Annual
Performance
Report 2023

Annexes

LCY
CITY
AIRPORT

01 June 2024

Contents

Annual
Performance
Report 2023

Annex 1

Summary of CADP1 APR Requirements & References

LONDON CITY AIRPORT

Requirements	Source: Approved Document or Condition	Condition /AOD References	APR Section	Format	APR Reference/ Source
Approved PCCS (AODS)					
Condition 18 AOD Aircraft Noise Categorisation Scheme – paras 4.1.3 & 5.2.2 (5.2.2) Produce a report as part of the APR that records the results of the assessments undertaken as part of the quota count regime. Including but not limited to: the quota counts for each aircraft type; the total annual quota arising from aircraft operations; the results of noise monitoring, expressed for each aircraft and airline as averages in relation to sideline, flyover and approach noise levels, quota counts to be used for each aircraft and the expected total annual quota for the forthcoming calendar year. (4.1.3) publish in the APR a league table setting out the performance of each aircraft type, by airline, relative to its previous years' performance.	Condition & Approved Document 22/00807/ AOD	18 AOD paras 4.1.3 & 5.2.2 19 31 31 AOD A.7, Appendix C paras C.2.3 and C.7	Environment	Summary in text and report in Annex	Sections 2.2 & 2.4 Annex 3 ANCS Report Annex 2 NOMMS Section 11 & Appendix 10 Annex 4 Annual Community & Airline Report
Condition 31 AOD NOMMS A.7 – Complaints Handling Report complaints about environmental impact of the operation of the airport and any action taken to address such complaints in the APR.	Condition & Approved Document 22/02035/AOD	31 31 AOD A.7 59	Environment	Summary in text	Section 2.11
Condition 31 AOD NOMMS A.8 – Reporting Publish noise monitoring data in APR in June each year, including reports from the Noise and Track Monitoring System:- i) Track plots showing the actual tracks flown by departing aircraft. ii) Average departure and arrival noise levels by aircraft type and airline iii) Data on reverse thrust by aircraft type and airlines.	Condition & Approved Document 22/02035/AOD	18 AOD 5.2.2 31 31 AOD A.8	Environment	Summary on text, report in Annex	Section 2.3 Annex 2 NOMMS Annex 3 ANCS Section 4 and Appendix 4
Condition 31 AOD NOMMS – Appendix C para C.2.7 Produce an annual Community and Airline Report as part of the APR describing aircraft/airline performance with regard to noise monitoring in terms of good and poor performance and league tables.	Condition & Approved Document 22/02035/AOD	31 31 AOD Appendix C para C.7	Environment	Summary in text and report in Annex	Section 2.4 Annex 4 Annual Community & Airline Report Annex 2 NOMMS Section 4 and Appendix 2
Condition 31 AOD NOMMS Appendix C para C.3 (iv) and (v) Publish an annual Community and Airline Report that highlights the performance of the scheme and identify the most improved airline for the previous calendar year. Identify the details of the community projects that have been sponsored in the previous year in partnership with the winning airline. Publish as part of the APR.	Condition & Approved Document 22/02035/AOD	31 31 AOD Appendix C para C.3 (iv) and (v)	Environment	Summary in text and report in Annex	Section 2.4 Annex 4 Annual Community & Airline Report Annex 2 NOMMS Section 4 and Appendix 2

Requirements	Source: Approved Document or Condition	Condition /AOD References	APR Section	Format	APR Reference/ Source
Approved PCCS (AODS)					
Condition 31 AOD NOMMS – Appendix F.3 (Annual Noise Contours) Produce annual daytime noise contours depicting air noise produced during an average summer day following defined method.	Condition & Approved Document 22/02035/AOD	31 31 AOD Appendix F	Environment	Contours in Annex and summary in text	Section 2.7 Annex 2 NOMMS Appendix 5
Condition 31 AOD NOMMS – H.1 Report in the APR details of the use of APUs at the airport the previous calendar year.	Condition & Approved Document 22/02035/AOD	31 31 AOD, H.1 58 AOD para 1.9 (measure 2)	Environment	Summary in text and report in Annex	Section 2.5 Annex 2 NOMMS, Section 8
Condition 31 AOD NOMMS – Appendix I (Reverse Thrust) Any exceedances of the noise threshold levels from an arriving aircraft shall be reported in the Annual Performance Report	Approved Document 22/02035/AOD	31 AOD Appendix I	Environment	Report in Annex	Annex 2 NOMMS
Condition 44 AOD Ground Power Strategy – para 1.7 Monitoring of Ground Power performance to be reported annually in APR. Paragraph 1.6 confirms the monitoring approach is described in the Air Quality Management Strategy (AQMS) (condition 58). Relevant measures in the AQMS are: 1, 2 and 3.	Approved Document 20/01200/ NONMAT	44 44 AOD para 1.7 58 AOD para 1.5 56 AOD	Environment	Summary of AQMS progress	Section 2.5 Annex 2 NOMMS Section 8 Annex 6 Air Quality Action Plan Progress Update
Condition 47 AOD Auxiliary Power Units Strategy – para 1.9 Report annually as part of the APR all current aircraft operational at the airport which require essential use of APUs and APU run times that have ran for longer than specified in the Airport Operating Instructions	Condition & Approved Document 20/00373/ AOD	47 AOD para 1.9 31 31 AOD Appendix H.1	Environment	Summary in text and report in Annex	Section 2.5 Annex 2 NOMMS Section 8.0 & Appendix 6 Annex 6 Air Quality Action Plan Progress Update
Condition 48 AOD Ground Engine Running Strategy - para 6.2.1 A report as part of the APR on the performance and or compliance during the previous calendar year with the approved targets in the Ground Engine Running Strategy. To compare against the stated targets, by aircraft type and airline, including the: average engine running time on stands; average time for aircraft to taxi into a stand on arrival; and average time from an aircraft leaving a stand to the time of departure.	Condition & Approved Document 23/01194/AOD	48 AOD para 6.2.1 31 31 AOD Appendix D para D.2	Environment	Summary in text and report in Annex	Section 2.5 Annex 2 NOMMS Section 5 & Appendix 4

Requirements	Source: Approved Document or Condition	Condition /AOD References	APR Section	Format	APR Reference/ Source
Approved PCCS (AODS)					
Condition 49 AOD Ground Running, testing and Maintenance Strategy – para 5.1.1. A report as part of the APR recording engine ground running during the preceding calendar year, including details of the number, duration and power setting of ground runs and the types of aircraft involved and written measurements and calculations to show whether the Ground Running Noise Limit has been exceeded during the preceding calendar year.	Condition and Approved Document 23/01194/AOD	49 49 AOD para 5.1 31 AOD Appendix D para D.5.2	Environment	Summary in text and report in Annex	Annex 2 NOMMS Section 5 & Appendix 4
Condition 51 AOD Ground Running Noise Limit Strategy - para 4.1.2 Provide written measurements and calculations in the APR to show whether the Ground Running Noise Limit is being approached.	Condition & Approved Document 17/00226/AOD	51 AOD para 4.1.2 52 48 49 31 AOD Appendix D para D.5.4	Environment	Summary in text and report in Annex	Annex 2 NOMMS Section 5 & Appendix 4
Condition 56 AOD Sustainability and Biodiversity Strategy – para 1.8 Report on the individual targets in the APR.	Condition & Approved Document 23/01195/AOD	56 56 AOD para 1.8 70 AOD para 4.7	Environment	Summary in text and report in Annex	Section 2.10 Annex 7 Sustainability and Biodiversity Action Plan Progress Update
Condition 57 AOD Air Quality Monitoring Strategy – para 2.10 Include the annual Air Quality Monitoring Report in the APR	Condition & Approved Document 23/01196/AOD	57 57 AOD para 2.10	Environment	Summary in text and report in Annex	Section 2.6 Annex 5 Annual Air Quality Report
Condition 58 AOD Air Quality Management Strategy - Measures 1 to 18 – para 1.5 Progress on each measure/target will be set out in the APR each year. All targets and strategies are set out in Box 1 of the approved strategy.	Approved Document 23/01196/AOD	58 AOD para 1.5 44 AOD para 1.7	Environment	Report in Annex	Section 2.6 Annex 6 Air Quality Action Plan Progress Update
Condition 60 AOD Use of River Thames For Construction – Para 4.2 Report the number of vehicles taken off the road each year as part of APR.	Approved Document 17/00534/AOD	60 AOD para 4.2	Environment	Summary in text	Section 4.4
Condition 70 AOD Waste Management Strategy – Para 4.7 Report progress annually on the targets for the management and recycling of CADP1 construction wastes.	Approved Document 19/02559/AOD	70 AOD para 4.7 56 56 AOD para 1.8	Environment	Summary in text and report in Annex	Section 2.10 Annex 7 Sustainability and Biodiversity Action Plan Progress Update
Condition 71 AOD Travel Plan – Para 6.13 Results of passenger and staff travel surveys will be included within the APR.	Approved Document 22/02830/AOD	71 AOD para 6.13	Surface Access	Summary in text	Section 4.2 Section 4.3 Annex 11 Employee Travel Survey

Requirements	APR Section	Format	APR Reference/ Source
Schedule 8 produce noise contours – Para 2 (30 Noise Monitoring System & 31 NOMMS – Appendix F) Publish noise contours each year as part of the APR (to include 54Db contour), noise contours for the Sound Insulation Scheme & produce annual daytime noise contours depicting air noise produced during an average summer day following defined method.	Environment	Contours in Annex and summary in text	Section 2.3 Annex 2 NOMMS Section 7 and Appendix 5
Schedule 9 Reinspection Scheme – Para 5.3 - a list of properties which have become eligible for the Reinspection Scheme in the preceding 12 months.	Environment	Report in Annex	Section 2.8 Annex 2 NOMMS Section 10 and Appendix 8
Schedule 9 NIPS 1 para 6.2 - which payments have been made under NIPS 1	Financial Contribution	Summary on text, report in Annex	Section 5.2 Annex 2 NOMMS Section 10.3
Schedule 9 NIPS 2 para 7.2 - which payments have been made under NIPS 2	Financial Contribution	Summary in text, report in Annex	Section 5.2 Annex 2 NOMMS Section 10.3
Schedule 9 Purchase Offer – Para 8.2 - any residential dwelling with any part of its external elevation which is situated within the actual 69 db contour for the purposes of the purchase scheme and within three months of that date they shall notify the owner/occupier of any dwelling so identified in the APR that they are entitled to benefit from the purchase scheme and invite applications from the owner/occupier under the purchase scheme.	Environment	Summary in text and report in Annex	Section 5.2 Annex 2 NOMMS Section 10 and Appendix 8
Schedule 11 – Para 1.3 Provide list of existing employers	Employment	Summary in text and schedule in Annex	Section 3.3 Annex 8 List of Employers Onsite
Schedule 11 – Recruitment Policy – Para 1.4 - to continue to provide the Council annually with details in writing of the policy adopted by the Operator to fill its job vacancies and the Operator shall consult the Council about such policy on not fewer than one occasion each year in conjunction with the APR	Employment	Summary in text and policy in Annex	Section 3.2 Annex 10 LCY Recruitment Policy
Schedule 11 – Paras 1.5 Report job numbers and target performance to LBN and LCACC (a) the percentage of jobs advertised at the Airport in the preceding calendar year to which residents living (i) in the Local Area; and (ii) the London Borough of Newham were recruited; (b) the percentage of jobs advertised by the Operator in the preceding calendar year to which residents living in (i) the Local Area; and (ii) the London Borough of Newham were recruited; (c) the numbers of full-time equivalent jobs at the Airport and the number of full-time equivalent jobs made available directly by the Operator; (d) the total number of full-time and part-time employees at the Airport and those employed directly by the Operator	Employment	Stats in text	Sections 3.2 and 3.3

Requirements	APR Section	Format	APR Reference/ Source
Schedule 11– Para 3.2 Maximise supply chain opportunities for LBN and local area businesses and report progress (a) the number of contractors being used on site; and (b) details of those based in Newham and the remainder of the Local Area; (c) name and postcode of contractor/supplier; and (d) the aggregate values of different categories of contracts	Employment	Stats in text and list in Annex	Sections 3.4 & 3.5 Annex 8 List of Employers Onsite
Schedule 12 Value Compensation Scheme (VCS) 1 - which payments have been made under VCS 1	Financial Contributions	Summary in text	N/A for 2023
Schedule 12 VCS 2 - which payments have been made under VCS 2 + The existence of the adopted VCS2 and its closing date will be published by its inclusion in the annual performance report which the Airport is obliged to publish every year and (within three months of the start of VCS2) through written notification of the owners of Eligible Interests in Eligible Sites, insofar as the Airport is able to identify them through Land Registry searches.	Financial Contributions	Summary in text	N/A for 2023
Annexure 2 – First Tier Scheme - para 3.1 - with effect from the Commencement of Development the APR shall specify the geographic area within which the properties which are eligible for this Scheme are situated.	Compensation	Summary on text, report in Annex	Section 2.7 Annex 2
Annexure 3 – NIPS – para 3.8 - the existence of NIPS (once adopted) will be published by its inclusion in the APR	Compensation	Summary in text and link to LCY website	Section 5.2
Annexure 4 – NIPS2 – para 3.8 - the existence of NIPS2 (once adopted) will be published by its inclusion in the APR	Compensation	Summary in text	Section 5.2
Annexure 7 – Second Tier Noise Insulation Scheme – para 3.1 - the geographic area within which the properties which are eligible for this Scheme are situated.	Compensation	Summary in text, report in Annex	Section 2.7 Annex 2
Annexure 8 – VCS – para 5.1 - written notification of the owners of Eligible Interests in Eligible Sites, insofar as the Airport is able to identify them through Land Registry searches.	Compensation	Summary in text and link to LCY website	Section 5.2
Annexure 9 – VCS2 – para 5.1 Publicise existence of VCS2 and closing date in APR and written notification of the owners of Eligible Interests in Eligible Sites, insofar as the Airport is able to identify them through Land Registry searches.	Compensation	Summary in text and link to LCY website	Section 5.2
Annexure 12 – Intermediate Tier Scheme – para 3 - specify the geographic area within which the properties which are eligible for this Scheme are situated.	Compensation	Summary in text, report in Annex	Section 2.7 Annex 2
Schedule of Payments Made	Financial Contributions	Summary of annual payments in text	Section 5.1

Requirements	Source: Approved Document or Condition	Condition /AOD References	APR Section	Format	APR Reference/ Source
Conditions					
19 Review and Reporting on Aircraft Noise Categorisation Scheme (ANCS) A report as part of the APR on the performance and/or compliance with the approved ANCS during the previous calendar year.	Condition & Approved Document 22/00807/ AOD	19 18 AOD paras 4.1.3 & 5.2.2	Environment	Summary in text and report in Annex	Section 2.2 Annex 3 ANCS Report
31 Noise Management and Mitigation Strategy (NOMMS) Report on the performance and compliance with the approved NOMMS during the previous 12 months in the APR	Condition & Approved Document 22/02035/AOD	31 31 AOD	Environment	Summary in text and report in Annex	Sections 2.3, 2.4 & 2.11 Annex 2 NOMMS
47 Auxiliary Power Units A report containing details of the use of Auxiliary Power Units at the Airport in the previous calendar year	Condition & Approved Document 20/00373/ AOD	47 AOD para 1.9 31 AOD-H3	Environment	Summary in text and report in Annex	Annex 2 NOMMS Section 8
48 Ground Engine Running Strategy - para 6.2.1 A report as part of the APR on the performance and or compliance during the previous calendar year with the approved targets in the Ground Engine Running Strategy.	Condition & Approved Document 23/01194/AOD	48 48 AOD	Environment	Summary in text and report in Annex	Annex 2 NOMMS Section 5 & Appendix 4
49 Ground Running, Testing and Maintenance Strategy A report as part of the APR on the performance and or compliance during the previous calendar year with the targets in the Ground Running, Testing and Maintenance Strategy.	Condition & Approved Document 23/01194/AOD	49 49 AOD	Environment	Summary in text and report in Annex	Annex 2 NOMMS Section 5 & Appendix 4
52 Ground Running Annual Performance Report A report as part of the APR, including details of the number, duration and power setting of ground runs and the types of aircraft involved and written measurements and calculations to show whether the Ground Running Noise Limit has been exceeded as a result of Ground running during the preceding calendar year.	Condition & Approved Document 17/00226/AOD	52 51 AOD para 4.1.2 48 AOD para 6.2.1 49 AOD para 5.1.1)	Environment	Summary in text and report in Annex	Annex 2 NOMMS Section 5 Appendix 4
56 Sustainability and Biodiversity Strategy A report as part of the APR on the performance and compliance during the previous calendar year with the targets in the approved Sustainability and Biodiversity Strategy.	Condition & Approved Document 23/01195/AOD	56 56 AOD para 1.8 57 AOD para 4.7	Environment	Summary in text and report as Annex	Section 2.10 Annex 7 Sustainability and Biodiversity Action Plan Progress Update
57 Air Quality Monitoring Report annually as part of the APR	Condition & Approved Document 23/01196/AOD	57 57 AOD para 2.11	Environment	Summary in text and report in Annex	Section 2.6 Annex 5 Air Quality Annual Report
59 Complaints About Environmental Impact Report in the APR all complaints and any action taken in the preceding calendar year.	Condition	59 31 31 AOD A.7	Environment	Summary in text	Section 2.11

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Annex 2

Noise Management and Mitigation Strategy (NOMMS) Report

LONDON CITY AIRPORT

Bickerdike Allen Partners
Architecture
Acoustics
Technology

LONDON CITY AIRPORT

NOISE MANAGEMENT AND MITIGATION STRATEGY (NOMMS) REPORT 2023

Report to

London City Airport
The Royal Docks
London E16 2PB

A11327_05_RP060_4.0
30 May 2024

Bickerdike Allen Partners LLP is an integrated practice of Architects, Acousticians, and Construction Technologists, celebrating over 60 years of continuous practice.

Architects: Design and project management services which cover all stages of design, from feasibility and planning through to construction on site and completion.

Acoustic Consultants: Expertise in planning and noise, the control of noise and vibration and the sound insulation and acoustic treatment of buildings.

Construction Technology Consultants: Expertise in building cladding, technical appraisals and defect investigation and provision of construction expert witness services.

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1.0 INTRODUCTION

The City Airport Development Programme (CADP1) planning application (13/01228/FUL) was granted planning permission by the Secretary of State for Communities and Local Government and the Secretary of State for Transport in July 2016 following an appeal and public inquiry which was held in March and April 2016.

Condition 31 of this permission states that:

"Prior to the Commencement of Development a Noise Management and Mitigation Strategy (NOMMS) shall be submitted to the Local Planning Authority for approval in writing.

The NOMMS shall be implemented as approved and thereafter the Airport shall only operate in accordance with the approved NOMMS.

Following implementation of the approved NOMMS, a report shall be submitted to the Local Planning Authority annually on 1 June (or the first working day thereafter) as part of the Annual Performance Report on the performance and compliance with the approved NOMMS during the previous 12 month period.

The approved NOMMS shall be reviewed not later than the 5th year after approval and every 5th year thereafter. The reviews shall be submitted to the Local Planning Authority within 3 months of such review dates for approval, and implemented as so approved.

The NOMMS shall include, but not be limited to:

- *Combined Noise and Track Monitoring System*
- *Quiet Operating Procedures*
- *Penalties and Incentives*
- *Control of Ground Noise*
- *Airport Consultative Committee*
- *Annual Noise Contours*
- *Integrity of NOMMS*
- *Auxiliary Power Units*
- *Reverse Thrust and*
- *Sound Insulation Scheme"*

The NOMMS which addresses the above requirements was formally approved by the London Borough of Newham (LBN) on 18 May 2017 and was implemented on 18 August 2017. The latest version of the NOMMS was approved on 27 September 2022 (LBN reference 22/02035/AOD).

This report reviews the performance and compliance with the latest NOMMS in 2023, as part of the Condition 31 requirements.

Information is also provided on the number of aircraft movements that have taken place at London City Airport (LCA) over the period 1st January 2023 up to and including 31st December 2023, to show compliance with CADP1 Conditions 17 and 23 to 27.

2.0 COMBINED NOISE AND TRACK MONITORING SYSTEM

2.1 Noise Monitoring

A continuous noise monitoring system was first installed and became operational at the airport in 1992, and a system of this type has been in place ever since. Since 1999 it has also included a flight track monitoring system and has been known as the Noise and Track Keeping (NTK) system. The noise monitoring system has since been upgraded and expanded and now comprises six fixed noise monitoring terminals (NMTs) and one mobile NMT. The fixed NMTs (NMTs 1-6) are used to measure arrivals and departures of aircraft using the airport. The mobile NMT (NMT 7) is used primarily for the monitoring of aircraft related ground noise. The location of NMTs 1-7 is shown in Figure 1.

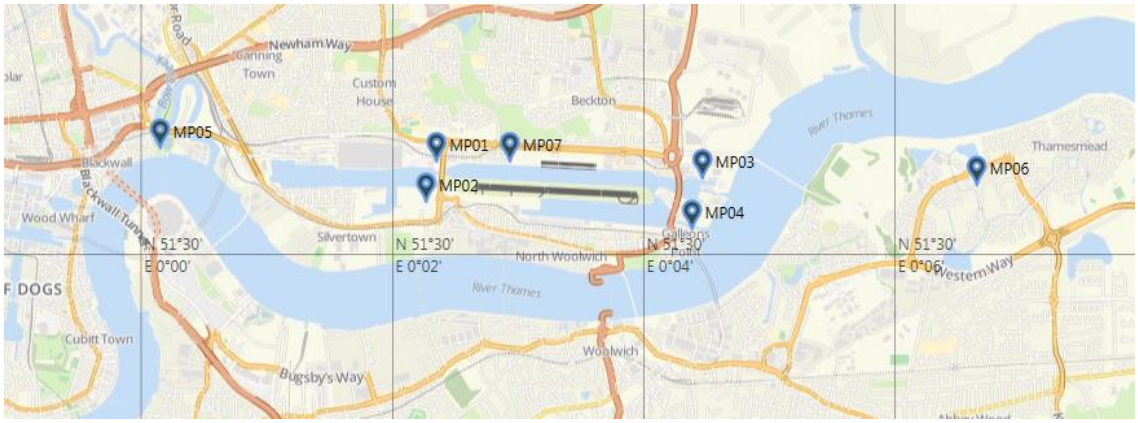


Figure 1: Location of NMTs 1-7

Noise data is collected from the NMTs and processed for the purposes of aircraft monitoring and also noise management. The NTK system is designed to ensure that a minimum correlation rate of 80% of all aircraft departures is achieved over the calendar year. Quarterly NTK status reports are issued to the London Borough of Newham, reporting on the correlation rate achieved over the quarter as discussed in 2.2.1 below.

The average departure and arrival noise levels measured in 2023, by aircraft type and airline, are reported elsewhere as part of the Aircraft Noise Categorisation Scheme (ANCS) summary.

As stated in the Noise Action Plan, the airport will be introducing an enhanced flight monitoring system, which will allow the community to review flight tracks and aircraft noise as measured by the airport's NMTs and review real-time and historical data.

2.2 Flight Track Monitoring

The flight track monitoring component of the system is permanently linked to the airport's radar feed, which is provided by the Air Traffic Control (ATC). Aircraft flight tracks are correlated with flight information and noise events. Based on this information, the airport use a web-based system (known as TRAVIS[1]) to share data from the flight track monitoring system with the public.

Flight tracks are capable of real-time inspection and are also stored for later processing and analysis. This allows deviations from the departure and arrival flight paths at the airport both in plan and elevation to be determined.

LCA do not currently operate noise preferential routes such as those that are in place at some other airports. In the absence of an agreed swathe to assess against, in recent years analysis has been carried out on the tracks flown to identify any aircraft which appear to be 'off track', based on whether they go through a 'gate' which has been set up in the NTK system for each route.

As part of the review of the NOMMS in 2022, the requirement to report airline/aircraft performance with respect to track-keeping and the requirement to maintain a log of 'off track' departures was removed. This is due to the lack of an agreed swathe to assess against and the perception that 'off track' aircraft are not currently a significant issue at LCA. The airport will however continue to present the track plots in the quarterly and annual reports. If these, or a sudden influx of related complaints, suggest 'off track' flights has become an issue, the analysis undertaken previously will recommence.

Figure 2 shows a heat map of all departures from LCA during 2023. The colour of each tile represents the number of aircraft that passed through it. The dark blue tiles represent the lowest frequency of departures and the red tiles the highest frequencies.

Figure 3 shows a heat map of all departures from LCA during the previous year for comparison. It can be seen that there have not been any significant changes to the flight tracks.

[1] https://travislcy.topsonic.aero/

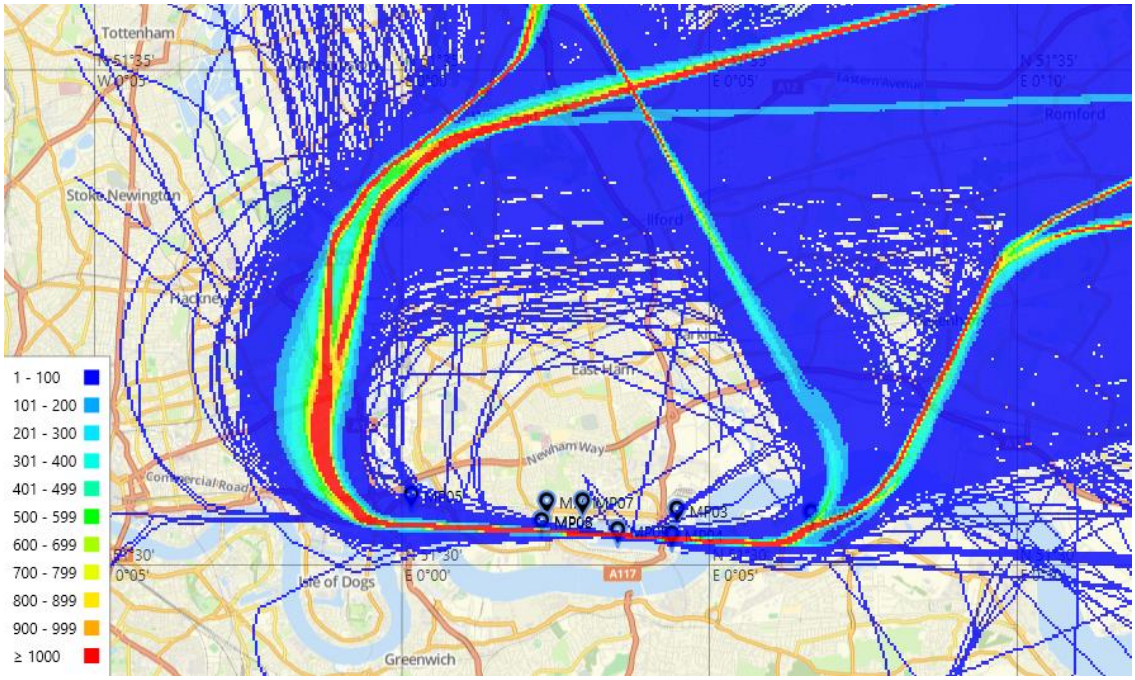


Figure 2: Departure Heat Map, 2023

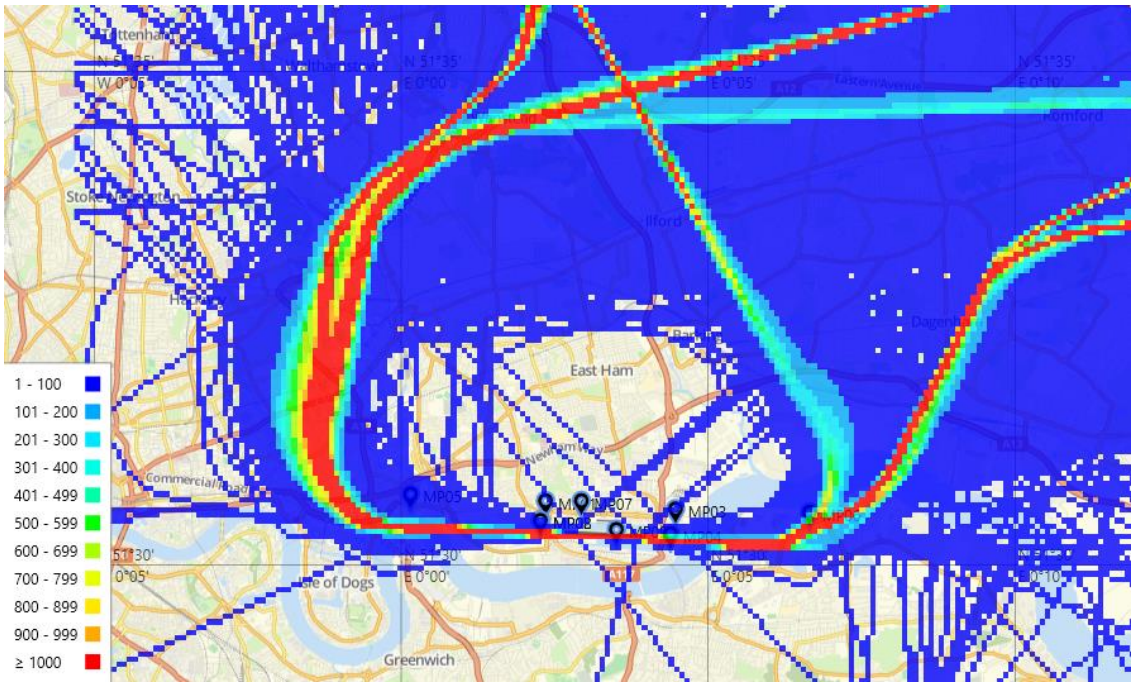


Figure 3: Departure Heat Map, 2022

2.2.1 NTK Status

Prior to the implementation of NOMMS, under paragraph A6.0 of the approved Temporary Noise Monitoring Strategy, the airport was required to provide quarterly reports on the status of the NTK system (NMTs 1-4) to the local authority. Each report was required to record the daily operational status of each Noise Monitoring Terminal (NMT) together with the total monthly correlation rate of noise events to aircraft departures over a specified quarter year period.

Although no longer a planning condition, at the request of the London Borough of Newham (LBN), the airport have agreed to continue providing these reports, and also to include the status of NMTs 5 & 6.

Table A1.1 of Appendix 1 of this report details the daily operational status of each of NMTs 1-6 between 1st January 2023 and 31st December 2023. Table A1.2 sets out the monthly correlation rate of noise events to aircraft movements for the same period, and Table A1.3 gives a summary of the NTK operational status for each quarter.

The noise monitoring system remained in continuous operation throughout the whole twelve month period between 1st January 2023 and 31st December 2023. Each noise monitoring terminal was in operation every day.

The target correlation rate (80%) for departures measured at NMTs 1-4 was met for 2023. A total of 25,045 aircraft departures were recorded, and an average correlation rate of noise events to aircraft departures of 96% was achieved.

A total of 24,855 (96%) departures and 25,047 (96%) arrivals were correlated at NMTs 5 and 6 in 2023.

3.0 QUIET OPERATING PROCEDURES

The airport requires that every operator of aircraft adopt procedures which will produce the least noise disturbance compatible with safe operation, and where applicable, such procedures should follow any promulgated noise abatement routing for the airport. Where aircraft manufacturers have established special procedures for the purposes of reducing noise, these should be applied to operations at London City Airport, subject always to the safe operation of aircraft.

Quiet operating procedures at London City Airport include the following:-

- Minimum use of reverse thrust (see Section 9.0)
- Use of fixed electrical ground power where possible (see Section 8.0)
- Minimum use of auxiliary power units (see Section 8.0)
- Operation of a steep glide slope (5.5 degrees)
- An EFPS (Electronic Flight Progress Strips) system (see Section 5.0).

4.0 INCENTIVES AND PENALTIES SCHEME

4.1 Scheme Details

The NOMMS includes an Incentives and Penalties Scheme (IPS) which has financial penalties for noisy departures. The IPS was implemented on 18 August 2017 and was intended to introduce a more equitable approach to determining penalties and credits by utilising the fixed noise monitors at either end of the runway (NMTs 5 and 6) to monitor departure noise levels. The IPS focuses on incentivising quieter operation of aircraft on departure and penalising noisy departures.

The scheme works as follows:

- The flyover noise level for a given departure is defined as the $L_{Amax,s}$ noise level measured at the relevant NMT (NMT 5 for runway 27 departures, and NMT 6 for runway 09 departures).
- The measured noise levels are compared with the thresholds given in Table 1.
- If the Fixed Penalty Limit is exceeded, the airline responsible is fined £600[2] per dB(A) of exceedance, and one credit point is removed from the airline's credit account.
- If the Fixed Penalty Limit is not exceeded, but the Credit Removal Threshold is exceeded, one credit point is removed from the airline's credit account.
- If the Credit Award Threshold is not exceeded, one credit point is added to the airline's credit account.
- An airline may avoid a fixed penalty or credit removal for a particular flight, if they are able to provide a reasonable explanation for the noisy departure. Each exceedance event is considered on a case by case basis to establish whether or not a penalty or credit removal is applied.
- An airline's credit account is reset to zero at the beginning of each calendar year.

The fines for exceeding the Fixed Penalty Limit are paid into London City Airport's Community Fund, and are added to the annual contribution of £75,000 provided to the fund by LCA. The most improved airline each year, as determined by this review, partners the airport in delivering the fund.

The current penalty and credit limits (noise levels) are set out in Table 1 below.

[2] Fines were not payable prior to 1st November 2018

Threshold Description	Aircraft Category	Flyover Noise Level, dB L_{ASmax}	
		Runway 09	Runway 27
Fixed Penalty Limit	Turbofans	84	84[1]
	Turboprops	78	78
Credit Removal Threshold	Turbofans	81	82
	Turboprops	75	77
Credit Award Threshold	Turbofans	73	72
	Turboprops	66.5	65.5

[1] If aircraft is between 100m and 300m north of the extended runway centreline, a 0.2 dB reduction is applied to the measured noise level

N.B. All noise limits are expressed as dB L_{ASmax}

Table 1: IPS Fixed Penalty Noise Limits and Credit Thresholds

4.2 Community Fund

The Community Fund grant provides a financial boost to local groups, such as mental health charities, disability groups, community gardens and sports teams as well as those providing family support, mentoring programmes and employability training. The Community Fund awarded £86k in 2023, to 20 organisations, including Salaam Peace, West Silvertown Community Foundation, Powerhouse for Women and the Helping Disabilities Trust. A full list is available on the airport website[3].

Applications are considered twice a year by a board of Trustees from London City Airport and representatives from the local community, as well as an independent chair. This means that with great local insight and expertise, the Trustees evaluate applications using their knowledge to ensure the greatest possible benefit goes to the community.

To qualify for any of the available Grant, an applicant must be a charity or not for profit organisation and the project is expected to meet one or more of the following criteria:

- build stronger, safer and healthier communities;
- create more sustainable and greener communities;
- raise aspirations of East Londoners; or

[3] https://www.londoncityairport.com/corporate/responsible-growth/community-fund

- create pathways into employment.

The Community Fund advertises in local newspapers including, Newham & Stratford Recorder, Barking and Dagenham Post, Wharf Life and South London press & Mercury Paper. An example of the advert is reproduced in Figure 4. The fund was also advertised to local MPs and councillors to cascade the information and encourage charities and not-for profit organisations to apply.

Figure 4: Example of Community Fund Advert

4.3 Scheme Review

The IPS was previously subject to an annual review, independently of the review of the NOMMS. As part of the 2022 review of the NOMMS, this was amended such that going forward the IPS shall be reviewed as part of the NOMMS.

4.4 Reporting

A summary of the number of fixed penalties, credit awards and credit removals by month is given in Table 2.

Month	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded
January	0	£0	0	282
February	0	£0	0	221
March	0	£0	0	255
April	0	£0	0	248
May	0	£0	2	304
June	0	£0	1	335
July	0	£0	0	183
August	0	£0	0	165
September	0	£0	0	282
October	0	£0	1	274
November	0	£0	0	285
December	0	£0	0	233
Total	**0**	**£0**	**4**	**3067**

Table 2: Monthly Penalties, Credit Removals and Credit Awards, 2023

The number of residual credits is given for the most commonly operating airlines (those with at least one departure per week on average) in Table 3. These are based on the thresholds given in Table 1. Full details of the fixed penalties, credit awards and credit removals for 2023 are given by airline and aircraft type in Appendix 2.

Airline	Residual Credits 2023	Residual Credits 2022	Residual Credits Difference 2023 - 2022
Swiss	1204	813	391
KLM Royal Dutch Airlines	155	75	80
Sun Air	124	45	79
ITA Airways	104	37	67
Lufthansa	90	58	32
BA Cityflyer	194	174	20
NetJets Europe	400	392	8
LOT Polish Airlines	2	2	0
Aerotaxi del Caribe	39	42	-3
GlobeAir	89	95	-6
Loganair	4	12	-8
Luxair	121	134	-13
Pelican Express	62	-	-

Table 3: 2023 Residual Credits Ranking

The most improved airline has been determined by comparing the total residual credits in the two years. Therefore, Swiss will partner LCA in delivering the Community Fund in 2025.

5.0 CONTROL OF GROUND NOISE

5.1 General

The airport seeks to ensure as far as reasonably practicable that every aircraft operator adopts the operating practice which generates the least amount of noise from aircraft taxiing, manoeuvring or holding on stand, at the runway, and prior to take off, subject to the requirement of ensuring the safe operation of the aircraft at all times, all in accordance with the procedures set out in the Ground Engine Running Strategy in compliance with CADP1 Planning Condition 48. This should involve the minimum power settings necessary and, in the case of propeller aircraft, pitch settings should as far as possible be those which produce the least propeller noise.

The introduction of nose-in parking at LCA remains under consideration. This procedure is expected to have a negligible effect on the future ground noise levels around LCA. This is because in general terms, the ground noise generated by an aircraft parking and departing a stand when nose in manoeuvring will differ little, albeit it will be possibly marginally less at a receptor, as compared to when self-manoeuvring.

An Electronic Flight Progress Strips (EFPS) system is in operation at LCA which provides the ability to monitor the time that aircraft operate engines on the ground, from engine start-up until the time of departure and following the time of landing until engine shut-down. The time of any engine ground running on the apron for maintenance purposes is also monitored. Any excessive or unnecessary operation of aircraft engines is investigated by the airport.

5.2 Ground Engine Running Strategy

Ground engine running relates to the use of aircraft engines from the time of engine start-up prior to departure, during taxiing and during holding, to the time of departure. Similarly, it relates to the time following an aircraft arrival from the time when it has reduced to taxiing speed on the runway, or when the aircraft turns off the runway, whichever occurs first, to the time when an aircraft switches off its engines on a stand.

The Ground Engine Running Strategy requires that ground engine running by aircraft is to be undertaken with the minimum amount of power and for the minimum amount of time as practically possible (except when operational or safety requirements dictate otherwise) to reduce noise emissions from the use of aircraft engines while on a stand, while taxiing or while holding at any point around the airport, all in accordance with procedures and requirements set out in Airside Operating Instruction (AOI) 06 Apron Management.

The following parameters were required to be reported under the strategy in 2023:

5.2.1 Average Engine Running time on Stands (ERS)

This is the time taken for an aircraft to operate its engines, once approval to start has been given, to the time of pushback from the stand, and is required to be reported for each airline and aircraft type, with a target to keep it below 7.5 minutes on average.

Where ERS times are found to exceed 7.5 minutes on average over a quarter on a regular basis for a given aircraft type and airline, the relevant airline will be contacted to seek an explanation and to identify ways of ensuring ERS time is reduced as far as practicable. The average time by aircraft type and airline is given in Appendix 3.

The overall average ERS time for 2023 was 4 minutes and 23 seconds. Taking the year as a whole there were no airline/aircraft combinations with a minimum of one result per week which on average exceeded an ERS time of 7.5 minutes.

5.2.2 Average Taxi Time on Arrival (TTA)

This is the time between an aircraft arriving at LCA and the time it arrives on the stand and is to be reported for each airline and aircraft type, with a target to keep it below 6 minutes on average.

Where the TTA is found to exceed 6 minutes on average over a quarter on a regular basis for a given aircraft type and airline, the relevant airline will be contacted to seek an explanation and to identify ways of ensuring the TTA is reduced as far as practicable. The average time by aircraft type and airline is given in Appendix 3.

The overall average TTA for 2023 across all aircraft was 3 minutes and 44 seconds. Taking the year as a whole there were no airline/aircraft combinations with a minimum of one result per week which on average exceeded a TTA of 6 minutes.

5.2.3 Average Taxi Time on Departure (TTD)

This is the difference between the time of pushback on the stand and the time of departure and is to be reported for each airline and aircraft type, with a target to keep it below 11.5 minutes on average.

Where the TTD is found to exceed 11.5 minutes on average over a quarter on a regular basis for a given aircraft type and airline, the relevant airline will be contacted to seek an explanation and to identify ways of ensuring the TTD is reduced as far as practicable. The average time by aircraft type and airline is given in Appendix 3.

The overall average TTD for 2023 across all aircraft was 6 minutes and 21 seconds. Taking the year as a whole there were no airline/aircraft combinations with a minimum of one result per week which on average exceeded a TTD of 11.5 minutes.

5.3 Ground Running of Engines for Testing and Maintenance Purposes

The ground running of engines is required for testing and maintenance purposes. The airport is required to ensure that the noise level arising from aircraft ground running does not exceed the Ground Running Noise Limit of 60 dB $L_{Aeq,12h}$. This is assessed against the worst-case month of the year.

The running of aircraft engines is permitted only during the approved operating times for the airport. The running of engines at high power settings for the purposes of test and maintenance is carried out in accordance with the Ground Running Testing and Maintenance Strategy in compliance with CADP1 Conditions 49 and 50. Aircraft operators wishing to carry out high power engine runs must obtain prior approval from the Airfield Operations Duty Manager. Approval to start the engine run is given by ATC.

High powered engine runs historically took place in the engine ground running locations on stands 23 and 24. A verification report was submitted in January 2020 and approved by LBN to support moving the Ground Running Location(s) to the eastern-most stand in operation at the time, as the CADP1 development is built out. The Ground Running Location(s) in use on a certain date will depend on the progress of the CADP1 development.

It is normally preferable to carry out engine testing on the eastern-most stand for operational reasons. The verification report also retained the option to use stands further to the west if this is more beneficial operationally, as the noise impact at the worst-affected sensitive receptors would be the same or slightly lower.

The airport records written details of ground running including details of the number, duration and power settings of ground runs (High and Low) and the types of aircraft involved.

In the event that the Ground Running Noise Limit is approached within 1 dB, proposals for the amelioration of this issue, for example undertaking ground running on alternative stands, will be submitted to LBN for their approval within 3 months of the identification of this risk and, thereafter, reported in the Annual Performance Report. Such measures shall ensure that Ground Running complies with the Ground Running Noise Limit and, once approved by LBN, these measures shall be implemented within 6 months.

In the event that the Ground Running Noise Limit has been exceeded, proposals will be submitted to the Council for their approval for the carrying out of measures to ensure that Ground Running complies with the Ground Running Noise Limit and such approved measures

shall be carried out in accordance with the approved time scale, all in accordance with the Ground Running Noise Limit Strategy.

Appendix 4 of this report sets out the official record of ground running of engines for test and maintenance for 2023 (Table A4.1), the summary of high power running for the same period (Table A4.2), and the prediction of ground running noise for comparison with the Ground Running Noise Limit.

During 2023, the large majority of high powered engine runs took place on Stand 28, with two using Stand 27. For the purpose of the compliance calculation, it has been assumed that Stand 28 was used at all times, which is the worst case in noise terms.

In 2023 LCA's ground running noise level was 56.6 dB $L_{Aeq,12h}$ which is 3.4 dB below the Ground Running Noise Limit of 60 dB $L_{Aeq,12h}$. Therefore, no further action is required.

6.0 AIRPORT CONSULTATIVE COMMITTEE

The airport holds regular quarterly meetings with the London City Airport Consultative Committee (LCYCC). The body of the committee is made up of representatives from the Council, public bodies, the airport and airport users, representatives for residents of local and neighbouring communities and non-voting attendees (present to provide advice to members as required, i.e. Metropolitan Police, Department for Transport).

The meetings are open and the committee's agendas and minutes are widely circulated and available on the LCYCC website[4]. The meetings include reports on developments at the airport including changes in routes, flight and passenger numbers. There is a standing item on environmental issues including complaints, enquiries, noise monitoring and management and other requirements of the planning permission and Section 106 Agreement.

[4] https://www.lcycc.org/meetings-and-reports

7.0 ANNUAL NOISE CONTOURS

The following noise contours are required to be produced as part of the APR, in order to assess eligibility under the various sound insulation schemes run by the airport:

- Actual average mode summer daytime for 2023,
- Forecast average mode summer daytime for 2024,
- Forecast average mode summer daytime for 2024, factored to account for the typical differences between the forecast and actual movements (referred to as "forecast reduced")

These noise contours, presented in Appendix 5, are all produced at values of 57, 63, 66, and 69 dB $L_{Aeq,16h}$. Additionally, the 54 dB $L_{Aeq,16h}$ contour is shown for the 2023 contour for information purposes, at the request of third parties during the CADP1 planning inquiry.

CADP1 Condition 33 requires that the area enclosed by the 57 dB $L_{Aeq,16h}$ actual average mode summer daytime contour shall not exceed 9.1 km^2.

The contours have been calculated by the Aviation Environmental Design Tool (AEDT) version 3d. The areas of each of the contours presented in Appendix 5 are given in Table 4.

Contour Value, dB $L_{Aeq,16h}$	Contour Area, km^2		
	2023 Actual Summer Average Mode	2024 Forecast Summer Average Mode	2024 Forecast Reduced Average Mode
54	11.0	10.9	10.1
57	5.9	5.8	5.4
63	1.5	1.5	1.4
66	0.8	0.8	0.7
69	0.5	0.5	0.4

Table 4: Contour Area Results

This demonstrates that LCA operated within their contour area limit in 2023 and are forecast to continue to do so in 2024.

8.0 AUXILIARY POWER UNITS

A number of aircraft using the airport require from time to time the use of their onboard auxiliary power units (APUs). The needs for usage of these power units as opposed to portable ground power units or the airport's fixed electrical power are varied.

The typical need is to condition the aircraft cabin when temperatures become uncomfortable as fixed electrical power cannot normally be used for that purpose. In this case, the airport policy is that the maximum running time for an APU should not exceed 10 minutes prior to departure. Permitted use of the APU is contained in Airside Operating Instruction (AOI) 07.

The other need arises when there is an incompatibility between aircraft systems and the fixed electrical power supply. The need to maintain the same source of supply to avoid interference with aircraft on board computer systems has been raised by users. There is also the rare occurrence where for technical reasons the airport's fixed electrical supply is not available.

The airport has fixed electrical ground power (FEGP) at Stands 1-10 and 15. All other stands are serviced by battery-powered Electric Mobile Ground Power Units (EMGPU).

Appendix 6 sets out details of the aircraft types that may require use of their auxiliary power units (APU) to supplement the electrical ground power that is provided by the airport when an aircraft is on a stand on the apron.

9.0 REVERSE THRUST

The use of reverse thrust on the landing roll should be kept to the minimum required for the necessary deceleration of the aircraft and within the limits of the airline's standard operating procedures.

A requirement as part of the CADP1 planning consent is that any instance of unusual or excessive use of thrust reversers will be investigated by the airport and a report generated. This will make reference to noise data collected at NMT 7, which has been installed for this purpose.

Noise events at NMT 7 are triggered by arriving aircraft. These are then correlated with the aircraft movement data. Many of these noise events are caused by arrivals which did not use reverse thrust, particularly those using runway 09. The loudest events are investigated to determine whether there were cases of unusual or excessive use of reverse thrust. When this is found to have been the case, the airport contacts the airline and seeks an explanation in order to minimise future occurrences.

BAP carried out a review of the NMT 7 data collected for the 12 month period from July 2017 to June 2018 in order to determine a suitable noise threshold above which events will be investigated. This has been defined as 88 dB L_{ASmax} for runway 09 arrivals and 90 dB L_{ASmax} for runway 27 arrivals.

7 aircraft arrivals exceeded these thresholds at NMT 7 in 2023. Details of these are presented in Table 5.

Date	Arrival Time	Runway	Aircraft Type	Airline	NMT 7 Noise Level, dB L_{ASmax}
03/01/2023	08:01:00	27	A221	SWR	90.2
13/02/2023	07:41:00	09	A221	SWR	88.5
09/03/2023	21:28:00	09	FA7X	GSP	89.5
18/03/2023	06:39:00	09	GL7T	N17	88.3
24/03/2023	19:21:00	27	FA8X	KOC	90.4
23/10/2023	08:36:00	09	A221	SWR	88.7
07/11/2023	17:05:00	27	GLEX	N50	91.3

Table 5: Log of Potentially Unusual or Excessive Reverse Thrust Use, 2023

The following responses have been received from airlines:

- Swiss (operating the A221) responded that reverse thrust was used on each of the relevant flights, but that this is consistent with normal operation of this aircraft type and no abnormalities were noted.
- Jet Concierge (operating the FA7X) responded that they will ensure nothing above idle reverse thrust is used in future unless safety dictates.
- Netjets (operating the GL7T) responded that reverse thrust was used on the flight in question for safety reasons as part of their normal operating procedure, but not to an excessive level.
- Setair (operating the FA8X) responded that reverse thrust is used for safety reasons and that pilots would be reminded to minimise its use.
- Pelican Aircraft Consulting (operating the GLEX) responded that there was an unexpected delay in the activation of reverse thrust on the flight in question.

The distribution of measured noise levels at NMT7 in 2023 are presented in Appendix 7 for reference.

