

London City Airport 
Get closer.

Noise Action Plan

2013 - 2018

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Section 1

Overview

- 1.1 In 2010 London City Airport (LCY) published a Noise Action Plan (NAP), in accordance with the Environmental Noise (England) Regulations 2006 (as amended) (ENR), outlining LCY's extensive commitments to monitor and mitigate the impacts of aircraft noise from 2010 - 2015. The Environmental Noise (England) Regulations 2006 (as amended) were introduced to implement the European Directive 2002/49/EC Assessment and Management of Environmental Noise, commonly known as the Environmental Noise Directive (END).
- 1.2 The NAP (2010 – 2015) was formally adopted by the Secretary of State for Environment, Food and Rural Affairs (DEFRA) on 9th May 2012.
- 1.3 It is a requirement of the ENR that the NAP will be reviewed at least every 5 years and revised as necessary. This document is the outcome of such a review and provides an update on the performance of the NAP (2010 – 2015) and covers the period from 2013 – 2018, in accordance with the ENR. This NAP (2013 – 2018) will therefore supersede the previous NAP (2010 – 2015).
- 1.4 The main purpose of the NAP is to establish the noise impact of the airport in order to consider whether the current noise management measures are sufficient to protect the local community adequately, particularly those worst affected. In order to demonstrate this LCY's noise impact has been assessed by qualified independent consultants and is documented in Appendix A.
- 1.5 As prescribed by the END and ENR, this NAP (2013 – 2018) covers the following:

- Details about the airport and its operation;
- Information about relevant legislation and current standards concerning NAP's;
- Any updated and relevant national and local policies which may affect the NAP;
- The results of the recent Strategic Noise Maps based on 2011 data;
- The progress made against the actions described in the NAP (2010 – 2015);
- On-going actions;
- Proposed new actions introduced as part of the NAP (2013 – 2018).

Section 2 - Introduction

- 2.1 LCY is the UK's leading business airport¹ serving close to 50 destinations across the UK, Europe and USA with connections to the rest of the world through major European hubs. LCY is two miles east of Canary Wharf and six miles east of the City of London.
- 2.2 The airport plays an integral part in contributing to the prosperity of the UK's capital city, through an annual economic contribution of more than £750m.² The airport is an important part of the local community and actively engages with its neighbours providing:

- Extensive environmental programmes to mitigate its impact on the surrounding areas;
- Significant employment and training opportunities for local residents; and
- Engagement with community partners such as local schools, colleges, charities and businesses.

Section 3 - Airport Operations

- 3.1 In 2013 the airport handled approximately 3.38 million passengers, representing an increase of 12% over 2012. 63% of passengers using LCY are travelling on business, using services to cities in the UK, Europe, and the USA.
- 3.2 The total number of aircraft movements at the airport increased from 70,524 in 2012 to 73,642 in 2013. This is an increase of 4.4%.
- 3.3 As detailed under point 4.1, London City Airport has a limit of 120,000 permitted aircraft movements per annum. This limit is based upon noise factored aircraft movements (more information on this can be found in Section 6 Noise Management). For 2013, London City Airport had a total of 77,377 noise factored movements (based on 73,642 aircraft movements).
- 3.4 For further information please visit London City Airports Consultative Committee (LCACC) website:-

<http://www.lcacc.org/statistics/index.html>.



Section 4 - Airport Planning and Long Term Development

- 4.1 On 9 July 2009, the London Borough of Newham (LBN) approved LCY's planning application (LBN ref: 07/01510/ VAR) for an increase in the total number of permitted aircraft movements at LCY to 120,000 per annum. The planning permission is subject to conditions including a number that seek to control noise impacts. It was also accompanied by a detailed and comprehensive Section 106 (S106) Planning Obligation (dated July 2009) which supersedes previous S106 Planning Obligations.
- 4.2 The 2009 planning permission and the associated S106 Planning Obligations (dated July 2009) cover a wide range of planning matters. These include a number of noise monitoring and mitigation measures. Some of these are detailed in the previous NAP (2010 – 2015) and will continue to be a key factor in this NAP (2013 – 2018). These measures include (but are not limited to):

- Noise Categorisation and associated procedures;
- Airport Operating hours;
- Aircraft movement limits and noise factors;
- Departure and Arrival procedures;
- Sound Insulation Scheme;
- The need for a Noise and Track Keeping (NTK) System in place at LCY; and
- Noise Management Scheme.

These measures further detail in Section 6 of this document.

- 4.3 The Planning Agreement requires LCY to submit an Annual Performance Report³ (APR) to LBN on 1 July each year documenting the airport's performance under the Planning Agreement during the previous calendar year (January – December). Included within this are updates associated to the various actions detailed in this NAP.
- 4.4 In July 2012 LCY submitted planning proposals to LBN for the City Airport Development Programme (CADP). CADP comprises of two planning applications, CADP1 and CADP2. CADP1 seeks detailed planning permission for new airfield infrastructure and extended passenger facilities. CADP2 seeks outline planning permission for a hotel with up to 260 bedrooms. An Environmental Statement accompanies the planning applications, which assesses the potential likely significant impacts arising from the CADP proposals including those arising from noise, and proposes mitigation measures where necessary.

- 4.5 Both CADP1 and CADP2 applications do not propose to increase the number of permitted aircraft movements beyond the maximum of 120,000 per annum as required by the 2009 Planning Permission (07/0150/VAR). In addition, neither application proposes to alter the airport's operating hours or noise factored limits on aircraft movements as detailed in the 2009 Planning Permission. At the time of writing LBN is in the process of determining the CADP planning applications.
- 4.6 The need for enhanced and expanded infrastructure is driven by three factors:

- The majority of passengers (63%) travelling through LCY are doing so for business reasons, which means the morning and evening peak hours are almost at capacity;
- The next generation of aircraft, expected to arrive at the airport in 2016, are larger (and quieter and more fuel efficient) and require bigger parking stands;
- Increasing the capacity of the existing runway to allow more flights at peak, combined with larger aircraft, will mean greater numbers of passengers (6 million by 2023), all of whom will still want the convenience and time-saving of using LCY.

The CADP plans include new aeroplane parking stands – to accommodate larger yet quieter next generation aircraft – a parallel taxiway to optimise runway capacity during peak operating hours and a terminal extension to ensure that LCY's convenience and speed-of-transit propositions are maintained. The airport is not proposing a second runway or any extension to the existing runway.

The expansion of the airport is essential – not just to satisfy growing demand for business travel, but also for the ongoing development of the Royal Docks and the east of London. The airport currently employs just under 2,100 people, of which more than 60% are local. The proposed development has the potential to create as many as 1,500 new jobs, providing further employment in east London.

Increasingly the Royal Docks is a focus for foreign investment – the announcement by Chinese company Advanced Business Parks (ABP) of its intention to build a multi-billion pound business park on Royal Albert Dock is one such example – and the connectivity to business centres across Europe, Eastern Europe and the Middle East that the airport provides, or will provide in the future, is central to this continuing.

In terms of the wider UK economy, the airport already contributes £750m⁴ every year - through business and leisure tourist spend, the operation of businesses on site, productivity savings and air passenger duty – and when this project is completed (subject to receiving planning permission), it will double to approximately £1.5billion⁵.

1 Civil Aviation Authority
2 Source: Transforming East London Together, <http://www.londoncityairport.com/AboutAndCorporate/page/CorporateReportsAndPublications>

3 <http://www.londoncityairport.com/aboutandcorporate/page/ourevironment>.
4 Source: Transforming East London Together, <http://www.londoncityairport.com/AboutAndCorporate/page/CorporateReportsAndPublications>
5 Source: Transforming East London Together, <http://www.londoncityairport.com/AboutAndCorporate/page/CorporateReportsAndPublications>

✈ Departures

Section 5 Legislative and Policy Requirements:

5.1 This section outlines the relevant EU, national and local legislative and policy requirements which have informed the preparation of this document and in doing so ensuring it meets their requirements. A more detailed review of relevant noise legislation can be found in Appendix D.

The Environmental Noise Directive (2002/49/EC)

5.2 NAPs are a legal requirement under Directive 2002/49/EC relating to the Assessment and Management of Environmental Noise. This Directive is commonly referred to as the Environmental Noise Directive or END. The requirements of END are transposed in the Environmental Noise (England) Regulations 2006, as amended.

Environmental Noise (England) Regulations 2006, as amended.

5.3 The Environmental Noise (England) Regulations 2006, as amended requires operators of civil airports in England to produce (Noise) Action Plans to manage noise issues and effects arising from aircraft departing from and arriving at their airport, including noise reduction as necessary. This NAP meets the respective requirements contained within this legislation.

National Planning Policy Framework (NPPF) (March 2012)

5.4 The National Planning Policy Framework (NPPF) published 27th March 2012, sets out the Government's planning policies for England and how these are expected to be applied. It contains policies to protect the environment and to promote sustainable growth.

5.5 The NPPF consolidates nearly all policy statements⁶, circulars and guidance documents into a single, simpler framework and replaces the planning guidance documents, such as PPG 24, Planning and Noise (1994), which is cancelled by the NPPF.

Noise Policy Statement for England (NPSE) 2010

5.6 The Noise Policy Statement for England (NPSE) provides the framework for noise management decisions to be made that ensure noise levels do not place an unacceptable burden on society.

5.7 Government is committed to sustainable development and managing noise is a key requirement to achieve this. The NPSE notes that DEFRA has the overall responsibility of managing noise in England. The NPSE applies to all types of noise including environmental, neighbour and neighbourhood noise. LCY addresses the NPSE through this and previous NAPs.

The Aviation Policy Framework (2013) APF

5.8 Airport NAP's support the Government's main policy objective concerning noise – as set out in The APF (2013)– to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise. Paragraph 3.11 in the APF (2013) relates directly to NAP's noting that they should be produced at least in line with the 5 yearly reviews stipulated and that NAP's, and any other noise measures agreed locally should be proportionate to actual noise impacts.

The London Plan (July 2011)

5.9 The London Plan sets out the Mayor of London's strategic approach to development in the capital and is the upper tier of the Development Plan. Policy 6.6 is the main policy covering aviation and it requires airport proposals to take full account of environmental impacts particularly noise.

London Borough of Newham's (LBN's) Core Strategy (adopted January 2012)


5.10 LBN's Core Strategy forms the lower tier of the Development Plan. Policy INF1 is directly related to the airport and supports its optimisation subject to ensuring careful consideration is given to the consequential impacts on the Royal Docks. In addition, SP2 Healthy Neighbourhoods under policy point 3 recognises the need to improve employment levels and reduce poverty whilst attending to the environmental impacts of economic development which includes noise.

5.11 The Core Strategy superseded most saved policies in the 2001 Newham Unitary Development Plan (UDP). However the Core Strategy confirms that Policies EQ45, EQ47 and EQ48 remain in place until further work is complete. These policies resist development where unacceptable environmental impacts (including from noise) arise and require the submission of noise assessments for proposals likely to considerably increase noise.

Sustainable Aviation's Noise Road Map

5.12 LCY is an active member within Sustainable Aviation which is a long term strategy setting out the collective approach of UK aviation to tackling the challenge of ensuring a sustainable future for our industry. As a result Sustainable Aviation is committed to a range of goals. One of these goals is to limit and, where possible, reduce the impact of aircraft noise. Through the publication of Sustainable Aviation's Noise Road-Map, Sustainable Aviation are working to ensure the identified opportunities and industry commitments are realised⁷.

⁶ There are some exceptions, for example PPS10.
⁷ <http://www.sustainableaviation.co.uk/>



Section 6

Noise

Management

- 6.1 As noted in Section 4, LCY has a number of existing noise mitigation measures already in place. These schemes have been designed to mitigate the noise impact of aircraft operations and are a requirement of the 2009 planning permission and associated S106 Planning Obligations (dated July 2009). These, together with the short runway length and steep approach angle, limit the types of aircraft which can use the airport.
- 6.2 LCY is committed to minimising, where possible, the noise impact of its operations on the local area. The success of its efforts can be demonstrated by the low number of noise complaints which have been received over the years.

Management of Environmental Complaints

- 6.3 LCY has an environmental Complaint Management System by which anyone can contact LCY to register a complaint or request information about airport operations. Communication can be either by telephone, post, email or via the LCY website.
- 6.4 Each complaint or enquiry is registered by the airport, investigated, responded to and resolved where practical. All environmental complaints and enquiries are reported to the LBN and a summary of these provided quarterly to the London City Airport Consultative Committee (LCACC).
- 6.5 Figures 1 and 2 present the number of environmental complaints received by LCY since 2009 in absolute terms and per 1,000 aircraft movement respectively. These are categorised as following:

- i) Aircraft noise – including all airborne aviation issues such as traffic frequency, flight paths, aborted approaches etc.
- ii) Ground noise – including aircraft and non-aircraft sources of noise such as engine runs, plant, generators, construction, road noise, maintenance and bird-scaring activities.
- iii) Air quality – such as odours.
- iv) Other – non-aviation related complaints such as alleged TV signal interference.
- v) Non-LCY – complaints regarding air traffic not associated with this airport.

