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APPLICATION BY LONDON LUTON
AIRPORT OPERATIONS LTD

VARIATION OF CONDITIONS
RELATING TO
LONDON LUTON AIRPORT

(REF APP/B0230/V/22/3296455)

Joint Statement on Air Quality

30 August 2022

Table of Contents

Table of Contents	1
Glossary of abbreviations	2
1. Introduction.....	4
1.1 <i>Joint Statement</i>	4
1.2 <i>The S.73 Planning Application</i>	4
1.3 <i>Summary of Joint Statement</i>	6
2. Legislative and Policy Context	7
2.2 <i>Air Quality Standards</i>	7
2.3 <i>Assessment of Significance</i>	11
3. Environmental Assessment	14
3.1 <i>Introduction</i>	14
3.2 <i>ESA2</i>	14
3.3 <i>ESA4</i>	17
3.4 <i>Condition 10 Compliant Scenario</i>	18
4. Conclusion	20

Glossary of abbreviations

Abbreviation	Definition
AQAL	Air Quality Assessment Level
AQMA	Air Quality Management Area
AQO	Air Quality Objective
AQS	Air Quality Standard
ASR	Annual Status Report
Defra	Department of the Environment, Food and Rural Affairs
EPUK	Environmental Protection UK
ES	Environmental Statement
ESA 1	July 2015 ES Addendum in relation to section 73 application dated 25 June 2015 with ref. 15/00950/VARCON
ESA 2	January 2021 ES Addendum in relation to section 73 application 21 January 2021 with ref. 21/00031/VARCON
ESA 3	May 2021 ES Addendum in response to a Regulation 25 request for clarifications on the noise assessment
ESA 4	July 2022 ES Addendum to update the ES in relation to some changes to the description of the proposed wording of Condition 10 and also due to the passage of time since the original application
IAQM	Institute of Air Quality Management
LAQM	Local Air Quality Management
LBC	Luton Borough Council
LLAOL	London Luton Airport Operations Limited
mppa	million passengers per annum
NO ₂	Nitrogen dioxide
PCM	Pollution Climate Mapping
PM	Particulate matter, PM ₁₀ or PM _{2.5}
PM ₁₀	Particulate matter smaller than 10 µm in diameter
PM _{2.5}	Particulate matter smaller than 2.5 µm in diameter
S73 Application	The application dated 8 January 2021 under section 73 of the Town and County Planning Act 1990 by LLAOL to vary Conditions 8 (Passenger Throughput Cap), 10 (Noise Contours), 22 (Car Parking Management), 24 (Travel Plan) and 28 (Approved Plans and Specifications) to planning

Abbreviation	Definition
	permission 15/00950/VARCON granted by LBC on 13 October 2017 to accommodate 19 million passengers per annum and to amend the day and night noise contours (with ref. 21/00031/VARCON)
WHO	World Health Organization
$\mu\text{g}/\text{m}^3$	microgramme per cubic metre

1. Introduction

1.1 Joint Statement

- 1.1.1 This is a Joint Statement by London Luton Airport Operations Limited (LLAOL) and Luton Borough Council (LBC) prepared by experts on air quality setting out common ground. It has been prepared at the request of the Planning Inspectorate.

1.2 The S.73 Planning Application

- 1.2.1 A short summary of the Airport's planning history and environmental information relevant to this s73 Application is as follows:
- a. In December 2012 LLAOL submitted a planning application (12/01400/FUL) accompanied by an Environmental Statement (dated November 2012) ("the 2012 ES"). This was for the expansion of the airport involving inter alia the dualling of Airport Way, extensions to the terminal, a new pier and walkway, extensions to taxiways, enlargement of car parks and the construction of a multi-storey car park;
 - b. On 23 June 2014 the Council granted planning permission 12/01400/FUL;
 - c. On 25 June 2015 LLAOL made a section 73 Application (15/00950/VARCON) for the variation of condition 11(i) relating to nighttime noise levels. This was accompanied by an ES Addendum dated July 2015 ("ESA1");
 - d. On 13 October 2017 the Council granted planning permission 15/00950/VARCON, ("the Variation Permission");
 - e. On 21 January 2021 LLAOL made this s73 Application for:

