



SCOPING OPINION:

Proposed Expansion of London Luton Airport

Case Reference: TR020001

Adopted by the Planning Inspectorate (on behalf of the Secretary of
State pursuant to Regulation 10 of The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017

May 2019

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1. INTRODUCTION

1.1 Background

- 1.1.1 On 29 March 2019, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from London Luton Airport Limited (LLAL) (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Expansion of London Luton Airport (the Proposed Development).
- 1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'*.
- 1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled 'Future LuToN: Making best use of our runway - Environmental Impact Assessment Scoping Report' (the Scoping Report) and dated March 2019. This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.
- 1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.
- 1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:
- (a) *any information provided about the proposed development;*
 - (b) *the specific characteristics of the development;*
 - (c) *the likely significant effects of the development on the environment; and*
 - (d) *in the case of a subsequent application, the environmental statement submitted with the original application.*
- 1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.
- 1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).
- 1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant

legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

- 1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.
- 1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) a plan sufficient to identify the land;*
 - (b) a description of the proposed development, including its location and technical capacity;*
 - (c) an explanation of the likely significant effects of the development on the environment; and*
 - (d) such other information or representations as the person making the request may wish to provide or make.*
- 1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.
- 1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on '*the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)*'.
- 1.1.13 The Inspectorate notes the submission of a Habitats Regulations Assessment (HRA) Screening Report appended to the Scoping Report (Appendix C) and the potential need to carry out an assessment under Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations). This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations. The Applicant's ES should therefore be co-ordinated with any assessment made under the Habitats Regulations.

1.2 The Planning Inspectorate's Consultation

- 1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation

11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.

- 1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.
- 1.2.3 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.2.4 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

1.3 Article 50 of the Treaty on European Union

- 1.3.1 On 23 June 2016, the United Kingdom (UK) held a referendum and voted to leave the European Union (EU). On 29 March 2017 the Prime Minister triggered Article 50 of the Treaty on European Union, which commenced a period of negotiations regarding the UK's exit from the EU. On 26 June 2018 The European Union (Withdrawal) Act 2018 received Royal Assent and work to prepare the UK statute book for Brexit has begun. The European Union (Withdrawal) Act 2018 will make sure that UK laws continue to operate following the UK's exit. There is no immediate change to legislation or policy affecting national infrastructure. Relevant EU Directives have been transposed into UK law and those are unchanged until amended by Parliament.

2. THE PROPOSED DEVELOPMENT

2.0 Introduction

- 2.0.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/ resources.

2.1 Description of the Proposed Development

- 2.1.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in Chapter 3 of the Scoping Report and in the associated figures and appendices.
- 2.1.2 The Proposed Development involves the remodelling and expansion of the existing London Luton Airport (the Airport) to enable an increase in operating capacity from 140,000 air transport movements (ATM) per annum to approximately 212,500 ATM per annum, and from around 18 million passengers per annum (mppa) to 32 mppa. The Scoping Report states that the Proposed Development is defined as a Nationally Significant Infrastructure Project (NSIP) under the terms of section 23 of the PA2008. London Luton Airport is currently operated under concession by London Luton Airport Operations Ltd (LLAOL) with its current planning permission for a capacity of 18mppa. This agreement is in place until 2031.
- 2.1.3 The Proposed Development is to be located at the existing site of the Airport and in the surrounding area, approximately 45km north west of London as shown on Figure 2.1 of the Scoping Report. The Scoping Report acknowledges that that uncertainty remains regarding the exact location and design of certain elements of the Proposed Development, but that the key known components of the Proposed Development will be located '*in the zones or envelopes indicated in Figure 3.1*' of the Scoping Report. These also being referred to as the following three key aspects/locations: 'Main Application Site'; 'Off-site Car Parks'; and 'Off-site Highway Interventions'. The assessment methodologies have been prepared based on the infrastructure being located within these zones/aspects/locations.
- 2.1.4 The Main Application Site encompasses approximately 360 hectares (ha) and includes Wigmore Valley Park. It lies approximately 4km from Junction 10 of the M1 motorway, with residential development to the north, mixed residential and industrial development to the west, and rural arable fields to the east and south. A closed historical landfill is located in the north of the Main Application Site, over which the Proposed Development will be built. Luton town centre is located approximately 2.5km to the west of the Airport.
- 2.1.5 As shown in Figure 2.2 of the Scoping Report, the Airport currently comprises a single runway with associated taxiways, stands and aprons. It has a single commercial passenger terminal with supporting hangars, maintenance facilities and airport related offices along with a number of car parks.

2.1.6 The key components of the Proposed Development include:

- creation of an airfield platform: earthworks from on-site excavation;
- new terminal with boarding piers;
- additional taxiways and aprons (aircraft stands);
- vehicle forecourt and multi-storey short stay/mid-stay car parking adjacent to the terminal. Additional mid and long stay surface parking, including replacement where the existing facilities are disturbed;
- airfield facilities: Relocated engine run-up bay, compass swing bay and de-icing area, and fire training facilities;
- landside facilities: Airport associated support buildings such as snow base, energy centre, logistics centre and service yard, and new fuel line connection and storage facilities;
- surface access: Road and infrastructure provision and adjustments. Bus station, taxi ranks and extension of Luton Direct Air to Rail (DART) system to the new terminal;
- surface water and foul management, including drainage, interceptors, surface water attenuation and treatment, foul water collection and treatment, effluent storage and discharge to ground; and
- landscaping: Improvement or replacement of existing and planned public open space and amenities.

2.2 The Planning Inspectorate's Comments

Description of the Proposed Development

2.2.1 The ES should include the following:

- a description of the Proposed Development comprising at least the information on the site, design, size and other relevant features of the development; and
- a description of the location of the development and description of the physical characteristics of the whole development, including any requisite demolition works and the land-use requirements during construction and operation phases

2.2.2 Due to the ongoing nature of the design development, the Scoping Report lacks specific information on the characteristics of elements to the Proposed Development e.g. dimensions, locations or final elevations of various structures to include the form and location of the terminal building, the forecourt configuration, the final number of parking spaces, the height of the new fuel farm and the precise range of ground handling and vehicle holding facilities. It does not provide information on the proposed landside facilities,

including the proposed 'energy centre', 'snow base', 'logistics centre and service yard' and 'storage facilities'.

- 2.2.3 The Inspectorate acknowledges that at this point in the evolution of the Proposed Development a final description may not yet be confirmed, and that there are currently different options for certain works. However, the Applicant should be aware that the description of the Proposed Development provided in the ES must be sufficiently certain to meet the requirements of the EIA Regulations. The ES must include a detailed description of all components of the Proposed Development and should include reference to the location, alignments and dimensions of each individual element, including maximum heights, design parameters and limits of deviation. Where appropriate this information should be accompanied by figures to assist the reader.
- 2.2.4 With respect to buildings, the description of the development should be defined in terms of their maximum footprints and maximum heights should be expressed as metres Above Ordnance Datum (m AOD). Proposed increases and decreases in ground levels should also be expressed in terms of m AOD.
- 2.2.5 In describing the Proposed Development and the scope of the assessments, the Scoping Report refers to three key aspects/locations: the 'Main Application Site'; 'Off-site Car Parks'; and 'Off-site Highway Interventions'. However, the precise extent of each of these areas, particularly the extent of the 'Main Application Site', is not clear from the plans provided. Figure 2.1 to the Scoping Report shows each of these areas using the same red line, making it difficult to distinguish each area. The ES should clearly describe the Proposed Development and ensure that textual description is supported by clear and legible plans to aid the reader.
- 2.2.6 The Scoping Report states that the Off-site Highway Interventions will be largely within the existing highway boundary. However, there is ongoing uncertainty with regards to the precise location, nature and extent of the Off-site Highways Interventions. The Scoping Report proposes to scope out matters from a number of aspect chapters on this basis. The lack of certainty affects the understanding of the current baseline and the extent to which likely significant effect would occur. The ES should provide detailed information on the Off-Site Highways Intervention areas, supported by clear and legible plans and figures.
- 2.2.7 The Scoping Report refers to both 'ancillary aviation supporting facilities' and 'ancillary buildings' in the description of development. The Applicant should clearly define in the draft DCO (dDCO) which elements of the Proposed Development are integral to the NSIP and which are ancillary matters. Any proposed works and or infrastructure identified as ancillary to the Proposed Development should be assessed as part of an integrated approach to the environmental assessment.
- 2.2.8 Section 2.4 of the Scoping Report refers to a number of airport related developments that are currently approved and under construction, or currently under consideration by the local planning authority including: Project Curium; Luton DART; the reuse and placement of soil from Project Curium and Luton

DART; and the Enterprise Zone development to include Bartlett Square and New Century Park. The description of development in the ES should explain the relationship between the Proposed Development and other developments. The ES description should be clear in stating which works have been assessed and whether they form part of the DCO application. Where these works are not to be included in the DCO application, the ES should ensure that they are adequately assessed in the cumulative effects assessment where significant effects are likely.

- 2.2.9 The Scoping Report references public transport infrastructure to access the airport such as the Luton DART. The ES should take account of any potential overlap between the expansion proposal and proposed public transport infrastructure links, detailing the outcome of relevant consultations with Network Rail.
- 2.2.10 Road closures and diversions are referenced at Sections 14.5.10 and 15.6.3 of the Scoping Report but limited information has been provided in respect of these. The ES should contain a full explanation of such closures and diversions, including whether they are temporary or permanent, and associated impacts should be fully assessed. This information should also be depicted on figures in the ES to provide further clarity.
- 2.2.11 Section 3.6.6 of the Scoping Report also refers to the '*installation of new drainage and diversions and disconnections*'. Limited information is provided in respect of these works. The ES should contain a full explanation of such diversions and disconnections, including whether they are temporary or permanent, and any associated significant effects should be fully assessed.
- 2.2.12 Table 13.6 of the Scoping Report outlines the material resources required for, and the waste to be generated by, the Proposed Development but does not provide any indication of likely quantities. This should be clearly set out in the ES. The nature and volume of materials should also be included in the description of the Proposed Development, including justification of any key assumptions made. It is also noted that the Scoping Report refers to five sites for the disposal of spoil; however, Figure 2.3 only shows four. This should be clarified in the ES and clearly shown on accompanying figures.
- 2.2.13 As set out in Section 3.6 of the Scoping Report, construction of the Proposed Development is likely to be in two key phases, and a brief indicative outline of the key elements of work likely to be undertaken in each phase is provided. Table 3-2 also presents the current forecast passenger demand and currently proposed airport capacity phasing. The Inspectorate notes that Table 3-2 states that the existing terminal capacity is set to increase from 18mppa to 21mppa in 2022. However, Section 7.6.6 of the Scoping Report states that this increase is not due to take place until 2024. Furthermore, Table 3-2 then shows a reduction in the capacity of the existing terminal from 21mppa to 18mppa in 2027, but has not provided an explanation for this. The Applicant should ensure that the finalised phases of the Proposed Development, the expected capacity of both the existing and new terminals, and the activities to be undertaken in each phase, are clearly explained in the ES and consistently reflected in the aspect assessments. Where uncertainty exists and flexibility is

required the assessment should be based on worst case assumptions, particularly in respect of the duration of construction phases. The ES should assess the potential significant effects from construction activities occurring in conjunction with the operational activities of the Airport.

- 2.2.14 The Scoping Report makes various references to '*demolition activities*' but does not provide any in-depth description of what these activities involve. As part of the description of physical characteristics of the Proposed Development, the ES should provide full details of the proposed demolition works and it should be clear at what point in the construction programme the demolition activities would occur. The Applicant should ensure that the ES aspect chapters assess the likely significant effects resulting from demolition activities taking into account their extent and duration.
- 2.2.15 Limited further information is provided on construction options. It is explained in Section 3.3.28 of the Scoping Report that an environmental appraisal of the key reasonable construction options for the Proposed Development will be undertaken as the design develops. The Applicant should ensure that the ES provides specific information on which construction activities are to take place in the different areas of the Proposed Development site and should explain the length of time that each activity shall last. Information should also be provided on the number, size and location of any construction compounds, and the potential significant effects from the use of construction compounds should be taken into consideration for each relevant aspect assessment.
- 2.2.16 In addition to the above, the ES should also include a description of the anticipated:
- Construction methods and activities associated with each phase of construction;
 - Numbers of workers and the hours of working;
 - Types of plant and machinery;
 - Lighting equipment/ requirements, in particular any lighting at construction compounds;
 - Number, type, movements and parking of construction vehicles (both heavy goods vehicles (HGVs) and staff vehicles);
 - Noise; and
 - The draft Code of Construction Practice (CoCP) referred to in section 3.6.8 of the Scoping Report (see also comments in Section 3.2 of this Opinion).

Alternatives

- 2.2.17 The EIA Regulations require that the Applicant provide '*A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are*

relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects’.

- 2.2.18 The Inspectorate acknowledges the Applicant’s intention to consider alternatives within the ES. The Inspectorate would expect to see a discrete section in the ES that provides details of the reasonable alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.

Flexibility

- 2.2.19 The Inspectorate notes the Applicant’s desire to incorporate flexibility into their dDCO and its intention to apply a Rochdale Envelope approach for this purpose. Where the details of the Proposed Development cannot be defined precisely, the Applicant will apply a worst case scenario. The Inspectorate welcomes the reference to Planning Inspectorate Advice Note nine ‘Using the ‘Rochdale Envelope’ in this regard.
- 2.2.20 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters will need to be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.
- 2.2.21 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

Airspace Change Process

- 2.2.22 Paragraph 5.3.12 and Section 5.5 explain that air space is being redesigned across the South East of England as a separate process outside of the Proposed Development and separate to the DCO process. This programme is referred to as the ‘Future Airspace Strategy Implementation (FASI) South’ and is being led by the National Air Traffic Services (NATS) under the supervision of the Department for Transport and the Civil Aviation Authority (CAA). Any air space change needs to follow the process outlined in the CAA’s Civil Aviation Publication 1616 (CAP 1616). It is a collaborative process involving all London airports and in respect of Luton, London Luton Airport Operations Ltd (LLAOL), as the aerodrome licence holder, will be developing the proposal to fit with FASI South implementation, which is targeted at 2026. The Scoping Report confirms that LLAOL will be developing their proposals to fit with the FASI South implementation, in parallel to the DCO process and working in collaboration with the Applicant, subject to a programme outside of the control of the Applicant.

- 2.2.23 Paragraph 5.5.4 states the *'timescale for this exercise means that confirmed flight paths will not be available for consideration in the assessment for this DCO application as they will not be available within the project programme. Therefore, the assessment in the ES will be based on existing flight path designs.'* The Scoping Report also states that *'should emerging flight path designs become available within a timeframe suitable to be included in the DCO application, consideration will be given to their inclusion in the assessment as a sensitivity test to illustrate potential environmental improvements that may be achievable as a result of the broader airspace redesign being undertaken by NATS.'*
- 2.2.24 The Inspectorate notes the intention to produce the ES based on current flight paths and not those associated with the air space change on the basis that these may not be available and/or may only be developing not final flight paths, but that should they become available, consideration will be given to their inclusion through sensitivity testing. The Inspectorate understands the relationship between the Proposed Development and the future air space change process, which may not run in parallel. However, the Inspectorate considers that the ES methodology should be compatible with the methodological approaches outlined in the CAA's CAP 1616 and CAP 1616a documents to ensure consistency and continuity between the two assessment processes. Where the ES methodology is not consistent with the CAA's CAP approach, this should be identified and explained.

3. ES APPROACH

3.0 Introduction

- 3.0.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'¹ and associated appendices.
- 3.0.2 Aspects/ matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.
- 3.0.3 The Inspectorate has set out in this Opinion where it has/ has not agreed to scope out certain aspects/ matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects/ matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/ matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.
- 3.0.4 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured through DCO requirements (or other suitably robust methods) and whether relevant consultation bodies agree on the adequacy of the measures proposed.

3.1 Relevant National Policy Statements (NPSs)

- 3.1.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.
- 3.1.2 The designated NPS relevant to the Proposed Development is the Airports National Policy Statement (ANPS). The Scoping Report states that nature and extent of works that may be required at or near Junction 10 of the M1, as part

¹ Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

of the Proposed Development, or implemented by the Applicant during the development programme for the Proposed Development, is not yet fully known. However, the Scoping Report further states that should the NPS for National Networks found relevant to the Proposed Development, it will be taken into consideration.

3.2 Scope of Assessment

General

3.2.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:

- to demonstrate how the assessment has taken account of this Opinion;
- to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
- to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
- to describe any remedial measures that are identified as being necessary following monitoring; and
- to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of European sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

3.2.2 The Inspectorate considers that where a DCO application includes works described as 'Associated Development', that could themselves be defined as an improvement of a highway, the Applicant should ensure that the ES accompanying that application distinguishes between; effects that primarily derive from the integral works which form the proposed (or part of the proposed) NSIP and those that primarily derive from the works described as Associated Development. This could be presented in a suitably compiled summary table. This will have the benefit of giving greater confidence to the Inspectorate that what is proposed is not in fact an additional NSIP defined in accordance with s22 of the PA2008.

3.2.3 As identified in Section 2 above, the Scoping Report does not provide detailed information about the proposed Off-site Highway Interventions to inform the description of likely significant effects. The ES should assess the likely significant effects which could arise from the Proposed Development as a whole, including any off-site works.

Baseline Scenario

3.2.4 The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

Forecasting Methods or Evidence

- 3.2.5 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.
- 3.2.6 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.
- 3.2.7 Given the scale of the development, temporary construction impacts may be of considerable duration. The ES should define the timescale of impacts defined as 'temporary' and consider how the duration of particular construction activities will influence the magnitude of the impacts identified. It will also be important to consider how the time period of impacts and resulting effects may be extended due to cumulative effects.
- 3.2.8 The Scoping Report refers to the use of professional judgement for various matters within the aspect chapters. The application of professional judgement used within the assessment should be clearly identified and fully justified in the ES.
- 3.2.9 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

Residues and Emissions

- 3.2.10 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.
- 3.2.11 The Inspectorate notes the intention to produce a standalone lighting assessment; however, it is not clear from the Scoping Report where the lighting assessment will be located within the ES. The lighting assessment should be clearly signposted from the relevant aspect chapters in the ES, including (but not limited to) the Biodiversity, Landscape and Visual, and Cultural Heritage aspect chapters. Specific comments with respect to lighting are provided in Tables 4.12, 4.13 and 4.14 of this Opinion.

Mitigation

- 3.2.12 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also

address how any mitigation proposed is secured, with reference to specific DCO requirements or other legally binding agreements. The Inspectorate advises that the approach to mitigation in the ES should follow the mitigation hierarchy of avoidance, mitigation, and finally compensation.

- 3.2.13 The Inspectorate notes that a draft CoCP is to be submitted as part of the DCO application, which will include draft plans such as the following: Construction Environmental Management Plan; Site Waste Management Plan; Construction Traffic Management Plan; Materials Management Plan; Soils Management Plan (SMP); Construction Noise Management Plan; Air Quality Management Plan; and Surface Water Management Plan. Where the ES relies upon mitigation measures which would be secured through management plans, it should be demonstrated (with clear cross referencing) where each measure is set out in the management plan. Paragraph 17.8.2 of the Scoping Report also states the intention to submit a Landscape and Biodiversity Management Plan. The Applicant should provide draft copies of these documents appended to the ES and/or demonstrate how they will be secured.

Decommissioning

- 3.2.14 The Scoping Report proposes that decommissioning impacts are to be scoped out of the ES for two specific aspect chapters: Chapter 8 Climate Change and Chapter 9 Greenhouse Gas. Paragraph 5.2.5 also states that the assessment of potentially significant effects arising from the decommissioning of the Proposed Development is proposed to be scoped out of the ES. The Inspectorate therefore infers that the Applicant intends to scope out decommissioning impacts from the ES entirely. Having regard to the nature and characteristics of the Proposed Development the Inspectorate agrees that decommissioning can be scoped out of the ES. The Inspectorate does however, advise that the ES includes details of any infrastructure elements predicted to be decommissioned over a shorter time period and give consideration to the potential for likely significant effects to arise in relation to these elements.

Risks of Major Accidents and/or Disasters

- 3.2.15 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development's potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.

- 3.2.16 Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

Climate and Climate Change

- 3.2.17 The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change.

Transboundary Effects

- 3.2.18 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES.
- 3.2.19 The Scoping Report concludes that the Proposed Development is not likely to have significant effects on another European Economic Area (EEA) State and proposes that transboundary effects do not need to be considered within the ES. The Inspectorate notes the Applicant's conclusion in the Scoping Report; however, recommends that for the avoidance of doubt the ES details and justifies this conclusion.

A Reference List

- 3.2.20 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.3 Confidential Information

- 3.3.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to information about the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information. Where documents are intended to remain confidential the Applicant should provide these as separate paper and electronic documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which

the Inspectorate would be required to disclose under the Environmental Information Regulations 2004.

4. ASPECT BASED SCOPING TABLES

4.1 Air Quality

(Scoping Report Section 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	Paragraph 6.7.1 and Table 5-2	Jettisoning of fuel from aircraft	The Inspectorate considers that significant effects from increased flight movements are not anticipated in relation to this matter and that it may be scoped out from further assessment. This is on the basis that jettisoning of fuel is an infrequent event that will occur over water and at high altitude in order to vaporise the fuel and facilitate dispersion.

ID	Ref	Other points	Inspectorate's comments
4.1.2	Paragraphs 6.1.2, 6.5.6, and 6.6.2	Construction impacts	The Scoping Report sets out the approach to the air quality assessment, and details throughout the aspect chapter the main issues and impacts likely to occur. However, these issues/impacts are not described consistently within the chapter. The ES should clearly assess any air quality impacts where significant effects are likely to arise during both construction and operation of the Proposed Development.
4.1.3	Section 6.3	Stakeholder engagement	The Scoping Report states that consultation with the relevant local authorities will continue throughout the pre-application stages of the Proposed Development. Any agreements reached with the consultation bodies on the Applicant's methodological approach should be documented in the ES, where possible.
4.1.4	Paragraph	Study area	The Applicant proposes a study area of 15km by 15km centred on the

ID	Ref	Other points	Inspectorate's comments
	6.4.3		<p>main site of the Proposed Development, and any additional roads outside of this area. The Inspectorate considers that the model extent should not be arbitrarily defined but instead should relate to the area over which significant air quality effects arising from the Proposed Development may occur, including a consideration of any Off-site Highways Interventions. This should be clearly defined within the ES. The Applicant should make effort to agree the study area with relevant consultation bodies.</p> <p>The assessment in the ES should have regard to the Air Navigation Guidance 2017 with respect to the parameters for assessment of aviation emissions on local air quality.</p>
4.1.5	Paragraph 6.4.9	Local Nature Sites	<p>The Scoping Report refers to local nature sites that lie within 2km of the site of the Proposed Development and refers to the biodiversity aspect chapter as providing further detail on these. The ES should provide a full assessment of the air quality impacts on these sites where significant effects are likely. Where information to support the assessment is to be presented in the biodiversity aspect chapter of the ES, clear cross referencing to the relevant sections of other chapters should be included and, where relevant, supporting plans provided in order to assist the reader.</p>
4.1.6	Paragraph 6.5.1	Baseline monitoring	<p>The Scoping Report states that baseline data collection is ongoing, with both desk studies and field surveys undertaken to date. The ES should clearly set out all studies and surveys undertaken to inform the final baseline information, including the timing of any site visit and how/if professional judgement has been applied. The Applicant should make effort to agree its approach with the relevant consultation bodies.</p>
4.1.7	Paragraph 6.5.10	Assessment years	<p>The Scoping Report states that the future assessment years are based on current forecast passenger demands and proposed capacity phasing. The Inspectorate understands that these demands could</p>

ID	Ref	Other points	Inspectorate's comments
			change, and that this would also have a bearing on the assessment scenarios to be used in the Traffic and Transport aspect chapter. The ES should also assess effects occurring during key phases of the construction and operation of the Proposed Development, outlined at Paragraph 3.6.2 of the Scoping Report as 2027 and 2036. The ES should clearly set out the years on which the assessments have been undertaken, providing a full justification for the years chosen.
4.1.8	Paragraph 6.5.24	Odour impacts during construction	The Scoping Report states that the potential odours from construction will be considered as part of the soils and geology assessment rather than within the air quality aspect chapter. The ES should contain adequate cross referencing to direct the reader to the relevant sections of the ES to ensure that a robust assessment of air quality impacts has been undertaken.
4.1.9	Paragraph 6.5.26	Health Impact Assessment	The Scoping Report states that ' <i>the air quality assessment will determine the population affected by significant concentrations</i> ' and that this will then be considered in the health and community aspect chapter. The ES should contain adequate cross referencing to direct the reader to the relevant sections of the ES to ensure that a robust assessment of air quality impacts to the health of receptors has been undertaken.
4.1.10	Paragraph 6.8.1	Mitigation measures	The Applicant should also give consideration to operational mitigation measures such as single engine taxi, measures to incentivise reductions in use of aircraft auxiliary power units whilst on stand (using fixed electrical ground power and preconditioned air) in its assessment.
4.1.11	N/A	Activities involving combustion: <ul style="list-style-type: none"> emissions of CO, SO₂, lead, benzene and 1,3 butadiene, arsenic, cadmium, nickel, 	The ES should include an assessment of the impacts associated with activities involving combustion, where they are likely to give rise to significant effects.

ID	Ref	Other points	Inspectorate's comments
		<p>mercury, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dioxins/ furans, PCBs, HCB);</p> <ul style="list-style-type: none"> • exposure to ozone (O3); and • increased emissions of pollutants that form secondary PM. 	
4.1.12	N/A	Air quality effects on rivers and flood storage	The Inspectorate considers that the potential for air quality effects on rivers and flood storage areas due to deposition of pollutants should be taken into account within the assessment, particularly where the Proposed Development has potential to give rise to stagnant or low flow conditions, where likely significant effects could occur.

4.2 Traffic and Transport

(Scoping Report Section 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Ref	Other points	Inspectorate's comments
4.2.2	Paragraph 7.1.3	Transport Assessment (TA)	The traffic and transport chapter will be supported by a TA. The Applicant should ensure that the relationship between the TA and the scope of the traffic and transport assessment is fully explained and justified within the ES. The Applicant should make effort to agree the scope of the assessment with the relevant consultation bodies.
4.2.3	Paragraph 7.1.3	Travel Plan	A travel plan will be drafted to support the traffic and transport assessment. For the avoidance of doubt any such travel plan should extend to workforce travel. The Applicant should make effort agree the scope of the travel plan with relevant consultation bodies. The approach to the assessment should be fully explained and justified within the ES.
4.2.4	Paragraph 7.1.3	Predictions of future year trips	The Scoping Report states that a continuing programme of engagement is ongoing with the relevant consultees, and that future consultation is planned with train, bus and coach operators. Agreements reached with consultation bodies on the Applicant's methodological approach to the assessment should be documented in the ES where relevant.
4.2.5	Paragraph 7.3.3	Stakeholder engagement	The Scoping Report states that a continuing programme of engagement is ongoing with the relevant consultees, and that future consultation is planned with train, bus and coach operators. Any

ID	Ref	Other points	Inspectorate's comments
			agreements reached with the consultation bodies on the Applicant's methodological approach should be documented in the ES, where possible.
4.2.6	Paragraphs 7.4.1 to 7.4.2 and 7.6.5	Study area	The Scoping Report states that the study area will be defined by the major transport routes serving the catchment area for air travellers and the locations of residences of the workforce. It further states that the geographical scope of the assessment will be determined based on the results of the TA scoping. The study area in the ES should be established relevant to the extent of the likely significant effects and in accordance with recognised guidance (e.g. Design Manual for Roads and Bridges (DMRB)) for the affected road network. The Applicant should make effort to agree the study area with relevant consultation bodies.
4.2.7	Paragraph 7.4.2	Impacts on 'workforce'	The definition of 'workforce' is unclear in the Scoping Report. The ES should clearly define these terms and ensure that they sufficiently encompass the applicable receptors.
4.2.8	Paragraph 7.4.10	Baseline data	The Scoping Report states that personal injury collision data will be obtained from Luton Borough Council (LBC), and that this may also extend to Central Bedfordshire Council (CBC) and Hertfordshire County Council (HCC). The Inspectorate recommends that the assessment takes into account personal injury collision data in respect of any roads falling within the study area and for which CBC and HCC are the highways authority. This data should be presented in the ES, alongside the data for LBC.
4.2.9	Paragraph 7.6.6 to 7.6.7	Assessment years	The Scoping Report states that the assessment will consider a number of years to reflect the phased build-up of passengers and to identify key infrastructure requirements for each stage. The anticipated assessment scenarios have been presented, but these are subject to change. The ES should include a description of each scenario used in

ID	Ref	Other points	Inspectorate's comments
			the assessment demonstrating that the worst-case construction and operational assessment scenarios are identified. The assessment years should be consistent between the traffic and transport and air quality assessments where relevant and effort should be made to be agree the approach with the relevant consultation bodies.
4.2.10	Table 7-4	Assessment of significance	The Scoping Report states that significance ratings of major and moderate will be considered as significant in EIA terms, and that those classified as minor and negligible will not. However, in presenting the approach to the assessment of significance as adapted from DMRB guidance, Table 7.4 of the Scoping Report states that low magnitude impacts on receptors of high sensitivity can be 'minor or moderate' which lack certainty with regards to the assessment of significant effects. In accordance with DMRB guidance, in these cases ' <i>a single description should be decided upon with reasoned judgement for the level of significance chosen</i> '. Such reasoned judgement should be presented and justified within the ES.
4.2.11	Table 7-4	Assessment of significance	Highways England has raised concerns about the Applicant's methodology for assessing significance and has recommended an alternative approach. The Inspectorate considers that the scope of the assessment in the ES should be related to the extent of impacts and whether significant effects are likely to occur. The Applicant should make effort to agree its approach with Highways England and other relevant consultation bodies.
4.2.12	Paragraph 7.7.2	Operational impacts	While the Scoping Report states that the impacts associated with traffic generation will be taken into account within the assessment, it is unclear specifically which traffic generating elements of the Proposed Development this will encompass. The ES should provide clear and precise information on the elements of the Proposed Development that are being assessed within the traffic and transport aspect chapter and, for the avoidance of doubt, this should include

ID	Ref	Other points	Inspectorate's comments
			(but not be limited to) the traffic generation associated with fuel delivery and waste removal, as referred to in other aspect chapters of the Scoping Report.
4.2.13	N/A	Rail capacity	The Scoping Report gives limited consideration to the impacts of the Proposed Development on the rail network. The ES should consider the existing rail capacity and reliability, and the impact of the increased passenger numbers and modal shift on rail capacity and loadings. The ES should provide clarity on how baselines have been established and how future impacts can be measured. In line with Buckinghamshire County Council's Freight Strategy (2018), the ES should include an assessment of any assumptions made regarding the transfer of freight from roads to rail in connection with the Proposed Development.

4.3 Climate Change

(Scoping Report Section 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	Section 8.7 and Table 5-2	Impacts of sea level rise	The Inspectorate notes that the Proposed Development is not vulnerable to or located in an area susceptible to sea level rise. The Inspectorate agrees with this approach on the basis that the Proposed Development is not vulnerable to or located in an area susceptible to sea level rise.
4.3.2	Paragraph 8.7.2 and Table 5-2	Decommissioning	The Inspectorate agrees that decommissioning can be scoped out of the impact assessment (see also comments at Paragraph 3.2.14 of this Opinion).

ID	Ref	Other points	Inspectorate's comments
4.3.3	Paragraphs 8.3.1 to 8.3.2	Key consultation bodies	A number of key consultation bodies have been identified by the Applicant, including local planning authorities and the Environment Agency (EA). The Applicant should ensure that other consultation bodies with statutory responsibilities for other matters relevant to this aspect assessment (eg biodiversity), such as Natural England (NE), are consulted regarding the potential for climate change effects to influence the effectiveness of any proposed mitigation measures.
4.3.4	Paragraphs 8.4.11 to 8.4.15	Future climate baseline	The ES should set out the assumptions and uncertainties in the projections and explain how these have informed the climate change risk and resilience assessments and influenced the design of the Proposed Development
4.3.5	Section 8.8	Mitigation measures	The ES should set out how mitigation measures will be secured through the DCO. The ES should describe how the adaptation

ID	Ref	Other points	Inspectorate's comments
			measures described, and those incorporated into the Climate Change Adaptation Plan, will address the need for on-going review of climate 'hazards' and risks.

4.4 Greenhouse Gases

(Scoping Report Section 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	Paragraph 9.7.1 and Table 5-2	Decommissioning	The Inspectorate agrees that decommissioning can be scoped out of the impact assessment (see also comments at Paragraph 3.2.14 of this opinion).
4.4.2	Paragraphs 9.6.2 to 9.6.4, and 9.7.2 and Table 5-2	Cumulative assessment of greenhouse gases (GHG)	The Applicant intends to scope out a specific cumulative assessment for GHG emissions on the basis that the nature and assessment of GHG emissions is already inherently cumulative. The Inspectorate does not agree this approach in the absence of sufficient justification and considers that the Applicant should identify and consider the cumulative effects of the Proposed Development with other relevant projects or plans.
4.4.3	Table 9-3, footnote	Cruise GHG emissions associated with arriving aircraft	The note to Table 9-3 identifies that cruise emissions are only calculated for flights departing from an airport to avoid double counting with other airport inventories. The Inspectorate recommends that the ES assesses the impact on arriving flights to the extent that the airspace change process affects the arriving traffic consistent with the CAP1616a requirements.

ID	Ref	Other points	Inspectorate's comments
4.4.4	Table 9-2	GHG emissions sources during construction	The assessment of effects should include increased GHG emissions from additional surface access for construction staff.

ID	Ref	Other points	Inspectorate's comments
4.4.5	Table 9-4	Emissions source factors	Table 9-4 refers to the emissions source factors; however, does not address GHGs from increased passenger journeys to and from the airport. The ES should explain how these have been taken into account.
4.4.6	Paragraphs 9.5.4 to 9.5.7	Temporal scope	The temporal scope of the assessment for the construction and operational phases for this aspect of the Proposed Development is anticipated to be 2020-2050. The ES should justify the choice of peak construction and operation years selected for the assessment of emissions scenarios.
4.4.7	Paragraph 9.5.11 and Section 9.8	Future baseline scenarios and best practice mitigation	The Scoping Report states that the future baseline will account for decarbonisation of the national grid and other technological improvements such as lower emission vehicles. The assumptions and uncertainties regarding future improvements scenarios, including any sensitivity analysis, should be clearly set out in the ES, in order to understand the reliance placed on such measures in assessing likely significant effects.

