Appendix 1

Application No: 21/00031/VARCON

The Noise Management Plan

London Luton Airport

2021 NOISE MANAGEMENT PLAN
Technical Document

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1. BACKGROUND TO THIS NOISE MANAGEMENT PLAN

1.1 On 23 June 2014 planning permission was granted by Luton Borough Council (LBC) for the expansion of London Luton Airport (ref: 12/01400/FUL), including amongst other things an extension of the terminal building, a new passenger pier, a multi-storey car park, dualling of Airport Way, alterations of taxiways and stands, and an increase in passenger numbers to 18 million passengers per annum (mppa).

1.2 The planning permission was subject to a number of conditions, including four relating to noise (conditions 11 (Noise Control Scheme), 12 (noise contour thresholds), 13 (Noise Control Monitoring Scheme) and 14 (Ground Noise Control Scheme)), together with a legal agreement under Section 106 of the Town and Country Planning Act 1990 ("**TCPA**").

1.3 On 4 December 2014 London Luton Airport Operations Limited (LLAOL) submitted an application to discharge the abovementioned noise conditions (ref: 14/01519/DOC). On 2 March 2015 Luton Borough Council approved the submitted details and the noise management system for London Luton Airport was established.

1.4 On 13 October 2017 a subsequent planning permission pursuant to section 73 of the TCPA was granted which varied noise condition 11(i) (ref: 15/00950/VARCON). The abovementioned noise conditions were restated on this permission as there were ongoing compliance elements to them but they were amended to reflect that they had already been approved. The condition numbering also changed, since it was not necessary to repeat all conditions associated with the original permission, thus the noise conditions became conditions 9 (Noise Control Scheme), 10 (noise contour thresholds), 11 (Noise Control Monitoring Scheme) and 12 (Ground Noise Control Scheme). The Section 106 Agreement entered into in connection with this permission incorporated (at Annex 1) the document that had been submitted to discharge the abovementioned noise conditions and which was termed the noise management plan. As a result there was some overlap and required read-across between the noise conditions and the Section 106 Agreement.

1.5 In January 2021, LLAOL submitted an application pursuant to section 73 of the TCPA to increase the passenger cap (condition 8) and to vary the area covered by the summer noise contours (condition 10), as well as consequential variations to conditions 22 (car parking management), 24 (travel plan) and 28 (approved plans and documents). Luton Borough Council resolved to grant this permission subject to ensuring that the terms of the Section 106 Agreement continued to apply, with necessary amendments. The Secretary of State for Levelling Up, Housing and Communities by a letter dated 6 April 2022 to Luton Borough

Council called in the application and on 11 May 2022 the Secretary of State for Transport confirmed that the application would be determined jointly by the two Secretaries of State.

1.6 In settling the terms of the Section 106 Agreement prior to the start of the inquiry, it was agreed between LLAOL and LBC that in order to make the noise controls simpler to understand, and to avoid the required read-across between the noise conditions and the Section 106 Agreement, it was considered appropriate to compile all the controls into this one Noise Management Plan.

1.7 This Noise Management Plan therefore brings into one single control document the following schemes, plans and systems:

- the Residential Noise Insulation Scheme (section 3 of this NMP);
- the Non-Residential Noise Insulation Scheme (section 4 of this NMP);
- the Noise Control Scheme (approved under condition 11 of the original permission and secured under condition 9 of the 2017 permission) (section 5 of this NMP);
- the Noise Control Monitoring Scheme (approved under condition 13 of the original permission and secured under condition 11 of the 2017 permission) (section 7 of this NMP); and
- the Ground Noise Control Scheme (approved under condition 14 of the original permission and secured under condition 12 of the 2017 permission) (section 8 of this NMP).

1.8 The Section 106 Agreement sets out details of the Noise Insulation Fund (Sch. 1, para. 4), the operation of the London Luton Airport Consultative Committee (LLACC) (Sch. 3), and the review process for the Noise Management Plan (Sch. 1, para. 1).

1.9 The noise contour thresholds (condition 10 in the 2017 permission) will continue to be principally controlled in the planning permission but section 6 of this NMP provides detail on how performance against the noise contour thresholds is monitored and reported on.

2. OTHER NOISE CONTROLS

2.1 Separate to these matters, London Luton Airport (the Airport) operates in accordance with The Environmental Noise (England) Regulations 2006 and has a Noise Action Plan (NAP) approved by Department for Transport (DfT) and Department for Environment Food and Rural Affairs (Defra). The current approved NAP includes noise related measures which form

part of the overall noise strategy. The Airport also operates in accordance with the Luton Byelaws approved by the Secretary of State for Transport (Appendix 1).

3. RESIDENTIAL NOISE INSULATION SCHEME

3.1.1 This scheme provides noise insulation works to residential buildings that meet the Residential Noise Insulation Eligibility Criteria and have not previously been treated by the Airport. The residential eligibility criteria are any of the following detailed below.

3.1.2 The eligibility criteria will be based on the forecast 2023 noise contour as specified in the Application (ref. 21/00031/VARCON) and will be fixed for a period of five years from that year (i.e. until 31 December 2028) following which the eligibility will revert to actual aircraft movements at the Airport for the summer period (16th June to 15th September) in the immediately preceding calendar year. This will be determined as part of the noise monitoring system on an annual basis in accordance with the following criteria:

(A) Airborne Aircraft Noise

(1) Any habitable rooms at dwellings within the 63 dB $_{LAeq,16h}$ on an annual basis.