10.0 SOUND INSULATION SCHEME

LCA are required to mitigate the impact of environmental noise on residential premises and public buildings as a result of airport operations. The Sound Insulation Scheme (SIS) offers the communities living close to the airport within the Scheme boundaries the opportunity to treat their homes and community buildings against noise.[5]

The airport previously operated a sound insulation scheme comprising a two tier system. Residential and Public Buildings became eligible under the scheme, subject to when they were built, when first exposed to air noise at the First Tier Eligibility Criterion of 57 dB $L_{Aeq,16h}$. Additional mitigation was offered at air noise exposure levels of 66 dB $L_{Aeq,16h}$.

As part of the CADP1 development, the airport improved the first tier of works, introduced an intermediate tier of treatment, and also upgraded the second tier to further protect those Residential and Public Buildings most affected by noise. The enhanced sound insulation scheme under CADP1 for Residential Buildings is summarised in Table 6 and described in more detail later in this section, alongside the other schemes in operation.

Scheme	Threshold ($L_{Aeq,16h}$)	Enhanced Scheme under CADP1
First Tier	57 dB	100% costs of secondary glazing or 100% costs of DG to existing single glazed properties, and acoustic vents
Intermediate Tier	63 dB	Secondary glazing and acoustic vents or £3000 (index linked) towards HPDG and acoustic vents
Second Tier	66 dB	100% costs of secondary glazing or HPDG in place of only a contribution to HPDG, and acoustic vents

DG – Standard thermal double glazing, HPDG – High (Acoustic) Performance double glazing

Table 6: Sound Insulation Schemes – Residential Buildings

No properties have become newly eligible for any of the schemes as shown in Appendix 8. This is because all properties within the actual contours for 2023, or the forecast reduced contours for 2024, were also inside the eligibility contours presented in the 2020 APR and therefore any eligible properties would already have been offered insulation.

[5] The full details of the Scheme (with CADP1) are documented within Annexures 2, 7 and 12 of the Section 106 Agreement dated 27th April 2016.

The first tier of works has been improved under CADP1 by ensuring any existing single glazed properties that are eligible under the scheme will be offered 100% of the cost for replacement standard thermal glazed windows or secondary glazing, whichever is preferred. Previously, only secondary glazing and acoustic vents were available to these single glazed properties. Residential premises in general will continue to be offered sound attenuating ventilators (acoustic ventilation) to provide background ventilation without the need to open windows.

The intermediate tier was a new requirement as part of the CADP1 permission. Under the intermediate tier works, for those residential properties that are already or become exposed to air noise at a level of 63 dB $L_{Aeq,16h}$, an offer of secondary glazing and acoustic ventilation will be made or alternatively, a contribution of £3,000 towards high performance acoustic double glazing and acoustic vents. Under this scheme, residents who prefer the high performance double glazing option may choose to treat only one or two rooms, such as those most affected by aircraft noise, as opposed to all rooms, to remain within the £3,000 budget available or they may use the £3,000 as a contribution towards more extensive works. Furthermore, this additional tier of works will be eligible to all existing dwellings exposed currently to 63 dB or more as well as any existing dwellings that come into the eligibility noise contour in the future.

For those most affected, that is those that become exposed to air noise at the Second Tier Eligibility Criterion of 66 dB $L_{Aeq,16h}$, they were previously offered improved secondary glazing or a monetary contribution of equivalent value towards high acoustic performance thermal double glazing, together with acoustic ventilation. The airport has enhanced the scheme under CADP1 to offer improved secondary glazing or a 100% contribution towards high performance double glazing, together with acoustic ventilation. This ensures that all of those most affected by noise are afforded the maximum noise protection opportunity. The airport will also inspect any previous treatments and rectify any damage caused by reasonable wear and tear.

An assessment of newly eligible properties is carried out every year as part of the Annual Performance Report and the eligibility boundaries are typically presented. In this 2023 APR there have been no newly eligible properties. The eligibility boundaries are presented in Appendix 5.

The scheme is delivered to eligible properties in accordance with a timescale agreed with the local authority and set out in detail in the Section 106 agreement. The timescales for treatment are devised as far as reasonably possible to ensure that the scheme will be delivered and in place by the time that residents become exposed to noise of 57 dB $L_{Aeq,16h}$ based on an average summer day. Second Tier and Intermediate Tier properties that are exposed to higher levels of noise will be treated as a priority in the new scheme.

The noise contours are produced annually (using actual summer-period operational data), in accordance with the calculation methodology agreed with LBN. This is reviewed every 3 years, with the most recent review approved on 19 October 2022 (LBN reference 22/02356/S106). The noise contours are used, along with information on when the properties were built, to determine eligibility for sound insulation treatment.

The sound insulation requirements of all public buildings in community use within the 57, 63 and 66 dB $L_{Aeq,16h}$ noise contours are assessed individually, based on the use of the building, the current and future levels of aircraft noise and recommended internal noise standards, and works agreed as necessary with the local authority.

Where new properties are granted planning consent within the airport's noise contours, the airport will encourage local planning authorities to incorporate published noise contours into decisions on new residential development, with a view to ensuring that acceptable noise levels will be achieved within new homes and other noise sensitive developments through the use of reasonable, robust and enforceable design standards.

10.1 Purchase Scheme

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[6].

Any properties that are found to lie within the current 69 dB $L_{Aeq,16h}$ noise contour will be identified and contacted in accordance with the Purchase Scheme's requirements. No properties fell within this contour in 2023.

10.2 Re-Inspection Scheme

For those eligible residential properties that were treated under the scheme at least 10 years ago, a free inspection is offered and provided previous treatments are unaltered, rectification works will be undertaken where appropriate to bring the sound insulation up to the standard when the treatment was originally undertaken[7]. 628 residential properties and 3 public

[6] The full details of the Scheme are documented within Annexure 5 of the Section 106 Agreement dated 27 April 2016 (with CADP1) and within Part 12 of the Fourth Schedule and Part 14 of the Ninth Schedule to the Section 106 Agreement dated 9 July 2009 (without CADP1).

[7] The full details of the Scheme are documented within Annexure 6 of the Section 106 Agreement dated 27 April 2016 (with CADP1) and Part 1 of the Fourth Schedule to the Section 106 Agreement dated 9 July 2009 (without CADP1).

buildings have been identified for reinspection in 2023. A list of these properties is provided in Appendix 8.

10.3 Noise Insulation Payment Scheme (NIPS)

Developments which have received planning permission but have not yet been built may be eligible to receive a payment under the NIPS. The aim of the NIPS is to compensate landowners and developers for the reasonable incremental costs of supplying and fitting additional noise insulation measures at certain proposed developments to mitigate against the noise effects of the increase in aircraft movements permitted by the Airport's Planning Permission. There is a NIPS relating to the 2009 planning permission as well as the CADP1 planning permission (known as NIPS2). No claims were made in 2023 under either scheme.

11.0 AIRCRAFT MOVEMENT NUMBERS

Conditions 17 and 23 to 27 of the CADP1 planning permission of July 2016, which are reproduced in Appendix 9, detail the maximum number of aircraft movements that are permitted at the airport.

The CADP1 planning permission allows up to 111,000 total aircraft movements per annum, including both scheduled and general aviation aircraft. The planning permission also contains specific limits on daily and weekly movements.

The airport is also required to record the numbers and types of aircraft that use the airport daily and submit aggregate figures to the Council on a quarterly basis. The daily records for the number of aircraft movements in 2023 are presented in Appendix 10, where they are compared with the relevant daily, weekly and annual limits.

Appendix 10 also presents the number of aircraft movements that took place each day during the restricted early morning periods of 06:30 to 06:44 hours and 06:30 to 06:59 hours, during the late operating periods of 22:00 to 22:30 hours on weekdays and Sundays and from 12:30 to 13:00 hours on Saturdays.

The data shows that throughout 2023, LCA has operated within its planning consent with regard to the number of daily and annual aircraft movements, including those during early morning and late evening periods, as well as weekly and annual noise factored movements.

Nick Williams
for Bickerdike Allen Partners LLP

David Charles
Partner

APPENDIX 1
NTK STATUS REPORTS

Table A1.1 gives the daily operation status of each NMT for the 2023 calendar year.

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
01/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/01/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
28/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/01/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/02/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
25/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/02/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/03/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
25/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/03/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/04/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
22/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/04/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/05/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
20/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/05/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/06/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
17/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/06/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/07/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
15/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/07/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/08/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
12/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/08/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/09/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
09/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/09/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/10/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
07/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/10/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
02/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/11/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
04/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
30/11/2023	Yes	Yes	Yes	Yes	Yes	Yes
01/12/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
02/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
03/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
04/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
05/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
06/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
07/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
08/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
09/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
10/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
11/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
12/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
13/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
14/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
15/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
16/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
17/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
18/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
19/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
20/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
21/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
22/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
23/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
24/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
25/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
26/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
27/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
28/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
29/12/2023	Yes	Yes	Yes	Yes	Yes	Yes

Date	NMT Operational?					
	NMT1	NMT2	NMT3	NMT4	NMT5	NMT6
30/12/2023	Yes	Yes	Yes	Yes	Yes	Yes
31/12/2023	Yes	Yes	Yes	Yes	Yes	Yes

Table A1.1: 2023 NTK daily operational status

A summary of the correlation rate for each month of 2023 is given in Table A1.2. In order to calculate the rate of correlation, the number of aircraft movements correlated has been compared against the number of operations at London City Airport during the same period. It has been assumed that the number of arrivals and departures each constitute 50% of the total number of operations.

Month	No. Operations	No. Correlated Departures (Sideline)	No. Correlated Departures (Flyover)	No. Correlated Arrivals
Jan	4,027	1,891	1,898	1,907
Feb	3,861	1,874	1,838	1,891
Mar	4,519	2,134	2,121	2,137
Apr	4,297	2,050	2,023	2,036
May	4,769	2,359	2,317	2,351
Jun	4,611	2,284	2,246	2,257
Jul	4,195	1,969	2,029	2,036
Aug	4,160	2,065	2,063	2,078
Sep	4,392	2,145	2,118	2,132
Oct	4,676	2,301	2,266	2,287
Nov	4,558	2,198	2,175	2,166
Dec	3,905	1,775	1,761	1,769

Table A1.2: Summary of Correlated Aircraft Movements, 2023

Table A1.3 gives a summary of the NTK operational status for each quarter.

Quarter	Operational Summary
January – March	All 6 NMTs were operational, and data was received from each NMT for all days. The target correlation rate (80%) at NMTs 1-4 for departures was met for the first quarter of 2023. A total of 5,899 aircraft departures were recorded, and an average correlation rate of noise events to aircraft departures of 95% was achieved. In the first quarter of 2023, a total of 5,857 (94%) departures and 5,935 (96%) arrivals were correlated at NMTs 5 and 6.
April – June	All 6 NMTs were operational, and data was received from each NMT for all days. The target correlation rate (80%) at NMTs 1-4 for departures was met for the second quarter of 2023. A total of 6,693 aircraft departures were recorded, and an average correlation rate of noise events to aircraft departures of 98% was achieved. In the second quarter of 2022, a total of 6,586 (96%) departures and 6,644 (97%) arrivals were correlated at NMTs 5 and 6.
July – September	All 6 NMTs were operational, and data was received from each NMT for all days. The target correlation rate (80%) at NMTs 1-4 for departures was met for the third quarter of 2023. A total of 6,179 aircraft departures were recorded, and an average correlation rate of noise events to aircraft departures of 97% was achieved. In the third quarter of 2023, a total of 6,210 (97%) departures and 6,246 (98%) arrivals were correlated at NMTs 5 and 6.
October - December	All 6 NMTs were operational, and data was received from each NMT for all days. The target correlation rate (80%) at NMTs 1-4 for departures was met for the fourth quarter of 2023. A total of 6,274 aircraft departures were recorded, and an average correlation rate of noise events to aircraft departures of 96% was achieved. In the fourth quarter of 2023, a total of 6,202 (94%) departures and 6,222 (95%) arrivals were correlated at NMTs 5 and 6.

Table A1.3: 2023 Quarterly Operations Summary

APPENDIX 2
INCENTIVES AND PENALTIES

The following table summarises the number of flights that incurred fixed penalties, credit removals and credit awards in the period between 1st January 2023 to 31st December 2023, by airline and aircraft type. Additionally, the total value of fixed penalties accrued and the residual number of credits are presented.

Airline Code	Aircraft Code	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded	Residual Credits
AAB	C25C	0	£0	0	3	3
AAB	C56X	0	£0	0	6	6
AAB	FA7X	0	£0	0	1	1
ABP	E135	0	£0	0	11	11
ABP	FA7X	0	£0	0	8	8
ADN	CL35	0	£0	0	2	2
ADN	FA7X	0	£0	0	2	2
AH0	C56X	0	£0	0	1	1
AHO	C525	0	£0	0	1	1
AHO	C560	0	£0	0	2	2
AHO	C56X	0	£0	0	28	28
AHO	E550	0	£0	0	2	2
AOJ	FA7X	0	£0	0	1	1
ASJ	C510	0	£0	0	6	6
ASJ	C68A	0	£0	0	2	2
AWU	C25A	0	£0	0	12	12
AWU	C510	0	£0	0	1	1
BA8	J328	0	£0	0	1	1
BFD	F2TH	0	£0	0	1	1
BTX	FA7X	0	£0	0	2	2
BTX	FA8X	0	£0	0	2	2
BTX	PC24	0	£0	0	2	2
CAZ	F2TH	0	£0	0	2	2
CAZ	FA7X	0	£0	0	5	5
CFE	E190	0	£0	1	195	194

Airline Code	Aircraft Code	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded	Residual Credits
CLF	FA8X	0	£0	0	1	1
CNE	FA7X	0	£0	0	1	1
CSP	E55P	0	£0	0	1	1
DBO	F2TH	0	£0	0	10	10
DCA	C56X	0	£0	0	26	26
DCA	C680	0	£0	0	7	7
DCA	C68A	0	£0	0	5	5
DCA	E55P	0	£0	0	1	1
DCS	C510	0	£0	0	1	1
DCS	C56X	0	£0	0	4	4
DCW	C25C	0	£0	0	2	2
DGX	FA8X	0	£0	0	2	2
DIM	C525	0	£0	0	1	1
DLA	E190	0	£0	0	1	1
DLH	E190	0	£0	0	90	90
DSO	FA8X	0	£0	0	1	1
ECC	C56X	0	£0	0	4	4
ECC	G280	0	£0	0	2	2
ECC	GLEX	0	£0	0	1	1
EFD	C25B	0	£0	0	4	4
EFD	C25C	0	£0	0	5	5
EFD	C680	0	£0	0	1	1
ELJ	C56X	0	£0	0	2	2
ELJ	C68A	0	£0	0	2	2
EUW	C680	0	£0	0	4	4
FHJ	C25B	0	£0	0	2	2
FHL	F2TH	0	£0	0	2	2
FHV	FA7X	0	£0	0	2	2
FJO	E550	0	£0	0	19	19

Airline Code	Aircraft Code	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded	Residual Credits
FLJ	E550	0	£0	0	6	6
FYG	C680	0	£0	0	1	1
FYG	FA7X	0	£0	0	1	1
FYG	GL5T	0	£0	0	3	3
FYL	PC24	0	£0	0	6	6
GAC	C510	0	£0	0	89	89
GES	C56X	0	£0	0	6	6
GLJ	GLEX	0	£0	0	2	2
GSP	FA7X	0	£0	0	2	2
HBJ	CL60	0	£0	0	2	2
HBJ	FA7X	0	£0	0	5	5
HBJ	FA8X	0	£0	0	3	3
HBV	E55P	0	£0	0	1	1
HUE	C510	0	£0	0	1	1
HUE	E55P	0	£0	0	2	2
IJM	C68A	0	£0	0	1	1
IJM	FA8X	0	£0	0	1	1
ITY	A221	0	£0	0	95	95
ITY	E190	0	£0	0	9	9
IXR	C25B	0	£0	0	5	5
IXR	C510	0	£0	0	4	4
JDI	E550	0	£0	0	2	2
JFA	PC24	0	£0	0	24	24
JKH	C25A	0	£0	0	1	1
JKH	PC24	0	£0	0	1	1
KFE	FA8X	0	£0	0	2	2
KLM	E190	0	£0	0	155	155
KOC	FA8X	0	£0	0	3	3
LGL	DH8D	0	£0	1	122	121

Airline Code	Aircraft Code	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded	Residual Credits
LMJ	C56X	0	£0	0	2	2
LOG	AT42	0	£0	0	4	4
LOG	AT72	0	£0	1	1	0
LOT	E190	0	£0	0	2	2
LXD	PC24	0	£0	0	1	1
LXJ	PC24	0	£0	0	2	2
LXZ	PC24	0	£0	0	1	1
MCK	C525	0	£0	0	1	1
MIL	F900	0	£0	0	2	2
MMD	F2TH	0	£0	0	3	3
MMD	FA8X	0	£0	0	1	1
N14	GLEX	0	£0	0	3	3
N15	GLEX	0	£0	0	3	3
N16	GLEX	0	£0	0	1	1
N17	GL7T	0	£0	0	3	3
N31	F900	0	£0	0	1	1
N50	GLEX	0	£0	0	5	5
N52	E190	0	£0	0	1	1
N68	GLF6	0	£0	0	2	2
N85	G280	0	£0	0	2	2
NJE	C56X	0	£0	0	52	52
NJE	C680	0	£0	0	19	19
NJE	C68A	0	£0	0	132	132
NJE	CL35	0	£0	0	60	60
NJE	CL60	0	£0	0	8	8
NJE	E55P	0	£0	1	117	116
NJE	GL5T	0	£0	0	3	3
NJE	GLEX	0	£0	0	10	10
NJU	C56X	0	£0	0	15	15

Airline Code	Aircraft Code	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded	Residual Credits
NJU	C68A	0	£0	0	1	1
NUM	FA7X	0	£0	0	1	1
OEG	C25B	0	£0	0	1	1
OOA	C25A	0	£0	0	1	1
OOA	C510	0	£0	0	1	1
OOG	F2TH	0	£0	0	14	14
OOH	C56X	0	£0	0	1	1
OOM	C56X	0	£0	0	1	1
OON	E545	0	£0	0	1	1
OOP	C25B	0	£0	0	1	1
OOS	C56X	0	£0	0	2	2
OOV	C56X	0	£0	0	1	1
PEA	E55P	0	£0	0	1	1
PEX	FA7X	0	£0	0	2	2
PEX	FA8X	0	£0	0	60	60
PHC	F2TH	0	£0	0	18	18
PHH	CL60	0	£0	0	3	3
PSR	GLF6	0	£0	0	1	1
PVD	E550	0	£0	0	2	2
PVD	E55P	0	£0	0	30	30
RTG	F2TH	0	£0	0	1	1
RTG	FA8X	0	£0	0	1	1
SED	PC24	0	£0	0	1	1
SHE	FA8X	0	£0	0	25	25
SNM	G280	0	£0	0	3	3
STQ	C25A	0	£0	0	1	1
STQ	PC24	0	£0	0	1	1
SUA	C56X	0	£0	0	2	2
SUI	F900	0	£0	0	2	2

Airline Code	Aircraft Code	Fixed Penalties (# aircraft)	Fixed Penalties (total value)	# Credits Removed	# Credits Awarded	Residual Credits
SUS	J328	0	£0	0	124	124
SVW	GLF6	0	£0	0	2	2
SWR	A221	0	£0	0	527	527
SWR	E190	0	£0	0	3	3
SWR	E290	0	£0	0	674	674
SWW	E55P	0	£0	0	1	1
SXN	LJ45	0	£0	0	7	7
TEU	FA7X	0	£0	0	3	3
TLJ	E135	0	£0	0	3	3
TVS	C680	0	£0	0	2	2
ULC	C68A	0	£0	0	1	1
ULC	FA7X	0	£0	0	1	1
VHJ	C56X	0	£0	0	1	1
VJH	C56X	0	£0	0	12	12
VLJ	C25A	0	£0	0	2	2
VLJ	C25B	0	£0	0	3	3
VLJ	E135	0	£0	0	1	1
VOR	DA62	0	£0	0	1	1
VQB	FA8X	0	£0	0	2	2
XRO	F900	0	£0	0	1	1
XRO	FA7X	0	£0	0	1	1
Total		**0**	**£0**	**4**	**3067**	**3063**

Table A2.1: 2023 Penalties and Credits Summary

APPENDIX 3
SUMMARY OF EFPS DATA

The following table summarises the Engine Run on Stand (ERS), Taxi Time on Arrival (TTA), and Taxi Time on Departure (TTD) times for 2023, by airline and aircraft type. Airline and aircraft type combinations that operated less than once per week on average have been grouped in the "Other" category.

Aircraft Code	Airline	Count of TTA	Average of TTA (mm:ss)	Count of ERS	Average of ERS (mm:ss)	Count of TTD	Average of TTD (mm:ss)
A221	German Airways	144	03:23	144	06:50	144	05:45
A221	Swiss	967	03:16	967	06:09	967	05:42
AT45	Loganair	172	04:09	172	06:17	172	05:23
AT75	Loganair	347	03:41	347	05:38	347	05:48
C510	Globe Air	114	03:03	114	06:54	114	07:02
C56X	NetJets	64	03:16	64	04:43	64	06:09
C68A	NetJets	234	03:28	234	05:53	234	06:25
CL35	NetJets	78	03:21	79	04:01	79	06:08
DH8D	Luxair	1,876	03:39	1,875	05:07	1,875	05:25
E190	BA CityFlyer	15,981	03:44	15,985	04:01	15,985	06:40
E190	Lufthansa	881	03:59	881	04:22	881	06:01
E190	German Airways	526	04:31	525	04:30	525	06:02
E190	KLM	2,209	03:53	2,209	03:34	2,209	05:40
E190	LOT	295	03:59	295	04:00	295	06:22
E290	Swiss	836	03:30	836	06:32	836	05:28
E55P	NetJets	143	03:42	144	05:41	144	05:54
FA8X	Pelican Express	69	03:48	69	05:59	69	07:06
J328	Sun Air	227	03:55	227	04:03	227	06:00
PC24	Jetfly Aviation	52	03:17	50	07:28	50	06:22
Other		872	03:33	869	05:17	869	06:39
Overall		26,087	03:44	26,086	04:23	26,086	06:21

Table A3.1: 2023 Ground Running Summary

APPENDIX 4
GROUND RUNNING OF ENGINES

Table A4.1 sets out the official record of ground running of engines for test and maintenance for 2023.

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
01/01/2023	Stand 27	NW	Idle	E190	GLCAD	20:20	20:25	00:05
01/01/2023	Stand 27	NW	Idle	E190	GLCAD	21:18	21:24	00:06
03/01/2023	Stand 25	NW	Idle	E190	GLCYN	07:34	07:43	00:09
04/01/2023	Stand 10	NW	Idle	E190	GLCAD	09:46	09:54	00:08
04/01/2023	Stand 27	NW	Idle	E190	GLCAA	13:49	14:03	00:14
06/01/2023	Stand 26	NW	Idle	E190	GLCAA	09:37	09:40	00:03
07/01/2023	Stand 9	NW	Idle	E190	GLCAA	11:20	11:26	00:06
09/01/2023	Stand 28	NW	Idle	E190	GLCYS	06:31	06:38	00:07
09/01/2023	Stand 21	Parked	Idle	E190	GLCYO	13:13	13:20	00:07
13/01/2023	Stand 26	NW	Idle	E190	GLCYS	07:22	07:38	00:16
16/01/2023	Stand 5	NW	Idle	E190	GLCYV	-	-	-
16/01/2023	Stand 9	NW	Idle	E190	GLCYV	14:35	15:14	00:39
17/01/2023	Stand 23	NW	Idle	E190	GLCAB	15:55	16:00	00:05
20/01/2023	-	NW	Idle	E190	GLCYS	11:55	12:01	00:06
22/01/2023	Stand 22	NW	Idle	E190	GLCYS	12:38	12:45	00:07
22/01/2023	Stand 28	W	High	E190	GLCYN	15:48	15:52	00:04
22/01/2023	Stand 28	W	Idle	E190	GLCYN	15:32	15:48	00:16
24/01/2023	Stand 24	NW	Idle	E190	GLCAE	11:19	11:25	00:06
27/01/2023	Stand 28	W	High	E190	GLCYO	15:13	15:35	00:22
27/01/2023	Stand 28	W	High	E190	GLCYO	15:42	16:00	00:18
30/01/2023	Stand 8	NW	Idle	E190	GLCYO	06:46	06:53	00:07
30/01/2023	Abeam 28	W	High	E190	GLCYN	09:55	10:23	00:28
31/01/2023	Stand 27	NW	Idle	E190	GLCYM	19:42	19:47	00:05
01/02/2023	Stand 8	NW	Idle	E190	GLCAG	21:00	21:07	00:07
02/02/2023	Stand 8	NW	Idle	E190	GLCYO	10:17	10:26	00:09
03/02/2023	Stand 4	NW	Idle	E190	GLCYO	07:37	07:43	00:06
05/02/2023	Stand 10	NW	Idle	E190	GLCYK	12:36	12:58	00:22
05/02/2023	Stand 9	NW	Idle	E190	GLCYU	13:08	13:18	00:10
05/02/2023	Stand 10	NW	Idle	E190	GLCYK	13:37	13:52	00:15

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
06/02/2023	Stand 25	NW	Idle	E190	GLCYM	10:23	10:28	00:05
10/02/2023	JC	E	Idle	PC24	DCAUB	16:52	16:59	00:07
12/02/2023	Stand 4	NW	Idle	E190	GLCAE	12:30	12:39	00:09
12/02/2023	Stand 8	NW	Idle	E190	GLCYZ	14:04	14:12	00:08
14/02/2023	Stand 24	NW	Idle	E190	GLCAE	18:28	18:35	00:07
14/02/2023	Stand 28	NW	Idle	E190	GLCAE	20:30	20:34	00:04
15/02/2023	Stand 28	NW	Idle	E190	GLCAE	11:11	11:16	00:05
15/02/2023	Stand 28	NW	Idle	E190	GLCAE	20:44	21:02	00:18
16/02/2023	Stand 26	NW	Idle	E190	GLCYK	06:47	06:55	00:08
16/02/2023	Stand 26	NW	Idle	E190	GLCYK	08:59	09:14	00:15
17/02/2023	Stand 26	NW	Idle	E190	GLCYK	07:37	07:43	00:06
17/02/2023	Stand 28	NW	Idle	E190	GLCAC	19:37	19:44	00:07
18/02/2023	Stand 27	NW	Idle	E190	GLCAH	07:57	08:01	00:04
18/02/2023	Abeam 28	W	High	E190	GLCAH	08:17	08:39	00:22
19/02/2023	Stand 8	NW	Idle	E190	GLCYT	12:31	12:34	00:03
20/02/2023	Stand 21	NW	Idle	E190	GLCAG	06:43	-	-
20/02/2023	Stand 26	NW	Idle	E190	GLCYP	09:10	09:15	00:05
22/02/2023	Stand 25	NW	Idle	E190	GLCYT	07:29	07:37	00:08
26/02/2023	Abeam 13	E	Idle	E190	GLCYK	12:48	12:58	00:10
27/02/2023	Stand 28	NW	Idle	E190	GLCYO	07:01	07:37	00:36
01/03/2023	Stand 26	NW	Idle	E190	GLCAG	09:10	09:16	00:06
02/03/2023	Stand 4	NW	Idle	E190	GLCAH	06:50	06:56	00:06
02/03/2023	Stand 27	NW	Idle	E190	GLCYZ	09:15	09:20	00:05
02/03/2023	Stand 27	NW	Idle	E190	GLCYZ	09:52	09:57	00:05
03/03/2023	Stand 25	NW	Idle	E190	GLCAB	07:12	07:18	00:06
05/03/2023	Stand 4	NW	Idle	E190	GLCYV	12:39	12:46	00:07
05/03/2023	Stand 27	NW	Idle	E190	GLCYZ	13:36	13:42	00:06
05/05/2023	Abeam 27	W	High	E190	GLCAG	20:10	20:26	00:16
09/05/2023	Stand 21	NW	Idle	E190	GLCAG	07:11	07:19	00:08
14/03/2023	Abeam 28	W	High	E190	GLCAG	13:52	14:04	00:12
14/03/2023	Stand 28	W	High	E190	GLCYS	20:39	20:51	00:12
16/03/2023	Stand 10	NW	Idle	E190	GLCYU	11:33	11:42	00:09

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
17/03/2023	Stand 26	NW	Idle	E190	GLCAG	20:22	20:26	00:04
19/03/2023	Stand 9	NW	Idle	E190	GLCAH	13:20	13:28	00:08
22/03/2023	Stand 21	W	Idle	E190	GLCYN	06:42	06:46	00:04
23/03/2023	Stand 27	NW	Idle	E190	GLCYJ	06:53	06:59	00:06
27/03/2023	Stand 28	W	High	E190	GLCAG	11:51	12:06	00:15
28/03/2023	Stand 25	NW	Idle	E190	GLCAF	06:15	06:19	00:04
29/03/2023	Stand 26	NW	Idle	E190	GLCAB	05:55	06:01	00:06
29/03/2023	Stand 26	NW	Idle	E190	GLCAB	06:11	06:18	00:07
31/03/2023	Stand 28	W	Idle	FA8X	VQBXD	10:44	10:56	00:12
31/03/2023	Stand 28	W	High	FA8X	VQBXD	10:56	11:04	00:08
02/04/2023	Stand 7	NW	Idle	E190	GLCAH	11:46	11:50	00:04
04/04/2023	Stand 5	NW	Idle	E190	GLCAF	06:03	06:08	00:05
04/04/2023	JC	E	Idle	CL35	CSCHE	15:20	15:30	00:10
05/04/2023	Stand 3	NW	Idle	E190	GLCAF	07:00	07:08	00:08
06/04/2023	Stand 28	NW	Idle	E190	GLCYT	09:38	09:42	00:04
06/04/2023	Stand 27	NW	Idle	E190	GLCAB	19:50	19:55	00:05
07/04/2023	Stand 27	NW	Idle	E190	GLCAB	08:38	08:46	00:08
08/04/2023	Stand 6	NW	Idle	E190	GLCAF	08:04	08:09	00:05
08/04/2023	Stand 6	NW	Idle	E190	GLCAF	08:36	08:42	00:06
08/04/2023	Stand 6	NW	Idle	E190	GLCAF	09:02	09:07	00:05
09/04/2023	Stand 25	NW	Idle	E190	GLCYT	11:34	11:41	00:07
09/04/2023	Stand 9	NW	Idle	E190	GLCAC	12:59	13:06	00:07
09/04/2023	Stand 9	NW	Idle	E190	GLCAC	13:12	13:17	00:05
10/04/2023	Stand 24	NW	Idle	E190	GLCYL	08:56	09:04	00:08
17/04/2023	Stand 28	NW	Idle	E190	GLCYJ	18:26	18:33	00:07
19/04/2023	Stand 8	NW	Idle	E190	GLCYZ	05:48	05:53	00:05
19/04/2023	Stand 27	NW	Idle	E190	GLCAG	06:42	06:52	00:10
21/04/2023	Stand 26	NW	Idle	E190	GLCYL	07:41	07:49	00:08
23/04/2023	Stand 26	NW	Idle	E190	GLCAB	12:02	12:10	00:08
26/04/2023	Stand 28	NW	Idle	E190	GLCAC	08:12	08:17	00:05
28/04/2023	Stand 10	NW	Idle	E190	GLCYO	06:11	06:16	00:05
01/05/2023	Stand 6	NW	Idle	E190	GLCYP	08:38	08:45	00:07

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
05/05/2023	Stand 9	NW	Idle	E190	GLCAF	07:09	07:15	00:06
05/05/2023	Stand 24	Parked	Idle	E190	GLCYO	11:30	11:35	00:05
09/05/2023	Stand 24	NW	Idle	E190	GLCYS	06:04	06:13	00:09
10/05/2023	Stand 25	NW	Idle	E190	GLCYM	05:41	05:50	00:09
15/05/2023	Stand 6	NW	Idle	E190	GLCYP	05:50	05:55	00:05
17/05/2023	Stand 26	NW	Idle	E190	GLCAG	05:50	05:57	00:07
17/05/2023	Abeam 28	NW	High	E190	GLCYO	09:08	09:32	00:24
18/05/2023	Stand 26	NW	Idle	E190	GLCYT	05:51	06:02	00:11
19/05/2023	Stand 26	NW	Idle	E190	GLCYP	05:40	05:47	00:07
19/05/2023	Stand 27	NW	Idle	E190	GLCYM	06:01	06:09	00:08
28/05/2023	Stand 23	NW	Idle	E190	GLCYS	11:45	11:52	00:07
06/05/2023	Stand 9	NW	Idle	E190	GLCAG	19:44	19:50	00:06
06/05/2023	Stand 9	NW	Idle	E190	GLCAG	20:07	20:12	00:05
07/05/2023	Stand 26	NW	Idle	E190	GLCAH	06:01	06:08	00:07
07/05/2023	Stand 5	NW	Idle	E190	GLCYR	14:01	14:14	00:13
08/05/2023	Stand 7	NW	Idle	E190	GLCYL	05:37	05:42	00:05
08/05/2023	Stand 10	NW	Idle	E190	GLCYP	10:24	10:30	00:06
09/05/2023	Stand 26	NW	Idle	E190	GLCYP	15:34	15:41	00:07
12/05/2023	Stand 8	NW	Idle	E190	GLCAD	11:30	11:39	00:09
12/05/2023	Stand 10	NW	Idle	E190	GLCYU	11:32	11:39	00:07
14/05/2023	Stand 27	NW	Idle	E190	GLCAG	05:54	06:04	00:10
16/05/2023	Stand 26	NW	Idle	E190	GLCAF	06:12	06:19	00:07
16/05/2023	Stand 24	NW	Idle	E290	HBAZB	12:43	12:59	00:16
18/05/2023	Stand 28	NW	Idle	E290	HBAZB	16:11	16:33	00:22
19/05/2023	Stand 21	NW	Idle	E190	GLCAG	05:35	05:49	00:14
20/05/2023	Stand 23	NW	Idle	E190	GLCYS	06:01	06:06	00:05
21/05/2023	Stand 3	NW	Idle	E190	GLCYL	06:07	06:12	00:05
21/05/2023	Stand 26	NW	Idle	E190	GLCYO	06:46	06:56	00:10
22/05/2023	Stand 10	NW	Idle	E190	GLCAG	06:10	06:15	00:05
22/05/2023	Stand 10	NW	Idle	E190	GLCAG	06:51	06:59	00:08
22/05/2023	Stand 26	NW	Idle	E190	GLCYM	07:35	07:40	00:05
22/05/2023	Stand 28	NW	Idle	E190	GLCYT	11:58	12:07	00:09

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
23/05/2023	Stand 3	NW	Idle	E190	GLCAG	05:41	05:44	00:03
23/05/2023	Stand 3	NW	Idle	E190	GLCAG	07:23	07:38	00:15
26/05/2023	-	-	Idle	E190	GLCAG	06:24	06:30	00:06
28/05/2023	Stand 3	NW	Idle	E190	GLCAE	05:39	05:44	00:05
29/05/2023	Stand 28	NW	Idle	E190	GLCYL	09:45	09:53	00:08
29/05/2023	Stand 28	NW	Idle	E190	GLCYL	11:27	11:31	00:04
29/05/2023	Stand 26	NW	Idle	E190	GLCYO	19:03	19:08	00:05
03/07/2023	Stand 27	W	High	E190	GLCYR	08:29	08:46	00:17
05/07/2023	Stand 24	NW	Idle	E190	GLCYV	05:53	06:06	00:13
10/07/2023	Stand 8	NW	Idle	E190	GLCYV	10:40	10:45	00:05
11/07/2023	Stand 10	NW	Idle	E190	GLCYR	06:09	06:17	00:08
16/07/2023	Stand 7	NW	Idle	E190	GLCYR	11:31	11:38	00:07
17/07/2023	Stand 4	NW	Idle	E190	GLCYT	06:20	06:31	00:11
19/07/2023	Stand 3	NW	Idle	E190	GLCYV	05:36	05:53	00:17
22/07/2023	Stand 10	NW	Idle	E190	GLCYR	05:51	05:59	00:08
24/07/2023	Stand 10	NW	Idle	E190	GLCYK	05:57	06:02	00:05
26/07/2023	Stand 10	NW	Idle	E190	GLCYF	05:35	05:43	00:08
27/07/2023	Stand 6	NW	Idle	E190	GLCYR	05:40	05:47	00:07
28/07/2023	Stand 24	NW	Idle	E190	GLCYE	06:20	06:31	00:11
29/07/2023	Stand 10	NW	Idle	E290	GLCAF	05:32	05:45	00:13
31/07/2023	Stand 26	NW	Idle	E290	GLCAB	05:40	05:59	00:19
31/07/2023	Stand 10	NW	Idle	E190	GLCYM	06:25	06:33	00:08
31/07/2023	Abeam 28	W	High	E190	GLCAH	15:36	15:54	00:18
01/08/2023	Stand 21	NW	Idle	E190	GLCAC	06:26	06:30	00:04
02/08/2023	Stand 25	NW	Idle	E190	GLCYS	05:52	05:56	00:04
04/08/2023	Stand 26	NW	Idle	E190	GLCYM	06:49	06:56	00:07
04/08/2023	Stand 12	NW	Idle	DH8D	LXLGG	09:00	09:07	00:07
05/08/2023	Stand 10	NW	Idle	E190	GLCAG	05:30	05:34	00:04
07/08/2023	Stand 23	NW	Idle	E190	GLCYV	06:18	06:24	00:06
08/08/2023	Stand 28	W	High	E190	GLCYV	08:42	09:18	00:36
10/08/2023	Stand 28	NW	Idle	E190	GLCYV	10:20	10:41	00:21
13/08/2023	Abeam 28	W	High	E190	GLCYV	11:48	12:08	00:20

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
13/08/2023	Stand 6	PARKED	Idle	E190	GLCYK	15:52	16:07	00:15
17/08/2023	Abeam 28	W	High	E190	GLCYK	09:15	09:42	00:27
17/08/2023	Stand 27	NW	Idle	E190	GLCAE	14:32	14:43	00:11
20/08/2023	Abeam 28	W	High	E190	GLCAD	11:55	12:09	00:14
24/08/2023	Stand 10	NW	Idle	E190	GLCYC	18:11	18:20	00:09
25/08/2023	Stand 26	NW	Idle	E190	GLCAF	09:54	10:00	00:06
26/08/2023	Stand 9	NW	Idle	E190	GLCYL	05:35	05:40	00:05
28/09/2023	Stand 21	NW	Idle	E190	GLCAH	09:05	09:12	00:07
30/08/2023	Stand 27	NW	Idle	E190	GLCYN	18:15	18:22	00:07
03/09/2023	Stand 3	NW	Idle	E190	GLCAH	11:36	11:41	00:05
03/09/2023	Abeam 28	W	High	E190	GLCYR	17:23	17:56	00:33
04/09/2023	Stand 26	NW	Idle	E190	GLCAF	18:49	18:53	00:04
07/09/2023	Stand 21	NW	Idle	E190	GLCYV	06:37	06:43	00:06
08/09/2023	Stand 21	NW	Idle	E190	GLCYU	07:02	07:17	00:15
10/09/2023	Abeam 28	W	High	E190	GLCYR	11:42	11:51	00:09
11/09/2023	Stand 25	NW	Idle	E190	GLCAC	06:12	06:22	00:10
12/09/2023	Abeam 28	W	High	E190	GLCYV	09:17	09:49	00:32
12/09/2023	Abeam 28	W	High	E190	GLCYV	10:31	10:57	00:26
14/09/2023	Abeam 28	W	High	E190	GLCYT	08:29	08:55	00:26
15/09/2023	Abeam 28	W	High	E190	GLCYU	06:01	06:17	00:16
16/09/2023	Stand 3	NW	Idle	E190	GLCYM	05:36	05:43	00:07
18/09/2023	-	W	High	E190	GLCYO	08:57	09:05	00:08
20/09/2023	Stand 27	NW	Idle	E190	GLCYJ	06:17	06:23	00:06
21/09/2023	Stand 25	NW	Idle	E190	GLCAG	06:17	06:22	00:05
22/09/2023	Abeam 28	W	High	E190	GLCXU	15:25	15:50	00:25
24/09/2023	Stand 10	NW	Idle	E190	GLCAG	11:40	11:47	00:07
26/09/2023	Stand 7	NW	Idle	E190	GLCYV	13:37	13:45	00:08
27/09/2023	Stand 21	NW	Idle	E190	GLCAF	05:42	05:46	00:04
01/10/2023	Stand 8	NW	Idle	E190	GLCYN	11:31	11:37	00:06
01/10/2023	Stand 21	NW	Idle	E190	GLCAF	11:56	12:00	00:04
02/10/2023	Stand 26	NW	Idle	E190	GLCAG	14:02	14:10	00:08
05/10/2023	Stand 4	NW	Idle	E190	GLCAD	06:22	06:28	00:06

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
05/10/2023	Stand 27	NW	Idle	E190	GCLSN	14:27	14:35	00:08
06/10/2023	Stand 27	NW	Idle	E190	GCLSN	08:12	08:19	00:07
06/10/2023	Stand 10	NW	Idle	E190	GLCYS	12:36	12:45	00:09
08/10/2023	Stand 10	NW	Idle	E190	GLCYL	12:21	12:28	00:07
09/10/2023	Stand 28	W	High	E190	GLCAF	08:11	08:48	00:37
12/10/2023	Stand 4	NW	Idle	E190	GLCAD	05:35	05:40	00:05
13/10/2023	Stand 23	NW	Idle	E190	GLCYK	06:03	06:08	00:05
16/10/2023	Stand 28	NW	Idle	E190	GLCYV	10:45	10:54	00:09
17/10/2023	Stand 28	NW	Idle	E190	GLCYV	05:58	06:03	00:05
17/10/2023	Stand 28	NW	Idle	E190	GLCYV	07:05	07:20	00:15
17/10/2023	Stand 28	NW	Idle	E190	GLCYV	09:54	10:06	00:12
18/10/2023	Stand 28	NW	Idle	E190	GLCYV	05:59	06:06	00:07
18/10/2023	JC	E	Idle	FA8X	VQBXF	17:23	17:26	00:03
19/10/2023	Stand 4	NW	Idle	E190	GLCYK	06:24	06:28	00:04
28/10/2023	Stand 8	NW	Idle	E190	GLCYO	08:19	08:27	00:08
01/11/2023	Stand 26	NW	Idle	E190	GLCYP	14:00	14:06	00:06
02/11/2023	Stand 3	NW	Idle	E190	GLCYM	07:50	07:55	00:05
02/11/2023	Stand 4	NW	Idle	E190	GLCYV	08:34	08:41	00:07
03/11/2023	Stand 28	NW	Idle	E190	GLCYP	09:26	09:33	00:07
04/11/2023	Stand 5	NW	Idle	E190	GLCYO	06:49	06:55	00:06
05/11/2023	Stand 27	NW	Idle	E190	GLCYV	12:32	12:54	00:22
05/11/2023	Stand 27	NW	Idle	E190	GLCYP	18:57	19:06	00:09
06/11/2023	Stand 27	NW	Idle	E190	GLCYP	06:54	06:59	00:05
06/11/2023	Stand 27	NW	Idle	E190	GLCYP	07:05	07:09	00:04
07/11/2023	Abeam 28	W	High	E190	GLCAH	10:27	10:39	00:12
07/11/2023	Stand 10	NW	Idle	E190	GLCYP	10:33	10:36	00:03
07/11/2023	Stand 27	NW	Idle	E190	GLCYV	11:40	11:45	00:05
08/11/2023	Stand 8	NW	Idle	E190	GLCYV	07:13	07:27	00:14
08/11/2023	Stand 27	NW	Idle	E190	GLCYR	09:49	09:54	00:05
11/11/2023	Stand 27	NW	Idle	E190	GLCAF	07:07	07:11	00:04
12/11/2023	Stand 28	NW	Idle	E190	GLCAG	12:57	13:02	00:05
12/11/2023	Stand 26	NW	Idle	E190	GLCAE	14:10	14:18	00:08

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
12/11/2023	Stand 8	NW	Idle	E190	GLCYV	15:47	-	-
19/11/2023	Stand 5	NW	Idle	E190	GLCYZ	12:35	12:45	00:10
19/11/2023	Stand 28	NW	Idle	E190	GLCYK	13:06	13:17	00:11
23/11/2023	Stand 9	NW	Idle	E190	GLCAE	06:54	06:59	00:05
23/11/2023	Abeam 28	W	High	E190	GLCYU	09:44	10:12	00:28
25/11/2023	Stand 28	NW	Idle	E190	GLCYJ	09:52	10:02	00:10
26/11/2023	Stand 28	NW	Idle	E190	GLCYJ	17:12	17:19	00:07
29/11/2023	Stand 23	NW	Idle	E190	GLCAH	12:57	13:08	00:11
29/11/2023	Stand 28	W	High	E190	GLCAH	15:20	15:44	00:24
30/11/2023	Stand 27	NW	Idle	E190	GLCYN	09:36	09:51	00:15
30/11/2023	Stand 27	NW	Idle	E190	GLLYN	12:35	12:47	00:12
01/12/2023	Stand 28	NW	Idle	E190	GLCYN	09:10	09:16	00:06
01/12/2023	Stand 28	NW	Idle	E190	GLCYN	10:19	10:21	00:02
02/12/2023	Stand 28	NW	Idle	E190	GLCYN	07:07	07:27	00:20
04/12/2023	Stand 21	NW	Idle	E190	GLCAB	07:05	07:09	00:04
04/12/2023	Stand 28	NW	Idle	E190	GLCYN	15:13	15:21	00:08
04/12/2023	Stand 28	NW	Idle	E190	GLCYN	15:30	15:43	00:13
05/12/2023	Stand 4	NW	Idle	E190	GLCAG	07:11	07:16	00:05
06/12/2023	Abeam 28	W	High	E190	GLCAG	10:27	10:41	00:14
06/12/2023	Stand 28	W	High	E190	GLCAD	16:21	16:34	00:13
06/12/2023	JC	JC	Idle	PC24	LXDAC	17:12	17:18	00:06
09/12/2023	Stand 4	NW	Idle	E190	GLCYU	06:55	07:05	00:10
11/12/2023	Stand 7	NW	Idle	E190	GLCYU	06:33	06:46	00:13
11/12/2023	Stand 26	NW	Idle	E190	GLCYS	06:47	06:53	00:06
12/12/2023	Stand 27	NW	Idle	E190	GLCYS	07:11	07:17	00:06
12/12/2023	Stand 28	W	High	E190	GLCYU	13:42	-	-
17/12/2023	Stand 22	NW	Idle	E190	GLCYO	13:16	13:21	00:05
17/12/2023	Stand 8	NW	Idle	E190	GLCAD	13:57	14:02	00:05
19/12/2023	Stand 9	NW	Idle	E190	GLCYL	12:22	12:28	00:06
20/12/2023	Stand 22	NW	Idle	E190	GLCYL	14:40	14:45	00:05
22/12/2023	Stand 28	W	High	E190	GLCYP	10:14	10:39	00:25
23/12/2023	Stand 8	NW	Idle	E190	GLCAH	06:51	06:56	00:05

Date	Location	A/C Orientation	Type Of Run / Power Set	A/C Type	Reg.	Start Time	Stop Time	Duration (hh:mm)
27/12/2023	Stand 4	NW	Idle	DH8D	LXLGM	15:55	15:59	00:04
28/12/2023	Stand 25	NW	Idle	E190	GLCYV	06:53	06:58	00:05
29/12/2023	Stand 27	NW	Idle	E190	GLCYV	06:54	07:00	00:06

Table A4.1: Official record of ground running of engines for test and maintenance for 2023

Table A4.2 gives a summary of high power running for 2023.

Month	Minutes	A/C Type
January	72	E190
February	22	E190
March	63	E190, FA8X
April	0	-
May	24	E190
June	0	-
July	35	E190
August	97	E190
September	175	E190
October	37	E190
November	64	E190
December	52	E190
Total	641	-

Table A4.2: Summary of high power ground running, 2023

Prediction of engine ground running as Appendix D2 of NOMMS

Values presented below have been rounded to 1 decimal place. Unrounded values have been used in the actual calculation.