4.5 Noise and Vibration

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Paragraph 10.7.1 and Table 5-2	Road traffic vibration	An assessment of road traffic vibration has been scoped out on the basis that the condition of road surfaces on the majority of the highway network is outside the scope of the Proposed Development and only localised junction improvements are proposed. It is unclear whether this includes construction traffic that may be utilising the existing road network. In the absence of information on the type and nature of the road traffic, the Inspectorate cannot agree to scope out this matter. The Inspectorate considers that an assessment of vibration effects arising from construction vehicles on the existing road network should be provided as part of the ES, in line with the methodological approach set out in the Design Manual for Roads and Bridges (DMRB).
4.5.2	Paragraph 10.7.2 and Table 5-2	Operational vibration	Operational vibration is scoped out on the basis that on-site sources of vibration such as road and air traffic activity are not expected to generate appreciable vibration on well-maintained surfaces and that the distance is considered to be sufficient that vibration will be ground attenuated to a level that is not appreciable. The Scoping Report contains limited information with regards to potential sources of operational vibration or the location of sensitive receptors. The Inspectorate is therefore unable to scope this matter out. The ES should include an assessment of operational vibration, where likely significant effects could occur.

ID	Ref	Other points	Inspectorate's comments
4.5.3	Paragraph 10.2.2	Legislation	Reference is made to the Civil Aviation Act 2006, but not to the Civil Aviation Act 1982, which is still in effect, nor the later Civil Aviation Act 2012. All relevant aviation legislation should be considered within the assessment.
4.5.4	Paragraphs 10.4.5 and 10.4.8	Baseline noise monitoring - location and methodology	<p>The ES should clearly describe how the monitoring locations have been selected and the extent to which they are agreed with the relevant consultation bodies.</p> <p>The methodology used for the baseline noise surveys should be described in the ES and/or accompanying technical appendices. The baseline year and the baseline noise monitoring year should be consistent.</p>
4.5.5	Paragraphs 10.4.1, 10.4.9 and 10.5	Study area	The Inspectorate notes the study area for the aircraft noise assessment is yet to be defined. The ES should describe the study area used for the impact assessment and this must be clearly defined and justified in the ES. The Inspectorate considers that the study area should include the Chilterns Area of Outstanding Natural Beauty (AONB) where relevant, including the potential for cumulative noise impacts with other airport development.
4.5.6	Paragraphs 10.4.11 to 10.4.13 and 10.5.5	Air noise assessment – airspace redesign scenarios	<p>The Scoping Report states that the assessment of air noise will be undertaken based on existing flight paths, but also acknowledges that the ANPS states that the assessment of aircraft noise should be undertaken in accordance with the developing indicative airspace design, which may involve the use of appropriate design parameters and scenarios based on indicative flight paths. Paragraph 10.4.11 states that London Luton Airport may be a significant beneficiary of airspace redesign, based on one optimised scenario.</p> <p>The ES should ensure that it presents an assessment of the realistic worse-case scenarios for the Proposed Development, including consideration of any airspace change implications for the noise</p>

ID	Ref	Other points	Inspectorate's comments
			<p>assessment and the introduction of performance-based navigation. The assumed Air Traffic Movements (ATM) should be clearly stated for all assessment scenarios. Furthermore, a WebTAG analysis to value and compare the noise impact of these options should be provided consistent with the requirements of the Air Navigation Guidance 2017.</p> <p>When considering the introduction of quieter aircraft each year against growth in ATMs, the ES should clearly identify the worse-case scenario, noting that it may not necessarily be one of the years noted in Paragraph 10.5.5 of the Scoping Report.</p>
4.5.7	Paragraph 10.4.11	Aviation 2050: The Future of UK Aviation	Footnote 163 of the Scoping Report refers to Paragraph 3.106 of this document; however, it is not apparent how this relates to the statement made in the Scoping Report. The ES should provide clear links to documents quoted, with accurate paragraph references, as necessary and appropriate.
4.5.8	Section 10.5	Unacceptable adverse effect level (UAEL)	The Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL) are defined the text, however the UAEL has not been defined. The ES should define and assess UAEL for the Proposed Development.
4.5.9	Paragraph 10.5.8 and Table 10-6	Sensitive noise receptors	It is unclear whether impacts to ecological receptors will be assessed in the noise assessment in addition to human receptors. The ES should clearly identify the sensitive receptors considered in the impact assessment and include cross-referencing between aspect chapters, as appropriate.
4.5.10	Paragraph 10.5.9 and Table 10-1	Construction noise criteria	Consistent with BS5228 Table E1, the assessment of construction noise effects should also include criteria for weekends and Saturdays 07:00-13.00. Whilst Example Method 2 in BS5228 makes reference to durations of one month, or more in the consideration of significant effects, the criteria also include the caveat ' <i>unless works of a shorter duration are likely to result in significant effect</i> '. The duration of effect

ID	Ref	Other points	Inspectorate's comments
			should not be applied as a blanket principle to rule out any likelihood of significant effect.
4.5.11	Paragraphs 10.5.12 to 10.5.13	Vibration effects	The text relating to vibration effects appears to mix peak particle velocity (PPV) and vibration dose value (VDV) as assessment criteria. The ES should distinguish between the vibration criteria for human receptors and those for buildings/structures. Relevant LOAEL and SOAEL criteria should be set out for both effects referencing relevant British Standards such as BS6472 and BS7385.
4.5.12	Paragraph 10.5.18	Operational noise – train movements	The ES should assess noise impacts associated with increased train movements relating to the Proposed Development where likely significant effects could occur.
4.5.13	Paragraph 10.5.19	Operational noise – fixed plant	The ES should assess on-site noise emissions from fixed plant relating to the Proposed Development where likely significant effects could occur. Static sources should be assessed using BS4142: 2014 Methods for rating and assessing industrial and commercial sound.
4.5.14	Paragraph 10.8.5	Noise mitigation	<p>The ES should set out the Applicant's noise insulation policy, justifying any change from existing provisions. The policy should explain how it addresses the proposed policy changes set out in '<i>Aviation 2050: The future of UK aviation. A consultation.</i>'</p> <p>The list of mitigation omits discussion of how embedded measures such as Fixed Electrical Ground Power and use of electrical vehicles can reduce emissions of noise.</p>
4.5.15	Paragraph 10.8.6	Noise envelope	The Scoping Report proposes that a bespoke noise envelope will be developed to provide a mechanism to manage noise impacts. The relationship between the existing noise envelope and the proposed noise envelope must be set out in the ES and the basis for any departure from the established noise envelope must be fully justified. The ES should explain how the Noise Envelope Design Group provides

ID	Ref	Other points	Inspectorate's comments
			continuity with existing noise controls at the airport and justify the need for any departures from the conditions of the existing operating consent.

4.6 Soils and Geology

(Scoping Report Section 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Paragraph 11.7.1 and Table 5-2	Geological and Geomorphological features of scientific interest and importance	The Inspectorate agrees that an assessment of likely significant effects on geological or geomorphological features of scientific interest can be scoped out on the basis that there are none located within (or immediately adjacent to) the Proposed Development.
4.6.2	Paragraph 11.7.2	Groundwater assessment to be undertaken as part of Chapter 12: Water Resources	The Inspectorate agrees that this is a logical approach; however, would expect to see clear cross-referencing between the two aspect chapters to ensure a full and robust assessment, particularly as data collated for the Soils and Geology assessment will likely inform the Water Resources assessment.
4.6.3	Paragraph 11.7.3 and Table 5-2	Off-site Highway Interventions	The Scoping Report acknowledges that the location, nature and extent of the proposed Off-site Highway Interventions are not yet known. It also does not provide sufficient certainty that there would be no impacts to sensitive/valued soil and geology receptors or details of the likely proposed measures to be included in the CoCP to manage potential risks. In the absence of this information, the Inspectorate is unable to agree that matters of soil and geology associated with the Off-site Highway Interventions can be scoped out at this stage. The ES should include an assessment of such matters where likely significant effects could occur.
4.6.4	Paragraph 11.7.4	Assessment of the impacts of off-site disposal of material on waste management infrastructure	On the basis that the management of off-site disposal of material on waste management infrastructure is to be assessed in Chapter 13: Waste and Resources of the ES, the Inspectorate agrees this matter can be scoped out of the Soil and Geology aspect chapter. The ES should however include clear and appropriate cross-referencing between relevant aspect chapters, such as Waste and Resources, and

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			Traffic and Transport.

ID	Ref	Other points	Inspectorate's comments
4.6.5	Paragraph 11.4.6	Zone of Influence (ZoI)	<p>The Scoping Report identifies a ZoI of 250m from the Main Application Site, extending to 1km for an assessment of landfills, based on guidance contained within the following: National House-Building Council and the Environment Agency (2008) Guidance for the Safe Development of Housing on Land Affected by Contamination R&D66: 2008 Volume 1. The ES should clearly justify why this distance is deemed an appropriate ZoI for the Proposed Development with reference to likely source-receptor-pathways.</p> <p>Due to the soils, as stated in the Scoping Report being predominantly clay above chalk, the Applicant should consider the potential for contamination further than 250m especially where waterbodies are present. The ES should ensure adequate cross-referencing between other aspect chapters, such as the Water Resources and Health chapters.</p>
4.6.6	Paragraph 11.4.25 to 11.4.27 and Figure 11.2	Historical land uses	The four figures presented as Figure 11.2 do not contain legends or labels and therefore it is difficult to identify any features referred to in Paragraphs 11.4.25 to 11.4.27. The Applicant is reminded that the information contained in the ES should be clearly legible and accessible to readers.
4.6.7	Paragraph 11.5.3	Land contamination	The Scoping Report states that the ' <i>The existing baseline assessment of the landfill area will be supplemented to consider the wider geo-environmental setting and ground conditions within the area of the Proposed Development.</i> ' It is not clear from this statement as to whether this relates to an area within and/or beyond the boundary of the Proposed Development. The geographical extent of the studies

ID	Ref	Other points	Inspectorate's comments
			used to inform the impact assessment should be clearly stated in the ES.
4.6.8	Paragraph 11.5.8	Excavated material	The Scoping Report references the potential for ' <i>significant quantities of excess material</i> ' and cross refers to Chapter 13: Waste and Resources for an assessment of the impact from disposal of off-site material on existing waste management infrastructure. The Inspectorate would also expect effects associated with the removal off-site of excavated material to be factored into the assessment of traffic and transport and air quality aspect chapters. The ES should include clear and appropriate cross-referencing between aspect chapters to ensure a robust assessment.
4.6.9	N/A	Soils Management Plan	This aspect chapter does not refer to the production of a SMP; however, it is noted to have been referenced in Chapter 16 Agricultural Land Quality and Farming Circumstances. The Inspectorate considers that a SMP is equally applicable to this aspect chapter and would therefore expect measures within a SMP to be referenced in the ES. It is recommended that an outline SMP be included with the ES, with the final SMP appropriately secured through the Applicant's dDCO or other suitably robust method.

4.7 Water Resources

(Scoping Report Section 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	Paragraph 12.7.1 and Table 5-2	Flooding associated with rivers and groundwater for the Main Application Site only	The Inspectorate is content that the Main Application Site is located entirely within Flood Zone 1 and is not located in an area susceptible to groundwater flooding. The Inspectorate is content that the assessment of impacts associated with flooding from rivers and groundwater can be scoped out of the ES as significant effects are unlikely to occur.

ID	Ref	Other points	Inspectorate's comments
4.7.2	Paragraph 12.2.5	Legislation	The ES should also refer to The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017
4.7.3	Paragraph 12.4.1	Study Area	The Scoping Report does not state the proposed assessment study area for the ES. The ES should clearly state and justify the study area used, which should be applicable to the ZoI of the Proposed Development.
4.7.4	Paragraph 12.4.10	Baseline – attenuation basins	Consultation bodies have identified the likely attenuation basin in Eaton Green Road and potential sources of information (see Appendix 2 to the Opinion). The ES should clearly describe and identify the drainage network likely to be affected by the Proposed Development, including clear figures.

ID	Ref	Other points	Inspectorate's comments
4.7.5	Paragraph 12.5.3	Assessment methodology - Groundwater modelling	The Inspectorate notes the intention to use and refine an existing EA groundwater model of the Vale of St Albans to understand the existing groundwater levels and flow paths, but that details of the model are not yet available. The ES and/or accompanying appendices should include details of the modelling methodology, including any assumptions made or limitations encountered. Efforts should also be made to agree the modelling with the relevant consultation bodies, including the EA.
4.7.6	Paragraphs 12.5.4; 12.5.10; 3.4.46 to 3.4.51	Assessment - Hydrogeological modelling and assessment	The Applicant should undertake a detailed assessment, including hydrogeological modelling, to identify any potential impacts to groundwater flow patterns beneath the Proposed Development arising from the surface water drainage strategy and assess any likely significant effects on sensitive receptors. Effort should be made to agree the assessment methodology, including modelling, with relevant consultation bodies including the EA.

ID	Ref	Other points	Inspectorate's comments
4.7.7	Paragraphs 3.4.50 to 3.4.51	Assessment - Discharge of treated sewage to ground	<p>The ES should make clear the proposed strategy and route for the discharge of treated sewage to ground arising from the Proposed Development. An assessment of effects to sensitive water receptors, including effects on groundwater quality in the underlying Chalk Principal Aquifer, should be provided where likely significant effects could occur.</p> <p>The Applicant should make effort to agree the assessment methodology, including the need for a detailed hydrogeological risk assessment, with relevant consultation bodies. The hydrogeological assessment should include: consideration of the potential effects that both chemical and microbiological contaminants may have on the underlying aquifer; details of the proposed treatment process; details of the proposed discharge arrangement; and long-term monitoring (including groundwater quality monitoring) arrangements.</p> <p>The Inspectorate notes the Applicant's intention to discharge treated surface water flows and treated sewage effluent flows via a single discharge point to ground. It is recommended that two separate discharge points are considered. The Applicant should seek to agree this matter with the EA. Noting that the proposed discharge of the treated surface water drainage and discharge of treated sewage effluent both require permits under the Environmental Permitting Regulations.</p>
4.7.8	Section 12.6	Potential impacts - Off-site Highway Interventions	<p>The Applicant should seek to agree the need or otherwise for connections to the Highways England drainage network with Highways England. Noting that no new connections are permitted to the Highways England drainage network and that in the case of an existing 'permitted' connection, this can only be retained if there is no change to land use.</p>

ID	Ref	Other points	Inspectorate's comments
4.7.9	Paragraph 12.6.3	Construction impacts – damage to existing water infrastructure	The ES should also consider the potential impact of damage to the existing distribution network of Affinity Water and the private network at the airport.
4.7.10	Paragraph 12.6.5	Operational impacts – sewage effluent	The ES should also assess impacts arising from the discharge of sewage effluent during operation, where likely significant effects could occur.
4.7.11	Paragraph 12.6.5	Operational impacts – fire training ground	The ES should assess impacts to water quality arising from the operation of the relocated fire training ground, where likely significant effects could occur. For example, through the generation and release of firefighting foam, hydrocarbons and used water run-off.
4.7.12	Paragraph 12.8.2	Mitigation – Drainage strategies	The Scoping Report commits to providing surface water strategies with the ES. The Inspectorate considers that any such strategies should include measures to address impacts during construction, where significant effects are likely to occur.
4.7.13	Figure 12.1	Figures	The figures provided with the Scoping Report do not clearly identify the River Mimram or the Ippollitts Brook. The ES should be supported by clear figures to depict these waterbodies.
4.7.14	N/A	Health impacts	The Health and Communities aspect chapter of the Scoping Report identifies that impacts to health effects of water and groundwater contamination and flooding will be elsewhere in the ES, presumably in the Water Resources aspect chapter. However, it is not apparent from the Scoping Report that the Water Resources aspect chapter will assess these matters. The ES must include an assessment of likely significant effects to health arising from water and groundwater contamination and flooding associated with the Proposed Development.

4.8 Waste and Resources

(Scoping Report Section 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	Paragraph 13.7.1 and Table 5-2	Waste arising from extraction, processing and manufacture of construction components and products	The Inspectorate agrees that this matter can be scoped out of the assessment. This is on the basis that such matters cannot be accurately predicted and assessed in the ES as they relate to procurement decisions that cannot be assured; however, the Inspectorate anticipates that the Applicant would implement sustainable procurement practices in the selection of sustainable sources.
4.8.2	Paragraph 13.7.2 and Table 5-2	Environmental impacts associated with the management of waste on water resources, air quality, noise or traffic resulting from the generation, handling, on-site temporary storage or off-site transport of waste	It is not apparent from the Scoping Report that these matters will be assessed in other aspect chapters. The Inspectorate accepts that these matters can be scoped out of the waste chapter of the ES on the basis that the assessment of likely significant effects associated with the management of waste will be assessed in other relevant aspect chapters. Clear cross-referencing between these relevant matters must be included in the ES to ensure a robust assessment has been undertaken.

ID	Ref	Other points	Inspectorate's comments
4.8.3	Paragraph 13.4.1	Study area	The Inspectorate notes that the overall study area for the Proposed Development has not yet been determined and it is the Applicant's intention to agree this with applicable consultation bodies. The study area should be clearly defined and justified in the ES with reference to the ZoI for the Proposed Development.
4.8.4	Paragraph	Study area for construction	The Scoping Report states that the study area for the construction of the Proposed Development is the <i>'footprint of the Proposed</i>

ID	Ref	Other points	Inspectorate's comments
	13.4.2		<i>Development, including temporary land requirements during construction'</i> . The ES should clearly define this study area, accompanied by clear and appropriately labelled/referenced figure(s).
4.8.5	Paragraph 13.4.3; Tables 13-2 and 13-3	Baseline - waste management capacity	The Applicant should seek to agree the baseline data to be used for landfill capacity with the relevant consultation bodies and ensure the use of the most up-to-date capacity data for the regions/Counties assessed, taking account of any likely closures/capacity changes at the start of construction as future baseline.
4.8.6	Paragraph 13.4.11	Operational waste	The Scoping Report provides a brief statement with respect to the amount of airport operational waste diverted from landfill in 2017, as stated to have been provided by LLAOL at footnote 282. The ES should expand on this statement and provide evidence to support statements made in respect to the baseline data used in the assessment.
4.8.7	Table 13-5	Assessment methodology	The Scoping Report states that due to an absence of a specific methodology/guidance for assessing effects on waste and resources, it intends to use professional judgement, national and local policy, and recognised best practice. The ES should clearly explain the methodology applied to the assessment; where professional judgement has been applied this should be clearly stated.
4.8.8	Table 13-6 and Paragraph 11.4.22	Historic landfill waste	Table 13-6 makes no specific reference to the existing landfill site within the Proposed Development and the likely type of waste arising from the remediation of this area would generate. An assessment of the waste generated from this remediation should be included in the ES. Appropriate cross-references should be included between this aspect chapter and other relevant aspects, such as (but not limited to) Traffic and Transport, Soils and Geology, and Air Quality. The Applicant should seek to agree the proposed remediation strategy with relevant consultation bodies, including waste authorities and the EA, and

ID	Ref	Other points	Inspectorate's comments
			ensure that consideration is given to the waste arisings being moved up the waste hierarchy.
4.8.9	N/A	Future baseline	It is not clear from this aspect chapter what future baseline will be considered for this assessment, particularly for operational effects. The ES should make clear the baseline scenarios applied to the assessment.

4.9 Economics and Employment

(Scoping Report Section 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	Paragraph 14.7.1 and Table 5-2	Impact on tourism deficit – quantified assessment	Table 5-2 states 'n/a' indicating no matters are proposed to be scoped out. However, Paragraph 14.7.1 states that no quantified assessment of the impact on tourism deficit is proposed. The Inspectorate notes the justification in the Scoping Report for the extent to which tourism effects will be assessed in the ES. On the basis of the information supplied and the nature of the likely impacts, the Inspectorate accepts the proposed approach. The Applicant should provide justification for the method of assessment in the ES and seek to agree the approach with the relevant consultation bodies.

ID	Ref	Other points	Inspectorate's comments
4.9.2	Paragraph 14.4.1 to 14.4.3	Study area	The Inspectorate welcomes the description of the immediate and wider study areas which will be applied to the assessment. The ES should include figures to clearly depict the study areas and the key features (eg businesses) addressed in the assessment.
4.9.3	Paragraph 14.4.4 to 14.4.7	Data gathering and survey	With respect to the scope of the assessment outlined in Paragraph 14.1.2 of the Scoping Report, these paragraphs do not state what data will be used to assess effects on existing businesses and employment from combined environmental factors. The note in Paragraph 14.5.9 of the Scoping Report that the findings of other aspect chapters will be reported is acknowledged; however, the ES should present the specific data and information which has informed the assessment, with cross-reference to other aspect chapters where necessary.

ID	Ref	Other points	Inspectorate's comments
			The impacts to direct employment are reported in Paragraph 14.4.6 with reference to the ' <i>Three counties</i> ' study area, although no value is presented for one of these counties (Buckinghamshire). The ES should provide a comprehensive report of all existing conditions established for the assessment.
4.9.4	Paragraph 14.4.8	Existing and future conditions	The Applicant should ensure that a robust baseline is established, to be informed by a thorough consultation. The joint response in Appendix 2 from Aylesbury Vale District Council (AVDC) and Buckinghamshire County Council (BCC) highlights the production of Local Industrial Strategies by the South East Midlands Local Enterprise Partnership (LEP) and Buckinghamshire Thames Valley LEP. The baseline assessment to the ES should take into account the extent to which the Proposed Development may affect these strategies and where significant effects may occur.
4.9.5	Paragraph 14.4.3 and 14.5.5	Methodology	The ES should explain the future construction and operation scenarios applied to the assessment, including how the Proposed Development's phased approach to construction has been taken into account where applicable. The Inspectorate notes the inclusion of a cumulative assessment identified in Paragraph 14.4.3 and advises that the future conditions taken into account in the assessment should be clearly described in the ES. For example, the future economic conditions with respect to available housing and changes to transport infrastructure.
4.9.6	Paragraph 14.5.12	Methodology	It is not clear from the Scoping Report how indirect and induced impacts will be assessed, and it has been understood that the 'appropriate multipliers' mentioned in Paragraph 14.5.12 will be used to assess supply chain and employee expenditure associated with the Proposed Development. The ES should clearly set out what these multipliers are, how they have been determined, and how they have been applied to the assessment.

ID	Ref	Other points	Inspectorate's comments
4.9.7	Table 14.5	Determination of significance	The information in this table and accompanying text is understood in relation to how significance will be determined as a result of magnitude of impact and sensitivity of receptor, however while a framework for assessing impact magnitude is set out in the preceding paragraphs, a similar method for assessing receptor sensitivity is not. The ES should contain this information.
4.9.8	Section 14.8, Paragraph 14.8.4	Mitigation and enhancement	The detail in the Scoping Report on the proposed training and employment programme is limited, and the ES should describe the proposed nature and extent of these measures and to what degree they will be expected to mitigate adverse effects. Additionally, benefits to the wider economy through employment or increased expenditure are identified but it is not clear if these will be entirely incidental or if measures are proposed to actively promote wider benefits. This information should be provided in the ES.

4.10 Health and Community

(Scoping Report Section 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.1	Section 15.7 and Table 5-2	Health effects from increased population exposure to air pollutants	<p>The Inspectorate understands that the Scoping Report is making a distinction between local population effects, which it states will be assessed in the Air Quality assessment, and wider population effects which are proposed to be scoped out. The term 'population' is not given context so it is not possible to fully understand this distinction. Reference is made to evidence which appears to be related to studies of NO₂ exposure and mortality rates. The Scoping Report refers to this evidence as quantification of effects on respiratory health. Other pollutants are not explored (eg PM) and other health aspects (eg exposure to carcinogens) are not discussed in this Section of the Scoping Report.</p> <p>The precise nature of the matter to be excluded from the assessment is not clear, and therefore the Inspectorate cannot agree to scope this matter out.</p>
4.10.2	Paragraph 15.7.3 and Table 5-2	Health effects from electromagnetic interference (EMI)	<p>The Scoping Report states that the Proposed Development does not include any significant sources of EMI in proximity to sensitive receptors. The Scoping Report does not identify what these sensitive receptors would be and over what geographical extent impacts could be expected to occur. There is no specific information presented on any significant EMI sources which form part of the Proposed Development. Without this information the Inspectorate cannot agree to scope this matter out and advises that it should be assessed in the ES where significant effects could arise.</p>
4.10.3	Paragraphs 15.7.4 to	Health effects of water and groundwater contamination,	<p>The Inspectorate understands from these paragraphs of the Scoping Report that these matters will be assessed in and mitigated for</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
	15.7.6 and Table 5-2	flooding, or major accidents	<p>through the relevant chapters of the ES; given in the Scoping Report as Chapter 11 Soils and Geology, Chapter 12 Water Resources, and Chapter 20 Major Accidents and Disasters, as well as the proposed Flood Risk Assessment, and are therefore proposed to be scoped out of the Health and Community aspect chapter of the ES.</p> <p>It is noted that Chapter 12 Water Resources of the Scoping Report does not contain any reference to assessment of effects on health, in particular any likely significant effects arising from water and groundwater contamination. The Inspectorate does note the reference to health in the Soils and Geology aspect chapter. The Inspectorate does not agree to scope these matters out and advises that the ES should assess any likely significant effects to health associated with water and groundwater contamination. If the Applicant choses to assess these matters in another relevant aspect chapter it should be clearly referenced.</p> <p>The Inspectorate agrees to scope out health effects to receptors at the Main Application Site. However, the flood risk associated with Proposed Development outside of the Main Application Site is not clearly stated in the Scoping Report. Therefore, the Inspectorate does not agree to scope these matters out of the assessment and where significant effects are likely to occur they should be assessed in the ES.</p> <p>It is noted that Paragraph 20.4.4 of the Scoping Report states that the assessment will use baseline information from Chapter 15 to define the receptors and the vulnerability of the Proposed Development to Major Accidents and Disasters. Population and human health are identified as receptors in Chapter 20 of the Scoping Report. The Inspectorate agrees that this matter can be addressed as proposed and therefore scoped out of the Health and Community assessment. Nevertheless, the Inspectorate advises that the ES clearly cross-</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			references common information between the two aspect chapters.
4.10.4	Paragraph 15.7.7 and Table 5-2	Community impacts on individuals/individual business owners or operators	The Inspectorate accepts that economic impacts on business owners will be assessed in the relevant chapters of the ES, given in the Scoping Report as Chapter 14 Economics and Employment and Chapter 16 Agricultural Land Quality and Farming Circumstances. As a result, the Inspectorate agrees to scope these matters out of the Health and Community assessment.

ID	Ref	Other points	Inspectorate's comments
4.10.5	Paragraph 15.4.1 and Table 15-1	Study Area	The Inspectorate welcomes the description of the immediate and wider study areas which will be applied to the health assessment and community assessment. It is not explicitly stated in the Scoping Report but the Inspectorate would expect the study area to reflect the change in ATMs where this is relevant. The ES should also define the relevant rural communities affected and include figures to clearly depict key features discussed in the assessment.
4.10.6	Paragraph 15.4.4	Baseline information	The Inspectorate notes the information sources listed in the Scoping Report and advises that the ES provides an explanation of the specific data to be gathered from these sources. It is not clear from the Scoping Report how mental health indicators will be determined from these sources, and the Inspectorate advises that both mental and physical health effects should be assessed in the ES.
4.10.7	Paragraph 15.4.5	Baseline information	While it is understood from this paragraph that the ES will identify community resources within the Study Area only if they may be affected by the Proposed Development, it will be necessary for the ES to provide an explanation of how the baseline has been established and therefore it should explain what possible effects have been

ID	Ref	Other points	Inspectorate's comments
			considered when identifying community resources.
4.10.8	Paragraph 15.4.12	Baseline information	With regard to the quality surveys to be undertaken, it should be clear in the ES how the locations/sites to be surveyed have been chosen, including how consultation has informed the decision. The data for the assessment, for example the attribute table referred to in Paragraph 15.4.10, should be provided in the ES.
4.10.9	Paragraph 15.4.19	Future baseline	The ES should explain how future changes to the profile of the affected communities and wider relevant policy has been considered within the assessment. Any forecasts used must be explained and the methods used justified. The Applicant should make effort to verify the information used with relevant consultation bodies.
4.10.10	Paragraph 15.5.2	Relationship to other EIA topics	The Inspectorate welcomes this section and would expect to see corresponding sections in the ES explaining how the other environmental aspect assessments have informed the assessment of health and community effects. For example, the Scoping Report does not directly relate landscape or visual effects to health, and the ES should provide an explanation of the relationship identified. The Inspectorate considers that elements of the Cultural Heritage assessment and assessment of Major Accidents and Disasters will also be relevant to the assessment of wellbeing and health. The ES should provide explanation and justification for the basis of the assessment and the Applicant should seek to agree with consultation bodies the approach taken.
4.10.11	Paragraph 15.5.10 to 15.5.17	Magnitude of impact and sensitivity of population/receptor	The Inspectorate acknowledges the information provided in the Scoping Report about the factors which will be considered when determining the magnitude of impacts and sensitivity of population (health effects) and receptor (community effects); however, Paragraph 15.5.10 refers to these judgements being based on ' <i>defined assessment criteria</i> '. These criteria are not presented in the Scoping

ID	Ref	Other points	Inspectorate's comments
			Report and the ES should provide this information.
4.10.12	Paragraph 15.5.19	Determination of significance	The Scoping Report states that as a ' <i>general rule</i> ' major and moderate effects will be considered significant. The ES should clearly define significant effects and any deviation from the defined method in the ES should be justified.
4.10.13	Table 15-3	Potential effects – relation to impacts	The Table sets out the potential effects of the Proposed Development relevant to each Activity/Stage. However, these are sometimes conflated with the impacts set out in the preceding paragraphs, and some impacts are not represented in the Table at all, for example 'permanent loss or gain of community facilities due to construction'. The ES must clearly set out the anticipated effects of the Proposed Development having regard to all impacts identified and where significant effects are likely to occur.

4.11 Agricultural Land Quality and Farming Circumstances

(Scoping Report Section 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	Paragraph 16.6.8 and 16.7.2 and Table 5-2	Operational impacts on agricultural land quality, soil resources, and agricultural holdings	<p>The Scoping Report states that no further impacts will occur from loss of agricultural land, once the Proposed Development is constructed. The Inspectorate accepts that given this information significant effects on agricultural land quality and soil resources are unlikely to occur during operation and is content to scope these matters out.</p> <p>The Inspectorate considers that the potential exists for significant effects on the continued operation of agricultural holdings from traffic/road changes and noise impacts. It is appreciated that these effects are likely to be assessed within separate relevant chapters of the ES, and cross reference to these assessments would be appropriate within the assessment of effects on agricultural interests.</p>
4.11.2	Paragraph 16.7.1 and Table 5-2	Operational impacts on rural land designations	<p>The Scoping Report states that as the Proposed Development will not contain any agricultural land, designations such as Nitrate Vulnerable Zones are unlikely to be affected. Given the nature of the Proposed Development the potential for significant release of organic and inorganic fertilizer into the environment is considered low and significant effects are considered unlikely to occur. In light of this the Inspectorate agrees to scope this matter out.</p>
4.11.3	Paragraph 16.6.6	Permanent construction impacts on soil resources	<p>The Scoping Report states that this matter is scoped in due the potential for significant effects, but then states that effects can be reduced to minor adverse (and therefore not significant) following best practice techniques. For clarity, the Inspectorate advises that this matter is fully assessed in the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.11.4	Paragraph 16.4.1	Study area	The Inspectorate advises that the 'study area' should include the extent of the anticipated impacts, including any land-holdings outside of the 'Main Application Site' as described in Paragraph 16.4.1 which could be affected by the Proposed Development, where applicable.
4.11.5	Paragraph 16.4.2 and 16.4.7	Data gathering and survey	It is noted from the Paragraph 16.4.7 of the Scoping Report that Agricultural Land Classification (ALC) surveys were carried out in 2018 to cover land not covered by existing data sources. It is not clear if these surveys are the 'soil survey data collected on site as part of previous investigations' referred to in Paragraph 16.4.2. The ES should clearly set out details of all survey work carried out to inform the assessment.
4.11.6	Paragraph 16.5.1, Table 16-3	Assessment methodology	From the information in Table 16.3 it is not clear if all the defined criteria (land-take, severance, infrastructure, nuisance) would have to be engaged or if one criterion falling into the description provided would lead to the corresponding assessment of magnitude. This should be clarified in the ES.

