SUMMARY PROOF OF EVIDENCE

Noise

On behalf of

LUTON BOROUGH COUNCIL

Town and Country Planning (Inquiries Procedure) (England) Rules 2000

Ben Holcombe, BEng(Hons), MIoA

APPLICANT: London Luton Airport Operations Limited

APPLICATION SITE: London Luton Airport, Airport Way, Luton

DESCRIPTION OF DEVELOPMENT: Variation of Conditions 8 (passenger throughput cap), 10 (noise contours), 22 (car parking management), 24 (Travel Plan) and 28 (approved plans and documents) to Planning Permission 15/00950/VARCON (dated 13th October 2017) for the dualling of airport way/airport approach road and associated junction improvements, extensions and alterations to the terminal buildings, erection of new departures/arrivals pier and walkway, erection of a pedestrian link building from the short-stay car park to the terminal, extensions and alterations to the mid-term and long-term car parks, construction of a new parallel taxiway, extensions to the existing taxiway parallel to the runway, extensions to existing aircraft parking aprons, improvements to ancillary infrastructure including access and drainage, and demolition of existing structures and enabling works and for the construction of multi-storey car park and pedestrian link building.

PINS REF: APP/B0230/V/22/3296455

LPA REF: 21/00031/VARCON

Luton Airport – 21/00031/VARCON

Summary Proof of Evidence of Ben Holcombe – Noise

Report 271E.RP.2.0 // 26 August 2022

prepared for

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Summary

Overview

S1. This document sets out a summary of my full Proof of Evidence (**271E.RP.1**).

S2. The following conditions are proposed to be varied:

- Condition 8 (passenger throughput cap);
- Condition 10 (noise contours);
- Condition 22 (car park management);
- Condition 24 (travel plan);
- Condition 28 (approved plans and documents).

S3. Noise impacts can potentially occur as a result of surface access activity, and movements by aircraft on the ground and in the air.

S4. Surface access noise and ground noise from aircraft were addressed in the applicant's screening report. Imperceptible noise increases were found for both sources, which would have a negligible effect.

S5. My Proof of Evidence pays particular attention to Condition 10, summarising the airborne aircraft noise implications of the application.

S6. Section 7.0 of my full proof sets out my detailed response to points raised in the Statements of Case from the Rule 6 Parties (LADACAN and CPRE Hertfordshire). I do not summarise these within this document, to avoid overly simplifying the matters addressed.

Noise Findings

S7. The most up-to-date assessment of noise due to aircraft in flight is assessed in the Environmental Statement Addendum 4 (ESA4, July 2022). This document sets out the noise effects that would arise as a result of the application, which would change the mix of aircraft forecast at Luton Airport, as well as increasing the passenger throughput cap (Condition 8) from 18 million passengers per annum (mppa) to 19 mppa.

S8. The 1 mppa increase would be carried by an increased number of aircraft movements. Set out in Table S1 below are the number of ATMs that were originally forecast, have occurred and are predicted.

Table S1 Number of movements per year

Year	ATMs	mppa
As were forecast in 2012 (original planning application)	156,840	18
As occurred in 2019 (although in breach of both day and night contours)	141,481	18
As forecast in this application	142,566	19

S9. Without any change in fleet mix, the change from 141,481 to 142,566 ATMs would result in a change in average noise level of a fraction of 1 dB, which is negligible. The number of ATMs required to carry 19 mppa is lower than was originally forecast to carry 18 mppa.

S10. The application forecasts noise level increases for key assessment years, as set out in table 6 of my proof and repeated in Table S2 below:

Table S2 Day and night noise level increases for assessment years

Metric	2023	2024	2025	2028	2031
$L_{Aeq,16hour}$	< 1 dB	< 1 dB	< 1 dB	< 1 dB	0 dB
$L_{Aeq,8hour}$	< 1 dB	< 1 dB	< 1 dB	< 1 dB	0 dB

S11. At no point are significant impacts expected during the daytime or night-time.