(2) Any habitable rooms which are used as bedrooms at dwellings within the 55 dB LAeq,8h

(3) Any habitable rooms which are used as bedrooms at dwellings where the airborne noise level in excess of 90 dB SEL occurs at an annual average frequency of once or greater during the night-time (23.00 to 07.00).

(B) Ground Noise

(1) Any habitable rooms at dwellings which are exposed to a free field noise level in excess of 55 dB LAeq,16h daytime (07.00-23.00)

(2) Any habitable rooms which are used as bedrooms at dwellings which are exposed to a free field noise level in excess of 45 dB LAeq,8h night-time (23.00-07.00)

(C) Traffic Noise

(1) Any habitable rooms at dwellings with a façade incident noise level in excess of 66 dB LAeq,16h daytime (07.00 to 23.00); and

(2) Which are subject to the predicted Road Traffic Noise Increase of not less than 1 dB as a result of the Development which for the avoidance of doubt has been identified in Plan 2 of the settled Section 106 Agreement.

This will be determined on a biennial basis. Current predictions indicate no eligibility will arise for many years as the traffic related to the Development forms only a minor element of road traffic flows on nearby roads.

3.1.3 LLAOL will assess the noise related to the Airport and determine the residential properties eligible in accordance with the criteria noted above. LLAOL will notify the scheme administrator, the independent London Luton Airport Consultative Committee (LLACC), who will determine at the beginning of each year the properties they wish to prioritize for sound insulation works in the coming year. LLAOL shall provide any necessary support and assistance reasonably requested by LLACC with the administration of the Residential Noise Insulation scheme.

3.1.4 The prioritisation is necessary as the scheme is based on a continuous annual program, allowing the properties deemed most in need to be treated first, with further properties treated in future years. It will involve considering the eligibility based on the criteria detailed above, daytime and night-time noise from airborne aircraft, ground operations noise, and road traffic noise, with any special circumstances. These could include the nature of specific properties or the specific residents, for example night workers, those needing a particularly quiet home environment to work in, or those that have a medical condition which will be seriously aggravated by noise. On resolution of the eligible properties to be considered for works, LLAOL will write to the residential property owners to establish whether the owners wish to accept the works. On the basis that the owner wishes to proceed, the scheme process will be implemented. If the owner does not wish to proceed at this stage, no further approaches will be made for a five-year period. If after five years the owner decides to proceed, the scheme will be implemented by LLAOL and works undertaken by a contractor appointed by LLAOL after discussion with LLACC. If after five years the owner decides again not to proceed, no further approaches will be made. If any eligible property that has declined the offer twice approaches LLAOL asking for insulation then such request

will be taken to the London Luton Airport Noise Insulation Sub-Committee (part of LLACC) for consideration.

3.1.5 The scheme will provide a grant of up to the value of £4,500 (index-linked[1]) per eligible property, in order that noise insulation can be provided to up to five habitable rooms. The rooms excluded are non-habitable rooms, for example hallways, bathrooms and kitchens, although kitchen dining rooms shall be considered as habitable rooms. In exceptional circumstances, as deemed appropriate by LLAOL, higher grants maybe available.

3.1.6 Grants paid pursuant to this scheme can only be used for works that will improve the internal noise climate within the residential property. The primary method of improving sound insulation is the installation of secondary glazing. Secondary glazing units provide an additional layer of glass inside the existing external windows. The style of secondary glazing units fitted will be dependent on the existing external window. The design will be such that both sides of the secondary glazing and the inside of the existing window can be cleaned from inside the habitable room.

3.1.7 Grants may also be used to assist in installation of High-Specification Double Glazed replacement windows, with a glazing specification of 10/12/6.4 acoustic laminate or similar.

3.1.8 Where glazing works are undertaken it will be necessary to install sound attenuated ventilation units to provide background ventilation and these would normally be fitted to external walls.

3.1.9 The works can also include the installation of High-Specification Double Glazed replacement windows with sound attenuated trickle vents.

3.1.10 The works can also include installation of loft insulation.

3.1.11 The works can provide funds for installation of blinds between the primary and secondary glazing for secondary glazed windows that face south.

3.1.12 Where treated habitable rooms have an external door, the works can provide improved sound insulating external doors.

[1] Indexation is to be calculated in accordance with the definition of "Index Linked" in the Section 106 Agreement to which this NMP is annexed.

3.1.13 Excluded from this scheme are residential properties built after the date of the grant of the original planning permission ref: 12/01400/FUL, namely 23 June 2014 unless such properties would fall within the new SOAEL as assessed under planning permission ref. 21/00031/VARCON.

3.1.14 The scheme will be advertised on the Airport's website, and that of the LLACC. The advertisement will describe the scheme, and clarify that eligible property owners will be approached, and so application to LLAOL will not be required.

4. NON - RESIDENTIAL NOISE INSULATION SCHEME

4.1.1 This scheme provides noise insulation works to non-residential buildings that meet the Non-Residential Noise Insulation Eligibility Criteria. Where acoustic insulation cannot provide an appropriate or cost-effective solution, alternative mitigation measures will be considered. Non-residential buildings relate to:

(A) Schools and colleges.