Item (A) Determination of largest monthly duration:

As indicated in Table A4.2, that occurred in September 2023, specifically –

175 minutes of E190

175 minutes total ground running

Item (B) Determination of average daily duration during worst case month:

175 minutes in a month of 30 days

5.8 minutes average daily duration

Item (C) Compute resultant noise level at reference distance (152 m)

Resultant noise level at 152 m

= reference noise level + 10 Log(duration) – 10 Log(12x60)

= 84 + 10 Log(5.8) – 10 log(12x60)

= 84 + 7.7 – 28.6

= 63.1 dB $L_{Aeq,12h}$

Item (D) Compute level at nearest properties in Silverland Street

Aircraft at Stand 28

Noise level at Silverland Street

= resultant noise level – 26.7 Log(267/152)

= 63.1 – 6.5

= 56.6 dB $L_{Aeq,12h}$

LCA ground running noise limit = 60 dB $L_{Aeq,12h}$

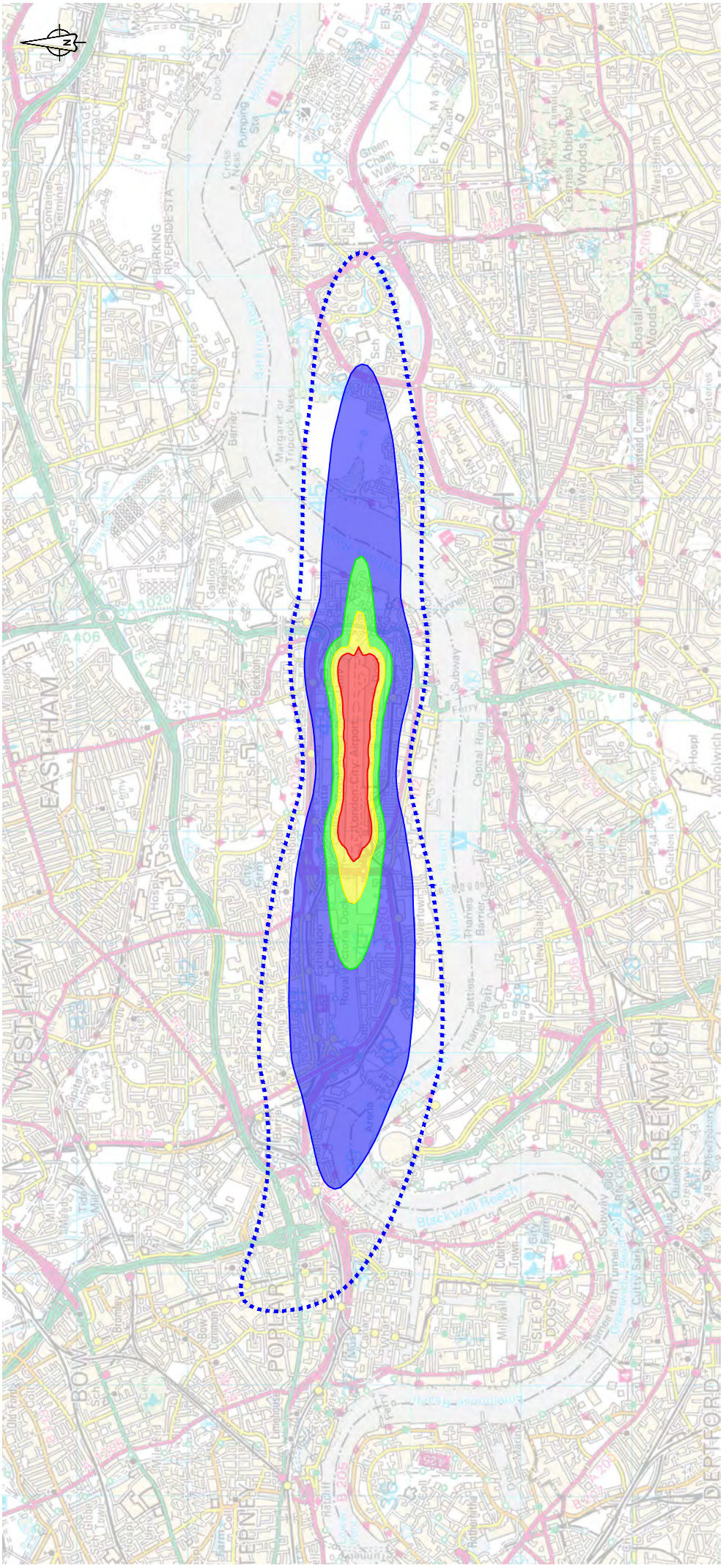
Conclusion

In 2023 LCA's ground running was 3.4 dB below the ground running noise limit.

APPENDIX 5
NOISE CONTOURS

The following noise contours are presented in this appendix:

- 2023 Actual average mode summer daytime
- 2024 Forecast average mode summer daytime
- 2024 Forecast reduced average mode summer daytime
- 1998 Planning Contour
- First Tier Eligibility Boundary
- Intermediate Tier Eligibility Boundary
- Second Tier Eligibility Boundary



LEGEND:

- 54 dB Noise Contour
- 57 - 63 dB $L_{Aeq,16h}$
- 63 - 66 dB $L_{Aeq,16h}$
- 66 - 69 dB $L_{Aeq,16h}$
- > 69 dB $L_{Aeq,16h}$

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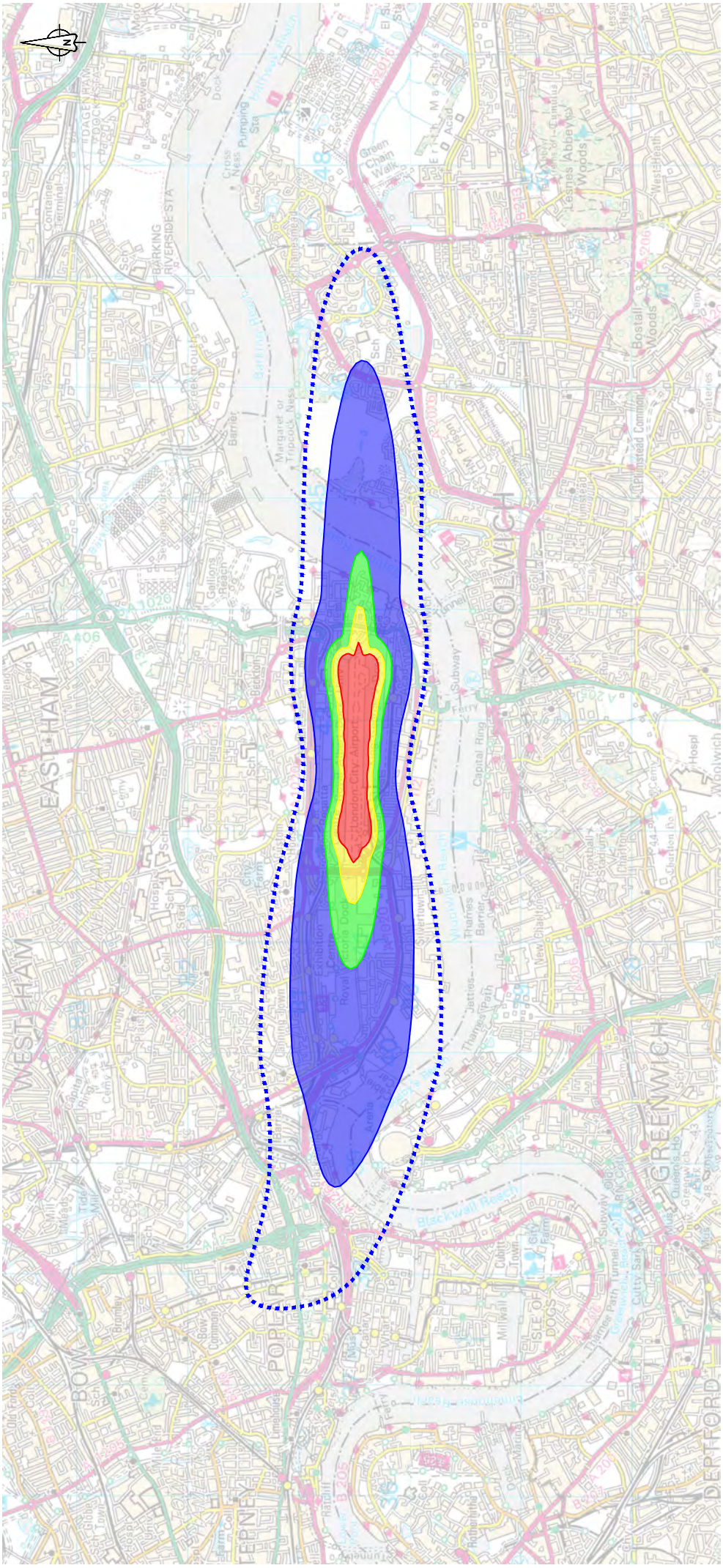
Actual Noise Contours
Summer 2023 Average Mode

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:50,000@A4

FIGURE No:

A11327_10_DR010_2.0



LEGEND:

- 54 dB Noise Contour
- 57 - 63 dB $L_{Aeq,16h}$
- 63 - 66 dB $L_{Aeq,16h}$
- 66 - 69 dB $L_{Aeq,16h}$
- > 69 dB $L_{Aeq,16h}$

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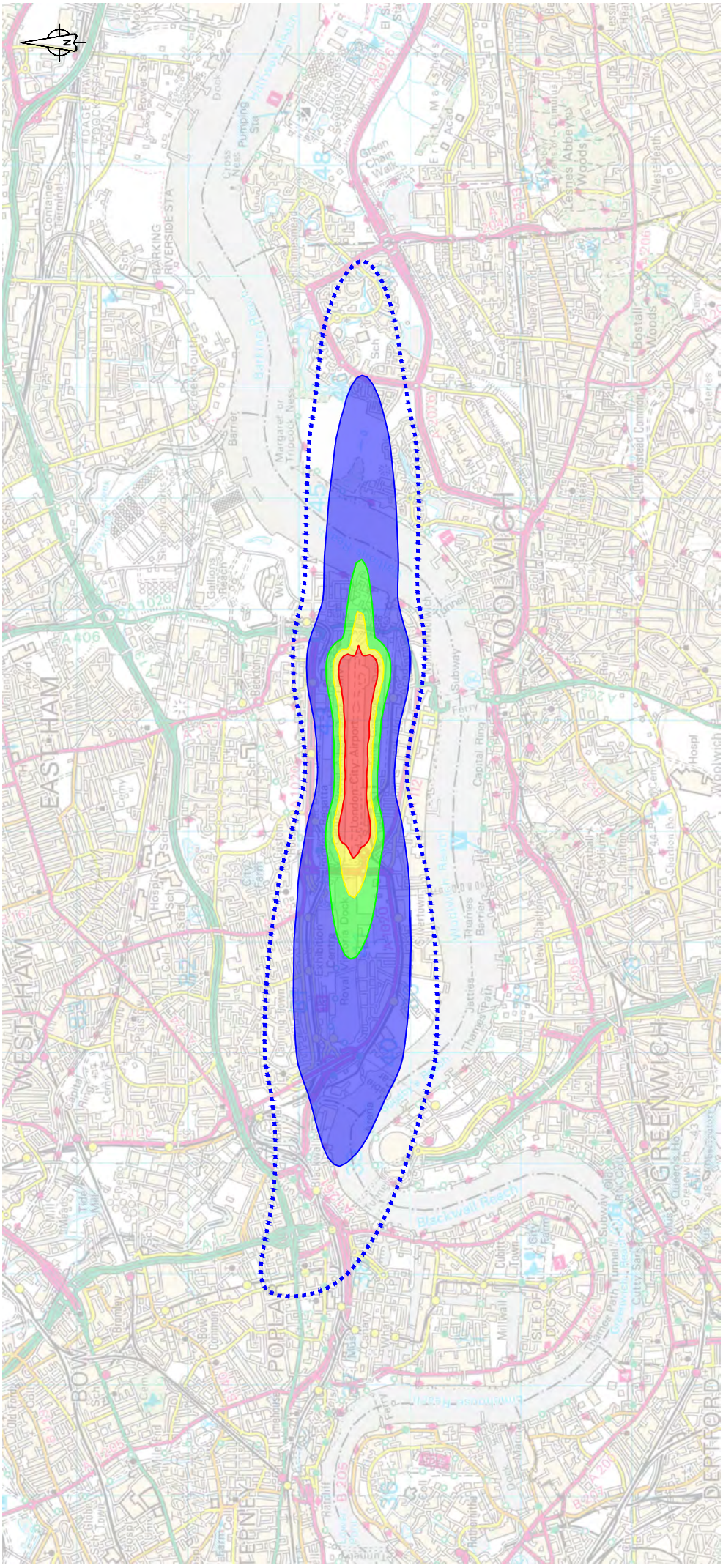
Forecast Noise Contours
Summer 2024 Average Mode

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:50,000@A4

FIGURE No:

A11327_10_DR011_2.0



LEGEND:

- 54 dB Noise Contour
- 57 - 63 dB $L_{Aeq,16h}$
- 63 - 66 dB $L_{Aeq,16h}$
- 66 - 69 dB $L_{Aeq,16h}$
- > 69 dB $L_{Aeq,16h}$

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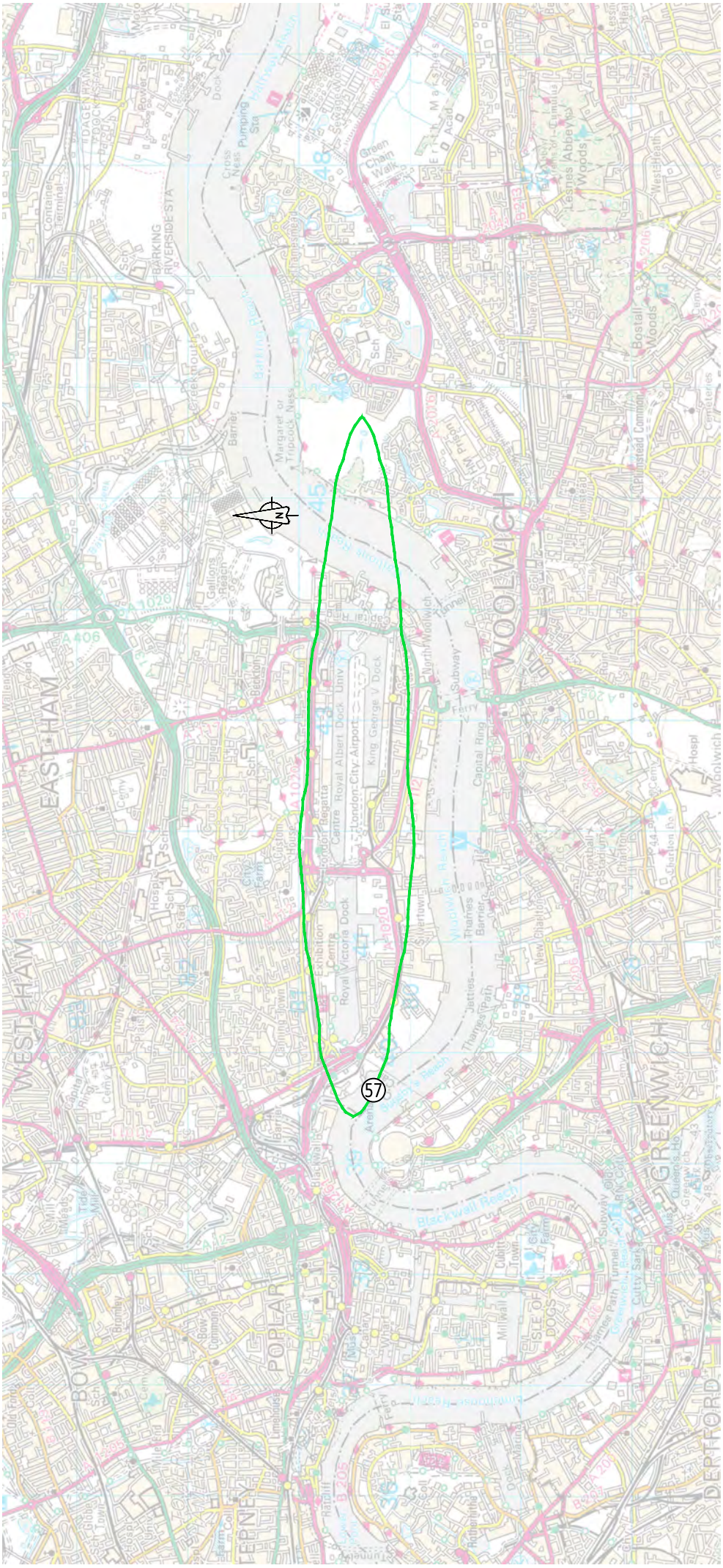
Forecast Reduced Noise Contours
Summer 2024 Average Mode

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:50,000@A4

FIGURE No:

A11327_10_DR012_2.0



LEGEND:

Noise Contours

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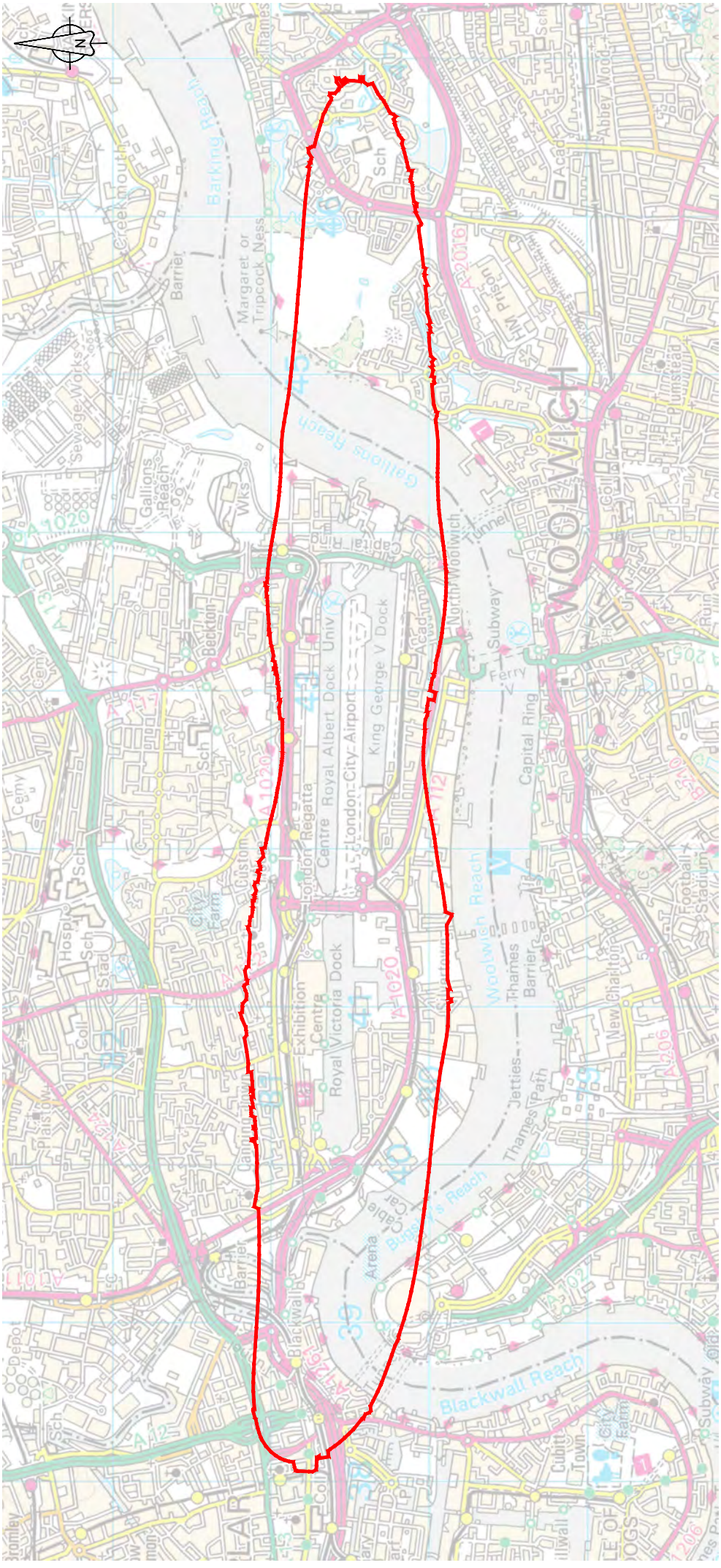
$L_{Aeq,16h}$ Noise Contours
1998 Planning Contour

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:50000@A4

FIGURE No:

A11327_10_DR002_2.0



LEGEND:

First Tier Eligibility Boundary

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2023 NOMMS Report

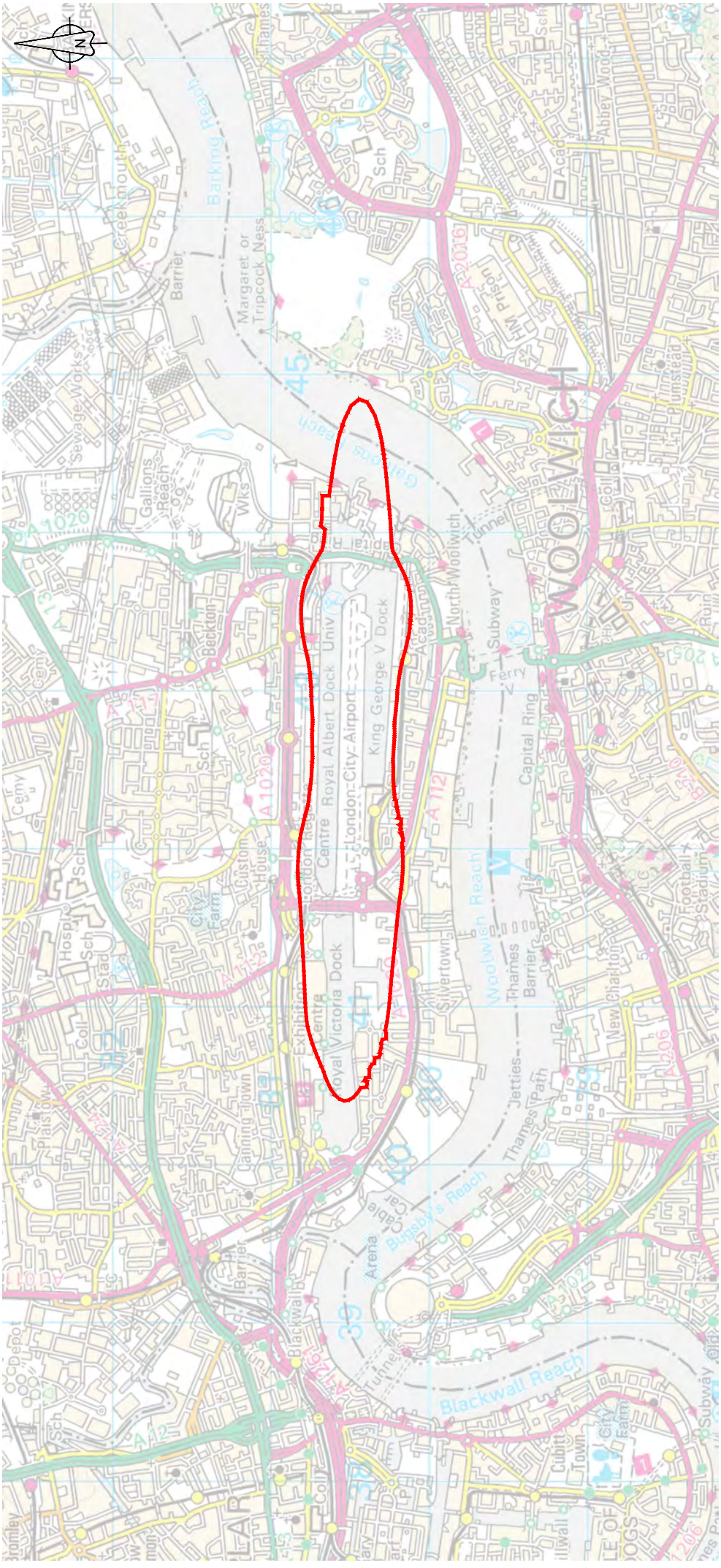
Residential First Tier Works and
Public Buildings First Tier Works
Eligibility Boundary

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:35,000@A4

FIGURE No:

A11327_11_DR009_2.0



LEGEND:

Intermediate Tier Eligibility Boundary

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2023 NOMMS Report

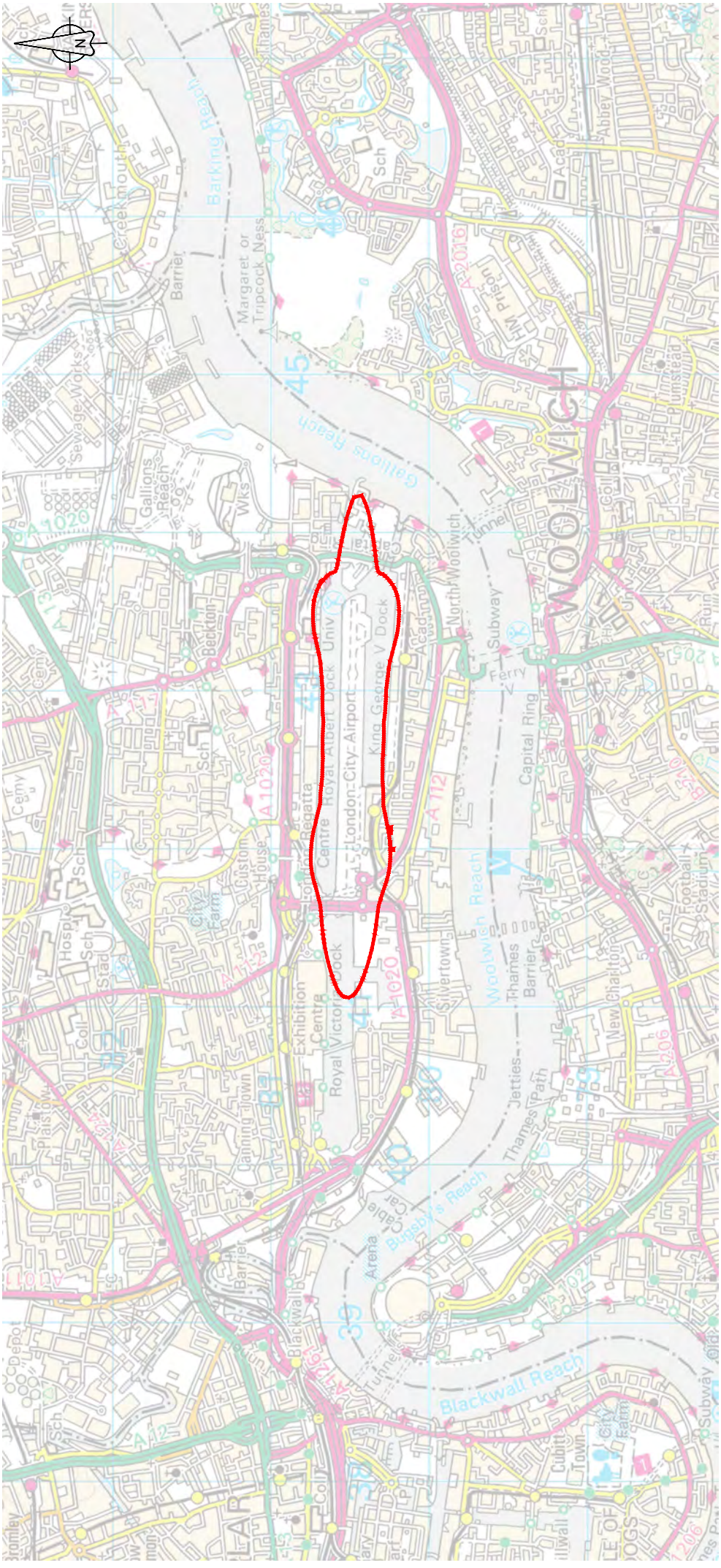
Residential Intermediate Tier Works and Public Buildings Intermediate Tier Works Eligibility Boundary

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:35,000@A4

FIGURE No:

A11327_11_DR010_2.0



LEGEND:

Second Tier Eligibility Boundary

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2023 NOMMS Report

Residential Second Tier Works and
Public Buildings Second Tier Works
Eligibility Boundary

DRAWN: NW CHECKED: DC

DATE: April 2024 SCALE: 1:35,000@A4

FIGURE No:

A11327_11_DR011_2.0

APPENDIX 6
AUXILIARY POWER UNIT USAGE

SCHEDULED AIRCRAFT

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
BAe 146	✓
RJ Series	✓
Airbus A221	✓
Airbus A318	✓
Embraer 135	✓
Embraer 170	✓
Embraer 190	✓
Embraer 290	✓
Embraer 295	✓
ATR 42	✓
ATR 72	✓
DHC 8-100	✓
DHC 8-300	✓
DHC 8-400	✓
Fokker 50	
Dornier 328	✓
Dornier 328 Jet	✓
Saab 2000	✓

Table A6.1: APU Usage Details, Scheduled Aircraft

GENERAL AVIATION AIRCRAFT

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
B300/350 Beechcraft Super King Air	
BE20 Beechcraft 200	
BE58 PA Beechcraft Baron	
BE9L Beechcraft 900	
Beech 400 A	

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
Bombardier Challenger 350	✓
Bombardier Challenger 600 Series	✓
Bombardier Global 5000/6000/7000 Series	✓
C510 (Citation Mustang)	
C525 Citation Jet Series (CJ1/2/3/4)	
C550 (Citation Bravo)	
C560 (Citation V)	
C56X (Citation Excel)	✓
C680 (Citation Sovereign)	✓
C680A (Citation Latitude)	✓
E545 Legacy 450	✓
E550 Legacy 500	✓
E55P Phenom 300	
FA900B	✓
FA10 (Falcon 10)	
FA50 (Falcon 50)	✓
F2TH (Falcon 2000EX)	✓
F900EX (Falcon 900EX)	✓
FA7X Falcon 7X	✓
FA8X Falcon 8X	✓
G150 Gulfstream 150	✓
G280 Gulfstream 280	✓
G500 Gulfstream GVII	✓
G600 Gulfstream GVII	✓
G650 Gulfstream GVI	✓
Hawker 800 XP	✓
Learjet 40/45	✓
P180 (Piaggio Avanti)	
P68C (Partenavia 68)	

AIRCRAFT	A.P.U. USAGE REQUIRED? (✓)
PA31 (Navajo)	
PA34 (Seneca)	
Pilatus PC24	✓

Table A6.2: APU Usage Details, General Aviation Aircraft

APPENDIX 7
SUMMARY OF REVERSE THRUST DATA

The following charts show the distribution of measured levels of arriving aircraft at NMT7 in 2023, separately for runway 09 and runway 27. The decibel values on the x-axis in each chart are the maximum values for events in that column, e.g. the column above "83" contains events that recorded a measurement of 82.1 to 83.0 dB L_{ASmax}.

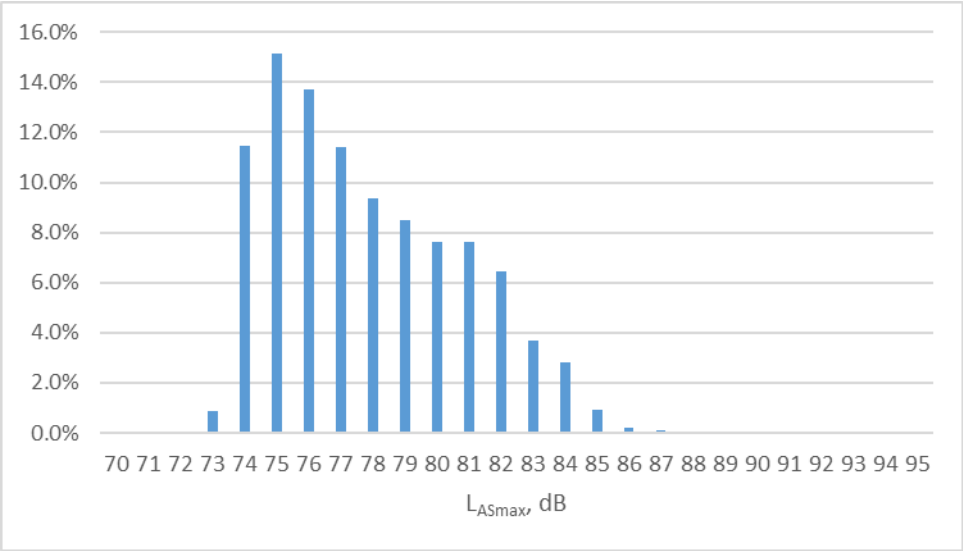

Figure A7.1: Runway 09 Distribution of NMT 7 Noise Levels, 2023 (2,237 events)

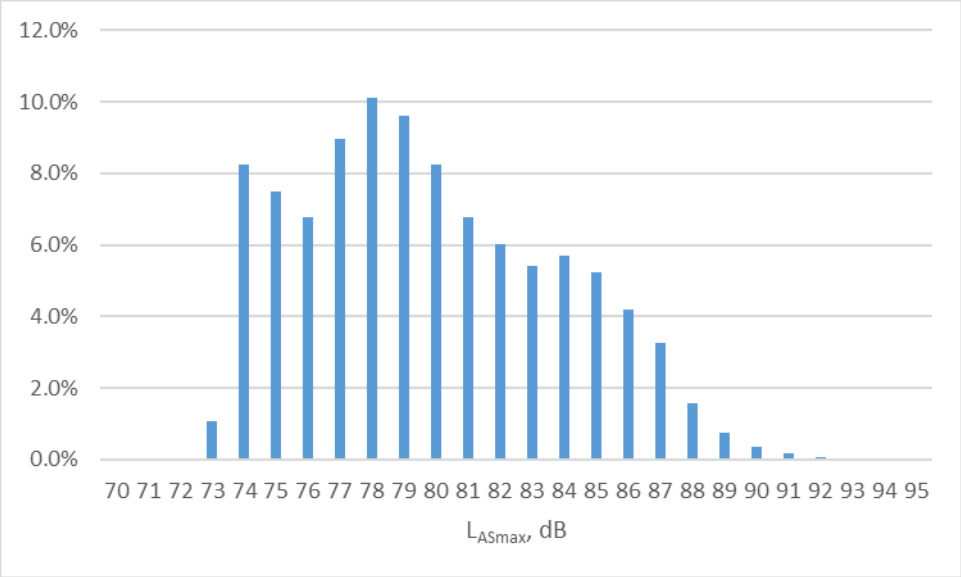

Figure A7.2: Runway 27 Distribution of NMT 7 Noise Levels, 2023 (1,647 events)

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APPENDIX 8
SOUND INSULATION SCHEME PROPERTY LISTS

The tables in this appendix give the lists of properties that have become newly eligible for the following sound insulation schemes:

- First Tier Scheme – Residential Dwellings
- First Tier Scheme – Public Buildings
- Intermediate Tier Scheme – Residential Dwellings
- Intermediate Tier Scheme – Public Buildings
- Second Tier Scheme – Residential Dwellings
- Second Tier Scheme – Public Buildings
- Re-inspection Scheme

First Tier Scheme – Residential Dwellings						
Building Name	**No.**	**Sub Building Name**	**Thorough-fare**	**Post Code**	**uprn**	**Further Info**
n/a						

Table A8.1: Newly Eligible Residential Dwellings, First Tier Scheme

First Tier Scheme – Public Buildings						
Building Name	**No.**	**Sub Building Name**	**Thorough-fare**	**Post Code**	**uprn**	**Further Info**
n/a						

Table A8.2: Newly Eligible Public Buildings, First Tier Scheme

Intermediate Tier Scheme – Residential Dwellings						
Building Name	**No.**	**Sub Building Name**	**Thorough-fare**	**Post Code**	**uprn**	**Further Info**
n/a						

Table A8.3: Newly Eligible Residential Dwellings, Intermediate Tier Scheme

Intermediate Tier Scheme – Public Buildings						
Building Name	**No.**	**Sub Building Name**	**Thorough-fare**	**Post Code**	**uprn**	**Further Info**
n/a						

Table A8.4: Newly Eligible Public Buildings, Intermediate Tier Scheme

Second Tier Scheme – Residential Dwellings						
Building Name	**No.**	**Sub Building Name**	**Thorough-fare**	**Post Code**	**uprn**	**Further Info**
n/a						

Table A8.5: Newly Eligible Residential Dwellings, Second Tier Scheme

Second Tier Scheme – Public Buildings						
Building Name	**No.**	**Sub Building Name**	**Thorough-fare**	**Post Code**	**uprn**	**Further Info**
n/a						

Table A8.6: Newly Eligible Public Buildings, Second Tier Scheme

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		18	BARGE HOUSE ROAD	E16 2NH	46251418	
		21	BARGE HOUSE ROAD	E16 2NX	46252752	
		22	BARGE HOUSE ROAD	E16 2NH	46003282	
		8	BARRIER POINT ROAD	E16 2SB	46090732	
		9	BARRIER POINT ROAD	E16 2SB	46090733	
		11	BARRIER POINT ROAD	E16 2SB	46090735	
		14	BARRIER POINT ROAD	E16 2SB	46090738	
		16	BARRIER POINT ROAD	E16 2SB	46090740	
		17	BARRIER POINT ROAD	E16 2SB	46090741	
		19	BARRIER POINT ROAD	E16 2SB	46090743	
		20	BARRIER POINT ROAD	E16 2SB	46090744	
		21	BARRIER POINT ROAD	E16 2SB	46090745	
		22	BARRIER POINT ROAD	E16 2SB	46090746	
		24	BARRIER POINT ROAD	E16 2SB	46090748	
		26	BARRIER POINT ROAD	E16 2SB	46090750	
		27	BARRIER POINT ROAD	E16 2SB	46090751	
		30	BARRIER POINT ROAD	E16 2SB	46090754	
		32	BARRIER POINT ROAD	E16 2SB	46090756	
		33	BARRIER POINT ROAD	E16 2SB	46090757	
		34	BARRIER POINT ROAD	E16 2SB	46090758	
		46	BARRIER POINT ROAD	E16 2SB	46090770	
		54	BARRIER POINT ROAD	E16 2SB	46090778	
		56	BARRIER POINT ROAD	E16 2SB	46090780	
		61	BARRIER POINT ROAD	E16 2SB	46090785	
		12	BERWICK ROAD	E16 3DS	46005341	
		26A	BERWICK ROAD	E16 3DS	46005340	
		34A	BERWICK ROAD	E16 3DS	46005318	
		42A	BERWICK ROAD	E16 3DS	46005325	
		42B	BERWICK ROAD	E16 3DS	46005338	
		44	BERWICK ROAD	E16 3DS	46005357	
		44A	BERWICK ROAD	E16 3DS	46005314	
		44B	BERWICK ROAD	E16 3DS	46005319	
		46	BERWICK ROAD	E16 3DS	46005358	
		50B	BERWICK ROAD	E16 3DS	46005323	
		12	BOWMAN AVENUE	E16 1LA	46007301	
		3	BRAY DRIVE	E16 1LD	46007741	
		4	BRAY DRIVE	E16 1LD	46007742	
		5	BRAY DRIVE	E16 1LD	46007743	
		31	BRAY DRIVE	E16 1LD	46007768	
		31	BRIDGELAND ROAD	E16 3AD	46007904	
		35	BRIDGELAND ROAD	E16 3AD	46007908	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		58	BRIDGELAND ROAD	E16 3AD	46007920	
		72	BRIDGELAND ROAD	E16 3AD	46007927	
FLAT 8	SHAW HOUSE		CLAREMONT STREET	E16 2LP	46015547	
FLAT 16	SHAW HOUSE		CLAREMONT STREET	E16 2LP	46015530	
FLAT 31	SHAW HOUSE		CLAREMONT STREET	E16 2LP	46015538	
		7	CLEMENTS AVENUE	E16 3AA	46016503	
		48	CLEMENTS AVENUE	E16 3AA	46016525	
		38	CUNDY ROAD	E16 3DL	46019898	
		42	CUNDY ROAD	E16 3DL	46019902	
		46	CUNDY ROAD	E16 3DL	46019906	
		56	CUNDY ROAD	E16 3DL	46019916	
		58	CUNDY ROAD	E16 3DL	46019918	
		60	CUNDY ROAD	E16 3DL	46019920	
		62	CUNDY ROAD	E16 3DL	46019922	
		72	CUNDY ROAD	E16 3DL	46019932	
		76	CUNDY ROAD	E16 3DL	46019934	
		20	ETHEL ROAD	E16 3AU	46024662	
		24	ETHEL ROAD	E16 3AU	46024666	
		28	ETHEL ROAD	E16 3AU	46024670	
		30	ETHEL ROAD	E16 3AU	46024672	
		32	ETHEL ROAD	E16 3AU	46024674	
		33	ETHEL ROAD	E16 3AT	46024675	
		34	ETHEL ROAD	E16 3AU	46024676	
FLAT 1		35	ETHEL ROAD	E16 3AT	10008985817	
FLAT 2		35	ETHEL ROAD	E16 3AT	10008985817	
FLAT 3		35	ETHEL ROAD	E16 3AT	10008985817	
FLAT 4		35	ETHEL ROAD	E16 3AT	10008985817	
		37	ETHEL ROAD	E16 3AT	46024678	
		38	ETHEL ROAD	E16 3AU	46024679	
		39	ETHEL ROAD	E16 3AT	46024680	
		41	ETHEL ROAD	E16 3AT	46024682	
		42	ETHEL ROAD	E16 3AU	46024683	
		43	ETHEL ROAD	E16 3AT	46024684	
		44	ETHEL ROAD	E16 3AU	46024685	
		45	ETHEL ROAD	E16 3AT	46024686	
		46	ETHEL ROAD	E16 3AU	46024687	
		47	ETHEL ROAD	E16 3AT	46024688	
		48	ETHEL ROAD	E16 3AU	46024689	
		49	ETHEL ROAD	E16 3AT	46024690	
		50	ETHEL ROAD	E16 3AU	46024691	
		51	ETHEL ROAD	E16 3AT	46024692	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		52	ETHEL ROAD	E16 3AU	46024693	
		53	ETHEL ROAD	E16 3AT	46024694	
		54	ETHEL ROAD	E16 3AU	46024695	
		55	ETHEL ROAD	E16 3AT	46024696	
		56	ETHEL ROAD	E16 3AU	46024697	
		57	ETHEL ROAD	E16 3AT	46024698	
		58	ETHEL ROAD	E16 3AU	46024699	
		59	ETHEL ROAD	E16 3AT	46024700	
		61	ETHEL ROAD	E16 3AT	46024702	
		62	ETHEL ROAD	E16 3AU	46024703	
		63	ETHEL ROAD	E16 3AT	46024704	
		65	ETHEL ROAD	E16 3AT	46024706	
		67	ETHEL ROAD	E16 3AT	46024708	
		69	ETHEL ROAD	E16 3AT	46024710	
		71	ETHEL ROAD	E16 3AT	46024712	
		72	ETHEL ROAD	E16 3AU	46024713	
		73	ETHEL ROAD	E16 3AT	46024714	
		74	ETHEL ROAD	E16 3AU	46024715	
		75	ETHEL ROAD	E16 3AT	46024716	
		76	ETHEL ROAD	E16 3AU	46024717	
		80	ETHEL ROAD	E16 3AU	46024719	
		93	EVELYN ROAD	E16 1UU	10009018551	
		105	EVELYN ROAD	E16 1UU	10009018557	
		107	EVELYN ROAD	E16 1UU	10009018558	
		111	EVELYN ROAD	E16 1UU	10009018560	
		113	EVELYN ROAD	E16 1UU	10009018561	
		115	EVELYN ROAD	E16 1UU	10009018562	
		113	FISHGUARD WAY	E16 2RU	46253045	
		115	FISHGUARD WAY	E16 2RU	46252977	
		117	FISHGUARD WAY	E16 2RU	46253046	
		137	FISHGUARD WAY	E16 2RU	46253051	
		163	FISHGUARD WAY	E16 2RU	46253057	
		195	FISHGUARD WAY	E16 2RX	10008990651	
		201	FISHGUARD WAY	E16 2RX	10008990645	
		203	FISHGUARD WAY	E16 2RX	10008990646	
		219	FISHGUARD WAY	E16 2RX	10008990620	
		35	FLOATHAVEN CLOSE	SE28 8SN	10010223651	
		42	FLOATHAVEN CLOSE	SE28 8SN	10010223655	
		52	FLOATHAVEN CLOSE	SE28 8SN	10010223661	
		55	FLOATHAVEN CLOSE	SE28 8SN	10010210268	
		56	FLOATHAVEN CLOSE	SE28 8SN	10010223662	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		60	FLOATHAVEN CLOSE	SE28 8SN	10010225092	
	NORMANDY TERRACE	21	FREEMASONS ROAD	E16 3AS	46027977	
		10	GILL AVENUE	E16 3AF	46029269	
		19	GILL AVENUE	E16 3AF	46029278	
		1	GRASSHAVEN WAY	SE28 8TH	10010211223	
		2	GRASSHAVEN WAY	SE28 8TH	10010211224	
		4	GRASSHAVEN WAY	SE28 8TH	10010211226	
		17	GRASSHAVEN WAY	SE28 8TH	10010211239	
		21	GRASSHAVEN WAY	SE28 8TH	10010211243	
		22	GRASSHAVEN WAY	SE28 8TH	10010211244	
		39	GRASSHAVEN WAY	SE28 8TJ	10010211259	
		40	GRASSHAVEN WAY	SE28 8TJ	10010211260	
		41	GRASSHAVEN WAY	SE28 8TJ	10010211261	
		48	GRASSHAVEN WAY	SE28 8TJ	10010211247	
		53	GRASSHAVEN WAY	SE28 8TJ	10010211252	
		64	GRASSHAVEN WAY	SE28 8TL	10010211309	
		83	GRASSHAVEN WAY	SE28 8TL	10010211296	
		84	GRASSHAVEN WAY	SE28 8TL	10010211297	
		85	GRASSHAVEN WAY	SE28 8TL	10010211298	
		86	GRASSHAVEN WAY	SE28 8TL	10010211299	
		89	GRASSHAVEN WAY	SE28 8TL	10010211302	
		91	GRASSHAVEN WAY	SE28 8TL	10010211313	
		93	GRASSHAVEN WAY	SE28 8TL	10010211315	
		94	GRASSHAVEN WAY	SE28 8TL	10010211316	
		1	GRIMSBY GROVE	E16 2RH	46251406	
		2	GRIMSBY GROVE	E16 2RJ	46252790	
		4	GRIMSBY GROVE	E16 2RJ	46252953	
		5	GRIMSBY GROVE	E16 2RH	46251408	
		6	GRIMSBY GROVE	E16 2RJ	46252954	
		8	GRIMSBY GROVE	E16 2RJ	46252955	
		11	GRIMSBY GROVE	E16 2RH	46251411	
		12	GRIMSBY GROVE	E16 2RJ	46252957	
		38	GRIMSBY GROVE	E16 2RJ	46252942	
		44	GRIMSBY GROVE	E16 2RJ	46252960	
		54	GRIMSBY GROVE	E16 2RJ	46252804	
		62	GRIMSBY GROVE	E16 2RJ	46252805	
		90	GRIMSBY GROVE	E16 2RJ	46252765	
		8	HARTLEPOOL COURT	E16 2RL	46081732	
		10	HARTLEPOOL COURT	E16 2RL	46081734	
		6A	HARTLEPOOL COURT	E16 2RL	46081730	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		9A	HARTLEPOOL COURT	E16 2RL	10023995815	
		10A	HARTLEPOOL COURT	E16 2RL	10023996900	
		11A	HARTLEPOOL COURT	E16 2RL	46081735	
		5	HIGH TOR VIEW	SE28 0LN	10010210690	
		12	HIGH TOR VIEW	SE28 0LN	10010210681	
		5	HILL VIEW DRIVE	SE28 0LJ	10010210613	
		16	HILL VIEW DRIVE	SE28 0LH	10010210584	
		19	HILL VIEW DRIVE	SE28 0LJ	10010210622	
		25	HILL VIEW DRIVE	SE28 0LJ	10010210637	
		28	HILL VIEW DRIVE	SE28 0LH	10010210574	
		29	HILL VIEW DRIVE	SE28 0LJ	10010210615	
		30	HILL VIEW DRIVE	SE28 0LH	10010210570	
		36	HILL VIEW DRIVE	SE28 0LH	10010210599	
		38	HILL VIEW DRIVE	SE28 0LH	10010210578	
		39	HILL VIEW DRIVE	SE28 0LJ	10010210638	
		40	HILL VIEW DRIVE	SE28 0LH	10010210577	
		49	HILL VIEW DRIVE	SE28 0LJ	10010210626	
		56	HILL VIEW DRIVE	SE28 0LH	10010210597	
		58	HILL VIEW DRIVE	SE28 0LH	10010210589	
		60	HILL VIEW DRIVE	SE28 0LH	10010210600	
		68	HILL VIEW DRIVE	SE28 0LH	10010210598	
		80	HILL VIEW DRIVE	SE28 0LH	10010210606	
		130	HILL VIEW DRIVE	SE28 0LL	10010210650	
		132	HILL VIEW DRIVE	SE28 0LL	10010210659	
		134	HILL VIEW DRIVE	SE28 0LL	10010210649	
		146	HILL VIEW DRIVE	SE28 0LL	10010210658	
		16	HULL PLACE	E16 2SW	10008995284	
		47	HUTCHINS ROAD	SE28 8SE	100020976867	
		15	INVERNESS MEWS	E16 2SP	46253041	
		21	INVERNESS MEWS	E16 2SP	46253027	
		25	INVERNESS MEWS	E16 2SP	46253028	
		34	INVERNESS MEWS	E16 2SP	10008990665	
		41	INVERNESS MEWS	E16 2SP	46253032	
		47	INVERNESS MEWS	E16 2SP	46252997	
		55	INVERNESS MEWS	E16 2SP	46253001	
		61	INVERNESS MEWS	E16 2SP	46253004	
		62	INVERNESS MEWS	E16 2SP	10008990661	
FLAT 2	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082114	
FLAT 33	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082145	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 35	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082147	
FLAT 36	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082148	
FLAT 46	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082158	
FLAT 55	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082167	
FLAT 59	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082171	
FLAT 63	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082175	
FLAT 75	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082538	
FLAT 87	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082531	
FLAT 88	STUDLEY COURT	5	PRIME MERIDIAN WALK	E14 2DA	6082503	
FLAT 12	WOTTON COURT	6	JAMESTOWN WAY	E14 2DB	6082517	
FLAT 14	WOTTON COURT	6	JAMESTOWN WAY	E14 2DB	6082519	
FLAT 28	WOTTON COURT	6	JAMESTOWN WAY	E14 2DB	6082472	
FLAT 31	WOTTON COURT	6	JAMESTOWN WAY	E14 2DB	6082475	
FLAT 1	ATLANTIC COURT	10	JAMESTOWN WAY	E14 2DH	6082207	
FLAT 2	ATLANTIC COURT	10	JAMESTOWN WAY	E14 2DH	6082208	
FLAT 4	ATLANTIC COURT	10	JAMESTOWN WAY	E14 2DH	6082210	
		43	JAMESTOWN WAY	E14 2DE	6082187	
		49	JAMESTOWN WAY	E14 2DE	6082190	
		1	JOHN SMITH MEWS	E14 2DP	6137029	
		2	JOHN SMITH MEWS	E14 2DP	6137035	
		3	JOHN SMITH MEWS	E14 2DP	6137036	
		4	JOHN SMITH MEWS	E14 2DP	6137037	
		5	JOHN SMITH MEWS	E14 2DP	6137038	
		6	JOHN SMITH MEWS	E14 2DP	6137039	
		7	JOHN SMITH MEWS	E14 2DP	6137040	
		8	JOHN SMITH MEWS	E14 2DP	6137041	
		9	JOHN SMITH MEWS	E14 2DP	6137042	
		10	JOHN SMITH MEWS	E14 2DP	6137030	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		11	JOHN SMITH MEWS	E14 2DP	6137031	
		12	JOHN SMITH MEWS	E14 2DP	6137032	
		13	JOHN SMITH MEWS	E14 2DP	6137033	
		14	JOHN SMITH MEWS	E14 2DP	6137034	
		1	MARTIN STREET	SE28 0BZ	10010210411	
		5	MARTIN STREET	SE28 0BZ	10010210413	
		9	MARTIN STREET	SE28 0BZ	10010210415	
		17	MARTIN STREET	SE28 0BZ	10010210418	
		60	MARTINDALE AVENUE	E16 3AB	46048919	
		102	MARTINDALE AVENUE	E16 3AB	46048940	
		104	MARTINDALE AVENUE	E16 3AB	46048941	
		1	MARTINS PLACE	SE28 0LG	10010210547	
		3	MARTINS PLACE	SE28 0LG	10010210549	
		5	MARTINS PLACE	SE28 0LG	10010210551	
		6	MARTINS PLACE	SE28 0LG	10010210552	
		1	MARTINS WALK	SE28 0LE	10010210491	
		3	MARTINS WALK	SE28 0LE	10010210500	
		5	MARTINS WALK	SE28 0LE	10010210494	
		6	MARTINS WALK	SE28 0LE	10010210495	
		9	MARTINS WALK	SE28 0LE	10010238376	
		2	MASON CLOSE	E16 1LF	46049255	
		10	MASON CLOSE	E16 1LF	46049263	
		11	MASON CLOSE	E16 1LF	46049264	
		16	MASON CLOSE	E16 1LF	46049269	
		20	MASON CLOSE	E16 1LF	46049273	
FLAT 18	TIDEHAM HOUSE		MERBURY CLOSE	SE28 0LW	10010211861	
FLAT 20	TIDEHAM HOUSE		MERBURY CLOSE	SE28 0LW	10010211861	
		24	MERBURY ROAD	SE28 0GZ	10010211800	
		29	MERBURY ROAD	SE28 0GY	10010211785	
		31	MERBURY ROAD	SE28 0GY	10010211787	
		33	MERBURY ROAD	SE28 0GY	10010211789	
		35	MERBURY ROAD	SE28 0GY	10010211783	
		37	MERBURY ROAD	SE28 0GY	10010211792	
		39	MERBURY ROAD	SE28 0GY	10010211784	
FLAT 3	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211941	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 5	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211943	
FLAT 16	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211954	
FLAT 18	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211956	
FLAT 21	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211959	
FLAT 22	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211960	
FLAT 25	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211963	
FLAT 29	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211967	
FLAT 30	TRIDENT HOUSE		MERBURY ROAD	SE28 0NB	10010211968	
		12	MILES DRIVE	SE28 0JA	10010203523	
		22	MILES DRIVE	SE28 0JA	10010210435	
		29	MILES DRIVE	SE28 0NE	10010210814	
		31	MILES DRIVE	SE28 0NE	10010210809	
		33	MILES DRIVE	SE28 0NE	10010210807	
		35	MILES DRIVE	SE28 0NE	10010210836	
		36	MILES DRIVE	SE28 0JA	10010210442	
		37	MILES DRIVE	SE28 0NE	10010210813	
		24	MONK DRIVE	E16 1LE	46051464	
		5	MUNDAY ROAD	E16 3QA	46052433	
		1	MURRAY SQUARE	E16 3AH	46052467	
		21	MURRAY SQUARE	E16 3AH	46052487	
		41	MURRAY SQUARE	E16 3AH	46052507	
		74	MURRAY SQUARE	E16 3AL	46052529	
		7	NEWMARSH ROAD	SE28 8TA	200002476059	
		8	NEWMARSH ROAD	SE28 8TF	200001927649	
		9	NEWMARSH ROAD	SE28 8TA	200002476187	
		11	NEWMARSH ROAD	SE28 8TA	200002476222	
		13	NEWMARSH ROAD	SE28 8TA	200002476266	
		17	NEWMARSH ROAD	SE28 8TA	200002476247	
		18	NEWMARSH ROAD	SE28 8TF	200001927654	
		21	NEWMARSH ROAD	SE28 8TA	200002476159	
		23	NEWMARSH ROAD	SE28 8TA	200002475945	
		27	NEWMARSH ROAD	SE28 8TA	200002476053	
		31	NEWMARSH ROAD	SE28 8TA	200002483713	
		33	NEWMARSH ROAD	SE28 8TA	200002801732	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		37	NEWMARSH ROAD	SE28 8TA	200002483747	
		38	NEWMARSH ROAD	SE28 8TF	200001927663	
		39	NEWMARSH ROAD	SE28 8TA	200002485348	
		43	NEWMARSH ROAD	SE28 8TA	200002364979	
		53	NEWMARSH ROAD	SE28 8TA	200001928907	
		55	NEWMARSH ROAD	SE28 8TA	200001928908	
		59	NEWMARSH ROAD	SE28 8TA	200001928910	
		75	NEWMARSH ROAD	SE28 8TA	200001928918	
		100	NEWMARSH ROAD	SE28 8TQ	200002801770	
		102	NEWMARSH ROAD	SE28 8TQ	200002494225	
		167	NEWMARSH ROAD	SE28 8TB	200002801797	
		175	NEWMARSH ROAD	SE28 8TB	200002801801	
		181	NEWMARSH ROAD	SE28 8TB	200002801804	
		183	NEWMARSH ROAD	SE28 8TB	200002801805	
		185	NEWMARSH ROAD	SE28 8TB	200002801806	
		197	NEWMARSH ROAD	SE28 8TB	200002801812	
		205	NEWMARSH ROAD	SE28 8TB	200002801816	
		209	NEWMARSH ROAD	SE28 8TB	200002801818	
		211	NEWMARSH ROAD	SE28 8TB	200002801819	
		235A	NEWMARSH ROAD	SE28 8TB	10010223754	
		243	NEWMARSH ROAD	SE28 8TB	200002801835	
		265	NEWMARSH ROAD	SE28 8TD	200002801846	
		295	NEWMARSH ROAD	SE28 8TE	200001930367	
		307	NEWMARSH ROAD	SE28 8TE	200001930373	
		317	NEWMARSH ROAD	SE28 8TE	200001930378	
FLAT 16	WINGFIELD COURT	4	NEWPORT AVENUE	E14 2DR	6355791	
FLAT 19	WINGFIELD COURT	4	NEWPORT AVENUE	E14 2DR	6355794	
FLAT 34	WINGFIELD COURT	4	NEWPORT AVENUE	E14 2DR	6355810	
FLAT 1	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361765	
FLAT 3	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361767	
FLAT 4	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361768	
FLAT 5	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361769	
FLAT 7	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361771	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 10	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361774	
FLAT 11	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361775	
FLAT 12	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361776	
FLAT 13	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361777	
FLAT 14	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361778	
FLAT 15	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361779	
FLAT 17	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361781	
FLAT 18	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361782	
FLAT 20	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361784	
FLAT 21	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361785	
FLAT 22	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361786	
FLAT 23	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361787	
FLAT 24	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361788	
FLAT 25	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361789	
FLAT 26	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361790	
FLAT 27	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361791	
FLAT 28	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361792	
FLAT 29	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361793	
FLAT 30	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361794	
FLAT 31	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361795	
FLAT 32	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361796	
FLAT 33	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361797	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 34	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361798	
FLAT 35	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361799	
FLAT 36	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361800	
FLAT 37	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361801	
FLAT 38	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361802	
FLAT 39	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361803	
FLAT 40	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361804	
FLAT 41	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361805	
FLAT 42	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361806	
FLAT 43	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361807	
FLAT 44	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361808	
FLAT 45	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361809	
FLAT 46	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361810	
FLAT 47	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361811	
FLAT 48	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361812	
FLAT 49	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361813	
FLAT 50	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361814	
FLAT 53	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361817	
FLAT 54	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361818	
FLAT 55	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361819	
FLAT 57	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361821	
FLAT 58	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361822	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 59	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361823	
FLAT 63	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EA	6361827	
FLAT 68	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361832	
FLAT 71	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361835	
FLAT 74	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361838	
FLAT 75	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361839	
FLAT 76	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361840	
FLAT 80	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361844	
FLAT 81	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361845	
FLAT 83	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361847	
FLAT 85	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361849	
FLAT 90	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361854	
FLAT 93	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361857	
FLAT 94	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361858	
FLAT 96	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361860	
FLAT 99	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361863	
FLAT 100	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361864	
FLAT 112	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361876	
FLAT 114	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361878	
FLAT 115	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361879	
FLAT 116	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361880	
FLAT 121	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361885	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 122	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361886	
FLAT 124	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361888	
FLAT 125	EXPLORERS COURT	5	NEWPORT AVENUE	E14 2EB	6361889	
FLAT 4	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6355829	
FLAT 8	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6355834	
FLAT 11	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6056853	
FLAT 12	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6062495	
FLAT 13	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6062533	
FLAT 14	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6063895	
FLAT 15	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6065137	
FLAT 16	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6065173	
FLAT 17	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6069560	
FLAT 18	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6070428	
FLAT 19	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6072863	
FLAT 20	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6008209	
FLAT 21	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6077475	
FLAT 22	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6077497	
FLAT 23	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6077671	
FLAT 25	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6083154	
FLAT 26	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6084684	
FLAT 29	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086157	
FLAT 30	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086204	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 31	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086221	
FLAT 33	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086436	
FLAT 34	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086470	
FLAT 36	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086511	
FLAT 37	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6355828	
FLAT 38	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6086981	
FLAT 39	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087026	
FLAT 40	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6355830	
FLAT 41	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087076	
FLAT 42	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087088	
FLAT 43	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087101	
FLAT 44	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087112	
FLAT 45	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087122	
FLAT 46	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087132	
FLAT 47	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6355831	
FLAT 48	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087151	
FLAT 49	SEXTON COURT	9	NEWPORT AVENUE	E14 2DU	6087160	
FLAT 32	BARTHOLOMEW COURT	10	NEWPORT AVENUE	E14 2DW	6082355	
FLAT 1	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6152035	
FLAT 2	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6355836	
FLAT 4	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6355838	
FLAT 5	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6355839	
FLAT 11	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6056190	
FLAT 12	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6062484	
FLAT 13	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6048174	
FLAT 14	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6063776	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 15	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6065128	
FLAT 16	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6065164	
FLAT 17	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6352068	
FLAT 18	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6069606	
FLAT 19	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6071545	
FLAT 20	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6077424	
FLAT 21	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6077446	
FLAT 22	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6077492	
FLAT 23	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6009690	
FLAT 24	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6646899	
FLAT 26	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6083348	
FLAT 28	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6086130	
FLAT 29	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6086152	
FLAT 30	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6086198	
FLAT 31	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6086216	
FLAT 33	KEEL COURT	11	NEWPORT AVENUE	E14 2DT	6086412	
FLAT 17	ADVENTURERS COURT	12	NEWPORT AVENUE	E14 2DN	6082290	
FLAT 27	ADVENTURERS COURT	12	NEWPORT AVENUE	E14 2DN	6082300	
FLAT 40	ADVENTURERS COURT	12	NEWPORT AVENUE	E14 2DN	6082313	
FLAT 2	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6355846	
FLAT 5	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6355850	
FLAT 6	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6152406	
FLAT 10	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6355845	
FLAT 11	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6056177	
FLAT 13	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6062512	
FLAT 15	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6065075	
FLAT 16	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6005199	
FLAT 17	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6065982	
FLAT 18	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6069569	

Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 20	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6075919	
FLAT 21	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6077432	
FLAT 23	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6077501	
FLAT 24	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6646886	
FLAT 26	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6083185	
FLAT 27	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6085121	
FLAT 28	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6086119	
FLAT 30	BRIDGE COURT	13	NEWPORT AVENUE	E14 2DS	6086191	
FLAT 18	SUSAN CONSTANT COURT	14	NEWPORT AVENUE	E14 2DL	6082247	
FLAT 21	SUSAN CONSTANT COURT	14	NEWPORT AVENUE	E14 2DL	6082250	
FLAT 32	SUSAN CONSTANT COURT	14	NEWPORT AVENUE	E14 2DL	6082261	
FLAT 34	SUSAN CONSTANT COURT	14	NEWPORT AVENUE	E14 2DL	6082263	
FLAT 3	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137963	
FLAT 21	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137954	
FLAT 29	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137962	
FLAT 30	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137964	
FLAT 33	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137967	
FLAT 34	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137968	
FLAT 40	SAIL COURT	15	NEWPORT AVENUE	E14 2DQ	6137975	
FLAT 4	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138025	
FLAT 18	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138001	
FLAT 19	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138002	
FLAT 21	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138005	
FLAT 29	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138013	

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Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
FLAT 34	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138019	
FLAT 47	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138033	
FLAT 63	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138051	
FLAT 76	SETTLERS COURT	17	NEWPORT AVENUE	E14 2DG	6138065	
		6	PANKHURST AVENUE	E16 1UT	46253849	
		9	PILGRIMS MEWS	E14 2DJ	6082226	
		12	ROYAL VICTORIA PLACE	E16 1UQ	46092253	
		17	ROYAL VICTORIA PLACE	E16 1UG	46089156	
		22	ROYAL VICTORIA PLACE	E16 1UQ	10008999768	
		23	ROYAL VICTORIA PLACE	E16 1UG	46089158	
			ROYAL VICTORIA			

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Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		21	TARLING ROAD	E16 1HN	10014035142	
		23	TARLING ROAD	E16 1HN	10014035143	
		25	TARLING ROAD	E16 1HN	10014035144	
		27	TARLING ROAD	E16 1HN	10014035145	
FLAT 3	BURNT ASH APARTMENTS	29	TARLING ROAD	E16 1GA	10014035150	
FLAT 4	BURNT ASH APARTMENTS	29	TARLING ROAD	E16 1GA	10014035151	
FLAT 5	BURNT ASH APARTMENTS	29	TARLING ROAD	E16 1GA	10014035152	
FLAT 7	BURNT ASH APARTMENTS	29	TARLING ROAD	E16 1GA	10014035154	
		9	TEASEL CRESCENT	SE28 0LP	10010210700	
		13	TEASEL CRESCENT	SE28 0LP	10010210702	
		14	TEASEL CRESCENT	SE28 0LP	10010210714	
		16	TEASEL CRESCENT	SE28 0LP	10010210715	
		17	TEASEL CRESCENT	SE28 0LP	10010210704	
		22	TEASEL CRESCENT	SE28 0LP	10010210732	

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Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		42	TIDESLEA PATH	SE28 0LY	10010211914	
		44	TIDESLEA PATH	SE28 0LY	10010211916	
		52	TIDESLEA PATH	SE28 0LY	10010211923	
		57	TIDESLEA PATH	SE28 0LY	10010211927	
		58	TIDESLEA PATH	SE28 0LY	10010211928	
		62	TIDESLEA PATH	SE28 0LY	10010211932	
		64	TIDESLEA PATH	SE28 0LY	10010211934	
		69	TIDESLEA PATH	SE28 0LZ	10010222484	
		73	TIDESLEA PATH	SE28 0LZ	10010222488	
		74	TIDESLEA PATH	SE28 0LZ	10010222489	
		80	TIDESLEA PATH	SE28 0LZ	10010222494	
		81	TIDESLEA PATH	SE28 0LZ	10010222495	
		82	TIDESLEA PATH	SE28 0LZ	10010222496	
		85	TIDESLEA PATH	SE28 0LZ	10010222499	
		90	TIDESLEA PATH	SE28 0LZ	10010222504	
		92	TIDESLEA PATH	SE28 0LZ	10010222506	
		94	TIDESLEA PATH	SE28 0LZ	10010222508	

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Re-inspection Scheme						
Flat/door number	**Building name**	**Street number**	**Street name**	**Post Code**	**uprn**	**Further Info**
		29	WATERSIDE CLOSE	SE28 0GT	10010210992	
		41	WATERSIDE CLOSE	SE28 0GT	10010210998	
		43	WATERSIDE CLOSE	SE28 0GT	10010210999	
		48	WATERSIDE CLOSE	SE28 0GS	10010210928	
		57	WATERSIDE CLOSE	SE28 0GT	10010211005	
		69	WATERSIDE CLOSE	SE28 0GT	10010211011	
		73	WATERSIDE CLOSE	SE28 0GT	10010211013	
		79	WATERSIDE CLOSE	SE28 0GT	10010211016	
		85	WATERSIDE CLOSE	SE28 0GT	10010210253	
		89	WATERSIDE CLOSE	SE28 0GT	10010210975	
		94	WATERSIDE CLOSE	SE28 0GS	10010222594	
		98	WATERSIDE CLOSE	SE28 0GS	10010222596	
		106	WATERSIDE CLOSE	SE28 0GS	10010222600	
		111	WATERSIDE CLOSE	SE28 0GT	10010210986	
		116	WATERSIDE CLOSE	SE28 0GS	10010222605	
		118	WATERSIDE CLOSE	SE28 0GS	10010222606	
		122	WATERSIDE CLOSE	SE28 0GS	10010222608	

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APPENDIX 9
EXTRACT FROM PLANNING CONDITIONS

LBN/107(b)

17. Aircraft Take-Off and Land Times

Except in cases of immediate emergency to an aircraft and/or the persons on board, the Airport shall not be used for the taking off or landing of aircraft at any time other than between:

Weekdays

0630 and 2200 hours Monday to Friday; and

Bank Holidays and Public Holidays (with the exception of Christmas Day – see condition 27)

0900 and 2200 hours on Bank Holidays and Public Holidays; and

Saturdays

0630 and 1230 hours on Saturdays; and

Sundays

1230 hours and 2200 hours on Sundays.

Provided that these restrictions shall not prevent an aircraft which was scheduled to take off from or land at the Airport but which has suffered unavoidable operational delays, from taking off or landing at the Airport between 2200 and 2230 Sunday to Friday and 1230 to 1300 on Saturday and where that taking off or landing would not result in there being more than 400 Aircraft Movements at the Airport per calendar year outside the above permitted hours of operation comprising no more than 150 such movements in any consecutive three months.

Reason: In the interests of limiting the number of aircraft movements in order to protect the amenity of current and future occupants and neighbours and with regard to saved

the London Plan (consolidated with alterations since 2011 and published March 2015), and Policies SP2 and SP3 of the Newham Core Strategy (adopted 26 January 2012).

21. Maximum Permitted Noise Factored Aircraft Movements

Until such time as the Aircraft Noise Categorisation Scheme has been approved and implemented in accordance with Condition 18 and the review of the Aircraft Noise Categorisation Scheme after its first year of operations has been submitted to and approved in writing pursuant to Condition 19, the number of Noise Factored Movements shall not exceed:

- in any one week the number of permitted Aircraft Movements for that week by more than 25%; and
- 120,000 Noise Factored Movements per calendar year.

Reason: In the interests of limiting the number of Aircraft Movements in order to protect the amenity of current and future occupants and neighbours and with regard to saved Policy EQ47 of the London Borough of Newham Unitary Development Plan (adopted June 2001 and saved from 27 September 2007 by direction from the Secretary of State and not deleted on adoption of the Core Strategy on 26 January 2012), Policy 7.15 of the London Plan (consolidated with alterations since 2011 and published March 2015), and Policies SP2 and SP3 of the Newham Core Strategy (adopted 26 January 2012).

22. Maximum Permitted Actual Aircraft Movements per hour as Timetabled

The scheduled number of Actual Aircraft Movements including business, commercial, charter and private Aircraft Movements shall not exceed 45 in total in any given hour.

Reason: In the interests of limiting the number of aircraft movements in the peak periods

the London Plan (consolidated with alterations since 2011 and published March 2015), and Policies SP2 and SP3 of the Newham Core Strategy (adopted 26 January 2012).

24. Maximum Permitted Actual Aircraft Movement on Other Bank Holidays
In the event of there being a Bank Holiday or Public Holiday in England which falls upon or is proclaimed or declared upon a date not referred to in sub-paragraph (d) to (j) (inclusive) of Condition 23 above, then the number of Aircraft Movements permissible on that date shall not exceed 330 unless otherwise agreed in writing by the Local Planning Authority but in any event shall not exceed 396.
Reason: In the interests of limiting the number of Aircraft Movements in order to safeguard the quality of life in the local area.

25. Maximum Permitted Actual Aircraft Movement limit between 0630 and 0659 Mondays to Saturdays
The maximum number of Actual Aircraft Movements between 0630 and 0659 hours on Mondays to Saturdays (excluding Bank Holidays and Public Holidays when the Airport shall be closed for the use or operation of aircraft between these times) shall not exceed 6 on any day.
Reason: In the interests of limiting the number of movements in and to protect the amenity of current and future occupants and neighbours and with regard to saved Policy EQ47 of the London Borough of Newham Unitary Development Plan (adopted June 2001 and saved from 27 September 2007 by direction from the Secretary of State and not deleted on adoption of the Core Strategy on 26 January 2012), Policy 7.15 of the London Plan (consolidated with alterations since 2011 and published March 2015), and

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Acoustics
Technology

APPENDIX 10

NUMBER OF AIRCRAFT OPERATING AT LCA

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
26/12/2022	86	-	100	-	16	134.0	742.5	14	-	608.5	0	0	2	6	0	-
27/12/2022	112	-	330	-	21			218	-		0	0	2	6	0	-
28/12/2022	125	-	592	-	25			467	-		1	2	1	4	0	-
29/12/2022	139	-	592	-	27			453	-		1	4	1	2	0	-
30/12/2022	135	-	592	-	27			457	-		0	0	2	6	0	-
31/12/2022	39	104	100	232	7			61	128		1	3	1	3	2	33
01/01/2023	65		132		12			67			-	-	-	-	0	-
02/01/2023	115	-	330	-	22	159.4	742.5	215	-	583.1	0	0	2	6	0	-
03/01/2023	146	-	592	-	29			446	-		1	5	1	1	0	-
04/01/2023	129	-	592	-	26			463	-		0	3	2	3	0	-
05/01/2023	137	-	592	-	27			455	-		0	3	2	3	0	-
06/01/2023	151	-	592	-	30			441	-		0	4	2	2	0	-
07/01/2023	36	135	100	280	7			64	145		0	3	2	3	1	-
08/01/2023	99		200		19			101			-	-	-	-	0	-
09/01/2023	175	-	592	-	34	185.6	742.5	417	-	556.9	2	4	0	2	0	-
10/01/2023	150	-	592	-	30			442	-		0	5	2	1	0	-
11/01/2023	160	-	592	-	32			432	-		0	5	2	1	0	-
12/01/2023	161	-	592	-	31			431	-		0	1	2	5	0	-
13/01/2023	161	-	592	-	32			431	-		0	3	2	3	0	-
14/01/2023	32	133	100	280	7			68	147		0	2	2	4	0	-
15/01/2023	101		200		20			99			-	-	-	-	0	-
16/01/2023	169	-	592	-	33	185.7	742.5	423	-	556.8	1	6	1	0	0	-
17/01/2023	159	-	592	-	30			433	-		0	5	2	1	0	-
18/01/2023	161	-	592	-	31			431	-		2	3	0	3	0	-
19/01/2023	162	-	592	-	31			430	-		0	1	2	5	0	-
20/01/2023	168	-	592	-	33			424	-		0	2	2	4	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
21/01/2023	21	80	100	280	4			61	141		0	1	2	5	2	-
22/01/2023	59		200		10			100			-	-	-	-	0	-
23/01/2023	172	-	592	-	33			420	-		1	4	1	2	0	-
24/01/2023	159	-	592	-	30			433	-		2	6	0	0	0	-
25/01/2023	138	-	592	-	28	178.4	742.5	454	-	564.1	2	5	0	1	0	-
26/01/2023	162	-	592	-	31			430	-		0	3	2	3	0	-
27/01/2023	161	-	592	-	31			431	-		1	5	1	1	0	-
28/01/2023	35	129	100	280	7			65	151		1	2	1	4	1	-
29/01/2023	94		200		18			106			-	-	-	-	0	-
30/01/2023	168	-	592	-	33			424	-		0	4	2	2	0	-
31/01/2023	162	-	592	-	31			430	-		2	6	0	0	0	25
01/02/2023	168	-	592	-	33			424	-		1	5	1	1	0	-
02/02/2023	171	-	592	-	33	187.4	742.5	421	-	555.1	2	6	0	0	0	-
03/02/2023	161	-	592	-	32			431	-		1	3	1	3	0	-
04/02/2023	45	138	100	280	8			55	142		2	4	0	2	0	-
05/02/2023	93		200		17			107			-	-	-	-	0	-
06/02/2023	180	-	592	-	35			412	-		0	3	2	3	0	-
07/02/2023	110	-	592	-	21			482	-		0	0	2	6	0	-
08/02/2023	121	-	592	-	24			471	-		0	0	2	6	0	-
09/02/2023	184	-	592	-	35	173.6	742.5	408	-	568.9	1	5	1	1	0	-
10/02/2023	168	-	592	-	32			424	-		2	4	0	2	0	-
11/02/2023	48	147	100	280	8			52	133		1	3	1	3	2	-
12/02/2023	99		200		19			101			-	-	-	-	0	-
13/02/2023	171	-	592	-	34			421	-		1	5	1	1	0	-
14/02/2023	138	-	592	-	27	184.9	742.5	454	-	557.6	0	0	2	6	0	-
15/02/2023	161	-	592	-	32			431	-		1	5	1	1	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
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16/02/2023	165	-	592	-	33			427	-		1	5	1	1	0	-
17/02/2023	166	-	592	-	31			426	-		2	4	0	2	0	-
18/02/2023	48	143	100	280	9			52	137		0	3	2	3	2	-
19/02/2023	95		200		18			105			-	-	-	-	0	-
20/02/2023	176	-	592	-	34			416	-		1	5	1	1	1	-
21/02/2023	176	-	592	-	34			416	-		2	5	0	1	0	-
22/02/2023	171	-	592	-	33			421	-		1	6	1	0	0	-
23/02/2023	179	-	592	-	35	193.9	742.5	413	-	548.6	2	4	0	2	0	-
24/02/2023	165	-	592	-	32			427	-		0	3	2	3	0	-
25/02/2023	38	135	100	280	7			62	145		1	2	1	4	1	-
26/02/2023	97		200		18			103			-	-	-	-	0	-
27/02/2023	188	-	592	-	35			404	-		1	5	1	1	0	-
28/02/2023	179	-	592	-	34			413	-		1	5	1	1	0	25
01/03/2023	178	-	592	-	34			414	-		1	5	1	1	0	-
02/03/2023	182	-	592	-	35	196.0	742.5	410	-	546.5	1	2	1	4	0	-
03/03/2023	168	-	592	-	33			424	-		1	4	1	2	0	-
04/03/2023	42	135	100	280	8			58	145		1	2	1	4	2	-
05/03/2023	93		200		17			107			-	-	-	-	0	-
06/03/2023	184	-	592	-	36			408	-		1	4	1	2	0	-
07/03/2023	181	-	592	-	34			411	-		1	6	1	0	0	-
08/03/2023	146	-	592	-	28			446	-		0	0	2	6	0	-
09/03/2023	171	-	592	-	33	186.8	742.5	421	-	555.7	0	1	2	5	1	-
10/03/2023	152	-	592	-	30			440	-		1	3	1	3	2	-
11/03/2023	37	135	100	280	8			63	145		0	1	2	5	2	-
12/03/2023	98		200		18			102			-	-	-	-	1	-
13/03/2023	131	-	592	-	25	184.8	742.5	461	-	557.7	1	3	1	3	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
14/03/2023	179	-	592	-	34			413	-		0	5	2	1	0	-
15/03/2023	173	-	592	-	34			419	-		1	4	1	2	1	-
16/03/2023	180	-	592	-	35			412	-		1	4	1	2	0	-
17/03/2023	166	-	592	-	31			426	-		1	5	1	1	0	-
18/03/2023	45	137	100	280	8			55	143		1	3	1	3	2	-
19/03/2023	92		200		18			108			-	-	-	-	0	-
20/03/2023	182	-	592	-	34			410	-		1	5	1	1	0	-
21/03/2023	175	-	592	-	34			417	-		2	4	0	2	0	-
22/03/2023	177	-	592	-	34			415	-		1	4	1	2	0	-
23/03/2023	175	-	592	-	34	192.1	742.5	417	-	550.4	1	5	1	1	0	-
24/03/2023	166	-	592	-	32			426	-		1	4	1	2	0	-
25/03/2023	39	132	100	280	7			61	148		0	1	2	5	2	-
26/03/2023	93		200		17			107			-	-	-	-	1	-
27/03/2023	163	-	592	-	32			429	-		0	3	2	3	0	-
28/03/2023	176	-	592	-	34			416	-		1	3	1	3	1	-
29/03/2023	196	-	592	-	37			396	-		0	2	2	4	0	-
30/03/2023	193	-	592	-	37	200.6	742.5	399	-	541.9	0	2	2	4	1	-
31/03/2023	186	-	592	-	36			406	-		0	4	2	2	0	26
01/04/2023	40	133	100	280	8			60	147		1	2	1	4	2	-
02/04/2023	93		200		18			107			-	-	-	-	0	-
03/04/2023	183	-	592	-	36			409	-		0	3	2	3	0	-
04/04/2023	186	-	592	-	35			406	-		0	2	2	4	0	-
05/04/2023	170	-	592	-	33			422	-		1	3	1	3	0	-
06/04/2023	187	-	592	-	35	192.5	742.5	405	-	550.0	0	2	2	4	1	-
07/04/2023	141	-	164	-	27			23	-		0	0	2	6	0	-
08/04/2023	45	134	100	280	9			55	146		1	4	1	2	4	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
09/04/2023	89		200		17			111			-	-	-	-	0	-
10/04/2023	141	-	198	-	27	191.7	742.5	57	-	550.8	0	0	2	6	1	-
11/04/2023	179	-	592	-	36			413	-		0	5	2	1	0	-
12/04/2023	176	-	592	-	34			416	-		1	2	1	4	0	-
13/04/2023	182	-	592	-	35			410	-		0	2	2	4	0	-
14/04/2023	168	-	592	-	33			424	-		1	5	1	1	0	-
15/04/2023	46	146	100	280	9			54	134		1	3	1	3	1	-
16/04/2023	100		200		18			100			-	-	-	-	0	-
17/04/2023	182	-	592	-	36	204.1	742.5	410	-	538.4	2	5	0	1	1	-
18/04/2023	195	-	592	-	36			397	-		1	3	1	3	0	-
19/04/2023	189	-	592	-	36			403	-		1	2	1	4	0	-
20/04/2023	187	-	592	-	36			405	-		0	4	2	2	0	-
21/04/2023	181	-	592	-	35			411	-		0	5	2	1	0	-
22/04/2023	42	133	100	280	8			58	147		0	4	2	2	0	-
23/04/2023	91		200		17			109			-	-	-	-	1	-
24/04/2023	191	-	592	-	36	208.9	742.5	401	-	533.6	1	5	1	1	0	-
25/04/2023	184	-	592	-	35			408	-		0	1	2	5	0	-
26/04/2023	198	-	592	-	37			394	-		0	3	2	3	0	-
27/04/2023	205	-	592	-	38			387	-		0	3	2	3	0	-
28/04/2023	189	-	592	-	36			403	-		0	5	2	1	0	-
29/04/2023	46	137	100	280	8			54	143		0	5	2	1	1	-
30/04/2023	91		200		17			109			-	-	-	-	0	34
01/05/2023	135	-	248	-	25	190.0	742.5	113	-	552.5	0	0	2	6	1	-
02/05/2023	181	-	592	-	35			411	-		0	1	2	5	0	-
03/05/2023	179	-	592	-	35			413	-		0	4	2	2	0	-
04/05/2023	184	-	592	-	35			408	-		0	1	2	5	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
05/05/2023	182	-	592	-	35			410	-		0	3	2	3	1	-
06/05/2023	43	131	100	280	8			57	149		0	4	2	2	2	-
07/05/2023	88		200		17			112			-	-	-	-	0	-
08/05/2023	128	-	330	-	25			202	-		0	0	2	6	0	-
09/05/2023	188	-	592	-	37			404	-		0	2	2	4	0	-
10/05/2023	182	-	592	-	36			410	-		1	3	1	3	1	-
11/05/2023	187	-	592	-	36	197.6	742.5	405	-	544.9	0	2	2	4	0	-
12/05/2023	189	-	592	-	37			403	-		0	5	2	1	0	-
13/05/2023	44	139	100	280	9			56	141		0	4	2	2	2	-
14/05/2023	95		200		19			105			-	-	-	-	0	-
15/05/2023	187	-	592	-	36			405	-		1	3	1	3	2	-
16/05/2023	175	-	592	-	35			417	-		1	4	1	2	0	-
17/05/2023	188	-	592	-	37			404	-		0	3	2	3	0	-
18/05/2023	197	-	592	-	38	210.3	742.5	395	-	532.2	1	2	1	4	0	-
19/05/2023	182	-	592	-	36			410	-		1	5	1	1	1	-
20/05/2023	48	156	100	280	9			52	124		0	4	2	2	2	-
21/05/2023	108		200		19			92			-	-	-	-	0	-
22/05/2023	190	-	592	-	37			402	-		1	4	1	2	0	-
23/05/2023	202	-	592	-	38			390	-		1	3	1	3	0	-
24/05/2023	201	-	592	-	39			391	-		1	1	1	5	0	-
25/05/2023	210	-	592	-	39	215.4	742.5	382	-	527.1	0	2	2	4	1	-
26/05/2023	187	-	592	-	36			405	-		0	4	2	2	1	-
27/05/2023	45	142	100	280	9			55	138		1	4	1	2	4	-
28/05/2023	97		200		18			103			-	-	-	-	0	-
29/05/2023	155	-	230	-	29	205.5	742.5	75	-	537.0	1	1	1	5	1	-
30/05/2023	193	-	592	-	38			399	-		1	5	1	1	0	-

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31/05/2023	199	-	592	-	38			393	-		0	2	2	4	0	47
01/06/2023	194	-	592	-	38			398	-		1	3	1	3	1	-
02/06/2023	186	-	592	-	36			406	-		0	4	2	2	0	-
03/06/2023	43	146	100	280	9			57	134		0	5	2	1	1	-
04/06/2023	103		200		18			97			-	-	-	-	2	-
05/06/2023	192	-	592	-	37			400	-		1	5	1	1	0	-
06/06/2023	200	-	592	-	38			392	-		1	4	1	2	0	-
07/06/2023	193	-	592	-	37			399	-		0	1	2	5	1	-
08/06/2023	183	-	592	-	35	202.9	742.5	409	-	539.6	1	3	1	3	0	-
09/06/2023	153	-	592	-	29			439	-		0	4	2	2	0	-
10/06/2023	38	137	100	280	7			62	143		1	4	1	2	3	-
11/06/2023	99		200		18			101			-	-	-	-	2	-
12/06/2023	171	-	592	-	32			421	-		0	3	2	3	1	-
13/06/2023	190	-	592	-	37			402	-		1	1	1	5	0	-
14/06/2023	206	-	592	-	38			386	-		0	2	2	4	0	-
15/06/2023	203	-	592	-	38	203.2	742.5	389	-	539.3	1	3	1	3	0	-
16/06/2023	185	-	592	-	34			407	-		1	3	1	3	1	-
17/06/2023	44	124	100	280	9			56	156		0	4	2	2	4	-
18/06/2023	80		200		14			120			-	-	-	-	1	-
19/06/2023	190	-	592	-	35			402	-		2	4	0	2	0	-
20/06/2023	174	-	592	-	32			418	-		1	3	1	3	2	-
21/06/2023	190	-	592	-	35			402	-		0	4	2	2	0	-
22/06/2023	190	-	592	-	36	196.9	742.5	402	-	545.6	0	2	2	4	2	-
23/06/2023	175	-	592	-	33			417	-		1	1	1	5	0	-
24/06/2023	43	133	100	280	9			57	147		2	6	0	0	4	-
25/06/2023	90		200		16			110			-	-	-	-	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
26/06/2023	178	-	592	-	34	199.6	742.5	414	-	542.9	2	4	0	2	0	-
27/06/2023	177	-	592	-	34			415	-		0	2	2	4	1	-
28/06/2023	184	-	592	-	36			408	-		0	2	2	4	0	-
29/06/2023	178	-	592	-	35			414	-		0	1	2	5	0	-
30/06/2023	179	-	592	-	35			413	-		0	3	2	3	4	61
01/07/2023	42	138	100	280	8			58	142		1	5	1	1	4	-
02/07/2023	96		200		17			104			-	-	-	-	2	-
03/07/2023	184	-	592	-	35	184.5	742.5	408	-	558.0	1	5	1	1	0	-
04/07/2023	156	-	592	-	30			436	-		0	4	2	2	0	-
05/07/2023	155	-	592	-	30			437	-		0	1	2	5	0	-
06/07/2023	177	-	592	-	34			415	-		0	3	2	3	0	-
07/07/2023	161	-	592	-	32			431	-		1	2	1	4	0	-
08/07/2023	39	134	100	280	8			61	146		1	4	1	2	2	-
09/07/2023	95		200		17			105			-	-	-	-	1	-
10/07/2023	183	-	592	-	35	189.3	742.5	409	-	553.2	1	4	1	2	0	-
11/07/2023	166	-	592	-	32			426	-		0	3	2	3	0	-
12/07/2023	162	-	592	-	33			430	-		0	2	2	4	0	-
13/07/2023	182	-	592	-	35			410	-		2	4	0	2	0	-
14/07/2023	161	-	592	-	31			431	-		0	2	2	4	0	-
15/07/2023	33	125	100	280	7			67	155		0	5	2	1	1	-
16/07/2023	92		200		17			108			-	-	-	-	0	-
17/07/2023	173	-	592	-	33	186.7	742.5	419	-	555.8	2	5	0	1	3	-
18/07/2023	157	-	592	-	31			435	-		2	3	0	3	0	-
19/07/2023	165	-	592	-	32			427	-		1	2	1	4	0	-
20/07/2023	168	-	592	-	33			424	-		1	4	1	2	0	-
21/07/2023	162	-	592	-	32			430	-		1	4	1	2	1	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
22/07/2023	42	138	100	280	8			58	142		0	4	2	2	5	-
23/07/2023	96		200		18			104			-	-	-	-	0	-
24/07/2023	177	-	592	-	34			415	-		1	5	1	1	1	-
25/07/2023	164	-	592	-	32			428	-		1	4	1	2	0	-
26/07/2023	164	-	592	-	32	187.8	742.5	428	-	554.7	0	2	2	4	0	-
27/07/2023	175	-	592	-	34			417	-		0	1	2	5	0	-
28/07/2023	164	-	592	-	32			428	-		0	4	2	2	1	-
29/07/2023	38	131	100	280	7			62	149		1	3	1	3	4	-
30/07/2023	93		200		17			107			-	-	-	-	2	-
31/07/2023	173	-	592	-	34			419	-		0	5	2	1	0	76
01/08/2023	155	-	592	-	31			437	-		1	4	1	2	0	-
02/08/2023	159	-	592	-	32			433	-		0	3	2	3	0	-
03/08/2023	166	-	592	-	33	187.0	742.5	426	-	555.5	1	4	1	2	0	-
04/08/2023	167	-	592	-	33			425	-		1	3	1	3	0	-
05/08/2023	37	130	100	280	8			63	150		1	6	1	0	3	-
06/08/2023	93		200		17			107			-	-	-	-	0	-
07/08/2023	161	-	592	-	31			431	-		0	4	2	2	0	-
08/08/2023	161	-	592	-	31			431	-		1	5	1	1	0	-
09/08/2023	155	-	592	-	31			437	-		0	2	2	4	0	-
10/08/2023	175	-	592	-	34	186.6	742.5	417	-	555.9	0	2	2	4	0	-
11/08/2023	162	-	592	-	32			430	-		1	1	1	5	0	-
12/08/2023	38	135	100	280	8			62	145		0	6	2	0	2	-
13/08/2023	97		200		18			103			-	-	-	-	0	-
14/08/2023	168	-	592	-	34	181.6	742.5	424	-	560.9	0	4	2	2	0	-
15/08/2023	147	-	592	-	30			445	-		0	3	2	3	0	-
16/08/2023	148	-	592	-	29			444	-		1	5	1	1	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
17/08/2023	166	-	592	-	33			426	-		0	1	2	5	0	-
18/08/2023	157	-	592	-	32			435	-		0	1	2	5	0	-
19/08/2023	35	128	100	280	7			65	152		0	6	2	0	3	-
20/08/2023	93		200		17			107			-	-	-	-	1	-
21/08/2023	167	-	592	-	33			425	-		1	5	1	1	0	-
22/08/2023	159	-	592	-	32			433	-		2	6	0	0	0	-
23/08/2023	168	-	592	-	34			424	-		1	2	1	4	0	-
24/08/2023	156	-	592	-	31	185.1	742.5	436	-	557.4	1	2	1	4	1	-
25/08/2023	160	-	592	-	32			432	-		0	2	2	4	2	-
26/08/2023	40	123	100	280	8			60	157		0	6	2	0	2	-
27/08/2023	83		200		15			117			-	-	-	-	0	-
28/08/2023	61	-	230	-	11			169	-		0	0	2	6	1	-
29/08/2023	170	-	592	-	32			422	-		0	4	2	2	0	-
30/08/2023	169	-	592	-	34			423	-		0	3	2	3	0	-
31/08/2023	187	-	592	-	36	172.5	742.5	405	-	570.0	1	3	1	3	1	73
01/09/2023	162	-	592	-	33			430	-		0	2	2	4	0	-
02/09/2023	43	141	100	280	8			57	139		0	5	2	1	3	-
03/09/2023	98		200		17			102			-	-	-	-	0	-
04/09/2023	160	-	592	-	32			432	-		1	2	1	4	1	-
05/09/2023	179	-	592	-	34			413	-		1	3	1	3	0	-
06/09/2023	176	-	592	-	34			416	-		0	1	2	5	0	-
07/09/2023	204	-	592	-	36	195.7	742.5	388	-	546.8	0	2	2	4	0	-
08/09/2023	173	-	592	-	34			419	-		0	4	2	2	0	-
09/09/2023	42	147	100	280	8			58	133		0	4	2	2	2	-
10/09/2023	105		200		19			95			-	-	-	-	2	-
11/09/2023	192	-	592	-	37	206.0	742.5	400	-	536.5	2	5	0	1	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
12/09/2023	187	-	592	-	36			405	-		1	5	1	1	0	-
13/09/2023	195	-	592	-	37			397	-		1	3	1	3	0	-
14/09/2023	192	-	592	-	36			400	-		0	3	2	3	0	-
15/09/2023	179	-	592	-	35			413	-		0	3	2	3	1	-
16/09/2023	46	145	100	280	9			54	135		0	4	2	2	5	-
17/09/2023	99		200		18			101			-	-	-	-	0	-
18/09/2023	188	-	592	-	36			404	-		2	5	0	1	0	-
19/09/2023	181	-	592	-	35			411	-		0	4	2	2	2	-
20/09/2023	160	-	592	-	31			432	-		0	2	2	4	0	-
21/09/2023	182	-	592	-	33	191.5	742.5	410	-	551.0	1	4	1	2	1	-
22/09/2023	177	-	592	-	33			415	-		2	5	0	1	1	-
23/09/2023	38	126	100	280	8			62	154		0	4	2	2	3	-
24/09/2023	88		200		16			112			-	-	-	-	0	-
25/09/2023	171	-	592	-	33			421	-		0	4	2	2	0	-
26/09/2023	181	-	592	-	34			411	-		1	4	1	2	0	-
27/09/2023	169	-	592	-	32			423	-		1	3	1	3	0	-
28/09/2023	194	-	592	-	38	200.0	742.5	398	-	542.5	1	3	1	3	0	-
29/09/2023	191	-	592	-	37			401	-		1	5	1	1	0	-
30/09/2023	40	133	100	280	8			60	147		0	3	2	3	4	68
01/10/2023	93		200		18			107			-	-	-	-	0	-
02/10/2023	145	-	592	-	27			447	-		0	2	2	4	2	-
03/10/2023	176	-	592	-	33			416	-		1	4	1	2	0	-
04/10/2023	178	-	592	-	33			414	-		2	4	0	2	0	-
05/10/2023	187	-	592	-	36	189.1	742.5	405	-	553.4	1	4	1	2	0	-
06/10/2023	177	-	592	-	35			415	-		0	4	2	2	0	-
07/10/2023	42	136	100	280	8			58	144		1	3	1	3	2	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
08/10/2023	94		200		17			106			-	-	-	-	0	-
09/10/2023	187	-	592	-	35			405	-		1	5	1	1	0	-
10/10/2023	187	-	592	-	36			405	-		1	3	1	3	0	-
11/10/2023	188	-	592	-	36			404	-		0	2	2	4	0	-
12/10/2023	182	-	592	-	35	206.0	742.5	410	-	536.5	0	1	2	5	0	-
13/10/2023	181	-	592	-	35			411	-		0	3	2	3	1	-
14/10/2023	49	152	100	280	9			51	128		0	3	2	3	2	-
15/10/2023	103		200		19			97			-	-	-	-	0	-
16/10/2023	190	-	592	-	37			402	-		1	3	1	3	1	-
17/10/2023	182	-	592	-	36			410	-		1	2	1	4	0	-
18/10/2023	196	-	592	-	37			396	-	532.1	0	3	2	3	1	-
19/10/2023	203	-	592	-	39	210.4	742.5	389	-		0	3	2	3	0	-
20/10/2023	187	-	592	-	37			405	-		1	4	1	2	2	-
21/10/2023	44	131	100	280	8			56	149		0	3	2	3	4	-
22/10/2023	87		200		16			113			-	-	-	-	0	-
23/10/2023	184	-	592	-	35			408	-		2	6	0	0	1	-
24/10/2023	181	-	592	-	35			411	-		0	5	2	1	0	-
25/10/2023	184	-	592	-	36			408	-		0	2	2	4	0	-
26/10/2023	189	-	592	-	36	202.3	742.5	403	-	540.2	0	2	2	4	0	-
27/10/2023	174	-	592	-	34			418	-		0	5	2	1	0	-
28/10/2023	44	140	100	280	8			56	140		0	3	2	3	3	-
29/10/2023	96		200		18			104			-	-	-	-	0	-
30/10/2023	178	-	592	-	34			414	-		0	4	2	2	0	-
31/10/2023	188	-	592	-	35			404	-		1	2	1	4	0	60
01/11/2023	171	-	592	-	33	193.8	742.5	421	-	548.7	0	3	2	3	0	-
02/11/2023	146	-	592	-	31			446	-		0	2	2	4	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
03/11/2023	179	-	592	-	32			413	-		0	1	2	5	0	-
04/11/2023	45	151	100	280	9			55	129		1	3	1	3	0	-
05/11/2023	106		200		19			94			-	-	-	-	0	-
06/11/2023	205	-	592	-	38			387	-		1	5	1	1	0	-
07/11/2023	183	-	592	-	34			409	-		1	4	1	2	0	-
08/11/2023	178	-	592	-	34			414	-		1	4	1	2	0	-
09/11/2023	187	-	592	-	35	199.8	742.5	405	-	542.7	1	5	1	1	0	-
10/11/2023	175	-	592	-	33			417	-		0	1	2	5	0	-
11/11/2023	43	141	100	280	8			57	139		0	1	2	5	0	-
12/11/2023	98		200		18			102			-	-	-	-	0	-
13/11/2023	175	-	592	-	34			417	-		0	2	2	4	0	-
14/11/2023	191	-	592	-	35			401	-		1	5	1	1	0	-
15/11/2023	179	-	592	-	33			413	-		0	4	2	2	0	-
16/11/2023	192	-	592	-	36	197.9	742.5	400	-	544.6	2	5	0	1	1	-
17/11/2023	177	-	592	-	34			415	-		0	1	2	5	0	-
18/11/2023	42	138	100	280	8			58	142		0	1	2	5	0	-
19/11/2023	96		200		18			104			-	-	-	-	1	-
20/11/2023	195	-	592	-	37			397	-		1	2	1	4	0	-
21/11/2023	183	-	592	-	35			409	-		2	4	0	2	0	-
22/11/2023	179	-	592	-	34			413	-		1	4	1	2	0	-
23/11/2023	190	-	592	-	36	199.5	742.5	402	-	543.0	1	3	1	3	0	-
24/11/2023	174	-	592	-	32			418	-		0	1	2	5	0	-
25/11/2023	41	142	100	280	8			59	138		0	1	2	5	0	-
26/11/2023	101		200		18			99			-	-	-	-	1	-
27/11/2023	188	-	592	-	34	187.5	742.5	404	-	555.0	0	3	2	3	0	-
28/11/2023	196	-	592	-	35			396	-		1	4	1	2	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
29/11/2023	187	-	592	-	34			405	-		1	2	1	4	2	-
30/11/2023	156	-	592	-	30			436	-		0	0	2	6	1	50
01/12/2023	159	-	592	-	29			433	-		0	0	2	6	0	-
02/12/2023	37	136	100	280	8			63	144		0	1	2	5	5	-
03/12/2023	99		200		18			101			-	-	-	-	1	-
04/12/2023	175	-	592	-	32			417	-		0	3	2	3	0	-
05/12/2023	177	-	592	-	33			415	-		0	3	2	3	0	-
06/12/2023	181	-	592	-	34			411	-		1	3	1	3	0	-
07/12/2023	169	-	592	-	31	190.4	742.5	423	-	552.1	0	2	2	4	1	-
08/12/2023	174	-	592	-	33			418	-		0	1	2	5	0	-
09/12/2023	44	144	100	280	8			56	136		0	1	2	5	0	-
10/12/2023	100		200		19			100			-	-	-	-	3	-
11/12/2023	184	-	592	-	35			408	-		0	4	2	2	1	-
12/12/2023	176	-	592	-	33			416	-		0	3	2	3	0	-
13/12/2023	179	-	592	-	34			413	-		1	5	1	1	0	-
14/12/2023	186	-	592	-	36	198.8	742.5	406	-	543.7	1	3	1	3	0	-
15/12/2023	177	-	592	-	32			415	-		0	0	2	6	0	-
16/12/2023	54	151	100	280	9			46	129		0	2	2	4	1	-
17/12/2023	97		200		19			103			-	-	-	-	0	-
18/12/2023	171	-	592	-	33			421	-		0	4	2	2	0	-
19/12/2023	170	-	592	-	31			422	-		0	3	2	3	0	-
20/12/2023	150	-	592	-	29			442	-		0	3	2	3	0	-
21/12/2023	146	-	592	-	27	169.3	742.5	446	-	573.2	0	3	2	3	1	-
22/12/2023	149	-	592	-	28			443	-		0	1	2	5	1	-
23/12/2023	44	118	100	280	8			56	162		0	0	2	6	2	-
24/12/2023	74		200		12			126			-	-	-	-	0	-

Date	Actual Aircraft Movements		Permitted Actual Aircraft Movements		QC Total		Permitted QC Total	Differences (Permitted - Actual)			Early Actual Movements		(Early Permitted - Actual)		Late Actual Movements[2]	
								Actual Movements		QC Total	Early Morning		Early Morning		Late Eve / Sat Afternoon	3 Month Running Total
	Day	Week-end	Day	Week-end	Day	Week	Week	Day	Week-end	Week	06:30-06:44	06:30-06:59	06:30-06:44	06:30-06:59	22:00-22:30 / 12:30-13:00	
25/12/2023	0	-	0	-	0			0	-		-	-	-	-	0	-
26/12/2023	97	-	100	-	18			3	-		0	0	2	6	0	-
27/12/2023	117	-	592	-	22			475	-		0	3	2	3	0	-
28/12/2023	147	-	592	-	27	117.3	742.5	445	-	625.2	1	2	1	4	0	-
29/12/2023	146	-	592	-	27			446	-		0	0	2	6	0	-
30/12/2023	48	126	100	280	9			52	-		0	2	2	4	2	-
31/12/2023	78		200		14			122			-	-	-	-	0	43
Annual Total	**51,970**		**111,000**		**9,957**		**22,000**	**59,030**		**12,043**	**173**	**988**	**-**	**-**	**198**	**-**

Annual
Performance
Report 2023

Annex 3

Aircraft Noise Categorisation Scheme (ANCS) Report

LONDON CITY AIRPORT

Bickerdike
Allen
Partners
Architecture
Acoustics
Technology

LONDON CITY AIRPORT

AIRCRAFT NOISE CATEGORISATION SCHEME (ANCS) REPORT 2023

Report to

London City Airport
The Royal Docks
London E16 2PB

A11327_05_RP061_1.0
27 March 2024

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Bickerdike Allen Partners LLP is an integrated practice of Architects, Acousticians, and Construction Technologists, celebrating over 60 years of continuous practice.