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) to

accommodate 19 million passengers per annum and to amend the day and night noise contours. (21/00031/VARCON)

This application was accompanied by an ES Addendum dated January 2021 (“ESA2”)

- f. In May 2021 LLAOL produced a further ES Addendum (“ESA3”) in response to a Regulation 25 request for clarifications on the noise assessment;
 - g. After considering the S73 Application over two evenings on 30 November 2021 and 1 December 2021, the Development Management Committee of LBC agreed with officers, and resolved to grant planning permission for the Development, subject to the Applicant and LBC entering into a section 106 agreement;
 - h. On 6 April 2022, the Secretary of State for Levelling Up, Housing and Communities called-in the Application for his own determination and directed that it should be referred to him instead of being dealt with by LBC;
 - i. On 11 May 2022, the Secretary of State for Transport made a direction under section 266(1A) of the Town and Country Planning Act 1990 for a joint determination of the Application;
 - j. In July 2022 LLAOL produced a further ES Addendum in support of its application. The purpose of this addendum was principally to provide an to update the ES due to the passage of time since the submission of the original application (“ESA4”).
- 1.2.2 This joint statement refers to the S73 Application in paragraph 1.2.1.e as the “Proposed Scheme” and the existing airport as the “Consented Development”. This joint statement refers to the four ES Addenda using the terminology ESA1, ESA2, ESA3 and ESA4 as described above.

1.3 Summary of Joint Statement

1.3.1 This Joint Statement is summarised as follows:

- a. Section 2 identifies the relevant legislation and methodology for air quality impact assessment.
- b. Section 3 summarises the air quality impact assessment provided in ESA2, when Luton Airport was expected to reach 19mppa in 2024. It is common ground that the methodology used is robust and is in accordance with best practice. The predicted air quality impacts of the Proposed Scheme were not significant, in accordance with widely accepted criteria.
- c. Section 3 also summarises the update to air quality impact assessment set out in ESA4, which considers the effect of Luton Airport reaching 19mppa in 2025 and the approach is agreed to be robust. Again, predicted air quality impacts of the Development remain not significant in accordance with widely accepted criteria.
- d. A further scenario included in Section 3 considers compliance with Condition 10. Predicted air quality impacts of the Proposed Scheme remain not significant.
- e. Section 4 concludes that air quality will remain at acceptable levels with the Development.

1.3.2 Air quality is generally improving and will be better in future than in recent years, with or without the Proposed Scheme.

2. Legislative and Policy Context

2.1.1 The legislative, regulatory and policy context for assessment of air quality has been set out in ESA2 (Section 6.3). There have been no changes that would affect the assessment since ESA2 was published, so the full details of legislation and policy are not repeated in this Joint Statement.

2.2 Air Quality Standards

2.2.1 The Air Quality Standards Regulations 2010¹ impose a duty on the Secretary of State for Environment, Food and Rural Affairs to meet certain limit values (commonly referred to as Air Quality Standards, AQS), based on the limit values set in the (then applicable) EU Ambient Air Directive. Air Quality Objectives (AQOs) are set in the Air Quality Strategy² and are a keystone of the Local Air Quality Management (LAQM) framework under which local authorities are expected to deliver compliance with the AQOs. Both AQSs and AQOs are concentrations of pollutants which should not be exceeded, when averaged over a certain period of time (and sometimes with a permitted number of periods which may exceed that level). As far as the pollutants and concentrations considered in this Joint Statement are concerned, AQOs and AQSs are numerically the same.