(B) Doctor's surgeries, health centres, hospitals, nursing homes and care homes;

(C) Libraries, community centres (unless only used as social clubs), meeting halls and village halls;

(D) Churches and other places of religious worship;

(E) Children's and other day centres, crèches and nurseries;

(F) Any other types of public building as agreed between Luton Airport and LBC.

4.1.2 The eligibility criteria will be based on the forecast 2023 noise contour as specified in the Application ref: 21/0031/VARCON and will be fixed for a period of five years from that year (i.e. until 31 December 2028) following which the eligibility will revert to actual aircraft movements at the Airport for the summer period (16th June to 15th September) in the immediately preceding calendar year. This will be determined as part of the Noise monitoring system on an annual basis in accordance with the following criteria:.

4.1.3 **Airborne Aircraft Noise**

(A) Any noise sensitive rooms[2] within non-residential buildings within the 63 dB LAeq,16h summer daytime (07.00-23.00)

(B) Any noise sensitive rooms which are used at night within non-residential buildings within the 55 dB $_{LAeq,8h}$ summer night-time (23.00-07.00)

4.1.4 LLAOL will assess the noise related to the Airport, and determine the non-residential properties eligible on the basis of the criteria noted above. LLAOL will notify the scheme administrator, the LLACC, and request that they determine which properties they wish to prioritize for sound insulation works. LLAOL shall provide any necessary support and assistance reasonably requested by LLACC with the administration of the Non-Residential Noise Insulation Scheme.

4.1.5 On resolution of the eligible properties to be considered for works, LLAOL will write to the property owners to establish whether the owners wish to accept the works. On the basis that the owner wishes to proceed, the scheme process will be implemented. If the owner does not wish to proceed at this stage, no further approaches will be made for a five-year period. If after five years the owner decides to proceed, the scheme will be implemented by LLAOL and works undertaken by the contractor appointed by LLAOL after discussion with LLACC. If after 5 years the owner decides again not to proceed, no further approaches will be made.

4.1.6 The scheme will provide a grant as appropriate in order that noise insulation can be provided.

4.1.7 The primary method of improving sound insulation is the installation of secondary glazing. Secondary glazing units provide an additional layer of glass inside the existing external window. The style of secondary glazing units fitted will be dependent on the existing external window. The design will be such that both sides of the secondary glazing and the inside of the existing window can be cleaned from inside the treated room.

4.1.8 Grants may also be used to assist in installation of Double-Glazed replacement windows.

[2] For example, areas where people spend most time, so in the case of a school the classrooms would be noise-sensitive but a cleaning cupboard would not be.

4.1.9 Where glazing works are undertaken it may also be necessary to install sound attenuated ventilation units. These will provide background ventilation and would normally be fitted to external walls.

4.1.10 The works can also include the installation of High-Specification Double Glazed replacement windows with sound attenuated trickle vents.

4.1.11 The works can also include installation of loft insulation.

4.1.12 The works can provide funds for installation of blinds between the primary and secondary glazing for secondary glazed windows that face south.

4.1.13 Where treated rooms have an external door, the works can provide improved sound insulating external doors.

4.1.14 Excluded from this scheme are non-residential properties built after the date of the grant of the original planning permission ref: 12/01400/FUL, namely 23 June 2014, unless such properties would fall within the new SOAEL as assessed under planning permission ref. 21/00031/VARCON.

4.1.15 The scheme will be advertised on the Airport's website, and that of the LLACC. The advertisement will describe the Scheme, and clarify that eligible property owners will be approached, and so application to LLAOL will not be required.

5. NOISE CONTROL SCHEME

5.1.1 Luton's Noise Quota System

(A) LLAOL will continue to operate a Quota Count System (QC system) based on the Noise Quota System utilised by other UK airports, including Heathrow Airport, or such other methodology to apply QC values for individual aircraft types to be agreed with the Council. The Noise Quota System at the other London Area Airports is promulgated in supplements to the Civil Aviation Authority's Aeronautical Information Publication (AIP). The most recent supplement detailing the Noise Quota System *London Heathrow, London Gatwick and London Stansted Airports Noise Restrictions Notice (No. 2) 2022* was published 22 September 2022 and includes information on the QC values for various aircraft types. The QC system is updated from time to time as new information obtained during the aircraft's noise certification process becomes available. Since 2017 the

supplement has included a new category of QC 0.125, and the Exempt category has been replaced with a new category of QC 0.

(B) The Luton System is required to assign to each aircraft operation by a Luton aircraft a QC value. Those values combined with the number of annual movements will be used to determine the annual quota used, which will be compared with the annual budget limit of 3,500. The Luton System also imposes restrictions on usage of aircraft based on their QC value and provides information that is used when the noise levels at the Airport's fixed monitors are reviewed.

5.2 **London Luton Airport Noise Quota System (LLANQS)**

5.3 **Citation and Commencement**

5.3.1 The LLANQS may be cited as the LLANQS, and came into operation following the commencement of development in June 2014.