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Contents

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1.0 INTRODUCTION

The City Airport Development Programme (CADP1) planning application (13/01228/FUL) was granted planning permission by the Secretary of State for Communities and Local Government and the Secretary of State for Transport in July 2016 following an appeal and public inquiry which was held in March and April 2016.

Condition 18 of the permission required a new Aircraft Noise Categorisation Scheme (ANCS) to be submitted to and approved by the Local Planning Authority (LPA) prior to the first beneficial use of the development. The ANCS was approved in December 2017 and implemented in January 2018.

Condition 19 of the permission requires the ANCS to be reviewed periodically. Following its first four years of operation, the ANCS was reviewed in 2022 and an update to the scheme was approved by the LPA. This came into effect from April 2022 and resulted in changes to the procedure used to determine the Quota Count (QC) values of jet aircraft and formalisation of the procedure for light propeller aircraft.

Condition 19 also requires that "*a report shall be submitted to the local planning authority annually on 1 June or the first working day thereafter as part of the Annual Performance Report on the performance and/or compliance with the approved Aircraft Noise Categorisation Scheme during the previous calendar year*".

To satisfy this condition, the ANCS states that "*A report will also be produced as part of the Annual Performance Report that records the results of the assessments undertaken as part of the quota count regime, including but not limited to:-*

- *The quota counts used for each aircraft type during the calendar year in question;*
- *The total annual quota arising from aircraft operations during the calendar year;*
- *The results of noise monitoring undertaken during the calendar year, expressed for each aircraft and airline as averages in relation to sideline, flyover and approach noise levels as determined in accordance with Section 3.1 above;*
- *The quota counts to be used for each aircraft for the forthcoming calendar year; and*
- *The expected total annual quota for the forthcoming year.*"

This report covers the items listed above for 2023.

2.0 QUOTA COUNT CLASSIFICATION SYSTEM

The ANCS uses a Quota Count (QC) classification system which, in the case of departure noise, is based on official noise certification data derived from measurements made on actual aircraft which have been conducted in accordance with the International Civil Aviation Organisation (ICAO) certification process.

A similar noise certification process exists for civil aircraft on approach, but this is based on operations at a glide slope of 3 degrees, not 5.5 degrees as used at LCA. To account for this difference, the AEDT[1] software has been used to compute, at the approach noise certification point[2], the difference in noise level between a 3 degree and a 5.5 degree glide slope using the AEDT in-built aircraft database. This difference is then applied to the noise certification data to estimate a certification value based on a glide slope of 5.5 degrees.

Whereas this method for approach noise levels provides a reasonable correlation with measurements of turbofan aircraft at LCA, it does not reflect well the noisiness of turboprop aircraft on steeper approaches. As a result, measured data at LCA has been used to validate the turboprop aircraft types within the AEDT model to achieve a reasonable correlation between prediction of approach noise at the noise certification point and measurement.

The ANCS uses manufacturers' noise certification data to categorise aircraft and allocate a specific 'QC score' to each aircraft type permitted to fly into and out of the airport. Each aircraft has a certificated 'sideline', 'flyover' and 'approach' noise level. These are described in Appendix 1.

Each aircraft in operation at the airport is allocated a separate QC score for arrival and departure operations, based on its certificated noise levels (adjusted to reflect the approach glide slope used at LCA), and categorised into 1 dB bands (rather than 3 dB bands as is the case in most other QC schemes). The QC classification bands are set out in Table 1 below. As an example, the ANCS would allocate a QC score of 0.4 to an aircraft departure or arrival in a noise band range of 87.0 dB to 87.9 dB and a QC score of 0.1 to a quieter aircraft departure or arrival in a noise band range of 81.0 dB to 81.9 dB.

[1] The term AEDT throughout this document refers to the Aviation Environmental Design Tool version 3d, produced by the Federal Aviation Administration.

[2] 2.0 km from runway threshold.

Noise Level Band[3], EPNdB	Quota Count (QC) Classification	Noise Level Band[3], EPNdB	Quota Count (QC) Classification
90 – 90.9	0.8	78 – 78.9	0.05
89 – 89.9	0.63	77 – 77.9	0.04
88 – 88.9	0.5	76 – 76.9	0.0315
87 – 87.9	0.4	75 – 75.9	0.025
86 – 86.9	0.315	74 – 74.9	0.002
85 – 85.9	0.25	73 – 73.9	0.016
84 – 84.9	0.2	72 – 72.9	0.0125
83 – 83.9	0.16	71 – 71.9	0.01
82 – 82.9	0.125	70 – 70.9	0.008
81 – 81.9	0.1	69 – 69.9	0.0063
80 – 80.9	0.08	68 – 68.9	0.005
79 – 79.9	0.063		

Table 1: Aircraft Noise Classifications

(NB. This classification system is a modification and extension of that operated by the designated airports in their Night Noise Quota Count System)

[3] Aircraft operations falling in noise level bands above those presented would not be permitted to operate at LCA as a result of the need to comply with the noise certification level limits within the scheme.

2.1 Derivation of Noise Certification Levels - Departures

Under regulations laid out by the European Commission[4], all aircraft of the types used at LCA are required to hold a certificate that sets out the noise certification levels for the aircraft and states the weight at which the aircraft was certificated (a higher weight typically corresponds with a higher noise level).

The sideline and flyover noise levels on the noise certificate are used to describe the noise of departing aircraft for all aircraft other than light propeller aircraft. Noise certification data for a given aircraft type can exist at a variety of different take-off weights. In addition, some aircraft of a given type are fitted with modified (quieter) engines and are certificated accordingly. As a result of this, the selection of noise certification levels for an individual aircraft shall be based on:-

i. the sideline and flyover departure noise values set out on the noise certificate for the individual aircraft; or

ii. the values set out in the EASA[5] database for the specific aircraft type[6] accounting for the permitted Maximum Take-Off Weight (MTOW) of that aircraft at LCA. If no entry in the database is available for the specific aircraft at this MTOW, the entry for the next highest MTOW will be used; or

iii. under exceptional circumstances, evidence presented to LBN which demonstrates to their satisfaction, confirmed in writing, that the aircraft is capable of operating at its permitted MTOW at LCA within the noise constraints applicable at the airport.

Appendix 1 sets out how to derive the Departure Noise Level from the sideline and flyover noise certification values to enable a QC classification to be derived from Table 1. Appendix 2 provides the QC values that are assumed for each aircraft type where no noise certificate is available.

2.2 Derivation of Noise Certification Levels - Arrivals

The approach noise levels on the noise certificate are used to describe the noise of arriving aircraft for all aircraft other than light propeller aircraft. This certificated noise level requires

[4] Commission Regulation (EU) 748/2012

[5] European Aviation Safety Agency *Aircraft type certificate data sheets*, [Online], Available: http://www.easa.europa.eu/certification/type-certificates/aircraft.php [12/02/2024].

[6] This relates to the noise certification levels given for the aircraft at a MTOW in the EASA database that equals the average of the maximum take-off weights specified for that aircraft type.

modification. This is because the certificated noise level appearing on the certificate is measured based on a glide slope of 3 degrees, whereas 5.5 degrees is used at LCA. This steeper approach is required to keep aircraft higher for longer for obstacle avoidance.

To account for this difference, the AEDT software is used to compute the approach noise level based on both a 3 degree and a 5.5 degree glide slope. The AEDT software contains an in-built database of aircraft types, flight, thrust and noise parameters. This database of information has been developed in consultation with aircraft manufacturers.

This computational method provides good correlation with measurements of turbofan aircraft at the different glide slopes; however it does not accurately reflect the noisiness of turboprop aircraft on steeper approaches. Data measured with noise monitors at LCA is therefore used to validate the turboprop aircraft types within AEDT.

The approach noise level for a given type of turbofan aircraft is derived by modelling the aircraft in AEDT using the matching or recommended built-in aircraft database entry at the approach noise certification point described in ICAO Annex 16[7]. This is done separately with a glide slope of 3 degrees and 5.5 degrees and the difference computed. This difference is then applied to the certificated (3 degree) approach noise level of the individual aircraft, obtained using the same criteria as for departing aircraft. The resulting value is equivalent to the noise certification level for that given turbofan aircraft type for a 5.5 degrees approach.

The approach noise level for a given type of turboprop aircraft is derived by firstly adjusting the noise profile of the most appropriate aircraft type within the AEDT to best match the approach noise level measured at LCA during a 5.5 degree approach. This aircraft type is then modelled with a glide slope of 5.5 degrees using the AEDT to derive the noise value at the approach noise certification point described in ICAO Annex 16. This resulting value is used as the approach noise certification level for that given turboprop aircraft type for the purposes of quota count classification. Appendix 1 sets out how to derive the Arrival Noise Level from the approach noise level to enable a QC classification to be derived from Table 1. Appendix 2 provides the assumed QC values used where no noise certificate is available, based on the EASA database.

2.3 Derivation of Noise Certification Levels – Light Propeller Aircraft

Light propeller aircraft are not subject to the same measurements as part of the certification process and therefore comparable certificated noise levels are not available. For these aircraft the following procedure is followed to estimate the certificated noise levels:

[7] Annex 16 to the Convention on International Civil Aviation, Environmental Protection, Volume 1, Aircraft Noise

i. Determine the reference aircraft, being the lightest propeller aircraft for which suitable measurements operating at LCA are available and which is subject to the ICAO Chapter 4 certification tests.

ii. Compare the measured EPNdB noise levels taken by the LCA NMTs with those for the reference aircraft, separately for sideline (NMTs 1-4), flyover (NMTs 5 6) and approach (NMTs 5-6).

iii. Use these difference to estimate the sideline, flyover and approach noise levels for the light propeller aircraft by comparing with noise certificates for the reference aircraft.

These estimated noise levels are then used to confirm that the aircraft meets the maximum noise limits. Light propeller aircraft are then treated as turboprop aircraft for the purposes of determining the arrival noise level and departure noise level.

3.0 QUOTA COUNT BUDGET

3.1 Quota Count Period

The quota count period applies throughout the operational hours of the airport as specified in the airport's entry given in the UK AIP[8]. For the purposes of an annual assessment of the quota count, the calendar year applies.

3.2 Quota Count Budget

LCA are required to operate within an overall noise quota budget set out in the ANCS, which limits the number of annual flight movements. Each aircraft landing or taking-off counts towards the overall quota budget at the airport. The noisier the aircraft type, the higher its QC score and the more it counts towards the total budget, resulting in fewer permitted flights within the limit. The use of 1 dB bands means that even a small reduction in noise levels may result in a lower QC score, thereby incentivising the use of quieter aircraft. Performance against the quota budget is calculated by multiplying the number of departures and arrivals by the respective QC scores for an aircraft and adding together the totals for each aircraft using the airport. All aircraft operating at LCA are included in the quota, other than those engaged in training, positioning, aircraft testing and/or evaluation.

The quota count budget is:

i) 22,000 per calendar year; and

ii) 742.5 in any one week

Each year's total quota count will be determined based on the schedule of actual aircraft movements for the year and established QC scores. The results will be compared against LCA's permitted noise quota budget as specified in i) and ii) above.

3.3 2023 QC Assessment

The QC score has been calculated for each aircraft movement during 2023. Totals for each day and week are presented in Appendix 3. These show that the airport has operated within its quota budget of 742.5 per week during this period.

[8] The UK Aeronautical Information Publication, NATS Aeronautical Information Service https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/AIP/

Table 2 presents the total QC score for 2023, broken down by aircraft type. This shows that the airport has operated within its quota budget of 22,000 for 2023.

Aircraft Type	Average QC Score[1]		2023 Total Mvts		2023 Quota Count[2]		
	Arr	Dep	Arr	Dep	Arr	Dep	Total
Airbus A221	0.032	0.130	1,111	1,111	35	144	179
ATR 42	0.200	0.049	172	172	34	8	43
ATR 72	0.250	0.094	347	347	87	33	119
Dash 8-400	0.125	0.100	1,876	1,875	235	187	422
Dornier 328JET	0.016	0.125	227	227	4	28	32
Embraer E190	0.050	0.393	19,881	19,876	994	7,817	8,811
Embraer E190-E2	0.040	0.100	836	836	33	84	117
General Aviation: Jet Aircraft	0.026	0.125	1,532	1,532	40	191	231
General Aviation: Non-Jet Aircraft	0.315	0.100	6	6	2	1	2
TOTAL			**25,988**	**25,982**	**1,464**	**8,493**	**9,957**

[1] Some aircraft types can have different departure QC scores depending on the specific aircraft flown. Average QC score rounded to three decimal places.

[2] QC totals rounded to nearest whole number. Overall totals are sum of unrounded values.

Table 2: 2023 QC Assessment

3.4 2024 QC Forecast

Based on the forecast provided by LCA, a predicted QC total for 2024 has been computed. An assumed QC score has been assigned to each aircraft operating at LCA and used to compute a predicted QC total for 2024.

Aircraft Type	Assumed QC Score		2024 Forecast Movements[1]		2024 Forecast Quota Count[2]		
	Arr	Dep	Arr	Dep	Arr	Dep	Total
Airbus A221	0.032	0.130	2,670	2,670	84	346	430
ATR 72	0.250	0.094	1,104	1,104	276	104	380
Dash 8-400	0.125	0.100	1,806	1,806	226	181	406
Dornier 328JET	0.016	0.125	140	140	2	18	20
Embraer E190	0.050	0.393	18,886	18,886	944	7,427	8,372
Embraer E190-E2	0.040	0.100	684	684	27	68	96
General Aviation: Jet Aircraft	0.026	0.125	1,532	1,532	40	191	231
General Aviation: Non-Jet Aircraft	0.315	0.100	6	6	2	1	2
TOTAL			**26,828**	**26,828**	**1,602**	**8,335**	**9,937**

[1] Forecast annual totals are derived from a summer forecast provided by LCA. Therefore, arrival and departure totals may not match exactly. General Aviation forecast movements are based on 2022 activity.

[2] QC totals are rounded to nearest whole number. Overall totals are sum of unrounded values.

Table 3: 2024 QC Prediction

The above calculation shows that in 2024 the airport is predicted to be under the QC budget of 22,000.

4.0 NOISE MONITORING

4.1 Aircraft Noise Measurement

The airport's noise monitoring system records the noise levels in terms of Effective Perceived Noise Level (EPNL) during aircraft departures and landings at six locations (NMTs 1 to 6) shown in Figure 1.

Figure 1: Location of NMTs 1-6

This data is reviewed on an annual basis to establish for each aircraft type, separately for each airline, the following information:

- the average annual SIDELINE[9] departure noise level (in EPNdB), from NMTs 1 to 4,
- the average annual FLYOVER departure noise level (in EPNdB), from NMTs 5 and 6,
- the average annual APPROACH noise level (in EPNdB), from NMTs 5 and 6.

4.1.1 Calibration Details

The sound level meter and microphone systems that comprise the NMTs are calibrated by a UKAS accredited institution every two years as a minimum, in accordance with ISO 20906:2009/Amd.1:2013 "*Acoustics – Unattended monitoring of aircraft sound in the vicinity of airports*".

During 2023, independent on-site microphone calibration was carried out in March, June, September and December. In all cases it was found that the NMTs were operating within normal tolerances and no concerns were raised regarding the functioning of the NMTs.

[9] At LCA all aircraft types, both jet and propeller, are measured at the same "sideline" noise monitoring locations. Further explanation of "sideline" in this context is given in Appendix 1.

4.1.2 Monitoring Results

A literal interpretation of the ANCS requirement is to compare the year-on-year changes for every aircraft type and associated airline. However, it is often not appropriate to assess every combination, as when there are small numbers of results this will likely show large differences due to the natural variation in measurement results, for example due to variation in aircraft weights and weather conditions. Therefore, it was agreed with the London Borough of Newham (LBN) that only aircraft and airline combinations which recorded at least one arrival and departure measurement per day on average would be included in the comparison.

The 2023 noise levels are presented in Table 4, alongside their change from 2022. The 2023 noise levels for all aircraft and airline combinations are given in Appendix 1.

Aircraft Code	Airline Code	Sideline (NMTs 1-4)		Flyover (NMTs 5-6)		Approach (NMTs 5-6)	
		Avg Level, EPNdB	Change from 2022[1]	Avg Level, EPNdB	Change from 2022[1]	Avg Level, EPNdB	Change from 2022[1]
A221	LX	94.0	0.1	83.8	0.1	83.7	0.3
DH8D	LG	92.6	0.3	81.9	0.1	84.8	0.2
E190	AZ	99.6	0.0	88.2	-0.1	85.1	0.8
E190	BA	99.5	0.1	88.1	0.0	85.1	0.4
E190	KL	98.7	-0.1	87.6	-0.3	85.0	0.4
E190	LH	99.1	-0.2	87.3	-0.2	85.4	0.2
E290	LX	93.9	0.6	83.1	0.1	83.9	0.6

[1] Averages are rounded to 1 decimal place. Changes are based on the unrounded values.

Table 4: 2023 Noise Monitoring Results and Comparison to 2022

The results in Table 4 show that for all the most commonly operating aircraft and airline combinations, there has been no significant change in the average measured arrival noise levels when compared to 2022. The QC classifications used in 2022 are therefore considered to remain appropriate.

Nick Williams
for Bickerdike Allen Partners LLP

David Charles
Partner

APPENDIX 1

DERIVATION OF DEPARTURE AND ARRIVAL LEVEL FOR QUOTA COUNT ASSESSMENT

The basic principles of how to calculate the departure and arrival level as part of the Night Noise Quota Counts that are in place at Heathrow, Gatwick and Stansted Airports are described in a report prepared by the Civil Aviation Authority[10].

These principles are adopted in the LCA Quota Count Scheme with some slight modifications and are as follows:-

i) The noise classification of aircraft into 1 EPNdB wide QC categories or bands is based on certificated (for departure) and calculated (for approach) Effective Perceived Noise Level (EPNL, in units EPNdB).

ii) The Departure Noise Level is determined from the aircraft's noise certification values (EPNLs) for sideline and flyover based on the following equation:

Departure Noise Level = (Sideline EPNL + Flyover EPNL)/2

iii) The Arrival Noise Level is determined from the approach noise level derived as described in Section 2.2 above and the equation:

Arrival Noise Level = Approach Noise Level EPNL – 9

iv) For propeller aircraft with maximum take-off weight (MTOW) not exceeding 5700 kg (i.e. those not subject to such criteria) and older propeller aircraft also not subject to these criteria, aircraft are classified according to assumptions based on available noise data.

v) The Departure Noise Level and (separately) the Arrival Noise Level are matched in Table A1.1 with the relevant noise band to determine the associated quota count (QC) classification for the specific aircraft type.

[10] ERCD Report 0204 Review of the Quota Count (QC) System: Re-Analysis of the Differences Between Arrivals and Departures

Noise Level Band, EPNdB	Quota Count (QC) Classification	Noise Level Band, EPNdB	Quota Count (QC) Classification
90 – 90.9	0.8	78 – 78.9	0.05
89 – 89.9	0.63	77 – 77.9	0.04
88 – 88.9	0.5	76 – 76.9	0.0315
87 – 87.9	0.4	75 – 75.9	0.025
86 – 86.9	0.315	74 – 74.9	0.002
85 – 85.9	0.25	73 – 73.9	0.016
84 – 84.9	0.2	72 – 72.9	0.0125
83 – 83.9	0.16	71 – 71.9	0.01
82 – 82.9	0.125	70 – 70.9	0.008
81 – 81.9	0.1	69 – 69.9	0.0063
80 – 80.9	0.08	68 – 68.9	0.005
79 – 79.9	0.063		

Table A1.1: Aircraft Noise Classifications

(NB. This classification system is a modification and extension of that operated by the designated airports in their Night Noise Quota Count System)

The terms “sideline” and “flyover” appear in this ANCS and also in LCA’s Noise Management and Mitigation Scheme (NOMMS) but carry different meanings in each. The following section provides an explanation of these terms in the context of both the ANCS and the NOMMS.

Explanation of "Sideline" and "Flyover" Points in the NOMMS and ANCS

The *terms* "sideline" and "flyover" are used in the NOMMS[11] and ANCS[12] to describe a point or location where aircraft noise is either measured or assessed. In the NOMMS, the terms are used to describe locations where London City Airport's (LCA's) fixed noise monitors are located. In the ANCS, the terms are used to describe noise certification points prescribed by the International Civil Aviation Organisation (ICAO). Although the terms "sideline" and "flyover" used in the NOMMS and ANCS are identical, they are not in the same position. To avoid confusion, this annex provides a short description of the location of the sideline and flyover points for both the NOMMS and ANCS.

NOMMS uses a number of fixed noise monitors to determine noise levels from departing and arriving aircraft at the airport. For historic reasons the location of these monitors are categorised as either *sideline* or *flyover* locations depending on where they are with respect to the flight path of departing or arriving aircraft. The results are used primarily for noise management purposes through a Penalties and Incentives Scheme.

The ANCS categorises and assesses aircraft by using noise certification data determined in accordance with procedures set out by ICAO. Each aircraft operating in the UK has a noise certificate describing its noise emissions under carefully controlled conditions, at three noise certification points. These certification levels are indicators of aircraft noise performance and are determined at three points in accordance with prescribed international procedures. These procedures also use the terms *sideline* and *flyover* for two of these three points (the third is the *approach* point).

NOMMS - noise monitor locations

A continuous noise monitoring system was first installed and became operational at the airport in 1992. A system of this type has been in place ever since that time and was upgraded in 2000 when a flight track monitoring system was also installed. The noise and flight track monitoring system was further updated in 2013. Historically, this noise and flight track monitoring system (NFTM) comprised four fixed noise monitors. These four monitors known as NMTs 1 to 4 are all located close to the airport.

Under the NOMMS, two new fixed noise monitors (NMTs 5 and 6) and a mobile noise monitor are incorporated within the NFTM.

[11] NOMMS – Noise Management and Mitigation Strategy

[12] ANCS – Aircraft Noise Categorisation Scheme

The six fixed noise monitors shown in Figure A1.1 are used to measure noise levels during an aircraft departure. These measured noise levels are used to determine the Sideline Noise Level and Flyover Noise Level for comparison with limits set in relation to the airport's Penalties and Incentives scheme which forms part of the NOMMS. The Sideline Noise Level and the Flyover Noise Level are compared against the fixed penalty limit and credit thresholds to determine whether a credit or penalty should be applied to the operator of the aircraft.

As NMTs 1 and 2, and 3 and 4 lie on either side of the flight path of a departing or an arriving aircraft these are designated as "sideline" locations.

For aircraft departures on Runway 27, the Sideline Noise Level is determined from the arithmetic average of the maximum noise level ($L_{Amax,S}$) measured at NMT 1 and 2. For aircraft departures on Runway 09, the Sideline Noise Level is determined from the arithmetic average of the maximum noise level ($L_{Amax,S}$) measured at NMT 3 and 4.

As NMTs 5 and 6 lie approximately underneath the flight path of a departing aircraft these are designated as "flyover" locations.

For aircraft departures on Runway 27, the Flyover Noise Level is the maximum noise level ($L_{Amax,S}$) measured at NMT 5. For aircraft departures on Runway 09, the Flyover Noise Level is the maximum noise level ($L_{Amax,S}$) measured at NMT 6.

The locations of NMTs 1 to 6 are shown in Figure A1.1.

Figure A1.1: NOMMS - Location of Noise Monitoring Terminals

ANCS - noise certification level positions

The ANCS uses a Quota Count (QC) system as a means of limiting the noise generated by aircraft movements in a transparent and easily administered manner. It operates in a similar manner to the Night Noise Quota Count scheme used at the designated airports such as Heathrow, Gatwick and Stansted, and used at other UK airports such as Manchester. The QC system at LCA however applies during the daytime, not the night-time. LCA are the first airport to operate a daytime QC system in the UK. As is the case for the Night Noise Quota Count scheme, the LCA QC system is

based on aircraft noise certification data where each aircraft type is allotted a QC value based on the noise generated by the aircraft type on departure and arrival under prescribed certification conditions[13].

Certification levels, determined in accordance with prescribed procedures under ICAO Annex 16[14] and given in terms of the Effective Perceived Noise Level (EPNL), are used within the ANCS for a variety of reasons, including:

- to comply with UK Regulations[15]
- they are reliable and independently verified indicators of aircraft noise performance;
- they are freely available for practically every relevant aircraft type[16].

Certificated noise levels for departing and arriving aircraft are determined under carefully controlled conditions at three positions:

- For jet-powered aeroplanes, 450 metres sideline at noisiest point during an aircraft departure. For propeller aircraft, depending on when the aircraft was certified, the point on the extended centre line of the runway 650 metres vertically below the climb-out flight path at full take-off power (referred to as Sideline or Lateral point);
- 6500 metres from start of roll, directly beneath the departing aircraft (referred to as Flyover point);
- 2000 metres from runway threshold, directly beneath the arriving aircraft (referred to as Approach point).

Figure A1.2, reproduced from ERCD 0205[17], illustrates these three noise certification points below.

[13] Based on the certified operating weight or maximum permitted operating weight at LCA or on evidence presented to LBN which demonstrates to their satisfaction, confirmed in writing, that the aircraft is capable of operating at its permitted MTOW at LCA within the noise constraints applicable at the airport.

[14] Annex 16 to the Convention on International Civil Aviation, Environmental Protection, Volume 1, Aircraft Noise

[15] Aerodrome (Noise Restrictions) (Rules and Procedures) Regulations 2003

[16] European Aviation Safety Agency (2016) *Aircraft type certificate data sheets*, [Online], Available: http://www.easa.europa.eu/certification/type-certificates/aircraft.php [12/02/2024].

[17] ERCD Report 0205 Quota Count Validation Study: Noise Measurements and Analysis, Civil Aviation Authority

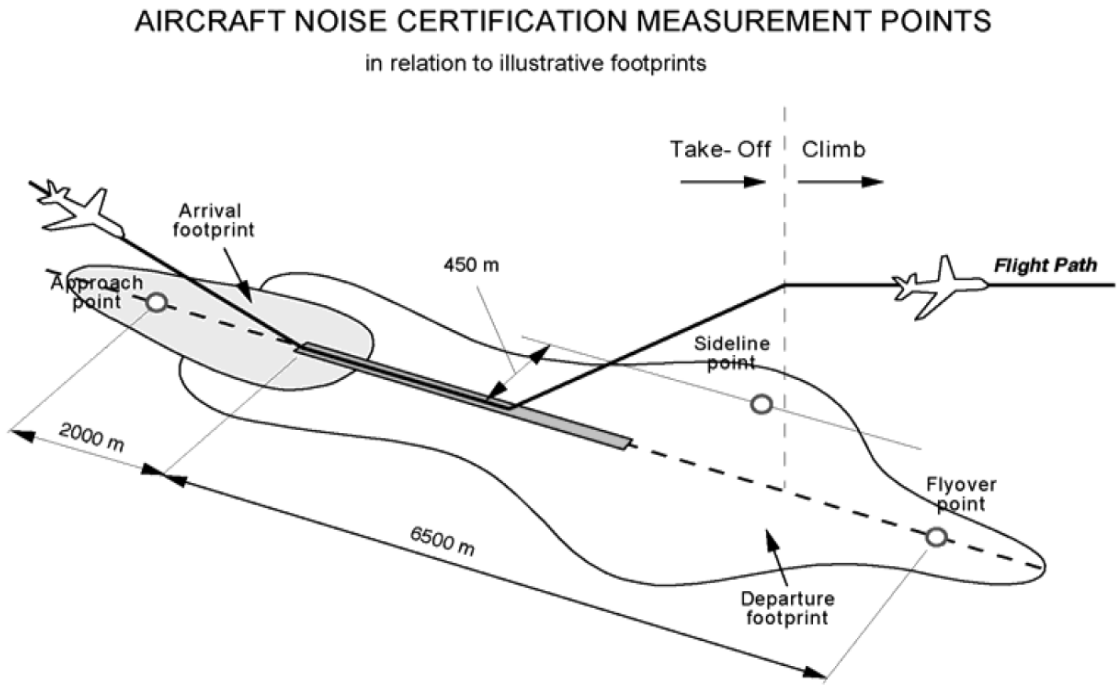

Figure A1.2: Aircraft noise certification measurement points

The Sideline point shown is for jet-powered aircraft. For propeller aircraft, depending on when the aircraft was certified, the sideline position may be the point on the extended centre line of the runway 650 metres vertically below the climb-out flight path at full take-off power. For reasons given in ERCD 0205, the use of a different measurement position for sideline noise from propeller aircraft is because of practical difficulties in measuring sideline noise at the 450 m sideline point required for jet-powered aircraft. ERCD found that the results obtained in the two locations are practically the same.

APPENDIX 2
ASSUMED QUOTA COUNT VALUES

The following table gives the Quota Count values which are assumed for each aircraft type in operation at LCA. These are used when a noise certificate is not available. The values are calculated using the noise certificate information set out in the EASA database for the specific aircraft type accounting for the permitted Maximum Take Off Weight (MTOW) of that aircraft at LCA.

Aircraft Code	Aircraft Description	Aircraft Category	Quota Count	
			Departures	Arrivals
A221	Airbus A220-100	Turbofan	0.16	0.0315
A318	Airbus A318	Turbofan	0.315	0.05
B461	BAe 146-100	Turbofan	0.16	0.063
B462	BAe 146-200	Turbofan	0.315	0.08
C25A	Cessna CitationJet CJ2	Turbofan	0.1	0.0315
C25B	Cessna CitationJet CJ3	Turbofan	0.1	0.0125
C25C	Cessna CitationJet CJ4	Turbofan	0.16	0.016
C510	Cessna Citation Mustang	Turbofan	0.063	0.0063
C525	Cessna CitationJet	Turbofan	0.05	0.016
C550	Cessna Citation II	Turbofan	0.16	0.025
C55B	Cessna Citation Bravo	Turbofan	0.063	0.0315
C560	Cessna Citation V	Turbofan	0.063	0.0125
C56X	Cessna Citation Excel	Turbofan	0.05	0.04
C680	Cessna Citation Sovereign	Turbofan	0.063	0.0315
C68A	Cessna Citation Latitude	Turbofan	0.08	0.016
CL30	Bombardier Challenger 300	Turbofan	0.1	0.016
CL35	Bombardier Challenger 350	Turbofan	0.125	0.016
CL60	Bombardier Challenger 600	Turbofan	0.125	0.025
E135	Embraer E135	Turbofan	0.1	0.0315
E170	Embraer E170	Turbofan	0.4	0.063
E175	Embraer E175	Turbofan	0.4	0.063
E190	Embraer E190	Turbofan	0.5	0.05
E290	Embraer E190-E2	Turbofan	0.1	0.04

Aircraft Code	Aircraft Description	Aircraft Category	Quota Count	
			Departures	Arrivals
E295	Embraer E195-E2	Turbofan	0.125	0.04
E545	Embraer EMB-545 (Legacy 450)	Turbofan	0.05	0.016
E550	Embraer EMB-550 (Legacy 500)	Turbofan	0.063	0.025
E55P	Embraer EMB-505 (Phenom 300)	Turbofan	0.063	0.02
F2TH	Dassault Falcon 2000	Turbofan	0.25	0.016
F900	Dassault Falcon 900	Turbofan	0.2	0.04
FA50	Dassault Falcon 50	Turbofan	0.4	0.1
FA7X	Dassault Falcon 7X	Turbofan	0.4	0.063
FA8X	Dassault Falcon 8X	Turbofan	0.25	0.04
G150	Gulfstream G150	Turbofan	0.25	0.0315
G280	Gulfstream G280	Turbofan	0.125	0.02
GA5C	Gulfstream GVII-G500	Turbofan	0.1	0.0315
GA6C	Gulfstream GVII-G600	Turbofan	0.16	0.04
GL5T	Bombardier Global 5000	Turbofan	0.2	0.02
GL7T	Bombardier Global 7000	Turbofan	0.25	0.02
GLEX	Bombardier Global 6000	Turbofan	0.25	0.02
GLF6	Gulfstream G650	Turbofan	0.125	0.02
H25B	Hawker 800	Turbofan	0.25	0.1
J328	Dornier 328JET	Turbofan	0.125	0.016
LJ45	Learjet 45	Turbofan	0.063	0.04
PC24	Pilatus PC-24	Turbofan	0.2	0.0315
RJ85	Avro RJ-85	Turbofan	0.25	0.1
AT42	ATR 42-200	Turboprop	0.08	0.2
AT45	ATR 42-500	Turboprop	0.04	0.2
AT75	ATR 72-500	Turboprop	0.08	0.25
D328	Dornier 328	Turboprop	0.125	0.125
DH8D	De Havilland Canada Dash 8 400	Turboprop	0.08	0.125

Aircraft Code	Aircraft Description	Aircraft Category	Quota Count	
			Departures	Arrivals
F50	Fokker 50	Turboprop	0.125	0.315
SB20	Saab 2000	Turboprop	0.125	0.08
SF34	Saab 340	Turboprop	0.1	0.125
B350	Beechcraft Super King Air 350	Light Prop	0.04	0.125
BE20	Beechcraft Super King Air 200	Light Prop	0.025	0.125
P180	Piaggio P-180 Avanti	Light Prop	0.1	0.315
PA31	Piper PA-31 Navajo	Light Prop	0.1	0.125

Table A2.1: 2023 Assumed Quota Counts

APPENDIX 3
QUOTA COUNT DAILY AND WEEKLY TOTALS

The following table gives the daily and weekly Quota Count totals for 2023. Values have been rounded to the nearest whole number, therefore in some cases the sum of the daily total may not match the weekly total.

Date	Daily Quota Count	Weekly Total
26/12/2022	16	
27/12/2022	21	
28/12/2022	25	
29/12/2022	27	134
30/12/2022	27	
31/12/2022	7	
01/01/2023	12	
02/01/2023	22	
03/01/2023	29	
04/01/2023	26	
05/01/2023	27	159
06/01/2023	30	
07/01/2023	7	
08/01/2023	19	
09/01/2023	34	
10/01/2023	30	
11/01/2023	32	
12/01/2023	31	186
13/01/2023	32	
14/01/2023	7	
15/01/2023	20	

Date	Daily Quota Count	Weekly Total
16/01/2023	33	
17/01/2023	30	
18/01/2023	31	
19/01/2023	31	186
20/01/2023	33	
21/01/2023	7	
22/01/2023	19	
23/01/2023	33	
24/01/2023	30	
25/01/2023	28	
26/01/2023	31	178
27/01/2023	31	
28/01/2023	7	
29/01/2023	18	
30/01/2023	33	
31/01/2023	31	
01/02/2023	33	
02/02/2023	33	187
03/02/2023	32	
04/02/2023	8	
05/02/2023	17	
06/02/2023	35	
07/02/2023	21	
08/02/2023	24	
09/02/2023	35	174
10/02/2023	32	
11/02/2023	8	
12/02/2023	19	

Date	Daily Quota Count	Weekly Total
13/02/2023	34	185
14/02/2023	27	
15/02/2023	32	
16/02/2023	33	
17/02/2023	31	
18/02/2023	9	
19/02/2023	18	
20/02/2023	34	194
21/02/2023	34	
22/02/2023	33	
23/02/2023	35	
24/02/2023	32	
25/02/2023	7	
26/02/2023	18	
27/02/2023	35	196
28/02/2023	34	
01/03/2023	34	
02/03/2023	35	
03/03/2023	33	
04/03/2023	8	
05/03/2023	17	
06/03/2023	36	187
07/03/2023	34	
08/03/2023	28	
09/03/2023	33	
10/03/2023	30	
11/03/2023	8	
12/03/2023	18	

Date	Daily Quota Count	Weekly Total
13/03/2023	25	
14/03/2023	34	
15/03/2023	34	
16/03/2023	35	185
17/03/2023	31	
18/03/2023	8	
19/03/2023	18	
20/03/2023	34	
21/03/2023	34	
22/03/2023	34	
23/03/2023	34	192
24/03/2023	32	
25/03/2023	7	
26/03/2023	17	
27/03/2023	32	
28/03/2023	34	
29/03/2023	37	
30/03/2023	37	201
31/03/2023	36	
01/04/2023	8	
02/04/2023	18	
03/04/2023	36	
04/04/2023	35	
05/04/2023	33	
06/04/2023	35	192
07/04/2023	27	
08/04/2023	9	
09/04/2023	17	

Date	Daily Quota Count	Weekly Total
10/04/2023	27	
11/04/2023	36	
12/04/2023	34	
13/04/2023	35	192
14/04/2023	33	
15/04/2023	9	
16/04/2023	18	
17/04/2023	36	
18/04/2023	36	
19/04/2023	36	
20/04/2023	36	204
21/04/2023	35	
22/04/2023	8	
23/04/2023	17	
24/04/2023	36	
25/04/2023	35	
26/04/2023	37	
27/04/2023	38	209
28/04/2023	36	
29/04/2023	8	
30/04/2023	17	
01/05/2023	25	
02/05/2023	35	
03/05/2023	35	
04/05/2023	35	190
05/05/2023	35	
06/05/2023	8	
07/05/2023	17	

Date	Daily Quota Count	Weekly Total
08/05/2023	25	198
09/05/2023	37	
10/05/2023	36	
11/05/2023	36	
12/05/2023	37	
13/05/2023	9	
14/05/2023	19	
15/05/2023	36	210
16/05/2023	35	
17/05/2023	37	
18/05/2023	38	
19/05/2023	36	
20/05/2023	9	
21/05/2023	19	
22/05/2023	37	215
23/05/2023	38	
24/05/2023	39	
25/05/2023	39	
26/05/2023	36	
27/05/2023	9	
28/05/2023	18	
29/05/2023	29	205
30/05/2023	38	
31/05/2023	38	
01/06/2023	38	
02/06/2023	36	
03/06/2023	9	
04/06/2023	18	

Date	Daily Quota Count	Weekly Total
05/06/2023	37	
06/06/2023	38	
07/06/2023	37	
08/06/2023	35	203
09/06/2023	29	
10/06/2023	7	
11/06/2023	18	
12/06/2023	32	
13/06/2023	37	
14/06/2023	38	
15/06/2023	38	203
16/06/2023	34	
17/06/2023	9	
18/06/2023	14	
19/06/2023	35	
20/06/2023	32	
21/06/2023	35	
22/06/2023	36	197
23/06/2023	33	
24/06/2023	9	
25/06/2023	16	
26/06/2023	34	
27/06/2023	34	
28/06/2023	36	
29/06/2023	35	200
30/06/2023	35	
01/07/2023	8	
02/07/2023	17	

Date	Daily Quota Count	Weekly Total
03/07/2023	35	
04/07/2023	30	
05/07/2023	30	
06/07/2023	34	184
07/07/2023	32	
08/07/2023	8	
09/07/2023	17	
10/07/2023	35	
11/07/2023	32	
12/07/2023	33	
13/07/2023	35	189
14/07/2023	31	
15/07/2023	7	
16/07/2023	17	
17/07/2023	33	
18/07/2023	31	
19/07/2023	32	
20/07/2023	33	187
21/07/2023	32	
22/07/2023	8	
23/07/2023	18	
24/07/2023	34	
25/07/2023	32	
26/07/2023	32	
27/07/2023	34	188
28/07/2023	32	
29/07/2023	7	
30/07/2023	17	

Date	Daily Quota Count	Weekly Total
31/07/2023	34	
01/08/2023	31	
02/08/2023	32	
03/08/2023	33	187
04/08/2023	33	
05/08/2023	8	
06/08/2023	17	
07/08/2023	31	
08/08/2023	31	
09/08/2023	31	
10/08/2023	34	187
11/08/2023	32	
12/08/2023	8	
13/08/2023	18	
14/08/2023	34	
15/08/2023	30	
16/08/2023	29	
17/08/2023	33	182
18/08/2023	32	
19/08/2023	7	
20/08/2023	17	
21/08/2023	33	
22/08/2023	32	
23/08/2023	34	
24/08/2023	31	185
25/08/2023	32	
26/08/2023	8	
27/08/2023	15	

Date	Daily Quota Count	Weekly Total
28/08/2023	11	172
29/08/2023	32	
30/08/2023	34	
31/08/2023	36	
01/09/2023	33	
02/09/2023	8	
03/09/2023	17	
04/09/2023	32	196
05/09/2023	34	
06/09/2023	34	
07/09/2023	36	
08/09/2023	34	
09/09/2023	8	
10/09/2023	19	
11/09/2023	37	206
12/09/2023	36	
13/09/2023	37	
14/09/2023	36	
15/09/2023	35	
16/09/2023	9	
17/09/2023	18	
18/09/2023	36	191
19/09/2023	35	
20/09/2023	31	
21/09/2023	33	
22/09/2023	33	
23/09/2023	8	
24/09/2023	16	

Date	Daily Quota Count	Weekly Total
25/09/2023	33	
26/09/2023	34	
27/09/2023	32	
28/09/2023	38	200
29/09/2023	37	
30/09/2023	8	
01/10/2023	18	
02/10/2023	27	
03/10/2023	33	
04/10/2023	33	
05/10/2023	36	189
06/10/2023	35	
07/10/2023	8	
08/10/2023	17	
09/10/2023	35	
10/10/2023	36	
11/10/2023	36	
12/10/2023	35	206
13/10/2023	35	
14/10/2023	9	
15/10/2023	19	
16/10/2023	37	
17/10/2023	36	
18/10/2023	37	
19/10/2023	39	210
20/10/2023	37	
21/10/2023	8	
22/10/2023	16	

Date	Daily Quota Count	Weekly Total
23/10/2023	35	
24/10/2023	35	
25/10/2023	36	
26/10/2023	36	202
27/10/2023	34	
28/10/2023	8	
29/10/2023	18	
30/10/2023	34	
31/10/2023	35	
01/11/2023	33	
02/11/2023	31	194
03/11/2023	32	
04/11/2023	9	
05/11/2023	19	
06/11/2023	38	
07/11/2023	34	
08/11/2023	34	
09/11/2023	35	200
10/11/2023	33	
11/11/2023	8	
12/11/2023	18	
13/11/2023	34	
14/11/2023	35	
15/11/2023	33	
16/11/2023	36	198
17/11/2023	34	
18/11/2023	8	
19/11/2023	18	

Date	Daily Quota Count	Weekly Total
20/11/2023	37	200
21/11/2023	35	
22/11/2023	34	
23/11/2023	36	
24/11/2023	32	
25/11/2023	8	
26/11/2023	18	
27/11/2023	34	188
28/11/2023	35	
29/11/2023	34	
30/11/2023	30	
01/12/2023	29	
02/12/2023	8	
03/12/2023	18	
04/12/2023	32	190
05/12/2023	33	
06/12/2023	34	
07/12/2023	31	
08/12/2023	33	
09/12/2023	8	
10/12/2023	19	
11/12/2023	35	199
12/12/2023	33	
13/12/2023	34	
14/12/2023	36	
15/12/2023	32	
16/12/2023	9	
17/12/2023	19	

Date	Daily Quota Count	Weekly Total
18/12/2023	33	169
19/12/2023	31	
20/12/2023	29	
21/12/2023	27	
22/12/2023	28	
23/12/2023	8	
24/12/2023	12	
25/12/2023	0	117
26/12/2023	18	
27/12/2023	22	
28/12/2023	27	
29/12/2023	27	
30/12/2023	9	
31/12/2023	14	

Table A3.1: 2023 Daily and Weekly Quota Count Totals

APPENDIX 4

2023 NOISE MONITORING RESULTS BY AIRLINE AND AIRCRAFT TYPE

Table A4.1 presents the 2023 noise monitoring results for each aircraft and airline combination. Results are given separately for sideline, flyover, and approach. Aircraft and airline combinations with fewer than 10 results have been grouped as "Other". Average noise levels have been rounded to 1 decimal place.