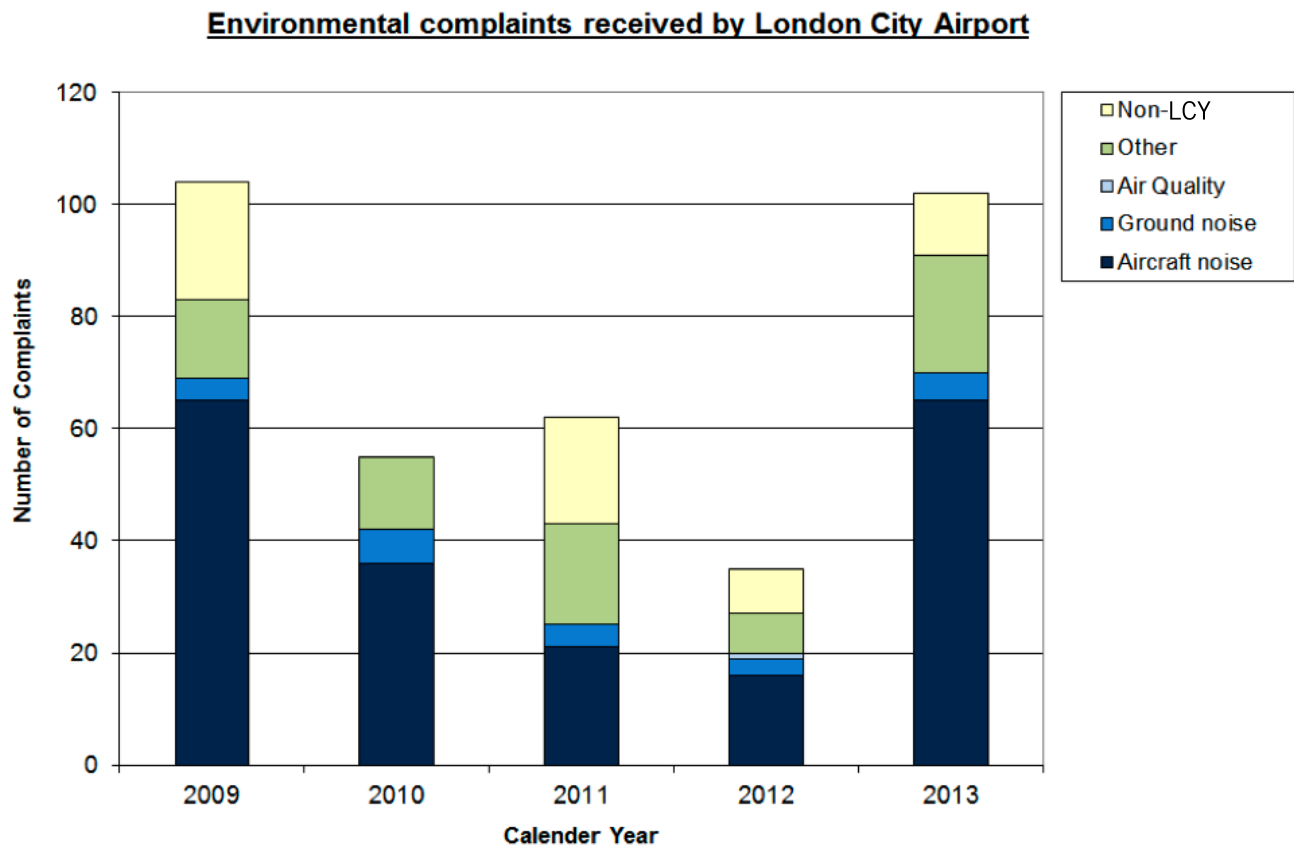


Figure 1 Total Environment complaints received by London City Airport (2009 – 2013)

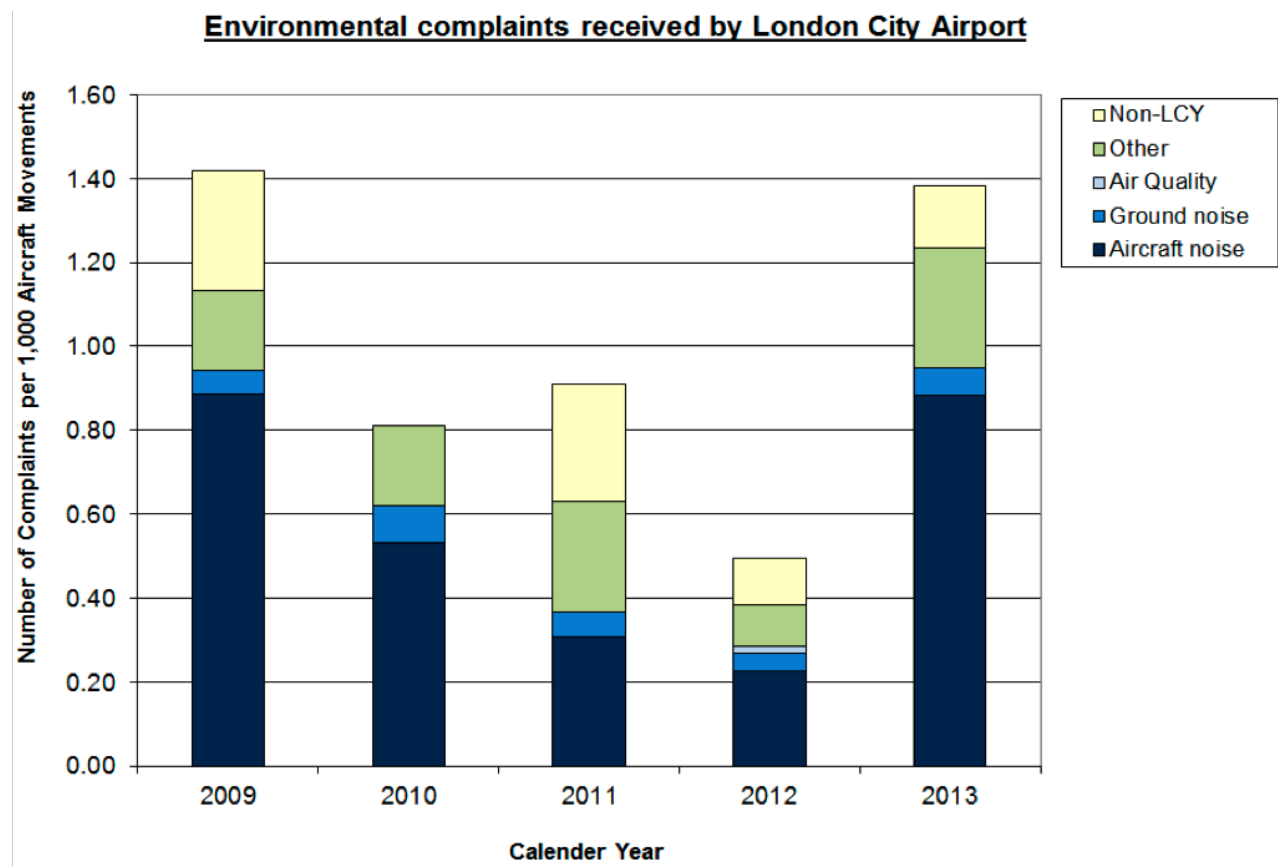


Figure 2 Environmental Complaints received by London City Airport (2009 – 2013) per 1,000 Aircraft Movements

6.6 As displayed in Figures 1 and 2 the number of noise complaints generally have declined until 2013. The increase in 2013 is due to a number of factors including:

- A high volume of complaints from a particular individual throughout 2013 (out of 65 complaints concerning aircraft noise, 39 originated from one individual).
- Increases in easterly operations during 2013 compared to previous years (a 13% increase in departures compared to 2012, for instance).
- The prolonged hot summer experienced during 2013 reduced the effectiveness of noise preventative measures such as closed double glazed windows and acoustic ventilation provision for residents.

Noise Categorisation Scheme

6.7 All aircraft operating at LCY are required to demonstrate their ability to operate within five departure Noise Categories, as shown in Table 1.

Category of Aircraft	Noise Reference Level	Noise Factor
A	91.6 – 94.5	1.26
B	88.6 – 91.5	0.63
C	85.6 – 88.5	0.31
D	82.6 – 85.5	0.16
E	Less than 82.6	0.08

Table 1: Aircraft Noise Categories

6.8 The Noise Reference Level is the departure noise level as measured at four Noise Categorisation Points (NCPs) as shown in Appendix E.

6.9 It is expressed in PNdB and calculated using an established procedure described in the S106 Planning Obligation (dated July 2009) between the airport and the LBN. As this table demonstrates, LCY has an upper noise limit of 94.5 PNdB based on an annual average of departure noise levels for a given aircraft type and therefore only those aircraft categorised as Category A or less are permitted to operate at LCY.

Airport Operating Hours

6.10 The existing approved operating hours have been maintained under the 2009 planning approval. The airport is permitted to operate flights between the following hours:

- i) 06.30 and 22.30 on weekdays
- ii) 06.30 and 13.00 on Saturdays
- iii) 12.30 and 22.30 on Sundays
- iv) 09.00 and 22.30 on Public or Bank Holidays
- v) Full closure on 25th December

6.11 There is a 24 hour period of closure from Saturday lunchtime to Sunday lunchtime. The final 30 minutes of operation on every day of the week is solely for flights scheduled earlier which have been unavoidably delayed.

Aircraft Movement Limits and Noise Factors

6.12 As part of the planning permissions granted by the LBN in July 2009 the LBN introduced strict limits to the number of daily aircraft movements. These include:

- i) 100 per day on Saturdays, 200 per day on Sundays, but no more than 280 on any consecutive Saturday and Sunday
 - ii) 592 per weekday, except for Public or Bank Holidays, specifically:
 - iii) 132 on 1st January
 - iv) 164 on Good Friday
 - v) 198 on Easter Monday
 - vi) 248 on May Day
 - vii) 230 on late May Bank Holiday
 - viii) 230 on late August Bank Holiday
 - ix) 100 on 26th December
- There are also limits for aircraft movements which occur during specific operational periods:
- x) 400 aircraft movements per calendar year or 150 in any consecutive 3 months between 22.00 and 22.30 hours, or 12.30 and 13.00 hours on a Saturday
 - xi) 6 aircraft movements between 06.30 and 06.59 hours on Mondays to Saturdays with no more than 2 in the first fifteen minutes.

6.13 The 120,000 aircraft movements per year limit also applies to Noise Factored Movements. All aircraft movements have a numerical factor applied (see Table 1), which relates to the level of departure noise each aircraft produces, e.g. the loudest aircraft type has a noise factor of 1.26, the quietest, 0.08. Noise Factored movements should also not exceed the permitted number of aircraft movements for that week by more than 25%.

Departure and Arrival Procedures

6.14 The routes flown to and from any major UK airport are prescribed by Standard Instrument Departures (SIDs) and Standard Instrument Arrivals (STARs). These departure and arrival routes are established by the Civil Aviation Authority. The UK Aeronautical Information Publication (AIP) for LCY outlines the restrictions on aircraft operators and aircraft movements to control noise⁸.

6.15 These procedures include:

- i) Standard noise abatement procedures for aircraft departing the airport following the Standard Instrument Departure (SID) instructions
 - ii) Minimum requirements for aircraft departing LCY to climb straight to a minimum of 1000 feet above airport level (aal) before turning on track unless otherwise instructed by Air Traffic Control (ATC)
 - iii) Aircraft approaching LCY to follow a descent path which will result in the aircraft not being lower at any point than the altitude prescribed by the Instrument Landing System (ILS)
 - iv) A minimum altitude of 1,500 feet for aircraft carrying out visual approaches (where the airport is clearly in the pilot's sight) until established on the final approach (within approximately four miles of the airport)
 - v) Instructions for following holding patterns over the airfield.
- In addition to the above, aircraft approaching LCY follow a steep approach angle of 5.5 degrees (compared to 3 degrees in place at other airports) which helps keep aircraft higher for longer, reducing the noise impact on local communities.

Sound Insulation Scheme

6.16 LCY's sound insulation scheme offers sound insulation for eligible properties within the 57 dB, L_{Aeq,16h} noise contour. The sound insulation works involve the treatment of habitable rooms (defined as bedrooms, dining rooms, living rooms and kitchen diners within eligible dwellings) to upgrade eligible external windows and doors to provide an average sound reduction of not less than 25 dB. Properties with double glazed windows will already meet this acoustic standard. The scheme also provides the option of acoustic ventilation in accordance with the sound insulation standards given in the Noise Insulation Regulations.

6.17 LCY also offers a "Second Tier" scheme for eligible properties within the 66 dB L_{Aeq, 16h} noise contour. This offers a higher standard of noise reduction and includes the option of a contribution towards high acoustic performance double glazed windows.

6.18 Eligible community buildings such as schools and community centres are also offered improvement works under the scheme. Sound insulation works are assessed on a case-by-case basis and agreed with the local authority.

6.19 Since the scheme began in 1991 LCY has successfully sound insulated/vented 7,884 properties with a total of 14,050 vents installed. Overall LCY has spent over £3.9million on the scheme. The eligibility daytime noise contour level (57 dB L_{Aeq,16h}) is much more stringent than that used at other UK airports. Some local homes are not eligible as they were built inside the airport's noise contours after particular dates when the growth of the airport and its noise impact would have been known by developers; partly, as a result of a higher standard of glazing required under Building Regulations and partly as a result of planning conditions attached to the relevant planning permissions. Those developers were required to install adequate sound insulation during construction of the property. A detailed list of the latest residential properties eligible for works under the scheme can be found on the LCY Consultative Committee website: www.LCACC.org/noise.

Noise and Track Keeping (NTK)

6.20 The noise levels produced by aircraft arriving at and departing from LCY are currently monitored by a four point noise monitoring system. Two noise monitors are located at each end of the runway in the form of a 'gateway pair'. Each pair is located approximately 2 kilometres from the runway's Start of Roll (SOR) (for a map indicating the locations of these monitors see Appendix E).

6.21 When an aircraft arrives or departs it passes between the monitors and an average noise level is calculated by the system. The measurements are used in the noise categorisation process and general noise management at LCY. The Track Keeping system records each aircraft arrival and departure. This provides a management tool to observe the flight path of individual aircraft. The Noise and Track Keeping system (NTK) is also accessible by the LBN.

Noise Management Scheme

6.22 The noise management scheme controls the use of auxiliary power units (APUs), mobile ground power units (GPUs), and aircraft engine test runs, the logging of aircraft movements and the reporting of measured noise levels to meetings of the LCACC. The use of Fixed Electrical Ground Power (FEGP) on stands at LCY further reduces the impact of noise with the reduction of the use of mobile GPU's which run on diesel.

6.23 The Noise Management Scheme also provides the airport with management tools to discourage excessively noisy departures, for example a system of penalties and incentives has been agreed between LCY and the LBN, which provides the airport with the ability to penalise airlines for noisy departures and provide credits for quiet departures. Noisy and quiet departures are defined as a deviation from the average annual departure noise level for each aircraft type with 4 dB or more above being classified as ‘noisy’ and 5 dB or more below being classified as ‘quiet’.