5.4 **Interpretation**

5.4.1 For the purposes of this System

'the Act' means the Civil Aviation Act 1982;

'airport authority' means the person for the time being having the management of Luton Airport as applicable;

'Annex 16' means Annex 16 (Volume 1 – Aircraft Noise) to the Convention on International Civil Aviation signed on behalf of the United Kingdom at Chicago on 7 December 1944[1];

'appropriate air traffic control unit', has the meaning ascribed to it by the Air Navigation Order 2009[2];

'maximum certificated landing weight' means the maximum landing weight authorised in the certificate of airworthiness;

'maximum certificated take-off-weight' means the maximum take-off weight authorised in the certificate of airworthiness;

'night period' means the period from 23.00 hours to 07.00 hours (Local time);

'night quota period' means the period from 23.30 hours to 06.00 hours (Local time)[3];

'noise classification' means the noise level band in EPNdB, for take-off or landing, as the case may be, for the aircraft in question, as determined from the individual aircraft's noise certification form coupled with The Schedule of the System.

'quota' means the maximum permitted sum of the quota counts of all aircraft taking off from or landing at the Airport during any twelve months in the night quota period;

'quota count' means the amount of the quota assigned to one take-off or to one landing by the aircraft in question, this number being related to its noise classification as specified in paragraph 5.5.3 of this system.

References in this system to a moment in time are to Local Time, that is in any period of summertime, to the time fixed by the Summer Time Act 1972, and outside that period to Universal Co-ordinated Time.

5.5 **Description of Aircraft**

5.5.1 Aircraft taking off or landing at Luton Airport are described in this system as follows:

(A) Aircraft having a quota count of 0;

(B) Aircraft having a quota count of 0.125;

(C) Aircraft having a quota count of 0.25;

(D) Aircraft having a quota count of 0.5;

(E) Aircraft having a quota count of 1;

(F) Aircraft having a quota count of 2;

(G) Aircraft having a quota count of 4;

(H) Aircraft having a quota count of 8;

(I) Aircraft having a quota count of 16.

5.5.2 The provisions of this section do not apply to light propeller-driven aircraft with a maximum certificated take-off weight not exceeding 8,618 KG, and which are being utilised to undertake essential airport safety checks.

[3] an aircraft is deemed to have taken off or landed during the night period or night quota period, as the case may be, if the time recorded by the appropriate air traffic control unit 'airborne' or 'landed' respectively falls within that period

5.5.3 Subject to paragraph 5.5.2, the quota count of an aircraft on taking off or landing is to be calculated on the basis of the noise classification for that aircraft on take-off or landing as appropriate as follows:

Noise Classification	Quota Count
<81 EPNdB	0
81-83.9 EPNdB	0.125
84-86.9 EPNdB	0.25
87-89.9 EPNdB	0.5
90-92.9 EPNdB	1
93-95.9 EPNdB	2
96-98.9 EPNdB	4
99-101.9 EPNdB	8
Greater than 101.9 EPNdB	16

5.6 **Prohibitions on taking off or landing**

5.6.1 Subject to paragraphs 5.12-5.13.1, at Luton Airport:

(A) any aircraft which has a quota count of 2, 4, 8 or 16 may not take-off or land during the night period;

5.6.2 Subject to paragraph 5.12, at Luton Airport an aircraft may not take-off or be scheduled to land during the night period where:

(A) the operator of that aircraft has not provided (prior to its take-off or prior to its scheduled landing time as appropriate) sufficient information to enable the airport authority to verify its noise classification and thereby its quota count; or

(B) the operator claims that the aircraft has a QC of 0 within paragraph 5.5.1(A), but the aircraft is not indicated as such an aircraft in Part 2 of the

Schedule to the UK AIP Supplement on Noise Restrictions at other London Area Airports.

5.7 **Maximum number of occasions on which aircraft may take-off or land**

5.7.1 Subject to paragraphs 5.9-5.12.1, the overall maximum number of occasions on which aircraft of the descriptions specified in paragraphs 5.5.1(B)to 5.5.1(E) inclusive may take-off or land during the night quota period in any twelve month period is at Luton Airport: 9650.

5.7.2 Subject to paragraphs 5.8-5.12.1, in the night quota period in the specified twelve month period the quota is at Luton Airport: 3500.

5.7.3 Subject to paragraphs 5.10 – 5.12.1, each take-off or landing by an aircraft at Luton Airport during each night quota period within the twelve month period is to count according to its quota count towards the relevant quota.

5.8 **Carry-over from the specified twelve-month period**

5.8.1 If the number of occasions on which aircraft of the descriptions specified in paragraphs 5.5.1(B) to 5.5.1(E) inclusive take-off or land at Luton Airport during the previous period is less than the maximum number of occasions specified in paragraph 5.7.1, the maximum number of occasions on which such aircraft may take-off or land at that aerodrome during the specified period may be supplemented by a number of occasions equal to the shortfall, up to a maximum of 10% of the maximum number of occasions specified in paragraph 5.7.1.

5.8.2 If any part of the quota specified in paragraph 5.7.1 remains unused at the end of the previous specified period, the quota for the specified period at Luton Airport may be supplemented by a sum of quota counts equal to the remainder, up to a maximum of 10% of the quota specified in paragraph 5.7.1.

