduced since we produced the existing plan, and updating existing commitments.

In September 2013 we outlined the review process and discussed proposed changes with the Monitoring, Environment, Noise and Track Sub Committee (MENT) of our Independent Consultative Committee. We explained that the noise action plan was to be produced in parallel with the Sustainable Development Plan and that a draft document would be presented at the subsequent meeting in January 2014. This was done and the revised noise strategy discussed in detail.

The following specific issues were raised.

General

- NAP1: It was suggested that the move to a smaller noise envelope indicates that the airport is listening and responding to concerns and that whilst this may not materially change things, it is a realistic change.
- NAP1: Concerns were expressed that changing the noise envelope level to coincide with that of the planning condition, indicated an intention to extend the runway.
- NAP1: Some concern was expressed that as the future noise envelope would be based around the 365 day L_{night} indicator, it would therefore not be directly comparable with previous 8 hour L_{Aeq} contours. Accordingly, for the duration of this action plan, we will continue to publish both indicators to enable comparison.
- Effective communication was encouraged.
- Concern was expressed that although a number of reviews were proposed as part of the plan, Independent Consultative Committee involvement was not explicitly specified. The airport confirmed that the MENT sub-committee had an important role to play in any review process.

Training Flights

- NAP 5: Concern was expressed that the proposals may represent a 'back-track' on the number of training flights.
- ### Night Noise

- NAP 11: It was observed that there had been no recent contributions to the Community Fund, in relation to the noisy aircraft penalty. The airport confirmed that there would be an annual review of the scheme.
- NAP14: It was suggested that the airport should be setting levels well beyond the requirements of Chapter 4. It was accepted that care must be taken to reach a balanced outcome and that too many restrictions could 'kill' an airport. The intention to develop the noise related charging mechanism, in support of the Chapter 4 target was noted and welcomed.

A further period of public consultation was undertaken following the publication of the Sustainable Development Plan. This consultation ran from the beginning of March 2014 to the end of June 2014.

This noise action plan formed part of the noise chapter of the Environment Plan (part of the Sustainable development Plan). The public consultation included presentations to the Independent Consultative Committee, six local Outreach events and meetings with local authority and community groups. There was widespread media coverage.

Consultees made a number of comments in relation to the approach and policies relating to aircraft noise. The comments are summarised below:

- The proposals relating to aircraft noise should be in accordance with the ICAO Balanced Approach. This is to ensure that airports and airlines can strike a balance between stricter environmental measures and the need to meet current and future air transport demand. – The Noise Action Plan is set in the context of the ICAO Balanced Approach.
- The impact of the Airport's operation is felt not just in the immediate vicinity but further afield in the region. The Key Performance Indicators should be monitored on a regular basis to ensure that the effect on the environment is minimised. The review process for the noise indicators should re-emphasised to make clear that the intention is to reduce night noise levels. – The Noise Action Plan sets out how the Airport monitors and reports on progress. Monthly noise reports are provided to the Independent Consultative Committee and the Monitoring, Environment, Noise and Track (MENT) sub-group.
- The Airport should take the opportunity to set lower night noise targets. The Noise Action Plan should then limit night noise to the current level and the Airport should actively seek measures to further reduce the levels of night noise – The limit on the area of the 55dB night noise target has been reduced by 27%. The forecast night noise contour areas for 2040 show the area to be between 11.6 and 10.2 sq. km compared to 10.7 in 2012.
- Local training flights should be kept to a minimum. – A review of the definition and the controls that will apply to training aircraft will be undertaken.
- Some mitigation, particularly the use of Continuous Descent Approaches and the use of quieter aircraft have made some improvement to the noise experienced by local residents. There should be further restrictions on night flying to reduce local disturbance, particularly at night. – The Noise Action Plan recognises that the Airport does cause disturbance to some local communities at night. The noise controls are consistent with the Government's aim to limit and where possible reduce the number of people that are significantly affected by aircraft noise.

Further information should be provided to support the identification of a noise envelope that is based on noise contours rather than other alternatives suggested in the Government's Aviation Policy Framework. – The use of a noise contour area for the limit on night noise is consistent with the approach taken by the local planning authority.