2.2.2 The Environment Act 2021³ requires the government to lay draft regulations before Parliament by 31 October 2022 on at least two air quality targets for PM_{2.5}. The targets subsequently consulted on were:

¹ CD14.02

² CD14.01

³ CD14.09

- a. An annual mean concentration target of $10\mu\text{g}/\text{m}^3$ to be met across England by 2040; and
- b. A population exposure reduction target to reduce population exposure by 35% between 2018 and 2040.

2.2.3 Schedule 12 of the Environment Act 2021 allows local authorities to increase financial penalties for the sale of certain solid fuels in smoke control areas and issue abatement notices to residents emitting smoke from domestic chimneys. This will increase the ability of local authorities to reduce emissions from a significant source of $\text{PM}_{2.5}$.

Human Health

2.2.4 The criteria of greatest relevance in terms of assessing potential human health impacts of the Development are the following AQOs and AQSs:

- a. NO_2 : annual mean concentration of $40\mu\text{g}/\text{m}^3$ (micrograms per cubic metre);
- b. Particulate matter smaller than $10\mu\text{m}$ in diameter (PM_{10}): annual mean concentration of $40\mu\text{g}/\text{m}^3$, and daily mean concentration of $50\mu\text{g}/\text{m}^3$ not to be exceeded more than 35 times a year; and
- c. Particulate matter smaller than $2.5\mu\text{m}$ in diameter ($\text{PM}_{2.5}$): annual mean concentration of $20\mu\text{g}/\text{m}^3$.

(PM_{10} and $\text{PM}_{2.5}$ are collectively referred to as particulate matter, PM).

2.2.5 In addition, the Clean Air Strategy sets an exposure reduction target, to reduce the number of people living in locations where the $\text{PM}_{2.5}$ concentration is above $10\mu\text{g}/\text{m}^3$ as an annual mean based on World Health Organization (WHO) Guidelines⁴ by 50% by

⁴ CD14.10

2025, compared to a 2016 baseline. The WHO guidelines were updated in 2021⁵ with a guideline for PM_{2.5} of 5 µg/m³ as an annual mean.

2.2.6 The above criteria are concerned with the effects of air pollution on human health, and so apply where people may be expected to be exposed to these levels of air pollution.

2.2.7 The latest LBC Air Quality Annual Status Report (ASR)⁶ submitted to the Department of Environment, Food and Rural Affairs (Defra) in June 2021 provides an update of the status of any air quality management areas (AQMA) declared, the results of ambient air quality monitoring undertaken in the borough and measures being taken by LBC and other third parties to improve air quality. The ASR describes the three AQMAs declared within Luton, all as a result of road traffic emissions and annual mean concentrations being observed above the Air Quality Standard of 40 µg/m³. Two of these AQMAs are adjacent to Junction 11 of the M1 motorway and the third AQMA is within the town centre. The ASR details the results of monitoring by LBC and LLAOL at a total of four automatic sites for NO₂, PM₁₀, PM_{2.5} and other pollutants, 84 diffusion tube sites for NO₂ and six adsorption tubes sites for volatile organic compounds.

2.2.8 For NO₂, all sites exhibit a reduction in annual mean concentrations over the five year period 2016 to 2020 with the AQO met at the majority of roadside locations, at all non-roadside locations outside the airport and at most locations within the airport. In 2020, the annual mean AQO was exceeded at only one site (L7, 49.7 µg/m³). A non-AQMA roadside site on Vauxhall Way, L7 is not considered representative of relevant exposure due to being situated away from both amenities and residential accommodation.

2.2.9 Annual mean and 24-hour mean PM₁₀ concentrations observed at the automatic sites over the five year period 2016 to 2020 all met the relevant AQOs of 40 µg/m³ annual

⁵ CD14.11

⁶ CD14.07

mean and the 24-hour mean not exceeding $50 \mu\text{g}/\text{m}^3$ more than 35 times in the calendar year.