Aircraft Code	Airline Code	Sideline (NMTs 1-4)		Flyover (NMTs 5-6)		Approach (NMTs 5-6)	
		No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB
A221	LX	2,054	94.0	1,025	83.8	932	83.7
A221	AZ	268	93.6	134	83.3	131	83.2
AT45	LM	421	91.3	210	82.3	168	88.1
AT75	LM	723	92.0	363	82.8	337	87.8
C25A	Other	18	91.1	6	78.7	6	79.4
C25A	AW	44	91.5	16	78.9	15	78.7
C25A	VL	10	90.6	3	75.2	3	80.1
C25B	IX	10	94.1	5	78.0	4	79.0
C25B	Other	32	91.9	14	78.7	9	80.7
C25C	AA	10	91.9	3	76.4	1	77.2
C25C	EF	10	91.9	5	79.9	4	78.0
C25C	Other	8	89.8	2	78.6	2	76.1
C510	GA	217	90.9	103	80.0	26	77.6
C510	Other	8	92.3	4	80.0	1	81.1
C510	AS	12	90.9	6	79.4	2	76.9
C525	Other	4	94.5	2	82.2	2	80.6
C56X	AA	56	89.1	8	77.2	25	81.1
C56X	NJ	171	90.3	72	77.2	77	81.0
C56X	Other	29	91.0	13	80.1	14	81.2
C56X	GE	12	91.4	6	79.0	6	81.4
C56X	AH	74	90.1	35	78.7	35	80.9
C56X	DC	91	90.1	38	77.6	38	81.3

Aircraft Code	Airline Code	Sideline (NMTs 1-4)		Flyover (NMTs 5-6)		Approach (NMTs 5-6)	
		No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB
C56X	OO	12	91.2	4	78.1	7	80.7
C56X	VJ	27	91.2	13	78.2	15	81.3
C680	Other	18	91.9	5	79.9	9	78.2
C680	DC	14	91.8	4	77.8	4	77.8
C680	EU	10	91.4	4	75.4	6	77.2
C68A	NJ	484	90.4	161	77.5	221	77.9
C68A	Other	20	92.2	8	80.9	9	77.9
C68A	DC	24	91.4	10	79.0	10	77.5
CL35	NJ	169	93.6	68	78.8	77	80.3
CL35	Other	4	95.9	2	78.8	2	80.2
CL60	NJ	24	90.1	8	78.8	12	81.8
CL60	PH	10	90.7	4	78.6	4	80.6
CL60	Other	12	88.8	3	74.3	4	80.4
DA62	Other	2	84.1	1	80.8	0	-
DH8D	LG	3,941	92.6	1,846	81.9	1,820	84.8
E135	Other	10	92.1	5	78.0	5	79.7
E135	AB	26	91.8	12	78.6	9	79.3
E190	BA	33,233	99.5	16,661	88.1	15,436	85.1
E190	KL	4,730	98.7	2,370	87.6	2,159	85.0
E190	AZ	1,153	99.6	576	88.2	511	85.1
E190	LO	626	100.7	314	88.7	282	84.7
E190	LH	1,853	99.1	923	87.3	863	85.4
E190	Other	8	100.4	4	87.2	2	83.8
E190	LX	14	98.0	7	85.4	5	87.1
E190	EZ	52	99.5	26	87.6	26	85.5
E190	EN	20	98.1	10	88.1	10	85.5

Aircraft Code	Airline Code	Sideline (NMTs 1-4)		Flyover (NMTs 5-6)		Approach (NMTs 5-6)	
		No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB
E290	LX	1,770	93.9	887	83.1	817	83.9
E545	Other	2	89.4	1	79.7	2	79.4
E550	FJ	70	93.9	27	77.9	31	78.9
E550	FL	32	94.5	9	79.1	12	80.3
E550	Other	16	93.1	6	81.0	9	79.6
E550	AH	18	92.7	2	79.8	10	79.9
E55P	NJ	294	91.4	130	79.0	137	79.4
E55P	Other	18	94.0	9	79.0	9	79.5
E55P	PV	84	93.4	32	79.6	44	79.5
F2TH	Other	28	91.9	14	81.0	12	78.0
F2TH	OO	33	91.0	17	79.8	15	79.6
F2TH	PH	50	90.6	25	80.9	18	78.1
F2TH	DB	30	91.6	12	79.9	10	77.3
F900	Other	10	94.0	4	82.3	4	77.3
F900	MI	10	92.2	5	81.2	4	81.7
FA7X	AB	36	96.7	18	82.6	18	80.4
FA7X	Other	40	90.8	20	82.2	22	81.7
FA7X	HB	16	91.6	8	83.7	8	80.3
FA7X	GS	11	89.6	4	83.1	5	81.2
FA7X	IJ	12	91.0	6	83.3	6	80.3
FA7X	XR	10	94.5	5	84.8	3	81.1
FA7X	CA	22	91.7	11	82.5	9	81.8
FA8X	SH	51	89.7	25	80.4	24	81.3
FA8X	Other	34	91.2	16	82.0	19	81.1
FA8X	HB	10	88.0	5	83.4	4	82.5
FA8X	KO	14	92.0	7	83.2	7	82.4

Aircraft Code	Airline Code	Sideline (NMTs 1-4)		Flyover (NMTs 5-6)		Approach (NMTs 5-6)	
		No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB	No. Results	2023 Avg Level, EPNdB
FA8X	PE	136	89.4	69	80.8	65	81.2
G280	Other	16	91.9	8	79.2	8	81.5
GL5T	FY	18	91.5	3	79.9	8	80.3
GL5T	NJ	10	91.5	5	81.8	4	80.7
GL5T	Other	4	93.0	2	84.4	3	78.4
GL7T	Other	10	94.3	5	80.8	6	80.4
GLEX	Other	6	95.4	3	80.4	4	80.9
GLEX	NJ	24	93.2	11	81.0	12	80.2
GLEX	N5	14	95.7	7	80.6	8	81.6
GLEX	N1	22	90.8	9	81.6	9	80.6
GLF6	Other	10	87.4	5	78.4	5	79.9
H25B	Other	2	93.8	1	85.1	1	80.7
J328	BA	483	92.4	241	83.2	224	85.8
LJ45	SX	22	95.4	7	79.5	7	78.9
LJ45	Other	2	91.5	0	-	2	79.5
P180	Other	6	93.1	4	82.5	5	90.2
PC24	JF	99	96.3	49	82.5	50	83.5
PC24	Other	12	95.4	6	80.4	8	83.4
PC24	FY	16	94.4	8	82.0	8	83.9
PC24	LX	16	95.6	8	81.4	5	84.1

Table A4.1: 2023 Noise Monitoring Results

Annual
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Annex 4
Community Fund 2023 Awardees

LONDON CITY AIRPORT

Community Fund 2023 Awardees
First Tranche – February 2023

Foodbank	Funds £	Borough
Barking Foodbank	£ 5,000	Barking
Dagenham Foodbank - RCCG	£ 5,000	Dagenham
Greenwich Foodbank	£ 10,000	Greenwich
Community Food Enterprise (CFE)	£ 10,000	Newham
Redbridge Foodbank	£ 10,000	Redbridge
Bow Foodbank	£ 5,000	TH
Burdett - Mile End Foodbank	£ 5,000	TH
Total February 2023 (7)	**£ 50,000**	

Second Tranche July 2022

Foodbank	Funds £	Boroughs Supporting	Category	Funding Criteria
West Silvertown Village Community Foundation	£ 2,990	Newham	raising aspirations of East Londoners	Sports, mentoring & wellbeing
Salaam Peace	£ 3,000	Newham	building stronger, safer, healthier communities	IT literacy for Elderly
The Bromley by Bow Centre	£ 1,390	Hackney, Newham, TH	building stronger, safer, healthier communities, raising aspirations of East Londoners, creating pathways into employment	Sports and wellbeing
Richard House Children's Hospice	£ 3,000	Hackney, Newham, TH	raising aspirations of East Londoners	Intergenerational Performing arts
One Place East	£ 2,788	Newham	building stronger, safer, healthier communities	Support for parents-playgroup sessions
Beis Brucha	£ 3,000	Lewisham	creating more sustainable and greener communities	Bio-diversity project
Powerhouse for Women	£ 2,995	Tower Hamlets	building stronger, safer, healthier communities, raising aspirations of East Londoners, creating pathways into employment	Wellbeing & Raising Aspirations
Immediate Theatre	£ 3,000	Greenwich, Hackney, Newham, Lambeth, Lewisham, Southwark, TH	raising aspirations of East Londoners	Wellbeing & Raising Aspirations
Age UK Bexley	£ 3,000	Barking and Dagenham	building stronger, safer, healthier communities	Support for parents-playgroup sessions
Trapped in Zone One	£ 2,860	Hackney	building stronger, safer, healthier communities	Intergenerational activities (youth and elderly)
Helping Disabilities Trust	£ 2,000	Hackney	building stronger, safer, healthier communities	Wheelchair renting for disabled residents
Museum of Happiness Ltd	£ 3,000	Various	raising aspirations of East Londoners, creating pathways into employment	Raising Aspirations of Blind Youth
Island House Community Centre	£ 3,000	Hackney	building stronger, safer, healthier communities, raising aspirations of East Londoners, creating pathways into employment	Mental Health and Wellbeing /Mentoring
Total July 2023 (13)	**£ 36,023**			
Total 2023	**£ 86,023**			

Annual
Performance
Report 2023

Annex 5
Annual Air Quality Monitoring Report

LONDON CITY AIRPORT

London City Airport Air Quality Monitoring Strategy: Annual Report 2023

April 2024

Experts in air quality management & assessment

Document Control

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Contents

Executive Summary

This document represents the 2023 Annual Report for the Air Quality Monitoring Strategy (AQMS) that is operated by Air Quality Consultants Ltd. on behalf of London City Airport (LCA). This programme measures concentrations of nitrogen dioxide (NO_2) and fine particles (the so called PM_{10} and $PM_{2.5}$ fractions, i.e., particles that are less than 10 and 2.5 micrometres in diameter, respectively).

Monitoring is currently carried out at two automatic monitoring stations. One is to the north of Royal Albert Dock adjacent to the Newham Dockside building (LCA-ND), and one is adjacent to King George V House (LCA-KGV). These automatic sites are supplemented by a network of passive monitoring devices (nitrogen dioxide diffusion tubes) located at 16 sites in and around the Airport boundary.

The Government has set a number of air quality objectives to protect human health. These are based on monitoring carried out over the period of a calendar year. In some cases, these objectives refer to average concentrations of pollutants measured over the calendar year (the “annual mean”); in other cases, they refer to the number of hours or days on which a specified pollutant concentration should not be exceeded (for example, no more than 35 days in each calendar year on which PM_{10} concentrations exceed 50 µg/m^3, and no more than 18 hours in each calendar year on which nitrogen dioxide concentrations exceed 200 µg/m^3). The GLA has also set an aspirational target to achieve the WHO Guideline for $PM_{2.5}$ (10 µg/m^3) by 2030.

In addition to the objectives, the Government has established a set of descriptors for the 1-hour mean concentrations of nitrogen dioxide and 24-hour mean concentrations of PM_{10} and $PM_{2.5}$. Air quality is defined by these descriptors as being ‘Low’, ‘Moderate’, ‘High’ or ‘Very High’.

Pollution concentrations measured in and around the Airport are associated with a wide range of sources at the local, regional, national and international scales. On occasions when pollution levels rise, these higher levels are often observed across the whole of London as a “regional pollution episode”. To assist with the interpretation of the results, pollution levels measured at other London monitoring sites are included in this report.

Nitrogen Dioxide

The 2023 annual mean nitrogen dioxide concentration measured at the automatic station at the Newham Dockside site was 17.1 µg/m^3 (micrograms per cubic metre). An annual mean concentration of 17.1 µg/m^3 was also measured at the King George V House site. The annual mean objective (40 µg/m^3) was not exceeded at either of the automatic sites in 2023.

There were no exceedances of the 1-hour mean objective value (200 µg/m^3) at both the Newham Dockside and King George V House sites. All (100%) of the 1-hour mean concentrations across both sites fell into the "Low" pollution band.

Annual mean concentrations of nitrogen dioxide at other background and roadside sites elsewhere in London over this period ranged from 15.4 to 24.3 µg/m^3. The 1-hour mean concentrations over the year show similar patterns at both Airport monitoring sites. There was a good correlation between observed peaks at the Airport sites and other London sites, suggesting that these occurrences were principally due to regional sources and changing weather conditions that affect the dispersion and dilution of pollutant emissions.

The annual mean nitrogen dioxide concentrations measured at the diffusion tube sites ranged from 13.8 to 20.6 µg/m^3 compared with the objective value of 40 µg/m^3. There were no measured exceedances of the air quality objective. As measured concentrations are well below 60 µg/m^3, it is highly unlikely that the 1-hour mean objective was exceeded (based on empirical relationships published by Defra).

Fine Particles (PM_{10})

The annual mean PM_{10} concentration measured at the automatic station situated at King George V House was 13.0 µg/m^3. This is well below the objective value of 40 µg/m^3. There were two recorded exceedances of the 24-hour mean objective (compared with the 35 exceedances allowed in a calendar year). The majority (99.5%) of the running 24-hour mean concentrations were classified as 'Low' and 0.5% were 'Moderate'. There were no running 24-hour mean concentrations within the 'High' or 'Very High' pollution bands.

24-hour mean concentrations of PM_{10} at other background sites in London over this period showed a similar pattern to those seen at the Airport site. There was a good correlation between observed peaks at the Airport site and other London sites, suggesting that these occurrences were principally due to regional sources and changing weather conditions that affect the dispersion and dilution of pollutant emissions.

Fine Particles ($PM_{2.5}$)

The annual mean $PM_{2.5}$ concentration measured at the automatic station at King George V House was 8.2 µg/m^3, well below the objective value of 25 µg/m^3, and below the GLA target of 10 µg/m^3. The majority (99.2%) of the running 24-hour mean concentrations were classified as 'Low' and 0.8% were 'Moderate'. There were no running 24-hour mean concentrations within the 'High' or 'Very High' pollution bands.

Concentrations of $PM_{2.5}$ at other background and roadside sites in London over this period showed similar patterns and correlation in observed peaks as that at the Airport site. As for PM_{10}, this suggests that these occurrences were principally attributable to regional sources.

1 Introduction

1.1 This document represents the 2023 Annual Report for the Air Quality Monitoring Strategy (AQMS), operated on behalf of London City Airport (LCA).

1.2 The City Airport Development Programme (CADP) 1 planning application was granted planning permission by the Secretaries of State for Communities and Local Government and Transport in July 2016 following an appeal and public inquiry which was held in March / April 2016. Condition 57 of the CADP 1 planning permission requires that an Air Quality Monitoring Strategy be implemented on commencement of the development.

1.3 The AQMS, as defined within Condition 57, requires the operation of two automatic air quality monitoring stations, situated at Newham Dockside (ND) and King George V (KGV) House, and a network of nitrogen dioxide diffusion tubes, situated in and around the Airport site.

1.4 The AQMS also included a commitment to commission a new site measuring $PM_{2.5}$ concentrations before 31st December 2018 at KGV House. This new site was fully operational on 1st January 2019, and records concentrations of both PM_{10} and $PM_{2.5}$; both metrics have been included within this report.

1.5 The AQMS is managed by Air Quality Consultants Ltd. (AQC) on behalf of London City Airport. Service support for the automatic monitoring stations is provided by Enviro Technology Services plc, with Ricardo Energy & Environment providing independent audit checks.

1.6 Chapter 2 of this Report sets out the various standards and guidelines against which air pollution concentrations should be compared. Chapter 3 describes the monitoring methodology and provides a summary of the measured concentrations in 2023 with respect to these criteria, and compares the measured concentrations with other local monitoring sites. Chapter 4 then provides an analysis of the monitoring data with respect to trends.

2 Assessment Criteria

2.1 The Government has established a set of air quality standards and objectives to protect human health. The 'standards' are set as concentrations below which effects are unlikely even in sensitive population groups, or below which risks to public health would be exceedingly small. They are based purely upon the scientific and medical evidence of the effects of an individual pollutant. The 'objectives' set out the extent to which the Government expects the standards to be achieved by a certain date. They take account of economic efficiency, practicability, technical feasibility and timescale. The objectives for use by local authorities are prescribed within the Air Quality (England) Regulations (2000) and the Air Quality (England) (Amendment) Regulations (2002).

2.2 For $PM_{2.5}$, the objective set by Defra for local authorities is to work toward reducing concentrations without setting any specific numerical value. In the absence of a numerical objective, it is convention to assess local air quality impacts against the limit value (see Paragraph 2.5), originally set at 25 $\mu g/m^3$ and currently set at 20 $\mu g/m^3$.

2.3 The WHO has set a guideline for annual mean $PM_{2.5}$ concentrations of 10 $\mu g/m^3$. The guideline is not currently in UK regulations and there is no requirement to assess against it at this time. However, achievement of the guideline is a long-term aspiration of the UK Government and the GLA has set out an intent in the London Environment Strategy to achieve it by 2030[1]. As such, consideration to this guideline has been included within this report.

2.4 The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 has set two legally binding targets for $PM_{2.5}$ to be achieved by 2040. These are a maximum annual mean concentration target (AMCT) of 10 $\mu g/m^3$, and a population exposure reduction target (PERT) of 35% compared to 2018. Compliance with these targets is to be based on national monitoring undertaken by Defra. There is no way to project 2023 concentrations forward to 2040 at this stage.

2.5 EU Directive 2008/50/EC (The European Parliament and the Council of the European Union, 2008) sets limit values for nitrogen dioxide, PM_{10} and $PM_{2.5}$, and is implemented in UK law through the Air Quality Standards Regulations (2010). The limit values for nitrogen dioxide are the same numerical concentrations as the UK objectives, but achievement of these values is a national obligation rather than a local one. In the UK, only monitoring and modelling carried out by UK Central Government meets the specification required to assess compliance with the limit values. Central Government does not normally recognise local authority monitoring or local modelling studies when determining the likelihood of the limit values being exceeded, unless such studies have been audited and approved by Defra and DfT's Joint Air Quality Unit (JAQU).

[1] The WHO Guideline of 10 $\mu g/m^3$ was set in 2005. In 2021, WHO revised this guideline down to 5 $\mu g/m^3$. The Mayor has made it clear that the aspiration in London is to achieve the 2005 Guideline by 2030.

2.6 The relevant air quality criteria for this report are provided in Table 1.

Table 1: Relevant Air Quality Criteria

Pollutant	Time Period	Objective / Value
Nitrogen Dioxide	1-hour mean	200 μg/m^3 not to be exceeded more than 18 times a year
	Annual mean	40 μg/m^3
Fine Particles (PM_{10})[a]	24-hour mean	50 μg/m^3 not to be exceeded more than 35 times a year [b]
	Annual mean	40 μg/m^3
Fine Particles ($PM_{2.5}$)	Annual mean [c]	20 μg/m^3
	Annual mean [d]	10 μg/m^3

[a] Measured by the gravimetric method.

[b] Equivalent to a 90th percentile of 24-hour mean concentrations of 50 μg/m^3.

[c] There is no numerical $PM_{2.5}$ objective for local authorities. Convention is to assess against the UK limit value which is currently 20 μg/m^3.

[d] GLA target to be achieved by 2030 and AMCT to be achieved by 2040, based on national monitoring undertaken by Defra.

2.7 In addition to the objectives, Defra has established a set of descriptors for the 1-hour mean values for nitrogen dioxide and for the 24-hour mean values for PM_{10} and $PM_{2.5}$, classifying the concentrations in an index from 1 to 10 and thus labelling the levels as 'Low', 'Moderate', 'High' or 'Very High' (Defra, 2024a). The banding is referred to as the Daily Air Quality Index (DAQI). The DAQI criteria are set out in Table 2.

Table 2: Daily Air Quality Index Bandings (μg/m^3)

Band	Index	Nitrogen Dioxide 1-hour Mean (μg/m^3)	PM_{10} 24-hour mean (μg/m^3) [a]	$PM_{2.5}$ 24-hour mean (μg/m^3) [a]
Very High	**10**	601 or more	101 or more	71 or more
High	**9**	535 – 600	92 – 100	65 – 70
	8	468 – 534	84 – 91	59 – 64
	7	401 – 467	76 – 83	54 – 58
Moderate	**6**	335 – 400	67 – 75	48 – 53
	5	268 – 334	59 – 66	42 – 47
	4	201– 267	51 – 58	36 – 41
Low	**3**	135 – 200	34 – 50	24 – 35
	2	68 – 134	17 – 33	12 – 23
	1	0 – 67	0 – 16	0 – 11

[a] Reference equivalent. 24-hour values are for the period 00:00 to 23:59.

3 Monitoring Methodology and Results

Automatic Monitoring Stations

3.1 Monitoring was carried out at two automatic stations throughout 2023 as follows:

- Newham Dockside (LCA-ND): Nitrogen dioxide (NO_2).
- King George V House (LCA-KGV): Nitrogen dioxide (NO_2), PM_{10} and $PM_{2.5}$.

The locations of the automatic sites are shown in Figure 1.

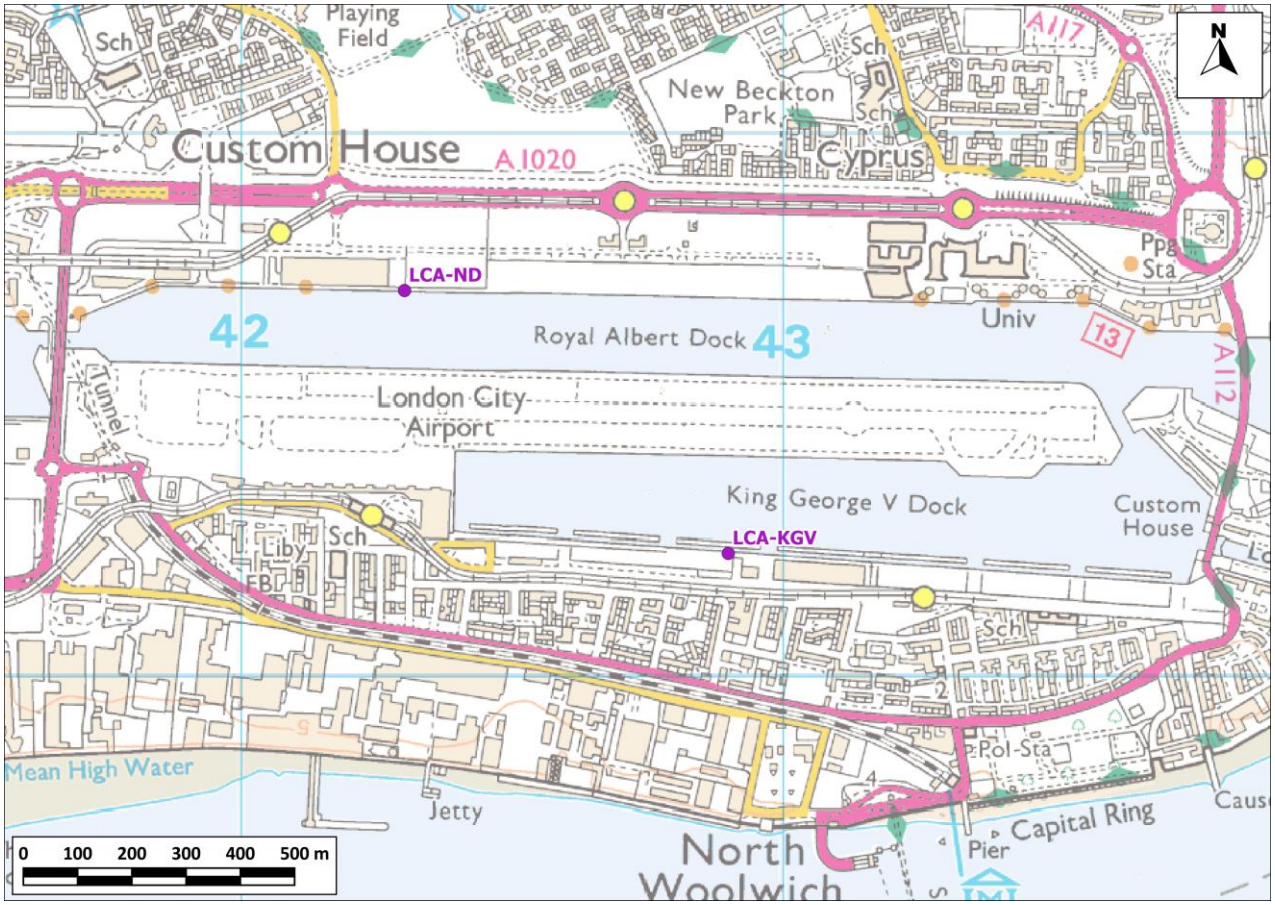

Figure 1: Automatic Monitoring Locations

3.2 Throughout 2023, the LCA-ND automatic station measured nitrogen dioxide using a M200E TAPI chemiluminescence analyser, while the LCA-KGV site measured nitrogen dioxide using a T200 chemiluminescence analyser. The LCA-KGV site also measured PM_{10} and $PM_{2.5}$ using a Palas FIDAS 200 Particulate Monitor. The data are stored as 15-minute mean concentrations, with further processing and ratification of the nitrogen dioxide concentrations to adjust to "reference-equivalent" as recommended by Defra (2022a). The PM_{10} and $PM_{2.5}$ concentrations measured at LCA-KGV are "reference equivalent" and are unadjusted.

3.3 Independent site audits, conducted by Ricardo-E&E were carried out on 30th March 2023, 13th September 2023, and 21st March 2024. The audit undertaken in March 2023 identified that the LCA-ND site was operating below the minimum standards set for the national networks operated by Government standard (with regard to the calibration cylinder gas), which has been taken account of in the data ratification process. The audit undertaken in September 2023 identified that the LCA-ND site was operating below standard with regard to the NOx molybdenum converter efficiency. Enviro Technology Services removed the LCA-ND analyser on 20th September 2023 for further testing and installed a temporary analyser on 23rd October 2023. As the original analyser could not be repaired, the temporary analyser was replaced by a T200 model (the same as LCA-KGV) on 6th February 2024.

3.4 Ratification of the data has been based on calibration factors determined from the calibration reports, along with visual examination of the data and comparison with monitoring data from nearby national network sites (Defra, 2022a). Any erroneous data have been flagged and removed from subsequent analysis. 1-hour, 24-hour, and annual mean concentrations have then been calculated.

3.5 Monitoring at the LCA-ND site was interrupted between 7th and 26th June due to a loss in power to the monitor. This was caused by the severing of the external power cable by contractors working in the vicinity of the Newham Dockside building. Power was restored by Royal Docks Electrical.

3.6 Pollution concentrations measured at both automatic Airport monitoring stations are associated with a wide range of sources at the local, regional, national and international scales. On occasions when pollution levels rise, these higher levels are often observed across the whole of London as a "regional pollution episode". To assist with the interpretation of the results, comparable data have been obtained via the London Air Application Programming Interface (API), which stores data from the UK Automatic Urban and Rural Network (AURN) (Defra, 2024b), London Air Quality Network (LAQM) (Imperial College London, 2024), and monitoring undertaken by local authorities. Data were obtained for the following five sites:

- Bexley – Belvedere (suburban);
- Bexley – Slade Green (suburban);

- Camden – Bloomsbury (background);
- Newham - Wren Close (background); and
- Newham - Cam Road (roadside).

Nitrogen Dioxide

3.7 The 2023 nitrogen dioxide results for the LCA-ND and LCA-KGV automatic monitoring stations are summarised in Table 3. Data capture[2] for LCA-ND and LCA-KGV was 83.4% and 94.4%, respectively. The annual mean concentration did not exceed the objective of 40 µg/m^3 at either site. The 1-hour mean objective was also not exceeded at either site; there were no 1-hour mean concentrations above the objective value (200 µg/m^3), which allows 18 exceedances in a calendar year.

Table 3: Nitrogen Dioxide (NO_2)[a] 2023 Data Summary for LCA-ND and LCA-KGV

Metric	LCA-ND	LCA-KGV	Objectives
	NO_2	NO_2	
Maximum 1- Hour Mean	148.1 µg/m^3	97.9 µg/m^3	-
No. 1-Hour Mean > 200 µg/m^3	0	0	200 µg/m^3; no more than 18 exceedances
Annual Mean	17.1 µg/m^3	17.1 µg/m^3	40 µg/m^3
Data Capture	83.4%	94.4%	-

[a] Nitrogen oxides concentrations are provided in Appendix 1.

3.8 Table 4 shows the distribution of the 1-hour mean values into the different pollution bands (DAQI). All 1-hour mean nitrogen dioxide concentrations measured at both sites fell into the 'Low' pollution band during 2023.

[2] It is inevitable that a small amount of data will be "lost" in each year due to routine downtime for calibrations and site servicing. Data capture at ND was lower than at KGV due to the replacement of the analyser and power interruption.

Table 4: DAQI Bandings for Nitrogen Dioxide, 2023

Band	Index	LCA-ND	LCA-KGV
Very High [a]	10		
High [a]	9		
	8		
	7		
Moderate [a]	6		
	5		
	4		
Low [a]	3	4	
	2	189	72
	1	7,116	8,197

[a] Number of 1-hour values

3.9 Nitrogen dioxide concentrations for five monitoring sites across London in 2023 are summarised in Table 5. These sites range from central London (Camden) to outer London (Bexley), with two in east London (Newham). The measured annual mean concentrations at London City Airport (17.1 µg/m^3 at both LCA-ND and at LCA-KGV) were higher than those measured at both Bexley sites, and lower than those measured at Camden – Bloomsbury and Newham – Wren Close, and at Newham – Cam Road. This is broadly consistent with the location of London City Airport between the areas of high concentrations in central London and lower concentrations towards the outskirts. The maximum 1-hour mean concentration recorded at LCA-KGV is very similar to those measured at Bexley – Belvedere and Newham – Cam Road. While the maximum 1-hour mean concentration at LCA-ND is higher than all other London sites presented, it coincided with a period of elevated concentrations at all sites, suggesting that it was due to regional rather than local sources, as previously concluded in the 2023 Q2 report.

Table 5: Nitrogen Dioxide (NO_2) Data Summary for London Monitoring Sites, 2023[a]

	Background				Roadside
	Bexley *Belvedere*	Bexley *Slade Green*	Camden *Bloomsbury*	Newham *Wren Close*	Newham *Cam Road*
Max. 1-hr Mean (µg/m^3)	102.2	126.9	113.4	114.7	98.5
Period Mean (µg/m^3)	15.4	15.8	24.3	19.8	21.6
No. 1-hr >200 µg/m^3	0	0	0	0	0
Data Capture (%)	99.4	95.6	99.1	98.4	99.0

[a] Includes provisional data. Nitrogen oxides concentrations are provided in Appendix 1.

Particulate Matter PM_{10}

3.10 The PM_{10} results for the LCA-KGV automatic monitoring station are summarised in Table 6. Data capture was good (99.9%) at LCA-KGV during the period. The recorded annual mean concentration at LCA-KGV (13.0 µg/m^3) was well below the objective value of 40 µg/m^3. There were two measured exceedances of the 24-hour mean objective level of 50 µg/m^3, compared with the 35 exceedances allowed in a year. The 90th percentile of daily mean concentrations at LCA-KGV (21.5 µg/m^3) was below 50 µg/m^3.

Table 6: PM_{10} Data Summary for LCA-KGV, 2023

Metric	LCA-KGV	PM_{10} Objectives
	FIDAS	
Maximum 24-hour Mean	53.7 µg/m^3	-
No. 24-Hour Means >50 µg/m^3	2	50 µg/m^3; no more than 35 exceedances
90th Percentile	21.5 µg/m^3	50 µg/m^3
Annual Mean	13.0 µg/m^3	40 µg/m^3
Data Capture (%)	99.9	-

3.11 Table 7 includes the distribution of the 24-hour mean values into the different pollution bands (DAQI). Most of the 24-hour mean measured PM_{10} concentrations during 2023 fell into the 'Low' pollution band (99.5%), with two occasions falling into the 'Moderate' band. There were no 'High' or 'Very High' pollution events.

Table 7: DAQI Bandings for PM_{10}, 2023

Band	Index	LCA-KGV
Very High [a]	**10**	
High [a]	**9**	
	8	
	7	
Moderate [a]	**6**	
	5	
	4	2
Low [a]	**3**	9
	2	65
	1	289

[a] Number of 24-hour mean values falling within band.

3.12 PM_{10} concentrations for four sites across London in 2023 are summarised in Table 8. These sites range from central London (Camden) to outer London (Bexley), with two in east London

(Newham). The measured period mean concentration at LCA-KGV (12.4 µg/m^3) was lower than all these sites. There were no recorded 24-hour mean exceedances of 50 µg/m^3 at any of the other London sites. The 90th percentile of 24-hour means at LCA-KGV was lower than those recorded at all of the other sites.

Table 8: PM_{10} Data Summary of Background London Monitoring Sites, 2023[a]

	Background			Roadside
	Bexley ***Slade Green FIDAS***	**Camden** ***Bloomsbury***	**Newham** ***Wren Close***	**Newham** ***Cam Road***
Maximum 24-hr mean (µg/m^3)	48.1	45.4	48.9	50.0
Period Mean (µg/m^3)	13.7	13.5	15.0	15.5
No. 24-hr mean >50 µg/m^3	0	0	0	0
90th Percentile	23.3	23.1	22.1	24.8
Data Capture (%)	98.2	97.4	97.8	99.3

Particulate Matter $PM_{2.5}$

3.13 The 2023 $PM_{2.5}$ results for the LCA-KGV automatic monitoring station are summarised in Table 9. Data capture was 99.9% during the period. The recorded annual mean concentration was 8.2 µg/m^3, and below both the objective and the GLA target.

Table 9: $PM_{2.5}$ Data Summary for LCA-KGV, 2023

Pollutant	**FIDAS**
	$PM_{2.5}$
Period Mean	8.2 µg/m^3
Data Capture (%)	99.9

3.14 Table 10 includes the distribution of the 24-hour mean values into the different pollution bands (DAQI). The majority of 24-hour mean measured $PM_{2.5}$ concentrations fell into the 'Low' pollution band (99.2%) during 2023; there were three 24-hour mean values within the 'Moderate' pollution band (0.8%). There were no 'High' and 'Very High' pollution events.

Table 10: DAQI Bandings for $PM_{2.5}$, 2023

Band	Index	LCA-KGV
Very High [a]	**10**	
High [a]	**9**	
	8	
	7	
Moderate [a]	**6**	
	5	1
	4	2
Low [a]	**3**	11
	2	51
	1	300

[a] Number of 24-hour mean values falling within band.

3.15 $PM_{2.5}$ concentrations for four sites in London in 2023 are summarised in Table 11. The sites are the same as those presented for PM_{10} concentrations. The measured period mean concentration at London City Airport (8.2 µg/m^3) was higher than those measured at Camden – Bloomsbury and Newham – Cam Road, but lower than those measured at Bexley – Slade Green and Newham – Wren Close.

Table 11: $PM_{2.5}$ Data Summary of London Monitoring Sites, 2023

	Background			Roadside
	Bexley ***Slade Green FIDAS***	**Camden** ***Bloomsbury***	**Newham** ***Wren Close***	**Newham** ***Cam Road***
Period Mean (µg/m^3)	8.5	7.8	9.1	8.0
Data Capture (%)	95.2	97.4	98.6	98.2

Nitrogen Dioxide Diffusion Tube Network

3.16 London City Airport also operates a network of passive diffusion tube samplers for nitrogen dioxide. The intent of this network is to establish the wider spatial pattern of nitrogen dioxide concentrations in the area surrounding the Airport. The locations of the monitoring sites are shown in Figure 2, and are described in Table 9; grid references and the monthly mean data are provided in Appendix A2. The diffusion tubes are exposed for approximately 4-week intervals. They are supplied and analysed by Gradko International Ltd. and are prepared using the 20% TEA in water method.

3.17 The diffusion tubes record monthly mean concentrations, which have been averaged to give the annual mean. The results cannot, therefore, be directly compared with the 1-hour mean objective. However, measurements across the UK have shown that the 1-hour mean nitrogen dioxide objective is unlikely to be exceeded where the annual mean concentration is below 60 $\mu g/m^3$ (Defra, 2022a).

Table 9: Description of Diffusion Tube Monitoring Sites [a]

Location	Site ID
Lamp post at top of Parker Street, adjacent to housing	LCA 01
Lamp post on Camel Road, adjacent to nearest property on Hartmann Street	LCA 02
Lamp post at waterfront to east end of Newham Dockside	LCA 04
Lamp post on Straight Road, at kerbside	LCA 05
Lamp post on pedestrian walkway adjacent to nearest housing at Gallions Way	LCA 06
Landing Lights	LCA 07
Jet Centre – airside	LCA 10
Lamp post at waterfront, eastern end of the University of East London	LCA 11
ILS, to north of runway and south of Royal Albert Dock	LCA 12
Lamp post at north west corner of Newham Dockside	LCA 13
Lamp post on waterfront at western end of Newham Dockside	LCA 14
Lamp post at kerbside (approx 1 m) of Royal Albert Way	LCA 15
Newham Dockside analyser (duplicate tubes)	LCA 18
Lamp post adjacent to roundabout, near to access road in Silvertown Quay. Approx. 1 metre from kerbside of main road.	LCA 20
Lamp post on Brixham Street	LCA 21
King George V House analyser (triplicate tubes)	LCA 22

[a] LCA-17 was discontinued from January 2012, as the lamppost on which diffusion tubes were deployed had been removed. LCA-16 and LCA-19 were discontinued from January 2017, as the land on which the sites were located had been vacated for construction works. LCA-03 has been discontinued from April 2018 due to ongoing issues with access. LCA-20 was initiated at the start of April 2018. LCA-08 was discontinued in February 2021 as the lamppost on which diffusion tube was deployed had been removed. The site has been relocated to a nearby lamppost (LCA-21) and became operational in April 2021. The previous triplicate sites located at LCA-CAH analyser have been relocated to KGV House (LCA 22).

3.18 It is important to note that not all of these monitoring sites represent relevant public exposure for annual mean concentrations of nitrogen dioxide; therefore, the objectives are not strictly applicable at all of these sites. For instance, the sites at Landing Lights (LCA 07), the Jet Centre (LCA 10) and the ILS (LCA 12) are located on land that is not generally accessible by the public, or is owned by the Airport. The sites at LCA 04 (at the waterfront of Newham Dockside), LCA 11 (at the waterfront of the University of East London) and LCA 13, 14 and 15 (in the vicinity of Newham Dockside and Royal Albert Way) and LCA 20 would also not represent relevant exposure for

annual mean concentrations according to the criteria defined in LLAQM.TG(22)[3], but are relevant for the 1-hour mean objective. These sites have been included in the study to better understand the spatial pattern of nitrogen dioxide concentrations around the Airport.

3.19 Diffusion tubes are known to show systematic bias in relation to automatic (reference) monitors. For this reason, a co-location study has been carried out with triplicate tubes exposed alongside the inlet to the automatic monitor at LCA-KGV, and with duplicate tubes exposed in close proximity to the inlet of the LCA-ND automatic monitor. Comparison of the matched period results shows that the diffusion tubes were over-reading by an average of 48.5%. An adjustment factor of 0.673 has therefore been applied to all diffusion tube results to ensure that they give the best representation of true concentrations (see Appendix 3). The results from the triplicate tubes at LCA-KGV and the duplicate tubes at LCA-ND indicate overall "good" precision (±4 and ±3 respectively) in 2023 (Defra, 2022a).

3.20 The bias-adjusted results are summarised in Table 10 and are also shown in Figure 3. The annual mean objective of 40 µg/m^3 was achieved at all monitoring locations during 2023. All measured annual mean nitrogen dioxide concentrations were well below 60 µg/m^3, and it is therefore unlikely that the 1-hour mean objective was exceeded at any location.

[3] Defra Technical Guidance Note LLAQM.TG(22) suggests that in the case of the annual mean objective, relevant locations should not include kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term.

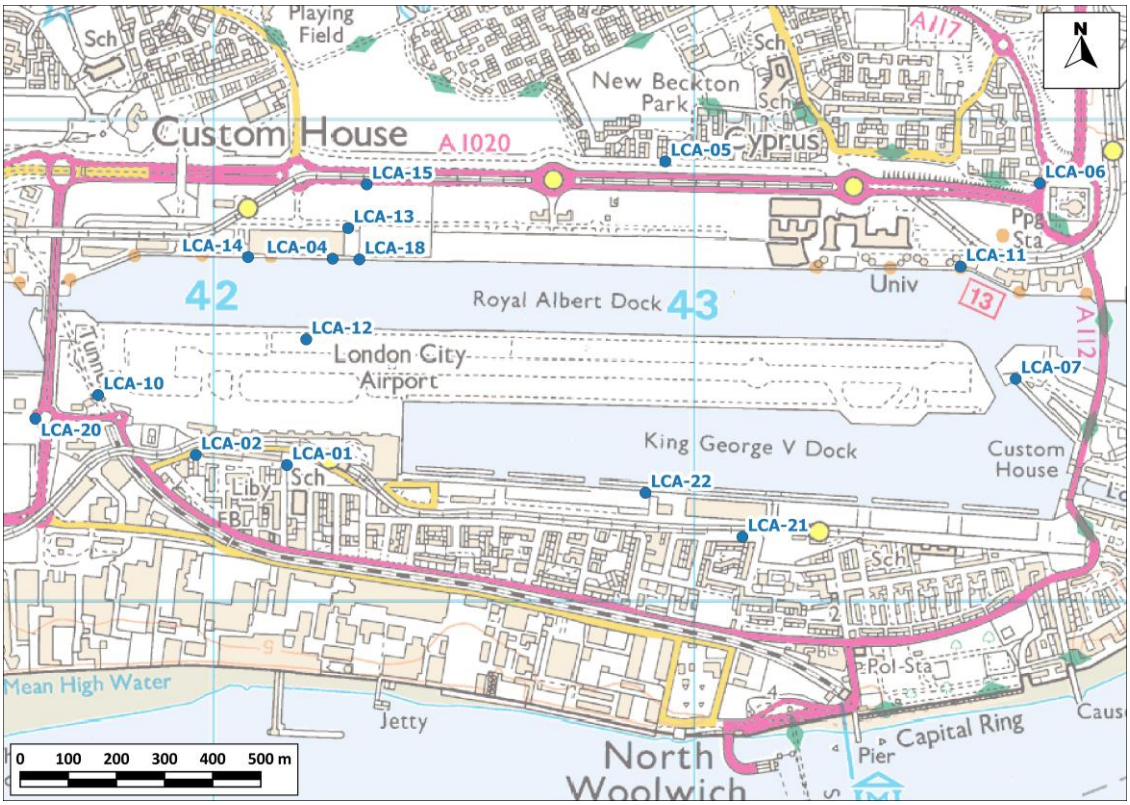

Figure 2: Diffusion Tube Monitoring Locations © Crown copyright and database right 2024. Ordnance Survey licence number 100046099.

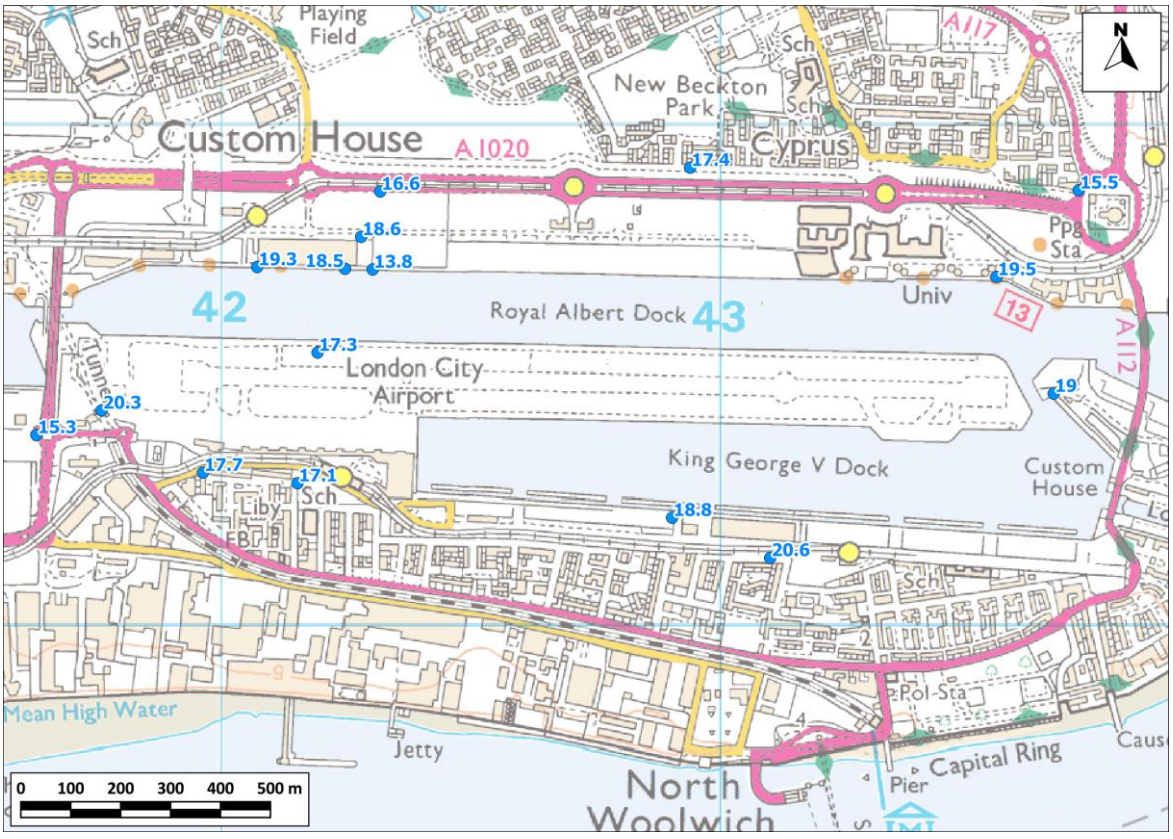

Figure 3: Nitrogen Dioxide Diffusion Tube Results 2023 (µg/m^3) © Crown copyright and database right 2024. Ordnance Survey licence number 100046099.

Table 10: Diffusion Tube Data Summary for London City Airport, 2023 (Adjusted for Bias)

Site ID	Adjusted Value (µg/m^3) [a]
LCA 01	17.1
LCA 02	17.7
LCA 04	18.5
LCA 05	17.4
LCA 06	15.5
LCA 07	19.0
LCA 10	20.3
LCA 11	19.5
LCA 12	17.3
LCA 13	18.6
LCA 14	19.3
LCA 15	16.6
LCA 18	15.3
LCA 20	20.6
LCA 21	13.8
LCA 22	18.8

[a] Data have been adjusted using a local bias adjustment factor for 2023 of 0.673. The co-location studies are carried out at LCA-KGV using triplicate tubes and at LCA-ND with duplicate tubes located at the automatic monitor.

4 Data Analyses

4.1 This section provides analyses of the data, including time series, trends and source contributions.

Time Series

4.2 The measured 1-hour mean nitrogen dioxide concentrations at the Airport sites (LCA-KGV and LCA-ND), and other sites in London (Bexley - Belvedere and Slade Green, Camden - Bloomsbury, Newham - Wren Close and Cam Road), are shown as time series in Figures 4 and 5 respectively. The concentrations over the year generally show similar patterns at all monitoring sites. The concurrence of periods with elevated concentrations at all sites suggests that these episodes were due to regional changes in concentrations. The only exception to this is the high concentration measured at LCA-ND on the 29th June, which was not recorded at other London monitoring sites. It is therefore likely this was due to a localised, but unknown and short-lived source.

4.3 The measured daily mean PM_{10} concentrations at LCA-KGV, and at other sites in London (Bexley - Slade Green, Camden - Bloomsbury, Newham - Wren Close and Cam Road), are shown in Figures 6 and 7 respectively. Once again, the similarity in peaks between the Airport sites and other London sites suggests that periods of high pollution were principally due to regional changes in concentrations.

4.4 As with PM_{10}, the concurrence of many periods of elevated $PM_{2.5}$ concentrations at all sites (see Figures 8 and 9) suggests that these episodes were due to regional rather than local sources and that changing weather conditions across the region affected the dispersion and dilution of pollutants.