4.12 Biodiversity

(Scoping Report Section 17)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.12.1	Paragraph 17.4.38 and 17.4.39, Section 17.7, and Table 5-2	Impacts to water courses, otters, water voles, white-clawed crayfish, and other aquatic invertebrates.	<p>Section 17.7 states that otter, water vole, white-clawed crayfish, and other aquatic invertebrates are to be scoped out due to the absence of watercourses within the 'Main Application Site'.</p> <p>It is not clear from the Scoping Report what is meant by the 'Main Application Site' although Figure 2.1 is provided and labels an area of the Proposed Development boundary crossing the River Lea on the A1081 as 'off-site car parks' which have been proposed to be scoped out of the assessment (see below). Table 3.1 and Figure 2.1 indicate works to the A602 which cross the Ippollitts Brook near Hitchin.</p> <p>Paragraph 17.4.37 notes that the citation for River Lea County Wildlife Site (CWS) includes water vole. The CWS is not labelled on Figure 17.2 and therefore it is not possible to determine its location relative to the Proposed Development.</p> <p>The Inspectorate considers that indirect impacts could occur on the River Lea, and therefore its flora, fauna and the CWS. Similarly, other watercourses including those which are of conservation concern (eg chalk streams) could be affected by the Proposed Development. The information in the Scoping Report is not sufficient to exclude significant effects and therefore the Inspectorate does not agree to scope these matters out. The ES must assess indirect impacts on watercourses and identify any significant effects on associated habitats, protected species, and other species of conservation concern.</p>
4.12.2	Paragraph	Impacts on great crested newts;	The Scoping Report states in Paragraphs 17.4.36 and 17.4.43 that

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
	17.4.36, 17.4.43, Section 17.7, and Table 5-2	impacts on hazel dormouse	<p>field survey, following standard guidance, has established the likely absence of these species from the 'Main Application Site'. Full details of the field surveys including the ponds surveyed are not provided in the Scoping Report, and the 'Main Application Site' is not defined. The Scoping Report states that access was not possible for all ponds within the study area however the implications for the conclusion of likely absence are not discussed. The 'off-site' areas within the Proposed Development are stated as being excluded, however insufficient justification is provided for this. The Inspectorate does not consider that sufficient information has been provided to confidently conclude that no significant effects could occur on these species, and therefore cannot agree to scope these matters out of the assessment. Accordingly, the ES should include an assessment of these matters where there is a likely significant effect.</p>
4.12.3	Table 5-2, Section 17.7	Impacts from the proposed Off-site Car Parks and Off-site Highway Interventions	<p>The Scoping Report states that the areas where these proposals are located are of negligible ecological value. No further information, such as Phase 1 survey data, is provided. The potential for indirect impacts giving rise to ecological effects, for example pollution events or disturbance through noise and lighting, is not explored in the Scoping Report.</p> <p>Notwithstanding the existing paucity of habitats of ecological value in these areas indicated by the Scoping Report, the proposed works could give rise to indirect impacts. The Inspectorate considers that the ecological effects from these works should be assessed in the ES where significant effects could arise, and does not agree to scope them out of the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.124	Paragraph 17.4.2, 17.4.3, 17.4.9-11 and Table 17-2	Study Area	The Scoping Report describes the study area in relation to 'the Main Application Site'. Paragraphs 17.4.9 to 11 describe statutory sites, including international sites, in relation to the 'Main Application Site'. Table 17.2 lists non-statutory sites within 2km of the 'Proposed Development'. The study area must be clearly defined in the ES, and any figures accompanying the ES should also clearly depict the study area applied to the assessment. The study area should be based on the anticipated geographical extent of impacts, and in the case of the Proposed Development this may include consideration of changes to ATMs for air quality and noise effects on ecological receptors.
4.125	17.4.5 and 17.4.6	ZoI	The ZoI will be established with regards to the Main Application Area and this should reflect the full extent of the Proposed Development and its likely impacts. The Scoping Report states that the Off-site Car Parks and Off-site Highway Interventions are located in areas of negligible ecological value and are not discussed further in the baseline. The ES should include a robust analysis of the baseline supported by appropriate desk-based analysis and site-specific surveys where necessary.
4.126	Paragraph 17.4.62 and Paragraphs 17.4.63-69	Baseline - further surveys	Paragraph 17.6.2 mentions ' <i>a range of further ecological surveys</i> ' to be undertaken to inform the ecological impact assessment of the ' <i>Proposed Development</i> '. Paragraphs 17.4.63 to 17.4.69 refer to the Main Application Site. The ES must define the study area applied and provide justification for the geographical extent of the surveys. The assessment should be based on the anticipated extent of the impacts of the Proposed Development.
4.127	Paragraph 17.4.68	Breeding bird surveys	The Scoping Report indicates that impacts to breeding birds will be assessed; however, there is no further information regarding the intended breeding bird surveys. For clarity, the Inspectorate consider these surveys are necessary to inform the assessment. The ES must describe all the survey works and data gathering which form the basis

ID	Ref	Other points	Inspectorate's comments
			for the assessment.
4.128	Figure 17.2	Designated sites	<p>Figure 17.2 (non-statutory designated sites) does not depict all of the sites listed in Table 17-2 as stated by the Scoping Report. Any figures presented in the ES should be complete and at an appropriate scale to illustrate the relevant baseline information.</p> <p>The joint response from HCC, North Hertfordshire District Council (NHDC), CBC and LBC highlights three CWS under consideration by NE as Sites of Special Scientific Interest (SSSIs), along with other information about the presence and nature of other non-statutory and statutory sites which may be affected by the Proposed Development. The Applicant is advised to consult with the local authorities to ensure accurate information about sites of ecological value is taken into account in the assessment.</p>
4.129	Paragraph 17.5.3	Assessment methodology – determining significance	<p>This paragraph of the Scoping Report states that a significant effect at a national level would be a material consideration for a NSIP, and that significant effects at district level should be a material consideration for district planning applications. The Inspectorate advises that the purpose of the ES is to assess and present the likely significant environmental effects resulting from the Proposed Development. The ES assessment methodology should avoid conflating issues between the assessment of significant effects and the weight that may or may not be afforded to the assessment in the decision-making process.</p> <p>The statement in Paragraph 17.5.3 does not align with the methodology for determining significance presented in Section 5.3 and Paragraphs 17.5.8 to 17.5.11 of the Scoping Report, and for clarity, the Inspectorate requests that a consistent methodology is applied in the ES.</p>
4.12.10	Paragraph 17.5.4 and 17.5.5,	Mitigation and enhancement	<p>Advice on mitigation is provided in Section 3 of this Scoping Opinion, and similar advice applies to measures proposed for the purposes of environmental enhancement. Measures to be provided to mitigate</p>

ID	Ref	Other points	Inspectorate's comments
	Section 17.8		impacts predicted through the EIA process should be clearly stated in the ES and secured in the dDCO, as appropriate. The ES should clearly identify significant effects that are to be mitigated and those that are to be included as part of a biodiversity net gain metric. The Inspectorate notes from Paragraph 17.8.2 the intention to submit a Landscape and Biodiversity Management Plan as part of the ES and advises that this should accord with the assessment of residual effects.
4.12.11	Section 17.8	Mitigation and enhancement - Bird collision risk	The Applicant should consider whether the proposed mitigation and enhancement has the potential to increase bird-strike risk. Design of new wetland habitats, such as through the drainage strategies, should minimise their attractiveness to species of birds hazardous to air traffic.
4.12.12	Paragraph 17.6.4 and 17.6.6	Potential impacts	The Scoping Report identifies lighting impacts during both construction and operation of the Proposed Development. The Inspectorate notes the reference to a lighting assessment in Paragraph 5.4.19 and expects that this information will be applied to the biodiversity assessment. Lighting impacts on birds are mentioned in relation to the operation of the Proposed Development but not for the construction phase. The Inspectorate considers that impacts from lighting during construction should be assessed in the ES where significant effects are likely to occur. As identified above, the Inspectorate considers that lighting impacts could result from the off-site car park and highways proposals and advises that any likely significant effects should be assessed in the ES.
4.12.13	Paragraph 17.6.4 and 17.6.6	Potential impacts	The ES should consider any likely significant effects associated with increased recreational pressure on ecological features/sites of importance as a result of displaced users of existing green space to be lost to/affected by the Proposed Development, notably Wigmore Park CWS. The ES should include appropriate cross-reference to other

ID	Ref	Other points	Inspectorate's comments
			relevant aspect chapter assessments in this regard, including the Health and Community and Landscape and Visual aspect chapters, which are proposed to include assessment of effects to open space and users.

4.13 Landscape and Visual

(Scoping Report Section 18)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.13.1	Section 18.7 and Table 5-2	The assessment of effects on private views from residential properties	The Inspectorate notes from Table 18-3 that residents at home are defined as having a high susceptibility to change. The Inspectorate does not agree that the assessment of effects to private views from residential property can be scoped out of the assessment. Where access to private property is not available for the purposes of the assessment then professional judgement should be used to assess the potential effect to those visual receptors, and an appropriate statement to that effect made.

ID	Ref	Other points	Inspectorate's comments
4.13.2	Table 3-1	Potential Indicative Off-site Highway Interventions in the Proposed Development	The landscape and visual impact of off-site highway works should be included within the scope of the assessment.
4.13.3	Paragraph 3.3.26	Existing features – visual screening	The third and fourth bullets refer to the retention of a ridgeline and trees to provide visual screening and the protection of ancient woodland as key considerations in selecting the current preferred option. The locations of these features should be made clear on suitably annotated figures and any reliance placed on this for the conclusions of the assessment of landscape and visual impacts should be adequately secured.
4.13.4	Paragraphs 5.4.19 to 5.4.25	Assessment of the impact of lighting	The Inspectorate notes the proposed submission of an assessment on the impact lighting. It is not clear from the Scoping Report where the lighting assessment will be located within the ES. The lighting assessment should be clearly signposted from the relevant aspect

ID	Ref	Other points	Inspectorate's comments
			chapters in the ES and should include the assessment of impact to the Chilterns AONB and effects on dark night skies. Having regard to the intrinsic links between lighting and visual impacts it is logical that the assessment forms part of the Landscape and Visual chapter, but the Inspectorate expects that other aspect assessments are informed by the findings, including biodiversity and the settings of heritage assets.
4.13.5	Section 18.2	Planning policies relevant to landscape and visual issues	The boundary of the Chilterns AONB is the subject of a request for its extension, made by Chilterns Conservation Board to NE. The assessment in the ES should take into account the proposed designation and any significant effects that may occur.
4.13.6	18.4.1 – 18.4.6	Study Area	A 5km study area is proposed, which will be reviewed and confirmed as part of the landscape and visual impact assessment once the parameters for the Proposed Development have been further developed and a Zone of Theoretical Visibility (ZTV) has been prepared. As the parameters of the Proposed Development are not yet confirmed, and no ZTV is yet prepared, the review of the study area should not discount the possibility that the study area may need to be wider than 5km to assess relevant landscape and visual effects, including to the Chilterns AONB. The Applicant should make effort to agree the study area with relevant consultation bodies.
4.13.7	Paragraph 18.4.6	ZTV	A clear methodology and statement of any assumptions made should be provided for the production of the proposed ZTV. The Applicant should seek to agree the methodology for preparing the ZTV with relevant consultation bodies.
4.13.8	Paragraph 18.4.7	Existing landscape character assessments	The Inspectorate expects that reference should also be made to relevant National Character Area profiles published by NE, and the East of England Landscape Typology
4.13.9	Section 18.5	Assessment methodology	The Inspectorate welcomes the use of the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) as the basis of

ID	Ref	Other points	Inspectorate's comments
			the methodology for the assessment. The Inspectorate expects effort to be made to agree the methodology for the proposed assessment with relevant consultation bodies. The Inspectorate notes that matrices are proposed to be used in the assessment, but also expects that there should be an emphasis on narrative text describing the landscape and visual effects and the judgements made about their significance. Tables and matrices should be used to support and summarise the descriptive text, not to replace it.
4.13.10	Paragraph 18.5.5	Assessment years	The assessment years 2020, 2024, 2029, 2039 and 2050 are proposed to reflect the phased build-up of passenger throughput, (and, it is assumed the infrastructure to support them) and to understand the effects of proposed structure planting measures and changes to land management objectives. These do not tie-in with dates given at Paragraph 3.6.2 of the Scoping Report, which state Phase 1 opening in 2027 and Phase 2 opening in 2036. The ES should make clear and justify the assessment years adopted for the ES and specific aspect chapters, where these differ. The assessment years adopted should take account of any required phasing of construction.
4.13.11	Table 18-2	The value of landscape receptors	Table 18-2 shows National Parks and AONBs as typical examples of both Very High and High value landscape receptors. Judgements made on the value of landscape receptors should be consistent and clearly explained and justified in the ES.
4.13.12	Paragraph 18.5.14 and Table 18-4	Value of views	Text at 18.5.14 refers to the value of a visual receptor but Table 18-4 appears to relate to the value of particular views. It is assumed that this relates to Paragraph 6.37 of the Third Edition of the Guidelines for Landscape and Visual Impact Assessment (GLVIA3). A clear distinction in the assessment should be made between the susceptibility of visual receptors as set out in Table 18-3 and the value of any particular views as set out in Table 18-4.

ID	Ref	Other points	Inspectorate's comments
4.13.13	Table 18-8	Significance of Landscape Effect	Typical Criteria Descriptors are denoted by bullet points and it is not clear if only one or all of the Typical Criteria need to be met if a categorisation of Significance is to be adopted in the assessment. The assessment methodology needs to be clearly defined and consistently applied in the ES.
4.13.14	Paragraphs 18.5.20 to 18.5.23	Tranquillity	The Scoping Report sets out the intention to conduct an assessment of impacts to tranquillity (as it relates to character of the landscape) and makes reference to Campaign to Save Rural England's Tranquillity Mapping in this regard. In addition to acknowledging tranquillity as a key factor in landscape character area sensitivity assessments the ES should also include consideration of significant effects on tranquillity from overflying aircraft, (including visual effects where significant effects are likely). The Applicant should also ensure that an assessment of impacts to tranquillity relevant to other aspects is assessed in the relevant ES chapters. The assessment of impacts to tranquillity should include consideration of effects to the Chilterns AONB.
4.13.15	Paragraphs 18.6.3 to 18.6.5	Identification of receptors, construction phase	Receptors that may be affected during the construction phase are listed. Full consideration of potential receptors should be made when the parameters of the scheme design are fixed, and effort should be made to agree these with relevant consultation bodies. The potential significant landscape and visual effects resulting from all elements of the Proposed Development should be taken into account, including off and on-site infrastructure required.
4.13.16	Paragraphs 18.6.6 to 18.6.7	Identification of receptors and effects, operational phase	Whilst there may be effects relevant to some receptors during the construction and operational phases, the potential for some receptors to be affected during the operational phase only should not be discounted. Effort should be made to agree these with relevant consultation bodies.

ID	Ref	Other points	Inspectorate's comments
			<p>The assessment of effects should include short and long term effects including residual effects, and those which are not be capable of being mitigated. Sequential effects, for example along long-distance recreational routes, should also be assessed.</p> <p>The potential significant landscape and visual effects resulting from all elements of the Proposed Development should be taken into account, including off and on-site infrastructure required.</p>
4.13.17	Paragraph 18.6.10	Cumulative effects	The Inspectorate expects effort to be made to agree the study area for the cumulative assessment with relevant consultation bodies.
4.13.18	Paragraph 18.7.2	Residential Visual Amenity Assessment	If the Applicant wishes to prepare a Residential Visual Amenity Assessment the Inspectorate expects that it should form part of the landscape and visual impact assessment aspect chapter in the ES. The Inspectorate draws attention to Landscape Institute Technical Guidance Note 02/2019 on Residential Visual Amenity Assessment, published in March 2019.
4.13.19	Section 18.8	Mitigation measures	The Applicant should ensure that the effectiveness of any proposed mitigation measures is thoroughly assessed in the ES, describing the likely significant effects of the Proposed Development both prior to mitigation and residually so that it is possible to understand the efficacy of proposed mitigation measures. The ES should also explain how measures proposed to mitigate landscape and visual effects, such as planting, may relate to other aspects, for instance impacts on ecological receptors. Appropriate cross-reference should be made between related aspects in the ES, such as Biodiversity, and Historic Environment.
4.13.20	Paragraphs 18.4.11 and 18.6.5, and	Proposed assessment viewpoints	The Inspectorate considers that it is premature, in advance of the adoption of the parameters of the scheme design, to determine assessment viewpoints. The Inspectorate expects effort to be made to agree the locations of assessment viewpoints with relevant

ID	Ref	Other points	Inspectorate's comments
	Figure 18.4		<p>consultation bodies. Viewpoints should also be determined in consideration of sensitive cultural heritage receptors and to inform the cultural heritage assessment. Appropriate cross-referencing between the Landscape and Visual and Cultural Heritage aspect chapters should be included.</p> <p>Viewpoint locations should be clearly mapped and the direction and area covered by the view recorded. The information should be sufficient to enable the viewpoints to be located on site.</p>
4.13.21	N/A	Photomontages	<p>It is unclear from the Scoping Report whether any the Applicant intends to produce any photomontages to support the landscape and visual impact assessment. The ES should include photomontages of both the baseline view and the view incorporating the Proposed Development, which should be numbered and cross-referenced to accurately plotted locations on an OS map of appropriate scale, which should also show the angles of the views. The Applicant should make effort to agree the methodology, the viewpoint locations, the assessment years and other scenarios which are to be portrayed with relevant consultation bodies.</p>

4.14 Cultural Heritage

(Scoping Report Section 19)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.14.1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Ref	Other points	Inspectorate's comments
4.14.2	Sections 19.2 and 19.3	Local planning authorities	Section 19.2 sets out policies of four local planning authorities; however, Section 19.3 only describes stakeholder engagement and consultation with two of those authorities to date. A statement should be provided on which authorities act as agents for others in the matters of archaeology and cultural heritage, if relevant, to provide context.
4.14.3	Paragraph 19.4.2	Extended study area	The Inspectorate notes that the extended study area will be agreed ' <i>in collaboration with the landscape architects to reflect the ZTV developed for the LVIA</i> '. As the parameters of the proposed development are not yet confirmed, and no ZTV is yet prepared, the review of the study area should not discount the possibility that the study area may need to be wider than 5km to assess relevant effects to the settings of heritage assets, including designated and non-designated assets. The assessment should include consideration of the effects of overflying aircraft which may also lead to impacts on tranquillity. The Applicant should make effort to agree the study area and the heritage assets to be included in the assessment with relevant consultation bodies.
4.14.4	Paragraphs 19.4.6 to	Archaeological evaluation	The Inspectorate notes that some on site archaeological evaluation has already commenced. Further evaluation may be required depending on the extent of works proposed in the application. The

ID	Ref	Other points	Inspectorate's comments
	19.4.9		Inspectorate expects that the Applicant will make efforts to agree the extent of archaeological evaluations required with relevant consultation bodies, in order to establish baseline data and complete the assessment of likely significant effects.
4.14.5	Paragraphs 19.4.17, 19.6.5 and 19.6.10	Designated Assets – Someries Castle Scheduled Monument	<p>The Inspectorate expects that the ES will assess and identify any likely significant effects on the Someries Castle Scheduled Monument. The assessment should acknowledge changes in air quality and vibration which may affect the fabric of the Scheduled Monument, where likely significant effects may occur.</p> <p>The Inspectorate also recommends that visual representations are provided to illustrate the impact on the setting of Someries Castle Scheduled Monument.</p>
4.14.6	Paragraph 19.4.18	Designated Assets – Luton Hoo Mansion and Registered Park and Gardens (RPG) and Putteridge Bury RPG	The Inspectorate expects that the whole of Luton Hoo / Putteridge Bury RPG will be taken into account in the assessment. The Inspectorate recommends that visual representations are provided to illustrate the impact on the settings of Luton Hoo Mansion and RPG.
4.14.7	Section 19.5	Assessment methodology	The proposed assessment methodology uses standardised EIA matrices. The Inspectorate considers that the analysis of setting and the impact upon it is a matter of qualitative and expert judgement which cannot be achieved solely by use of systematic matrices or scoring systems. The Inspectorate therefore recommends that, if used, these matrices should be seen primarily as material supporting a clearly expressed and non-technical narrative argument using professional judgement. The ES should use the concepts of benefit, harm and loss (as set out in the National Planning Policy Framework) to set out 'what matters and why' in terms of the heritage assets' significance and setting, together with the effects of the development upon them.

ID	Ref	Other points	Inspectorate's comments
4.14.8	Section 19.6	Methodology – heritage settings assessment	The Inspectorate advises that the assessment of heritage asset settings should be cross-referenced with other relevant ES aspect assessments, including air quality, noise, lighting and landscape and visual effects.
4.14.9	Section 19.8	Mitigation	<p>The ES should set out how the Cultural Heritage Management Plan will be secured through the DCO.</p> <p>The Inspectorate considers that the approach to mitigation section should emphasise the need to preserve heritage assets in-situ, where possible and appropriate.</p> <p>The Applicant should also make effort to agree mitigation approaches with all relevant consultation bodies and take account of potential impacts that may result to other aspects, such as biodiversity and landscape.</p>
4.14.10	Figure 19.1	Cultural Heritage Constraints Plan	The ES should include figures which clearly depict the location of designated and non-designated heritage assets within the ZoI.

4.15 Major Accidents and Disasters

(Scoping Report Section 20)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.15.1	Paragraph 20.7.1	Events with no source-pathway-receptor linkages	The Scoping Report seeks to scope out matters where there is no source-pathway-receptor link, such as natural disasters unlikely to affect the Proposed Development site e.g. tsunamis and sea level rise. The Inspectorate is content that the impacts associated with such matters are unlikely to represent major accident and disaster significant events and can be scoped out of the assessment.
4.15.2	Paragraph 20.7.1 and Table 5-2	Activities already undertaken by the Airport or within adjacent sites which are not altered by the Proposed Development or which do not affect the vulnerability of the Proposed Development	The Scoping Report seeks to scope out such matters on the basis that the severity and emergency response to the accidents and disasters associated with these activities would not be affected by the Proposed Development. The Inspectorate is uncertain of the full extent of matters to be scoped out on this basis. Furthermore, the Inspectorate does not consider that sufficient information regarding the existing emergency response procedures has been provided to justify the scoping out of these matters. The ES should include a definition of the and the current systems in place to address impacts for these matters. Where significant effects are likely to occur, this should be assessed in the ES.
4.15.3	Paragraph 20.7.1	Events which are not specific to the Proposed Development and which would not be altered by the Proposed Development	The Scoping Report seeks to scope out such matters and provides the example of disease outbreak. The Inspectorate is uncertain of the full extent of matters to be scoped out by this description. The ES should include a definition of these events and where significant effects are likely to occur, this should be assessed in the ES.
4.15.4	Paragraph 20.7.1 and	Wilful trespassers in the Airport	The Scoping Report states that members of the public who wilfully trespass will not be considered as sensitive receptors as there are, and will continue to be, appropriate measures to provide a secure

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
	Table 5-2		boundary to the Airport in line with appropriate standards of compliance. The Inspectorate notes that there is limited information regarding this matter in the Scoping Report. However, the Inspectorate is content that the ES should include an appropriate description of the current systems in place to address these matters and on that basis significant effects are unlikely to occur.
4.15.5	Paragraph 20.7.1 and Table 5-2	Events of any likelihood with a low consequence	The Scoping Report seeks to scope out matters where the consequence does not result in significant harm. The Inspectorate is content that the impacts associated with such matters are unlikely to represent major accident and disaster significant events and can be scoped out of the assessment.
4.15.6	Paragraph 20.7.1 and Table 5-2	Expected or planned impacts	The Scoping Report seeks to scope out such matters as these will be covered by other aspect chapters within the ES. The Inspectorate is uncertain of the full extent of matters to be scoped out by this description. The Inspectorate is content that these matters are to be assessed elsewhere in the ES but there should be cross reference made to appropriate aspect chapters.
4.15.7	Paragraph 20.7.1	<p>The following risks during the construction phase of the Proposed Development:</p> <p>Vandalism/ crime/ terrorism leading to an increased risk to personal safety of members of the public;</p> <p>Cyber-attack and digital/ data security; and</p> <p>Civil unrest/ protests</p>	The Scoping Report expressly scopes these matters into the assessment during the operational phase of the Proposed Development but excludes them from the assessment of construction impacts. The Inspectorate considers that insufficient information has been provided to justify a scoping out of these matters at this stage. The ES should assess impacts to these matters where significant effects are likely to occur. Furthermore, with regards to the risk of vandalism, crime and terrorism during both construction and operation, the Inspectorate is of the view that the onsite safety of Airport staff should be taken into consideration, in addition to the onsite safety of members of the public.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.15.8	Paragraph 20.7.1	<p>The following risks during both the construction and operational phases of the Proposed Development:</p> <p>Absent or deficient safety/ environmental management systems (e.g. inadequate planning, resource provision, procedures);</p> <p>Absent or deficient security provision (e.g. inadequate planning, resource provision, procedures);</p> <p>Importation of biological agents/ biohazard/ disease/ pathogen including disembarkation of passengers and/ or flight with controlled disease or biohazard;</p> <p>External aircraft interference (lasers, fireworks, sky lanterns, drones, wind turbine interaction with radar);</p> <p>Damage to artefacts of national or international importance during import or export;</p> <p>Space weather (e.g. geomagnetic storms, radiation storms and solar flares) leads to loss of systems (e.g. loss of primary navigation system or loss of communications);</p>	<p>The Scoping Report does not appear to specifically address these matters as being scoped in to the assessment of major accidents and disasters. The Inspectorate does not consider that sufficient information has been provided to justify the scoping out of these matters at this stage. The ES should assess impacts to these matters where significant effects are likely to occur.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		and Loss of essential air safety and airside systems or loss of safety critical workers	

ID	Ref	Other points	Inspectorate's comments
4.15.9	Paragraph 20.3.1	Consultation bodies	The Scoping Report notes that key consultation bodies have been identified and that consultation will be undertaken and recorded throughout the pre-application stage. The ES should clearly evidence any such consultation that is undertaken, the consultation bodies that have taken part and the outcomes that have been decided upon.
4.15.10	Paragraph 20.4.2	Study area	The Scoping Report states that the potential maximum impact extent will be determined during the assessment. The ES should clearly evidence and justify the final extent of the study area used in the assessment of this aspect. The study area should be sufficient to encompass the likely significant effects of the Proposed Development from the perspective of major accidents and disasters and effort should be made to agree the approach with relevant consultation bodies.
4.15.11	Paragraphs 20.4.4; 20.4.9; 20.4.13; 20.4.17; and 20.5.2	Receptors and baseline conditions	The Scoping Report states that the baseline and receptors will be largely informed by other aspect chapters. The ES should provide a description of all receptors and baseline conditions to be considered as part of the major accidents and disasters assessment, including cross referencing and signposting to the relevant sections of other aspect chapters that are being relied upon. In addition to the conditions set out in the other aspect assessments the ES should establish a baseline in respect of natural disasters, for example setting out the current susceptibility of the site to seismic movement, extreme storms,

ID	Ref	Other points	Inspectorate's comments
			tornadoes, snow and fog.
4.15.12	Paragraph 20.4.7	Baseline sources	The Scoping Report notes that baseline information relevant to the assessment of major accidents and disasters will be obtained from a number of sources. The ES should include a complete list of all sources that have been relied upon in establishing the baseline conditions.
4.15.13	Paragraph 20.4.12	Consultation distances	The Scoping Report refers to 'consultation distances' held by HSE in respect of COMAH sites and LPAs in respect of Hazardous Substances Consent sites, and states that further assessment may be required if an interaction between these sites and the Proposed Development is identified. The ES should clearly set out these consultation distances and the steps taken to identify any interaction between the sites and the Proposed Development. The Applicant should make effort to agree its approach with HSE and the LPAs.
4.15.14	Paragraph 20.4.13 and 20.5.4	Risk registers	Reference is made throughout the Scoping Report to various risk registers that will list identified risks relevant to the assessment of major accidents and disasters. In the event that such registers are to be relied upon in assessing significance, copies of these should be provided as appendices to the ES.
4.15.15	Paragraphs 20.5.13 and 20.5.17	Additional consultation	The Scoping Report states that further consultation will be undertaken to ensure that all risks are as low as reasonably practicable. The ES should provide an overview of any such consultation that is undertaken with the relevant consultation bodies and the outcomes that have been decided upon as they relate to the assessment of likely significant effects.
4.15.16	Paragraph 20.5.15	Significance criteria	The Scoping Report refers to various factors that are relevant to the identification of a potential significant effect, to include: the sensitivity of receptors; the duration of effect; the geographic extent of effect;

ID	Ref	Other points	Inspectorate's comments
			the severity of effect; and the effort required to restore an affected environment. However, no information is provided on how each of these factors will be taken into consideration to determine significance. The ES should clearly demonstrate how these factors are taken into consideration and combined to determine the overall significance of effects.
4.15.17	Paragraph 20.5.18	Tolerability criteria	The Scoping Report states that reference will be made to the tolerability criteria of major accidents and disaster hazards as mentioned in ' <i>Reducing Risks, Protecting People: HSE's decision making process</i> '. The ES must clearly set out the risk tolerability criteria referred to and contain an explanation as to how it has been taken into consideration within the assessment in concluding on likely significant effects.
4.15.18	Paragraph 20.6.3	Operational impacts – increase in ATMs and interactions	The ES should take into account increased likelihood of aircraft related incidents that could arise from the proposed increased in ATMs, where likely significant effects could occur.

4.16 In-Combination and Cumulative Effects

(Scoping Report Section 21)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.16.1	Paragraph 21.6.1	Greenhouse gasses will not be considered in the in-combination or cumulative effects assessment as all relevant emissions will be considered in that assessment, and the global atmosphere is the receptor.	The Inspectorate agrees with this approach and is content that significant cumulative effects from GHG emissions can be assessed the Climate Change aspect chapter.

ID	Ref	Other points	Inspectorate's comments
4.16.2	Paragraph 21.4.12	Use of exclusion criteria for cumulative effects assessment	If exclusion criteria are to be used in the identification of the long list of other developments at Stage 1, then these must be clearly stated and justified. Consideration needs to be given to the potential for non-significant effects of a number of projects or developments contributing to an overall significant effect.
4.16.3	Table 21-2	Traffic and Transportation	Table 21-2 of the Scoping Report notes that the transport and traffic assessment, based on surface access modelling, is inherently cumulative as it includes employment and housing development projections. The Applicant should ensure that the list of cumulative developments (including Local Plan allocations) that are taken into account within the Cumulative Effects Assessment are aligned with the traffic modelling.
4.16.4	Table 21-2	Use of surface access modelling for cumulative assessment of transport	The Applicant should interrogate assumptions made in surface access modelling to ensure that these are up to date and include relevant other developments. The Applicant should make effort to agree the

ID	Ref	Other points	Inspectorate's comments
		and transportation aspect	model or models for the cumulative assessment of transport and transportation with relevant consultation bodies.
4.16.5	Table 21-2	Climate change resilience, ZoI for cumulative effects	The Inspectorate agrees that climate change resilience is only considered in respect of the Proposed Development, and that cumulative effects with other developments will not be included in the ES.
4.16.6	Table 21-2	Agriculture, ZoI for cumulative effects	The Inspectorate expects that the ZoI will extend to encompass other land within agricultural holdings affected by the proposed development, that may also be affected by other development, such that the cumulative impact on agricultural holdings of the proposed development and other developments can be assessed.
4.16.7	Table 21-2	Biodiversity - ZoI for cumulative effects	The proposed 1.5km ZoI is not justified in the Scoping Report but appears to be based on potential effects on species. It is not clear why the ZoI set within the Biodiversity chapter (Chapter 17) has not been applied, which extends up to 10km for statutory designated sites (up to 30km for those designated for bat and bird species). At 1.5km the cumulative ZoI is likely to omit consideration of cumulative effects on designated sites in the wider area. The Inspectorate advises that the ZoI should reflect that proposed in the Biodiversity assessment.
4.16.8	Table 21-3 and Paragraph 21.4.15	CEA Stage 1	The Inspectorate considers that minor applications or allocations within 1km of the red line boundary should be included in the CEA. The Applicant should make effort to agree with relevant consultation bodies the applications and allocations to be taken into account in the CEA and should also consider whether it is relevant to include applications submitted more than five years ago where these may lead to significant cumulative effects.
4.16.9	Paragraphs 21.4.21 and	Stage 2 inclusion and exclusion criteria	The screening of the long list of other developments for inclusion and exclusion should use criteria which is explicitly defined in the ES.

ID	Ref	Other points	Inspectorate's comments
	21.4.23		Those criteria not already covered by the bullet points in section 21.4.21 should in addition be clearly stated.
4.16.10	Paragraphs 21.4.25 and 21.4.28	Later submission of applications for other developments and cut-off date for Stage 3; Information Gathering	As set out in the AN17, where new 'other development' comes forward following the stated assessment cut-off date, the Examining Authority may request additional information during the Examination in relation to effects arising from such development. The Applicant should be aware of the potential need to conduct further assessments and provide more information.
4.16.11	N/A	Cumulative effects with other proposed airport expansions in the South East	The assessment should take into account the cumulative effects of the proposed development together with the expansion of other airports, in the South East. The ES should consider cumulative impacts where significant effects could occur, including impacts to the Chilterns AONB.

5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus²
- Planning Inspectorate advice notes³:
 - Advice Note Three: EIA Notification and Consultation;
 - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
 - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
 - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
 - Advice Note Nine: Using the 'Rochdale Envelope';
 - Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
 - Advice Note Twelve: Transboundary Impacts;
 - Advice Note Seventeen: Cumulative Effects Assessment; and
 - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

² The Planning Inspectorate's pre-application services for applicants. Available from: <https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

³ The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES⁴

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service (NHS) Commissioning Board	NHS England
The relevant Clinical Commissioning Group	NHS East and North Hertfordshire Clinical Commissioning Group
	NHS Luton Clinical Commissioning Group
	NHS Bedfordshire Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	Hertfordshire Fire and Rescue Service
	Bedfordshire and Luton Fire and Rescue Service
The relevant police and crime commissioner	Police and Crime Commissioner for Bedfordshire
	Police and Crime Commissioner for Hertfordshire
The relevant parish council(s) or, where the application relates to land [in] Wales or Scotland, the relevant community council	King's Walden Parish Council
	Offley Parish Council
	St Ippolyts Parish Council
	Hye Parish Council

⁴ Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
	Slip End Parish Council
The Environment Agency	The Environment Agency
[The relevant] AONB Conservation Boards	Chilterns Conservation Board
The Civil Aviation Authority	Civil Aviation Authority
The Relevant Highways Authority	Luton Borough Council
The relevant strategic highways company	Highways England - East
Transport for London	Transport for London
The relevant internal drainage board	Bedford Group of Internal Drainage Boards
Public Health England, an executive agency of the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission - East and East Midlands
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS⁵

STATUTORY UNDERTAKER	ORGANISATION
The relevant NHS Trust	East of England Ambulance Service NHS Trust
Railways	Network Rail Infrastructure Ltd
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group

⁵ 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
Homes and Communities Agency	Homes England
The relevant water and sewage undertaker	Affinity Water
	Thames Water
The relevant public gas transporter	Cadent Gas Limited
	Energetics Gas Limited
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	Scotland Gas Networks Plc
The relevant electricity distributor with CPO Powers	Eclipse Power Network Limited
	Energetics Electricity Limited
	Energy Assets Networks Limited
	Energy Assets Power Networks Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Leep Electricity Networks Limited

STATUTORY UNDERTAKER	ORGANISATION
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	UK Power Networks Limited

TABLE A3: SECTION 43 CONSULTEES (FOR THE PURPOSES OF SECTION 42(1)(B))⁶

LOCAL AUTHORITY ⁷
Aylesbury Vale District Council
Barnet London Borough Council
Bedford Borough Council
Buckinghamshire County Council
Cambridgeshire County Council
Central Bedfordshire Council
Dacorum Borough Council
East Hertfordshire District Council
Enfield London Borough Council
Essex County Council
Harrow London Borough Council
Hertfordshire County Council

⁶ Sections 43 and 42(B) of the PA2008

⁷ As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY ⁷
Hillingdon London Borough Council
Huntingdonshire District Council
Luton Borough Council
Milton Keynes Council
North Hertfordshire District Council
South Cambridgeshire District Council
St Albans District Council
Stevenage Borough Council
Uttlesford District Council
Welwyn Hatfield Borough Council

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

Consultation bodies who replied by the statutory deadline:

Affinity Water
Aylesbury Vale District Council and Buckinghamshire County Council – Joint response
Civil Aviation Authority
Cadent Gas Limited
Chilterns Conservation Board
Defence Infrastructure Organisation (Ministry of Defence)
East Hertfordshire District Council
Environment Agency
ESP Utilities Group
Forestry Commission
Harrow London Borough Council
Health and Safety Executive
Hertfordshire County Council, North Hertfordshire District Council, Central Bedfordshire Council and Luton Borough Council – Joint response ⁸
Highways England
Historic England
Milton Keynes Council
National Grid
NATS En-Route Safeguarding
Public Health England

⁸ Mr Andrew Davie confirmed in a letter to the Inspectorate on 2 May 2019 that the joint response received reflects the views of Central Bedfordshire Council.