5.9 **Overrun of movements in the specified twelve-month period**

5.9.1 If, in respect of Luton Airport, the sum of the maximum number of occasions specified in paragraph 5.7.1 has been exceeded during the previous specified period:

(A) by up to 10% of the number of occasions specified in paragraph 5.7.1, the maximum number of occasions on which aircraft of the descriptions specified in paragraphs 5.5.1(B) to 5.5.1(E) inclusive may take-off or land

during the specified period at Luton Airport is to be reduced by the same amount; or

(B) by more than 10% of the number of occasions specified in paragraph 5.7.1, the maximum number of occasions on which aircraft of the descriptions specified in paragraphs 5.5.1(B) to 5.5.1(E) inclusive may take-off or land during the specified period at Luton Airport is to be reduced by the amount of the excess up to 10% plus twice the amount of the excess over 10%.

5.10 **Overrun of the quota limits in the previous specified period**

5.10.1 If, in respect of Luton Airport, the sum of the quota specified in paragraph 5.7.2 has been exceeded during the previous specified period:

(A) by up to 10% of the quota specified in paragraph 5.7.2, the quota for the specified period at the Luton Airport is to be reduced by the same amount; or

(B) by more than 10% of the quota specified in paragraph 5.7.2, the quota for the specified period at Luton Airport is to be reduced by the amount of the excess up to 10% plus twice the amount of the excess over 10%.

5.11 **Limits to overrun in the specified period**

5.11.1 The sum of the maximum number of occasions specified in paragraph 5.7.1 for Luton Airport and any supplementary number of occasions permitted by paragraph 5.8.1 must not be exceeded by more than 10% of the number of occasions specified in paragraph 5.7.1.

5.11.2 The sum of the quota specified in paragraph 5.7.2 for Luton Airport must not be exceeded by more than 10% of the quota specified in paragraph 5.7.2.

5.12 **Disregarded movements**

5.12.1 For the purposes of Section 78(4)(a) of the Act, the following circumstances are specified in relation to the taking off and landing of aircraft at Luton Airport, namely:

(A) delays to aircraft which are likely to lead to serious congestion at the aerodrome or serious hardship or suffering to passengers or animals;

(B) delays to aircraft resulting from widespread and prolonged disruption of air traffic.

5.13 **Exclusion from the provisions of this System for emergency take-offs or landings**

5.13.1 None of the provisions of this System apply to a take-off or landing which is made in an emergency consisting of an immediate danger to life or health, whether human or animal.

5.14 **The Schedule**

5.14.1 The noise classification for an aircraft on take-off or landing as appropriate means for the purpose of landing:

(A) in the case of an aircraft certified to the standards of Chapters 2, 3, 4, 5 or 14 of Annex 16 (or the equivalent standards), the certificated approach noise level of the aircraft at its maximum certificated landing weight minus 9 EPNdB: and

(B) in the case of a propeller aircraft with a maximum take-off weight not exceeding 5,700 kg and any other aircraft not certificated to the standards of Chapter 2, 3, 4, 5 or 14 of Annex 16 (or the equivalent standards): the noise level indicated in relation to that aircraft in the noise data supplied for this purpose to the CAA.

5.14.2 For the purposes of take-off:

(A) where the aircraft is certificated to the standards of Chapter 3, 4, 5 or 14 of Annex 16 (or the equivalent standards): half the sum of the flyover and the sideline noise levels in EPNdB as measured at the certification points specified in that Annex during the noise certification of the aircraft at its maximum certificated take-off weight;

(B) where the aircraft is certified to the standards of Chapter 2 of Annex 16 (or the equivalent standards): half the sum of the flyover and the sideline noise levels in EPNdB as measured at the certification points specified in that Annex during the noise certification of the aircraft at its maximum certificated take-off weight, plus 1.75 EPNdB; and

(C) where the aircraft is a propeller aircraft with a maximum take-off weight not exceeding 5.700 kg or any other aircraft not certified to the standards of Chapter 2, 3 or 5 of Annex 16 (or the equivalent standards): the noise

levels indicated in relation to that aircraft in the noise data supplied for this purpose to the CAA.

5.14.3 Luton Airport will operate the system delineated above and will apply sanctions in relation to operators of aircraft which land or take-off in breach of the LLANQS. The operation of the LLANQS, including movement and quota totals, will be reported within Luton Airport's Quarterly Flight Operations Reports (QFOR) and Sustainability Reports (SR).

5.15 **Quarterly Flight Operations Report (1st March/1st June/1st September/1st December)**

5.15.1 The QFORs have included for many years (and shall continue to include), details of monthly movements, monthly passengers, runway usage, departure route usage, arrival details including Continuous Descent Approach (CDA) usage, measured departure noise levels, details of any noise violations, track violations, complaint statistics and analysis, and quarterly night noise contours. Following the grant of the original planning permission (LBC ref: 12/01400/FUL) the QFORs have also been required to include:-

(A) Actual Total Number of Aircraft Movements for the preceding 12 month period, and a breakdown of monthly totals;

(1) For the time 00.00 to 24.00 hrs (Overall)

(2) For the time 23.30 to 06.00 hrs (Night Quota Period)

(3) For the time 06.00 to 07.00 hrs (Early Morning Shoulder Period)

(B) Actual Total Noise Quota Usage for the preceding 12 month period, and a breakdown of monthly totals.