Purchase Offer

6.24 Any eligible properties that fall within the 69 dB $L_{Aeq,16h}$ noise contour will receive an offer from the airport to purchase the property at the open market value within 6 months of the owner/occupier making an application for the airport to do so. For more information, the LCY Purchase Offer Scheme brochure can be viewed under the Environment section within the Noise and Track Keeping System page under the Purchase Offer Scheme link at the London City Airport website⁹.

Noise Insulation Payment Scheme

6.25 The airport is committed to a scheme where any new residential developments within the 57 dB or 66 dB $L_{Aeq,16h}$ noise contours which received planning permission but had not been built as of 9th July 2009 will benefit from a noise insulation payment scheme that funds during construction any additional works anticipated as a result of the airport’s 2009 planning approval, over and above any pre-agreed planning conditions (or Building Regulations standards) with regard to external sound insulation. On the 19th December 2013 the latest draft Noise Insulation Payment Scheme was sent to LBN for approval.

Future Noise Mitigation Measures

6.26 In addition to the above measures to manage noise, within the NAP (2010 – 2015) additional Noise Mitigation Measures – an Action Plan for the future were listed. A summary of its contents is detailed below.

6.27 Updates on the current progress of these noise mitigation measures are provided in further detail below. In addition, there has been another action introduced as part of this latest NAP update (2013 – 2018). This has been added to Table 2 accordingly (Action 9).

Noise Monitoring and Mitigation Strategy (NOMMS)

6.28 The airport’s Noise Monitoring and Mitigation Strategy (NOMMS) sets out a framework¹⁰ to provide a more robust system of noise control, reporting and mitigation. This includes the measurement and monitoring of ground based sources as well as airborne noise. Furthermore, the NOMMS includes the recording of aircraft tracks and associated information of aircraft using the airport with the introduction of a Noise and Track Keeping System with greater functionality. This will allow, for the first time, this data directly accessible to the public via a web portal. This strategy also retains and expands upon a series of noise management functions dealing with, for example:-

- An incentives scheme to ensure airlines fly as quietly as possible
 - Control of engine running and auxiliary power units by aircraft on stands
 - Operation of quiet operating procedures
 - Operation of temporary noise monitoring strategy (in case of failure of any existing continuous noise monitoring terminal)
 - Production of annual noise contours
 - Operation of a two tier sound insulation scheme
- Further information on various components of the NOMMS is set out in the following paragraphs.

Temporary Noise Monitoring Strategy

6.29 The Temporary Noise Monitoring Strategy (approved by LBN and implemented by LCY in 2009) includes a requirement to provide quarterly reports that record the daily operational status of each noise monitor together with the total monthly correlation rate of noise events to aircraft departures.

6.30 Copies of the four quarterly reports (January to March, April to June, July to September and October to December) are provided to LBN and are included within LCY’s Annual Performance Report (APR) each year.

6.31 Since the previous NAP the airports Noise And Track Keeping System has remained constantly operational, correlating at over 90% or above of all aircraft departures from 2010 to 2013.

Noise Monitoring and Flight Track Keeping System Upgrade.

6.32 In September 2013 LCY installed a new Noise Monitoring and Flight Track Keeping System. This new Noise and Track Keeping System is provided by a German company called Topsonic and includes replacing the existing Noise Monitoring Terminal’s (NMT’s) hardware with state of the art equipment, upgrading facilities

(such as the installation of a large solar panel at NMT 2) and providing additional noise monitors within Newham, Tower Hamlets and Greenwich.

6.33 As part of this upgrade, LCY now has two portable noise monitor trailers which can be used within the local community. One of the trailers uses renewable energy to power the equipment via solar panels attached to the roof of the unit.

6.34 Not only has the hardware been improved, by the replacement of the four existing permanent noise monitors, but also the system is supported by a dedicated call out support team in case of the unlikely event of any failures, adding improved resilience to the operation of the Noise and Track Keeping System.

6.35 It is intended in 2014 to introduce the three additional NMT’s external to the airport as part of the NOMMS. This includes one NMT in Newham to monitor ground noise levels from the airfield, another NMT within the community in East India (Tower Hamlets) and one in the community of Thamesmead (Greenwich) subject to planning permission.

Action No.	Action (Noise Mitigation Measures)	Summary Details
1	NOMMS	Noise Monitoring and Mitigation Strategy (NOMMS) – a new strategy to be developed in agreement with LBN, intended to replace the existing Noise Monitoring and Track Keeping System and upgrade the current noise management scheme.
2	Sound Insulation Scheme (Residential)	A new two-tier scheme building on the existing scheme to offer enhanced sound insulation to properties within the 66 dB $L_{Aeq,16h}$ noise contour and 10 yearly inspections to previously treated properties.
3	Noise Insulation Payment Scheme	A payment scheme to be made available to fund any additional works required as a result of the recent LCY planning approval which affects approved developments as yet un-built as of 9th July 2009.
4	Sound Insulation Scheme (Public Buildings)	A new two-tier scheme building on the existing scheme to offer enhanced sound insulation to properties within the 66 dB $L_{Aeq,16h}$ noise contour and 10 yearly inspections to previously treated properties.
5	Purchase Offer Scheme	A programme to offer building owners that fall within future 69dB $L_{Aeq,16h}$ noise contours the opportunity to sell their property.
6	Sound Screen Study	A study of the existing sound screens at LCY and implementation of recommended upgrades following this.
7	Ground Noise Study	A study of ground noise leading to implementation of recommended measures to mitigate its effects in the local area.
8	Aircraft Categorisation Review	A review of the procedure currently used to assess the noise impact of individual aircraft.
9	Web based public aircraft track keeping display.	A version of the Noise and Track Keeping System will be published online for interested parties to replay aircraft movements and view associated tracks in a particular point in time.

Table 2: Summary of Noise Mitigation Measures NAP (2010 – 2015)

9 <http://www.londoncityairport.com/AboutAndCorporate/page/NoiseAndTrackKeepingSystem>

10 The draft NOMMS was submitted to LBN on 8 October 2009 and a letter was subsequently received from LBN on 26 February 2010 confirming the draft NOMMS was acceptable. The NOMMS Implementation Guidelines were submitted to LBN on 6 July 2010 for approval.

Sound Insulation Scheme (Residential)

6.36 This involves a new two-tier scheme offering enhanced sound insulation to properties within the 66 dB $L_{Aeq,16h}$ noise contour and 10 yearly inspections to previously treated properties. This enhanced scheme was introduced on the 15th December 2011. Current progress of the implementation of the scheme can be seen in Table 3.

	Location	Total No. Properties	Notified	Works Permission Requested	No response/no permission	Works Completed
Re-inspection Properties (2009 APR)	Various	153	100%	100%	46.41%	53.59%
First Tier – Phase 1	Britannia Village E16	352	100%	100%	83.24%	16.76%
First Tier – Phase 2	Canning Town (1) E16	373	100%	100%	41.55%	58.45%
First Tier – Phase 3	Thamesmead SE28	889	100%	100%	52.76%	47.24%
First Tier – Phase 4	Tower Hamlets E14	1288	100%	100%	82.61%	17.39%
First Tier – Phase 5	Barrier Point E16	67	100%	100%	68.66%	31.34%
First Tier – Phase 6	North Woolwich E16	302	100%	100%	79.47%	20.53%
First Tier – Phase 7	Canning Town (2) E16	84	100%	100%	48.81%	51.19%
Second Tier	Camel Road & Parker St	27	100%	100%	100.00%	0.00%
Total 2009 APR		3,535	100%	100%	68.06%	31.94%
Re-inspection Properties (2011 APR)	Various	2	100%	100%	100.00%	0.00%
First Tier – Phase 8	Various	49	100%	100%	63.27%	36.73%
Total 2011 APR		51	100%	100%	64.71%	35.29%
Re-inspection Properties (2012 APR)	Various	19	100%	100%	94.74%	5.26%
First Tier						
Phase A1	Wards Wharf Approach E16, Naval Row and Inverness Mews	239	100%	100%	99.58%	0.42%
Phase A2	New Providence Wharf	559	100%	100%	100.00%	0.00%
Phase A3	Ontario Tower E14	264	100%	0%	100.00%	0.00%
Phase B	Barrier Point and Berwick Road	44	100%	100%	86.36%	13.64%
Phase C	Thamesmead SE28	290	100%	100%	95.17%	4.83%
Total 2012 APR		1,415	100%	100%	98.45%	1.55%
Overall Total		5,001	100%	100%	76.62%	23.38%

Table 3: Sound Insulation Scheme Progress as of 31st December 2013

Noise Insulation Payment Scheme

6.37 The draft Noise Insulation Payments Scheme (NIPS) was submitted to LBN on 9 July 2010 for approval, together with evidence of consultation undertaken with persons interested in developments that are likely to benefit significantly from NIPS. LCY has considered the consultation responses received and has submitted for approval to LBN the Noise Insulation Payment Scheme and an updated consultation schedule. This was completed on 19th December 2013.

Sound Insulation Scheme (Public Buildings)

6.38 This measure is similar to Residential Buildings Sound Insulation Scheme action and was launched at the same time (15th December 2011). During the implementation of the SIS, works have been carried out to the following buildings which were eligible for works:

- The Faraday Primary School, Trinity Buoy Wharf
- The Prince’s Drawing School, Trinity Buoy Wharf
- Peacock Gym (music studios and classrooms), Canning Town

6.39 The two “My Nursery” sites in Virginia Quays were assessed under the scheme. These recently constructed nurseries already had a high level of sound insulation from double glazed windows, mechanical ventilation and air-conditioning. These were not eligible under the scheme. Works are currently progressing with The Richard House Hospice in Beckton and the Virginia Quays Community Centre.

Purchase Offer Scheme

6.40 The LBN approved the Purchase Offer Scheme on 14 June 2011 and it was adopted by LCY on 9 September 2011. So far however no dwellings have been identified within the 2012 Actual 69 dB contour since the schemes inception in 2011. For more information the LCY Purchase Offer Scheme brochure can be viewed under the Environment section within the Noise and Track Keeping System page under the Purchase Offer Scheme link at the London City Airport website.¹¹

Sound Screen Study

6.41 This was completed in July 2010. London City Airport’s noise consultants conducted a study of the Camel Road Sound Screen. This screen provides protection to residents of Camel Road from noise of aircraft activities on the ground at the western end of the airfield, particularly in the region of aircraft Stands 12 –14. The purpose of the study is to ascertain whether any improvements should be made to enhance the noise attenuation properties of the Camel Road Sound Screen.

6.42 The report concluded that no improvements were required at the time to enhance the noise attenuation properties of the Camel Road Sound Screen. The ground noise levels in the vicinity of Camel Road, and the need for any further modifications to the Camel Road Sound Screen, are checked periodically as part of the regular Ground Noise Study undertaken by the airport.

Ground Noise Study

6.43 LCY has issued two Ground Noise Study reports (in July 2010 and August 2013) to the LBN. The 2010 Ground Noise Study was reviewed by the LBN with no additional noise mitigation measures required. The 2013 Ground Noise Study has been reviewed by the LBN.

6.44 Ground noise levels arising from aircraft operations on the ground in the immediate vicinity of the airport have been measured in 2013 to determine whether the magnitude of ground noise exposure levels exceed reasonable levels outside any nearby residential premises and public buildings. Noise measurements made in 2013 were not significantly different to those measured in 2010.

6.45 The 2013 survey found a close correlation between noise exposure levels determined from measured results and those determined from the predictive noise model at locations in the immediate vicinity of the airport clearly affected by ground noise.

Aircraft Categorisation Review

6.46 On 1 July 2010, London City Airport consulted LBN on the draft Aircraft Categorisation Review (prepared by its noise consultants) which reassessed the methodology, categories, noise reference levels, noise factors and procedures for categorisation with the objective of providing further incentives for aircraft operators using the airport to emit less noise.

11 <http://www.londoncityairport.com/AboutAndCorporate/page/NoiseAndTrackKeepingSystem>

Section 7 - Conclusions

6.47 Consultation with LBN has continued in the interim as provided for within the terms of the S106 Planning Obligations (dated July 2009) and projects identified in order to further develop the proposals set out in the draft Categorisation Review.

6.48 The most significant Categorisation Review projects undertaken in 2012 were:

- Temporary additional noise monitoring at locations in East India (Tower Hamlets) and Thamesmead (Greenwich) to gain large samples of noise data at the locations of two proposed additional fixed noise monitoring terminals which are to be introduced under the NOMMS.
- Preparation and submission to LBN of reports on a comparison of departure and arrival noise footprints for turbo-prop and turbo-fan aircraft to assist in reviewing the categorisation process.

Work on the Aircraft Categorisation Review is continuing.

Additional Action - Web based public aircraft track keeping display

6.49 With the introduction of the new Noise and Track Keeping System in 2013 it is the intention to provide members of the general public access to an online version in 2014. This version will be known as TraViS (Tracking and Visualisation System) and it will allow individuals to replay aircraft activity from London City Airport from October 2013 onwards.

Mitigation measures and residual Noise Impact Assessment

6.50 It is important to recognise the NAPs primary purpose is to determine if the various mitigation techniques employed by the airport are protecting the local community by mitigating resulting noise impacts from the airport operation. This is assessed in Appendix A and indeed forms part of the overall conclusion of the performance of the NAP in Section 7.

7.1 This Noise Action Plan or NAP (2013 – 2018) builds upon the previous NAP by describing the development of key noise control measures to supplement the existing mitigation methods that continue to protect the local community from the effects of aircraft noise.

7.2 The main purpose of the NAP is to establish the noise impact of the airport in order to consider whether the current noise management measures are sufficient to adequately protect the local community, particularly those worst affected.

7.3 An assessment of LCY’s noise impact has been carried out by independent consultants based on:

- i) Relevant guidance and legislation;
- ii) The current noise impact of operations at LCY shown by the results of the END Strategic Noise Maps produced in 2012;
- iii) The noise measures already in place at LCY;

7.4 The assessment has found that the environmental noise impact of existing operations at the airport, based on both the 2011 noise contours and the measures described in Sections 5 & 6 of the Noise Action Plan are acceptable. This assessment is detailed in Appendix A.