2.2.10 Roadside monitoring of annual mean $\text{PM}_{2.5}$ over the five year period 2016 to 2020 was in the range 8.3 to $10.0 \mu\text{g}/\text{m}^3$. Annual mean $\text{PM}_{2.5}$ concentrations observed within the airport were in the range 9.6 to $11.6 \mu\text{g}/\text{m}^3$. These observed concentrations are within the AQO of $20 \mu\text{g}/\text{m}^3$ and within or very close to the proposed target value of $10 \mu\text{g}/\text{m}^3$ to be achieved by 2040.

2.2.11 There were no monitored exceedances of any AQO at any relevant receptor in 2021.

2.2.12 The ASR describes five local actions to further improve air quality, which are in addition to national measures in place. These local actions include:

- a. installation of four electric vehicle rapid charging units in taxi bays;
- b. installation of gas to liquid refuelling infrastructure at the LBC depot to enable the existing fleet of 300 diesel vehicles to switch to this cleaner fuel;
- c. introducing restrictions at the traffic light controlled junction of Castle, Windsor and Hibbert Streets, to reduce congestion and prevent southbound traffic tailing back along Castle Street;
- d. completion of the Bedfordshire Sustainable Travel Access to Railway Stations project, reducing private car use through the promotion of walking, cycling and bus travel as means of accessing the Midland Mainline train stations in Bedfordshire; and
- e. piloting of school air quality workshops for pupils in years 4 to 6 (ages 9 to 11), to raise awareness and to promote active and sustainable travel to and from school as a practical way for pupils and their families to help improve air quality.

2.2.13 These measures are in addition to the Direct-Air-Rail-Transit system due to come into operation in 2022. This is a joint LBC/LLAOL project designed to enhance modal share

by the electrified rail network, reducing reliance on private road vehicles and the current fleet of diesel shuttle buses.

Ecological Receptors

2.2.14 The criteria of greatest relevance in terms of assessing potential ecological impacts of the Development are the following AQOs and AQSs:

- a. NO_x: annual mean concentration of 30 µg/m³;
- b. Nutrient nitrogen: annual deposition rate of 10 KgN/ha (kilogrammes of nitrogen per hectare); and
- c. Acid deposition (nitrogen and sulphur): site specific critical loads are included in ESA2, expressed in terms of kilograms of H⁺ ion equivalents per hectare per year (keq/ha/year).

2.2.15 The above criteria are specifically concerned with the effects of air pollution on sensitive ecological receptors, i.e. within designated sites including Special Areas of Conservation, Special Protection Areas and Ramsar sites which are covered by the Habitats Regulations, and Sites of Special Scientific Interest, Areas of Special Scientific Interest, National Nature Reserves, local nature reserves, local wildlife sites and areas of ancient woodland.

2.3 Assessment of Significance

Human Health

2.3.1 The significance of air quality impacts on human health has been assessed with reference to guidance from the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK)⁷. Although this guidance has no formal or legal status, it is widely recognised and respected within the planning and air quality

⁷ CD14.12

communities. The aims of the guidance are to provide professionals operating within the planning system with a means of reaching sound decisions, having regard to the air quality implications of development proposals, and to help developers to better understand what will make a proposal more likely to succeed. It offers guidance on policy within England and Wales, designing developments for air quality, undertaking air quality assessments, assessing significance and mitigating impacts.

2.3.2 The IAQM guidance uses the terms ‘substantial’, ‘moderate’, ‘slight’ and ‘negligible’ to describe impacts.

2.3.3 The IAQM guidance uses the term Air Quality Assessment Level (AQAL) to mean an AQS, AQO, or any other assessment level given in legislation, policy or guidance against which the impacts various pollutants may be assessed.