Scoping Opinion for the Proposed
Expansion of London Luton Airport

Royal Mail Group
St Albans District Council
Transport for London
Welwyn Hatfield Borough Council



Affinity Water Limited
Tamblin Way
Hatfield
Hertfordshire
AL10 9EZ
Direct Tel: 01707 268111

patrick.campbell@affinitywater.co.uk

The Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN.

Our ref: 113 of 2019. SMM/APM

EMAIL only

Your ref: TR020001_000042_190401

29 April 2019

Dear Sir/Madam,

**Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017 (the "EIA Regulations")
Regulations 10 and 11**

**Application by London Luton Airport Limited (LLAL) (the "Applicant") for an Order
granting Development Consent for the Expansion of London Luton Airport (the
"Proposed Development")**

**Scoping consultation and notification of the Applicant's contact details and
duty to make available information to the Applicant if requested**

We refer to your letter of 1 April 2019.

Affinity Water is appointed as a water undertaker under the Water Industry Act 1991; it provides drinking water to approximately 3.6 million customers in parts of North London and the Home Counties together with customers in the Dover and Folkestone and East Tendring area.

We have a statutory duty under section 37 of the Water Industry Act 1991 to develop and maintain an efficient and economical system of water supply and to ensure that all such arrangements have been made for providing supplies of water and for maintaining, improving and extending our water mains and other pipes.

The "Proposed Development" is located within our Central region, which extends from Guildford in Surrey to Saffron Walden in Essex, much of Hertfordshire and Buckinghamshire and north and west London including the area around Heathrow Airport. Around 60% of the water we supply to customers in our Central region is abstracted from groundwater sources.

The remaining 40% of the water we provide to our customers is abstracted from the River Thames and treated at four water treatment works.

We have reviewed the request for a Scoping Opinion. We appreciate that the Planning Inspectorate has a statutory timetable to meet in issuing its Scoping Opinion, but the time available has meant that we have not been able to give the issues raised in this request detailed consideration. We will be writing further directly to the Applicant in due course to discuss the Proposed Development in relation to the time, costs and resources needed to properly deal with this matter.

We have not had preliminary discussions with the Applicant to advise in general terms of the likely footprint of the Proposed Development and the possible effects it may have on our undertaking. We are concerned that overall water demand from the expanded airport will increase significantly despite any potential water saving measures which may be introduced across the airport. Diversions and other network related work will need to be made in relation to our existing and extensive network of water mains, service pipes, equipment, operational apparatus and accessories within the Proposed Development.

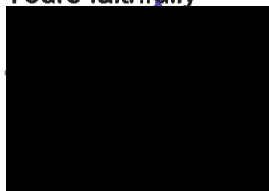
We have identified the following points of sensitivity and potential concern based on our preliminary review of the documents provided.

- We have distribution pipelines and service pipes that are in the Proposed Development that will be directly affected.
- We manage and control leakage and pressure to customers across leakage zones that are well understood; the reconfiguration of our network is likely to impact on this management.
- We anticipate there may be impacts on network resilience arising from the Proposed Development. We currently have multiple ways of providing water to household and non-household properties using different pipes and the number of options available to us could be reduced. This impact could extend 3-4km outside of the Proposed Development.
- We have concerns that the Proposed Development could exacerbate the risk of contamination of the water quality at our ground water abstractions.

Please note this cannot be a fully comprehensive list because we have not yet seen the full detail of the Applicant's Proposed Development and we anticipate that we may identify additional concerns.

If you have any queries regarding our response please do not hesitate to contact me.

Yours faithfully



PP Patrick Campbell
Head of Infrastructure Strategy
Affinity Water Limited

AYLESBURY VALE DISTRICT COUNCIL

Councillor Paul Irwin

Cabinet Member for Environment and Leisure

Telephone: 01296 585712

Text Relay: prefix telephone number with 18001

Email: pirwin@aylesburyvaledc.gov.uk

Our Ref:

Your Ref:



29 April 2019

Major Casework Directorate
Temple Quay House
2 The Square
Bristol, BS1 6PN

by email: lutonairport@planninginspectorate.gov.uk

Dear Sir/Madam,

**Scoping consultation – Environmental Statement for the proposed development
(Application by London Luton Airport Limited (LLAL) for an Order granting Development
Consent for the Expansion of London Luton Airport)**

Further to your notification of 1 April 2019, members and officers of Aylesbury Vale District Council (AVDC) and Buckinghamshire County Council (BCC), offer the following response to this consultation.

In view of the current division of responsibilities in a two tier area such as Buckinghamshire, we seek to continue to work collectively recognising our statutory roles across the county including the districts' role as local planning authority and environmental noise regulatory body and the county's role as a transport and health authority. This joint response seeks to ensure a single aligned view from the two councils.

Given the short but relative distance of Buckinghamshire from Luton Airport, certain elements of the scoping report will be less relevant, but we are pleased to be able to offer a more detailed response into chapters, 6, 7, 10, 14, 15 & 19 of the report. Notwithstanding this we do feel that we should particularly highlight the importance of considering the cumulative effect of the expansion of airport capacity in the South East. When taken together, the potential additional air traffic from Luton and Heathrow Airports over parts of northern Buckinghamshire are likely to be significant and something that both residents and local members are particularly concerned about. We are particularly keen to ensure that there is coordination on the use of airspace over northern Buckinghamshire and the Chilterns, between LLAOL, LLAL and HAL in order to ensure that airspace benefits secured over Buckinghamshire attributable to Heathrow expansion are not undermined by lower altitude aircraft from Luton airport.

You will note that we feel that the scope of the study area should be extended in some areas and we very much hope that this is given detailed consideration.

Cabinet Office

The Gateway Gatehouse Road Aylesbury Bucks HP19 8FF
DX 4130 Aylesbury 1
www.aylesburyvaledc.gov.uk



Chapter 6 – Air Quality

As much of the impact on air quality in north Buckinghamshire is likely to be from additional vehicle movements and emissions, the issues raised in relation to chapter 7 are especially important. We are particularly concerned about the lack of origin/destination data for trips to and from the airport, alongside the lack of fast and non congested busses serving the airport from locations in north Buckinghamshire. Given the proposed growth in Aylesbury alone, the associated demand from the area is likely to make up a good deal of the additional passenger capacity, causing a likely increase in vehicle emissions in some villages which are already commuter routes such as Wing, Pitstone and Ivinghoe alongside arterial routes such as the A41, A418, A4146 and B489.

Study area

Currently no areas of Buckinghamshire will fall within the study area, therefore all impacts will be scoped out of the report.

There is however, recent strong evidence to suggest that the spread of carbon monoxide from air traffic has considerable health effects at a 10 kilometre distance from major airports. When taken together with potential additional traffic emissions, air quality and consequential health effects are naturally of concern. Based on this we would suggest the study area is extended to a 25km by 25km grid area centred on the main application site and additionally that consideration should be given to including key sites within north Buckinghamshire, which may be affected by pollutants from air traffic (such as Edlesborough or Dagnall), alongside those which are likely to experience additional ground vehicle emissions (such as Pitstone, Ivinghoe or Wing). This will give confidence to rural communities who have concerns about the cumulative effect on air quality locally.

Chapter 7 – Traffic and Transport

The proposed increase in passenger numbers will significantly increase the vehicle movements to and from the site, and so highway and transport network impacts in the surrounding area are expected to be significant.

At this stage in the process, there is limited information available about the level of impact we can expect in Buckinghamshire, and the submitted Transport Assessment Scoping Report (TASR) reflects this. Nevertheless, we would like to provide some comments that should help in the continuing development of the Transport Assessment (TA) for the site.

1) Trip generation and mode share targets

Two scenarios have been tested for public transport mode share. The do minimum assumes 40% whilst the do something assumes 45%. The public transport mode shares (bus/coach, rail) will increase gradually from the baseline (32%) to the final goal at the expense of the private car modes (taxi, drop off, car parks). The mode share will be gradually increased from its current base of 32% to reach 45% from 2029 onwards.

It would be helpful to understand the origin/destination locations of all vehicle trips to the airport now and in the future, in order to understand where improvements to highways and public transport services should be made. Further to this, within the TA, it would be useful to understand the current (and future expected) levels of employees located in Buckinghamshire. This will allow

us to provide advice on how best to encourage these journeys by public transport, or car sharing, rather than single occupancy car use.

Similarly, understanding the profile and origin locations of leisure and business travellers using the airport will aid in identifying appropriate mitigation, as well as improvements to the local public transport network, that can be used to increase access to the airport by sustainable means.

2) Increased freight activity (construction and servicing)

As stated in the BCC Freight Strategy, effective management of freight through and around Buckinghamshire is vital to the local economy and our residents' quality of life. A number of significant Nationally Significant Infrastructure Projects are proposed in and around Buckinghamshire and we are working with scheme promoters to manage the freight movements associated with their construction and subsequent operation. We request that the TA includes sufficient information on the impacts of the expected freight and construction vehicle activity in north Buckinghamshire, and should include measures that ensure vehicles utilise appropriate freight routes through the county. We wish to understand any East West/West East movements between Buckinghamshire and Luton via Pitstone and Ivinghoe, as this is a particular area that is suffering with high levels of HGVs.

Chapter 10.6 states that a Construction Management Plan will be produced which will mitigate the impact of construction traffic on the highway network as a result of the airport development. This should include details of the locations of the construction sites and main HGV routes to and from these sites.

There were approximately 28,000 cargo air traffic movements (ATM) within the last year from Luton. The majority of service providers, such as freight forwarders and catering companies, reside outside the Luton airport boundary in the surrounding industrial estates. They would therefore be theoretically outside the scope of the TA if LLAL decide to exclude them from the DCO. However, an upgrade to the airport could result in additional surface freight and servicing movements and so these impacts must be identified and mitigated against.

3) Public transport accessibility from Buckinghamshire

The TASR shares some preliminary information on current bus and rail capacity to Luton. The TA should identify the future capacity needs on key routes, to cater for both the increased passengers and staff. It is important that interchanges from public transport links to Luton services are seamless and easy in order to increase the attractiveness of these options as an alternative to taking a car (including the DART project). In line with this, it would be useful to understand what access points there will be around the airport perimeter for staff and to integrate these with public transport provision.

In Table 3 'bus services around the airport' it is clear there is a notable lack of routes into Buckinghamshire for either staff or passengers. We would like to work with LLAL to identify new routes and operators that could potentially serve the Buckinghamshire markets, including coach and bus routes, bus priority measures and upgrading supporting infrastructure. A potential option could be for Buckinghamshire routes to link into current Luton – Dunstable – Leighton Buzzard bus links along the Luton Busway.

We understand that total car parking spaces will increase from approximately 14,100 spaces to 22,400 spaces. We would like to understand that how despite this significant increase in car

parking spaces, public transport will be encouraged where possible. In addition, we would welcome schemes that incentivise the use of cleaner vehicles.

4) Walking and cycling requirements

Paragraphs 10.1 and 10.2 state that the TA will identify the walking and cycling catchment areas for the proposed redevelopment. We would support the identification, formalisation and improvement of any formal or informal walking and cycling routes as part of the package of improvements that will reduce local staff car use, as outlined in paragraph 2.9.

We will also expect LLAL to submit a draft Employee Travel Plan, as well as a draft Construction Travel Plan for construction workers during the build out phase, alongside the TA. Both Plans should include measures to facilitate and encourage access by active and sustainable modes for employees, operatives and visitors to Luton Airport and expansion-related sites.

Surface access priorities

1. Construction

Protection from the cumulative impacts of freight and construction vehicles

One of our primary transport concerns is that both the construction and future servicing/freight movements at an expanded Luton could put further strain on villages in the north of the county that already suffer with relatively high numbers of HGVs passing through. This has subsequent implications for residents' health, wellbeing and quality of life, and is a significant factor in the attractiveness and economic vitality of local places. An example of this would be the villages of Pitstone and Ivinghoe on the B489, a frequently used route towards Luton from Aylesbury.

Construction Management and Workforce Travel Plans

We have found these to be key documents within the submissions of our Nationally Significant Infrastructure Projects underway within the county. BCC consider that agreeing terms of reference for this at an early stage would remove some uncertainty for local residents and businesses before DCO submission and enable agreement on DCO requirements and obligations.

Maximised use of rail to minimise freight by road

In line with the BCC Freight Strategy (2018), we would like to see a transfer of freight from roads to rail where possible. As such we would like to understand the future opportunities for use of the potential Northampton Strategic Rail Interchanges and the Marston Vale line. We are aware of a Tarmac rail served depot at Crescent Road in Luton which has the potential to be used to receive bulk building materials, albeit involving crossing the town by lorry for delivery.

2. Connectivity

We would like to work with LLAL to review the current public transport network and assess the possibility of improving links through the county to towns such as Aylesbury and Buckingham, allowing a greater number of Buckinghamshire residents to access employment opportunities at Luton, as well as providing greater choice for local passengers to access the airport sustainably.

The East West Rail project will allow greater connectivity to and from Luton for Buckinghamshire residents through the connection at Bedford. We would like to understand the public transport

links between strategic stations such as Bedford and Bletchley and how they will connect to Luton airport.

Fast and non-congested bus access

Currently there is no mention of direct services from the Airport to Buckinghamshire towns. We think it is important that towns such as Aylesbury and Buckingham are directly connected with Luton via direct bus routes that pass through appropriate villages, in order to maximise the community benefits that result from the expansion at Luton.

We recommend the inclusion of bus/coach priority all around the airport, so that the last 5km is quicker by bus than by car, thereby making this alternative more attractive to both staff and local passengers.

Chapter 10 – Noise and Vibration

Study Area

It is unlikely that any parts of North Buckinghamshire (with the possible exception of Dagnall) will fall within the study area defined by extent of LOAEL (10.4.9), therefore all impacts will be scoped out of the report.

There is evidence to suggest that annoyance and health effects can occur below the proposed LOAEL levels, indeed WHO 'strongly recommends' reducing aircraft noise to below 40dBLnight. We also are concerned that limiting the study area to the extent of LOAEL will miss potential impacts where there is interaction with aircraft from other airports. Parts of north Buckinghamshire are regularly overflown by flights from Heathrow (particularly Wendover and Pitstone areas) and the combination of increased Luton flights and these other overflights will potentially lead to problems which will be missed in the Environmental Statement (ES).

Based on this we would suggest that the scope of the study area should be extended to at least 3dB below LOAEL and other metrics, e.g. N60/65 and overflights should be used in these areas to determine significance of effects.

Airspace design

10.4.13. We understand the importance of the design of Luton airspace and the wider UK airspace in controlling noise, however, it seems unlikely that these re-designs will be confirmed in time for the production of this ES. On this basis the ES should primarily be based on current flight paths. As with future aircraft design, sensitivity testing should be applied to potential changes in impacts that could arise out of airspace changes. Potential significant effects should not be scoped out on the basis of airspace changes unless these changes are confirmed at the time of writing the ES.

Impact Criteria

Tables 10-3,10-4. It is our view that any change that resulting in exposure exceeding SOAEL should be classified as a high magnitude of impact on the basis that it will by definition result in a significant effect. Where existing noise levels are above SOAEL we would suggest that any increase of more than 3dB(A) would be a high impact, 2-2.9 Medium and 1-1.9 Low.

Noise Predictions

10.5.25. Given the seasonal nature of Luton flights we welcome predictions (and therefore definition of LOAEL 10.5.28) being based on average mode summer day and night contours.

Determination of significant effects

In determining whether or not a significant effect is being produced as well as noise change (10.5.22) and additional metrics (10.5.33) some consideration need to be given to the size of the population impacted by the noise change. A 3dB change affecting 10 people is less significant than a 3dB change effecting 1000. Significant effects could occur below the level of SOAEL and should not be scoped out.

Chapter 14 - Economics and Employment

We agree with the wider study area as set out and the need to include the three counties, which is also consistent with the assessment methodology.

The report provides a detailed account of the relevant policies although we consider that reference should be made to section 6 of the NPPF (Building a strong, competitive economy) as well as section 9 of the NPPF. In addition, there appears to be no regard of the National Industrial Strategy and how the proposals fit in with the grand challenges it identifies.

London Luton Airport is a vital asset to the Buckinghamshire economy, providing a gateway international market for goods and services from the county and strategically located at the heart of the Oxford-Cambridge Arc. We welcome the proposals to ensure that detailed business engagement will be undertaken throughout the three counties of Bedfordshire, Hertfordshire and Buckinghamshire and would want to ensure that this engagement includes all Local Enterprise Partnerships including Buckinghamshire Thames Valley LEP and all Growth Hubs including Buckinghamshire Business First.

Reference is made to the SEMLEP SEP as a regional document. As you may be aware, SEMLEP are also producing a Local Industrial Strategy building on from the SEP in order to showcase the strengths of the area and direct action and investment which is due to be published in June 2019. BTVLEP are also producing a Local Industrial Strategy in order to showcase the strength and assets distinctive of the area, which is due to be published in June. These documents will also feed into an Economic Vision document which covers the Oxford to Cambridge Arc which is due for publication in May 2019. These documents will provide some strategic context on economic priorities in the area which would be useful to be referenced.

In terms of assessing the wider economic impacts and effects, consideration should also be given to proposed improvements in connectivity in the wider region with the opening of East West Rail western section in 2023 providing rail services between Bicester and Bedford which is due to link to Aylesbury in 2024. In addition, the Oxford to Cambridge Expressway is anticipated to be open in 2030, significantly improving journey times and links between Oxford to Milton Keynes and beyond to Cambridge, but which in turn will likely improve connectivity to Luton Airport for the wider region. These infrastructure investments are proposed in order to help unlock the economic potential of the Oxford to Cambridge Arc and lead to increased jobs and housing growth across the area. We therefore consider that these should also feed into the assessment.

Chapter 15 - Health and Community

We are particularly concerned that significant numbers of rural population living in the north of Buckinghamshire who are relatively close to Luton Airport are excluded from the EIA

assessment. Even though the impact of a single development may not have significantly high impacts on this population, the cumulative impacts of number of major current/future projects could have a major impact on rural communities.

We consider the first principle when considering any changes to air traffic must be to minimise the number of people newly overflown. Peer reviewed research and that commissioned by Heathrow Airport Limited (HAL) clearly demonstrates that it is those newly overflown communities who are disproportionately affected through the introduction of aircraft noise. Residents of northern Buckinghamshire in the more rural areas which were relatively tranquil less than 5 years ago, are negatively affected by the changes previously introduced by Luton Airport to fly more frequently across rural areas. These Bucks residents now suffer loss of sleep, consequent mental and physical health impacts and disruption to home and working lives. Rural areas including the nationally designated Chilterns AONB as well as parks and recreational areas such as Ivinghoe Beacon provide a quiet sanctuary for local residents, people from nearby towns and provide tourism and recreation opportunities because they are tranquil.

We are concerned that this omission may cause anxiety for communities in north Buckinghamshire, whom may be concerned about aircraft noise from changes in air traffic movement (arising from a proposed doubling of flights) and potential changes in the ground traffic due to this expansion. As set out above, we therefore recommend including study areas to incorporate the most affected Buckinghamshire communities. This will better identify probable effects on the health, arising from direct and indirect environmental, social and economic effects of the Proposed Development.

Chapter 19 – Cultural Heritage

Our most fundamental concern is the effect of new/additional noise impacts (from new flight paths or additional flight traffic) on the setting and therefore significance of any heritage assets in northern Buckinghamshire. Given the uncertainty as to airspace design and the potential for assets to be either newly or more frequently overflown, we are concerned that the proposed 2 km zones would effectively exclude any assets in northern Buckinghamshire.

We are also concerned that the report only considers those assets of the highest designation (Grade I, II* and SAM) and not others (most notably Grade II, as well as non designated). Clearly there is potential for lower grade/non designated assets whose existing tranquillity forms a fundamental part of its significance to be affected. The potential to identify impact/mitigation is therefore missed and should be considered.

Chapter 22- Next Steps

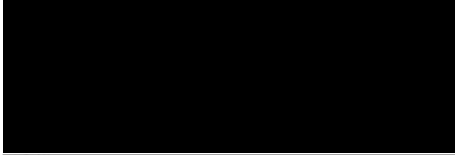
Further to a parallel consultation on the Draft Statement of Community Consultation, we note and endorse the response submitted by Darl Sweetland (Strategic Infrastructure Project Lead – BCC). We suggest that consultation areas should be based on noise metrics in line with both our suggested revised study area (3dB below LOALL) and any communities newly overflown at below 6,000ft.

Conclusions

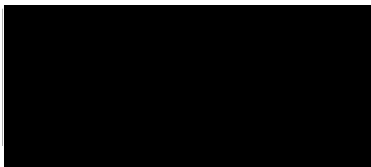
It is clear that a great deal of work has gone into preparing this statement and indeed that there has been positive dialogue between council officers and LLAL, particularly in relation to transport. We are however concerned that the focus of this document is too narrow in places and especially that that villages and communities in north Buckinghamshire, who already experience health

effects from aircraft noise and vehicle pollution are effectively excluded from the scope of assessment. This is likely to fundamentally undermine the integrity of the decision making process for these communities and we sincerely hope that this is reviewed.

Yours Faithfully



Cllr Paul Irwin
Cabinet Member for Environment & Leisure
Aylesbury Vale District Council



Cllr Bill Chapple
Cabinet Member for Planning & Environment
Buckinghamshire County Council

Civil Aviation Authority's response to London Luton Airport Limited's Environmental Impact Assessment Scoping Report

29 April 2019

Introduction

1. The CAA is the UK's specialist aviation regulator. We work so that:
 - the aviation industry meets the highest safety standards. We regulate the safety of airport design against UK, European and international safety criteria.
 - consumers have choice, value for money, are protected and treated fairly when they fly.
 - airspace is well managed. We make decisions on proposals to change airspace design, which we do against the background of Directions and environmental guidance from the Secretary of State.
 - the aviation industry manages security risks effectively.

We also provide the government, and third parties on a commercial basis, with environmental advice as requested, including information about the noise effects of aviation operations.

In general, it is for government to determine environmental policy and for the CAA, where required, to implement such policy as it relates to our functions.

2. We welcome the opportunity to respond to London Luton Airport Limited's (LLAL) Environmental Impact Assessment (EIA) scoping report in our capacity as a prescribed statutory consultee in the planning process.
3. By way of general introductory comment, in paragraphs 5 to 12 we provide a high-level overview of our regulatory roles and how they relate to the Development Consent Order (DCO) process. In paragraphs 13 to 17 we explain how we approached our consideration of LLAL's EIA scoping report. In paragraphs 18 to 22 we provide such comments as we have at this stage on those chapters of LLAL's EIA scoping report that relate to the CAA's regulatory roles.
4. For further information about the CAA's responsibilities or on any of our comments in this paper, please contact us at DCO.Coordination@caa.co.uk.

The DCO and CAA's Regulatory Processes

5. In addition to obtaining a DCO, LLAL will also be required to obtain a number of regulatory approvals from the CAA in order to give effect to the Proposed Development. The CAA's regulatory approval processes will continue throughout the planning and construction phases. The environmental statement that will form part of LLAL's DCO application will contain topics which are relevant to the CAA's regulatory processes. The most significant regulatory areas are as follows.

Safety Regulation

6. The CAA has a number of safety oversight responsibilities in the UK. The CAA oversees the safety of aircraft and air navigation, the control of air traffic, air traffic services personnel, the licensing of aerodromes and air crew. In recent years, the European Commission, the European Aviation Safety Agency (EASA) and International Civil Aviation Organisation have played an increasingly significant role.
7. The CAA is the national supervisory authority for the certification of air navigation services (ANS) providers covering the requirements of Regulation (EU) No. 1035/2011. Those requirements include technical and operational competence and capability,

specific requirements for the provision of air traffic services, meteorological services, aeronautical information services and communication, navigation or surveillance services.

8. The CAA is also the designated competent authority for the licencing of aerodromes under Regulation (EU) No. 139/2014. The licensing process ensures continuous oversight of safety standards at civil aerodromes. Since this regulation came into force in 2014, London Luton Airport's aerodrome licence has been converted to an EASA compliant licence.
9. Safety assurance of proposed changes can only be provided if the proposer submits to the approving authority a fully detailed concept of operations for how it intends to achieve an acceptable level of safety.
10. It might not be possible to issue some approvals without trialling the operation first. In such circumstances, permission to operate a trial may sometimes be given so that the operator can demonstrate that the concept works as intended (potentially with further mitigating action required to ensure the concept meets all requirements).

Airspace Change

11. The CAA is responsible for making decisions on proposals to change airspace design. As part of that decision-making role, we take into account a range of factors including safety, efficiency and guidance on environmental objectives from the Secretary of State. The evidence we use to consider those factors, and how it should be prepared, is set out in our regulatory process 'Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements' (CAP1616).
12. Any airspace changes associated with the Proposed Development at London Luton Airport must follow the CAA's airspace change process as set out in our guidance in CAP1616. Our guidance specifies the evidence we need from the organisation sponsoring an airspace change, including the relevant environmental data and the methodologies for producing it.

CAA's response to LLAL's EIA Scoping Report

13. The CAA's regulatory processes will to a significant extent run in parallel with the DCO process, but not conclude until after the DCO application has been submitted. Accordingly, the CAA may be asked by the Planning Inspectorate ("PINS") and the Secretary of State to provide an interim opinion regarding the viability of LLAL's scheme.
14. It would therefore be prudent for the EIA scope and methodology to be consistent with the requirements of the CAA's regulatory processes in order to avoid duplication and aid clarity for stakeholders. Where this is not possible, we suggest that LLAL explains its choice of methodology with great care and sets out the difference between the methodology used for EIA purposes and that to be used for the purposes of any submissions seeking CAA approval.
15. We have considered LLAL's EIA scoping report on that basis, and we are using this response to inform PINS of the information we consider should be provided in LLAL's environmental statement. We have in particular considered LLAL's proposed scope and methodology to assess and mitigate the significant environmental impacts of the Proposed Development. We have only commented on relevant chapters/EIA topics.
16. Our response below contains a limited number of comments on those aspects of LLAL's EIA Scoping Report that relate to our regulatory roles.

17. In respect of airspace change, CAP 1616 and CAP 1616a¹ provide the relevant methodologies for use in environmental assessments to assist those preparing airspace change proposals.

Chapter 5

18. We note at paragraphs 5.5.1 to 5.5.6 that the environmental impact assessment will not take account of the planned airspace reorganisation known as FASI South. We invite the Applicant to clarify whether airspace change is required in order to deliver the Proposed Development.

Chapter 6

19. With reference to paragraphs 6.8.1 to 6.8.6 we note that the applicant should consider referring also to operational measures such as single engine taxi, measures to incentivise reductions in use of aircraft APUs whilst on stand (using fixed electrical ground power, FEGP and preconditioned air, PCA).

Chapter 10

20. With reference to paragraph 10.4.11 we are unable to reconcile the statements made with the footnoted reference 163 to paragraph 3.106 of Aviation 2050 the Future of UK Aviation. This makes no mention of NATS or noise reduction; some further clarity is sought from the applicant on this.
21. With reference to paragraph 10.5.5, EIA Regulations require assessment of the year of maximum effect. In the case of airports with quieter aircraft being introduced each year, set against growth in air traffic movements, the year of maximum effect may not be one of the years indicated for assessment and may be an intermediate year.

Chapter 20

22. We note at paragraph 20.6.3 that there is no reference to increased likelihood of aircraft related incidents that could arise as a result of a projected 50% uplift in ATMs planned by 2038. The Applicant may wish to demonstrate that this has been taken into account.

¹ CAP 1616a is CAA publication 'Airspace Design: Environmental requirements technical annex'



REF: Expansion of London Luton Airport – EIA Scoping Notification and Consultation

I refer to your email dated 1st April 2019 regarding the above proposed DCO. Cadent has reviewed the project scoping report provided and wishes to make the following comments:

In respect of existing Cadent infrastructure, Cadent will require appropriate protection for retained apparatus including compliance with relevant standards for works proposed within close proximity of its apparatus,

Cadent Infrastructure within or in close proximity to the development

Cadent has identified the following apparatus within the vicinity of the proposed works, the impact to which should be considered further:

- High pressure (above 2 bar) Gas Pipelines and associated equipment
- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are also gas services and associated apparatus in the vicinity, these are not shown on plans but their presence should be anticipated)

Note: No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any error or omission.

Diversions:

Where diversions of apparatus are required to facilitate the scheme, Cadent will require adequate notice and discussions should be started at the earliest opportunity. Please be aware that diversions for high pressure apparatus can take in excess of two years to plan and procure materials.

Where diversions of apparatus are required to facilitate the scheme, Cadent will require the party requesting the diversion works to obtain any necessary planning permissions and other consents to enable the diversion works to be carried out. Details of these consents should be agreed in writing with Cadent before any applications are made. Cadent would ordinarily require a minimum of C4/Conceptual Design study to have been carried out to establish an appropriate diversion route ahead of any application being made.

Where diversions sit outside the highway boundary the party requesting the diversion will be responsible for obtaining at their cost and granting to Cadent the necessary land rights, on Cadent's standard terms, to allow the construction, maintenance and access of the diverted apparatus. As such adequate land rights must be granted to Cadent (e.g. following the exercise of compulsory powers to acquire such rights included within the DCO) to enable works to proceed, to Cadent's satisfaction. Cadent's approval to the land rights powers included in the DCO prior to submission is strongly recommended to avoid later substantive objection to the DCO. Land rights will be required to be obtained prior to construction and commissioning of any diverted apparatus, in order to avoid any delays to the project's timescales. A diversion agreement may be required addressing responsibility for works, timescales, expenses and indemnity.



Protection/Protective Provisions:


Where the Promoter intends to acquire land, extinguish rights, or interfere with any of Cadent's apparatus, Cadent will require appropriate protection for retained apparatus and further discussion on the impact to its apparatus and rights including adequate Protective Provisions. Operations within Cadent's existing easement strips are not permitted without approval and will necessitate a Deed of Consent or Crossing Agreement being put in place. Any proposals for work in the vicinity for Cadent's existing apparatus will require approval by Plant Protection under the Protective Provisions/Asset Protection Agreement and early discussions are advised.

Key Considerations:

- Cadent has a Deed of Grant of Easement for each pipeline, which prevents the erection of permanent / temporary buildings/structures, change to existing ground levels or storage of materials etc within the easement strip.
- Please be aware that written permission is required before any works commence within the Cadent easement strip and a Crossing Agreement may be required if any apparatus needs to cross the Cadent easement strip
- The below guidance is not exhaustive and all works in the vicinity of Cadent's asset shall be subject to review and approval from Cadent's plant protection team in advance of commencement of works on site.

General Notes on Pipeline Safety:

- You should be aware of the Health and Safety Executives guidance document HS(G) 47 "Avoiding Danger from Underground Services", and Cadent's specification for Safe Working in the Vicinity of Cadent High Pressure gas pipelines and associated installations - requirements for third parties GD/SP/SSW22. Digsafe leaflet Excavating Safely - Avoiding injury when working near gas pipes. There will be additional requirements dictated by Cadent's plant protection team.
- Cadent will also need to ensure that our pipelines remain accessible throughout and after completion of the works .
- The actual depth and position must be confirmed on site by trial hole investigation under the supervision of a Cadent representative. Ground cover above our pipelines should not be reduced or increased.
- If any excavations are planned within 3 metres of Cadent High Pressure Pipeline or, within 10 metres of an AGI (Above Ground Installation), or if any embankment or dredging works are proposed then the actual position and depth of the pipeline must be established on site in the presence of a Cadent representative. A safe working method agreed prior to any work taking place in order to minimise the risk of damage and ensure the final depth of cover does not affect the integrity of the pipeline.
- Below are some examples of work types that have specific restrictions when being undertaken in the vicinity of gas assets therefore consultation with Cadent's Plant Protection team is essential:
 - Demolition
 - Blasting
 - Piling and boring
 - Deep mining
 - Surface mineral extraction
 - Landfilling

- 
- Trenchless Techniques (e.g. HDD, pipe splitting, tunnelling etc.)
 - Wind turbine installation
 - Solar farm installation
 - Tree planting schemes

Pipeline Crossings:

- Where existing roads cannot be used, construction traffic should ONLY cross the pipeline at agreed locations.
- The pipeline shall be protected, at the crossing points, by temporary rafts constructed at ground level. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.
- The type of raft shall be agreed with Cadent prior to installation.
- No protective measures including the installation of concrete slab protection shall be installed over or near to the Cadent pipeline without the prior permission of Cadent.
- Cadent will need to agree the material, the dimensions and method of installation of the proposed protective measure.
- The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to Cadent.
- A Cadent representative shall monitor any works within close proximity to the pipeline.