7.5 In line with the Environmental Noise (England) Regulations 2006 (as amended) the NAP will be reviewed every 5 years or if a significant change to policy, regulation or a change in operation demands, an updated NAP will be produced before this time.

7.6 This review is and will continue to be part of the airport’s Annual Performance Report (APR). The APR is a requirement through the airports S106 Planning Obligations (dated July 2009).

7.7 The requirement to prepare an APR was included in the Planning Agreement to document monitoring and recording of LCY’s activities in relation to the 2009 planning consent and the APR is published online to be readily available to the public. The APR can be found at <http://www.londoncityairport.com/aboutandcorporate/page/ourevironment>.

Glossary of Terms and Abbreviations

aal

above aerodrome level

Agglomeration

An area having a population in excess of 100,000 persons, and a population density equal to or greater than 500 people per km2 and which is considered to be urbanised

AIP

Aeronautical Information Publication – publication updated every 28 days, containing information of a lasting character essential to air navigation

Aircraft movement

Any arrival or departure operation to or from the airport excluding flights for the purpose of training, positioning and/or evaluation flights

Altitude

Height above sea level

Ambient Noise

Usually expressed using LAeq,T unit, commonly understood to include all sound sources present at any particular site, regardless of whether they are actually defined as noise

ANASE

Attitudes to Noise from Aviation Sources in Europe – a DfT study published in 2007

ANIS

Aircraft Noise Index Study

AONB

Areas of Outstanding Natural Beauty

APF

Aviation Policy Framework

APU

Auxiliary Power Unit – a power unit located on the aircraft to provide power to essential systems whilst on the ground

APR

Annual Performance Report – annual report London City Airport publically produces which details progress made of the actions contain in the airports Noise Action Plan.

ATC

Air Traffic Control

ATWP

Air Transport White Paper

A-weighted

The human ear is not equally sensitive to sound at all frequencies, being less sensitive to sound at low and very high frequencies. When measuring sound it is often useful to ‘weight’ each frequency appropriately so that the measurement correlates better with the sound that a person would actually hear

Background Noise

This is the steady noise attributable to less prominent and mostly distant sound sources above which identifiable specific noise sources intrude

CAA

Civil Aviation Authority

CADP

City Airport Development Plan

dB(A)

A unit of sound pressure level, adjusted in accordance with the A weighting scale, which takes into account the increased sensitivity of the human ear at some frequencies

Decibel (dB)

The unit used to describe the magnitude of sound is the decibel (dB) and the quantity measured is the sound pressure level

DEFRA

Department for Environment, Food and Rural Affairs

DfT

Department for Transport

Dispersion

Due to the effect of the wind, aircraft speed and pilot choice, differing aircraft tracks about the nominal track are flown; this is known as dispersion around a nominal track

END

European Directive 2002/49/EC generally known as the Environmental Noise Directive (END)

ENR

Environmental Noise (England) Regulations 2006 (as amended)

EU

European Union

FEGP

Fixed Electrical Ground Power – a method to provide power to an aircraft whilst it is on stand.

Frequency

Frequency is analogous to musical pitch. It depends upon the rate of vibration of the air molecules which transmit the sound and is measured as the number of cycles per second or Hertz (Hz). The human ear is sensitive to sound in the range 20 Hz to 20,000 Hz (20 kHz).

GPU

Ground Power Unit

Ground noise

Noise as a result of airport operations other than that associated with arriving and departing aircraft

ILS

Instrument Landing System

INM

Integrated Noise Model

L_{Aeq,16h}

The L_{Aeq} over the period 0700 – 2300, local time (for strategic noise mapping this is an annual average)

LBN

London Borough of Newham

LCACC

London City Airport Consultative Committee

LCY

London City Airport

L_{day}

The L_{Aeq} over the period 0700 – 1900, local time (for strategic noise mapping this is an annual average)

L_{den}

The L_{Aeq} over the period 0000 – 2400, but with the evening values (1900 – 2300) weighted by the addition of 5 dB(A), and the night values (2300 – 0700) weighted by the addition of 10 dB(A) (for strategic noise mapping this is an annual average)

L_{Aeq}

The A-weighted equivalent continuous sound pressure level which is a notional continuous level that, at a given position and over the defined time period contains the same sound energy as the actual fluctuating sound that occurred at the given position over the same time period

L_{evening}

The L_{Aeq} over the period 1900 – 2300, local time (for strategic noise mapping this is an annual average)

L_{night}

The L_{Aeq} over the period 2300 – 0700, local time (for strategic noise mapping this is an annual average)

NAP

Noise Action Plan

NIPS

Noise Insulation Payment Scheme

NATS

Formerly known as National Air Traffic Services Ltd. NATS is licensed to provide en-route air traffic control for the UK and the Eastern part of the North Atlantic, and also provides air traffic control services at several major UK airports

Noise Contour

Map contour line indicating noise exposure in dB for the area that it encloses

Noise Factor

A numerical factor applied to a noise source, dependent on the time, type or level of noise produced.

Nominal Tracks

Using recognised international design techniques, tracks across the ground can be delineated for departing and arriving aircraft. These tracks are nominal because they can be influenced by the wind, ATC instruction, the accuracy of the navigational systems and the flight characteristics of individual aircraft. In the UK it is usual to permit a 1500 metre swathe to be established about the nominal track for the purposes of assessing whether an aircraft has stayed on track

NOMMS

Noise Monitoring and Mitigation Strategy

NPR

Noise Preferential Route – departure flight ground tracks to be followed by aircraft to minimise noise disturbance on the surrounding population

NPPF

Noise Planning Policy Framework

NPSE

Noise Policy Statement for England

NTK

Noise and Track Keeping system

PNdB

Perceived Noise Level. Its measurement involves the analyses of the frequency spectra of noise events as well as the maximum level

PPG24

Planning Policy Guidance 24 – Planning and Noise

QC

Quota Count – the basis of the Night Restrictions regime at London’s airports

Radar Vectoring

Air Traffic Control provides aircraft with various instructions which result in changes of heading, altitude and speed. The controller effects safe separation from other traffic using radar

SID

Standard Instrument Departure Route

Sound

A physical vibration of air molecules, propagating away from a source, whether heard or not

Sound Transmission

In the open air, most sources of sound can be characterised as a single point in space. The sound energy radiated is proportional to the surface area of a sphere centred on the point. In decibel terms, every time the distance from a point source is doubled, the sound pressure level is reduced by 6 dB

SOR

Start Of Roll – the position on the runway where aircraft commence their take-off runs

STAR

Standard Arrival Route

Strategic Noise Maps

Noise maps required by Defra to be produced every 5 years for the UK’s main sources of environmental noise

Threshold

The beginning of the portion of runway usable for landing

UDP

Unitary Development Plan

Appendix A: END Noise Maps and Evaluation.

End Noise Maps

- A.1 LCY has prepared Noise Maps under the Environmental Noise (England) Regulations 2006 (as amended). This formed part of a requirement for the Strategic Noise Maps under the Environmental Noise Directive (END).
- A.2 Noise Maps were updated and based on actual aircraft movements during the calendar year of 2011 and used the prediction methodology Integrated Noise Model (INM) Version 7.0c. The maps were presented as noise contours, and were assessed for a number of noise parameters relating to the average noise level in decibels over specific periods of time.
- A.3 While LCY’s operational hours are between 06.30 and 22.30, with a 24 hour period of closure at weekends, the assessment criteria within the END dictated that the following parameters were used:

Parameter	Time Period (hh:mm)	Number of hours
L _{den}	07.00 – 07.00	24
L _{day}	07.00 – 19.00	12
L _{evening}	19.00 – 23.00	4
L _{Aeq,16hr}	07.00 – 23.00	16
L _{night}	23.00 – 07.00	8

Effects of Noise Exposure

- A.4 The effects of aircraft noise on a community area are normally assessed in terms of the L_{Aeq,16h} parameter, calculated using the number of aircraft movements over an average summer day (summer typically being more noisy than winter).
- A.5 The END dictated that LCY’s Strategic Noise Maps include noise contours for the L_{Aeq,16h} parameter calculated from the number of aircraft movements on an average annual day rather than a summer day. While this is not the standard period, it does not affect the shape or size of the contours to any significant degree. Similar to the L_{Aeq,16h} parameter is the L_{den} parameter. The key difference however is that the L_{den} parameter gives more significance to noise events that occur during the evening (19.00 – 23.00) and night-time (23.00 – 07.00) periods.
- A.6 Note that LCY only operates until 22:30 during the evening period, and between 06.30 and 07.00 during the night-time period defined by these parameters.

- A.7 The Government has not yet published any guidance on how to interpret noise contours created in terms of L_{den}. The European Commission is, however, working to produce a relationship between the L_{den} parameter and community response.

1985 UK Aircraft Noise Index Study (ANIS)

- A.8 Current Government guidance regarding the assessment of exposure to aircraft noise is generally based on published research relating to the onset of community annoyance from aircraft noise levels, the Aircraft Noise Index Study (ANIS).

- 57 dB L_{Aeq,16h} - the level which marks the onset of significant community annoyance.

- A.9 While the Government recognises that the relationship between the level of noise and the resulting annoyance is not exact and varies according to individual people and locations, it gives the following definitions:

The Aviation Policy Framework (APF) 2013

- A.10 The APF 2013 has superseded the Air Transport White Paper (2003) and is further explained in both Section 5 and Appendix D. However, it is important to identify that APF does mention, under Chapter 3. Noise and other local environmental impacts, that 57 dB L_{Aeq,16h} contour as adopted by ANIS is still relevant as per below:

“We will continue to treat the 57dB L_{Aeq} 16 hour contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance. However, this does not mean that all people within this contour will experience significant adverse effects from aircraft noise. Nor does it mean that no-one outside of this contour will consider themselves annoyed by aircraft noise.”¹²

It also states that airport operators are expected to:-

- offer acoustic insulation to noise-sensitive buildings, such as schools and hospitals, exposed to levels of noise of 63 dB L_{Aeq,16h} or more;
- as a minimum, to offer financial assistance towards acoustic insulation to residential properties which experience an increase in noise of 3dB or more which leaves them exposed to levels of noise of 63 dB L_{Aeq,16h} or more.
- offer households exposed to levels of noise of 69 dB L_{Aeq,16h} or more, assistance with the costs of moving.

12 Para 3.17, Chapter 3, Aviation Policy Framework (2013) - <https://www.gov.uk/government/publications/aviation-policy-framework>

Population, Dwelling and Area Statistic tables

A.11 The estimated total number of people and dwellings exposed above various noise levels in 2011 derived from the strategic mapping of noise from aircraft using LCY, the findings of which are in the following tables.

Table 1: Estimated total number of people and dwellings above various noise levels, L_{den}

Noise Level (dB)	Number of Dwellings	Number of People
≥ 55	12,250	26,100
≥ 60	3,750	6,600
≥ 65	300	400
≥ 70	0	0
≥ 75	0	0

Table 2: Estimated total number of people and dwellings above various noise levels, L_{day}

Noise Level (dB)	Number of Dwellings	Number of People
≥ 54	15,650	34,200
≥ 57	7,050	14,500
≥ 60	3,650	6,400
≥ 63	900	1,000
≥ 66	0	0
≥ 69	0	0

Table 3: Estimated total number of people and dwellings above various noise levels, $L_{evening}$

Noise Level (dB)	Number of Dwellings	Number of People
≥ 54	11,500	24,800
≥ 57	5,350	10,300
≥ 60	2,000	2,800
≥ 63	800	800
≥ 66	0	0
≥ 69	0	0

Table 4: Estimated total number of people and dwellings above various noise levels, $L_{Aeq, 16h}$

Noise Level (dB)	Number of Dwellings	Number of People
≥ 54	14,600	31,500
≥ 57	6,700	13,600
≥ 60	3,250	5,500
≥ 63	900	1,000
≥ 66	0	0
≥ 69	0	0

Table 5: Estimated total number of people and dwellings above various noise levels, L_{night}

Noise Level (dB)	Number of Dwellings	Number of People
≥ 48	1,650	2,000
≥ 51	< 50	< 100
≥ 54	0	0
≥ 57	0	0
≥ 60	0	0
≥ 63	0	0
≥ 66	0	0

13,14

A.12 The areas of the noise contours for each of the indices L_{den} , L_{day} , $L_{evening}$, $L_{Aeq, 16h}$ and L_{night} are given in Table 6 below.

A.13 Guidance on how to determine the acceptability of noise levels has been provided to airport operators by Defra¹⁵ which states that current legislation and guidance taken into account as well as any relevant local planning conditions. The assessment of aviation noise impact is normally expressed in terms of dB $L_{Aeq, 16h}$ as this is the level which Government legislation marks as the point at which there is onset of significant community annoyance.

A.14 As was the case in 2006, the 57 dB $L_{Aeq, 16h}$ noise contour for operations at LCY in 2011 extends in to West Thamesmead in Greenwich and the eastern extremity of Blackwall in Tower Hamlets. The shape of the contour remains very similar to that in 2006 although is slightly smaller in terms of area. Many of the eligible dwellings within the noise contour have been, or soon will be treated under the airport's sound insulation scheme (see Section 6.36). Recently built dwellings within the 57 dB $L_{Aeq, 16h}$ noise contour should have been built in accordance with the Local Authority planning conditions to ensure adequate sound insulation against aircraft noise. The continuation of development in the proximity of the airport together with the slightly altered shape of the contours has brought an increase over 2006 in the number of people within the low to moderate noise contour bands.

A.15 There are no dwellings and no noise sensitive buildings within the 69 dB $L_{Aeq, 16h}$ noise contour and none in the 66 dB $L_{Aeq, 16h}$ noise contour, in contrast to the situation in 2006 when fewer than 50 dwellings were within the 66 dB $L_{Aeq, 16h}$ noise contour.

A.16 The night noise contours remain very small at LCY since only a handful of operations take place during the period from 06.00 to 07.00 hours. No dwellings are located within the 55 dB L_{night} contour which is given as an Interim Target in the World Health Organisation Guidelines¹⁶.