Ecological Receptors

2.3.4 The significance of air quality impacts on ecological receptors has been assessed primarily with reference to guidance issued by the Environment Agency⁸ and refers also to guidance issued by the IAQM⁹. The Environment Agency guidance includes screening thresholds which, if met, indicate no further assessment is required. These thresholds are used to determine if the impact is material (i.e. significant) or not:

- a. For Special Protection Areas, Special Areas of Conservation, Ramsar sites and Sites of Special Scientific Interest, the predicted impact was considered not significant if the long-term contribution from the Proposed Development is less than 1% of the long-term (annual mean) AQAL or if the total (i.e. contributions from the airport and background sources) is less than 70% of the long-term AQAL.

⁸ CD14.13

⁹ CD14.14

- b. For local nature sites (ancient woodland, local wildlife sites and national and local nature reserves), the predicted impact was considered not significant if the long-term contribution from the Proposed Development is less than 100% of the long-term (annual mean) AQAL.

2.3.5 ESA2 identifies that the only sensitive ecological receptor within the study area is ancient woodland (paragraph 6.7.13).

3. Environmental Assessment

3.1 Introduction

- 3.1.1 This section provides a summary of the assessments given in ESA2 and ESA4. The air quality assessment contained in ESA2 is considered robust and reflects best practice. It is common ground that the approach to the update in ESA4 and the results of that update are robust and reflect best practice. The results of the air quality assessment confirm that the Proposed Scheme will not result in any significant air quality effects.

3.2 ESA2

Assessment methodology

- 3.2.1 The methodology for the air quality assessment contained in ESA2 follows established guidance for air quality assessments generally and for modelling air quality around airports in particular. The assessment was carried out using dispersion modelling to predict pollutant concentrations at receptor locations, i.e., places where people may be exposed to pollution over the relevant timescales. Sources of emissions included in the assessment are:
- a. Aircraft, including main engines, auxiliary power units, brake wear and tyre wear;
 - b. Ground Support Equipment, i.e., plant and vehicles used airside;
 - c. Road traffic, both airport-related and non-airport;
 - d. Car parks; and
 - e. Background sources, i.e., other sources unrelated to the airport.
- 3.2.2 Modelling of emissions from aircraft follows the approach recommended by the Project for the Sustainable Development of Heathrow, a large project sponsored by the Department for Transport that aimed to develop best practice in airport air quality

modelling. Road traffic emissions were calculated using emission factors published by Defra, with dispersion modelling following guidance from Defra's Local Air Quality Management Technical Guidance¹⁰ (TG16), including model verification. Background sources were taken from the latest versions of Defra's mapped background concentration data.

3.2.3 Any relevant sensitive ecological receptors within the study area were identified using the Multi Agency Geographic Information for the Countryside tool, MAGIC¹¹. Background deposition rates and Critical Load information for nitrogen deposition and acidity were determined using the Air Pollution Information System, APIS¹².

3.2.4 The assessments considered a number of scenarios. The historic year 2017 was assessed to provide a baseline and model evaluation (to determine how well the model performs by comparing its outputs for a historic case with monitored data, and to determine if any model adjustment is necessary). Two future scenarios were assessed, known as the Consented Development (18 mppa "without scheme") case and the Proposed Scheme (19 mppa "with scheme") case. In ESA2, the assessment year for the Consented Development and Proposed Scheme scenarios was 2024. At the time of ESA2, this was the year that Luton Airport was forecast to reach 19 mppa.

3.2.5 Traffic data for the two future scenarios was generated assuming no change in the proportions of private and public transport used for surface access to the airport. The assessment is conservative in terms of road traffic emissions as measures to increase the use of public transport are being implemented.