New Service Crossing:

- New services may cross the pipeline at perpendicular angle to the pipeline i.e. 90 degrees.
- Where a new service is to cross over the pipeline a clearance distance of 0.6 metres between the crown of the pipeline and underside of the service should be maintained. If this cannot be achieved the service shall cross below the pipeline with a clearance distance of 0.6 metres.
- A new service should not be laid parallel within an easement strip
- A Cadent representative shall approve and supervise any new service crossing of a pipeline.
- An exposed pipeline should be suitable supported and removed prior to backfilling
- An exposed pipeline should be protected by matting and suitable timber cladding
- For pipe construction involving deep excavation (<1.5m) in the vicinity of grey iron mains, the model consultative procedure will apply therefore an integrity assessment must be conducted to confirm if diversion is required

Yours Faithfully



Vicky Cashman

Consents Officer

Land & Property Services

Vicky.Cashman@cadentgas.com; 

Cadent Gas Limited

Registered Office Ashbrook Court, Prologis Park
Central Boulevard, Coventry CV7 8PE
Registered in England and Wales No.10080864

National Gas Emergency Service
0800 111 999* (24hrs)

*Calls will be recorded and may be monitored

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Guidance

To download a copy of the HSE Guidance HS(G)47, please use the following link:

<http://www.hse.gov.uk/pubns/books/hsg47.htm>

Dial Before You Dig Pipelines Guidance:

<https://cadentgas.com/Digging-safely/Dial-before-you-dig>

Essential Guidance document:

https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Essential_Guidance.pdf

Excavating Safely in the vicinity of gas pipes guidance (Credit card):

https://cadentgas.com/getattachment/digging-safely/Promo-work-safely-library/Excavating_Safely_Leaflet_Gas-1.pdf

Copies of all the Guidance Documents can also be downloaded from the Cadent website:

<https://cadentgas.com/Digging-safely/Work-safely-library>



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Helen Tuffs
Sue Holden

29th April 2019

Major Casework Directorate
The Planning Inspectorate,
Temple Quay House,
Temple Quay,
Bristol,
BS1 6PN

By email only to: lutonairport@planninginspectorate.gov.uk,
My Ref.: F:\Transport\Airports\Luton

Dear Sir/ Madam,

EIA Scoping for the Expansion of London Luton Airport

Thank you for your email of 1.4.19 consulting the Chilterns Conservation Board on the EIA Scoping for the Expansion of London Luton Airport.

This letter contains Chilterns Conservation Board's response. Our key concerns, which we have used these to assess the content of the EIA Scoping Report, are:

- noise and effects on tranquillity from overflying the Chilterns AONB
- air pollution and effects on sensitive habitats in the Chilterns including protected sites of national and international importance
- cumulative impacts from the combined changes in flightpaths from Luton and Heathrow - it is important that in any redesign of flightpaths there is careful design to avoid harm to the tranquillity of the AONB, and take all opportunities to reduce noise over the AONB (e.g. Bovingdon stack)
- people walking, cycling, riding or volunteering in the AONB are likely to be outdoors and seeking tranquillity, so are sensitive to noise disturbance and the sight of aircraft flying overhead.
- Light pollution from the airport and aircraft overhead affecting the dark night skies of the AONB, which is an intrinsically dark zone, and impacting on people's opportunities to star gaze and experience darkness.
- identifying opportunities for AONB mitigation and enhancement.

General points on EIA Scope

1. The Luton Airport expansion project should be assessed against whether it achieves Environmental Net Gain, in the light of the Government's 25 Year Environment Plan and the Draft Environmental (Principles and Governance) Bill 2018, and renewed public concern about climate change. Rather than the applicant's vision "to actively manage environmental impacts at the local and wider levels in line with our wider commitment to responsible and sustainable development" it should be bolder in its environmental ambition and commitments. At the moment it covers understanding impacts and mitigating them, but it should refer to avoiding them, using the mitigation hierarchy: 1. avoid impacts 2. mitigate and only then 3. compensate for residual impacts.
2. Although we welcome the inclusion of climate change and greenhouses gases within the scope of the EIA, and that this includes surface access as well as operation of aircraft (Table 1, Vol 1), the scope of the assessment has been wrongly curtailed. It is hard to think of another project in the sub-region that has the potential to contribute more greenhouse gas emissions than the expansion of Luton Airport. It has national and global consequences. We question the exclusive of cumulative effects in relation to greenhouse gasses. Para 8.6.10 of Vol 1 asserts: "It is not relevant to assess the cumulative effects with regard to CCR as the focus of this assessment is only the Proposed Development itself." Why? We strongly disagree with the conclusion at para 9.6.4 of Vol 1 "The requirement to present the impact of the Proposed Development in the context of the UK Carbon budgets is a cumulative assessment and as such it is concluded that further cumulative GHG emissions is scoped out."
3. Section 8 on climate change should be expanded to address mitigation. It currently focuses on adaptation and resilience (i.e. impacts of climate change on operation of an expanded airport) rather than addressing an expanded airport's role in contributing to climate change. Para 8.8.1 Vol 1 admits that climate change mitigation measures or mechanisms to reduce the potential significant effects are not yet developed and will be developed with specialists. Why such an after-thought?
4. We question in Table 1 under Biodiversity the scoping-out of effects on watercourses. The impacts on the biodiversity and function of Chilterns chalk streams should be assessed, with careful scrutiny of where additional water supply for the expanded airport will come from. Chalk streams are an internationally rare habitat that are suffering from over-abstraction which is decreasing water levels in the streams and shortening their functional length. The River Ver, a chalk stream which supplies Luton with its public water supply, is already over-abtracted and the river bed is consistently dry for much of its former functional length and no longer flows at all within the AONB. The small Water Soil and Geology zone of influence (shown on Figure 21.2) is derisory given this important chalk stream.
5. In Table 1 the scope of the Landscape and Visual Assessment (LVIA) should include the following in order to meet recommended practice in the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment (3rd Edn):
 - Landscape character, with particular attention to the impacts of moving approximately 4,000,000m³ of earth, excavated from the land to the east of the platform, creating large craters into which car parks will be placed, to

win material for building up the airport platform. The steep 1 in 3 gradient of the proposed slopes, and the artificial shape of embankments (see Figure 3.1) should be assessed and compared with the existing natural chalk hillside.

- Tranquillity, including noise, vapour trails, motion and effects on perception of unspoilt and peaceful places. Tranquillity is currently scoped out of the LVIA part of the EIA, as explained at para 18.5.20. We disagree.
 - Sequential effects eg on a series of viewpoints or along popular walks like the Chiltern Way
 - Cumulative effects eg airport plus other planned housing, new roads, employment growth
 - Night time views as well as daytime views in order to identify and address any increase in light pollution from an expanded airport and from aircraft overhead. This will help safeguard dark night skies and the experience bright stars from the Chilterns AONB.
6. Zones of influence for the development (summarised in Figure 21.1 in Vol 2) have been drawn far too closely. Much wider zones are needed for all 6 categories. Assessments must include the area under the flightpaths, protected habitats likely to be affected by air pollution, impacts on the River Ver – an internationally important chalk stream, and the natural beauty, dark skies and public enjoyment of the nationally designated landscape of the Chilterns AONB. The impacts of an expanded Luton Airport go much wider than Luton town and its immediate environs, and so should the EIA.
7. The Air Quality monitoring appears to focus on Air Quality Management Areas (monitoring cars in already polluted urban areas) and lacks any consideration of effects of air pollution on natural habitats. See for more information Plantlife's report [We Need To Talk About Nitrogen](#). This is especially important for the SSSIs, and it is critically important for the Chiltern Beechwoods Special Area of Conservation (mapped on Figure 17) which is an internally important biodiversity designation. All three of the Special Areas of Conservation in the Chilterns AONB (Chilterns Beechwoods SAC, the Aston Rowant SAC and Hartslock Wood SAC) have already breached their critical loads for air pollution. For example, see Natural England, [Supplementary Advice for Chiltern Beechwoods SAC](#), Nov 2018:
- "The supporting habitat of this feature is considered sensitive to changes in air quality and is currently exceeding the critical load for nitrogen (October 2018). This habitat type is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it."*
- The Chilterns Beechwoods Special Area of Conservation (SAC) is in close proximity to motorways and major roads which are likely to experience increased traffic from the expansion of Luton Airport. The Aston Rowant SAC is possibly the only SAC in the UK which is actually severed by a motorway, with the vast cutting of the M40 motorway constructed through this nature reserve in the 1960s. The M25 also cuts through the Chilterns through the AONB. Increased traffic for Luton Airport could have an effect on air quality, noise and habitats. Air pollution and effects on sensitive habitats and protected sites of national and international

importance must be carefully addressed through Environmental Impact Assessment and Habitat Regulations Assessment.

8. For landscape and visual considerations, the 5km proposed study area is too narrow. Given the topography, Luton Airport might be visible from wider parts of the Chilterns Hills. Rather than just views of the airport, other visual effects like aircraft moving through the sky above the wider AONB creating motion and vapour trails should be addressed too.
9. The proposed methodology for Cumulative Effects Assessment (CEA) fails to consider more than a zone local to the Airport. The thresholds proposed at Table 21.3 covers too small an area. The list of developments scoped-in for cumulative effects testing have been shared with local planning authorities but not available for other stakeholders to comment. Chilterns Conservation Board considers that the CEA should include other projects which are putting pressure on the Chilterns AONB and which should be scoped into the CEA:
 - HS2
 - The Ox-Cam expressway and growth corridor
 - Heathrow expansion (also an NSIP). There is a clear interrelationship between plans for airport expansion at Heathrow and Luton, both of which might happen. The change in flight paths at Heathrow could have a direct impact on Luton airport's flightpaths and the height planes fly at over the Chilterns AONB. Heathrow third runway should clearly be scoped in to the cumulative effects assessment
 - Housing and employment growth of Aylesbury into a Garden Town, the major expansion of housing at nearby Hemel Hempstead and in future likely development to the west of Luton.
10. The area east of Luton, including land within the airport's proposed development boundary, is candidate land for AONB boundary review. Although Figure 18.1 shows the current AONB boundary, it should also show the land that has been proposed by the Chilterns Conservation Board for inclusion in the Chilterns AONB, in a still live application made to Natural England. The area to the east of Luton is a potential candidate for extension of the AONB based on criteria published by Natural England relating to landscape quality, scenic quality and relative wildness, relative tranquillity and cultural heritage (Guidance for assessing landscapes for designation as National Park or AONB, 2011). In September 2010 the North Herts DC cabinet passed a resolution to support consideration of the area as AONB. The area has a clear affinity with the rest of the Chilterns. It contains clearly recognisable Chilterns features such as chalk streams and associated dry valleys and small settlements, with isolated farms and dwellings with red brick and flint as dominant building materials. The woodland cover is good, with much of it being Ancient Woodland. It is of the same high quality as landscape in the AONB, the current boundary is arbitrary, following the A505 road and not natural features (see Appendix 1 for a map and extract from our AONB boundary review application).
11. It is not clear why the airport expansion involves the removal of high quality attractive greenfield landscape to east of the airport, in preference re-developing and extracting spoil from beneath the run-down brownfield employment land north of the airport (Percival Way area etc). This alternative should be explored as a reasonable alternative under Schedule 4 of the EIA Regulations. Explaining the

different options for the location of the terminal, as consulted on in the non-statutory Future LuToN consultation in 2018, is not sufficient.

Detailed points on the EIA Scoping Report and appendices

12. Why is the Air Quality study area (a square of 15km) skewed so that Luton Airport is not in the centre of the study area? See Figure 6.1 in Volume 2. The area west of Luton including the Chilterns AONB is mainly excluded, and the area north and east of Luton is covered more than its share. We object to the air quality study area for the EIA because it fails to cover the flightpaths. Luton Airport already affects all of the Chilterns AONB as it lies under the flight paths and holding stacks for Luton and Heathrow airports. The EIA should investigate what the air quality effects be during the operational life of the expanded airport and over the full area that will be impacted. Passenger's journeys to airports are typically long and the airport has a far longer reach than the study area shows.
13. Figure 6.3 and 6.7 why are there so few (only 1) air quality automatic monitors in Luton Borough Council's area near the airport itself? Why are there none on the road network between the airport and junction 10 of the M1? Especially since the EIA Scoping Report states at para 2.3.24 that "The majority of vehicles accessing LTN do so from the M1 and Luton via New Airport Way (the A1081)". There is also an absence of monitors on the A6 north of Luton and the A505 north east of Luton which should be addressed to consider air quality impacts of increased traffic from the proposed airport expansion.
14. It is unclear from Figure 10.1 showing noise monitoring locations whether these are existing or proposed new noise monitoring locations. It is difficult to comment on the adequacy of these locations without information being provided on likely flightpaths. Without this, they could be in the wrong place.
15. On Figure 10.1 noise monitors are shown within the Chilterns AONB villages of Dagnall and Jockey End, but none further west e.g. around Tring, and none at key visitor destinations like the National Trust's Ashridge Estate, Ivinghoe Beacon, the Dunstable Downs, Sharpenhoe Clappers, and Galley and Warden Hills. This shows a bias towards residential effects in villages, and little regard to assessing the impact on visitors. As a nationally protected landscape on the doorstep of London and many large settlements, the tranquillity of the Chilterns AONB is of national importance, not just to residents, but visitors and tourists too. The assessment should give weight to the AONB as a national asset and recognise that people walking, running, cycling, riding or volunteering in the AONB are likely to be outside and seeking peace, so are especially noise sensitive. The EIA should assess where people visit for leisure time and when people are more likely to be outdoors in the Chilterns Area of Outstanding Natural Beauty (AONB). It would be informative to map areas for existing ambient noise levels and ensure that quiet areas of protected countryside remain as quiet as possible, recognising their importance for quiet recreation, health and wellbeing. We note that CAP1616 guidance requires that specific attention is given to tranquillity of AONBs.
16. Figure 11.2 these clipped versions of the historical maps should be displayed larger (1 page each at A3), they are reproduced too small and not a good enough resolution to provide useful data.

17. Figure 18.1 the LVIA constraints plan uses a 5km buffer around the airport and excludes most of the land in the Chilterns AONB further west and north. Only one proposed viewpoint (at Ivinghoe Beacon) is shown within the Chilterns AONB on Figure 18.4. This is not enough. Para 18.4.11 of Vol1 explains of the existing airport "The airport is a prominent and visually intrusive feature within views from the surrounding area", and likely to be more so with an expanded airport. Suggest include a map of Zones of Theoretical Visibility, overlain with the Chilterns AONB boundary, to assess other viewpoints needed. The study area for the LVIA should be re-assessed once ZTV work has been carried out.
18. Why are no viewpoints included within the site boundary (Figure 18.1) eg Wigmnore Park and from the Public Right of Way over attractive chalk fields sloping towards Winch Hill to the east? The hillside of fields would be excavated to a lower level with material used to build up the runway, before being converted to car parks. These are significant landscape and visual impacts but are neglected by the proposed LVIA.
19. Why is there no map of Public Rights of Way, to help identify viewpoints? Two important strategic recreation assets, the Chiltern Way footpath (a 125 mile walking route though some of the finest scenery in the country) and the Chilterns Cycleway (a 170 mile circular cycle route through the Chilterns AONB) both run close to the east of the development boundary. There are public rights of way over highly attractive chalk landscape which would be altered beyond recognition, and this should be explored in the LVIA part of the EIA.
20. Figures 21.2 planning applications and 21.2 local plan allocations do not assess a wide enough geographic area. Other major proposals are likely to have a cumulative environmental impact on traffic, carbon emissions, waste, water consumption, habitats and tranquillity together with the growth of Luton Airport. The EIA Scoping Report has missed HS2, the growth of Aylesbury into a Garden Town, the major expansion of housing at nearby Hemel Hempstead and in future west of Luton, Heathrow third runway because of flightpaths implications at Luton, and the Ox-Cams expressway and growth arc. It should also recognise the current planning application (ref 19/00428/EIA) submitted by Luton Airport to Luton Borough Council to vary the noise conditions on the airport to increase both day and night time noise.

Our role

For info, the Chilterns Conservation Board is the statutory independent corporate body for the Chilterns Area of Outstanding Natural Beauty, set up by Parliamentary Order under the provisions of Section 86 of the Countryside and Rights of Way (CROW) Act 2000. The Chilterns Conservation Board is a statutory consultee for National Policy Statement consultations, a prescribed consultee for major infrastructure projects that affect the Chilterns AONB and an interested party for examinations in connection with Nationally Significant Infrastructure Projects that may affect the Chilterns AONB (as set out in the Infrastructure Planning (National Policy Statement Consultation) Regulations (2009), the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations (2009) and the Infrastructure Planning (Interested Parties) Regulations (2010).

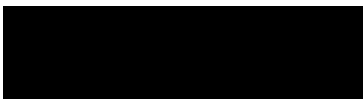
The Chilterns AONB is nationally protected as one of the finest areas of countryside in the UK. Public bodies and statutory undertakers have a statutory duty of regard to the purpose of conserving and enhancing the natural beauty of the AONB (Section 85 of [CROW Act](#)).

Going forward the Chilterns Conservation Board would like to be involved as stakeholders and consultees on the Luton Airport plan, in order to advise on whether the plans conserve and enhance the Chilterns AONB, and to ensure that the EIA and HRA include consideration of the Chilterns AONB.

Should you require any further information please do not hesitate to contact me.

The Chilterns Conservation Board is a body that represents the interests of all those people that live in and enjoy the Chilterns AONB. It is made up of representatives nominated by the organisations listed in Appendix 2.

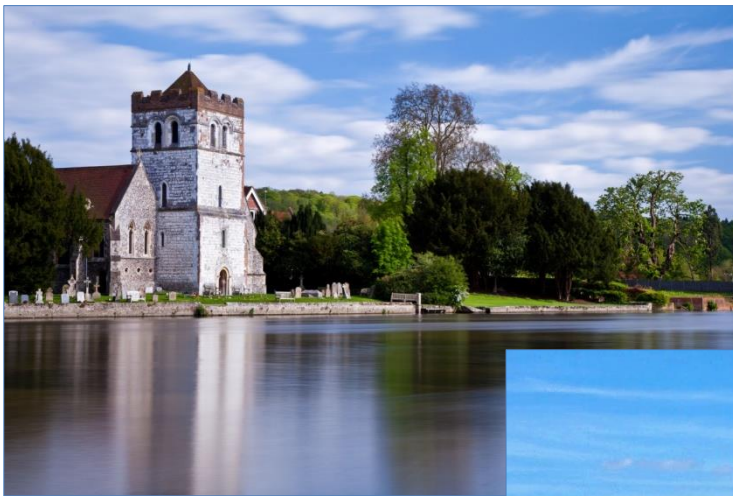
Yours sincerely,

A black rectangular box redacting the signature of Lucy Murfett.

Lucy Murfett MRTPI
Planning Officer
For and on behalf of the Chilterns Conservation Board



The Case for Reviewing the Boundary of the AONB





AREA OF OUTSTANDING NATURAL BEAUTY

The Case for Reviewing the Boundary of the Chilterns AONB

Summary

1. The core of the Chiltern Hills is designated as an Area of Outstanding Natural Beauty. It covers only half of the area commonly accepted to be The Chilterns. That part of the Chilterns not currently designated lies on the dip slope of the Chilterns escarpment which falls south eastwards to the Thames Valley and the Colne Valley, a tributary of the Thames. The Chiltern Hills National Character Area (110) covers most of the wider Chilterns, the area also covered by The Chiltern Society.
2. A review of the AONB boundary provides a welcome opportunity to reconsider whether more of the Chiltern Hills should be designated as AONB.
3. The Chilterns Conservation Board requests that Natural England consider reviewing the boundary of the Chilterns AONB in four areas covering a total of 331 sq.kms (Map 1);
 - North Hertfordshire - an area to the south of Hitchin and east of Luton. (Area1- 92 sq.kms)
 - South Buckinghamshire - the area between the River Thames, Slough and Chalfont Common (Area 2 – 81 sq.kms)
 - Thames Valley – the area bordered to the north by the Thames and between Cookham (north of Maidenhead) and Caversham (north of Reading) (Area 3 – 78 sq.kms)
 - Eastern Area – the area between Chesham, Amersham, Berkhamsted and Hemel Hempstead (Area 4 – 80 sq.kms)
4. It is the view of the Conservation Board and relevant partners that these areas are worthy of consideration for designation as part of the Area of Outstanding Natural Beauty as they meet the criteria for designation, including the primary justifications of landscape quality. They also are important as they: link local towns and surrounding countryside; provide extensive opportunities for recreation and environmental education, and contain significant numbers of designated sites and areas of environmental and cultural heritage.
5. In selecting areas to be, potentially, considered for designation as AONB the Board and its partners are confident they meet the criteria given in the guidance issued by Natural England in March 2011, in particular that weight must be given to:

- Landscape Quality
 - Scenic Quality
 - Relative wildness
 - Relative tranquillity
 - Natural heritage features
 - Cultural heritage
6. The Board is aware that recreational opportunities are not a reason for designation of an AONB. However, the Conservation Board does have a statutory purpose to promote enjoyment and understanding of its special qualities. The reality is that the importance and popularity of the Chilterns for recreation is considerable. It is already one of the most visited protected landscapes in Europe with 55 million visits per annum. All four of the proposed areas are in themselves important for their recreational opportunities and are an integral part of the wider access networks and appeal of the Chiltern Hills. For example, both the Chiltern Way and Chiltern Cycleway link the AONB and the proposed areas.
7. It is proposing these four areas the requirements set out in the letter from Natural England of 20th June 2013 have been given considerable weight.
- Ecological connectivity
 - Climate Change
 - Public Engagement with nature
 - Public benefits from a healthy natural environment.

Landscape Character

8. Areas 1, 3 and 4 fall within the Chilterns National Character Area and Area 2 lies in the Thames Valley NCA. All four exhibit the typical landscape character of the Chiltern Hills - a chalk escarpment facing north-west with a dipslope to the south east running into the Thames Valley. The four areas proposed for possible inclusion in the AONB fall in the transition zone of dipslope to the Thames Valley (including the River Colne). This is an area where the boundary is currently convoluted and long thought to have excluded areas that should have been included at the time of the last boundary review in 1984-1990.
9. It is notable that they are all encompassed by the area covered by The Chiltern Society.
10. Area 2, in South Bucks, although not in NCA 110, is the original ancient designation of Chiltern Hundred and culturally is very much part of the Chilterns including the renowned Burnham Beeches National Nature Reserve. It represents the transition between the Chilterns escarpment and the Thames Valley.
11. The Thames is currently the boundary for a considerable part of the AONB but only includes one side of the river and the river valley. Inclusion of Area 3 will ensure that a more comprehensive landscape approach can be countenanced.

Evidence Base

12. The Board, and its partners, have based the case on the evidence provided by the following data sets:

- Natural Character Area Profiles
 - Landscape Character Assessments for; Buckinghamshire; Hertfordshire; Wokingham Borough; and the Royal Borough of Windsor and Maidenhead
 - Geology and soils maps
 - Historic Landscape Characterisation
 - Woodland including Ancient Woodland
 - Common land
 - SSSIs, NNRs and SACs
 - Registered Parks and Gardens
 - Conservation Areas
 - Listed Buildings (Grade I and Grade II*)
 - Scheduled Ancient Monuments
 - National Trust Property
 - Public Rights of Way, National Trails and promoted routes
 - Open Access Land
 - Priority Habitats
13. To support the four proposed areas the Board and its partners have compiled the same supporting evidence base for each.
14. The Board is conscious that, whilst all 4 areas exhibit, strongly, various typical characteristics of the Chilterns, they are also distinct in many ways. Whilst the Board requests that the merits of including all four areas as a group are taken into account, it wishes them to be considered on their individual merits too.

The Boundary

15. The Board notes the advice in page 10, of the Guidance for assessing landscapes for designation as National Park or AONB - March 2011, where Natural England states that, "It is not necessary to identify a precise 'hard' boundary for an area in relation to which the technical criteria are considered at the initial stage." This accords with our own view of the process as it would be both impractical and undesirable to do so at this formative stage.
16. Accordingly, the Board has deliberately not identified a precise boundary for each area. Whilst a potential AONB extension has been identified with a possible boundary, usually in line with the boundary of the landscape character area units, a more in depth assessment is needed to determine the most appropriate boundary should the Chilterns be selected as an AONB for further boundary review work.

Area 1 – North Hertfordshire

Total Area – 92km²

Currently the southern boundary of the AONB follows the A505, a dual carriageway which runs north eastwards in a more or less straight line from Luton to Hitchin. This road does not follow any natural feature and must be considered an arbitrary boundary. The natural landform and landscape character runs across the line of the road from north to south following the dip slope of the Chiltern escarpment towards the River Colne, a tributary of the Thames.

Despite the A505 being a major road it sits down in the landscape and does not unduly affect longer views. The area put forward for consideration lies to the south of this road. There is no discernible difference in the landscape on either side of the road. This is borne out by a series of considerations including the: geology; soils; landscape character, and Historic Landscape Characterisation.

The area falls between the growing towns of Luton and Hitchin and forms part of the setting of both. All of the proposed area lies within Hertfordshire; in fact all of it lies within North Hertfordshire district.

Landscape Quality

A relatively large area is owned by three estates which have maintained, what could be called, a traditional approach to estate management. In addition to extensive areas of mixed farmland there is a good network of field boundaries and woodland. Shooting for game birds remains a high priority for each landowner. There are relatively large areas of land in stewardship including HLS.

The extent of the area proposed for consideration as AONB is based on the boundary of the landscape character units.

Scenic Quality

This is one of the most unspoilt parts of Hertfordshire and, whilst adjacent to Hitchin and Luton, there are no large towns or villages within the area under consideration. It is typified by a well-managed area of lowland mixed farming and woodland and a network of ancient lanes. Running through the heart of the area is the Mimram Valley, which in the southern part of the area includes the River Mimram (chalk stream flow is erratic and often doesn't flow the full length of the valley) . This is a typical chalk stream and has working watercress beds at Whitwell.

Many of the villages and houses display architectural features and styles showing their origin as estate holdings.

Relative Wildness

This has been a well-managed area for centuries largely due to the dominance by traditionally managed estates, including the Bowes-Lyon family (the Queen's mother's family). There is a notable absence of discordant features and activity giving a sense of getting away from it into an area of farmland still relatively rich in wildlife .It has a timeless quality which is rare in this part of the county.

Relative Tranquillity

In the busy south east and east of England all such assessments are based on relative perception. Compared to surrounding areas this is a haven of peace and tranquillity. It has no large settlements or busy roads. There is an extensive network footpaths, bridleways, cycleways and promoted routes allowing those who are seeking the quiet enjoyment of the countryside plenty of opportunities.

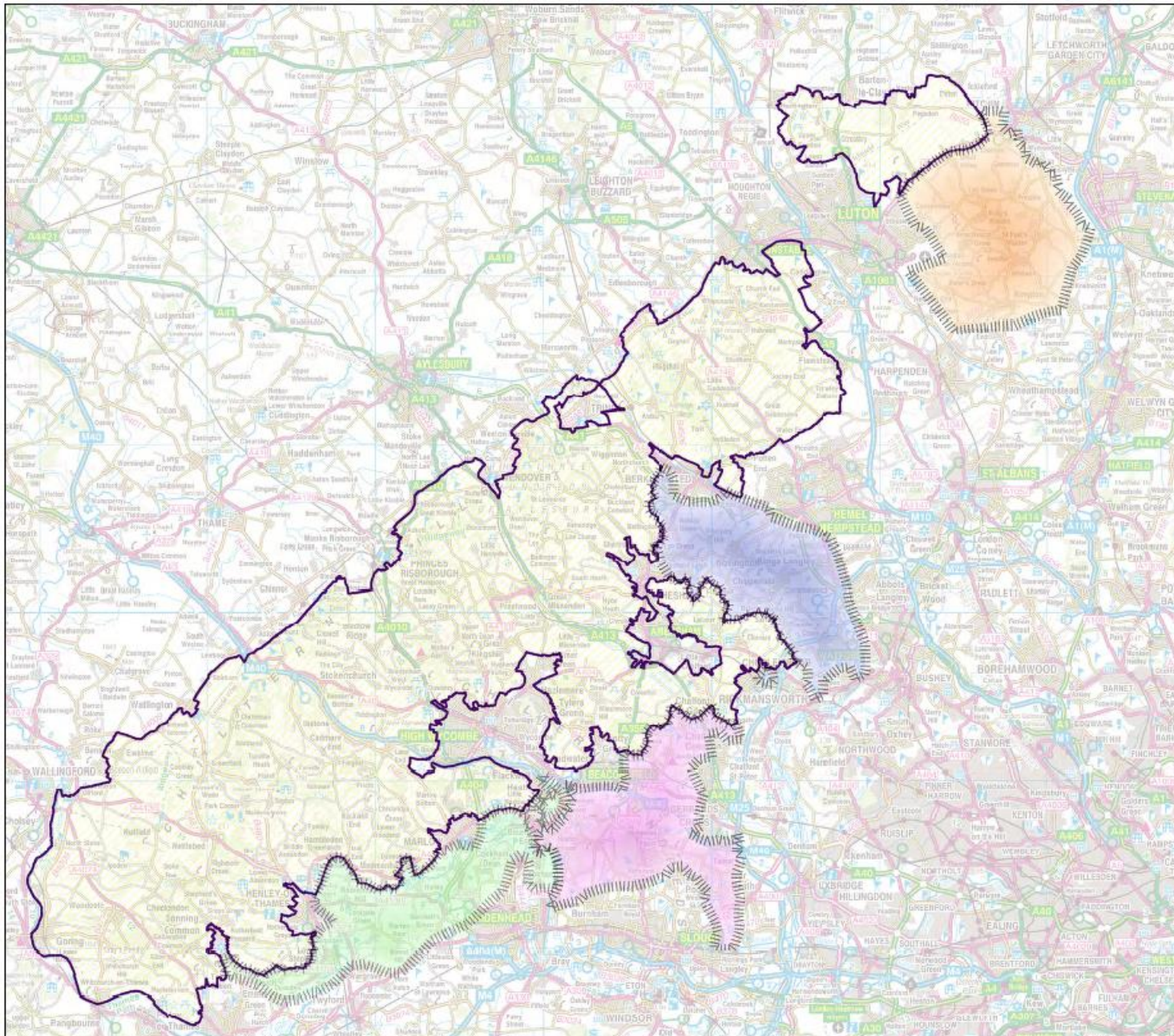
Luton airport lies to the west of the area and this inevitably disturbs that sense of tranquillity. That affects all of the existing AONB as it lies under the flight paths and holding stacks for Luton and Heathrow airports.





Cultural Heritage

The area is notable for a number of extensive registered parks and gardens. Close to the boundary of the proposed area is the Grade 1 Luton Hoo mansion and its Capability Brown landscape.

Support

Support for consideration of the area as AONB is provided by a cabinet resolution (28/09/2010) of North Herts DC; Cllr Richard Thake, Herts CC; Cllr Ian Reay appointed to the Conservation Board by Herts CC and Liz Hamilton, chairman of the CPRE Hertfordshire.



-  Area 1: North Hertfordshire
-  Area 2: South Buckinghamshire
-  Area 3: Thames Valley
-  Area 4: Eastern Area

 Chiltern AONB

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Potential Chiltern AONB Boundary Variations

Drawing 1: All Areas



The Chilterns Area of Outstanding Natural Beauty

The Chilterns AONB was designated in 1965 for the natural beauty of its landscape and its natural and cultural heritage. In particular, it was designated to protect its special qualities which include the steep chalk escarpment with areas of flower-rich downland, woodlands, commons, tranquil valleys, the network of ancient routes, villages with their brick and flint houses, chalk streams and a rich historic environment of hillforts and chalk figures.

Chilterns Conservation Board

The Chilterns Conservation Board is a statutory independent corporate body set up by Parliamentary Order in 2004 under the provisions of Section 86 of the Countryside and Rights of Way (CRoW) Act 2000.

The Board has two statutory purposes under section 87 of the CRoW Act:

- a) To conserve and enhance the natural beauty of the AONB; and
- b) To increase the understanding and enjoyment by the public of the special qualities of the AONB.

In fulfilling these roles, if it appears that there is a conflict between those purposes, Conservation Boards are to attach greater weight to (a). The Board also has a duty to seek to foster the economic and social well-being of local communities within the AONB.

Like all public bodies, including ministers of the Crown, local authorities and parish councils, the Chilterns Conservation Board is subject to Section 85 of the CRoW Act which states under "General duty of public bodies etc"

"(1) In exercising or performing any functions in relation to, or so as to affect, land in an area of outstanding natural beauty, a relevant authority shall have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty."

List of Organisations providing Nominees to the Chilterns AONB Conservation Board

The Chilterns Conservation Board has 27 board members, all drawn from local communities:

- Buckinghamshire, Hertfordshire and Oxfordshire County Councils
- Central Bedfordshire and Luton Borough Councils (unitary authorities)
- Aylesbury Vale, Chiltern, North Hertfordshire, South Buckinghamshire, South Oxfordshire, Three Rivers and Wycombe District Councils
- Dacorum Borough Council
- The Central Bedfordshire, Buckinghamshire, Hertfordshire and Oxfordshire Parish Councils (6 elected in total), and
- DEFRA (8 in total).



Defence
Infrastructure
Organisation

The Planning Inspectorate
3/18 Eagle Wing,
Temple Quay House,
Temple Quay House,
Temple Quay

BS1 6PN
England

**Safeguarding Department
Statutory & Offshore**
Defence Infrastructure Organisation
Kingston Road
Sutton Coldfield
West Midlands
B75 7RL

Email: DIO-safeguarding-statutory@mod.gov.uk

www.mod.uk/DIO

06 Apr 2019

Dear Sir/Madam,

Your Reference: LUTN-TR020001
Our Reference: 10045465

MOD Safeguarding - SITE OUTSIDE SAFEGUARDING AREA

Proposal: Luton Airport Extension
Location: Luton Airport

Grid Reference:
Planning Reference: LUTN-TR020001

Thank you for consulting Defence Infrastructure Organisation (DIO) on the above proposed development.

This application relates to a site outside of Ministry of Defence safeguarding areas.

I can therefore confirm that the Ministry of Defence has no safeguarding objections to this proposal.

I trust this adequately explains our position on this matter.

Yours sincerely

Louise Dale
Safeguarding Officer
DIO Estates

From: [Eze Ekeledo](#)
To: [Luton Airport](#)
Subject: Application by London Luton Airport Limited (LLAL) (the Applicant) for an Order granting Development Consent for the Expansion of London Luton Airport (the Proposed Development) (Our Ref: TR020001_000042_190401)
Date: 29 April 2019 16:39:32
Importance: High

Dear Sir/Madam

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Thank you for consulting the Council on 01 April 2019 with regards the above subject matter.