A.17 The above indicates that the noise environment remains very similar to that reported in LCY's Noise Action Plan 2010-2015 which described the noise conditions in 2006. As was the case then, this assessment has found that the environmental noise impact of existing operations at the airport are acceptable, This is based on both 2011 noise contours and the previously approved increase in aircraft movements to 120,000, subject to the implementation of the measures described in Section 6 of the Noise Action Plan.

A.18 In addition to this London City Airport produces annual $L_{Aeq, 16h}$ noise contours as part of its Annual Performance Report (APR). London City Airport's Annual Performance report can be found at <http://www.londoncityairport.com/aboutandcorporate/page/oureenvironment>.

Contour Level (dB)	Area of L_{den} Air Noise Contours (km2)	Area of L_{day} ($L_{Aeq, 12h}$) Air Noise Contours (km2)	Area of $L_{evening}$ ($L_{Aeq, 4h}$) Air Noise Contours (km2)	Area of $L_{Aeq, 16h}$ Air Noise Contours (km2)	Area of L_{night} ($L_{Aeq, 8h}$) Air Noise Contours (km2)
45	N/A	N/A	N/A	N/A	3.36
50	18.12	17.61	14.33	16.79	1.05
55	7.77	7.6	6.20	7.26	0.41
60	2.83	2.77	2.07	2.60	0.20
65	0.90	0.88	0.69	0.83	0.08
70	0.38	0.37	0.32	0.36	0.01
75	0.18	0.18	0.15	0.17	N/A

Table 6: Area contained in each noise contour band

13 The dwelling counts in the tables above include a count of the residential addresses of rooms within multi-occupancy student flats at the University of East London. The counts are therefore greater than would be derived from a consideration of individual dwellings alone.

14 Population and dwelling counts have been rounded as follows: The number of dwellings has been rounded to the nearest 50, except when the number of dwellings is greater than zero but less than 50, in which case the total has been shown as "< 50". The associated population has been rounded to the nearest 100, except when the associated population is greater than zero but less than 100, in which case the total has been shown as "< 100".

15 Guidance for Airport Operators to produce noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended), Update July 2013, Department for Environment Food & Rural Affairs.

16 Night Noise Guidelines for Europe, World Health Organisation, 2009.

The background image shows an airport tarmac. In the foreground, there is a yellow metal structure with lights, possibly a ground support vehicle or a lighting rig. In the middle ground, a large white aircraft is visible, with its tail fin and part of its fuselage showing. The aircraft has a red and white striped pattern on the tail. In the background, there are airport buildings and other structures. The sky is clear and blue.

Appendix B: London City Airport Strategic Noise Maps (2011)



Department
for Environment
Food & Rural Affairs

The Environmental Noise
(England) Regulations 2006
(as amended)

London City Airport (EGLC)
L_{den}

Year - 2011

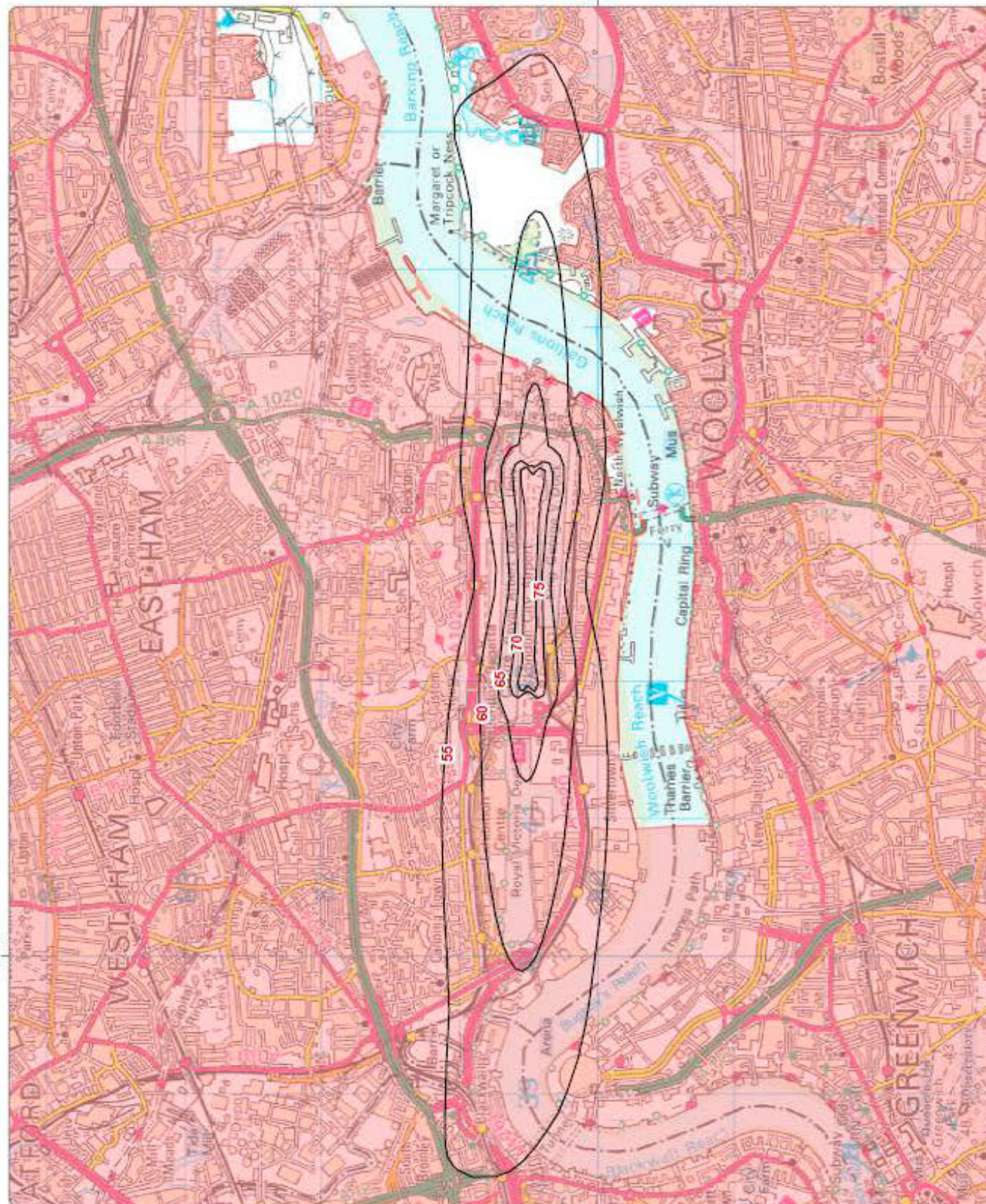
— 60 — Noise Level Contour (dB)

Agglomeration



Produced on behalf
of Defra by
Extrium

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Department
for Environment
Food & Rural Affairs

The Environmental Noise
(England) Regulations 2006
(as amended)

London City Airport (EGLC)

Levy

Year - 2011

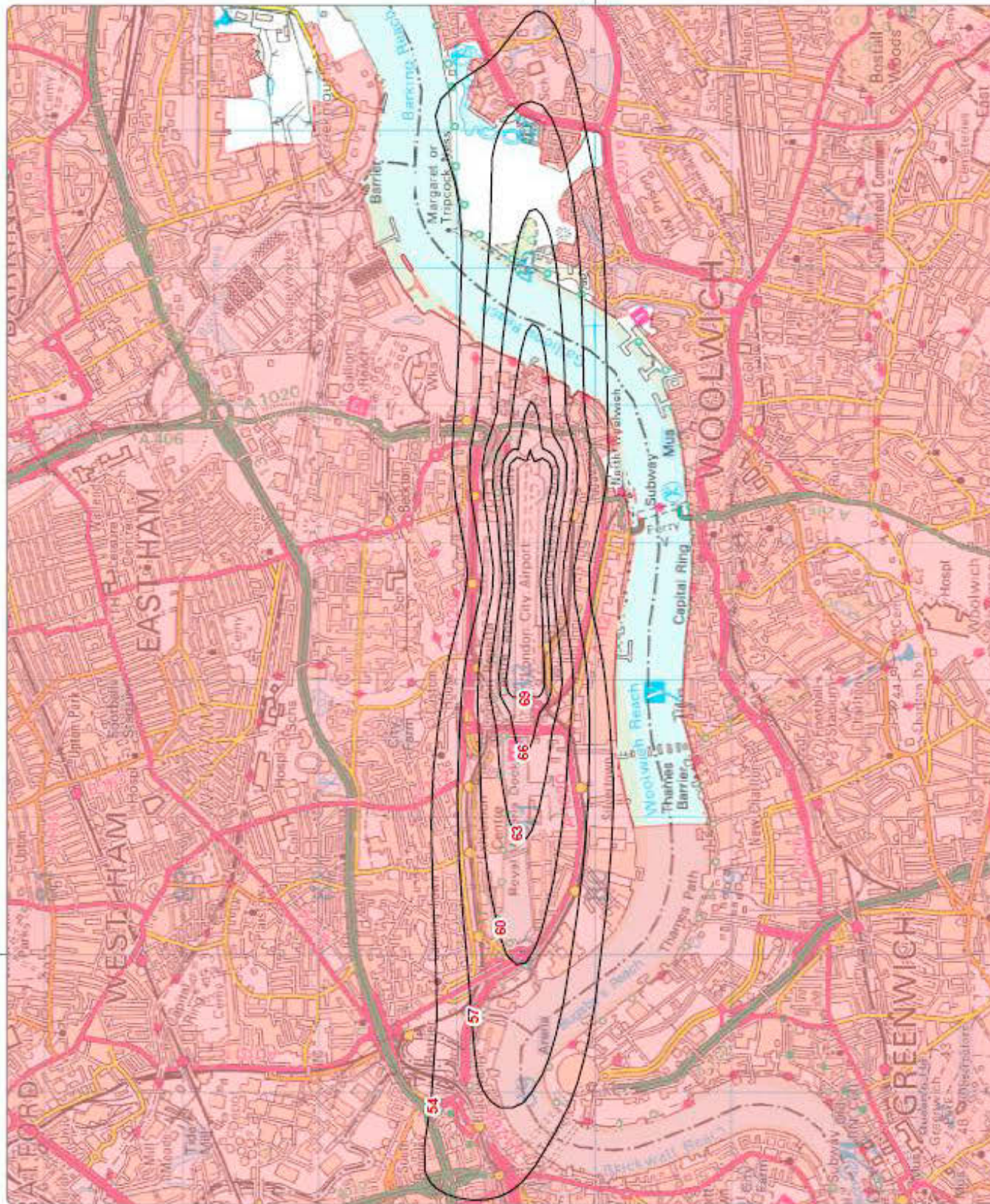
— 60 — Noise Level Contour (dB)

Agglomeration



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Department
for Environment
Food & Rural Affairs

The Environmental Noise
(England) Regulations 2006
(as amended)

London City Airport (EGLC)
Laying

Year - 2011

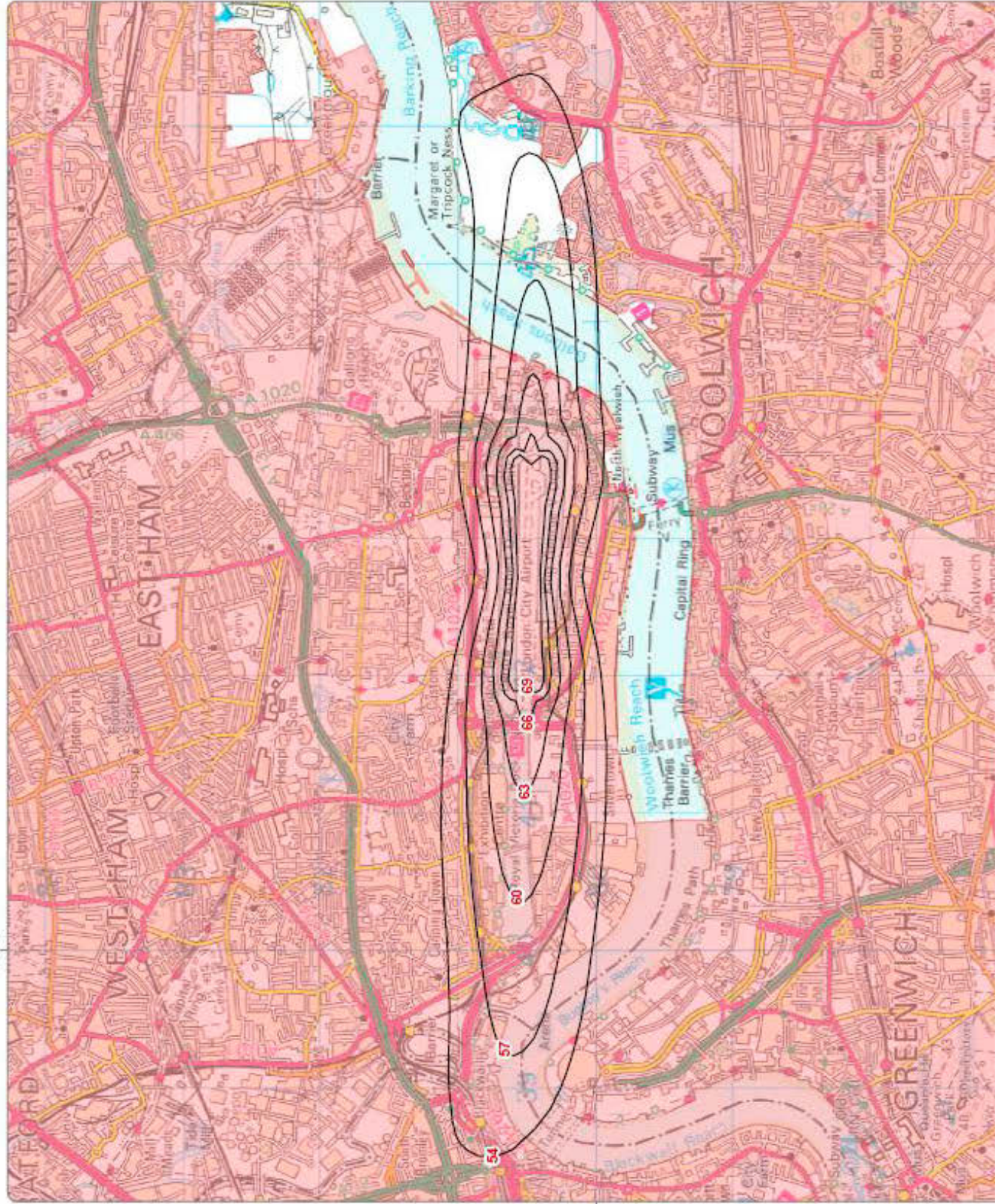
— 60 — Noise Level Contour (dB)