- The Airport's noise impact should be presented as a single event as well as an average. – It is increasingly accepted that average noise contours can be difficult to understand. To help this 'Number Above' contour maps will be published showing the number of times aircraft noise was louder than a given level.
- There are no restrictions in place in respect of the number of night flights that can operate from the Airport. The forecasts of growth in the number of night movements have the potential to increase the levels of night noise. – The night noise contour area limit has been reduced to reflect the reduction in the contour area and the use of quieter aircraft.
- All aircraft operated at the Airport at night should meet the requirements of the ICAO Chapter 4 standard and that a timetable should be given for achieving this. – In 2013 83% of flights were by Chapter 4 compliant aircraft and the Airport will continue to work towards a 100% Chapter 4 target and publicly report on progress.
- Aircraft with a Quota Count (QC) of 8 and 16 should be further restricted. – QC8 and QC16 aircraft cannot be scheduled to operate between 23:00 and 07:00 and are only allowed to depart in exceptional circumstances. They are then charged at the highest noise supplement rate.
- A community representative should be part of the proposed Collaborative Environmental Management Group to provide a local perspective. – The local community is strongly represented on the Independent Consultative Committee and on its MENT sub-group.
- There is limited noise data in the Environment Plan. This is now provided in the Noise Action Plan. There should be greater clarity about the relationship between the two documents. – This will be clarified in the final draft of the Environment Plan that is part of the Sustainable Development Plan. This will also strengthen the link to the air traffic forecasts that are also contained in the Sustainable Development Plan.
- Greater clarity should be provided on the impact of noise, its monitoring, control and mitigation as a consequence of growth. Where possible a timetable should be provided to show when quieter aircraft would be introduced. – The Airport will continue to report progress on its noise impact and mitigation measures through the Independent Consultative Committee and the MENT sub-group. Upgrades and improvements will be made to the noise and track monitoring system in 2014.

- There is a significant night noise impact in local communities, particularly as a result of arriving aircraft. A commitment should be given to alter the Airport's flight paths so that arriving aircraft do not fly over built-up areas. The target for compliance with Continuous Descent Approaches should be 100%. – Continuous Descent Approaches provide a noise benefit, but generally in areas away from the immediate vicinity of the Airport. The Airport will continue to specify a preferred westerly runway direction and will continue to operate a Sound Insulation Grant Scheme that is based on a 55dB night noise contour. The Airport will continue to report the levels of compliance with Continuous Descent Approach procedures.
- The Airport should continue to utilise best practice in its operations and in its Sound Insulation Grant Scheme. – The Noise Action Plan sets out the links to Sustainable Aviation and its work with partners across the aviation industry to share best practice and to reduce the effects of aircraft noise. The Sound Insulation Grant Scheme that is in place is the most generous at any airport in the UK.
- There should be no increase in night flights. – The impact of aircraft noise at night will continue to be closely monitored and reported. The night noise envelope has been reduced by 27% to reflect the reduction in the night noise contour area and the use of quieter aircraft.

17. Conclusion

As a 'major' airport, as defined by the Environmental Noise (England) Regulations 2006, as amended, East Midlands Airport is legally required to publish a noise action plan every five years. Noise action plans are designed with the aim of 'preventing and reducing environmental noise where necessary' and Defra has issued guidance to help airport operators prepare their plans.

Under the regulations we must assess how effectively we are controlling the effect of noise arising from aircraft landing and taking off. We have presented the effect of our work in the form of noise maps, together with the numbers of people and homes exposed to a range of noise levels.

Since the 1990s we have had a noise control programme to try to keep the effect noise has on local residents as low as possible.

Today, the programme includes measures ranging from restricting the use of the noisier types of aircraft, surcharges to encourage the use of quieter aircraft, and regular communication with local communities.

Our policy continues to be to encourage the use of quieter aircraft and to restrict noisier aircraft. As the airport grows, and the frequency and number of flights increase, we know that we must make sure that our policies on controlling noise continue to evolve so they remain appropriate and effective.

Departing aircraft must follow set routes designed, where possible, to avoid aircraft flying over densely populated areas. We monitor the noise levels generated by each aircraft as it arrives at and takes off from the airport. If any aircraft goes over strict noise limits on departure, the airline must pay a surcharge. We donate money raised from these surcharges to the East Midlands Airport Community Fund.

Although the average level of noise from departing aircraft is falling, we will continue to work closely with airlines and air traffic control, through the Collaborative Environmental Management process, to improve performance even more.

Until recently, noise from aircraft landing had not received the same attention as that from aircraft taking off. By working with airlines we have introduced landing procedures such as the 'continuous descent approach' to control noise as much as possible. We are also looking into ways to reduce engine noise once the aircraft has landed. Our night noise policy continues to place tight controls on aircraft noise at night. It limits the total number of flights during the night period and restricts the use of noisier types of aircraft. The noisiest types of aircraft cannot be used. We review our night noise policy every five years.

Where aircraft noise has been reduced as far as is possible, 'mitigation schemes' play an important role in limiting the disturbance caused by aircraft noise. Our Sound Insulation Grant Scheme has been in place since 2002 and is currently the most generous in the UK. We regularly review the scheme to make sure it

remains relevant and appropriate for the local residents worst affected by noise.

We are committed to developing the ways we share information relating to aircraft noise with others. We continue to make information from our monitoring system available to our Airport Consultative Committee. We will be upgrading the system and expanding the area our network of noise monitors covers. We will continue to regularly publish our performance against a set of performance indicators and will report on the noise complaints we receive and how we handled them.