I can confirm that the Council does not have any comments at this moment with regards the Applicant's request to the Planning Inspectorate on behalf of the Secretary of State (SoS) for its opinion (a Scoping Opinion) as to the information to be provided in an Environmental Statement (ES) relating to the Proposed Development.

If you have any queries, please do not hesitate to contact us.

Yours faithfully,

Eze Ekeledo **BSc (Hons) MSc Architecture, MA URP MRTPI**
Service Manager (DM) Major Applications

East Herts Council
Direct Dial: 01992 531425
www.eastherts.gov.uk

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Major Casework Directorate
Planning Inspectorate
3/20 Eagle Wing
Temple Quay House (2 The Square)
Bristol
Avon
BS1 6PN

Our ref: NE/2019/130056/01-L01

Your ref: TR020001_000042_190401

Date: 29 April 2019

Dear Sir/Madam

Luton Airport 2 Percival Way Luton, LU2 9LY.

Application by London Luton Airport Limited (LLAL) for an order granting development consent for the expansion of London Luton airport - scoping opinion as to the information to be provided in an environmental statement (ES).

Thank you for consulting us on this scoping opinion, having reviewed the documents we have the following comments which are mainly concerned with the impact the development may have on groundwater quality beneath or in the vicinity of the proposed scheme.

Whilst the majority of the airport is not located within a groundwater source protection zone (SPZ) or groundwater drinking water protected area (DrWPA), parts of the site are located within the “total catchment” zone (or SPZ 3) and drinking water protected zones relating to large groundwater abstractions used for potable supply located to the west of the airport at Crescent Road in Luton and to the north east of the airport in Kings Walden and Whitwell.

There is some uncertainty with respect to the actual recharge zones of these abstractions and it is considered likely that the footprint of the airport and the proposed development to the east of the airport does provide a contribution to the catchment zones for these abstractions. As such, we consider the Chalk Principal Aquifer beneath the site to be sensitive and requiring specific consideration as part of any proposed development in the area.

The proposed scheme includes elements that could potentially present a risk to groundwater beneath the site. We welcome that detailed geo-environmental and hydrogeological assessments (discussed in chapters 11 and 12 of the scoping report) will be considered in detail in the EIA and feel that the proposed scope is reasonably comprehensive. However, we do feel that the following aspects will need to be “scoped in” to the detailed assessments:

Detailed Hydrogeological Modelling

We note that the scheme will increase the run off from areas of hardstanding that will be directed to a single infiltration basin/wetland located to the east of the site following treatment. This will reduce infiltration across areas and increased recharge in one area and potentially influence the hydrogeological flows beneath the site. This will need detailed assessment to demonstrate that the proposed scheme will not significantly alter groundwater flow patterns beneath the site such that it could detrimentally impact on identified receptors.

The proposed discharge of the treated surface water drainage will require a permit under the Environmental Permitting Regulations (England and Wales) 2016. At this time we note that it is proposed to combine the treated surface water flows with treated sewage effluent flows (discussed further below) and discharge via a single infiltration basin; the management and permitting of this combined discharge could present a challenge and we recommend that two separate discharge points are considered going forwards. We recommend that the developer considers parallel tracking the planning and permit applications as this can help identify and resolve any issues at the earliest opportunity.

Discharge of Treated Sewage to Ground

We note that it is proposed to discharge treated sewage effluent originating from the new airport development to ground. We will only agree to developments involving the release of treated sewage effluent to ground if it is satisfied that it is not reasonable to make a connection to the public foul sewer. At this time no detailed explanation has been provided as to why it is not possible to provide a connection to the public sewer. Given the scale of the development we are concerned that this proposed discharge of treated sewage effluent to ground could potentially have a significant impact on the groundwater quality in the underlying Chalk Principal Aquifer. If it is not possible to connect to the public foul sewer a detailed hydrogeological risk assessment of the proposed discharge will be required as part of the EIA; if it cannot be demonstrated that this discharge will not detrimentally impact on groundwater quality in the underlying Chalk Principal Aquifer this approach will not be acceptable. The hydrogeological assessment should include consideration of the potentials effects that both chemical and microbiological contaminants may have on the underlying aquifer, details of the proposed treatment process, details of the proposed discharge arrangement and long term monitoring (including groundwater quality monitoring) arrangements.

In addition to the above, the proposed discharge of treated sewage effluent to ground will require a permit under the Environmental Permitting Regulations (England and Wales) 2016 and at this time insufficient detail has been provided to know if this discharge can meet our requirements to prevent pollution. If the discharge of treated sewage effluent to ground is unavoidable we recommend that the developer considers parallel tracking the planning and permit applications as this can help identify and resolve any issues at the earliest opportunity.

We would also suggest that sewage effluent is added to the likely key impacts to the water environment during operation in Sec 12, 12.6.5

Fire training ground

Sec 3, 3.4.27 notes that the fire training ground is going to be moved to the south of the runway. There is then mention of the impacts that the fire training ground could have on air quality and also on noise. However no mention of the impact it could have on water quality. p251 mentions 'airport related pollutants' but we would prefer to see a specific

mention to the fire training ground as an individual issue due to potential issues relating to the use of firefighting foam, hydrocarbons and fire water run-off.

Should you have any queries please contact me

Yours faithfully

Mr Kai Mitchell
Sustainable Places Planning Specialist

Tel: 0203 0259074

E-mail HNL.SustainablePlaces@environment-agency.gov.uk

Rafferty, Conor

From: ESP Utilities Group Ltd <donotreply@espug.com>
Sent: 01 April 2019 15:09
To: Luton Airport
Subject: Your Reference: TR020001 Our Reference: PE138466. Plant Not Affected Notice from ES Pipelines

Luton Airport
The Planning Inspectorate

1 April 2019

Reference: TR020001

Dear Sir/Madam,

Thank you for your recent plant enquiry at: London Luton Airport.

I can confirm that ESP Utilities Group Ltd has no gas or electricity apparatus in the vicinity of this site address and will not be affected by your proposed works.

ESP Utilities Group Ltd are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

Important Notice

Please be advised that any enquiries for ESP Connections Ltd, formerly known as British Gas Connections Ltd, should be sent directly to us at the address shown above or alternatively you can email us at: PlantResponses@espug.com

Yours faithfully,

Plant Protection Team
ESP Utilities Group Ltd



Bluebird House
Mole Business Park
Leatherhead
KT22 7BA

☎ 01372 587500 📠 01372 377996

<http://www.espug.com>

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eandem@forestrycommission.gov.uk

Tel: 0300 067 4574
Fax: 01842 811309

Area Director
Steve Scott

Your Ref: TRO20001_000042_190401

Date: 2/4/19

Dear Sir or Madam,

Application by London Luton Airport Limited (LLAL) (the Applicant) for an Order granting Development Consent for the Expansion of London Luton Airport (the Proposed Development)

Thank you for seeking the Forestry Commission's advice about the impacts that this application may have on Ancient Woodland.

Having read the London Luton Airport Limited Scoping Report it is clear that Government Policy relating to ancient woodland, the biodiversity and landscape importance of native woodland and the need for compensation for the loss of woodland and veteran trees have been included in the Report. The Forestry Commission therefore has no further comment to make.

The links below are for your reference to further technical information set out in Natural England and Forestry Commission's [Standing Advice on Ancient Woodland](#) – plus supporting [Assessment Guide and Case Decisions](#).

As a Non Ministerial Government Department, we provide no opinion supporting or objecting to an application. Rather we are including information on the potential impact that the proposed development would have on the ancient woodland.

These comments are based upon information available to us through a desk study of the case, including the [Ancient Woodland Inventory](#) (maintained by Natural England), which can be viewed on the [MAGIC Map Browser](#), and our general local knowledge of the area.

If the planning authority takes the decision to approve this application, we may be able to give further support in developing appropriate conditions in relation to woodland management mitigation or compensation measures. Please note however that the Standing Advice states that We suggest that you take regard of any points provided by Natural England about the biodiversity of the woodland.

We hope these comments are helpful to you. If you have any further queries please do not hesitate to contact me.

Yours sincerely

Neil Jarvis
Local Partnership Advisor.
Direct dial – 0300 067 4571

A summary of Government policy on ancient woodland

[Natural Environment and Rural Communities Act 2006](#) (published October 2006).

Section 40 – “Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”.

[National Planning Policy Framework](#) (published July 2018).

Paragraph 175 – “*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*”.

[National Planning Practice Guidance](#) – Natural Environment Guidance. (published March 2014)

This Guidance supports the implementation and interpretation of the National Planning Policy Framework. This section outlines the Forestry Commission’s role as a non statutory consultee on “*development proposals that contain or are likely to affect Ancient Semi-Natural woodlands or Plantations on Ancient Woodlands Sites (PAWS) (as defined and recorded in [Natural England’s Ancient Woodland Inventory](#)), including proposals where any part of the development site is within 500 metres of an ancient semi-natural woodland or ancient replanted woodland, and where the development would involve erecting new buildings, or extending the footprint of existing buildings*”

It also notes that ancient woodland is an irreplaceable habitat, and that, in planning decisions, **Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland in the National Planning Policy Framework.** It highlights the Ancient Woodland Inventory as a way to find out if a woodland is ancient.

[The UK Forestry Standard](#) (4th edition published August 2017).

Page 23: “Areas of woodland are material considerations in the planning process and may be protected in local authority Area Plans. These plans pay particular attention to woods listed on the Ancient Woodland Inventory and areas identified as Sites of Local Nature Conservation Importance (SLNCIs)”.

[Keepers of Time](#) – A Statement of Policy for England’s Ancient and Native Woodland (published June 2005).

Page 10 “The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland”.

[Natural Environment White Paper “The Natural Choice”](#) (published June 2011)

Paragraph 2.53 - This has a “renewed commitment to conserving and restoring ancient woodlands”.

Paragraph 2.56 – “The Government is committed to providing appropriate protection to ancient woodlands and to more restoration of plantations on ancient woodland sites”.

[Standing Advice for Ancient Woodland and Veteran Trees](#) (first published October 2014, revised November 2018)

This advice, issued jointly by Natural England and the Forestry Commission, is a material consideration for planning decisions across England. It explains the definition of ancient woodland, its importance, ways to identify it and the policies that are relevant to it.

The Standing Advice refers to an [Assessment Guide](#). This guide sets out a series of questions to help planners assess the impact of the proposed development on the ancient woodland.

[Biodiversity 2020: a strategy for England’s wildlife and ecosystem services](#) (published August 2011).

Paragraph 2.16 - Further commitments to protect ancient woodland and to continue restoration of Plantations on Ancient Woodland Sites (PAWS).

Importance and Designation of Ancient and Native Woodland

Ancient Semi Natural Woodland (ASNW)

Woodland composed of mainly native trees and shrubs derived from natural seedfall or coppice rather than from planting, and known to be continuously present on the site since at least AD 1600. Ancient Woodland sites are shown on Natural England's Inventory of Ancient Woodland.

Plantations on Ancient Woodland Site (PAWS)

Woodlands derived from past planting, but on sites known to be continuously wooded in one form or another since at least AD 1600. They can be replanted with conifer and broadleaved trees and can retain ancient woodland features, such as undisturbed soil, ground flora and fungi. Very old PAWS composed of native species can have characteristics of ASNW. Ancient Woodland sites (including PAWS) are on Natural England's Inventory of Ancient Woodland.

Other Semi-Natural Woodland (OSNW)

Woodland which has arisen since AD 1600, is derived from natural seedfall or planting and consists of at least 80% locally native trees and shrubs (i.e., species historically found in England that would arise naturally on the site). Sometimes known as 'recent semi-natural woodland'.

Other woodlands may have developed considerable ecological value, especially if they have been established on cultivated land or been present for many decades.

Information Tools – The Ancient Woodland Inventory

This is described as provisional because new information may become available that shows that woods not on the inventory are likely to be ancient or, occasionally, vice versa. In addition ancient woods less than two hectares or open woodland such as ancient wood-pasture sites were generally not included on the inventories. For more technical detail see [Natural England's Ancient Woodland Inventory](#). Inspection may determine that other areas qualify.

As an example of further information becoming available, Wealden District Council, in partnership with the Forestry Commission, Countryside Agency, the Woodland Trust and the High Weald AONB revised the inventory in their district, including areas under 2ha. Some other local authorities have taken this approach.

Further Guidance

[Felling Licences](#) - Under the Forestry Act (1967) a Felling Licence is required for felling more than 5 cubic metres per calendar quarter. Failure to obtain a licence may lead to prosecution and the issue of a restocking notice.

**Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017(the EIA Regulations)**

Regulations 10 and 11

**Application by London Luton Airport Limited (LLAL) for an Order granting
Development Consent for the
Expansion of London Luton Airport**

PINS Reference: TR020001

Response to Scoping Report on behalf of the Host Authorities

**Hertfordshire County Council, North Hertfordshire District Council,
Central Bedfordshire Council and Luton Borough Council**



**Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017(the EIA Regulations) –
Regulations 10 and 11**

**Application by London Luton Airport Limited (LLAL) (the Applicant) for an
Order granting Development Consent for the Expansion of London Luton
Airport (the Proposed Development)**

**Response to Scoping Report on behalf of Hertfordshire County Council,
North Hertfordshire District Council, Central Bedfordshire Council and
Luton Borough Council**

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APPENDIX 1: MEMORANDUM BY COLE JARMAN REGARDING NOISE

VINCENT AND GORRING
STERLING COURT
NORTON ROAD
STEVENAGE
HERTS
SG1 2JY

Martin.friend@vincent-gorring.co.uk

29 April 2019

1.0 INTRODUCTION

- 1.1 This document provides a response to the report prepared by London Luton Airport Limited (“LLAL”) entitled “*Future LuToN: Making the best use of our runway: Environmental Impact Assessment Scoping Report*” (herein referred to as “the SR”).
- 1.2 LLAL propose to increase the capacity of London Luton Airport (LTN) to 32 million passengers per annum (mppa) and propose to apply for a DCO under the Planning Act 2008 (PA2008) as the ‘Proposed Development’ is a nationally significant infrastructure project under Section 23 of that Act.
- 1.3 The ‘Proposed Development’ includes a number of elements including *inter alia* an extended airfield platform, a new terminal, additional taxiways and aprons, additional parking, various airside and landside facilities, changes to surface access, surface water management, landscaping and replacement open space. The Proposed Development will increase the airport’s air transport movements (ATMs) from the current capacity of 140,000 ATMs to 212,500 ATMs by 2038.
- 1.4 This response has been prepared by Vincent and Gorbing (V+G) and represents the joint response of :-
- Hertfordshire County Council (“HCC”)
 - North Hertfordshire District Council (“NHDC”)
 - Central Bedfordshire Council (“CBC”); and
 - Luton Borough Council (“LBC”)
- 1.5 Local authorities are identified as consultation bodies under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 as each local authority that is defined within s43 of the PA2008.
- 1.6 Each of the above authorities fall into the s43 definition and each is in their own right a ‘host authority’ for the purposes of the Proposed Development

as some part of the land within their municipal area falls within the draft Development Boundary.

- 1.7 V+G have co-ordinated the responses of officers of each of the host authorities as well as reviewed the SR themselves. In addition, Cole Jarman has provided specialist technical input on noise and their comments in the form of a Memorandum are attached as Appendix 1.
- 1.8 In providing a single joint response, the host authorities emphasise the value of engagement wherever possible on a joint and co-ordinated basis throughout the DCO process. Where possible, the authorities will in turn seek to provide a single joint response to both LLAL and the SoS as matters progress.
- 1.9 Unless otherwise specified, the views expressed in this document are shared by all four authorities and for clarity the word 'we' in this document refers to those authorities.

2.0 GENERAL COMMENTS

DESCRIPTION OF THE DEVELOPMENT

- 2.1 The SR states at para. 3.1.1 that at this stage the description of the Proposed Development is indicative and subject to change before the DCO application is submitted. Section 3.5 deals with uncertainty, flexibility and the use of the “Rochdale Envelope.”
- 2.2 We would emphasise that this SR and the response to it, together with the Scoping Opinion that will be subsequently issued by the SoS, relate to the Proposed Development as described in the SR itself. If the Proposed Development were to change to any material degree, we consider that a further scoping stage would be needed so that all stakeholders, including the four host authorities, can ensure that the Environmental Statement (ES) will be comprehensive and robust.
- 2.3 We understand that some flexibility may be required as the design of the scheme progresses. However, LLAL must ensure that the description of the Proposed Development is as accurate and firm as possible as this will form the basis of the Environmental Impact Assessment (EIA). We would wish to ensure the highest possible degree of certainty by the time the ES is submitted with the DCO. The description of the Proposed Development provided in the ES must be sufficiently certain to meet the requirements of the EIA Regulations. The ES must include a detailed description of all components of the Proposed Development and should include reference to the location, alignments and dimensions of each individual element, including maximum heights, design parameters and limits of deviation.
- 2.4 The SR notes (para. 2.2.18 and paras. 3.4.37 – 3.4.44) that the Proposed Development will require off-site highway improvements but the nature and extent of these is yet to be confirmed. Whilst LLAL appear confident that such interventions will all be within the highway boundary, we consider that this is a further area of uncertainty that needs to be resolved as soon as possible. These changes could themselves have environmental effects that

need to be considered in the ES (further comment is made on this in Section 3.0 below).

2.5 The description of the development highlights that the existing Wigmore Valley Park is located within the boundary of the Main Application Site, directly east of LTN. The SR highlights at para. 2.2.4 that this provides open space and recreational facilities. is designated as an Area of Local Landscape Value and parts of the park are designated as a County Wildlife Site (CWS).

2.6 The impact on these facilities relocation is a significant concern to the host authorities. The Proposed Development should provide detail and certainty regarding future reconfiguration and impact on existing agricultural land, how acceptable and uncongested access/egress including parking and public transport will be achieved, future improvements to facilities and future management responsibility and funding (at no cost to the host authority). This will be a key embedded mitigation of the proposals, having an impact across a number of different topic areas including health, transport, biodiversity and landscape.

JUSTIFICATION AND ALTERNATIVES

2.7 It is noted that the ES will include a description of a 'Do Nothing' scenario. Alongside this, we would expect LLAL to provide a robust justification as to the passenger numbers forecast to be accommodated by the Proposed Development. The justification for the passenger numbers proposed should necessarily consider forecast/proposed growth at other airports (particularly but not exclusively in the South East) and the extent to which the Business Case for LTN, taking account of other proposals, supports the level of growth proposed and justifies the associated environmental impacts at Luton compared to elsewhere.

2.8 The ES should provide details of all assumptions used to underpin the passenger forecasts and prior to its preparation allow for further consultation regarding those assumptions. The host authorities should be allowed the

opportunity to understand and if possible agree the passenger forecasts as part of the EIA process.

CONSTRUCTION

2.9 The SR provides little information on construction processes and the construction phasing information (paras. 3.6.2 – 3.6.7) is high level.

2.10 The ES should include a clear description of the construction process in each Phase including *inter alia*:-

- land use requirements including where there is temporary and permanent change;
- further detail on the construction programme for each phase;
- construction hours, including confirmation of whether night time working is required;
- site preparation processes;
- construction processes and methods;
- vehicle routes for construction materials; number of movements and parking of construction vehicles (both HGVs and staff)
- further detail on the nature and quantity of materials used, as well as waste arisings and their disposal; and
- emissions during construction - air pollution, noise, vibration and light.

2.11 The SR is also lacking in any detail as to the impact of construction workers on the area and in particular any potential impact on the availability of local housing.

2.12 We understand the rationale for a Draft Code of Construction Practice at application stage but this document will form a key mitigation tool during construction. We therefore question to what extent it can be relied upon if it were not to be a certified document at the time the DCO was made. We

consider that the maximum amount of certainty regarding environmental mitigation during construction should be achieved as early in the DCO process as possible.

- 2.13 On a specific point regarding phasing and construction, Table 3-2, showing Forecast Passenger Demand and Capacity Phasing indicates that the existing terminal capacity increases to 21 mppa for one year in 2022. It is unclear as to why this might be the case given its capacity remains at 18mppa both prior to and after this date. We assume that this reflects a conscious choice to limit its capacity as the new terminal opens, but the inference is that the original terminal could take an additional 3mppa each year after 2022 if LLAL so chose.

POLICY CONTEXT

- 2.14 The Development Plans and other adopted strategies of the four host authorities will be important and relevant matters in the determination of the DCO. As the SR highlights, there are emerging plans in both NHDC and CBC and the ES will need to reflect the most up-to-date position in respect of these plans at the time the DCO is submitted; the SoS will in turn need to consider their status at the time of the decision on the DCO. The same applies in respect of the Government's aviation policy. It is noted in the SR (for example at 10.2.10) that this is yet to be finalised.
- 2.15 The Policy Context section of the SR is selective in its identification of relevant local planning and transportation policies. Chapter 4 includes no reference to other Local Transport Plans (LTPs) aside from HCC's, albeit these are mentioned in topic specific chapters. However, some of the topic chapters are not comprehensive. For example, Chapter 7, Traffic and Transport, does not deal with other policies in the relevant LTPs that apply to all forms of development.
- 2.16 Moreover, the SR may need to consider the policy context applicable in authorities beyond the host authorities themselves, if significant environmental effects arise in adjoining authorities through, for example, the increase in ATMs. We note that the study area for noise is yet to be defined

and cannot be until noise modelling is undertaken. The increase in ATMs and associated noise may give rise to impacts on, for example, biodiversity, designated heritage assets, landscape and health in other authorities. In this case, the SR should consider relevant policies applying to those areas.

- 2.17 It is accepted that topic specific chapters of the ES will need to undertake topic-specific policy analysis. It is assumed however, that a separate Policy Compliance Statement will be prepared to support the application in due course that will allow for a full analysis of the compliance or conflict of the Proposed Development with national and local planning policy. This should include all authorities where significant effects may arise.
- 2.18 It is to be noted that in Fig 21.3, site allocation KW1 is located in the wrong place and named wrongly: it should be KW1 Kings Walden not East of Luton.

CUMULATIVE EFFECTS

- 2.19 We are concerned that the use of a 'projects/developments within the last 5 years' (para. 21.4.15) may exclude some very large and complex developments from consideration as part of the Cumulative Effects Assessment (CEA). Justification for this approach and whether it results in the exclusion of such projects should be provided.
- 2.20 The SR states (para. 21.4.23) 'Professional judgement will be used in the development and application of the inclusion and exclusion criteria, and relevant planning authorities and statutory consultees will be consulted.' We welcome further engagement on the methodology for identifying cumulative projects to be included in the CEA.
- 2.21 Table 21-2 of the SR notes that the transport and traffic assessment, based on surface access modelling, is inherently cumulative as it includes employment and housing development projections. There needs to be clarity that the list of cumulative developments (including Local Plan allocations) that are taken into account within the CEA are aligned with the traffic modelling to ensure that the latter does not underestimate impacts.

- 2.22 The SR indicates that it will consider local development plans, policies and programmes “to determine present and future potential interactions with the Proposed Development.” We consider this to be particularly important to ensure that the CEA follows the advice set out in Advice Note 17: Cumulative Effects Assessment (AN17). It must include a comprehensive assessment in relation to local plans.
- 2.23 The SR states (para. 21.4.31) that the same significance criteria will be used in relation to each topic when undertaking the CEA. This suggests an ‘additive’ approach to cumulative effects is proposed. However, the ES should ensure that any synergistic cumulative effects are also identified, where relevant.
- 2.24 There is no mention of the cumulative effects of expansion at other airports (for example London Heathrow and Stanstead) and whether cumulative effects from increased air traffic generally will result. If this is not to be considered the Applicant should justify this.

MONITORING

- 2.25 The host authorities consider that the ES should set out how the monitoring of the success or otherwise of mitigation proposals will be undertaken, and the process for amending mitigation if its effectiveness is demonstrated through monitoring to be not achieving the outcomes predicted. This will require on-going monitoring and reporting protocols that should be established in the DCO and should consider both construction and operational phases of the Proposed Development. During construction, for example, greater environmental impacts arising than assumed in the ES could require changes to working practices set out in the CEMP. During operation, further mitigation may be necessary in respect of aspects such as traffic congestion, noise, air quality or landscape effects to ensure that the local communities around the airport are suitably protected.

AIRSPACE CHANGE PROCESS

- 2.26 We note at Section 5.5 that the airspace change process is outside of the scope of the LLAL proposed DCO and that environmental assessment will

be based on existing flightpaths, with sensitivity testing if new flightpaths become available within a timeframe suitable to be included in the DCO process. Although we accept that they are distinct, there is a clear interface between the two processes with the ACP process potentially substantively changing the environmental impacts of the airport as assessed within the ES and judgements underpinning the DCO decision-making process and mitigation requirements. We consider that this matter should be recognised and kept under review.

3.0 EIA METHODOLOGY AND SCOPE

- 3.1 In general, we support the EIA methodology set out in the SR and the scope of topics to be covered.

SCOPE OF ASSESSMENT

- 3.2 We support the topics covered in the SR.
- 3.3 We consider that the Topic Chapter on 'Health and Community' should be divided into two separate chapters dealing with 'Health' and 'Community' respectively. We consider that this will ensure a clear assessment of two discrete areas – the health of the population overall and groups within it and the impact on community infrastructure. We comment below in section 4.0 on some aspects of the chapter as presently proposed.
- 3.4 There are two 'topic areas' that we consider would usefully have their own ES chapters.
- 3.5 The first is lighting. Clearly the Proposed Development will have a significant impact in terms of light pollution and this will impact on surrounding areas (both built areas - residential etc and on the natural landscape/environment).
- 3.6 Paragraphs 5.4.19 – 5.4.25 of the Scoping Report discusses the inclusion of a Lighting Assessment 'as part of the ES'. We assume that the proposal is for the lighting assessment to be a Technical Appendix and cross referred to by topic chapters. However, given the importance of this subject we consider that a specific ES chapter may be more appropriate to ensure that all effects arising from the lighting proposals associated with the Proposed Development are assessed on a comprehensive basis.
- 3.7 The second is Utilities and Services. The Proposed Development will have an impact on both basic utilities (water, electric and gas supplies) and on services and this should be considered including service enhancement or diversions.

STUDY AREAS

- 3.8 We are concerned that for some topic areas the study area is not yet defined (e.g. air quality and transport), is potentially too limited in extent and has not been evidenced, or has been defined but is likely to be related to those topics awaiting definition.
- 3.9 In particular, we consider that the increase in ATMs on flight paths into LTN needs to be fully assessed across all environmental topics in order to establish whether significant environmental impacts will arise at a greater distance from the airport than the Study Areas presently adopted for other topics. This noise study area will need to take account of the change in ATMs which in turn could affect a number of other topic areas including health, community, air quality, biodiversity and heritage. The host authorities will wish to be directly involved in agreeing the study area for noise and transport.
- 3.10 The ES should clearly evidence and justify the final extent of the study area used in each assessment. Where this information is set out in another ES chapter (for example the Zone of Visual Influence is used as a proxy for a 'study area' elsewhere) there should be clear cross referencing and justification.

MITIGATION

- 3.11 The host authorities wish to ensure that the ES is clear on mitigation measures in all topic areas including both primary measures which would form part of the design process, and secondary measures designed to address adverse effects and how these will be secured. We also consider that there should be a clear distinction between mitigation that is proposed in response to effects identified in the ES and that which is inherent in the design of the proposals. In respect of the latter, this relates to our comments above that the design of the scheme needs to be as fixed as possible to allow for a robust EIA process.
- 3.12 It is understood that at this stage of the process there is limited detail around mitigation proposals and LLAL will need to continue close working with the

host authorities to ensure mitigation is agreed. Effective mitigation and how this will be secured is a key concern of the host authorities.

4.0 TOPIC SPECIFIC COMMENTS

AIR QUALITY

- 4.1 In general terms we are satisfied with the approach to Air Quality Assessment.
- 4.2 Surface Access: the inclusion of local and regional traffic modelling that considers the impact on all roads in the area is welcomed as is the provisional identification of the highway mitigation proposals on roads where there is an air quality problem, including the four schemes in Hitchin. As noted in Section 2.0 above, we consider that finalising the off-site highways interventions will be important.
- 4.3 Code of Construction Practice: the inclusion of a Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP) and Air Quality Management Plan is welcomed as key mechanisms for addressing air quality. However, see comments above at para. 2.12 regarding these being in 'draft' rather than certified documents at the time the DCO is determined.
- 4.4 Scoped in/out topics: we accept the range of topics scoped into the ES in respect of air quality with one exception. We do not consider that Emergency Fuel Jettison should be scoped out. This has been the subject of significant issues with local residents over a number of years such that when incidents do occur their effect can be significant. The ES should consider the changes in ATMs and how many of these events could occur in the future and their impact.
- 4.5 Assessment Scenarios/Years: the principle of the approach outlined on pages 62-63 is supported as are the proposed assessment scenarios detailed in para. 5.3.9. However, it is considered that the flexibility retained by para. 5.3.10 is vital and may need to be applied with respect to the air quality modelling.
- 4.6 The following areas of concern are raised :

- a) Localised Air Quality Assessment where highways interventions are proposed: it is noted that the methodology for the assessment of the offsite highway mitigations is yet to be defined. Road traffic issues have direct implications on local air quality. Where off-site highway interventions are proposed, we consider that specialist and localised air quality impact assessment will be required. NHDC have a particular concern in this regard with the four highway mitigations proposed for Hitchin.
- b) Given the identification of highway mitigations within and immediately adjacent to the two Air Quality Management Areas (AQMAs) in Hitchin it will be necessary to demonstrate the general approach and the detailed methodology that will be applied to the Air Quality Assessment to incorporate the various mitigation proposals, as well as the possibility that any one or combination of the various mitigation proposals will not be implemented.
- c) Assessment years: the years provisionally selected for the air quality impact assessment (para. 6.5.9) are only broadly justified in para. 6.5.10 and they do not include 2027 or 2036 which are identified on p.43 as being the years provisionally identified as when design capacity is to be reached for Phase 1 and Phase 2 respectively. The reasons why these two years are not included with the other five assessment scenarios must be justified and agreed, or they should be added to the existing list of assessment scenarios.

An additional scenario year of 2034 or 2036 should be added and is particularly important given that a 9 year gap between the 2029 and 2038 assessment scenarios is currently proposed. At the very least an additional scenario should be added in between the proposed dates – potentially 2034.

- d) Secondary mitigation: in Section 6.8 the absence of any commitment to the provision of secondary mitigation (as defined in para. 5.3.26) is unacceptable.

- e) AQIA Scoping: a commitment is required that a standalone and detailed Air Quality Impact Assessment Scoping Document is submitted to the host authorities for agreement prior to its implementation. This requirement reflects the fact that only the broad principles of the Air Quality Impact Assessment have been provided in this EIA SR.

4.7 The following points of detail are also raised.

4.8 Paragraph 6.4.16 states that “*There are no Part A process (sic) with emissions to air listed on the Environment Agency website within approximately 10km of the Main Application Site.*” It should be noted that IBC Vehicles Ltd, located on Kimpton Road, is a Part A2 process regulated by LBC.

4.9 Describing Luton AQMA 1, Table 6-3 states that “*No monitoring has been undertaken in the AQMA from 2013 to 2017.*” It should be noted that, as Luton AQMA 1 & 2 overlap, LN15 [Armitage Gardens] and LN86 [Bradley Road (by M1 Bridge)] are in actuality located in both AQMAs.

4.10 Paragraph 6.4.19 states that “*Automatic monitoring of pollutants is undertaken by LBC at three locations...*” Currently, LBC has two auto-analysers (one of nitrogen dioxide [NO₂] and one for particulate matter [PM]) co-located at its monitoring site on Dunstable Road East.

4.11 Paragraph 6.4.24 states that “*LBC operates 47 diffusion tube sites...*” Currently, LBC undertakes diffusion tube monitoring at 42 unique locations.

TRAFFIC AND TRANSPORT

4.12 We consider that LLAL’s approach to transport is key to the acceptability of the Proposed Development. The document recognises the planned growth initiative under the HCC’s Local Transport Plan (LTP4) to make the best use of the existing runway with assessments identifying the capacity of the existing runway being 36-38mppa.

4.13 It also acknowledges Policy 11 of the LTP4, which states “The county council, working in partnership with neighbouring local authorities and airport operators, will seek improvements to surface access to Luton and Stansted Airports, and promote and where possible facilitate a modal shift of both airport passengers and employees towards sustainable modes of transport”. It is therefore vital that the proposed expansion is taken forward in an environmentally sensitive and sustainable manner.

4.14 The following concerns are raised, however, as to certain aspects of the proposed assessment.

Achieving modal shift

4.15 Table 7-1 gives details of the mode of travel to the airport. It shows that Luton has the lowest uptake of public transport when compared to Heathrow, Gatwick, London City and Stansted. During discussions with ARUP (on behalf of LLAL) it was suggested by them that the uptake ought to be similar to that of Gatwick, although that may now be a lower figure similar to Heathrow. Regardless, we consider that all the various modelling scenarios need to have a sensitivity test run with public transport uptake set at its current level in order to ensure the assessment of the worst case scenario.

4.16 The report indicates that the Proposed Development will result in an increase in passenger trips by non-car modes as more passengers use such modes in the coming years. The SR suggests a significant increase in public transport mode share from a baseline 31% of 15.6 mmpa (Table 7-1, p128) to 45% of 32 mmpa passenger transport (Paragraph 3.4.22, p 35).

4.17 The emphasis is therefore to maximise the use of sustainable transport modes and seek to meet modal shift targets. This accords with the Hertfordshire and Luton Local Transport Plans.

4.18 However, the SR appears to give limited attention to rail services, with the network beyond Luton Station apparently not featuring in the ‘Study Area’. The SR will need to consider existing rail capacity and reliability, and the impact of the increased passenger numbers and modal shift on rail capacity

and loadings. The ES should provide clarity on how baselines have been established, how future impacts can be measured, and what enhancement to services may be required in order to achieve the modal shifts suggested.