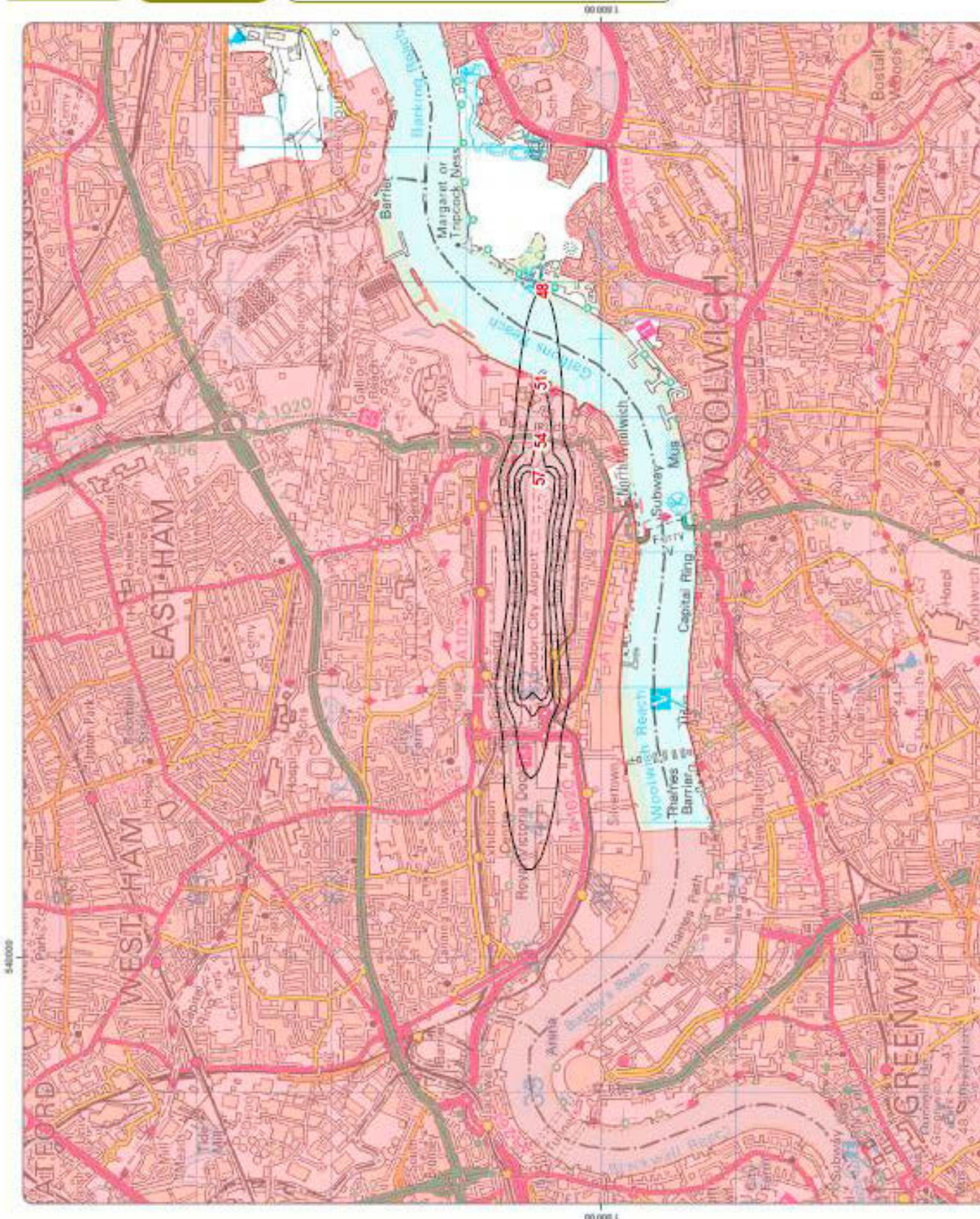
Agglomeration



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Department
for Environment
Food & Rural Affairs

The Environmental Noise
(England) Regulations 2006
(as amended)

London City Airport (EGLC)

Legend

Year - 2011

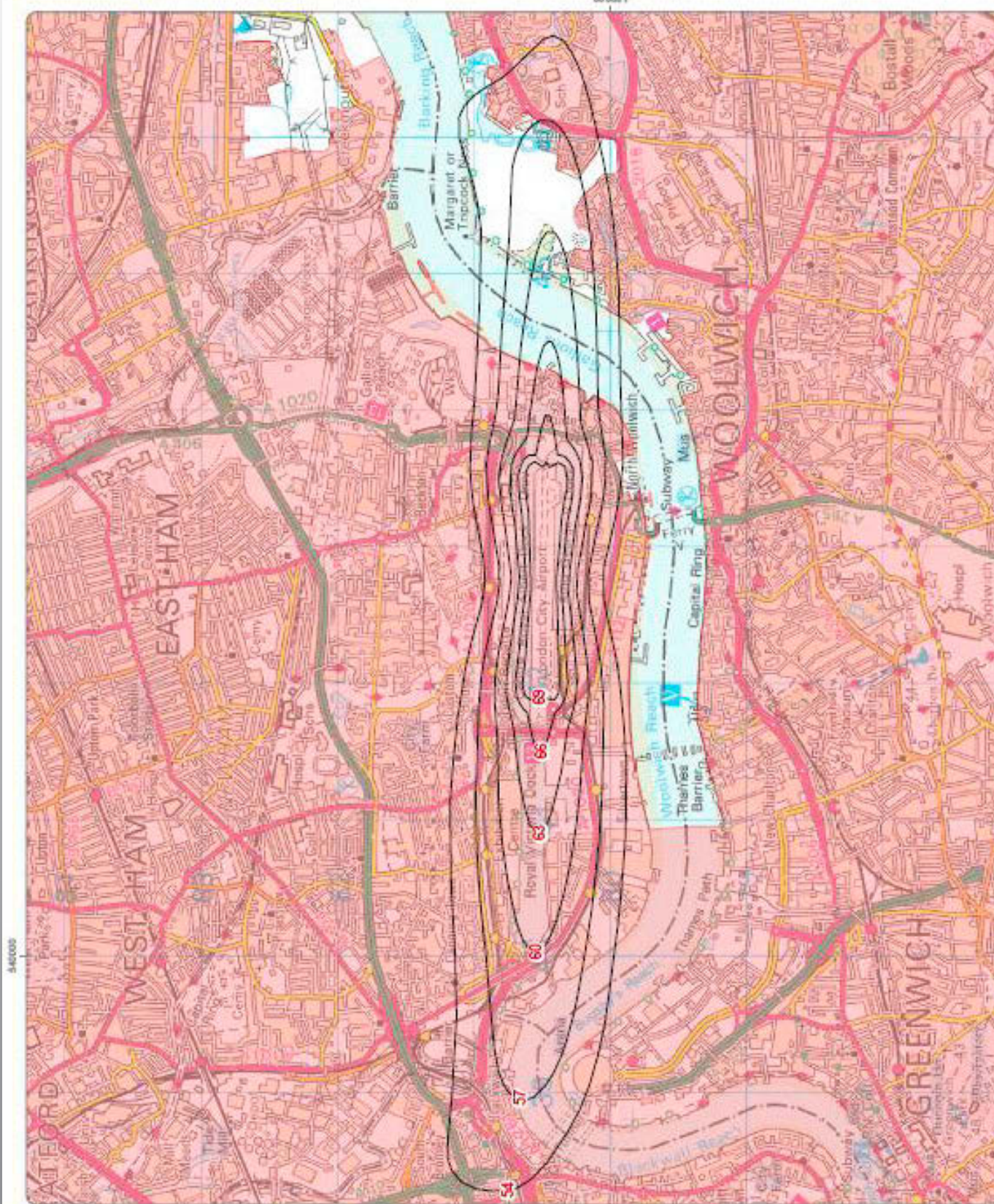
— 50 — Noise Level Contour (dB)

Agglomeration



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Department
for Environment
Food & Rural Affairs

The Environmental Noise
(England) Regulations 2006
(as amended)

London City Airport (EGLC)

1 Aug. 18h

Year - 2011

— 60 — Noise Level Contour (dB)

Agglomeration



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Appendix C: Description of comments raised by the Consultative Committee and justification of responses.

C.1 In July 2013 Defra updated its Guidance for Airport Operators to produce Noise Action Plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended). Within this guidance it stipulates that any NAP which is reviewed or updated can be presented to the Consultative Committee accordingly¹⁷.

C.2 On 11th February 2014 a draft version of this document was provided to the London City Airport Consultative Committee members for comment. After a consultation period of 3 weeks, comments were received and either accepted in this final NAP or rejected. Below is a summary of comments received, identified by section, with justification of action where applicable.

C.3 Section 1 Overview

Comment:

Could an Executive Summary be included in the Noise Action Plan.

Response:

A separate Executive Summary has been produced to accompany this main NAP.

Comment:

Under point 1.1, the use of the phrase 'extensive commitments' implies that LCY are going above and beyond what the airport is obliged to do.

Response:

This Noise Action Plan details how London City Airport manages, monitors and mitigates associated noise from aircraft movements. To enable this, London City Airport's Noise Action Plan outlines a number of commitments. Some of the commitments can be deemed as extensive as they go further than what the airport must do, for instance the provision of an online publically available portal to allow members to view London City Airport associated flights. In addition, the LCY's sound insulation scheme commences at a threshold of 57 dB, well below that expected of airport operators under the Aviation Policy Framework.

¹⁷ Paragraph 5.5, page 17, Guidance for Airport Operators to produce noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended), Defra, July 2013.

C.4 Section 2 Introduction

Comment:
Point 2.2, could the source of this information be detailed?

Response:
Point 2.2 has been referenced as requested.

Comment:
Point 4.6, to align with the City Airport Development Plan (CADP) planning application's Environment Statement (ES), should this segment recognise that larger next generation aircraft will be quieter as detailed in the CADP ES?

Response:
As detailed in the Guidance for Airport Operators to produce noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended). DEFRA, July 2013. It details under paragraph 1.11:

Response:
This has been included in order to provide context of the origins of the Local Plan.

Comment:
Under 5.10, the policy SP2 Healthy Neighbourhoods is also pertinent for the NAP.

Response:
This has been altered, it is now only referred to as 'Section 106 (S106) Planning Obligation (dated July 2009)' to avoid confusion and where applicable. This consistency symbolises the appreciation that it is a single legally binding Deed.

Comment:
Under point 6.40, please signpost readers to where this scheme can be found on your website.

Response:
Reference has been included as per point 6.24.

C.5 Section 3 Airport Operations

Comment:
Given that one of the planning imposed environmental controls relates to noise factored movements it would be useful to include this information alongside actual movement numbers at this point in the NAP? (it is noted it is referred to later).

Response:
This has been included within point 3.3.

Response:
The Noise Action Plan does recognise this in the second bullet point of within point 4.6. However, acknowledging this response this has also now been included within point 4.6, second paragraph.

Comment:
In relation to point 4.4 and 4.5, the ES accompanying the planning applications does not support the proposition that enabling development and the next generation of aircraft will provide for environmental benefits to the local environment.

"The Regulations also require the Action Plans to be reviewed from time to time and revised if necessary and whenever a major development occurs affecting the existing noise situation."

Therefore, if the planning application was approved, the Noise Action Plan would need to be reviewed as and when the development occurred. It would be at this point that this impact would be fully considered in the context of the Noise Action Plan.

Response:
This has been included under point 5.10 accordingly.

Comment:
Under 5.12 the policies outlined need to be revised to capture EQ45 pollution, EQ47 Noise Impact Statement and EQ48 Noise Sensitive Development.

Response:
These were reviewed as part of the production of the Noise Action Plan however EQ45 and EQ48 were omitted in the text. All policies have now been included.

Comment:
Point 6.9 indicates that a list of all properties treated under the Sound Insulation Scheme is available on the LCACC website; I do not believe this is accurate.

Response:
The text has been altered to refer to the latest eligible properties under the Sound Insulation Scheme as opposed to those which have been treated.

Comment:
Reference 6.43, the council has no obligation to approve the Ground Noise Study 2013.

Response:
This has been taken into consideration and the paragraph altered accordingly.

C.6 Section 3 Airport Operations

Comment:
Point 3.2, shouldn't noise factored movements be mentioned in this segment.

Response:
This has been included in 3.3.

Response:
This is accepted and as such isn't referenced within the Noise Action Plan.

Comment:
Noting point 4.6, a consideration of the impact of noise, or the perceived impact, during the more intensively used peaks should potentially be addressed here.

C.8 Section 5 Legislative and Policy Requirements

Comment:
Point 5.8, should this also indicate, as detailed in the Aviation Policy Framework (2013), that local communities should appreciate the benefits of advancements in technology. This is noted in Appendix D under Point D.30.

C.9 Section 6 Noise Management

Comment:
Under 6.5, (and in sections throughout the Noise Action Plan), London City Airport is abbreviated as LCA and LCY. Could one abbreviation be used for consistency?

Response:
This has been changed; London City Airport is referred to LCY throughout the Noise Action Plan.

Comment:
Under 6.22, when referring to the Noise Management Scheme, perhaps the benefits of the installation of FEGP as a means to control noise impacts of APU/GPU should be articulated?

Response:
This is a valid comment and therefore included in point 6.22.

Comment:
Under point 6.24, please signpost to the Purchase Offer Scheme.

Comment:
In relation to point 6.7, Table 1: Aircraft Noise Categories. It seems to that the airport should press the airlines harder to speed up the replacement of older aircraft as they are very noisy (1.26 noise factor). There exist new aircrafts in the market far better from a noise and economic point of view. This is an old issue and airlines have been dragging their feet for far too long. I do not know how many of these aircrafts are still operating from London City, but would be good to have some figures.