S12. The worst-case year would occur in 2023 (next year) for which it is forecast that there would be an increase in relevant contour areas. The daytime and night-time Significant Observed Adverse Effect Level (SOAEL) contours are used to signify eligibility of dwellings for the Noise Insulation Scheme (NIS). The number of eligible dwellings increases, as can be seen in Table 3 of my proof, recreated in Table S3 below:

Table S3 ESA4 Table 6.20 - LOAEL and SOAEL for various noise model scenarios

Scenario	Area of SOAEL (km^2)	No. Dwellings in SOAEL	Area of LOAEL (km^2)	No. Dwellings in LOAEL
Daytime				
Current Condition 10 for 2023	6.6	639	53.6	14,227
Proposed Scheme 2023	7.1	744	57.6	16,282
Night-time				
Current Condition 10 for 2023	10.1	1,671	60.6	19,589
Proposed Scheme 2023	11.5	1,993	68.5	24,602

S13. There would be an increase in the number of dwellings eligible for Luton Airport's Noise Insulation Scheme of 322. All of these dwellings are as a result of the night-time increase; 105 of the same dwellings are also eligible as a result of the day-time increase.

S14. For all assessment years, there are no dwellings within the UAEL (Unacceptable Adverse Effect Level) contour areas in the day or night.

S15. The largest increase in noise at non-residential noise-sensitive buildings and open spaces is 0.5 dB $L_{Aeq,16hour}$ during the daytime and 0.8 dB $L_{Aeq,8hour}$ during the night. These are not significant increases in noise.

S16. The methodology of the assessment undertaken by the Applicant with regards to noise matters is consistent with the approach adopted at other UK commercial airports of similar size and scale and is therefore deemed acceptable.

Policy

S17. With regards to noise matters, the application assesses impacts and effects in a manner that allows them to be determined against relevant government aviation policies.

S18. The three aims of the Noise Policy Statement for England (NPSE, 2010) are met. These are:

a) avoid significant adverse impacts on health and quality of life;

b) mitigate and minimise adverse impacts on health and quality of life; and

c) where possible, contribute to the improvement of health and quality of life.

S19. The consultation response on UK airspace policy (APF 2017) states:

The government's overall policy on aviation noise is to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise, as part of a policy of sharing benefits of noise reduction with industry in support of sustainable development.

S20. As noise contour areas from 2031 onwards are predicted to be smaller than Condition 10's 2028 requirement, this application is deemed to achieve the aim of sharing noise benefits, but only in the longer term.

S21. Change criteria for air noise has been taken from Aviation Policy Framework 2013, that being a change of 3 dB relating to a significant effect. The same criteria were used in the recent Stansted and Bristol Airport expansion applications. In both cases, the Secretary of State granted permission.

S22. Aviation Policy Framework 2013 also sets out minimum thresholds for airports to offer financial assistance towards acoustic insulation where properties are above 63 dB $L_{Aeq,16hour}$. The application meets this requirement, as set out below.

S23. Policy LLP6 from Luton Borough Council's Local Plan relates to airport expansion and associated noise. With regards to noise matters, the application can be considered to be in line with Local Plan policy.

Noise Insulation Scheme

S24. In accordance with government policy set out in Aviation Policy Framework 2013, enhanced acoustic mitigation is proposed. For airborne aircraft noise, Luton Airport's scheme covers dwellings within the 63 dB $L_{Aeq,16hour}$ contour, 55 dB L_{night} contour, or exposed to individual flyover levels of 90 dB SEL.

S25. Set out in Table S4 below are the extant and proposed schemes, both with the same thresholds listed above:

Table S4 Noise Insulation Scheme changes

Scenario	Dwellings Covered	£ per property	Years expected until completion	Annual funding cap
Extant scheme	1,671	£3,000	33	£100,000
This application	1,993	£4,500	6	No cap

S25. The application would therefore result in a materially enhanced NIS.

S26. The NIS is enhanced despite the increase in noise level being less than 1 dB $L_{Aeq,T}$, and therefore a negligible effect. Should the application be granted, properties already within the SOAEL may benefit, as they can be offered insulation faster. The insulation will also mitigate other sources of environmental noise, such as surface access and ground noise, leading to further benefit.