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London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 5 Environmental Statement and Related Documents
5.02 Appendix 16.3 Fixed Plant Noise Management Plan

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APFP Regulation: 5(2)(a)

The Planning Act 2008

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009**

**London Luton Airport Expansion Development Consent
Order 202x**

**5.02 ENVIRONMENTAL STATEMENT APPENDIX 16.3
FIXED PLANT NOISE MANAGEMENT PLAN**

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1 INTRODUCTION

- 1.1.1 This document has been prepared by Luton Rising (a trading name for London Luton Airport Limited ('the Applicant')) as part of the Environmental Statement (ES) submitted in support of the application for development consent for the expansion of London Luton Airport (the airport) from 18 million passengers per annum (mppa) to accommodate 32 mppa (hereby referred to as the 'Proposed Development').
- 1.1.2 This document is an appendix to **Chapter 16** Noise and vibration of the ES **[TR020001/APP/5.01]** submitted as part of the application for development consent. This document contains the Fixed Plant Noise Management Plan which describes the process to reduce and control adverse effects of fixed plant noise arising from operation of the Proposed Development.
- 1.1.3 A requirement in Schedule 2 of the **Draft Development Consent Order [TR020001/APP/2.01]** requires that fixed plant associated with the Proposed Development is designed, constructed, operated and maintained in accordance with the Fixed Plant Noise Management Plan.
- 1.1.4 Following the process described in the Fixed Plant Noise Management Plan will mean that:
- a. adverse effects of noise from fixed plant are reduced as far as is reasonably practicable in line with the second aim of Government noise policy (Ref. 1) to minimise adverse effects on health and quality of life in the context of sustainable development; and
 - b. significant adverse effects are avoided (by specifying noise limits so as not to exceed a rating level of 5dB or more above the background sound level) in line with the first aim of Government noise policy to avoid significant adverse effects on health and quality of life.

2 FIXED PLANT NOISE MANAGEMENT PLAN

2.1 Scope

2.1.1 This section describes the measures that will be put in place to manage noise from fixed plant. 'Fixed plant' covers the following systems associated with the Proposed Development:

- a. substations;
- b. fuel storage facilities;
- c. water treatment facilities;
- d. solar battery storage facilities; and
- e. mechanical, electrical and public health (MEP) systems serving the new terminal infrastructure.

2.2 Residential receptors

2.2.1 Fixed plant shall be designed, constructed, operated and maintained with the objective that the rating level $L_{Ar,Tr}$ of fixed plant under normal operation at the worst affected residential receptor, minus the background sound level ($L_{A90,T}$), is not more than -5dB, determined in accordance with British Standard 4142 (Ref. 2).

2.2.2 In cases where it is not reasonably practicable to achieve the above objective, the Applicant will adopt measures so that noise from all fixed plant is reduced as far as is reasonably practicable, including the consideration of:

- a. engineering feasibility;
- b. cost; and
- c. other design considerations such as the visual appearance of plant, equipment and any screening or structures which house the equipment.

2.2.3 In these cases, the Applicant shall design, construct, and maintain the fixed plant such that, under all reasonably foreseeable circumstances, the rating level of the fixed plant in normal operation at the worst affected residential receptor, minus the existing background level, is not more than +5dB, determined in accordance with BS 4142.

2.2.4 Special consideration will be given to the assessment of noise from fixed plant when the background sound level is low (below $30dB_{LA90,T}$).

2.2.5 The surveys used to define the background sound levels will be carried out at the time of detailed design of the fixed plant systems so that the relevant background sound levels are established using up to date information.

2.3 Non-residential receptors

2.3.1 The process described in BS4142 is not relevant for non-residential receptors. The Applicant shall undertake an assessment of noise from fixed plant at non-residential receptors using a methodology first approved in writing by the

relevant planning authority (expected to be Luton Borough Council in all cases). The assessment, and any required noise control, shall demonstrate that adverse significant effects are avoided at the noise-sensitive non-residential receptors.

GLOSSARY AND ABBREVIATIONS

Term	Definition
The Applicant	Luton Rising (a trading name for London Luton Airport Limited)
ES	Environmental Statement
MEP	Mechanical, Electrical and Public Health

REFERENCES

Ref 1 Department for Environment Food and Rural Affairs (2010), Noise Policy Statement for England
Ref 2 British Standards Institute (2019), BS 4142:2014+A1:2019 – Methods for rating and assessing industrial and commercial sound. BSi, London.