C.7 Section 4 Airport Planning and Long Term Development

Comment:
Point 4.5, it should detail that the current planning permission (07/0150/VAR) also provides for a noise factored limit on movements.

Response:
This has been included.

Response:
No change to the text in relation to this is considered necessary in the Noise Action Plan as this is referred to in Appendix D.

Comment:
Under points 5.9 & 5.10, stipulating the hierarchy of the development plan seems redundant.

Comment:
Under 6.9, the '2009 Section 106 Agreement' is mentioned, in the previous sections you have referred to it as 'Section 106 (S106) Planning Obligation' or 'S106 planning obligation'. Please ensure consistency as not all readers will be familiar and appreciate that this is one legally binding Deed.

Response:
This has been included.

<p>Response:</p> <p>As detailed under paragraph 4.5 (Section 4 Airport Planning and Long Term Development), the replacement of fleet to allow next generation aircraft which are quieter and more economical to operate at London City Airport is being addressed through the City Airport Development Plan (CADP). Full details of the aircraft types and the associated number of movements operating on a quarterly basis at London City Airport can be found on the Consultative Committee website, http://www.lcacc.org/statistics/index.html. This additional information has been linked under paragraph also.</p>	<p>Response:</p> <p>The Guidance for Airport Operators to produce noise action plans (DEFRA, July 2013) has been produced under the terms of the Environmental Noise (England) Regulations 2006¹⁸ (the “Regulations”), as amended. As detailed in paragraph 1.05 of this guidance:</p> <p><i>“The Regulations require relevant Airport Operators to produce strategic noise maps. The second round of noise mapping was completed during 2012 for the majority of Airports¹⁹. The noise maps provide a snap shot of the noise impact that is arising from the relevant airport. The action planning process is designed to consider the results of the mapping and to identify whether there are any particular or additional measures that might be taken.....”</i></p> <p>London City Airport’s Noise Action Plan has been reviewed in accordance to this guidance and therefore this why the END strategic noise maps are based on 2011 actual movements. In addition, the Environmental Noise (England) Regulations 2006¹⁸ (the “Regulations”), as amended, specifies to the report on the previous year of which was 2011.</p> <p>The $L_{Aeq,16h}$ index has been used to compare with other contours because it is this index that the Government uses in the UK as a means of rating aircraft noise, likelihood of annoyance and mitigation. Reference to this is given in the Aviation Policy Framework.</p>	<p>Comment:</p> <p>There are of course later versions of the $L_{Aeq,16h}$ contours produced and published for operations at the airport so it might be worth clarifying that the $L_{Aeq,16h}$ contours are produced annually within the airports Annual Performance Report (APR)?</p> <p>Response:</p> <p>This is correct and the text within the Noise Action Plan has been updated accordingly and the Annual Performance Report referenced under A18 in Appendix A.</p> <p>Comment:</p> <p>It appears that the production of noise contours is out of step with the updates to the NAP? The NAP focuses on actions and operational changes beyond the last noise mapping exercise and therefore appears to have limited ability to clarify further improvements or impacts in airport operations since the maps were produced in 2012 (which are based on the 2011 movements).</p> <p>Response:</p> <p>The second round of noise mapping was completed in 2012 and provides a snapshot of the noise impact that is arising from a given airport. In order to have a robust action plan the results of the mapping are considered and therefore shape future actions which are within the noise action plan. It is important to also provide up to date contour information where applicable and this is done annually through the airport’s Annual Performance Report.</p>	<p>Comment:</p> <p>In accordance with point A14, were the 2006 contours based on a different model?</p> <p>Response:</p> <p>The Integrated Noise Model (INM) software was used to generate both the 2006 and 2011 noise contours. The model is periodically updated by the Federal Aviation Authority (the authors of the software) to reflect new aircraft types and to include minor software updates. However, any updates do not affect the methodology used to create contours. Therefore the model itself isn’t different.</p> <p>C.13 Appendix B: London City Airport Strategic Noise Maps (2011)</p> <p>Comment:</p> <p>The contours may comply with existing regulations but contours remain too small and the local community could benefit if they could be expanded slightly. Many people perceive the airport as a “nuisance” because they have to put up with the noise but see little in return. I understand this would be difficult to change but it is important to recognise that City Airport is located in a heavily populated area which is getting more crowded as more people come to live around the airport.</p> <p>Response:</p> <p>As you rightly note the contours identified in the Noise Action Plan do comply with existing regulations and best practice. The airport recognises that the surrounding community is impacted by aircraft operations associated to the airport and it is through the development of this Noise Action Plan where further mitigation measures can be established to reduce this to an acceptable level.</p>	<p>C.14 Appendix C: Description of comments raised by the Consultative Committee and justification of responses.</p> <p>No comments received as derived from London City Airports Consultative Committee consultation.</p> <p>C.15 Appendix D: Legislative Structure for Noise Management.</p> <p>No comments received.</p> <p>C.16 Appendix E: Location of Noise Monitoring Terminals, (NMTs)</p> <p>No comments received.</p> <p>C.17 Appendix F: Requirements of END</p> <p>No comments received.</p> <p>C.18 General Enquires which relate to the Noise Action Plan but not sign posted to a specific chapter</p> <p>Comment:</p> <p>It would be useful to signpost readers to the Annual Performance Report as this provides a more regular update on progress against most of the environmental controls outlined in the NAP. It is recognised that the APR is acknowledged at paragraph 6.30 and 7.5 – but with limited explanation as to what it is and how it can be accessed by the public.</p> <p>Response:</p> <p>In response to this comment the APR has been included under relevant sections where required.</p>	<p>Comment:</p> <p>Quality of the insulation. Despite the fact that the Airport has spent quite a bit of money in insulation schemes, many people aren’t too happy because, though it is an improvement, there is still ample room for improvement. The airport authorities should be more flexible and provide local residents with greater support e.g. by including residents outside the area of the contours and better insulation and air filters.</p> <p>Response:</p> <p>A number of research studies relating to aircraft noise and annoyance/health effects have emerged in recent years. The Government has also commissioned and considered the results of their own study known as ANASE. These studies have been considered by those responsible for Government guidance, and the Government have confirmed in the Aviation Policy Framework that existing guidance as set out in the ATWP remains appropriate.</p> <p>LCA is committed to providing protection to schools (as well as other Public Buildings) that lie within the 57 dB $L_{Aeq,16h}$ contour to ensure protection in keeping with current noise guidelines. This trigger level for sound insulation is the most stringent daytime limit adopted by an airport in the UK.</p>
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18 S.I. 2006/2238. as amended
19 Please note as this was completed in 2012 the data is based on 2011 as required.

Appendix D: Legislative Structure for Noise Management

Noise Legislation

Operating Restrictions Directive 2002/30/EC (March 2002)

D.1 Reducing noise pollution from aircraft and improving the noise climate around airports are key objectives of the European Union air transport policy. The current Directive 2002/30/EC²⁰ of the European Parliament and Council of 26 March 2002 set out procedures and rules for the introduction of noise related operating restrictions to the busiest of the European airports. The purpose of this Directive is to prevent an overall increase in noise levels in areas around major airports. In the Directive, noise management is to be structured around a balanced approach, including solving noise problems on an ‘airport-by-airport’ basis and requiring the careful assessment of four key elements:

1. reduction of aeroplane noise at source;
2. land-use planning and management measures;
3. noise abatement operational procedures; and
4. local operating restrictions relating to noise problems.

D.2 In the UK, this Directive was implemented as the Aerodromes (Noise Restrictions) (Rules and Procedures) Regulations 2003. London City Airport became a competent authority under the Regulations to apply its own noise related restrictions at this time. As a competent authority, it continues to apply and strives to enhance a strict regime of noise monitoring and management and produced strategic noise maps and a noise action plan as required by legislation relating to this European Directive.

Better Airports Package (December 2011)

D.3 On the 16th April 2014 the European Parliament adopted new regulation on the establishment of rules and procedures with regards to the introduction of noise related operating restrictions at European Airports.

This will repeal directive 2002/30/EC and further harmonise and strengthen E.U. rules on aircraft noise management and assessment. The next regulation is expected to come into force in a few years’ time.

20 Directive 2002/30/EC of the European Parliament and of the Council on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community Airports.

Environmental Noise Directive 2002/49/EC (June 2002)

D.4 The Environmental Noise Directive (END) concerning the assessment and management of environmental noise from transport came into effect in June 2002²¹. Its aim was to define a common approach across the European Union with the intention of avoiding, preventing or reducing on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. This involves:

- a) informing the public about environmental noise and its effects;
- b) preparation of strategic noise maps for large urban areas ('agglomerations'), major roads, major railways and major airports as defined in the END; and,
- c) preparation of action plans based on the results of the noise mapping exercise.

D.5 Noise maps and noise action plans aim to manage and reduce environmental noise where necessary, and to preserve environmental noise quality where it is good. Directive 2002/49/EC was implemented in the UK by the Environmental Noise (England) Regulations 2006 (and as amended by the Environmental Noise (England) (Amendment) Regulations 2008, the Environmental Noise (England) (Amendment) Regulations 2009, and the Environmental Noise (England) (Amendment) Regulations 2010).

D.6 Under this legislation, London City Airport, as the competent authority, have produced strategic noise maps in 2007 (based on 2006 data) and 2012 (based on 2011 data) for Noise Action Plan's covering the period 2010 – 2015 previously and now this Noise Action Plan from 2013 - 2018.

National Planning Policies

Planning Policy Guidance 24 (September 1994)

D.7 National planning policy guidance PPG 24 "Planning and Noise"²² was withdrawn in March 2012. It dealt with new housing development in relation to existing noise generating development and also developments which generate noise, including measures to alleviate change to development such as airports. It is replaced by the National Planning Policy Framework of March 2012, which sets out the Government's planning policies for England.

D.8 London Borough of Newham's (LBN) retained policy EQ48 referenced in Newham's Core Strategy²³ states that in considering planning applications for new noise-sensitive development, the council will apply the concept of 'Noise Exposure Categories' (NECS) to assist it in assessing the acceptability of the proposal.

D.9 NECS were introduced in PPG 24 and a summary of the relevant guidance regarding daytime aircraft noise is given in Table 4. The guidance given in PPG 24 has historically been considered by Local Authorities in actions and decisions relating to planning applications for dwellings near airports. Similar guidance is also available for roads and railways which, for some of the regeneration and development sites, may be the most significant source of noise and so determine the planning implications.

dB L _{Aeq,16h}	Guidance/Experience with regard to aircraft noise (daytime)
< 57	Noise need not be considered as a determining factor in granting planning permission, although the noise level at the high end of the category should not be regarded as a desirable level. PPG 24 Category A.
57 – 66	Noise should be taken into account when determining planning applications and, where appropriate, conditions imposed to ensure an adequate level of protection against noise. PPG 24 Category B.
66 – 72	Planning permission for housing should not normally be granted. Where it is considered that planning permission should be given, for example because there are no alternative quieter sites available, conditions should be imposed to ensure a commensurate level of protection against noise. PPG 24 Category C.
> 72	Planning permission for housing should normally be refused. PPG 24 Category D.

Table 4: PPG 24 Guidance with regard to aircraft noise (daytime)

Aerodromes (Noise Restrictions) Regulations (August 2003)

D.10 Directive 2002/30/EC was implemented as the Aerodromes (Noise Restrictions) (Rules and Procedures) Regulations 2003 (SI 2003/1742) which came into force on 6th August 2003. The Regulations apply to civil airports in the EU with more than 50,000 movements a year by civil subsonic jet aircraft with a maximum take-off mass of 34,000 kg or more, or with more than 19 passenger seats. It has additional provisions for a small number of "City Airports", including LCY, being airports near the centre of a large conurbation and which are considered to operate in a particularly noise-sensitive location.

D.11 Where it is proposed to introduce noise-related operating restrictions, the competent authority (at London City, the airport itself) is required to undertake a detailed assessment of the noise situation in the locality, and the full range of possible measures to address any noise problems identified. At LCY, a strict regime of noise-related operating restrictions has been in place for many years. These restrictions are periodically reviewed and enhanced, normally by way of a planning application and Environmental Impact Assessment, to account for any noise related changes that occur as a result of infrastructure or significant airport operational changes.

21 Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise - Declaration by the Commission in the Conciliation Committee on the Directive relating to the assessment and management of environmental noise.

22 Planning Policy Guidance PPG 24 Planning and Noise, 1994, Department of the Environment.

23 Newham 2027, Newham's Local Plan – The Core Strategy, Adopted Version January 2012.

Environmental Noise Regulations
(October 2006)

- D.12 A transposition of EC/2002/49/EC was laid before Parliament in September 2006 as the Environmental Noise (England) Regulations 2006 (SI 2006/2238). These Regulations came into force on 1st October 2006.
- D.13 London City Airport is both a “major airport” (having more than 50,000 movements per annum) and is located within Greater London. It is therefore required to produce noise maps on a rolling (5 year) basis. The noise maps for the airport and for 17 other airports in England were published in 2007 and those for the current round were due for completion and issued to Defra in 2012. Noise maps for London City Airport were issued to Defra in October 2012 and are publicised within this NAP. The maps are used in “developing co-ordinated and cost-effective action plans to reduce noise”.
- D.14 The Regulations also require relevant airports to undertake an action planning process of which this NAP and previous NAP’s conform to.

Noise Policy Statement for England
(March 2010)

- D.15 The Noise Policy Statement for England (NPSE) provides the framework for noise management decisions to be made that ensure noise levels do not place an unacceptable burden on society.

D.16 The stated aims of the Noise Policy Statement for England are to:

- a) Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development;
- b) Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development; and
- c) Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.

National Planning Policy Framework
(NPPF) (March 2012)

- D.17 The National Planning Policy Framework (NPPF) published 27th March 2012, sets out the Government’s planning policies for England and how these are expected to be applied. It is designed to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth.