¹⁰ CD14.04

¹¹ Sponsored by the Department for Environment, Food & Rural Affairs and available as an on-line tool at: <https://magic.defra.gov.uk/> [Accessed 27 June 2022]

¹² Sponsored by Natural England and available as an on-line tool at: <http://www.apis.ac.uk/> [Accessed 27 June 2022]

Results and Conclusions

- 3.2.6 ESA2 predicted that the impact of the Proposed Scheme would be negligible at all modelled receptors using the IAQM criteria for human health.
- 3.2.7 In the assessment year of 2024, predicted annual mean concentrations of NO₂ were found to increase by, at most, 0.7 µg/m³ at any of the modelled receptors where humans may be exposed over the course of a year. The maximum concentration was predicted at receptor H83 close to the M1 motorway near Junction 11, where the total NO₂ concentration was modelled to be 22 µg/m³. Predicted annual mean NO₂ concentrations at all receptors would remain well below the AQO.
- 3.2.8 The greatest predicted total concentration of annual mean PM₁₀ was 20 µg/m³ or 50% of the AQO. The greatest predicted total concentration of annual mean PM_{2.5} was 13 µg/m³ or 65% of the AQO.
- 3.2.9 ESA2 also predicted that the impact of the Proposed Scheme would be negligible at all modelled receptors using the Environment Agency criteria for ecological receptors (in this case, ancient woodland).
- 3.2.10 The maximum predicted contribution from the airport to annual mean NO_x concentrations was 2.5 µg/m³; 8.3% of the AQAL of 30 µg/m³. Predicted maximum contributions from the airport to annual nitrogen deposition was 0.37 KgN/ha; 3.7% of the AQAL of 10 KgN/ha. The maximum predicted contribution from the airport to acid deposition was 0.3 keq/ha/year; 1.4% of the critical load.
- 3.2.11 Overall, therefore, the ESA2 concluded that the air quality impacts of the Proposed Scheme were not significant as all impacts were negligible. This was the case for human health and ecological receptors.

3.3 ESA4

Assessment

- 3.3.1 In the ESA2, 2024 had been identified as the year when 19 mppa would be reached, but due to the passage of time and events since the S73 Planning Application was submitted, this is now forecast to be 2025. For robustness, the change in the year when 19 mppa is forecast to be reached from 2024 to 2025 was considered in ESA4 to ascertain whether there might be any change to the conclusions of ESA2.
- 3.3.2 Air quality in the UK is generally improving as a result of controls on emissions sources, such as engines that meet tighter emission standards in newer road vehicles or the replacement of vehicles with combustion engines with electric powered versions. As a result of this, the emission factors used in air quality assessments reduce each year. The 2024 emission factors from the Defra Emissions Factors Toolkit¹³ used in the ESA2 were compared with the 2025 factors that are now available. As one would expect, it was found that PM emissions will be marginally lower in 2025 than 2024, whilst nitrogen oxides (NO_x) emissions are 11% lower.
- 3.3.3 Pollutant concentrations at any receptor location are made up of a local contribution from pollutants emitted near to the receptor (such as vehicles on a road) and a background contribution from emissions in the region. Defra maintains a nationwide model (the Pollution Climate Mapping (PCM) model¹⁴) of current and future background air quality concentrations at a 1 km grid square resolution up to 2030. The change in background pollutant concentrations was reviewed. Again, as one would expect, NO₂ concentrations are expected to fall by about 20% between 2018 and 2025, or about

¹³ Sponsored by the Department for Environment, Food & Rural Affairs and available as an on-line tool at: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/> [Accessed 27 June 2022]

¹⁴ Sponsored by the Department of Environment, Food and Rural Affairs (2017). Pollution Climate Mapping (PCM) modelled background concentrations are available on-line at : <https://data.gov.uk/dataset/394bf17d-ef9f-4649-b628-64d99de69618/defra-national-pollution-climate-mapping-pcm-modelled-background-concentrations> [Accessed 27 June 2022]

0.5 µg/m³ per year. Background concentrations are therefore expected to be lower in 2025 than in the assessment year of 2024 used in ESA2.