(C) Forecast Total Number of Aircraft Movements in the following 12 month period;

(1) For the time 07.00 to 23.00 hrs (Day period)

(2) For the time 23.00 to 07.00 hrs (Night period)

(D) Instances where daytime and night-time Noise Violation Limits (NVL) have been breached, if any. (Already reported in QFORs and SR).

(E) Instances where Track Violation Limits have been breached, if any.

5.15.2 The future commercial schedules become available for the summer and winter scheduling periods at different times and therefore forecast movements can only be approximately estimated.

5.16 **Sustainability Report (30th June)**

5.16.1 The SRs have included for many years, detailed information on aircraft movements, aircraft fleets, runway usage, CDA usage, track-keeping, noise monitoring, noise contours, complaints, employment, surface access and planning. The contents and format of the SR has been resolved between Luton Airport and the Airport's independent consultative committee, LLACC. Following the grant of the original planning permission (LBC ref: 12/01400/FUL) the SR has also been required to include:-

(A) For preceding year total aircraft movements;

(1) for 23.30 to 06.00 Night Quota Period

(2) for 06.00 to 07.00 Early Morning Shoulder Period.

(B) Actual Annual Movements of;

(1) Marginally compliant Chapter 3 aircraft (00.00-24.00)

(2) QC 2 aircraft (23.00-07.00)

(C) Forecast total aircraft movements;

(1) Summer Period Daytime Period : 07.00-23.00

(2) Summer Period Night-time Period: 23.00-07.00

(3) Annual Night quota Period: 23.30-06.00

(4) Early Morning Shoulder Period: 06.00-07.00

(D) Actual QC Annual Usage: 23.30-06.00

(E) Forecast QC Annual Usage: 23.30-06.00

(F) Actual Noise contours for the Day and Night Period for the preceding summer 92 day period, and details of contour areas and populations within contours.

(G) Breaches of noise limits or flying off-track.

(H) Payments from the Noise Insulation Fund.

5.17 **Prohibition of QC 2 operations [23:00 – 07:00]**

5.17.1 Since 2018 LLAOL has phased out aircraft operations in the night period, 2300-0700, by aircraft with a QC value of greater than 1. Aircraft operations involving aircraft with a QC value of greater than 1 will not be permitted during the night period.

6. MONITORING AND REPORTING IN CONNECTION WITH CONDITION [10][4] (NOISE CONTOUR THRESHOLDS)

6.1 Noise Contouring

6.1.1 In connection with planning condition 10 (noise contour thresholds), LLAOL will continue to provide on the 1st December of each calendar year the information listed below:

(A) LAeq,16h noise exposure contours for an average summer day for the 16 hour period (07.00 to 23.00 local time, equivalent to 06.00 to 22.00 GMT in the summer period) commencing at 57 dB(A) and showing increasing values in 3 dB(A) steps for the following cases:

(1) The current year based on actual ATM data;

(2) The following year based on predicted ATM data.

(B) LAeq,8h noise exposure contours for an average summer night for the 8 hour period (23.00 to 07.00 local time, equivalent to 22.00 to 06.00 GMT in the summer period) commencing at 48 dB(A) and showing increasing values in 3 dB(A) steps for the following cases:

(1) The current year based on actual ATM data;

(2) The following year based on predicted ATM data.

6.1.2 For the period up to 31 December 2027, for each of the cases described above, LLAOL will provide to LBC a comparison of the area enclosed within the 57 dB $_{LAeq,16h}$ daytime contours with the value of 21.1 sq km respectively and a comparison of the area within the 48 dB $_{LAeq,8h}$ night time contours with the value of 42.1 sq km.

6.1.3 For the period from 1 January 2028 to 31 December 2030, for each of the cases described above, LLAOL will provide to LBC a comparison of the area enclosed

[4] Condition number to be updated prior to finalising draft.

within the 57 dB $_{LAeq,16h}$ daytime contours with the value of 15.5 sq km respectively and a comparison of the area within the 48 dB $_{LAeq,8h}$ night time contours with the value of 35.5 sq km.

6.1.4 For the period from 1 January 2031, for each of the cases described above, LLAOL will provide to LBC a comparison of the area enclosed within the 57 dB $_{LAeq,16h}$ daytime contours with the value of 15.1 sq km respectively and a comparison of the area within the 48 dB $_{LAeq,8h}$ night time contours with the value of 31.6 sq km.

6.1.5 An evaluation of the results, including a description of any trends and the identification of any relevant features which have affected the results, will be provided to LBC.

6.1.6 The above contours will be calculated using the Federal Aviation Authority Integrated Noise Model version 7.0d (as may be updated or amended from time to time);

6.1.7 In determining the modal split for the average day or night, two cases will be used: (1) the actual percentage of westerly and easterly operations for the current summer period and (2) for the purpose of assessing compliance with the contour area limits in Condition 10 the modal split shall be 78% westerly 22% easterly.

6.1.8 The above information will be contained in a report to be submitted by LLAOL to LBC each year, detailing the forecast aircraft movements, consequential noise contours, and noise quota usage for the forthcoming calendar year. The movements and contours relate to the forecast activity in the 92 day summer period, 15th June-16th September for the forthcoming year. The quota usage relates to the annual usage in the forthcoming calendar year.