D.18 The NPPF consolidates all policy statements, circulars and guidance documents into a single, simpler framework and replaces the planning guidance documents, such as PPG 24, Planning and Noise (1994), which is cancelled by the NPPF.

D.19 Government’s current planning policy concerning noise is embodied in the National Planning Policy Framework (NPPF), and more specifically the Noise Policy Statement for England.

D.20 The aim of planning policies and decisions with respect to noise is addressed in paragraph 123 of the NPPF:

“avoid noise from giving rise to significant adverse impacts²⁴ on health and quality of life as a result of new development;

mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions:

recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established²⁵; and

identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.”

D.21 The above policy refers to “significant adverse impacts” and “other adverse impacts” which are not defined numerically in the case of aviation noise although reference is made to further research being underway in this regard in The Noise Policy Statement for England.

Aviation Policy Framework (March 2013)

D.22 The Aviation Policy Framework (APF) was published this year in March by the Department for Transport (DfT). This followed a public consultation which commenced in March 2011 following the issue of a Scoping Report²⁶, which generated over 600 responses, and the publication of a Draft Aviation Policy Framework for further consultation in July 2012, generating almost a further 500 responses.

D.23 The APF replaces the 2003 Future of Air Transport White Paper in conjunction with relevant policies and any decisions which Government may take in response to recommendations made by the airports Commission which is due to issue its final report and recommendations in 2015.

D.24 The APF defines the Government’s objectives and policies on the impacts of aviation in the UK and so sets out the parameters within which the airports Commission will work.

D.25 On managing aviation’s environmental impacts, and specifically noise, it states in paragraph 3.12 that the Government’s overall objective on noise is to

“limit and where possible reduce the number of people in the UK significantly affected by aircraft noise”.

D.26 It advises in paragraph 17 of the Executive Summary that the APF :

“makes clear that the acceptability of growth in aviation depends to a large extent on the industry continuing to tackle its noise impact and confirms that the Government expects the industry at all levels to continue to address noise”. recognising that “the manufacturing industry across Europe has committed to ambitious long-term goals to reduce aviation emissions to one-quarter of 2000 levels by 2050 and to halve perceived aviation noise”.

D.27 The APF goes on to state in paragraph 17 that the Government:

“want to incentivise noise reduction and mitigation, and we also want to encourage better engagement between airports and local communities and greater transparency to facilitate an informed debate”

Chapter 3, paragraph 3.3 of the APF on noise, states that the Government’s intention is:

“to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means 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.”

24 Refer to Explanatory Note to Noise Policy Statement for England (Defra)

25 Subject to the provisions of the Environmental Protection Act 1990 and other relevant law.

26 Developing a sustainable framework for UK aviation: Scoping Document, DfT, March 2011

D.28 For noise control at airports not currently designated for noise management purposes, it states in paragraph 3.11 that:

“the Government would like appropriate controls to be agreed locally. For example, local authorities will want to consider whether to set such controls as a planning condition on new airport development. Noise controls at the designated airports will provide examples for other airports to consider as appropriate. Airports should ensure that the effectiveness of their measures to tackle noise is reviewed on a regular basis. For airports required to produce Noise Action Plans under EU legislation, this should be done at least as often as the five-yearly review of these plans. Noise Action Plans and any other noise measures agreed locally should be proportionate to actual noise impacts”.

Regional Policies

The London Plan (July 2011)

D.29 The London Plan is the overall strategic plan for London. It sets out a fully integrated economic, environmental, transport and social framework for the development of the capital. London boroughs’ local plans need to be in general conformity with the London Plan, and its policies guide decisions on planning applications by councils and the Mayor.

D.30 Policy 7.15 of the London Plan – Reducing noise and Enhancing Soundscapes, states the Mayor’s Policy on Noise is at three levels as follows:

- a) Strategic - The transport, spatial and design policies of this plan will be implemented in order to reduce noise and support the objectives of the Mayor’s Ambient Noise Strategy.
- b) Planning decisions - Development proposals should seek to reduce noise by: (a) minimising the existing and potential adverse impacts of noise on, from, within, or in the vicinity of, development proposals. (b) separating new noise sensitive development from major noise sources wherever practicable through the use of distance, screening, or internal layout in preference to sole reliance on sound insulation. (c) promoting new technologies and improved practices to reduce noise at source.
- c) LDF preparation - Boroughs and others with relevant responsibilities should have policies to: (a) reduce the adverse impact of noise through the distribution of noise making and noise sensitive uses, and in highway management and transport policies.
- (b) protect Quiet Areas, to be formally identified under Environmental Noise (England) Regulations 2006 (as amended) and consider protection of spaces of relative tranquillity or high soundscape quality, particularly through borough open space strategies.

D.31 In March 2010, the Government published a Noise Action Plan for the London Agglomeration (larger than GLA area) under the Environmental Noise Directive 2002/49/ EC and the Environmental Noise (England) Regulations 2006 (as amended).

Local Policies

D.32 LCY is located within Newham. Thamesmead in Greenwich, and part of Tower Hamlets, lying close to the airport, are overflowed at low altitude by arriving and departing aircraft.

D.33 Relevant noise policies for each Borough are therefore discussed below, either from the Local Development Framework (LDF) and the Core Policies, or from any relevant saved UDP policies or retained guidance notes.

London Borough of Newham Noise and Transportation Policies (2012)

D.34 Newham’s new Core Strategy was adopted 26th January 2012. Relevant to LCY and planning and noise, it states in page 54 on Spatial Policies:

“London City Airport is a major employer within the area but the operation of the airport has impacts on the local environment and also could constrain some types of development in the Public Safety Zone to the east and west of the runway. Any proposals for future expansion will need to be carefully considered in light of these impacts, and the objective to attract people to the new neighbourhoods being planned in the Docks (see INF1). The London Plan (Policy 6.6) emphasises the importance of optimising existing airport capacity for example, improving access and other passenger facilities, and the Council supports this in line with the airport’s acknowledged economic role.”

D.35 The Infrastructure INF1 Strategic Transport forms part of the Core Strategy and states:

“London City Airport - The London Plan (Policy 6.6) emphasises the importance of optimising existing airport capacity, for example, improving access and other passenger facilities, and the Council supports this in line with the airport’s acknowledged economic role. The LCY Masterplan (2006) sets out development plans through to 2030, proposing that the airport will have 8 million passengers per annum (p.a.) by 2030. This equates to approximately 180,000 air traffic movements p.a. LCY propose this is accommodated by maximising the use of the existing runway, improving flight occupancy and creating better facilities for passengers. Such an increase would also necessitate an enlarged Public Safety Zone, and may impact adversely on the development potential of sites around the Royal Docks. The airport was granted planning permission in July 2009 for an increase in flight movements to 120,000 p.a. from the previously permitted level of 80,000. As part of this permission, requirements for monitoring air quality and noise impacts have been put in place. Future growth at the airport in line with the Masterplan will need to be carefully considered to ensure the potential impacts on the Royal Docks and its future role and function are taken into account”.

D.36 The policies and proposals of the LBN relating to open spaces and outdoor recreational areas are set out in saved UDP policies, retained following adoption of the Core Strategy in 2012. Whilst not specifically mentioning the effects of noise on open spaces and recreational areas, policies OS7, OS8 and OS10 state that the objectives of the Borough are to: safeguard existing open space and recreational buildings; to secure the improvement of the quality of these facilities and heavily used public open spaces in town centres, as well as damaged and derelict areas of Metropolitan Open Land in the Roding and Lea valleys; to seek the optimum use of these resources; to secure new open space and recreational facilities that will be valued by local people; and, to improve access to a range of open space and recreational facilities for local people.

Greenwich Council Noise and Transportation Policies

D.37 The 2006 UDP sets out policies for the development of the London Borough of Greenwich until 2011 and in some instances 2016. The Borough is mainly residential and is considered sensitive to overflying by all types of air traffic, including Heathrow operations.

D.38 The Borough states that it will seek to reduce disturbance caused by existing noise and vibration by negotiating a reduction in activity where possible, installing improvement measures and, where appropriate, by encouraging relocation. The UDP is due to be superseded by the Local Development Framework (LDF) once the LDF is adopted and approved as Greenwich's development plan.

D.39 Greenwich's Draft Core Strategy with Development Management Policies 2011 has a new policy C(e) - London City Airport, which has provision for new applications to take account of both safeguarding and noise issues associated with the airport.

Tower Hamlets Noise and Transportation Policies

D.40 The Tower Hamlets UDP was adopted as the Council's statutory development plan on 2nd December 1998, and will be replaced by the Local Development Framework (LDF). Until the LDF is adopted, the 'saved' policies of the UDP remain relevant.

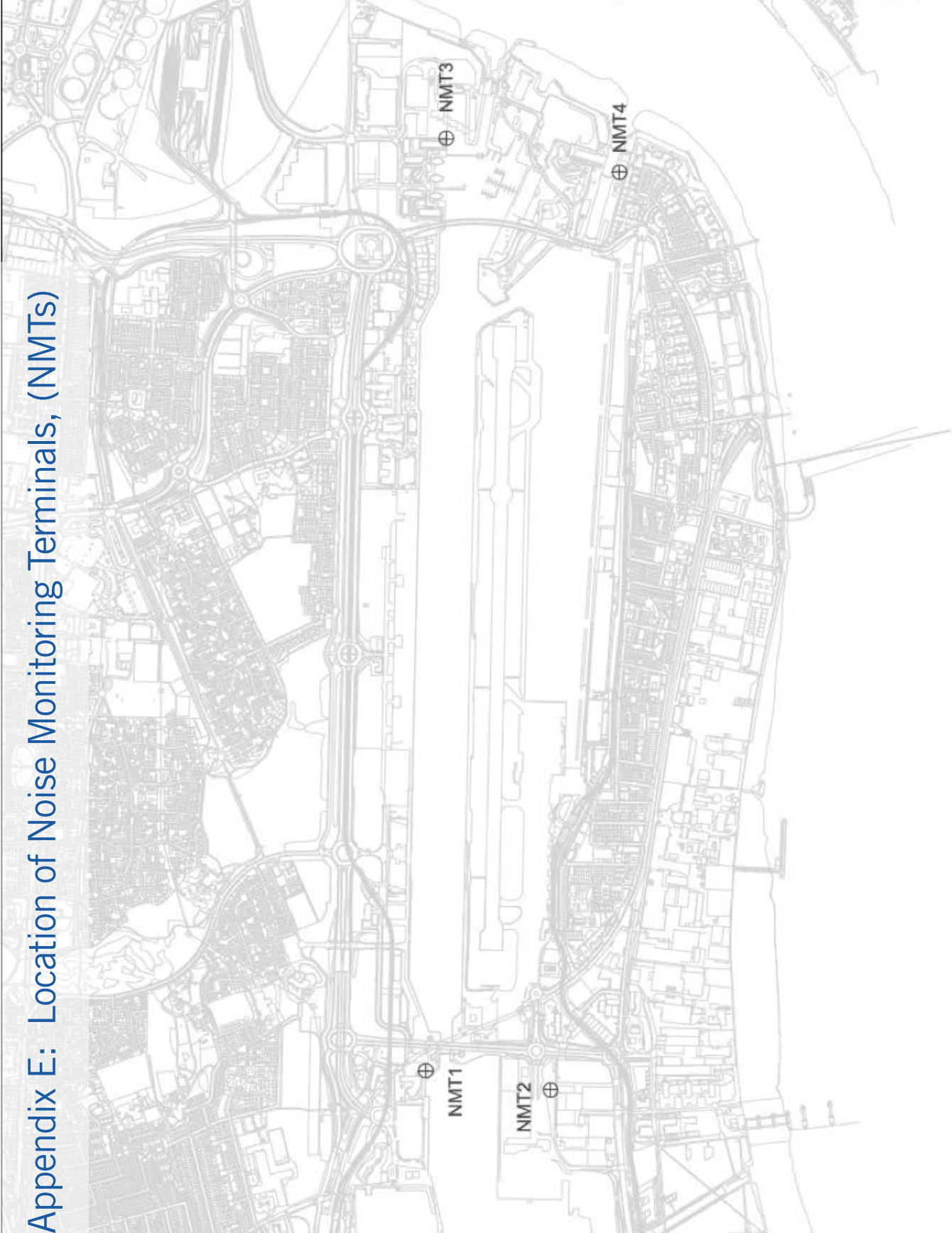
D.41 The Core Strategy Development Plan 2025 provides a 15-year plan for the Borough as part of the LDF. It was found sound by the Planning Inspector and adopted by Tower Hamlets Council 15 September 2010. There are no policies within the Core Strategy or the Environmental and Transport sections of the UDP which make reference to overflying aircraft.

Industry Policies

Sustainable Aviation's Noise Road Map

D.42 LCY is a member of Sustainable Aviation which is a long term strategy which sets out the collective approach of UK aviation to tackling the challenge of ensuring a sustainable future for our industry. As a result Sustainable Aviation is committed to a range of goals. One of these goals is specifically about noise, to limit and, where possible, reduce the impact of aircraft noise. Through the publication of Sustainable Aviation's Noise Road-Map, it is working to ensure the identified opportunities and industry commitments are realised.

Appendix E: Location of Noise Monitoring Terminals, (NMTs)



**Bickerdike
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Legend

⊕ NMT position

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Drawing Title
LONDON CITY AIRPORT
Baseline Noise Measurement
Locations- NMTs 1-4

Scale at A3

Not to scale

Total: June 2013

Drawing Number

Figure-8.3

Appendix F: Requirements of END

Noise Action Plan – Requirements of END

F.1 Below are the minimum requirements as given in Annex V of the END:

An Action Plan must at least include the following elements:

- A description of the airport and any other noise sources taken into account;
- The authority responsible;
- The legal context;
- Any limit values in place;
- A summary of the results of the noise mapping;
- An evaluation of the estimated number of people exposed to noise, identification of problems and situations that need to be improved;
- A record of the public consultations organised in accordance with Article 8(7);
- Any noise reduction measures already in force and any projects in preparation;
- Actions which the airport operator intends to take in the next five years, including measures to preserve quiet areas;
- Long term strategy;
- Financial information (if available): budgets, cost-effectiveness assessment, cost-benefit assessment;

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