- 4.19 Moreover, the Proposed Development as presently described appears to propose limited investment in public transport beyond the Direct Air to Rail Transit (DART) system providing links from Luton Airport Parkway station and revised bus and coach stands incorporated in the lower levels of a new multi-storey car park.
- 4.20 The SR acknowledges that public transport improvements are required and that a significant shift to public transport is a key component of any future transport strategy, alongside the introduction of traffic management measures. However, we are concerned by the lack of detail and commitment to improving public transport to achieve modal shift targets and how such improvements will be funded.
- 4.21 Currently, shuttle buses transport passengers between Parkway station and the airport (though the DART should replace this shuttle service in 2021). The reliability and journey time of the bus service can be affected by traffic congestion, which is difficult to predict in advance. These issues can lead to stressful and delayed journeys to the airport. To achieve the delivery of sustainable airport growth at LTN whilst mitigating the negative impacts on the local road network, the Applicant will need to work with the transport authorities and other stakeholders to improve non-car modes of access.
- 4.22 Alongside the required highway improvements and investment in DART, the Applicant will need to consider bus and coach service improvements to bring passengers and staff to the site from areas not linked directly to Luton by rail (for example east-west in Hertfordshire from Stevenage, Hitchin, Welwyn Garden City, Hatfield, Hemel Hempstead and Watford). Such proposals will be important embedded mitigation and at present are under-developed. Improvements could include service frequency enhancements, increased hours of operation, vehicle and technology improvements and price incentives to make the services more attractive to passengers. A genuine commitment to improvements across all passenger transport modes is

required as part of the design of the Proposed Development and associated mitigation measures.

- 4.23 We foresee that this will include working with local authority partners, bus operators and the airport operator to look for opportunities to maximise the levels of passenger transport. This would include through the proposed Intalink Enhanced Partnership currently being developed. The overarching objectives of the partnership (to prioritise bus services in traffic, improve the image of bus services, upgrade bus infrastructure, closer integrate the network and use data and information more smartly) are directly relevant to the application, and should be used in support of increased sustainable travel to Luton Airport.
- 4.24 Priority must be given to facilitating access to high quality public transport, with services that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use rather than private cars. All of the host authorities will need to be certain that such measures are properly costed and delivered through the DCO as essential mitigation. It is crucial to specify the cost of such measures at an early stage of scheme development and to set out delivery mechanisms.
- 4.25 The SR confirms that a Travel Plan will be submitted, but does not identify any long term objectives, targets and indicators to increase for modal share by sustainable methods. Comprehensive details will also be required to set out the actions and measures that need to be taken forward as well as the means of monitoring results to ensure appropriate targets are met within the prescribed timescales.

Potential network impacts

- 4.26 Our main concerns in terms of the potential impact of the proposals upon the Hertfordshire road network relate to the A505 (Hitchin), the A1081 (Harpenden), B653 (Wheathampstead), A602 (Hitchin to Stevenage), M1 and A1(M) junctions. Consideration should therefore be given to any potential changes to the traffic and transport behaviour, particularly potential

stress points at junctions and approach roads and consequential effects on local communities (e.g. in Hitchin), such as severance or intimidation.

4.27 The effects of increased traffic generation on the local and wider highway network need to be fully assessed and the mitigation proposed to minimise disturbance to local communities. Hitchin has several heavily trafficked routes, namely the A505, A600 and A602. These routes carry a significant proportion of through traffic as well as local traffic and often experience peak hour congestion. Table 3-1 of the document sets out potential indicative Offsite Highway improvements including Hitchin Junction improvements. It acknowledges that these will be subject to change following detailed modelling, assessment and engagement with the relevant stakeholders.

4.28 In addition, we are concerned by 'rat running' of airport-related trips through the rural lanes to the east of the airport and this should be considered further through traffic modelling and also the EIA process. This will also need to be explored as part of the joint A505 study and the expectation is that the airport should contribute towards any mitigation identified as part of that work.

Transport Assessment

4.29 Paragraph 7.6.9 of the SR states that the TA will assess the impact of the proposed development on the local highway network and public transport. It acknowledges that changes in the traffic patterns, freight movement and construction traffic will be the principal focus of the Transport Assessment (TA). In the absence of such a study, there is uncertainty associated with the potential impacts of the proposed routing of the transport links and the transport interchange points. These together with a review of consented and planned developments needs to be consolidated collaboratively prior to finalising the TA.

4.30 Paragraph 7.9.3 of the SR indicates that the construction traffic movements would be managed by a Construction Logistic Plan (CLP) and Construction Traffic Management Plan (CTMP). It is important that such documents are produced collaboratively to ensure their effectiveness. In order to minimise

the number of vehicular movements associated with construction, materials used for the construction of the transport links, infrastructure works and new buildings should be sourced locally wherever possible and the use of recycled materials should be considered.

Transport Modelling

- 4.31 The host authorities have been in discussion with LLAL regarding the scope of transport modelling to assess the Proposed Development.
- 4.32 The SR does not go into the same level of detail as a recently discussed Transportation Assessment Scoping note. Our comments on modelling are however as follows.
- 4.33 The EIA process will rely largely on an updated version of the Central Bedfordshire and Luton Traffic Model (CBLTM) to assess the distribution of future year transport trips from the expansion. HCC agreed that the model needed to be expanded to include more highway network in Hertfordshire using information from the HCC Countywide model (COMET) to ensure that full account is taken of the impact on Hertfordshire roads in particular the A1081 to Harpenden, the B653 Lower Luton Road, the A505 to Hitchin and the rural roads around Breachwood Green. We have not yet seen a report detailing the update process or confirming the revised coverage of the model.
- 4.34 The forecast model will need to take into account planned developments within the model area as well as airport growth. As part of the COMET model forecasting process HCC has assembled planning data which is in line with current local plans within Hertfordshire and takes into account developments already within the planning system.
- 4.35 As part of their Cumulative Effects Assessment, the Applicant has assembled their own planning data from publicly available sources. However, the Long List of 'other developments' in Appendix D1 excludes a number of development sites (for example in St Albans District to the south of the airport). We are concerned that the modelling work may

underestimate future highway conditions as a result. The interaction between the CEA and the highway modelling therefore needs to be clarified.

- 4.36 A more localised Vissim model has also been developed looking at the detail of the highway network in the vicinity of the airport (mentioned in Section 7.6.10 of the SR). It is understood that the future year Vissim model will be fed from the CBLTM model but the SR does not refer to how this will be done. Further clarity and detail on this aspect is required and how it will be used for the purposes of the EIA.
- 4.37 The Vissim Local Model Validation Report (LMVR) indicates that the modelled flows and turning movements calibrate well on the key routes of concern to HCC (identified as the A1081; B653 and Eaton Green Road). It should be noted that the Vissim Model study area does not cover the A505 or the rural area to the east of Eaton Green. It should be also noted that it is difficult to identify the turning movements from the Appendix A - Junction Turning Movement Validation Results as provided. The LMVR report should also identify the MCC locations used to develop the peak hour analysis.
- 4.38 The SR claims that the CBLTM includes allowances for development in surrounding areas so no further cumulative impact testing is required. (Para 7.7.5). As highlighted above, this is considered unacceptable.
- 4.39 NHDC in particular have significant concerns over CBLTM's ability to accurately reflect the cumulative impacts of development. This has been specifically raised by NHDC in their representations to the Central Beds Local Plan and the need for further investigation is identified in the subsequent MoU between NHDC and CBC¹. Development East of Luton within North Hertfordshire and that proposed surrounding Hitchin is concentrated closer to the borders and the key transport corridor of the A505 than the Central Beds/Luton model is likely to have assumed so impacts may be underplayed. The reliance on this model may well also therefore under-estimate findings in respect of other issues such as air quality.

¹ <https://democracy.north-herts.gov.uk/documents/s3826/Appendix%20A%20Memorandum%20of%20Understanding%20with%20Central%20Bedfordshire%20Council.pdf>

- 4.40 Section 7.1.6 of the SR refers to the need for daily traffic flows. These will need to be provided in the correct formats for Noise and Air Quality Modelling (ie AADT and 24 hour flows) and we will require this information (along with the results of the environmental modelling work) for the key routes into Hertfordshire including the A1081 to Harpenden, the A505 to Hitchin, the B653 Lower Luton Road, Markyate Road and the rural area to the east of Luton. Any reporting needs to clearly document the data and expansion factors used. Data will also be needed on the percentage of HGVs and traffic speeds on the surrounding highway network.
- 4.41 On a more general point, Table 3.1 lists a number of mitigation measures at junctions in Hitchin. A North Central Hertfordshire Growth and Transport plan along with the A505 strategy is currently being developed. Junction improvement schemes will be required and the form of these will need further discussion.
- 4.42 Concern is raised regarding the suggested highway junction mitigation schemes proposed for Hitchin and the impact these are likely to cause with respect to traffic congestion and delays and how improvements could cater for other modes of sustainable transport. No reference is made to the NHDC Transportation Strategy² which seeks to promote sustainable modes of transport and references further work that is being undertaken with the host authorities regarding the A505 Corridor.

Other matters

- 4.43 Any parties carrying out works on the existing highway or the proposed new highway will need to indemnify the Highways Authorities and keep indemnified against all claims under Part I and Part II of the Land Compensation Act 1973 (including claims the Highways Authorities determine should be met under the provisions of the Noise Insulation Regulations 1988).

² <https://www.north-herts.gov.uk/files/ed14-nhdc-transport-strategy-october-2017pdf-0>

CLIMATE CHANGE

- 4.44 We are broadly in agreement with the proposed approach to Climate Change assessment.
- 4.45 Table 8-9: Key Climate Parameters for potentially significant operation ICCI effects must include additional potential effects of humidity and hotter temperatures as follows:
- Increase in temperature and/or humidity may that result in a greater number of people sleeping with windows open exacerbating impacts of any increased noise levels resulting from increased number of flights and closer proximity of the airport's operational area to the existing residents;
 - Increase in local temperature due to loss of green space (such as Wigmore Valley Park) and increase in the airport's hard standing area in closer proximity to existing residential and commercial properties resulting in exacerbated Urban Heat Island Effect that may adversely impact health and exacerbate noise and pollution impacts of the airport's operations.
- 4.46 We note that whilst para. 8.6.9 indicates that the assessment will consider cumulative effects with respect to In-combination Climate Change Impacts (ICCI) this has not been included in the list of Environmental Topics listed in the Table 21-2: Environmental topics. This omission should be rectified.
- 4.47 The ES should consider the potential for climate change effects to influence the effectiveness of any proposed mitigation measures such as biodiversity proposals. We recommend that consultation on this continues with the host authorities but that the list of stakeholders identified in para. 8.3.1 should include Natural England.
- 4.48 We welcome the proposal at para. 8.8.3 that the ES will explain which mitigation measures would be 'embedded' and which would comprise further or additional mitigation including those incorporated into the Climate Change Adaptation Plan (CCAP). The importance of the CCAP is emphasised and it

should be clear how the mitigation measures within it will be secured through the DCO.

GREENHOUSE GASES

- 4.49 We are broadly in agreement with the proposed approach to Greenhouse Gas emissions assessment.
- 4.50 At Table 9-4: example of GHG emissions source factors by scope of emissions, Scope 3 must include emissions from passengers' journeys to and from the airport.

NOISE AND VIBRATION

- 4.51 LBC commissioned Cole Jarman to provide comments on the EIA Scoping on noise and their report is attached as Appendix 1 to this statement. LBC have used Cole Jarman since at least 2012 to inform the Council as LPA on airport related development including the increase to 18mppa and a number of s73 applications to vary noise conditions. Cole Jarman raise a number of issues and detailed points in response to the SR. The appendix should be seen as part of the response by the host authorities. A summary of the report is as follows.
- 4.52 Professional judgement will be needed to identify the likely geographical extent of the study area, taking account of all noise effects including any that may occur below LOAEL. Definition of the study area for noise is clearly important for other topics.
- 4.53 At some time up to the anticipated capacity of 32mppa, the combination of number and mix of aircraft will lead to community noise levels reaching their highest value. We would expect the assessment to be able to identify and quantify this maximum effect.
- 4.54 We consider that better definition is required on how construction noise and vibration effects will be assessed (as noted in Section 2.0 above, much greater detail on construction will be necessary).

- 4.55 The proposed methodology for assessing the significance of changes in noise depending on the ambient noise levels contains some inconsistencies and requires, in our view, some refinement.
- 4.56 The proposed noise assessment metrics are not complete. There is additional information that should be provided and additional metrics that should be assessed.
- 4.57 The description of how noise effects, especially significant noise effects, will be determined is incomplete and confusing. Section 5.3 of the Scoping Report provides a generic framework for the assessment of environmental effects and this has only been partially adopted into the noise section.
- 4.58 It is proposed to develop a bespoke noise envelope, even though a daytime and night-time noise envelope is already in place at Luton Airport and is set out in the Noise Action Plan (NAP). The relationship between current actual constraints and proposed future constraints should be made clear.
- 4.59 We would expect the noise assessment to include an evaluation of the benefits arising from a revised Noise Insulation Scheme (NIS). The one in place at present is not consistent with proposals set out by the government in Aviation 2050, currently out for consultation.
- 4.60 In addition to the comments by Cole Jarman, we recognise and welcome the use of the Noise Working Group to discuss this matter further. The membership of this should be kept under review and given its importance to local communities, wider consultation with community groups on this issue should be fully recognised with engagement protocols discussed in the Statement of Community Consultation.

SOILS AND GEOLOGY

- 4.61 We agree with the matters scoped in and out in respect of Soils and Geology (Table 5.2, pages 57-58).
- 4.62 It is noted there are no geological or geomorphological features of scientific interest and importance within or immediately adjacent to the proposed development. Therefore this has been scoped out of further assessment

(11.7.1). Whilst this would appear correct from existing information, the requirement for the generation of significant chalk spoil to enable land-raising will create an extensive new quarry face, recognised as one of the development zones (excavation earthworks Fig. 3.1). If this results in new exposures of chalk, this could reveal features of geological interest which may need to be retained as exposed faces. This would need to be assessed in due course and would require consideration in respect of future management and use of the site. This is a direct consequence of the development and so will be an effect of the proposals.

WATER RESOURCES

4.63 We recognise that a full Flood Risk Assessment and Drainage Strategy will be prepared. We would like to see the ES consider the following:-

- If soakaways are to be used to remove surface water, that it will not cause land slip or sink holes.
- If discharge to a watercourse is to be used to remove surface water, it is not going to cause flooding or movement of pollution in to a watercourse.
- We would expect the FRA and Drainage Strategy to fully address any fluvial, groundwater or surface water flood risk areas that require consideration..

4.64 A drainage strategy during construction would also be expected as an integral part of the application.

4.65 The reference at para. 12.2.7 to the use of sustainable drainage systems is considered as relevant to LTN and would be seen as progressive and advantageous, especially in context of full or partial integration with the wider landscape.

4.66 As per the guidance set out at para. 12.2.10 the applicant should assess the effects of the Proposed Development on the surrounding water (distribution) and wastewater treatment network, including the impact on the wastewater treatment works in East Hyde. To this effect the applicant should consult with Affinity Water and Thames Water.

4.67 It is noted that policy LLP36 of the Luton Local Plan is summarised at para. 12.2.16. The text of that policy requires that:

- all development proposals are assessed against the Luton Water Cycle Strategy and consider recommendations of the Strategic Flood Risk Assessment and Luton Flood Risk Management Strategy

- all new development should provide a drainage strategy and those over 100 dwellings must also provide a site specific Water Cycle Strategy.

- developments are expected to incorporate multi-functional sustainable drainage systems (SuDS), which also address water efficiency and rainwater harvesting. SuDS should be designed in accordance with Luton's Sustainable Drainage Advice

(<http://online.flipbuilder.com/mccloy.consulting/tdki/mobile/index.html>)

4.68 The Proposed Development should comply with this policy.

4.69 Policy LLP38 (Pollution and Contamination) of the Luton Local Plan is also relevant to the Proposed Development in relation to water resources, as it refers to satisfactory disposal of surface and waste water, which should deliver water quality improvements where feasible, and should not be detrimental to the management and protection of water resources.

4.70 The Study Area (para. 12.4.1) appropriate to consider the impact on surface water resources should be based on hydrology; i.e. it should consider the impact on surface water catchments from the final outfall from the drainage system, which may fall outside of the suggested 1km zone from the Main Application Site.

4.71 Should connections be proposed into the Thames Water network, or the private airport network that in turns connects to Thames Water network, discharging into the River Lea, the ongoing (unresolved) issues in respect of trade effluent consents and environmental permits for discharge and water quality monitoring should be taken into account and any cumulative impacts

carefully considered and addressed, preferably with the view to provide betterment of the local environment.

- 4.72 In respect of data gathering (para. 12.4.2), Thames Water should be consulted to access current trade effluent consents and available surface and waste water modelling.
- 4.73 In the description of existing conditions (12.4.6 – 12.4.8) it should be noted that the River Lea is also a chalk stream, albeit heavily modified, as noted in para. 12.4.6.
- 4.74 The second attenuation basin in Eaton Green Road (para. 12.4.10) is likely to be part of the airport drainage network and known as the Northern Soakaway, however this is impossible to confirm without an unambiguous reference on a map. Full details of airport related attenuation features are available from Veolia Water who manage the network for the airport. Alternatively, descriptions of the airport drainage network had been provided as supporting documents for discharge of flood and drainage related conditions/variations linked to planning permission for the ongoing expansion of the airport (reference 12/01400/FUL)³.
- 4.75 The Applicant is referred to the Luton Surface Water Management Plan (SWMP - noted as reference 234 on page 238) which identifies two critical drainage areas within the Main Application Site - VAUX and WIGP. The flood mechanisms had been explained in detail in the draft report and should be considered and acknowledged.
- 4.76 The ES should include clear plans showing the locations of the infrastructure described at paras. 12.4.39 and 12.4.40. Details of the airport drainage system operated by Veolia Water should also be mapped and provided as part of the ES. Where connections to existing networks are proposed (this relates to both the Main Application Site and the Off-site Highway Interventions) the applicant will be expected to provided full mapping of the

³ Planning applications are available to view at <https://planning.luton.gov.uk/online-applications/>

sewer network to the final discharge point (in cooperation with the network operator), to ensure that the known current issues are not exacerbated.

- 4.77 The existing surface water drainage characteristics (para. 12.5.4) should be determined using the latest edition of Flood Estimation Handbook (FEH) – i.e FEH13 (2015). For ease of review, it is suggested that the tools available at www.uksuds.com are used as recommended in the Luton's Sustainable Drainage Advice (see comment in respect of para. 12.2.16 at para. 4.67 above).
- 4.78 As well as the provision of a separate FRA and drainage strategy to accompany the ES a Water Cycle Strategy will also be required, to ensure compliance with Policy LLP36 of the Luton Local Plan (given the scale of the proposals is greater than 100 dwellings).
- 4.79 The desktop review of potential risk to groundwater (para. 12.5.5) should also consider the desktop reviews completed for the current phase of airport expansion and submitted for discharge of contamination related conditions/variations linked to the planning permission for the ongoing expansion of the airport (reference 12/01400/FUL).
- 4.80 Damage to existing water infrastructure during construction (para. 12.6.3 last bullet point) should also consider the distribution network of Affinity Water and the private network at the airport.
- 4.81 The FRA (para. 12.8.5) should in particular consider the surface water risk to and appropriate mitigation to ensure a safe operation during the lifetime of the development of the off-site highway interventions in Wigmore Lane. Potential mitigation may consider upstream measures, in which case the proposed development boundary may be affected.

WASTE AND RESOURCES

- 4.82 The inclusion of assessment of 'Waste and Resources' is welcomed and reflects engagement held to date. We agree that the ES should scope in most of the waste which would arise from the Proposed Development.

- 4.83 The document refers to the National Planning Policy Framework (NPPF), National Planning Policy for Waste (NPPW), National Waste Plan and the most recent Waste and Resources Strategy. It may be beneficial to add details of the National Planning Policy Guidance (NPPG) which also contains waste specific guidance. References made to adopted policies in the HCC Waste Local Plan are welcomed as are those made to the other County and Local plan policies.
- 4.84 Of specific concern is Table 13.3 which details landfill inputs and capacities for Hertfordshire and states that there is 733m³ of Non-Hazardous landfill capacity in the county. Whilst this might be the case at present, the last remaining non-hazardous landfill facility is due to close in 2021, leaving no capacity for non-hazardous landfill in the county. This table also quotes figures from 2017 which will need to be updated to give a true picture of site availability (e.g. those with remaining capacity may not be continuing for planning reasons).
- 4.85 Table 13-3 also identifies 609,000 tonnes input into non-hazardous landfill sites in Bedfordshire in 2017. It should be noted that this was not non-hazardous waste but inert waste for restoration purposes at non-hazardous sites.
- 4.86 Para 13.7 states that waste arising from extraction, processing and manufacture of construction components and product is 'scoped out' and this is understood and accepted.
- 4.87 Reference is made at 11.4.22 to the presence of the historic landfill at Eaton Green and the need to excavate the site, in part, to deliver the Proposed Development. Whilst it is noted that preliminary ground investigations have identified 'a large proportion of daily cover material', there is evidence of other types of waste (domestic/mixed) and therefore the need to seek suitable options for treatment and/or disposal. We are keen to ensure that the waste is moved up the hierarchy and that the scarcity of facilities and disposal sites for any waste that is deemed to be hazardous is fully considered.

- 4.88 The use of 'designing out waste' workshops, Site Waste Management Plans, Code of Construction Practice (CoCP) (subject to our comments above) and Contaminated Land: Applications in Real Environments (CL:AIRE) code of practice (as set out in para 13.8) is supported.

ECONOMICS AND EMPLOYMENT

- 4.89 In general, we consider the approach to Economic and Employment robust. The ES should make clear how LLAL will mitigate any impact and maximise any opportunities for local businesses and fully address this issue in the ES.
- 4.90 The ES should include proactive measures to spread the potential benefits of the Proposed Development to business and the community in the wider area. Businesses and residents around the airport will experience increased noise, traffic and other undesirable effects of the expansion, whilst what mitigation there is in the document relates largely to upskilling residents (probably largely within Luton) to take advantage of both the construction and operational phases there is little offered to the wider area.
- 4.91 In addition, the ES should set out proactive measures for opening up of construction and operational supply chains to local businesses in Luton and the wider area and this should be included as a commitment in an Employment and Skills strategy.
- 4.92 Proactive advertising of spin-off and supply chain construction and operational business opportunities to local companies and a drive to bring foreign tourists to the area for e.g. weekend breaks would indicate that LLAL appreciate this and have a strategy for spreading the benefits of the expansion.
- 4.93 We are unclear as to whether the references in paragraph 14.4.15 should be to 'Bedfordshire' rather than 'Bedford.'

HEALTH AND COMMUNITY

- 4.94 All of the host authorities have a duty to ensure that the health and wellbeing of their residents are not adversely affected by Proposed Development.

- 4.95 The chapter seeks to cover both health and community resources although appears to focus largely on health issues as the more easily identifiable and quantifiable. As noted in Section 3.0 above we consider that two separate chapters should deal with these issues.
- 4.96 The ES should consider the potential impact on open space in particular given the proposed impacts on Wigmore Valley Park and its proposed extension into North Hertfordshire. Through this chapter the ES should consider the impact of this proposal on accessibility, biodiversity, and public usage. This will require details of the proposals for the area of open space and the future management and funding arrangements.
- 4.97 The SR does not appear to consider the impact of the development on local housing markets either during the construction stage or during operation. Particularly during construction, the ES should consider to what extent the temporary influx of significant numbers of construction workers could affect the private rental market and whether mitigation in the form of, for example, greater efforts to use those already in the local labour market would be practicable. More broadly the ES should consider the effects during construction on the provision of public services, related to temporary employment generated during the construction phase of the Proposed Development. Whilst these might be temporary, their nature and duration and any likely significant effects and any mitigation that may be required should be considered. This is mentioned briefly in para. 15.6.3 but the ES should include a detailed consideration of this matter.
- 4.98 The commitment to undertake a Health Impact Assessment is fully supported and in our view this is a key document for the EIA process. The HIA should be fully inclusive of the residents and communities in all four host authorities.
- 4.99 The study area and spatial scope of health pathways should be confirmed with the host authorities. Understanding the HIA study area and where its spatial boundary extends to is crucial. We are concerned that the assessment of health impact assessment will be restricted to wards around the airport. It is well known that pollutant PM can travel over great

distances, dependent on weather conditions and therefore measuring at source or within a 15km area will not provide an accurate impact for this pollutant on public health. The study area suggested does not take into account the transient nature of PM dependent on wind conditions

- 4.100 Monitoring PM2.5 across the town and across County boundaries will be required to identify a baseline and to assess possible impact. It may be possible to request that NHS Digital re-models Public Health Outcomes Framework (PHOF) 3.01 for Luton and surrounding areas with expansion data to understand likely impact of pollutant PM2.5 on fraction of adult mortality
- 4.101 Data, evidence and intelligence needs should be communicated at the earliest opportunity in order to allow for appropriate engagement on this matter.
- 4.102 The following points are raised by way of clarification.
- 4.103 The 'Local Policy' subsection of 15.2 omits the Hertfordshire Health and Wellbeing Strategy⁴, and does not make reference to any Hertfordshire Joint Strategic Need Assessments.⁵
- 4.104 The 'Guidance' subsection of 15.2 makes clear that because there is no statutory guidance for HIA, the approach will draw on best practice. We recommend that the Welsh Health Impact Assessment Unit's *Health Impact Assessment: A Practical Guide* is also referenced here⁶. This methodology has been used extensively in relation to transport planning, regeneration, land-use planning and industrial proposals; it may offer additional scope to compliment other methodologies that may lend themselves more towards other types of development.
- 4.105 Para. 15.5.14 mentions size of the 'exposed population' – increased traffic into area will increase pollutants including PM2.5 – it is unclear how the

⁴ <https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/partnerships/hertfordshire-health-and-wellbeing-strategy-2016---2020.pdf>

⁵ <https://www.hertfordshire.gov.uk/microsites/JSNA/Hertfordshires-Joint-Strategic-Needs-Assessment.aspx>

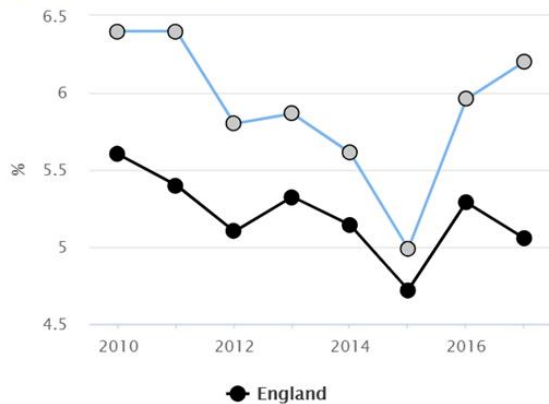
⁶ <https://whiasu.publichealthnetwork.cymru/en/resources/>

magnitude of impact will be assessed with the transient nature of this pollutant within 'exposed population area.'

- 4.106 The approach in para. 15.5.18 and Table 15-2 suggests the current baseline is acceptable. PHOF 3.01 indicates a worsening fraction of adult mortality rate in Luton attributed to human-made particulate matter. A result of a 'minor' magnitude of impact may look positive but given the already 'high' baseline any increase is likely to significantly impact public health and impact public health further afield than the suggested 'exposed population' because of the transient nature of pollutant PM2.5. The methodology therefore needs to identify if the baseline is already of a public health concern prior to determining the magnitude of effect.
- 4.107 Below is data identifying current pollution data PHOF 3.01 – even a minor rise in PM levels could increase mortality rates significantly. Mitigation proposals need to be considered and their effectiveness evidence based.

Fraction of mortality attributable to particulate air pollution Luton

Proportion - %

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Recent trend: -

Period		Count	Value	Lower CI	Upper CI	East of England region	England
2010	○	-	6.4%	-	-	5.6%	5.6%
2011	○	-	6.4%	-	-	5.5%	5.4%
2012	○	-	5.8%	-	-	5.3%	5.1%
2013	○	-	5.9%	-	-	5.6%	5.3%
2014	○	-	5.6%	-	-	5.4%	5.1%
2015	○	-	5.0%	-	-	5.1%	4.7%
2016	○	-	6.0%	-	-	5.4%	5.3%
2017	○	-	6.2%	-	-	5.5%	5.1%

Source: Background annual average $PM_{2.5}$ concentrations for the year of interest are modelled on a 1km x 1km grid using an air dispersion model, and calibrated using measured concentrations taken from background sites in Defra's Automatic Urban and Rural Network (<http://uk-air.defra.gov.uk/interactive-map/>). Data on primary emissions from different sources and a combination of measurement data for secondary inorganic aerosol and models for sources not included in the emission inventory (including re-suspension of dusts) are used to estimate the anthropogenic (human-made) component of these concentrations. By approximating LA boundaries to the 1km by 1km grid, and using census population data, population weighted background $PM_{2.5}$ concentrations for each lower tier LA are calculated. This work is completed under contract to Defra, as a small extension of its obligation under the Ambient Air Quality Directive (2008/50/EC). Concentrations of anthropogenic, rather than total, $PM_{2.5}$ are used as the basis for this indicator, as burden estimates based on total $PM_{2.5}$ might give a misleading impression of the scale of the potential influence of policy interventions (COME AP, 2012).

Search results for **air pollution** [County & UA \[12\]](#) [County & UA \(post 4/19\) \[3\]](#) [District & UA \[9\]](#) [District & UA \(post 4/19\) \[1\]](#) [Region \[11\]](#)

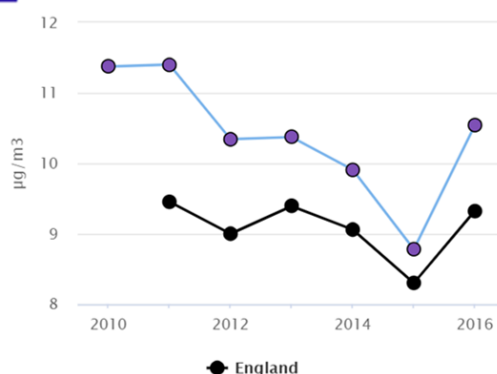
Show me the profiles these indicators are from

Compared with benchmark: ● Better ● Similar ● Worse ○ Not compared

Quintiles: Best ● ● ● ● ● Worst ○ Not applicable

Trends for **Luton** **All in east of England region** Display **Selected indicator** All indicators

Air pollution: fine particulate matter Luton

Mean - $\mu\text{g}/\text{m}^3$
[Export chart as image](#)
[Show confidence intervals](#)
[Export chart as CSV file](#)


Recent trend: -

Period		Count	Value	Lower CI	Upper CI	East of England region	England
2010	●	-	11.4	-	-	-	-
2011	●	-	11.4	-	-	9.8	9.5
2012	●	-	10.3	-	-	9.3	9.0
2013	●	-	10.4	-	-	9.8	9.4
2014	●	-	9.9	-	-	9.5	9.1
2015	●	-	8.8	-	-	9.1	8.3
2016	●	-	10.5	-	-	9.6	9.3

Source: Defra: various instruments used to derive estimates including Pollution Climate Mapping model, Automatic Urban and Rural Network and National Atmospheric Emissions Inventory. Also make use of census population estimates (ONS). See https://uk-air.defra.gov.uk/data/pcm-data#population_weighted_annual_mean_pm25_data for more detail.

- 4.108 At para. 15.5.20 it is stated there are quantifiable measures associated with measuring associated exposure to noise and air pollution – while this is true, again PM2.5 pollutant effect across the whole of Luton and in bordering areas needs to be considered. PHOF 3.01 fraction of mortality attributed to particulate matter should be recalculated using new modelling data based on London Luton Airport expansion data.
- 4.109 We are unconvinced that at this stage the health effects from increased population exposure to air pollutants can be scoped out. Dealing with localised impacts through the AQA only is likely to conceal differential impacts on different groups in the population. Moreover, adopting this approach negates the potentially wider impacts of PM.
- 4.110 With reference to the approach of para. 15.7.2, the baseline of air quality should be considered, as set out above. EU and UK limits while providing a standard do not recognise that harms to health are possible at and below standard limits. Current baseline readings of air quality will give a better understanding of the magnitude and significance of effects. Again, the assumptions of air quality impacts ignore transient properties of PM.
- 4.111 In respect of the impact of noise on health the specific noise criteria needs to be measured in order that the WebTAG analysis can take place.
- 4.112 The potential for mitigation during operation should be considered further beyond the three opportunities stated at para. 15.8.2⁷. Mitigation is largely considered as a construction process issues. We consider that a long term strategy to mitigate/reduce/prevent negative impacts of expansion on public health is crucial.

AGRICULTURAL LAND QUALITY AND FARMING CIRCUMSTANCES

- 4.113 In respect of the effects of the proposed development on agricultural interests, there are several issues with potential ecological consequences, including soil resources, agricultural holdings (and therefore management

⁷ PHE evidence review of interventions to improve outdoor air quality and public health should be considered.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/795185/Review_of_interventions_to_improve_air_quality.pdf

capability) and agri-environment schemes. It is noted the proposals will seek to avoid or reduce adverse effects on agricultural interests.

- 4.114 All of the land within the Hertfordshire area of the proposed Development Order Boundary is in agricultural use and adjacent to a similar but slightly smaller area in Luton. Less than half of this is proposed to remain in current agricultural use, although the majority of that lost may still require some form of agricultural management (e.g. hay cropping or grazing) as replacement habitat and open space. It is recognised the reduction in agricultural land may have an adverse effect on the holding (16.6.7). Consequently, future land use of the area will need to be adequately considered to ensure it remains properly managed to benefit both environmental as well as farming interests where appropriate.

BIODIVERSITY

- 4.115 We are satisfied that the overall approach to the EIA process in respect of biodiversity is sound. Establishing a Zone of Influence (Zol) is an accepted approach and we acknowledge that the Zol may vary by ecological feature/receptor and type of effect. The ES should consider all ecological features of importance that could be significantly affected by the Proposed Development within the Zol. This should include consideration of noise and air quality effects arising from the proposed increase in ATMs that may affect ecological receptors at a greater distance from the airport than established to date. As the study areas for noise and transport are not yet defined we question whether the Zol for biodiversity can equally be finalised. This inter-relationship between study areas should be fully explained in the ES.
- 4.116 It is noted that a Habitats Regulations Assessment screening assessment has been undertaken to determine whether an Appropriate Assessment is required. It determined that there are no likely significant effects on any Natura 2000 sites within 30km (Chilterns Beechwood, Wormley Hoddesdon Park Woods and Lee Valley (also Ramsar) and so no appropriate assessment is required. We have no reason to consider the assessments as outlined within Habitats Regulation Assessment Screening Report 28 March

2019 (Appendix C) to be wrong. Consequently we accept this conclusion. The only minor comment is that Fig 1 should also show the Wormley Special Area of Conservation (SAC) as per the legend.