6.1.9 With respect to “trends” and “relevant features” identified in the annual reports, LLAOL will study any adverse trends or features and seek to establish causes, and will set out in a Contour Action Plan what actions will be taken by LLAOL or airlines to avoid repetition. The Contour Action Plan should be prepared and agreed within [6 weeks] of LLAOL notifying LBC of any potential exceedances of the noise contours. Once agreed, the Contour Action Plan will be publicised by LBC and LLAOL will provide regular updates on the effectiveness of the measures being taken until the adverse trends and features are no longer predicted. Actions could include detailed operational decisions which would be resolved at the regular “Flight Ops” Committee meetings.

6.2 **Noise Contour Area Reduction Methodology**

6.2.1 Within 12 months of the date of the permission LLAOL will submit a report to LBC which will define methods to be used by LLAOL to reduce the area of the noise contours in accordance with the terms of condition 10 (as summarised above at 6.1.2-6.1.4).

6.2.2 The contour area reduction measures envisaged currently are the improved operational arrangements arising from the Future Airspace Strategy Implementation (FASI), improved operation arrangements arising from introduction of RNAV departure and arrival procedures for all routes, and the introduction of new quieter aircraft, such as the Airbus A320 NEO, Boeing 737 MAX, Boeing 787 etc. The effectiveness of these measures to achieve the target reductions by 2028 and 2031 will be addressed in the regular reviews of this NMP in accordance with the terms of the Section 106 Agreement.

7. **NOISE CONTROL MONITORING SCHEME**

7.1 **Elements of Luton's Overall Noise Management**

7.1.1 LLAOL operates a sophisticated Aircraft Noise and Track Monitoring System. This System includes a network of three permanent noise monitors that measure the noise of individual aircraft movements, and the system is also directly connected to the air traffic control radar that collects aircraft flight tracks. This allows the monitoring of tracks flown by departing aircraft from Luton Airport via a website 'Travis'.

7.2 **Elements of Luton's Future Overall Noise Management**

Fixed Noise Monitoring

7.2.1 LLAOL will continue to maintain, calibrate, and operate the current Aircraft Noise and Track Monitoring System (as may be updated from time to time).

7.2.2 LLAOL will continue to carry out noise monitoring at the following locations:

(A) Pepsal End Farm, Pepsal End, Bedfordshire;

(B) Grove Farm, Slip End, Bedfordshire;

(C) Frogmore Bottom, Hertfordshire.

7.2.3 If these locations become unavailable or not appropriate alternative locations agreed with LBC.

7.2.4 Noise levels of departing aircraft passing in the vicinity of the noise monitors will be recorded and the results analysed, to establish the departure noise level in relation to the aircraft registration. Using the registration, the noise certification values for the aircraft will be obtained via the operator. This information will allow the QC value of the aircraft to be determined. ACL (the slot co-ordinator) will use this information to implement any restrictions on aircraft slots given at the airport.

7.3 **Track Keeping System**

7.3.1 LLAOL will continue to maintain and operate the current Aircraft Noise and Track Monitoring System (as may be updated from time to time). The equipment will continue to identify aircraft which will be deemed to have complied with the current Noise Preferential Routes (NPRs). In particular, it will identify aircraft that fly wholly within the Lateral Swathe (LS) of each Noise Preferential Route (NPR). LLAOL currently has in effect three LS for aircraft departing the Airport, which deal with traffic on the departure routes to Compton, Match and Olney.

7.3.2 The LS are defined from the centreline of the relevant NPR by the closest to the centre-line of a pair of lines either side, each diverging at an angle of 10 degrees from a point on the centre-line of the runway centre-line 2000m from the start of roll; and of a pair of parallel lines representing a distance of 1.5km either side of the route centre-line. The NPRs and consequently the LS include curved sections representing turns.

7.3.3 Once aircraft have attained a certain altitude relevant to the NPR[5], they will be no longer considered within the NPR. At that stage the aircraft may be directed by air traffic controllers onto a different heading, a process described often as “radar vectoring”. Aircraft may also be turned off the NPR earlier to fly outside the LS by air traffic control due to special requirements, such as storm clouds.

7.3.4 LLAOL will continue to maintain a Track Violation Penalty (TVP) System. That TVP System monitors all departures using sophisticated monitoring equipment. The observed radar tracks will be assessed against the Lateral Swathes of the NPRs, and

[5] For example, on RNAV1 route it is 4000ft during both the daytime and night-time periods.

where the aircraft is clearly flying outside the LS, e.g. 250m outside, the aircraft will be identified as causing a “possible” track violation.

7.3.5 On identifying such a “possible” track violation, LLAOL's specialist environmental team will investigate with the airline and air traffic control to ascertain whether there were any valid justifications for the possible track violation, such as a specific air traffic control instruction or aircraft technical issue. If a valid justification is identified the incident will be noted and reported in the QFOR. If no valid justification is identified, then the aircraft operator will be warned and subject to a fine. Such fines will be paid into the Community Fund. If the same operator operates subsequent departures at Luton Airport with the same generic aircraft type and is observed to cause similar “possible” track violations, which after the investigation are found to be actual track violations, then the aircraft operator will be subject to further fines. All such incidents will be noted and reported in the QFOR.

7.4 Noise Violation Limits/Track Violations Sanction/Fine System

7.4.1 LLAOL will take all reasonable steps to reduce the departure noise levels and have already in place some measures in the approved Noise Action Plan. The measures require LLAOL to work with the airline operators to adopt best practice to minimise noise of departing aircraft.