We have developed our noise policies in partnership with airlines, our air traffic service provider and local communities. We have done this over many years.

We regularly report our performance on our website, through the Independent Consultative Committee, and by talking with airlines, pilots and local authorities. We continue to consult the local community face-to-face, through our website and by phone. We believe that this is essential for us to better understand their concerns, provide information on noise issues, discuss possible changes in policy and respond to complaints.

We have developed our noise policies in partnership with airlines, our air traffic service provider and local communities. We have done this over many years. As we look to the future, we realise that we must maintain and develop those relationships so we can continue to strike the necessary balance between the benefits of developing a successful airport and the environmental effects of our work.

We believe that our noise strategy is effective for the long term. However, we understand that aircraft noise continues to be an important issue for some people. So we will carry on listening to and working with our neighbours, and try to make sure that we continue to reduce the effect aircraft noise has on their quality of life.

Appendix 1 – Financial information

The Government recognises that a balance needs to be struck between local disturbance, the limits of social acceptability and economic benefit and has therefore provided guidance as to financial information that we should include in our noise action plan. Any new noise control measure considered for inclusion in the plan must '...take account of the cost of implementation and the likely benefit expected to be accrued.' No new noise control measures have been included within this revision of the plan.

Appendix 2 – List of consultees

List of organisations and individuals that were sent a copy of the draft noise action plan in 2009

County Councils

Leicestershire
Nottinghamshire
Derbyshire

District Councils

North West Leicestershire District Council
Rushcliffe Borough Council
South Derbyshire District Council

Parish Councils

Kingston on Soar
West Leake
East Leake
Costock
Normanton on Soar
Sutton Bonington

Weston on Trent
Melbourne
Kegworth
Long Whatton and Diseworth
Isley Walton
Breedon on the Hill
Hemington and Lockington
Castle Donington

Others

Independent Consultative Committee
Business partners
National Air Traffic Services
National Trust
Airport Joint Working Group
MPs and MEPs

East Midlands Airport Independent Consultative Committee (ICC).

This Committee, together with its' two Sub Committees, the Monitoring, Environment, Noise and Track (MENT) and Transport, Economic Development and Public Transport (TEP), fulfils the role of facilitating adequate facilities for consultation for users of the Airport, local authorities and organisations representing people in the locality of the Airport as required by Section 35 of the Civil Aviation Act 1982. The main Committee and both Sub Committees each meet three times a year.

CPRE Derbyshire

East Staffordshire Borough Council

Nottinghamshire Association of Local Councils

People Against Intrusive Noise (PAIN)

Derby City Council

Derbyshire County Council

Nottinghamshire County Council

Demand East Midlands Airport Now Designated

Nottingham City Council

Leicestershire Chamber of Commerce

Association of Airport Related Parish Councils

Institute of Export

Save Aston Village Environment (SAVE)

Jobcentre Plus

Leicestershire County Council

Leicestershire and Rutland Association of Local Councils

Derby City Council

WINGS

Charnwood Borough Council

North West Leicestershire District Council

Melbourne Civic Society

East Midlands Development Agency (EMDA)

South Derbyshire District Council

ABTA

DHL Aviation (UK) Ltd

Derbyshire Association of Local Councils

Airport Operators Committee

Kings Newton Residents Association

Rushcliffe Borough Council

WHICH

United Parcel Service

Derbyshire and Nottinghamshire Chamber of Commerce

Derbyshire Association for the Blind (DAB)

Donington Park

Erewash Borough Council

CPRE Leicestershire

CPRE Nottinghamshire and Rushcliffe

Leicester City Council

Broxtowe Borough Council

Unison

Independent Chair Mr B. Whyman

Appendix 3 - Respondents

List of organisations and individuals that responded to the draft noise action plan consultation

Members of Public

55 Responses

Others

Airport Joint Working Group
Assoc. of International Courier & Express Services
Aston on Trent Parish Council
Barrow on Soar Parish Council
Campaign For Protection of Rural England
Castle Donington Parish Council
Charnwood District Council
David Taylor MP
Derbyshire County Council
Derbyshire, Nottinghamshire & Leicestershire Chamber of Commerce
DHL
East Leake Neighbourhood Plan
Environmental Protection UK
Gotham Parish Council
Kegworth Parish Council
Kingston on Soar Parish Council
Leicestershire County Council
Long Whatton & Diseworth Parish Council
Loughbrough University
Mark Todd MP
Melbourne Civic Society
Melbourne Parish Council (2)
National Trust
North West Leicestershire District Council
Pain - People Against Intrusive Noise
Prescient Power
Repton Parish Council
Repton Village Society
Royal Mail
Save Aston Village Environment
Smisby Parish Council
South Derbyshire District Council
Sutton Bonington Parish Council
United Parcel Services
West Leake Parish Meeting
Whitwick Community Enterprises
WINGS

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PART OF M.A.G