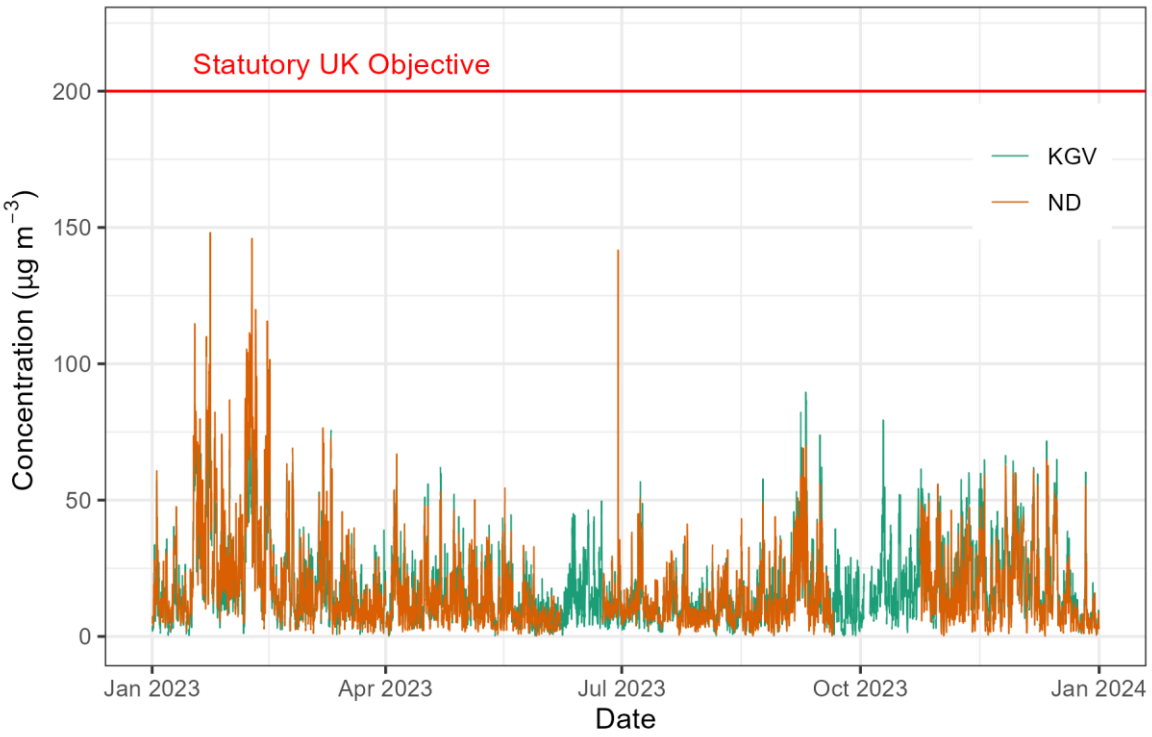

Figure 4: 1-Hour Mean Nitrogen Dioxide Concentrations at London City Airport, 2023

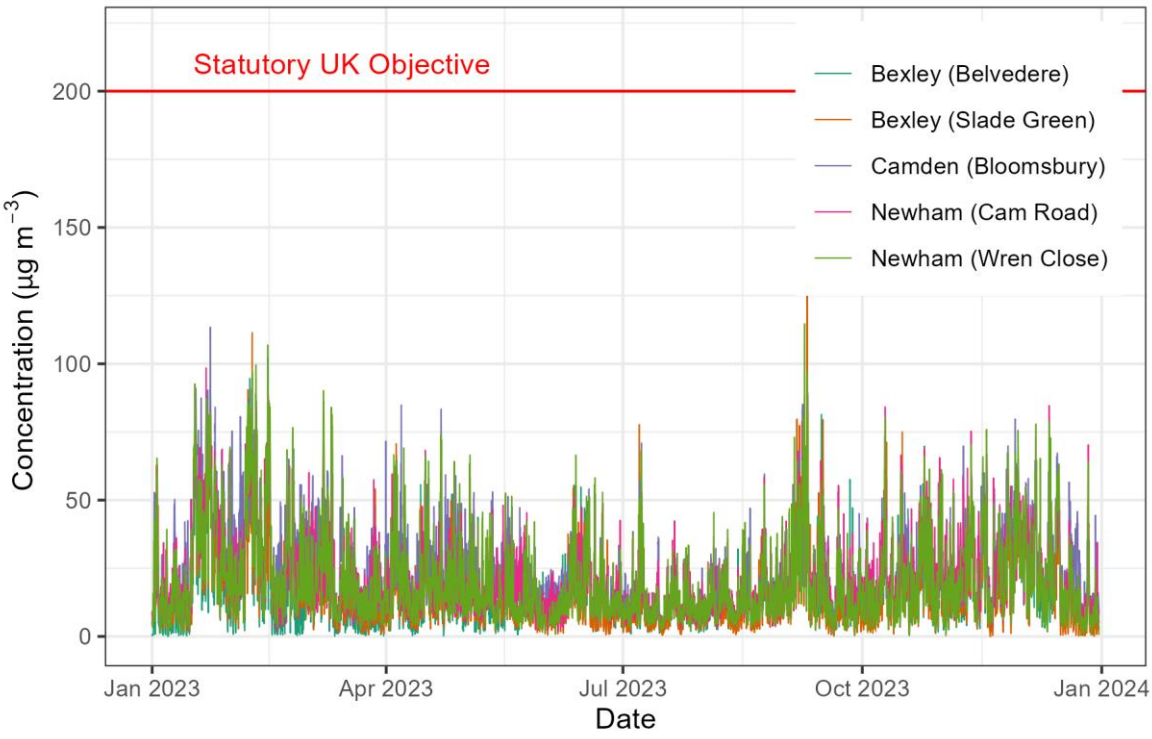

Figure 5: 1-Hour Mean Nitrogen Dioxide Concentrations at London Monitoring Sites, 2023

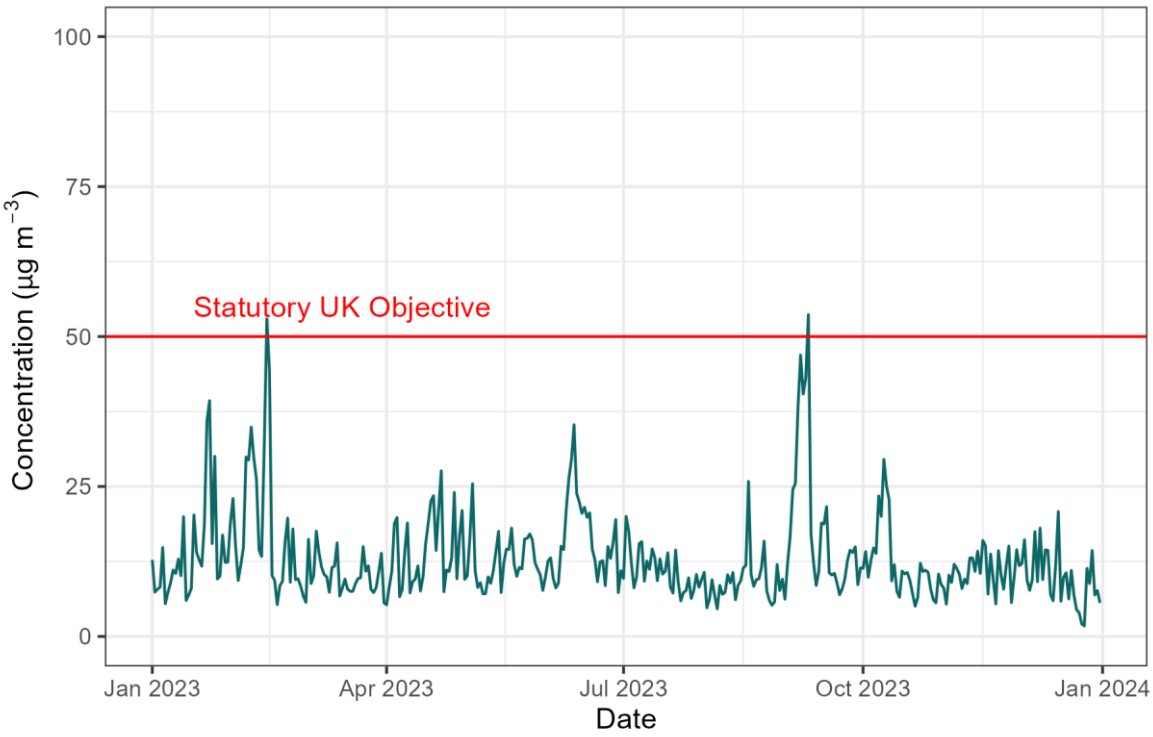

Figure 6: Daily Mean PM_{10} Concentrations at London City Airport (LCA-KGV), 2023

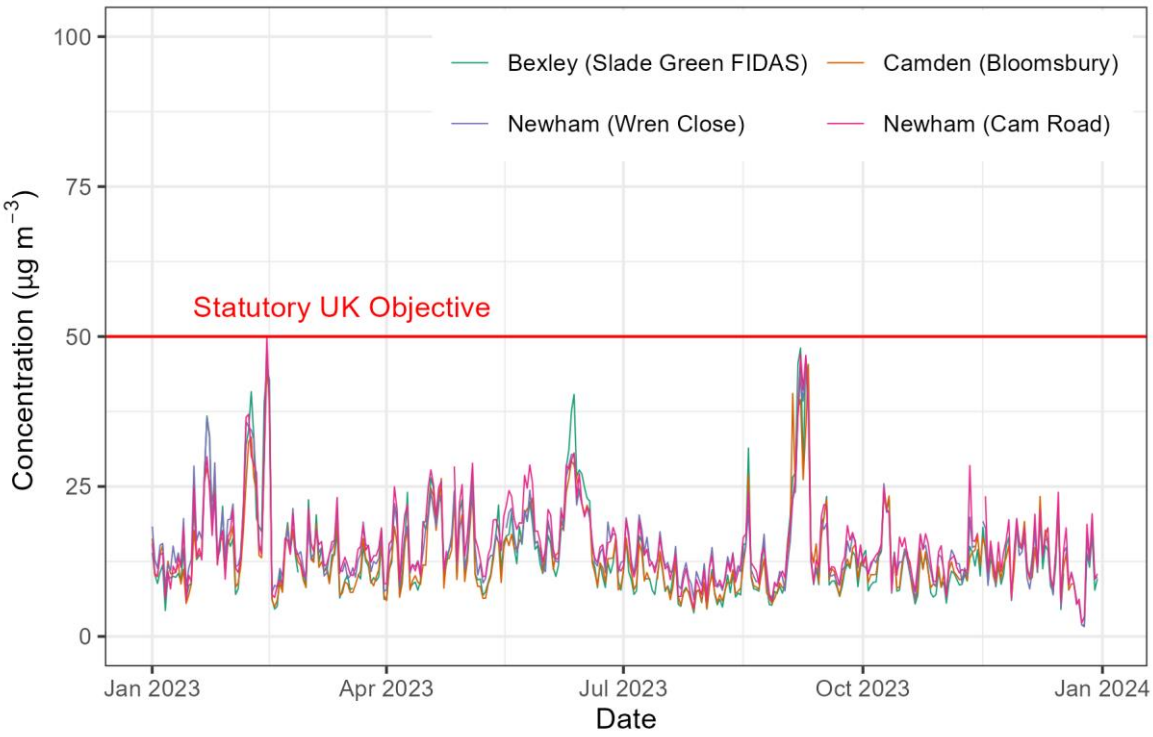

Figure 7: Daily Mean PM_{10} Concentrations at London Monitoring Sites, 2023

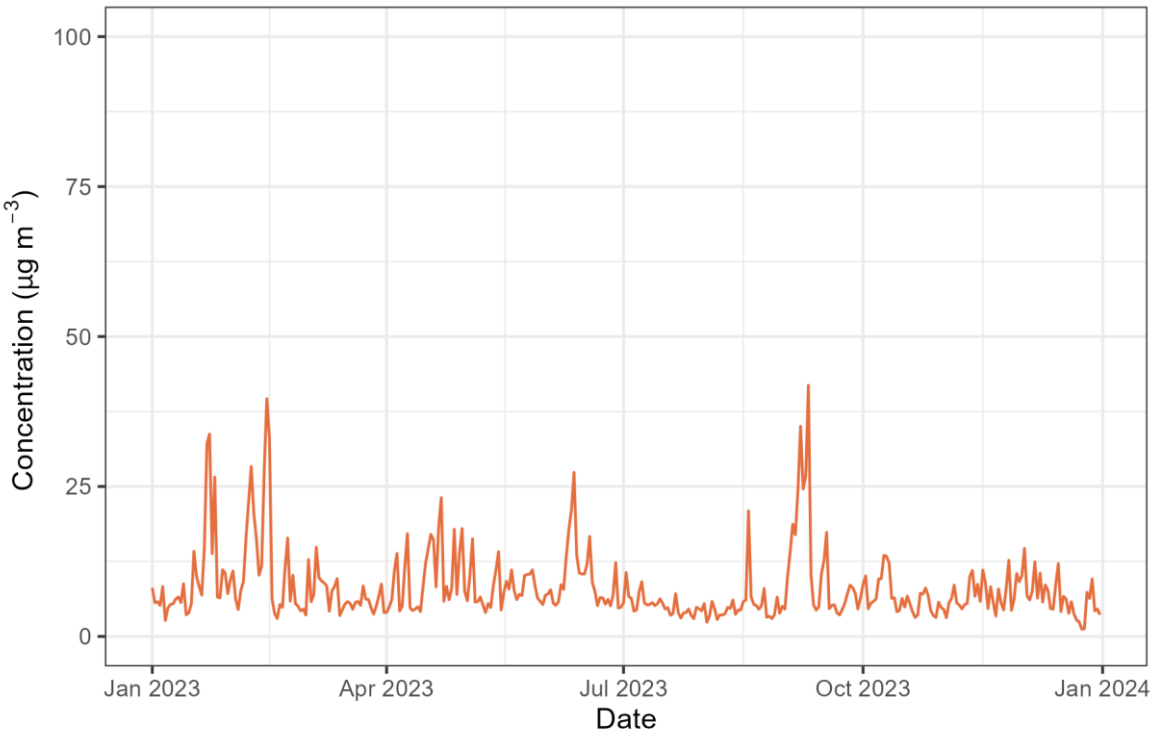

Figure 8: Daily Mean $PM_{2.5}$ Concentrations at London City Airport (LCA-KGV), 2023

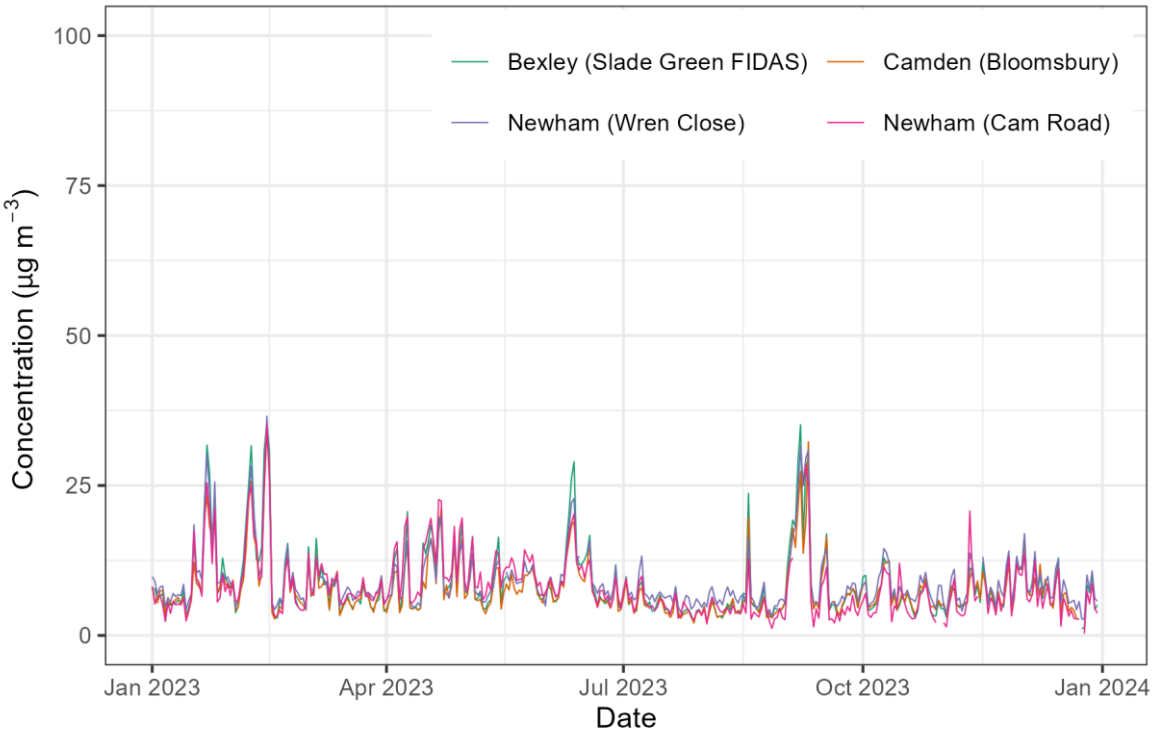

Figure 9: Daily Mean $PM_{2.5}$ Concentrations at London Monitoring Sites, 2023

Trends in Pollutant Concentrations

4.5 Automatic monitoring of pollutant concentrations has been in operation at London City Airport since 2006. The monitoring station previously sited on the rooftop of City Aviation House (LCA-CAH) measured nitrogen dioxide, NOx and PM_{10} concentrations until it was decommissioned in May 2022. The LCA-ND site has been in operation since 2011 measuring nitrogen dioxide and NOx. It is therefore appropriate to examine whether there are any trends in the measured pollutant concentrations over time at these sites. The LCA-KGV site has been operational since 2019 ($PM_{2.5}$/PM_{10}) and July 2022 (NOx/NO_2), and while included in this section for completeness, trends from such a limited time period (<5 years) should be treated cautiously.

4.6 Figure 10 shows the trends in measured annual mean nitrogen dioxide concentrations at LCA-CAH, LCA-ND, LCA-KGV, and at the five other monitoring locations identified for the regional evaluation of pollution episodes. From a visual examination of Figure 10, there appears to be a general downward trend at all sites from 2007 to 2019, followed by an acceleration of the downward trend in 2020, likely due to Covid-19 lockdown restrictions.

4.7 Because of the interest in trends, a more detailed analysis has been carried out, the results from which are provided in Appendix 5. In summary, there is a statistically significant downward trend at all the monitoring sites (excluding LCA-KGV due to the limited monitoring period) for both nitrogen dioxide and nitrogen oxides (NOx), including at LCA-CAH and LCA-ND.

4.8 The trends in annual mean PM_{10} concentrations are shown in Figure 11 for the LCA-KGV site (2019 onwards), LCA-CAH site (2006-2022), and other London monitoring locations. There is generally a downward trend between 2006 and 2023; concentrations in 2006 were all above 20 $\mu g/m^3$, whereas concentrations in 2023 were all lower than 20 $\mu g/m^3$.

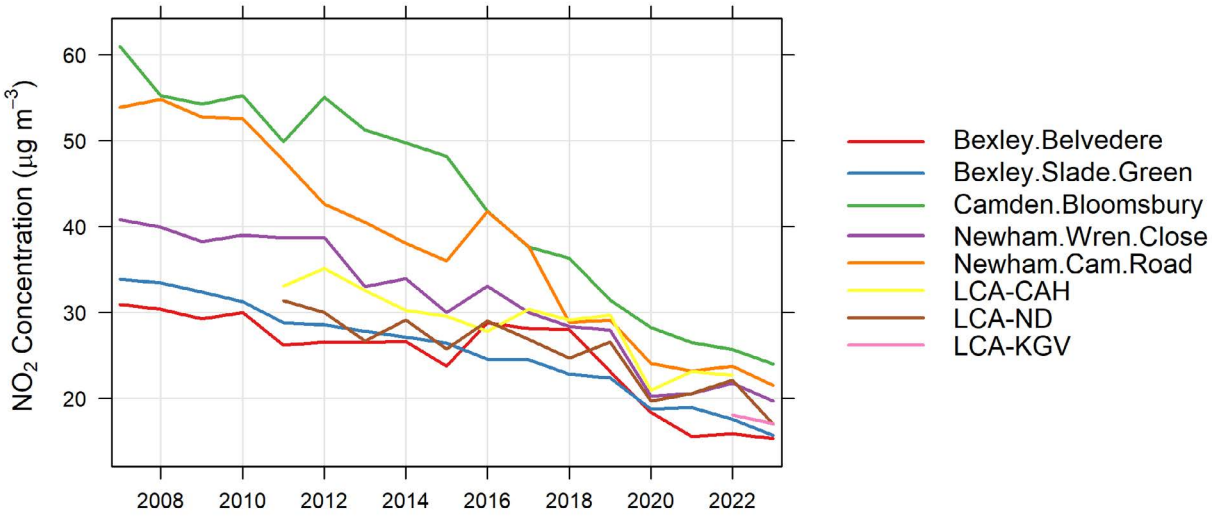

Figure 10: Annual Mean Nitrogen Dioxide Concentrations, 2007 – 2023 (µg/m^3)

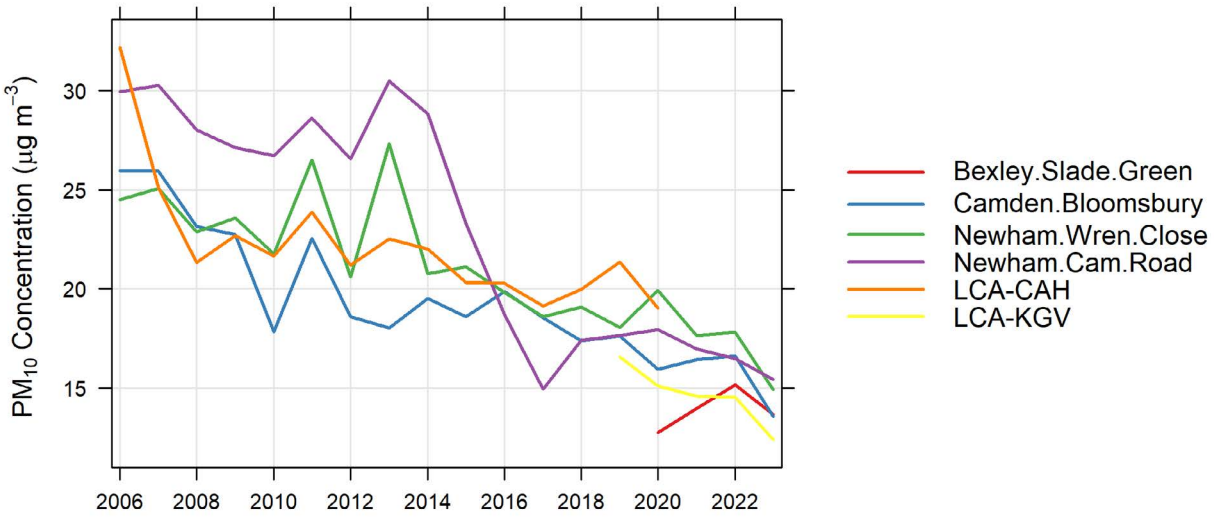

Figure 11: Annual Mean PM_{10} Concentrations, 2006 – 2023 (µg/m^3)

Bivariate Pollution Roses

4.9 Pollution roses are a useful technique for exploring the influence of different sources of air pollution at a monitoring site. Bivariate pollution roses have been prepared using the "Openair" software[4]. These bivariate roses process average pollution concentration data by both wind direction and wind speed. They provide a powerful tool in identifying source contributions to measured concentrations at monitoring sites. The concentrations are shown by colour shading, with the distance from the centre point representing increasing wind speed.

4.10 It is known from both modelling studies and the analysis of empirical data that emissions from different source types behave differently in low and high wind speed conditions. For emissions from ground-level sources (such as road traffic), concentrations are highest during low wind speeds, and decrease rapidly with increasing wind speed (due to greater dilution and dispersion). In contrast, emissions released from elevated (e.g. chimney) sources, give rise to higher concentrations at higher wind speeds, as the plume is more likely to come down to ground close to the source. Emissions from the buoyant plumes of jet aircraft engines tend to behave in a similar manner to elevated sources. Carslaw *et al* (2006) showed how these bivariate plots could be used to identify the contribution of aircraft emissions to measured concentrations at Heathrow Airport.

4.11 Figure 12 shows bivariate pollution roses for NOx concentrations in 2023 at the LCA-ND and LCA-KGV sites, using wind data from the meteorological station at London City Airport. During low wind speeds, dispersion is reduced and concentrations from ground-level sources are higher.

4.12 The pattern at all monitoring sites is that the highest NOx concentrations occur during low wind speeds (i.e. towards the centre of the rose), indicating that the highest concentrations are associated with ground-level source releases. These higher concentrations are not associated with any particular wind direction. There is also some indication that emissions from the apron area are making a small contribution at all sites, with these contributions being associated with moderate wind speeds. The association with higher wind speeds is suggestive of emissions from an elevated, buoyant source reflecting emissions from aircraft engines.

4.13 It is concluded that airport sources do not make a significant contribution to local NOx concentrations

[4] Carslaw, D. C., and K. Ropkins. 2012. "openair — An R package for air quality data analysis." Environmental Modelling & Software 27–28 (0): 52–61. https://doi.org/10.1016/j.envsoft.2011.09.008.

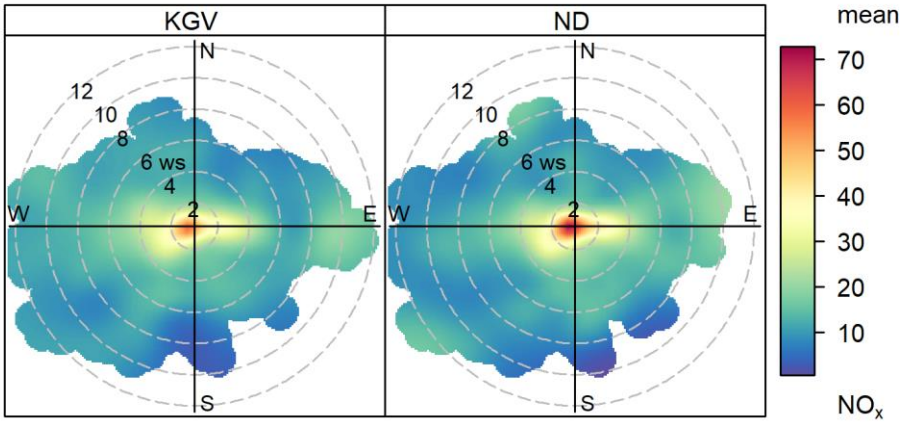

Figure 12: Bivariate Pollution Roses at LCA-KGV and LCA-ND Sites, 2023 (NO_x, µg/m^3)

5 References

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6 Glossary

Exceedance	A period of time where the concentration of a pollutant is greater than the appropriate air quality objective.
FDMS	Filter Dynamics Monitoring System.
LAQN	London Air Quality Network.
LCA	London City Airport
LCA-CAH	London City Airport – City Aviation House monitoring site
LCA-KGV	London City Airport – King George V House monitoring site
LCA-ND	London City Airport – Newham Dockside monitoring site
$\mu g/m^3$	Microgrammes per cubic metre.
NO_2	Nitrogen dioxide.
NO_x	Nitrogen oxides (taken to be NO_2 + NO).
NO	Nitric oxide.
Objectives	A nationally defined set of health-based concentrations for nine pollutants, seven of which are incorporated in Regulations, setting out the extent to which the standards should be achieved by a defined date, taking into account costs, benefits, feasibility and practicality. There are also vegetation-based objectives for sulphur dioxide and nitrogen oxides.
PM_{10}	Small airborne particles, more specifically particulate matter less than 10 micrometers in aerodynamic diameter.
$PM_{2.5}$	Small airborne particles, more specifically particulate matter less than 2.5 micrometers in aerodynamic diameter.
Standards	A nationally defined set of concentrations for nine pollutants below which health effects do not occur or are minimal.
TEA	Triethanolamine – absorbent for nitrogen dioxide used in diffusion tubes.
TEOM	Tapered Element Oscillating Microbalance.
VCM	Volatile Correction Model.

A1 Nitrogen Oxides Results

A1.1 Nitrogen oxides (NO_x) concentrations, which are essentially the sum of nitrogen dioxide and nitric oxide, are presented in Table A1.1 for the automatic monitoring stations at London City Airport and for five sites across London in Table A1.2. There are no relevant air quality criteria for nitrogen oxides in an urban area. Nitrogen oxides concentrations are included here for completeness, and because they are relevant for air quality modelling.

Table A1.1: Nitrogen Oxides (NO_x) Data Summary for LCA-KGV and LCA-ND, 2023

Site	LCA-ND	LCA-KGV
Maximum 1-Hour Mean	520.2 µg/m^3	441.0 µg/m^3
Annual Mean	24.5 µg/m^3	23.3 µg/m^3
Data Capture	83.4 %	94.4 %

Table A1.2: Nitrogen Oxides (NO_x) Data Summary for London Monitoring Sites, 2023

	Bexley *Belvedere*	Bexley *Slade Green*	Camden *Bloomsbury*	Newham *Wren Close*	Newham *Cam Road*
Maximum 1-Hour Mean (µg/m^3)	366.3	421.8	549.8	336.3	293.9
Period Mean (µg/m^3)	20.4	22.3	30.5	25.8	31.4
Data Capture %	99.4	95.1	99.1	98.4	99.0

A2 Diffusion Tube Data

A2.1 Raw monthly average diffusion tube data, along with the location details and monitoring periods, are presented in Table A2.1.

Table A2.1: Raw Monthly Diffusion Tube Data for 2023, Not Bias Adjusted (µg/m^3)

Site ID	Grid ref	09/01/23 to 06/02/23	06/02/23 to 07/03/23	07/03/22 to 03/04/23	03/04/23 to 02/05/23	02/05/23 to 05/06/23	05/06/23 to 03/07/23	03/07/23 to 31/07/23	31/07/23 to 05/09/23	05/09/23 to 02/10/23	02/10/23 to 30/10/23	30/10/23 to 04/12/23	04/12/23 to 08/01/24	Unadjusted Annual Mean	Data Capture (%)
LCA 01	542154, 180288	36.8	34.3	-	27.2	23.0	21.0	16.3	19.0	23.8	25.8	28.9	24.5	25.4	91.7
LCA 02	541965, 180299	36.1	34.6	22.9	25.7	22.4	24.8	19.6	21.3	25.7	28.5	27.9	27.5	26.3	100.0
LCA 04	542271, 180708	38.8	36.6	26.7	24.7	16.8	21.4	-	20.3	29.6	32.6	31.5	27.4	27.5	91.7
LCA 05	542847, 180914	29.0	57.0	22.8	-	16.8	20.3	-	16.9	25.3	25.6	26.7	21.6	25.8	83.3
LCA 06	543712, 180868	29.7	31.7	22.6	23.6	20.6	23.2	16.3	16.9	25.3	23.1	22.0	-	23.0	91.7
LCA 07	543662, 180460	43.2	38.7	23.0	25.7	18.8	22.5	23.5	22.3	27.3	31.5	35.6	27.7	28.2	100.0
LCA 10	541758, 180428	41.6	43.9	25.1	30.5	26.0	32.0	22.4	24.2	31.9	33.1	31.1	23.2	30.1	100.0
LCA 11	543549, 180693	44.2	41.7	28.2	26.3	20.9	24.2	21.2	21.9	26.7	32.3	32.7	-	28.9	91.7
LCA 12	542192, 180561	37.3	38.4	21.7	23.7	16.3	22.9	19.2	18.8	28.7	28.9	29.7	24.8	25.6	100.0
LCA 13	542280, 180769	34.7	39.0	26.0	24.4	-	22.6	17.4	19.6	27.3	30.5	31.4	30.5	27.6	91.7
LCA 14	542070, 180712	40.4	38.0	28.9	-	19.5	25.8	23.6	24.0	32.3	33.8	-	23.9	28.6	83.3
LCA 15	542316, 180862	33.0	35.6	22.2	24.9	19.1	21.6	16.7	19.8	27.1	27.1	29.4	21.9	24.7	100.0
LCA 18	542303, 180707	33.1	-	22.6	23.2	15.0	21.6	16.7	18.4	27.0	26.1	25.8	22.1	22.7	91.7
		34.6	-	22.1	25.4	17.2	19.9	16.7	17.9	26.3	25.1	24.3	22.4	22.7	91.7
LCA 20	541632, 180378	33.2	38.2	29.0	33.7	-	38.0	-	24.1	34.3	27.2	31.1	21.3	30.6	83.3
LCA 21	543100, 180132	33.8	31.2	19.4	18.1	14.3	18.1	16.2	16.0	20.6	21.0	-	19.5	20.5	91.7
LCA 22	542902, 180212	36.3	40.1	24.8	26.5	24.1	24.9	19.4	21.5	29.7	31.12	32.57	24.57	27.8	100.0
		38.8	38.7	24.2	25.1	24.3	27.1	20.9	21.7	29.9	31.3	33.34	25.98	28.3	100.0
		40.1	35.6	26.6	26.9	25.4	24.6	21.5	21.2	29.3	28.97	30.29	24.54	27.7	100.0

A3 Bias Adjustment Factor for Diffusion Tubes

A3.1 Diffusion tubes are known to exhibit bias when compared to results from automatic analysers. Therefore, diffusion tube results need to be adjusted to account for this bias. One of the main factors influencing diffusion tube performance is thought to be the laboratory that supplies and analyses the tubes. The diffusion tubes exposed at London City Airport are supplied and analysed by Gradko International Ltd. (20% TEA in water).

A3.2 In order to determine the bias exhibited by these tubes, a study was carried out using triplicated tubes at LCA-KGV and duplicate tubes at LCA-ND. All diffusion tube data presented in this report have been adjusted using the overall factor calculated from the data presented in Table A3.1.

A3.3 The accuracy of the bias adjustment factor is limited by the exposure periods of the co-located diffusion tubes and time the corresponding automatic monitors were operating for. At LCA-ND there was only one month (Period 2) of missing diffusion tube data and the automatic monitor had a good level of data capture for 2023 (83.4%). At LCA-KGV there were no months of missing diffusion tube data and the automatic monitor had a good level of data capture (94.4%). A comparison between the 2023 bias adjustment factor calculated and those from previous years (see Table A3.2) shows the 2023 factor is numerically smaller (which adjusts concentrations by a greater degree) than in previous years.

Table A3.1: Results of Diffusion Tube and Continuous Monitor Co-location Study in 2023

	Diffusion Tube [a]	Automatic [b]	Adjustment Factor
LCA-ND	22.98	17.01	0.740
LCA-KGV	27.94	17.12	0.613
Overall Factor [c]			**0.673**

[a] Diffusion tubes were exposed for the period between 9th January 2023 to 8th January 2024.

[b] The automatic period corresponds with the diffusion tube period.

[c] The overall factor has been determined using orthogonal regression.

A3.4 Table A3.2 presents the bias adjustment factors applied to the data for the last fifteen years.

Table A3.2: Previous Bias Adjustment Factors

Year	Factor
2008	0.786
2009	0.717
2010	0.801
2011	0.738
2012	0.744
2013	0.771
2014	0.832
2015	0.858
2016	0.762
2017	0.724
2018	0.784
2019	0.796
2020	0.783
2021	0.846
2022	0.873
2023	0.673

A4 Diffusion Tube Precision

A4.1 Diffusion tube precision describes the ability of a measurement to be consistently reproduced, i.e., how similar the results of duplicate or triplicate tubes are to each other. It is an indication of how carefully the tubes have been handled in either the laboratory and/or the field. Tube precision is separated into two categories 'Good' or 'Poor' as follows: tubes are considered to have **'Good'** precision where the coefficient of variation (CV) of duplicate or triplicate diffusion tubes for eight or more periods during the year is less than 20%, and the average CV of all monitoring periods is less than 10%. Tubes are considered to have **'Poor'** precision where the CV of four or more periods is greater than 20% and/or the average CV is greater than 10%.

A4.2 Table A4.1 and Table A4.2 shows that monitoring at LCA-ND and LCA-KGV there was 'Good' precision at every period of recorded data across the year (Defra, 2011). The precision is consistent with the performance of 20% TEA in water tubes supplied by Gradko International in other co-location studies (Defra, 2024c).

Table A4.1: Precision of Duplicate Diffusion Tubes, LCA-ND

Period	Start Date	End Date	Tube 1	Tube 2	Mean	Standard Deviation	CV	Tube Precision
1	09/01/2023	06/02/2023	33.1	34.6	34	1.0	3	9.3
2	06/02/2023	07/03/2023	-	-	-	-	-	-
3	07/03/2023	03/04/2023	22.6	22.1	22	0.3	1	3.0
4	03/04/2023	02/05/2023	23.2	25.4	24	1.5	6	13.7
5	02/05/2023	05/06/2023	15.0	17.2	16	1.6	10	14.3
6	05/06/2023	03/07/2023	21.6	19.9	21	1.2	6	10.5
7	03/07/2023	31/07/2023	16.7	16.7	17	0.0	0	0.0
8	31/07/2023	05/09/2023	18.4	17.9	18	0.4	2	3.3
9	05/09/2023	02/10/2023	27.0	26.3	27	0.5	2	4.3
10	02/10/2023	30/10/2023	26.1	25.1	26	0.7	3	6.2
11	30/10/2023	04/12/2023	25.8	24.3	25	1.0	4	9.1
12	04/12/2023	08/01/2024	22.1	22.4	22	0.2	1	1.9
Average CV							**3**	**-**

Table A4.2: Precision of Triplicate Diffusion Tubes, LCA-KGV

Period	Start Date	End Date	Tube 1	Tube 2	Tube 3	Mean	Standard Deviation	CV	Tube Precision
1	09/01/2023	06/02/2023	36.3	38.8	40.1	38	1.9	5	4.8
2	06/02/2023	07/03/2023	40.1	38.7	35.6	38	2.3	6	5.8
3	07/03/2023	03/04/2023	24.8	24.2	26.6	25	1.3	5	3.1
4	03/04/2023	02/05/2023	26.5	25.1	26.9	26	1.0	4	2.4
5	02/05/2023	05/06/2023	24.1	24.3	25.4	25	0.7	3	1.7
6	05/06/2023	03/07/2023	24.9	27.1	24.6	26	1.4	5	3.4
7	03/07/2023	31/07/2023	19.4	20.9	21.5	21	1.1	5	2.6
8	31/07/2023	05/09/2023	21.5	21.7	21.2	21	0.2	1	0.6
9	05/09/2023	02/10/2023	29.7	29.9	29.3	30	0.3	1	0.8
10	02/10/2023	30/10/2023	31.1	31.3	29.0	30	1.3	4	3.2
11	30/10/2023	04/12/2023	32.6	33.3	30.3	32	1.6	5	3.9
12	04/12/2023	08/01/2024	24.6	26.0	24.5	25	0.8	3	2.0
Average CV								**4**	**-**

A5 Detailed Trend Analysis

Nitrogen Dioxide

A5.1 Figure A6.1 shows the smooth-trend analyses of monthly mean nitrogen dioxide concentrations for LCA-CAH, LCA-ND, LCA-KGV and the other nearby monitoring sites in the wider London area, over the period 2007 to 2023. As noted in Paragraph 4.5, interpretation of trends at the LCA-KGV monitoring site should be cautious due to the relatively limited time period of monitoring compared to the other sites studied.

A5.2 A Theil-Sen analysis has been applied to the data to identify statistically significant trends and slopes, and the results are described in Table A6.1. There is a statistically significant downward trend in nitrogen dioxide concentrations at LCA-CAH, LCA-ND, and all of the wider London monitoring sites. It is unsurprising that no statistically significant trend was observed at LCA-KGV given the limited monitoring period.

Table A6.1: Theil-Sen Analysis, NO_2 Concentrations at LCA-CAH, LCA-ND, LCA-KGV and Other London Monitoring Sites, 2007 to 2023

Monitoring Site	Theil-Sen Analysis [a]	Statistically Significant Trend?
Bexley - Belvedere	-0.91 [-1.17, -0.67]	**Yes**
Bexley – Slade Green	-1.10 [-1.29, -0.90]	**Yes**
Camden - Bloomsbury	-2.43 [-2.72, -2.16]	**Yes**
Newham – Wren Close	-1.45 [-1.72, -1.19]	**Yes**
Newham – Cam Road	-2.20 [-2.39, -1.90]	**Yes**
LCA-CAH [b]	-0.93 [-1.21, -0.65]	**Yes**
LCA-ND [c]	-0.99 [-1.35, -0.60]	**Yes**
LCA-KGV [d]	0.21 [-9.85, 5.98]	**No**

[a] The first value is the slope. The number in brackets is the upper and lower 95th percentile confidence interval.

[b] Analysis carried out for 2007 to 2022.

[c] Analysis carried out for 2011 to 2023.

[d] Analysis carried out for 2022 to 2023.

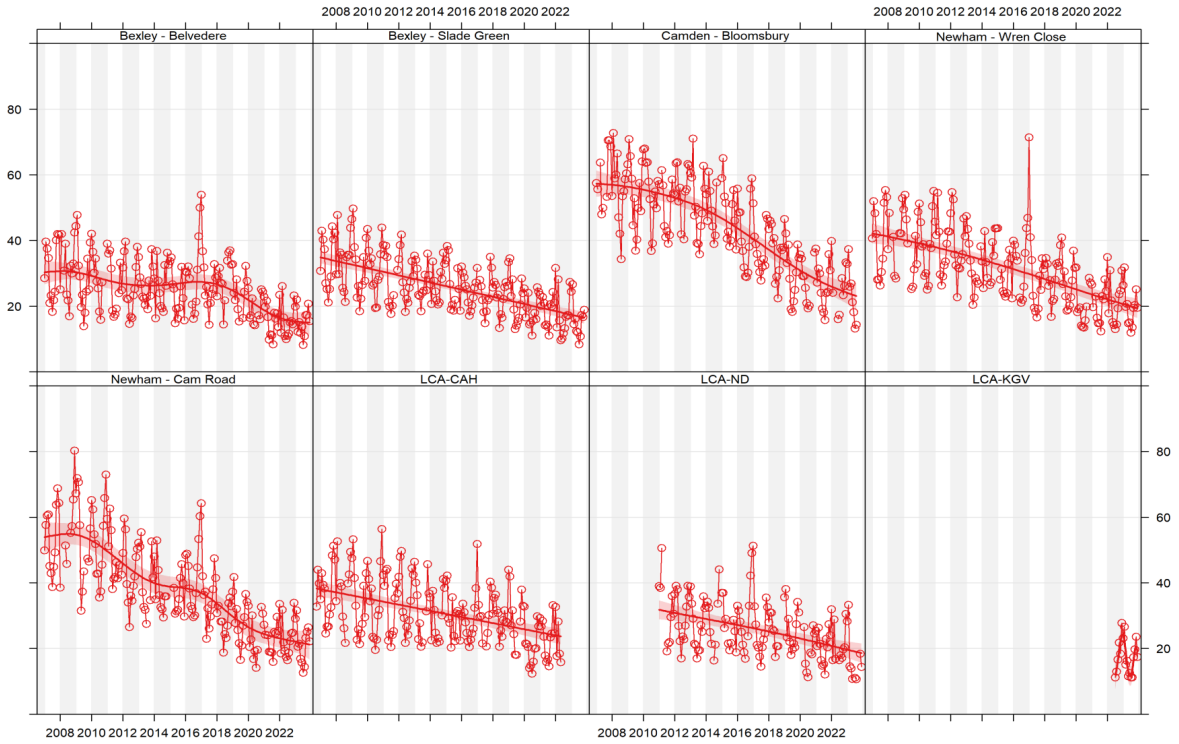

Figure A6.1: Smooth Trend Analysis, Monthly NO_2 Concentrations at LCA-CAH, LCA-ND, LCA-KGV and Other Monitoring Sites, 2007 – 2023

Nitrogen Oxides (NO_x)

A5.3 Figure A6.2 shows the smooth trend analysis of monthly mean NO_x concentrations for LCA-CAH, LCA-ND, LCA-KGV and other monitoring sites in the wider London area for the period 2007 to 2023.

A5.4 The Theil-Sen analysis, shown in Table A6.2, indicates a statistically significant downward trend in NOx concentrations at LCA-CAH, LCA-ND, and all the other London monitoring sites. It is unsurprising that no statistically significant trend was observed at LCA-KGV given the limited monitoring period.

Table A6.2: Theil-Sen Analysis, NO_x Concentrations at LCA-CAH, LCA-ND, LCA-KGV and Other London Monitoring Sites, 2007 to 2023

Monitoring Site	Theil-Sen Analysis [a]	Statistically Significant Trend?
Bexley – Belvedere	-1.54 [-2.08, -1.06]	**Yes**
Bexley – Slade Green	-1.91 [-2.42, -1.48]	**Yes**
Camden - Bloomsbury	-4.87 [-5.62, -4.17]	**Yes**
Newham – Wren Close	-2.40 [-3.02, -1.80]	**Yes**
Newham – Cam Road	-4.68 [-5.35, -3.96]	**Yes**
LCA-CAH [b]	-1.81 [-2.50, -1.12]	**Yes**
LCA-ND [c]	-2.00 [-2.88, -1.28]	**Yes**
LCA-KGV [d]	-0.04 [-17.92, 8.54]	**No**

[a] The first value is the slope. The number in brackets is the upper and lower 95th percentile confidence interval.

[b] Analysis carried out for 2007 to 2022.

[c] Analysis carried out for 2011 to 2023.

[d] Analysis carried out for 2022 to 2023.

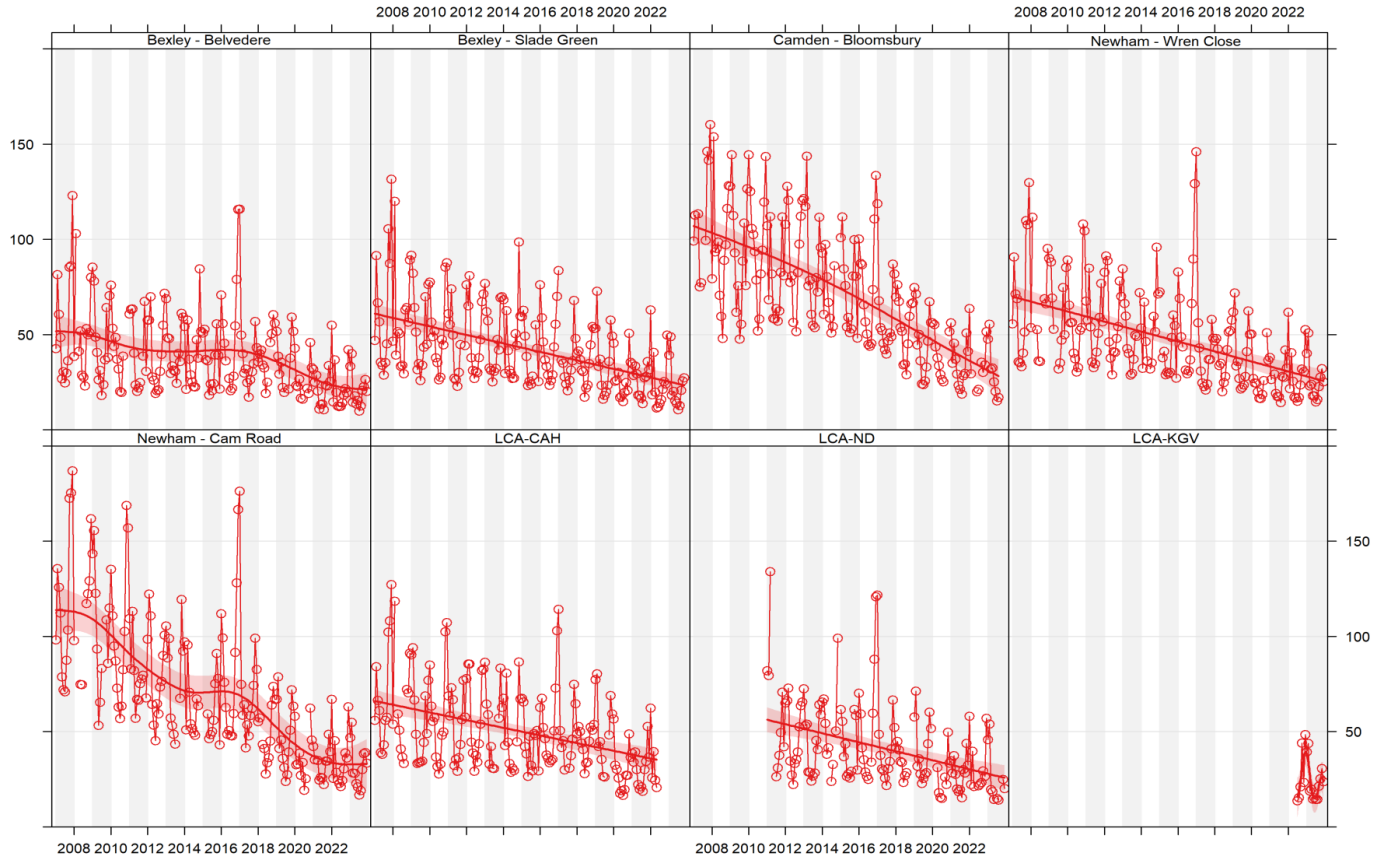

Figure A6.2: Smooth Trend Analysis, Monthly NO_x Concentrations at LCA-CAH, LCA-ND, LCA-KGV and Other London Monitoring Sites, 2007 – 2023

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Annex 6

Air Quality Action Plan Progress Update

LONDON CITY AIRPORT

Measure	Expected emissions / air quality benefit	Outputs / targets / KPIs	Completed by	Status APR 2023
Ground Power				
Measure 1: Maximising availability of Fixed Electrical Ground Power (FEGP)	Measures to minimise APU run times (and emissions) include the provision of FEGP and actions taken to ensure its availability.	London City Airport will continue to routinely record the availability of FEGP on all stands where it is has been installed. It will also continue to record the use of FEGP within the online portal and document any contraventions of Airfield Operating Instruction AOI 07.	June in each year	Ongoing. A report detailing serviceability is distributed during each shift. Stand planners are promptly informed if an aircraft cannot be supplied with power.
Measure 2: Minimising APU Use.	NOx and PM10 emissions from APU use were 5.2 and 0.32 tonnes respectively, in 2019. Airfield Operating Instruction AOI 07 restricts the running of APUs.	London City Airport will continue to monitor the use of APU in accordance with AOI 07, and will continue to record APU use via the Airport's "Qlickview" online reporting tool. Any contraventions of the Airfield Operating Instructions, updated as necessary to comply with any requirements within the APU Strategy.	June in each year	Ongoing. This continues to be recorded in Qlik. 44 instances of extended APU usage were recorded in 2023.

Measure	Expected emissions / air quality benefit	Outputs / targets / KPIs	Completed by	Status APR 2023
Emissions from Aircraft Taxiing Operations				
Measure 3: Ground Engine Running Strategy – air quality implications	Ground running relates to the use of aircraft engines on stand, during taxiing, and on-hold, and accounted for 15.6 tonnes NOx and 0.35 tonnes PM10 in 2019. The Ground Engine Running Strategy is aimed at ensuring aircraft engines are operated at minimum power necessary and for as short a time as possible.	London City Airport will continue to review the outcomes of the Ground Engine Running Strategy within the quarterly reports and will prepare a report for submission to LBN on the air quality implications where ground running times exceed agreed targets.	Within 2 months of GERS quarterly reports	Ongoing. No exceedances reported.
Measure 4: Reduced thrust during taxiing.	Taxiing accounted for 18.8 tonnes NOx and 0.47 tonnes PM10 in 2019. Emissions can be reduced by "Engine-Out Taxiing" in which one or more engines is switched off. However, there are both safety and operational concerns with the use of this measure.	London City Airport will continue to work with the major airlines to explore the potential to introduce reduced thrust during taxiing. Direct engagement with the airlines will be made at forthcoming bi-annual pilot forums.	June in each year	Ongoing. Continuing engagement with airlines via the bi-annual pilot forums.
Measure 5: Electric Taxiing Systems	Emissions from taxiing could be reduced by the use of electric pushback from stand	London City Airport will review the requirements for electric pushback systems as the new CADP stands become available.	June in each year	Electric pushback tugs requirements to be reviewed as and when new CADP stands become operational.