7.4.2 All violations of the NVL will be reported on a three-month basis in the QFORs, and annually in the AMR. The reporting will state the noise level excess over the NVL, the aircraft type, the past average noise level for the type concerned, the aircraft operator, the time of occurrence, and the sanction/fine action taken by LLAOL (see Table 1 below).

7.4.3 The NVL system shall be regularly reviewed in accordance with the review cycle associated with this NMP.

7.5 Track Violations Sanction/Fine System

7.5.1 LLAOL will report track violations in both the QFORs, and the SR. Such reports will identify:-

(A) the number of track-keeping violations;

(B) the operator causing such violations;

(C) the aircraft types causing such violations;

(D) the fines levied and paid into the Community Fund.

The fines will be set in accordance with Table 1 below and will be Index-linked and subject to review on an annual basis.

7.5.2 LLAOL will include in the AMR a report on the operation of the TVP System which will review the effectiveness of the TVP System and which will include as a minimum the following for the preceding year:

(A) the number of fines levied by Luton Airport and the amount of revenue received by Luton Airport in payment of those fines, and paid to the Community Fund;

(B) the categories of the violations by the airlines which gave rise to the fines;

(C) the amount levied against each airline and each aircraft type which operates at Luton Airport; and

(D) whether modifications to level of fine under the Track Violation Penalty System is necessary (and so the nature of those modifications) to improve its effectiveness in minimising the noise disturbance of residents.

7.5.3 The TVP System shall be regularly reviewed in accordance with the review cycle associated with this NMP.

7.5.4 LLAOL will continue to develop the TVP System and will have to take into account the changes occurring in UK, resulting from the introduction of new airspace arrangements, and new navigational methods.

	Fine per Event	
	Daytime **0700-2259 Local Time**	**Night-time** **2300-0659 Local Time**
Any Event	£1000	£2000

Table 1: Noise Violation/Track Violation Sanctions/Fines

8. GROUND NOISE CONTROL SCHEME

8.1 Elements of Luton's Overall Noise Management

8.1.1 Luton Airport in exercise of the powers conferred on it by sections 63 and 64 of the Airport Act 1986, produced and promulgated byelaws, London Luton Airport

Byelaws 2005, which were confirmed by the Secretary of State for Transport on 20th November 2005.

8.1.2 The Byelaws address in Part 5 Control of Aircraft Noise, and advise in Byelaws 5.2 on the controls, including noise which will apply to Ground Running and Testing of Aircraft Engines. The details are given in the schedule attached to the Byelaws.

8.1.3 The resultant ground noise control scheme has achieved minimal community reaction to ground noise sources over the last few years. It includes for the four main ground noise issues: -

(A) Ground running of aircraft propulsion engines

(1) The current restrictions are actioned by:-

(a) OSI 19-21 Aircraft Power Back Procedures

(b) OSI 22-21 Jet Blast

(c) OSI 46-21 Aircraft Engine Ground Runs + Booking and using the Engine Run-up Bay (ERUB)

(2) They seek to use the minimum engine power whilst on the aprons. Engine ground runs on the aprons are limited to check-starts that do not exceed ground idle power. Engine runs on stand are limited to one engine at a time for a maximum duration of 10 minutes.

(B) Preferential use of stands and taxi ways

(1) Luton Airport seeks to operate aircraft from the contact stands that abut the terminal building rather than those non-contact stands on the northern edge of the Airport. The preference cannot apply to the Cargo Apron, as clearly aircraft carrying out cargo operations will need to use that Apron.

(2) Luton Airport seeks to operate taxiway use in order to minimize times taken for departing aircraft, and so reduce ground noise.

(C) Use of Auxiliary Power Units

(1) OSI 048-21 sets out the rules and procedures for the use of Auxiliary Power Units (APUs) at the Airport. They require that APUs are used for the absolute minimum time, and whenever possible to

ensure APUs are used for no more than 5 minutes after arrival on stand, and no more than 30 minutes before planned departure.

(2) APUs are not to be used as a substitute for GPUs. The GPUs are subject to OSI 047-21, which requires new GPUs to make low working noise levels a prime requirement in the selection process.

(D) Ground run tests at night and locations for ground run test during the day period

(1) Measures and controls are detailed in:

(a) Byelaws: Part 5: Para 5.2 and associated schedule.

(b) OSI 046-14, Aircraft Engine Ground Runs and Booking and using the Engine Run Up BAY (ERUB).

8.1.4 These indicate that engine ground runs will not normally be permitted during night hours, 23.00-06.00 weekdays and 23.00-07.00 over the weekends, and on Public Holidays. The details of the management and control of engine ground runs and movements to and from ERUB have to be given in advance to the Airport Operations Control Centre, and approval sought.

8.1.5 The ERUB is located adjoining Taxiway A and is located distant from the main residential areas surrounding the airport. For all engine runs by jet aircraft, other than runs at ground idle power setting, the operator has to use the ERUB facility. They are required to keep noise disturbance to a minimum.

8.1.6 A review of this scheme will take place as part of the regular review of this NMP in accordance with the terms of the Section 106 Agreement.

Appendix 1: Luton Airport Byelaws