Conclusions

- 3.3.4 As a result of changes such as the replacement of older vehicles with newer ones that meet tighter emission standards, both emission rates and background pollutant concentrations are predicted to be lower in 2025 than in 2024. Pollutant concentrations are therefore expected to be slightly lower in 2025 than in 2024, the assessment year used in ESA2. As this will apply to both the Consented Development and Proposed Scheme cases, it was concluded and it is common ground that the magnitude of impact (the 'Process Contribution') would be expected to be of a very similar magnitude to that predicted in ESA2, namely negligible in all circumstances.
- 3.3.5 For a 2025 assessment of the Proposed Scheme for human health receptors, impacts at all modelled receptors would remain negligible, in terms of the significance criteria used. The same is true of the ecological receptors. The conclusions of ESA2 were therefore considered to remain valid. In 2025, effects on both human health and ecological receptors would be considered not significant.

3.4 Condition 10 Compliant Scenario

- 3.4.1 Paragraph 4.5.5 of ESA4 states the following:

"For a Condition 10 compliant future baseline in 2025, the air quality assessment would have around 5% fewer flights than the 18mppa future baseline, and a proportionate decrease in road traffic trip generation. The lower emissions would mean that the magnitude of impact of the Proposed Scheme (the difference in concentration between the 'without development' and 'with development' scenarios) would notionally increase."

- 3.4.2 Using the IAQM/EPUK significance criteria^{Error! Bookmark not defined.} (as presented in Table 4.5 of ESA4) would not change any of the conclusions. All impacts would still be 'negligible' and no significant effects would occur. This is because these significance criteria take account of the total pollutant concentrations with the Proposed Scheme first, before going on to consider the magnitude of any impact.
- 3.4.3 The total pollutant concentrations with the 'Proposed Scheme would not change. The 2025 maximum NO₂ concentration would be lower than 22 µg/m³ (well below the AQAL).
- 3.4.4 The maximum magnitude of impact in NO₂ concentration reported in ESA2 as a result of an increase from 18mppa to 19mppa was 0.7 µg/m³. The change in magnitude of impacts with a 5% reduction in emissions from flights and road traffic trips in the Consented Scheme future baseline scenario would be expected to be of a similar magnitude. As the Proposed Scheme NO₂ concentrations are predicted to be well below the AQAL, for any impact to become 'slight' rather than 'negligible', the impact would need to be over 6% of the AQAL (2.4 µg/m³).
- 3.4.5 The conclusions in ESA2 and ESA4 are that that impacts at all modelled receptors would be **negligible** and overall effects would be **not significant**. The same conclusions are reached with the inclusion of the Condition 10 compliant scenario.

4. Conclusion

- 4.1.1 ESA2 and ESA4 provide a detailed and robust air quality assessment, in compliance with the requirements of the EIA Regulations. The methodology follows best practice for assessments of this kind, using dispersion modelling to determine the concentrations of air pollutants arising from the various airport-related sources under various scenarios, and combining these with the future baseline.
- 4.1.2 ESA2 concluded that the air quality impacts of the Proposed Scheme were negligible and there not significant. Concentrations of all pollutants were forecast to be well below their respective AQOs in 2024 and impacts were considered to be of a negligible magnitude.
- 4.1.3 ESA4 considered the impact of a change in the year when 19 mppa would be reached from 2024 to 2025. As a result of changes, such as the replacement of older vehicles with newer ones that meet tighter emission standards or with electric vehicles, both emission rates and background pollutant concentrations are expected to be lower in 2025 than in 2024. The conclusions of ESA2 therefore remain valid. In 2025, the effects on both human health and ecological receptors would also be negligible and therefore considered **not significant**. The same conclusion is reached if an adjusted baseline to account for compliance with condition 10 is used.
- 4.1.4 Air quality is generally improving and will be better in future than in recent years, with the Consented Development or with the Proposed Scheme. The development of Luton Airport to accommodate 19mppa is predicted to result in negligible changes in pollutant concentrations at receptors. These do not result in significant impacts.

Susteer AB
Registered in Stockholm, Sweden
559364-6796