Measure	Expected emissions / air quality benefit	Outputs / targets / KPIs	Completed by	Status APR 2023
Airside Vehicles and Plant				
Measure 6: ULEZ Compliance – Third Party Operators	The ULEZ will require diesel cars and vans to comply with the Euro 6 emission standard which will, on average, reduce NOX emissions by 65% compared to Euro 5.	London City Airport will continue to engage with third-party operators of airside vehicles to monitor progress and update records on ULEZ compliance on an annual basis going forwards.	June in each year	All suppliers with non-compliant vehicles (8%) were contacted for their plans to upgrade their fleet which will be monitored on an annual basis.
Measure 7: Airside Vehicle Permits (AVP) – Promote Earlier Introduction of Cleaner Vehicles	Emissions from Ground Support Equipment (principally airside vehicles) accounted for 2.6 tonnes NOx in 2019. The AVP system can be used to drive the introduction of cleaner vehicles at an earlier stage, in advance of full ULEZ compliance.	London City Airport will continue to enforce a requirement in AOI 12 that all new vehicles issued with a Airside Vehicle Permit (i.e. not renewal applications for existing AVPs, comply with the latest vehicle emissions standards for road vehicles (Euro Standards) defined as the date by which the Euro Standard comes into force for registration and the sale of new vehicles.	June in each year	Ongoing. As agreed on 21/12/2021, some dispensations may be granted if ULEZ compliant vehicles cannot be deployed on the basis of documented technical, safety, operational and financial constraints. Justification provided will be reviewed by LCY, records retained and updates required annually.
Measure 8: Vehicle Emissions Testing	Failed abatement systems can lead to substantially high emissions on individual vehicles	London City Airport will continue to undertake routine annual, and periodic, random emissions testing for Airport owned and third-party airside vehicles. Where a vehicle fails, a Vehicle Defect Notice will be used; the operator will have 14 days to rectify the fault or the AVP will be withdrawn. The results of the testing will be reported to LBN on an annual basis.	June in each year	Ongoing. In 2023 no LCY vehicles failed the testing requirements.
Measure 9: Introduction of Hybrid and Electric Vehicles	Both hybrid and electric airside vehicles would reduce emissions (above and beyond ULEZ standards), but is dependent on the availability of suitable vehicles	Both hybrid and electric vehicles would reduce emissions (above and beyond ULEZ standards) but is dependent on availability. London City Airport will continue to review the Airport-owned fleet with the aim of maximising the use of hybrid and electric vehicles in line with its net zero ambitions.	June in each year	Ongoing. LCY continues to review the overall fleet utilising electric or hybrid options. There were no new or replacement vehicles to the LCY fleet in 2023.

Measure	Expected emissions / air quality benefit	Outputs / targets / KPIs	Completed by	Status APR 2023
Emissions from Black Cabs				
Measure 10: Anti-Idling: Black cabs	Idling engines when stationary causes unnecessary pollution emissions. Vehicle Idling Action is a behaviour change campaign supported by LBN.	London City Airport will continue to monitor idling by black cabs and will report any issues or compliants to the Airport Transport Forum.	Twice a year	Signs are in place to advise drivers to turn off engines. No related issues or complaints were received in 2023.
Publicity and Promotion				
Measure 11: Review and Update Website	No direct emissions benefits, but critical in communicating with staff, passengers and members of the public, and disseminating information of air quality	London City Airport will continue to review and update the website to provide clear, concise information to the local and wider community on the performance of the Air Quality Management Strategy.	June in each year	The AQMS and the air quality monitoring data are available on the public website. Updates on the Air Quality Action Plan are provided annually and available on the website as part of the APR.
Measure 12: RAMP Sampling.	Although subject to workplace air quality standards, staff on the RAMP are likely to be exposed to higher levels of pollution	London City Airport will continue to undertake, on a two-year basis, a RAMP employee air quality monitoring assessment with direct, individual recording apparatus	April 2025	The RAMP sampling was completed in May 2023, and the report was provided to LBN in June 2023.
Measure 13: Staff Communications	No direct emissions benefits, but critical in communicating with staff, and in gaining support to this Strategy	London City Airport will publish an article relating to air quality and airport operations at least once per year in the airport newsletter "Inside E16" or in the staff eBulletin	June each year	Staff received information through the staff eBulletin on the airport's air quality management in December 2023.

Measure	Expected emissions / air quality benefit	Outputs / targets / KPIs	Completed by	Status APR 2023
Ultra Fine Particles				
Measure 14: Emission Inventories for Ultra Fine Particles (UFPs)	There is increasing evidence related to aircraft operations and UFPs, but there is currently no robust manner in	London City Airport will continue to review the emerging evidence on UFPs related to aircraft emission inventories and will provide an update on an annual basis.	June in each year	Ongoing. Confirmation received from LCY's air quality consultant in March 2024 that there was no change of previous findings related to UFPs in 2023.
Measure 15: UFP Emissions and Sulphur Content of Aviation Fuel	Evidence has identified a unique size distribution of UFPs related to aviation emissions, which is thought to be linked to the high S content of aviation fuel.	London City Airport will continue review the emerging evidence on the link between the sulphur content of aviation fuel and UFP emissions and will work with industry partners to assess the benefits and feasibility of introducing SAFs.	June in each year	Ongoing. Confirmation received from LCY's air quality consultant in March 2024 that there was no change of previous findings related to UFPs in 2023.

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Annex 7

Sustainability and Biodiversity Strategy Update

LONDON CITY AIRPORT

Sustainability and Biodiversity Strategy Update 2023

Ref	Title	Timeframe	Status APR 2023
EMS1	Maintain LCA's current ISO14001:2015 and ISO9001 certification.	Ongoing (evidence yearly)	Ongoing. The airport has successfully undergone an external surveillance audit in Q4 2023 for its Environmental Management System (EMS under ISO 14001:2015) and Quality Management System (QMS under ISO 9001:2015), meeting the requirements of both international standards.
EMS2	Continue to develop an integrated management system.	Ongoing	Ongoing. Integrated management system maintained (see above).
WST1	Implement SWMPs and review prior to each phase of CADP.	Prior to each phase of CADP	CADP works currently paused.
WST2	Reduce total waste kg per passenger by 10% from 2022 by the end of 2025.	End of 2025	Ongoing. Working towards our 2025 target.
WST3	Recycle 70% of total kg of waste by the end of 2025.	End of 2025	Ongoing. Working towards our 2025 target.
WST4	Work with a waste contractor (and/or others) to develop a circular economy strategy and waste reduction strategy.	End of 2023	Waste and material management contract was awarded in Q42023, with the circular economy strategy and the waste reduction strategy developed as an integral component of the tender process. LCY is currently actively collaborating with the newly appointed waste and material management company to implement these strategies.
WST5	Include waste management in the criteria for any new concessions, including how they will reduce waste and promote recycling, and integrate site-specific requirements into new contracts where practicable.	End of 2024	Waste management is included as a standard criteria for new concessions.
WST6	Demonstrate use of reasonable endeavours to eliminate all avoidable single use plastics generated by our staff and tenants.	End of 2025	Working towards our 2025 target. In 2023 we have introduced advanced security scanners removing use of security plastic bags to hold toiletries and liquids.
EC1	Improve employee awareness on energy reduction through two campaigns and training sessions per year. This target is ongoing with evidence on progress being provided yearly.	Ongoing (evidence yearly)	Staff received information about Electric Vehicles and charging points in January and October, along with sustainable commute alternatives shared in September.
EC2	Maintain Level 4+ Transition of the ACI Europe Airport Carbon Accreditation Scheme.	End of 2023	Level 4+ (Transition) certificate of the Airport Carbon Accreditation Scheme was maintained in Q4 2023, demonstrating LCY are on a path towards net zero, and are engaging third parties at the airport to decarbonize too.
EC3	Report on LCY's progress in reducing scope 1 and 2 absolute emissions and provide an update annually through the 'LCY Sustainability Report' to also how LCA is supporting the target to achieve net zero by 2030.	Ongoing (evidence yearly)	Sustainability Progress Report 2022 was published in June 2023 which included this information. A progress report will also be published in 2024.
WH1	Review the safeguarding guidance for developers available on our website annually, which specifically details safe methods of increasing local biodiversity within developments within compromising aerodrome safety.	Ongoing (evidence yearly)	Review carried out with the safeguarding contractor, no changes are necessary.
WH2	Provide a report to LBN annually summarising where LCY has requested amendments to local development proposals in order to manage the operational safety risk of birds.	Ongoing (evidence yearly)	In 2023, a Bird Hazard Management Plan was requested for eight planning applications, all of which then proceeded without any objections.
WH3	Maintain the artificial substrate mesh for aquatic colonisation and the provision of shelter for fish fry within the KGV dock, and record whether colonisation	End of 2024	Last colonisation report issued on 20/04/21. Next review of the artificial substrate mesh is scheduled for 2024.

Ref	Title	Timeframe	Status APR 2023
	is progressing.		
WH4	Provide £10,000 a year to LBN for educational biodiversity and environmental programmes for the local community. Where LBN are unable to use the money within 6 months of it becoming available, transfer the money to the Community Trust Fund for use on projects relating to biodiversity in the next round of grant allocation.	Ongoing (evidence yearly)	LBN has not drawn down the £10,000 for 2023, therefore as agreed with LBN it will be transferred to the Community Fund.
WH5	Fund other environmental and biodiversity projects with preference given to areas of nature deficiency from 2023 onwards. Subject to interest from schools and community groups, options could include (1) funding allotment boxes in SINCs; (2) enhancing biodiversity by installing bat boxes or hedgehog homes to protect these key species; or (3) funding biodiversity related projects in schools. Such projects would be subject to a combined annual funding of £5,000 from 2023.	End of 2024	In 2023, LCY has been conducting research on projects and engaging with companies with the aim of maximizing the impact of our initiatives. In 2024, we are committed to executing these projects, with £10,000 allocated in accordance with this action.
WH6	Continue the annual Biodiversity Fund investment of a minimum of £25,000 to local biodiversity projects.	End of 2026	Ongoing. In 2023, LCY supported GreenTheUK, benefitting East London schools with wildflower planting for wildlife habitats and educational value. Additionally, in 2023, LCY supported Thames21 to enhance biodiversity along the Rived Roding over a two-year-long project.
WH7	Achieve 10% net gain for any future airport develop projects by the end of 2026.	End 2026	CADP works currently paused.
W1	Review of the building standards and contractual requirements for tenants and concessionaires in relation to water usage.	End 2024	All new contracts include sustainability requirements for water usage and minimisation.
W2	Operate within the conditions stipulated in LCA's water discharge permit with regards to BOD and evidence performance by the end of May each year.	Ongoing (evidence yearly)	Completed for 2023/2024 winter season with no exceedance.
W3	Achieve a reduction in surface water run-off of at least 63% against the 2013 baseline (as assessed in the UES) by completion of the CADP works.	By completion of the CADP works	CADP works currently paused.
N1	Continued operation of The Airspace & Environment Sub-Committee as part of the London City Airport Consultative Committee (LCACC) to achieve the agreed objectives established at the inaugural meeting in October 2016.	Ongoing	Ongoing. Note that LCACC was rebranded as LCYCC in Q3 2023, continues to fulfil the relevant responsibilities of the LCACC as stated on the new LCYCC website. LCYCC Airspace & Environment Sub-Committee meetings held quarterly in 2023.
N2	Maintain compliance with all noise mitigation measures as required under CADP 1 planning permission.	Ongoing	Ongoing. Quarterly reports on noise mitigation measures are submitted to LBN to demonstrate compliance. The annual NOMMS Report and ANCS Report are submitted as annexes to the 2023 APR.
SC1	Distribution of a community leaflet detailing construction activity at least four times a year to the immediate local area.	Ongoing throughout CADP works	CADP works currently paused.
SC2	Complete a Sustainable Construction Strategy to maximise sustainability performance and carbon reduction in any future development and increase energy efficiencies for future buildings and operations.	End of 2026	Ongoing and subject to future development.

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Annex 8

List of Employers Onsite and CADP1 Contractors

LONDON CITY AIRPORT

Company - 2023 list
ABM - omniserve
ADVANCED - One Advanced
AeroSpa
AVIS
BA CITYFLYER
Big Penny Brews (Trumans)
Boots
BP Installations
Caffé Nero
Dnata
ESP
Europcar
GGS LTD
Global Exchange
GSF
Hertz
InMotion
ITA (previously Alitalia)
Lagadere
London City Airport
Lufthansa (part of Swiss Airlines)
Luxair
MENZIES Aviation (Fuels)
MITIE
MITIE CARE+CUSTODY
NATS
Pret a Manger
Sky Handling Partner - SHP
SSP - Select Service Providers
SWISSPORT
WHSmith

CADP Main - 2023 List
No CADP Contractors were based on site in 2023 due to works being paused temporarily.

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Annex 9

Our Newham Work Statistics 2023

LONDON CITY AIRPORT

Company - 2023 list	Vacancy's	Starts	13 Week Sustained	26 Week Sustained	Still in Employment
LCY Direct	39	20	18	18	15
Onsite Partners	32	17	12	11	8
Concessions	9	2	0	0	0
Total	**80**	**39**	**30**	**29**	**23**

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Annex 10
LCY Employment Policy

LONDON CITY AIRPORT

1. Applications

1.1.

London City Airport advertise all vacancies on their dedicated career's page on www.londoncityairport.com/careers

1.2.

JThe HR Team manages this careerspage and posts all vacancies.

1.3.

It is a core value of London City Airport to ensure that:

- All applicants are dealt with in a courteous, respectful, fair and diplomatic way.
- All applicants are properly informed at all stages of the progress of their application.

1.4.

In some limited specific instances, vacancies of a specialist nature may be advertised on both the LCY website, LinkedIn and via specific aviation or other recruitment agencies and job boards. In this instance, advertising and procedure will remain the same as that for all other vacancies to ensure consistency.

1.5.

Notwithstanding the above, where recruitment for more than one position is initiated simultaneously, London City Airport will advertise such vacancies through a local employment agency (e.g. Newham Workplace and/or others), notify local recruitment centres of such vacancies and advertise through the LCY website.

1.6.

London City Airport works in partnership with the Local Authority (via Newham Workplace) to deliver into-work training for unemployed Newham residents. In some instances, candidates from this training programme may be recruited directly by London City Airport Limited and from Newham Workplace.

1.7.

London City Airport endeavours to employ people living in the vicinity of the airport to share its economic and social benefits. Specifically, the airport has agreed targets with the Local Authority to endeavour to employ:

- At least 70% of new recruits for jobs advertised at the Airport are residents of the Local Area[1]
- At least 40% of new recruits for jobs advertised at the Airport are residents of the London Borough of Newham
- At least 70% of new recruits for jobs at the Airport advertised by the Operator are residents of the Local Area
- At least 50% of new recruits for jobs at the Airport advertised by the Operator are residents in the London Borough of Newham

1.8.

A standard online application form is used to assist in filling all vacancies as a way of obtaining the same information from each candidate.

1.9.

Applicants will have the opportunity to register their interest in specific areas of the business and upload their CVs to our website. We will hold this information on our data base in line with GDPR and LCY retention policy.

1.10.

All documentation relating to selection of new staff (e.g. completed application forms) that is not retained must be disposed of securely (i.e. shredded).

[1] The "local area" is defined by the London Borough of Newham as the 11 East London Boroughs of Newham, Tower Hamlets, Hackney, Waltham Forest, Redbridge, Barking & Dagenham, Having, Bexley, Greenwich, Lewisham, Southwark, Barking and Dagenham, Greenwich, Bexley, Havering and the area of Epping Forest District Council

2. Selection

2.1.

A candidate will not be appointed without first being interviewed or participating in an assessment process by persons with the authority to select.

2.2.

The purpose of the interview is to:

- Assess the skills and knowledge of the applicant
- Assess the attitude of the applicant
- Identify the strengths and weaknesses not apparent from the application form
- Probe details or inconsistencies submitted by the applicant
- Establish suitability for employment
- Give information about the job and working conditions

2.3.

All interviewers are trained in Recruitment and Selection Skills and Employment Law to be aware of legal requirements and the Company's equal opportunities policy.

2.4.

All interviews are conducted by **two or more** authorised people.

2.5.

All interviewers are **senior to** the vacant position.

2.6.

All interviews are **conducted in private** and in a place without distractions. Where appropriate, the candidate is shown the environment in which he/she will work if successful.

2.7.

Interviews reflect Company philosophy, observe legal requirements, are conducted courteously and give full details of terms and conditions of employment and benefits.

2.8.

Written records are kept of all short-listing decisions in case of query at a later stage.

2.9.

Written records are kept of all interviews conducted using a standard 'Interview Assessment Form'.

2.10.

Successful applicants will receive a standard offer of appointment letter. This is arranged by the HR Team.

3. Equal opportunities policy

3.1.

The recruitment policy will aim to select the most suitable person for the job in respect of experience and qualifications and the Company will comply with its equal opportunities policy in this regard.

3.2.

All recruitment publicity positively encourages applications from suitably qualified, experienced people and avoids any stereotyping of roles.

3.3.

Vacancies are advertised in a variety of ways to ensure that a fair cross section of potential applicants have access to the advertisement, including via:

- Local Authority "one stop shops" including Newham Workplace, WorkPath and Greenwich Local Labour & Business
- All Job Centre Plus outlets, via their electronic system, Newham College (CIPS) and Anchor House Homeless Charity (entry level roles only).

3.4.

All vacancies are advertised on London City Airport's website (www.londoncityairport.com/careers).

3.5.

The application form only includes those questions that are necessary at the initial stages of selection. All questions on the application form are relevant and non-discriminatory

3.6.

At interview, questions or assumptions about a candidate's personal and domestic circumstances or plans will only be asked where required with regard to the role. Where the requirements of the job affect the candidate's personal life (e.g. shift work, unsociable hours or travel) this will be discussed objectively.

4. Selection criteria

4.1.

Only those qualifications and skills that are important to the job are criteria for selection. These include, but are not limited to, education and professional qualifications, experience and physical abilities. However, such formal academic or professional qualification requirements may be waived if candidates can demonstrate their suitability for the job by other means including previous experience and a willingness to undergo further training.

4.2.

All applicants will receive with the application form:

- an outline job description
- a person specification, detailing essential and desirable characteristics

4.3.

All applicants short-listed for interview will receive interview details in writing.

4.4.

All candidates who are not short-listed receive a standard rejection email immediately after the short-listing process has been completed.

4.5.

In the event that two candidates, after interview, equally meet the person specification, the candidate living closer to the airport will normally be given priority.

4.6.

Positions will only be filled with suitable candidates. Unsuitable candidates will not be appointed.

4.7.

All unsuccessful short-listed candidates will receive Notification informing them of the result of their assessment / interview usually within 7 working days.

4.8.

All unsuccessful internal applicants will have a debriefing interview where the reasons for their non appointment will be explained and, where appropriate, general guidance will be given on areas for improvement.

5. Selection tests

5.1.

Selection tests are used to ensure that applicants have the skills and aptitude requirements for the job.

5.2.

All such tests are valid, reliable and free from gender or race bias and are non-discriminatory. Tests are developed in conjunction with education professionals to ensure a level of suitability to the role applied for.

6. Other criteria

6.1.

Any requirements in relation to age, ability, experience and qualifications will be applied for the particular vacancy in a non-discriminatory way.

6.2.

All concessionaires/service partners at London City Airport have a contractual obligation to London City Airport to use all reasonable endeavours to recruit locally.

6.3.

London City Airport has an Employers' Forum in which supports on-site partners with a range of issues, one of which is local recruitment.

Annual
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Annex 11
Employee Travel Survey

LONDON CITY AIRPORT

London City Airport Staff Travel Survey 2023: Results Analysis for Annual Performance Review

April 2024

Content

Who responded and where do they work

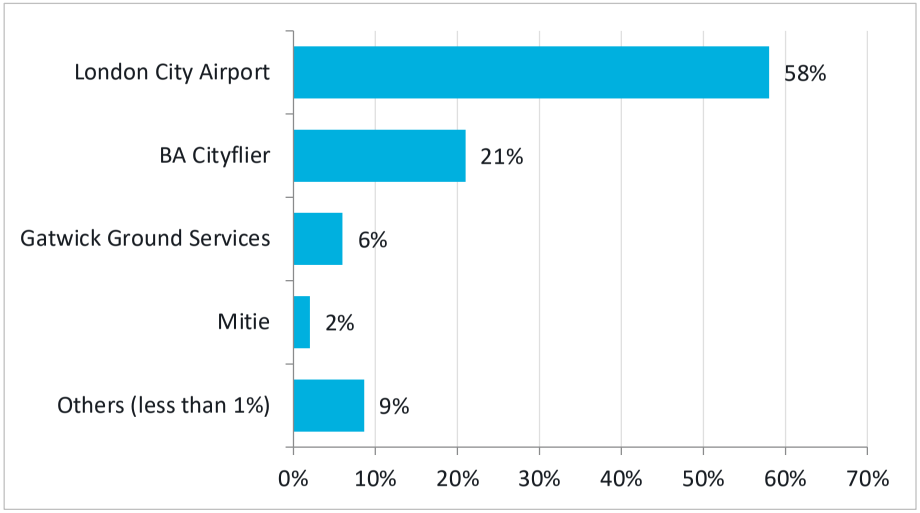
London City Airport undertook a travel survey of all staff from 4 Oct to 8 Nov 2023. It was undertaken in conjunction with Mobilityways using an online link which was distributed by email or staff could download a QR code. The survey targeted 2,051 staff who worked at City Airport at that time. **Responses were received from almost 20% of staff** (405 respondents).

- Over half of respondents worked for London City Airport plc (58%); this was similar but less than 2022 (62%).
- The next highest proportion worked for BA Cityflier (21%) which was a slightly smaller proportion than in 2023 (25%). These represent the two largest employers at the airport.
- Staff from 21 onsite employers participated; 2 more than in 2022.

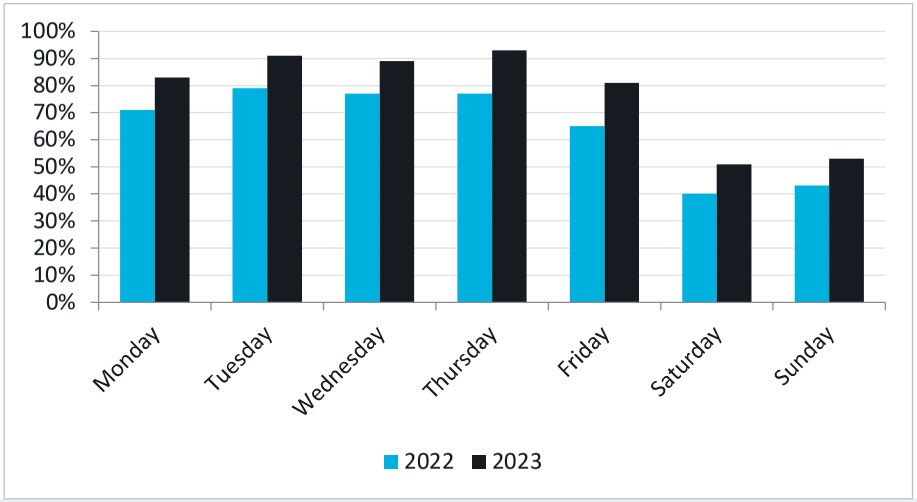
Staff were asked to select in a typical week, what days they worked from the airport.

- **The majority of staff travelled to work 5 days a week (52%)** with 4 days and 3 days the next most popular (18% each).
- **81% of staff never work from home** (up from 79% in 2022) with Mondays and Fridays being the most popular day for those who do (13% of respondents working from home on each of those days).
- Thursday was the most popular day (93%) to work at the airport. Overall, more staff are working at the airport every day in 2023, compared with 2022.

Who do staff work for (responses by employer)?



When do staff work at the airport?



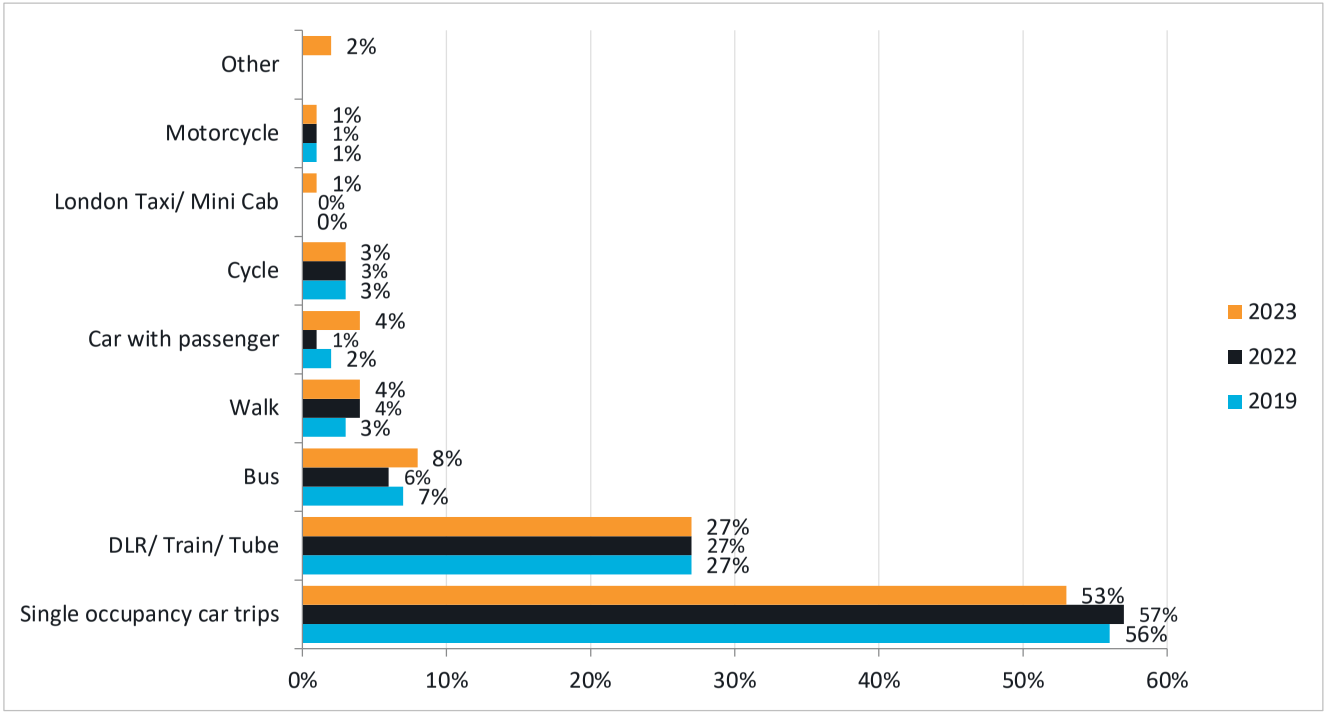
How do staff travel to and from work

The 2023 survey results demonstrated that the airport has made progress on its mode share targets in the past year.

Staff were asked how they usually travel to work (for the longest part of the journey). The results for 2023, as well as data for the two prior surveys is shown in the chart. Of note:

- the proportion of staff travelling by single occupancy vehicle reduced in 2023 to 53% (from 57% in 2022);
- bus use increased by 2 percentage points, to 8%;
- car share also increased 2 percentage points, to 4%.

Main mode of transport to work

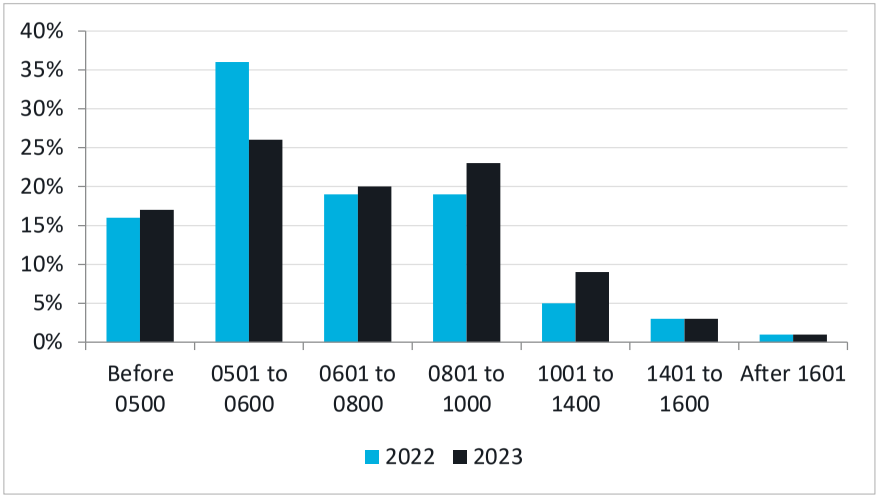


When do staff typically start and finish work?

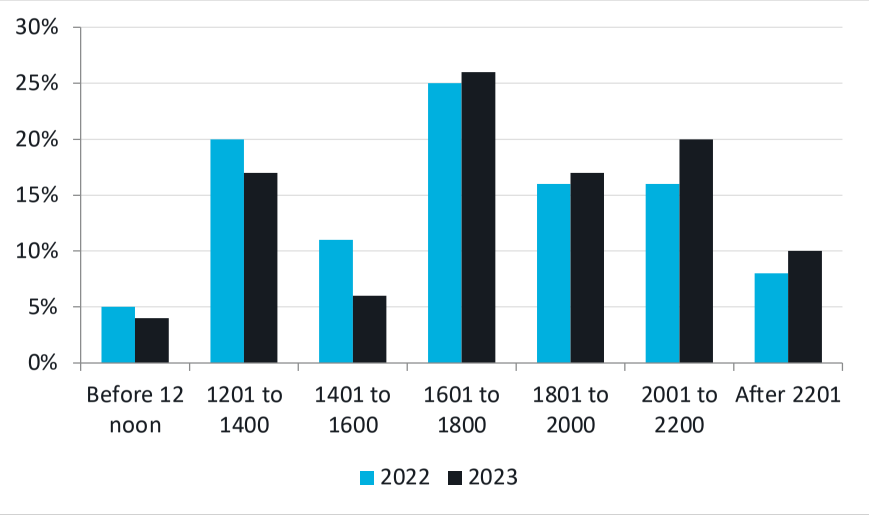
London City Airport is an atypical workplace as a far greater proportion of staff start work earlier than a more typical workplace start time

- Start and finish times followed a similar pattern in 2023, although overall there were more later start times in 2023.
  - 43% of staff started work before 6am.
  - A greater proportion of staff started work later In the day in 2023, with a lower proportion of start times being most evident between 0501 and 0600 (-10 % points). Higher proportions were most evident between 0801 and 1000 (+4 % points) and between 1001 and 1400 (+4 % points.
- The most popular finish times was between 1601 and 1800 (26%) with slightly more staff finishing later in all subsequent time bands in 2022 than in 2023.

What time do staff typically start work?



What time do staff typically finish work?

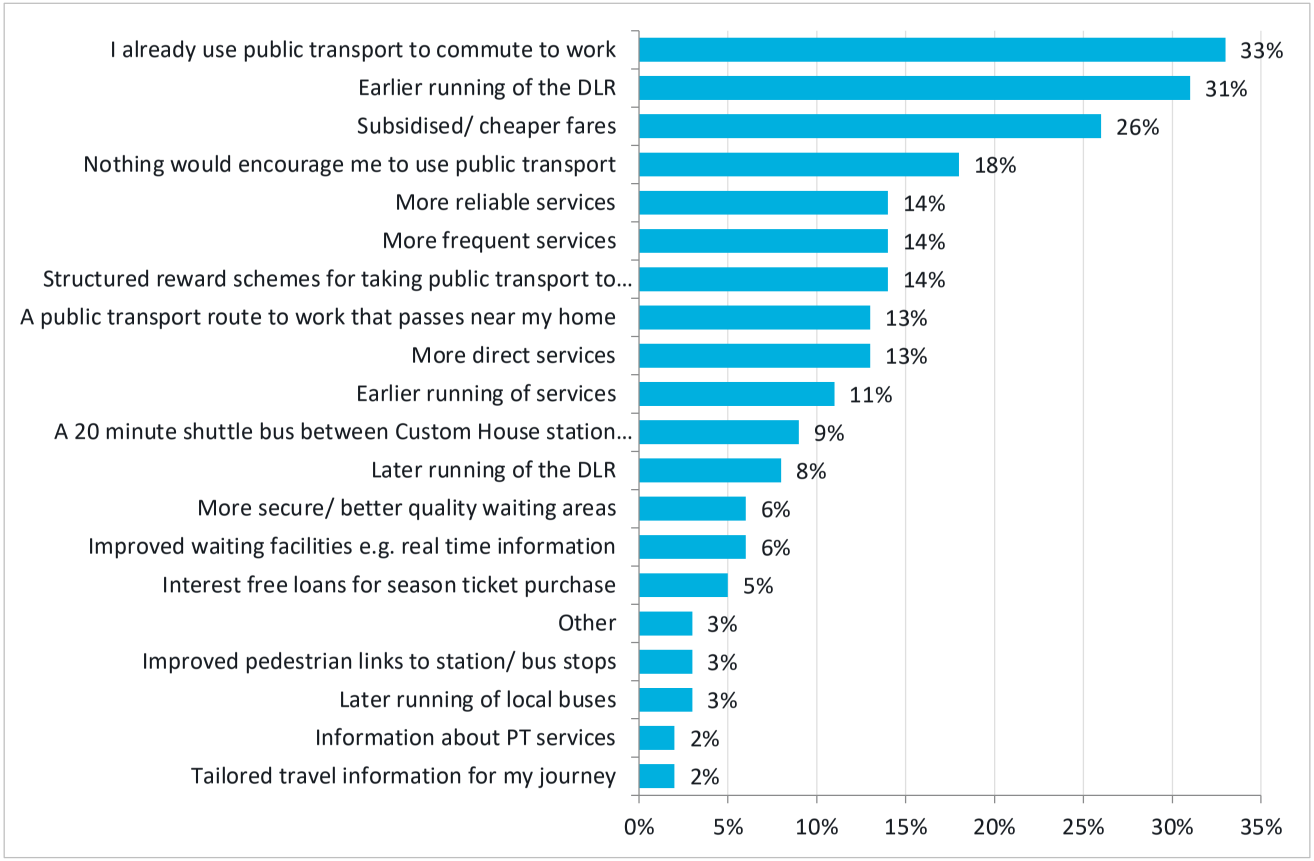


What would encourage staff to use public transport to commute to work

Respondents were asked what would encourage them to use public transport for their regular commute to work. Respondents were allowed to choose more than one thing. The chart shows the number of responses for each option.

- A third of responses were that they already use public transport to commute to work.
- **The most requested changes were earlier running of the DLR (31%)** with others choosing earlier running of services more generally (11%) and earlier running of local bus services (3%).
- **The second most requested change was subsidised/ cheaper fares which attracted a quarter of responses.**
- 5% of responses were for interest free loans for a season ticket which is something London City Airport already offers.

Which of the following changes would most encourage you to use public transport on your regular commute to work?



What would encourage staff to cycle to work

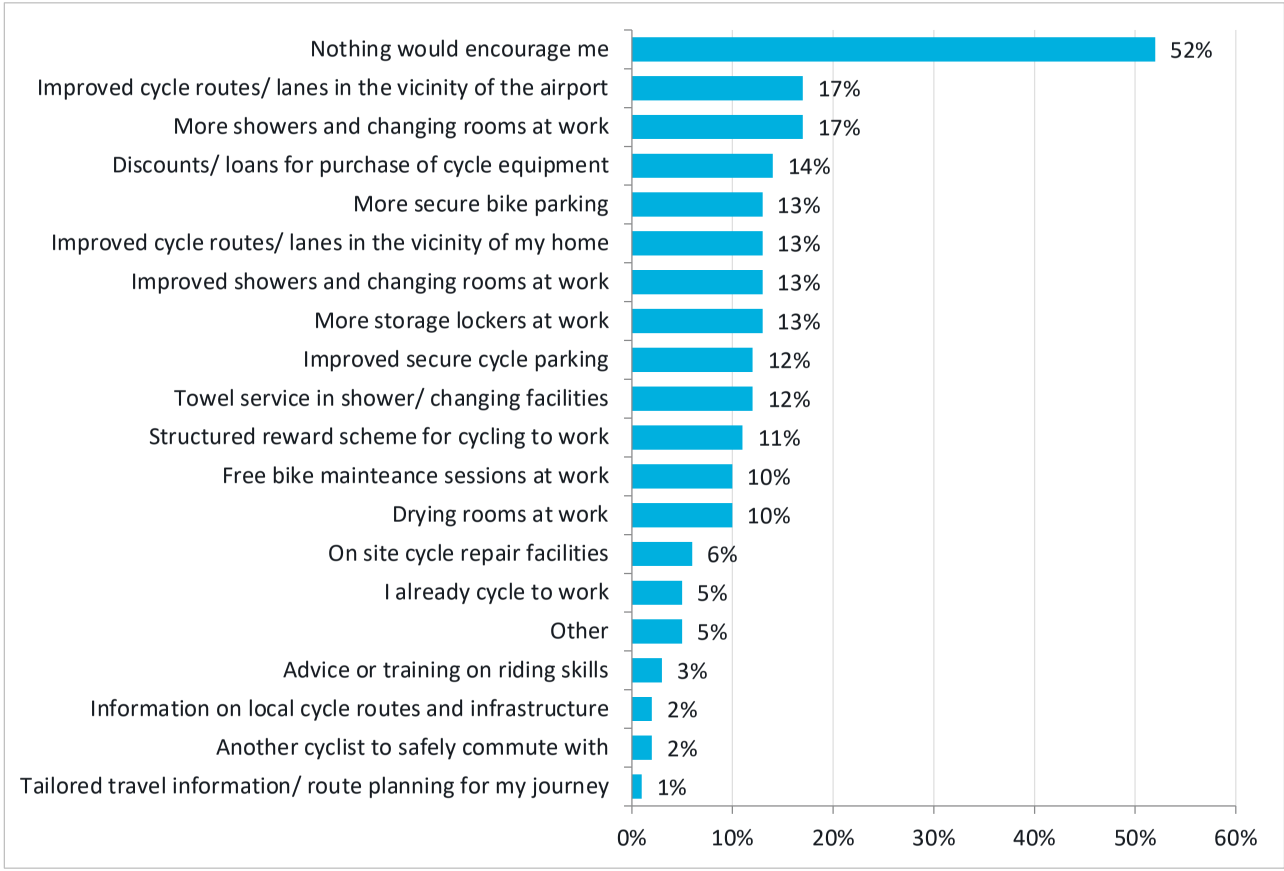
Respondents were asked which of the following changes would most encourage them to cycle to work. Respondents were allowed to choose more than one thing.

- Over half of responses (52%) were “nothing would encourage me to cycle to work”; and
- 5% were I already cycle to work (the same as last year).

In terms of encouraging staff to cycle to work:

- **The two most common responses (17% of respondents each) were improved cycle routes/lanes to the airport and more showers and changing rooms at work.**
- Better provision of facilities for cyclists at the airport was important:
  - 13% wanted more secure bike parking
  - 13% wanted improved showers/ changing facilities at work
  - 13% wanted more storage lockers at work.
- Discounts/ loans for cycle equipment was important for 14% of respondents.

Which of the following changes would most encourage you to cycle to work?



What would encourage staff to car share to work

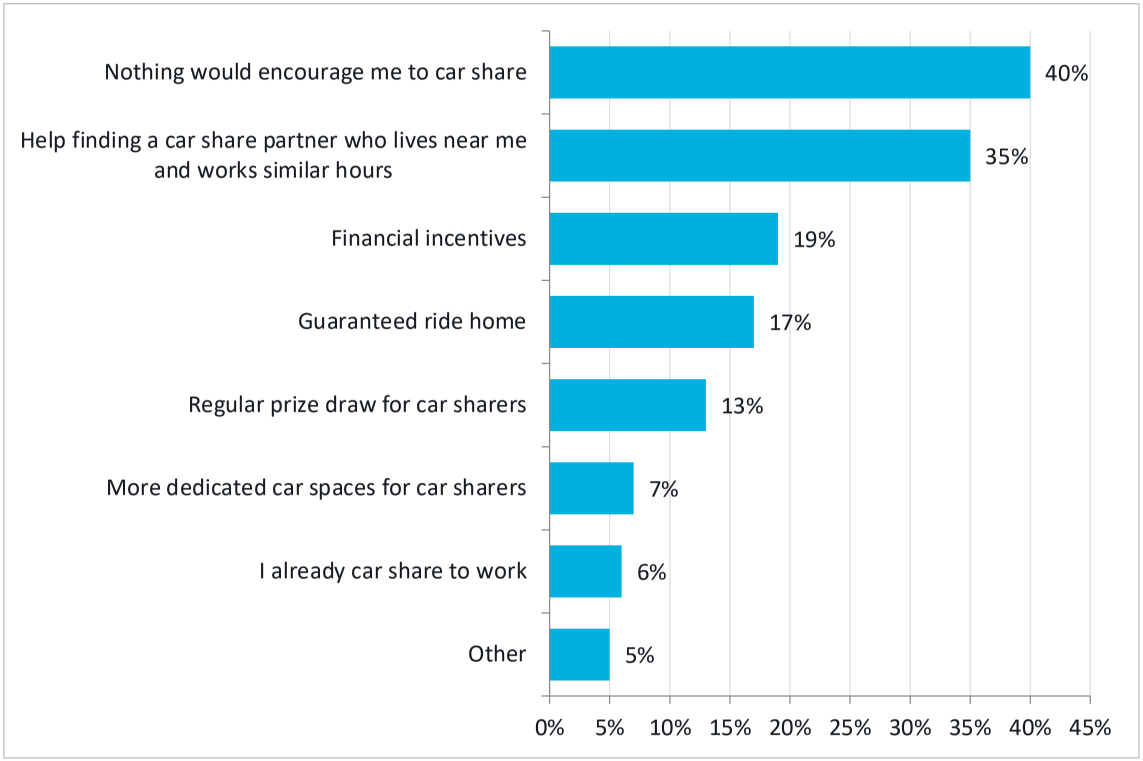
Respondents were asked which of the following changes would most encourage them to car share to work. Respondents were allowed to choose more than one thing.

- Over a third (40%) of responses were “nothing would encourage me to car share”; and
- 6% already car share.

In terms of encouraging staff to car share to work:

- **The most common response (35% of respondents) was help finding a car share partner who lives near me and works similar hours**;
- 19% of responses were for financial incentives to encourage car sharing, as well as 13% for a regular prize draw; and
- 17% of responses were for a guaranteed ride home to would encourage car sharing.

Which of the following would most encourage you to car share to work?



What would encourage staff to walk to work

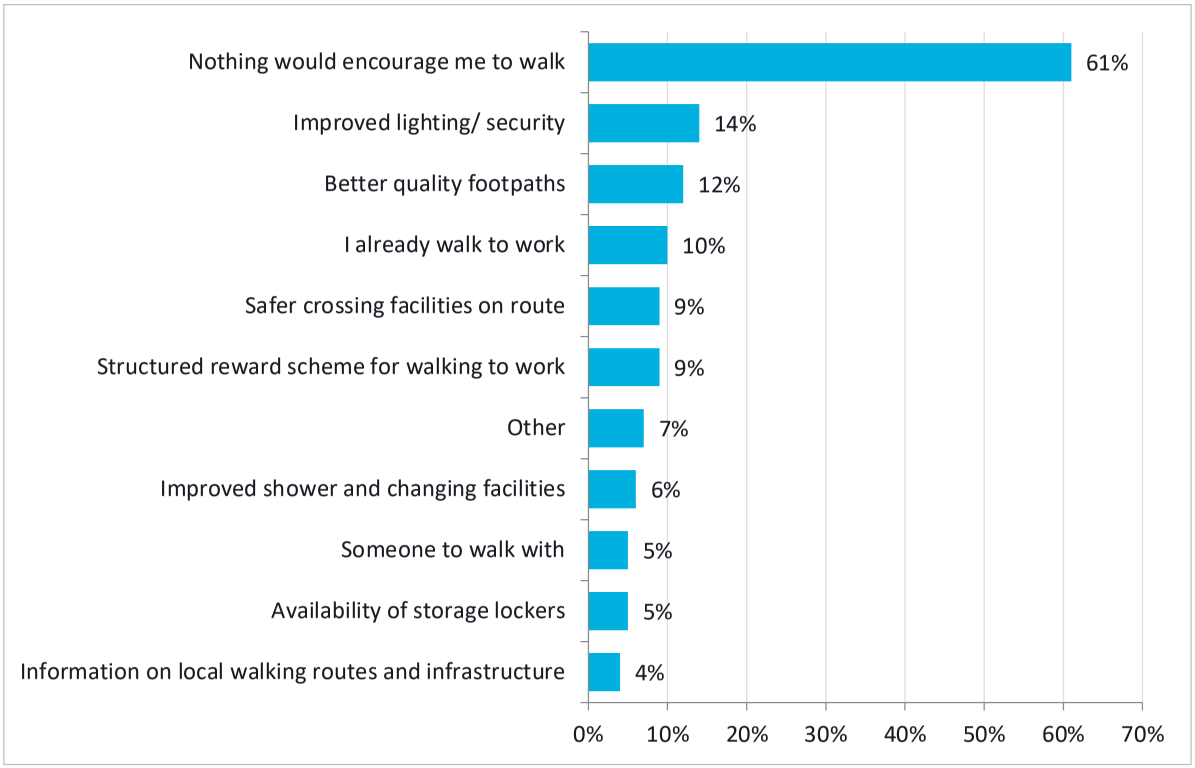
Respondents were asked which of the following changes would most encourage them to walk to work. Respondents were allowed to choose more than one thing.

- Nearly two-thirds of responses (61%) were “nothing would encourage me to walk to work” (less than the 69% in 2022); and
- 10% already walked to work.

In terms of encouraging staff to walk to work:

- **The most common response (14% of responses) was improved lighting and security**; and
- 12% chose better quality footpaths.

Which of the following changes would most encourage you to walk to work?



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Annual
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Report 2023

Annex 11
Travel Plan Measures Update

LONDON CITY AIRPORT

Target Ref	Measure	Starts	13 Week Sustained	Status
GM1	Travel Plan Staff Resource	Role(s) for travel planning / surface access at the airport.	Ongoing. Resource procured, and consultant support provided 1.5 days per week.	Complete
GM2	Direct bus link from Custom House to Elizabeth Line station	New bus service directly linking London City Airport and Custom House Crossrail station	Connectivity Study to identify optimal connection from LCY to Elizabeth Line complete. A demand assessment will be completed for this in 2024.	In progress
GM3	Improved real-time public transport information on site	Improved provision of real-time public transport information	Met TfL to discuss installation on 25/9, site visit has taken place, waiting on TfL to confirm timescales and next steps / potential funding.	In progress
GM4	Improved wayfinding and guidance at stations and bus stops	Improved provision of airport-branded wayfinding and information at stations and bus stops	In conjunction with TfL / DLR, improved signage now in place between terminal and ticket hall.	On track
GM5	Promote 'Mobility Hub' facilities at nearby station hubs	Cycle parking and hire facilities at London City Airport DLR and / or Custom House stations	Awaiting outcome of Newham bike hire strategy to confirm next steps. Note that continued pause of CADP1 may limit potential location for Mobility Hub in the short term.	Pending input
GM6	Cycle route to Connaught Bridge	Supporting the delivery of a committed cycle route to be implemented to Connaught Bridge	Waiting for update from Newham, which will inform LCY actions.	Pending input
GM7	Regular travel surveys	Commitment to undertake travel surveys	Passenger surveys undertaken quarterly, staff survey took place in October 2023.	Complete for 2023
S1	Improved lift share system	Enhance priority parking spaces for lift share users	Four new priority spaces are in place in staff car park.	Complete
		Relaunch the lift share system	Lift share system to be relaunched in early 2024, including new prize draw and Guaranteed Ride Home policy.	On track
S2	Cycle to work	Improve the quality of the cycle to work scheme	Not progressed – focused on raising awareness of existing scheme including new Getting to Work tile on LCY Intranet. BACF introduced a scheme in 2023.	In progress

Target Ref	Measure	Starts	13 Week Sustained	Status
		Improved locker and shower facility provision	Used 2023 staff survey to better understand demand and location. Reviewing data and possible sites.	In progress
S3	Cycle parking improvements	Facilitate the development of high-quality secure and amenable staff cycle parking.	New improved cycle parking provision agreed for KGV House and City Aviation House. Installation expected in February 2024.	In progress
S4	Private car restrictions for business travel	Consider mileage allowance for private cars where sustainable modes would otherwise be available	Limited impact expected from this measure.	Not progressed
S5	Personalised Travel Planning (PTP) services	PTP available to staff	Staff who completed the staff travel survey were offered a PTP. 166 or 171 requested were sent out on 12 December 2023 (5 did not have viable alternatives).	Complete
		1-on-1 or group PTP sessions with staff	Group team sessions to be delivered through airport in 2024.	In progress
S6	Staff Travel Planning Forum	Forum to discuss issues, opportunities, and ideas for modal shift.	Presented at airport Bi-Annual Employers Forum and asked for feedback. Also at LCY Staff Committee. Identifying cycle champions through weekly e-bulletin.	On track
S7	Sustainable Travel incentives and Gamification	Look to improve the quality of LCY's Starpoints system	Incentives for Sustainable Travel include issue of vouchers for TravelWise week, and new Liftshare prize draw.	On track
P1	Customer Service Information Desk	Provision of face-to-face travel information and support to passengers	New DLR Information Desk and Store opened in September 2023. Very positive feedback received.	Complete
P2	Increase short stay parking charges	Higher charges for both pick-up and drop-off by car	Charges (for pick up area and drive up parking) increased 1 August 2023 by average of 15%.	Complete
S2	Cycle to work	Improve the quality of the cycle to work scheme	Not progressed – focused on raising awareness of existing scheme including new Getting to Work tile on LCY Intranet. BACF introduced a scheme in 2023.	In progress

Target Ref	Measure	Starts	13 Week Sustained	Status
P3	Increase provision of EV charging points	Increased provision of EV charging points	Usage continues to be monitored – no demand for additional provision at present. Potential for future discussions with Places for London in 2024 to explore sites for an EV hub at the airport.	On track
P4	Integrated public transport infrastructure into airline tickets	Facilitate airlines in providing LCY specific public transport information when they book flights	LCY website re-launched in October 2023, and included better information getting to airport. To be reviewed quarterly.	On track
P5	Brompton Cycle Share	Implement a Brompton cycle docking station at the airport and promote its use to passengers	LBN have advised that a (match) funding for a Brompton hub at LCY is unlikely to be available until FY2024-25. To revisit when available.	Pending input

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