- 4.117 It is important that the ES considers the impact of lighting in both construction and operation on biodiversity and there is some reference to this in the discussion on the Lighting Assessment (5.4.19 – 5.4.25). As highlighted above at para. 3.5 and 3.6, lighting could arguably be the subject of a separate chapter in the ES.
- 4.118 Existing tall lighting columns visible from some distance already have a significant effect from open countryside to the east and can therefore be seen by animals from here, even if direct illumination levels are not increased. Glare from poorly designed or prominent lamps is obtrusive visually and can impact on biodiversity depending on wavelengths. The proposals will extend the built infrastructure to the east and therefore by default, nearer to existing open countryside. Consequently the impact of associated lighting must be properly considered and mitigation addressed as necessary in the ES.
- 4.119 Effects on Local Air Quality (Chapter 6) should be assessed in respect of ecological receptors consistent with national guidelines and as such should represent an adequate assessment. We consider this acceptable.
- 4.120 Assessment of climate change impacts (Ch.8) on the proposed development (Climate Change Resilience (CCR)) where this could have an effect on biodiversity is proposed, consistent with national guidance and best practice. We consider this to be acceptable.
- 4.121 Considering specifically Chapter 17 of the SR, we would highlight that the Airports National Policy Statement June 2018 sets out to achieve no net loss of biodiversity (17.2.27). This is *not* wholly consistent with NPPF which seeks measurable net gains to biodiversity resulting from development, an expectation which will become mandatory according to Government. In any event the NPPF is policy which the SoS should take into consideration as ‘important and relevant’ to the decision in accordance with S.104 of PA2008.

- 4.122 Consequently, we consider net gain needs to be demonstrated as a consequence of the Proposed Development. Use of DEFRA's biodiversity offsetting metric is outlined as a tool to help this process. This is reflected in the emerging NHDC Local Plan with proposed Modifications (Policy NEx and supporting statements) which should also be referenced⁸. Para. 17.2.29 refers to the Airports National Planning Policy Statement para. 5.95 which requires a 2:1 compensation ratio as a minimum. The Proposed Development should accord with this requirement and should set out how such compensation will be delivered and managed in the future.
- 4.123 We consider the approach to data gathering is acceptable and follows best practice. The surveys have provided a satisfactory baseline to assess impacts of the development.
- 4.124 It is highlighted that there are three sites within Luton under current consideration by Natural England as SSSIs⁹. All three are currently County Wildlife sites (CWSs) and it is not yet clear whether potential SSSI status would be on the CWS boundaries. All would fall within the 10km range and are referred to in the adopted Luton Local Plan. These sites are :-
- Cowslip Meadow
 - Dallow Downs with Winsdon Hill (this site and that above appear on the NE website – and the latter site may include Castle Croft & bluebell Wood)
 - Bradgers Hill which is in an earlier phase of the process.
- 4.125 It is believed likely that SSSI designation will take place during the timescale of the DCO process and should therefore be highlighted more prominently in the ES. Owing to their current status they all fall outside the 2km threshold for inclusion as non-statutory sites, but if/when designation occurs they will

⁸ <https://www.north-herts.gov.uk/planning/planning-policy/local-plan/local-plan-examination/main-modifications-and-additional-work>

⁹ <https://www.gov.uk/government/publications/natural-england-designations-programme-for-areas-sites-and-trails/natural-englands-designations-programme-to-march-2017>

each be in the 10km zone. It would therefore be appropriate to include them now on a precautionary basis.

- 4.126 Winch Hill Wood is the only Hertfordshire Local Wildlife Site within the application boundary, although Burnt Wood is immediately adjacent. Other local LWS woodlands include Diamondend Springs, Limekiln Wood and Pondcroft LWS, and Withstocks Wood LWS. There are other small scattered woods, scrubby corners and occasional remnant hedgerows, otherwise the land is essentially entirely arable. Some soils in the valley bottoms east of the airport could offer opportunities for more calcareous grasslands as they appear more chalky, although the general agricultural land is of limited intrinsic ecological value. Some bird interest has been recorded.
- 4.127 Further surveys are outlined for 2019 to inform the assessment – hedgerows, badger, bats and Roman snails and we support these.
- 4.128 In respect of paras. 17.4.18 and 17.4.24, recent scrub & bramble clearance may have increased the areas of calcareous & neutral grassland and reduced areas of scrub. The quoted figures may therefore now be out of date. Badger populations will need to be monitored as they may still show evidence of movement with respect to the baseline. There is a typographical error at para. 17.4.60 – this should read Stopsley, not ‘Stopsey.’
- 4.129 With respect to sources of information (para. 17.4.63), Bedfordshire Natural History Society & Bedfordshire Invertebrate Group should be among the special interest groups consulted. It should be established if any Recorders have records not submitted to Bedfordshire and Luton Biodiversity Recording and Monitoring Centre (BLBRMC).
- 4.130 We support delivery of biodiversity benefits as outlined in 17.5.5
- 4.131 Using the definitions of ecological importance in para. 17.5.7 can be misleading. The regional category is hard to define, as most biodiversity considerations are at either National or County level. CWSs are selected at County level, but there is no category for regional sites. It could be argued that sites at the top end of CWS quality, such as Wigmore Park, are of

regional importance, as would the potential SSSIs noted above. District Wildlife Sites (DWSs) are Luton Borough-wide; CWSs range from the upper thresholds of Borough sites to the lower threshold of national sites. This can lead to an undervaluing of sites in this range.

- 4.132 We agree with the ecological features scoped in for assessment as outlined in Table 17.3 and those scoped out in paras. 17.7.1 – 17.7.2.
- 4.133 As highlighted above, we consider that mitigation and enhancement must deliver net gains to biodiversity which should be clearly stated within the ES, given the new Government expectation outlined above. This will be determined by appropriate compensation, enhancement and management within the application boundary, and beyond if necessary to help achieve this. This will be outlined within a Landscape and Biodiversity Management Plan as stated within para. 17.8.2. and informed by an offsetting calculation. This should provide a suite of local biodiversity and environmental benefits to address the impacts and effects of the proposals. This is supported.
- 4.134 In terms of mitigation, there should be an emphasis on quality rather than mere quantity. The Proposed Development should ensure no loss of habitat – notably the Wigmore CWS, should as much as possible be mitigated within Luton Borough itself for the benefits of the community as a whole, not just residents of the Wigmore Area. These should include acquiring and bringing neglected sites into protective ownership where they are being left unmanaged and falling derelict. There are a number of these including part of Waulud's Bank SAM land adjoining Leagrave Park CWS. The former could also act to protect the Scheduled Monument as mitigation for losses of archaeological heritage. Parts of the eastern valley habitats of the River Lea, such as Crick & Honeygate Hills CWS and parts of Bradgers Hill CWS would also be appropriate areas in which to provide mitigation and access for local people and landscape protection. Compulsory purchase should be considered as a last resort of securing the future of such areas the value of which is currently being degraded.
- 4.135 Contributions to survey and management of other sites and habitats within the area should also be considered. Detailed proposals as to how this can

be achieved should be set out in the proposed Landscape & Biodiversity Management Plan.

- 4.136 For accuracy, Fig 17.1 Chilterns Beechwoods is the SAC; Ashridge Commons and Woods is the SSSI. For completeness given some of the SSSIs shown, Fig 17.1 should also include Tewinbury SSSI north of Welwyn Garden City and Bennington High Wood SSSI east of Stevenage.

LANDSCAPE AND VISUAL

- 4.137 In relation to the 'Legislation, policy and guidance' described in the SR (Section 18.2), it is important to recognise that the extent and designation of the Area of Outstanding Natural Beauty (AONB) is currently under review. There is a demonstrable case for an upgrade to National Park Status and there has been pressure to extend the area covered by the Chilterns AONB to the east of Luton (within NHDC). Both aspirations are covered in the draft Chilterns Area of Outstanding Natural Beauty Management Plan 2019-2024 (Chilterns Conservation Board, Feb 2019).
- 4.138 We note that the Landscape and Visual Impact Assessment (LVIA) does not appear to take account of increases in ATMs and the potential effect of these on either the AONB or other areas around LTN that may be valued for recreation and amenity including areas associated with cultural heritage sites, country parks and designated Local Green Spaces, etc. These need to be considered as part of the LVIA and the Study Area for the LVIA will need to further considered once the noise and transport assessments are further refined.
- 4.139 In respect of data gathering - the viewpoint locations (para. 18.4.6) should be reviewed and agreed with the host authorities. Photomontages are also required, the number and location of viewpoints from which photomontages are required should be agreed with the host authorities. Photomontages should include night time and winter views, be verified and fully rendered, and show different stages of the project lifecycle.
- 4.140 The Zone of Theoretical Visibility (ZTV) should assume an eye height of 1.6m, be based on bare earth, and include an analysis of multiple points. It

is requested that the points for analysis are also be agreed with the host authorities.

- 4.141 Para. 18.4.7 – other sources of information include the following:

National Character Areas, Sept 2014, Natural England¹⁰

East of England Landscape Typology, Landscape East¹¹

- 4.142 It is noted that in para. 18.4.11 the reference to Dallow Downs viewpoint should be Winsdon Hill, with the view from Wellhouse Close also being significant.

Assessment methodology

- 4.143 The landscape and visual impact assessment (LVIA) methodology utilises a series of matrices. Whilst the use of matrices is supported in principle, it should be understood that a key update in the revision of the landscape and visual impact assessment guidelines (GLV13) was to reduce the reliance on matrices and introduce a greater emphasis on professional judgement supported by narrative. Any judgements should therefore be accompanied by a clear narrative on how the assessor came to their view.
- 4.144 Table 18-2: Landscape Value – The matrix is not supported as it does not provide a comprehensive overview of the various aspects that can contribute to ‘value.’ Box 5.1 of GLVIA provides a list of aspects, and includes for example wildness and tranquillity, that is not covered in the proposed matrix. At a recent Landscape Institute (LI) Conference, ‘landscape value’ was debated in great detail and it was concluded that Box 5.1 is not an exhaustive list, and that a landscape of high value could potentially only demonstrate one of the listed factors, and that it does not necessarily have to be designated.
- 4.145 It is therefore advised that the judgement of ‘landscape value’ should be based on narrative and wider definition and understanding of the factors that can contribute to value. Areas of Local Landscape Value (ALLV) and Areas

¹⁰ <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles>

¹¹ <http://landscape-east.org.uk/east-england-landscape-typology>

of High Landscape Value (as identified in the Luton Local Plan Policies Map) should also be included in this table.

- 4.146 Table 18-3: Visual Susceptibility to Change:- with regards to users of public rights of way, the distinction between users who may or may not be focused on the landscape/or views is not supported and it is not clear how this could be evidenced. In line with experience and good practice to demonstrate worst case scenario, all users of public rights of way and footpaths should be considered high.
- 4.147 Table 18-4: Visual Important / Value:- there is concern with regards to the criteria for views of medium importance where a landscape and/or heritage asset makes some contribution to the view. Even where an asset makes some contribution to the view, the importance could still be high. For example a designated heritage asset and its setting could be considered to be of significant importance, and any degradation of it or its setting, no matter how small, could be considered unacceptable. Each heritage asset will therefore need to be considered on its own merits.
- 4.148 Table 18-5: Magnitude of Landscape Impact and Table 18-6: Magnitude of Visual Impact :- there is concern that the tables that are not evenly weighted, if it is agreed that medium represents a 'middle status' then it is suggested that 'very low' is not required, or that 'very high' should be added. This will affect the matrices that consider magnitude of impact and will need to be reviewed.
- 4.149 Table 18-7: Significance of Effect:- the same comment in the paragraph above is applicable to the assessment of impacts in this table. In addition, the table only identifies 4 scenarios which give rise to significant effects (moderate or above), it is queried if where the magnitude of impact is low but the sensitivity of the receptor is high then the significance of effects should be moderate, and vice versa.

Effects on tranquillity

- 4.150 Para 18.5.21 – see comments above at para. 4.144 with regards to Table 18-2: Landscape Value. In general we consider that the assessment of

potential impacts on tranquillity including noise, movement, light pollution and impact on dark skies will need to be expanded upon in the LVIA process and in accordance with:

- NPPF (2019) Chapter 8 Promoting Healthy & Safe Communities - Open Spaces and Recreation, para. 100 and Chapter 15 Conserving and Enhancing the Natural Environment, para 180.
- Airports National Policy Statement (2018) Chapter 5 Assessment of Impacts, para. 5.213 which states that landscape and visual effects also include tranquillity effects which would affect enjoyment of the natural environment and recreation, and para. 5.216 which highlights the assessment of potential impacts on views and visual amenity and any noise and light pollution effects, including local amenity, tranquillity and nature conservation, para. 5.219 which deals with development within nationally designated area; and 5.222 development outside nationally designated areas which might affect them.
- Central Bedfordshire Council Local Plan 2015 - 2035 (Pre-submission Jan 2018); Policy EE5 Landscape Character and Value, safeguarding intrinsic character, scenic beauty and perceptual qualities such as tranquillity. Policy EE6 Tranquillity, protection of areas of high tranquillity at both strategic and community scales. Policy EE7 The Chilterns AONB, need to conserve the special qualities, distinctive character, tranquillity and remoteness in accordance with national planning policy and the overall purpose of the AONB designation.
- Chilterns Conservation Board - Chilterns AONB Management Plan 2019 - 2024; Policies DP2 & DP14 supporting guidance on protection of special qualities of the AONB and tranquillity.

Construction

- 4.151 It is not clearly stated how the LVIA will approach the assessment of the phased construction works, and the site at operation. In line with GLVIA3 each stage should be assessed separately.

4.152 It is not clear if the list in para. 18.6.3 of landscape receptors potentially affected includes Wigmore Valley Park or just its parkland setting. It is suggested that the list in paragraph 18.6.3, of landscape receptors, should also include LCA 212 Lilley Bottom.

4.153 It is also suggested that the list in para. 18.6.5 of visual receptors, should also include the following:

- the residents of Tea Green;
- users of Winsdon Hill;
- Public Rights of Way (PROWs) Offley 023, Kings Walden 010; and Kings Walden 020;
- road users of Stoney Lane; Dane Street; Chiltern Green Road; Heath Road.

Operation

4.154 Para 18.6.6 – 18.6.7 :- whilst it is understood that there will be adverse residual effects of varying significance, it should also be clearly stated at this stage that these will be compensated for through other measures such as for example off site compensation, and supporting local landscape enhancement projects.

4.155 However, there is concern in respect of the potential significant adverse effects as a result of the Proposed Development, and there needs to be assurance that compensatory measures will be delivered and steered by the appropriate LPA representatives.

Matters scoped out

4.156 The fact that a 'Non-EIA Residential Visual Amenity Appraisal' will be prepared and submitted alongside the ES is noted and welcomed.

Mitigation

- 4.157 Mitigation should also consider ecological impacts of mitigation measures as well as consider the historic development of / changes to the local landscape, as this could also influence landscape restoration proposals. Reference to Landscape Character Areas is important as these help to define a context for future land management issues. Given the ecological implications of LCAs, we support their inclusion as a context for the proposals.

Other comments

- 4.158 Supporting plans are required to help inform the LPAs understanding of the scheme and should include existing and proposed contours, levels and gradients. Cross sections should extend beyond the site boundary to show the relationship between the scheme and its wider landscape context.
- 4.159 It is not yet understood if there are any areas of deposited material that will be subject to settlement. In the event that there are, then pre- and post-settlement contours and levels are required.

CULTURAL HERITAGE

- 4.160 We agree with the SR's conclusion that cultural heritage be included in the ES and that no matters associated with cultural heritage should be scoped out.
- 4.161 Generally, the approach to assessment is supported but there are a number of issues with both the scope and methodology and the host authorities make the following comments.

Information sources

- 4.162 The Hertfordshire historic environment record should be consulted as per the NPPF paragraph 189, and it does not appear that the SR has done this. Archaeological information and its interpretation may be out-of-date and inconsistent with the NPPF. The heritage gateway website is not sufficient (para. 19.4.4).

- 4.163 Figure 19.1 in volume two does not include any data from the historic environment record and therefore any undesignated heritage assets; this may provide a misleading picture of the character of the historic environment in the study area.

Built Heritage – general comments

- 4.164 Section 19.4 should be clear that the ES will assess the significance of heritage assets which may be affected by this proposal and the likelihood that further currently unknown heritage assets may be identified that could also be affected.
- 4.165 We are broadly satisfied that potential impacts upon key heritage assets in the area have been acknowledged, including impacts upon asset setting, and there is due recognition that these impacts need to be assessed in detail and fully understood.
- 4.166 Study area : the 2km study area seems to be of a sufficient size to consider the direct and immediate impacts on heritage assets. However, the assessment should consider whether there are any heritage assets at a greater distance to the airport that would be adversely affected by the increase in ATMs that will result from the Proposed Development. This might reasonably include high value heritage assets which are sensitive to changes in the noise environment. A review of such assets close to flightpaths should be properly evidenced as to why they have been included or not. This could include assets in other authorities including Stevenage, Welwyn Hatfield and St Albans.
- 4.167 The 2km study area includes Someries Castle, the majority of Luton Hoo (which comprises the Grade II* Registered Park and Garden (RPG), the Grade I Luton Hoo mansion and a number of other listed buildings). It is recommended the Cultural Heritage assessment considers the impact upon all of Luton Hoo RPG / Putteridgebury RPG rather than just that part within the 2km study area. Consideration of the topography of the area will need to be taken into account when assessing the impact upon designated and non-designated heritage assets.

Impacts upon Luton Hoo mansion and RPG

- 4.168 The nationally significant Luton Hoo mansion (now Hotel) is set within a celebrated 'Capability Brown Landscape' that is defined as a Registered Park and Garden (RPG). The hotel is recognised as the 'optimum viable use' for the mansion and parkland, and is recognised as a key business in Central Bedfordshire. Beyond its historic significance, the parkland possesses a visual tranquillity which is a significant asset to the 'offer' of the hotel.
- 4.169 The airport occupies an open and elevated (skyline) location and the highly obtrusive impact of existing buildings and structures (notably the Easy Jet hangars WSW of the proposed terminal building) upon key views from principal rooms of the east front of the mansion, overlooking the lake, is apparent upon inspection, and is also apparent, even in glimpsed views through strong leaf cover, within the hotel grounds.
- 4.170 The impact of the proposed development in respect of both construction and operation in the context of the Luton Hoo mansion, its Hotel accommodation and parkland grounds, including noise and night-time impacts, need to be fully explored and reported. Impacts of Operation (including the visual impacts of new infrastructure and support buildings, and aircraft ground movements) need to be demonstrated by comprehensive visual representations.

Impacts upon Someries Castle.

- 4.171 Section 19.6 of the SR discusses the Potential Significant Effects of the proposals on heritage assets and states that Someries Castle Scheduled Monument is likely to experience noise and visual intrusion both during construction and operation. The nationally significant monument of Someries Castle, constructed around the mid-1400's, is located in close proximity to the southern boundary of the airport and current Main Application Site.
- 4.172 We are of the view that the demonstrable rapid deterioration of fabric at Someries Castle cannot be explained in terms of normal building pathology.

There has been demonstrable accelerated erosion and loss of brick detailing at the monument since the mid-1970's, notably the crumbling-away of historically significant corbel-table detailing above the main entrance and on the north-west turret. This detailing crucially places Someries Castle firmly in an established national chronology of early brick building.

- 4.173 The real potential of adverse impacts to the monument during both construction and operation are openly acknowledged in the SR (paras 19.6.5 and 19.6.10). Significantly, however, the scoped impact is limited to the context of monument setting and visitor experience (paragraph 19.6.10).
- 4.174 Potential impacts to the physical fabric of a heritage asset are acknowledged in paragraph 19.5.6 of the SR. We require that air pollution and vibration impact assessments in respect of both the Construction and Operation phases of the proposed development are extended to specifically encompass effects on the fabric of the monument through on-site monitoring and evaluation. We would also expect that this assessment is undertaken in close liaison with Conservation Officers.
- 4.175 Modelling of any proposed landscaping and its effect on the historic environment should also be included.

Archaeology

- 4.176 We have been liaising with AECOM (on behalf of LLAL) in order to assist with the data collation and assessment of the impact of the development proposals on the archaeological resource and are pleased to note that the EIA will consider the potential impacts on both designated and non-designated heritage assets and would remind the applicant that any assessment of the impact on the setting of heritage assets must be undertaken using Historic England's The Setting of Heritage Assets: Historic Environment. Good Practice Advice in Planning: 3 (Historic England, 2015) in order that the ES can be considered valid. We would also expect to see visual representations to illustrate the magnitude of change that will be experienced at Someries Castle and Luton Hoo if the scheme proceeds.

- 4.177 We are content with the study areas as described in section 19.4.1-19.4.3 of the SR. However, concern is raised by the inaccuracies of figure 19.1 (Cultural Heritage Constraints Plan), which has failed to identify the known non-designated heritage assets with archaeological interest from within the Luton Borough and Central Bedfordshire Council areas. This matter needs to be addressed.
- 4.178 Heritage assets which lie outside the main application site may provide a context to help understand the significance of those within the site, so these should be discussed if appropriate; this should also apply to the discussion of heritage assets in adjoining authorities.
- 4.179 The Proposed Development lies within a known archaeological landscape with remains dating from the later prehistoric periods onwards. Under the terms of the NPPF these are heritage assets with archaeological interest. In addition, the airport lies within the setting of a number of nationally protected designated heritage assets of the highest significance (as defined by the NPPF).
- 4.180 We agree with the proposed suite of archaeological evaluation techniques included in para. 19.4.9, and the statement that other techniques will be considered if appropriate. The assessment methodology (section 19.5) should not be restricted to desk-based assessment guidelines. The results of an archaeological evaluation of the site should be included in the ES and this should include appropriate non-intrusive surveys, intrusive investigations (for example trial trenching) and assessment of setting.
- 4.181 Para. 19.4.8 of the SR discusses the programme of archaeological field evaluation that was undertaken to the east of Wigmore Valley Park in February 2019 and CBC confirm that the trial trenching was monitored by the CBC Archaeology Team. However, para. 19.4.8 does not acknowledge that only part of the proposed development site (within the LBC administrative area) was subject to trial trenching, neither does it give an indication of when the second phase of trial trenching will take place. Given that Figure 3.1 suggests that the area which has yet to be evaluated will be affected by: excavation earthworks, car parking, access roads, a fuel farm, a

sewage treatment works, surface water treatments works and platform embankments the Archaeology Team expect that the ES will include the results of not only the trial trench evaluation in February 2019, but the whole of the area to the east of Wigmore Valley Park. Without this information CBC consider the baseline data would be incomplete.

- 4.182 Section 19.8.3 of the SR refers to the measures that may be adopted to mitigate the impact of the development proposals on the setting of heritage assets. Close liaison will be required with Landscape Officers to ensure that any physical mitigation is considered appropriate in landscape terms.

APPENDIX 1: MEMORANDUM BY COLE JARMAN REGARDING NOISE

Memorandum

Project: London Luton Airport: DCO
Subject: Future LuToN: Making best use of our runway - Scoping Report
Prepared: Vernon Cole
Date: 25 April 2019
Reference: 19/0223/M01 **Revision:** 1 **Approved:** BH

Preamble

This memo sets out some comments and observations on the noise section of the Luton Airport DCO Scoping report published in March 2019.

The Scoping Report comprises two volumes:

- TR020001-000048-LUTN - Scoping Report (Volume 1 - Main Report);
- TR020001-000049-LUTN - Scoping Report (Volume 2 - Figures);

Noise (including vibration where appropriate) is dealt with in Chapter 10 of the Scoping Report and the commentary in this memo pertains principally to the information contained therein.

The memo is split into two sections. Part A contains commentary on points that we consider must be addressed in order to ensure the noise assessment is complete and adequate. Part B contains commentary on additional points which, if addressed, would in our view enhance the assessment.

The numbering system reflects that used in Chapter 10, except where reference to other parts of the document is made.

Part A: Key issues

10.2 Legislation, policy and guidance

National planning and aviation policy

- 10.2.2 Reference is made to the *Air Navigation Guidance (October 2017)*, which provides guidance to the CAA on the implementation of the changes to airspace policy which became effective on 1 January 2018. However, not referenced is *CAP 1616 Airspace design: Guidance on the regulatory process for changing airspace design including community engagement requirements (CAA, December 2017)*. This document is considered particularly relevant in the context of this section of the scoping report as it sets out, in Appendix B, the environmental metrics and assessment requirements. Technical Annex CAP 1616a summarises the metrics recommended for use in a study of this type.

10.4 Baseline conditions

Study Area

- 10.4.1 We would expect the scoping report to provide an indication of the extent of the study area for each of the noise sources to be assessed. While it is accepted that detailed noise modelling will not have been undertaken, that does not preclude the use of some expert judgement to identify what scale of effects are likely to arise and the areas that will be affected. There is a substantial amount of information available on the historic and forecast noise levels arising as a result of operations at Luton Airport and these could be used as a basis for defining in broad terms the study area. Without this information, it is not possible to judge whether all relevant noise sensitive receptors are likely to be covered by the assessment.
- 10.4.9 We agree with the principle that study areas should, as a minimum, encompass all areas within which operational noise is likely to be above the LOAEL. In the case of airborne aircraft noise, however, further information should be provided on how the noise study will respond to the requirements in Air Navigation Guidance 2017 that noise should be considered at levels of exposure below LOAEL and up to an altitude of 7,000 ft.

Data gathering and survey

- 10.4.8 It is noted that noise monitoring locations have already been agreed through consultation with the Noise Working Group and it is therefore naturally assumed that these are all located within the study area. There is therefore a contradiction in the proposition that the study area cannot yet be identified if the geographical extent of noise monitoring is already established.



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Airspace Design

- 10.4.11 The redesign of airspace affecting operations at Luton Airport will not be completed until 2024, and as a result the assessment of air noise will be undertaken based on existing flight paths. Can it be confirmed that air noise modelling of all flight paths will include proper consideration of Performance Based Navigation (PBN) flight paths?

Adoption of PBN enhances navigational accuracy and allows aircraft, particularly on departure, to fly on tracks that incorporate a much smaller degree of dispersion. This results in a greater degree of control over which areas are overflown and which are avoided and therefore has the potential to reduce the number of people affected by aircraft noise. PBN also offers increased options for the establishment of noise respite/relief routes. On the other hand, concentrating flights over specific areas can lead to a greater noise impact in those areas and may influence the extent and nature of the mitigation or compensation to be provided.

It is indicated that *“NATS states that LTN may be a significant beneficiary of airspace redesign through the suggestion that the 55dB noise contour may reduce by 28%”*. The reference for this statement is incorrect, as paragraph 3.106 of Aviation 2050 deals with another matter entirely (the sensitivity of the public to noise and the recently published WHO Environmental Noise Guidelines 2018).

Health Impacts

Will the impacts of noise on health be quantified within the ES Noise chapter or will they be included within Chapter 15 Health? Will a separate Health Impact Assessment form part of the application?

It should be noted that if the ES is to include an assessment of alternative airspace design options, even if only at draft stage pending subsequent detailed analysis by the CAA, the Air Navigation Guidance 2017 document requires that a WebTAG analysis is undertaken to value and compare the noise impact of these options.

10.5 Assessment Methodology

Assessment Scenarios

- 10.5.5 What is the rationale for setting 2017 as the Baseline Year? Will data not be available for 2018?

Year of predicted maximum environmental effects

At some time between the Baseline Year and operation up to the anticipated capacity of 32mppa, the combination of number and mix of aircraft will lead to community noise levels reaching their highest value. We would expect the assessment to be able to identify and quantify this maximum effect.



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The year in which this occurs will depend on the rate of uptake of new generation, low noise aircraft, replacing older, noisier variants. This rate of uptake will be determined by the aircraft operators and not by Luton Airport and is therefore ultimately outside LLAL's direct control. This is an important reason for ensuring that appropriate sensitivity checks based on varying rates of new generation aircraft uptake must be carried out, yet it has not been included within the operational assessment scenarios.

Construction

10.5.9 Table 10-1 is incomplete. Although the ABC method defined in BS 5228 1:2009+A1:2014 is proposed to be used for the assessment of construction noise, no definition is given for the threshold values that define category B. In addition, the use of the day, evening and night periods to control construction noise to acceptable levels is not consistent with the approach normally used at construction sites in the UK as required by many Local Planning Authorities:

- Day: Weekdays (07h00 to 19h00) and Saturdays (07h00 to 13h00);
- Evening: Weekdays (19h00 to 23h00), Saturdays (13h00 to 23h00) Sundays and Bank Holidays (17h00 to 23h00);
- Night: Weekdays, Weekends and Bank Holidays (23h00 to 07h00).

10.5.13 The preceding paragraph identifies that vibration generated by construction activity will be assessed using the Peak Particle velocity (PPV), which for assessment of this type is normally expressed in mm/s. However, it is proposed to set LOAEL and SOAEL thresholds in terms of Vibration Dose Value (VDV), which is a quite different measure of vibration that takes into account both level and duration of the vibration after it has been frequency weighted. VDV is defined in BS 6472-1:2008¹ and is expressed in the units m/s^{1.75}.

It is therefore erroneous to refer to the LOAEL as being 0.3mm/s, as this more likely refers to a measure of PPV: the same can be said the SOAEL value of 1.0mm/s. Furthermore, if it is indeed proposed to use PPV as a means of defining the LOAEL and SOAEL thresholds, justification for these values needs to be provided.

Operation

Introduction

10.5.17 The Scoping Report is not clear on what standards noise from engine ground running when under test should be assessed against, and this needs to be clearly defined. Some recent assessments of this particular ground noise source at airports have categorized it as a fixed source that should be assessed in accordance with BS 4142:2014.

¹ BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings. Part 1: Vibration sources other than blasting



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Magnitude of impact for changes in operational noise

- 10.5.20 The concept of assigning greater significance to changes in noise level where ambient noise levels are already high is not new and there is some justification for adopting such an approach in principle. However, we have a number of comments about the magnitude of impact criteria set out in Tables 10-3 and 10-4:
- It is not clear why daytime and night-time periods should be treated differently. If this is a considered approach to the issue, reasons why daytime noise changes at high ambient levels are more significant than night-time changes at high ambient levels need to be provided;
 - Changes only in a positive sense (i.e. noise levels only increase) are considered. If the proposals lead to noise level reductions (which might result if future aircraft are substantially quieter than current aircraft), does the logic still apply?
 - The proposals lead to potentially anomalous conclusions. For example, is it really the case that a 5dB increase in air noise levels from 58 to 63 is a high impact whereas a 9dB increase from 53 to 62 is only a medium impact? The resulting noise levels will be barely indistinguishable between the two cases, yet the much higher increase in noise is still rated as lower impact.
- 10.5.22 This binary approach to defining the magnitude of impact resulting from noise level changes based on a cliff edge transition at the SOAEL is not fully capable of capturing the nuances of how noise level and noise level change fully interact to give rise to quantifiable effects. Further comments are made on the assessment of effects in relation to paragraph 10.5.42 below.

Air noise assessment methodology

- 10.5.31 Reference is made to Table 10-5 which defines values for the SOAEL for airborne aircraft noise. It also defines values for the LOAEL. We do not disagree with the values proposed. However, no reference is made to UAEL (Unacceptable Adverse Effect Level), which also defined in government policy and is an important concept in that noise effects on people at this level are to be prevented from occurring.

Significant effects on health and quality of life must be identified in line with government noise policy. In this regard it is important to distinguish the actions that should be taken to prevent this level of effect from occurring (UAEL) from those that should be taken to avoid the significant adverse effects from occurring (SOAEL).

Additional air noise metrics

- 10.5.33 For the N65 (daytime) and N60 (night-time), the Scoping Report should state the values at which the contours will be plotted.

It is noted that consideration will be given to providing $L_{Aeq,T}$ contours for periods outside those defined in UK policy. In our view, the Scoping Report should commit to providing the following information as a minimum:



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- Movements for each assessment year (including the year of highest noise levels) during the Night Quota Period, allowing the QC values to be determined in each case. Luton Airport currently operates under a condition that limits the QC value during the Night Quota Period and it should be assumed this will or may be retained over the assessment period;
- Movements for each assessment year (including the year of highest noise levels) during the early morning (06h00 to 07h00) and late evening (23h00 to 23h30) shoulder periods, allowing the QC values to be determined in each case. Luton Airport currently operates under a condition that limits the QC value during the early morning shoulder period and it should be assumed this will or may be retained over the assessment period;
- Information on the hourly pattern of movements for each assessment year (including the year of highest noise levels) over the 24-hour operating day. While the aggregate 16-hour daytime and 8-hour night-time metrics are recognised as correlating most closely with overall community response, it is also important to determine whether there are particular periods during which noise effects might be particularly acute, e.g. will receptors currently benefiting from noise respite during certain periods of the day continue to benefit from such respite as the number of movements increases? Assessment and commentary should be provided as required to enable changes in the pattern of noise levels to be evaluated over the assessment period.

10.5.33 Is it proposed to use L_{\max} outputs only to assess potential sleep disturbance during the night time period? Daytime L_{\max} values are also instructive when considering the full range of impacts on noise sensitive receptors such as schools.

It should be noted that the following assessment metrics referred to in CAP 1616, required by current policy or used in best practice assessments of aircraft noise changes resulting from this type of application are not proposed to be undertaken:

- L_{den} and L_{night} : it is required to determine the number of people exposed to airborne aircraft noise at different values of each of these indices in order to determine health effects arising. Carrying out a WebTAG analysis requires an assessment using these two indices;
- % *Highly Annoyed*: changes in the number of people highly annoyed by airborne aircraft noise are derived from population counts within the various daytime and night-time $L_{\text{Aeq,T}}$ contours. These should be tabulated as part of the assessment so that changes over the assessment period can be quantified;
- *Difference contours*: required to be plotted in bands, typically from $\pm 1\text{-}2\text{ dB}$ to $\pm >9\text{ dB}$.

Airside ground noise

10.5.36 Table 10-2 defines values for the LOAEL and SOAEL for road traffic noise. Paragraph 10.5.36 identifies that these values are also used for the assessment of aircraft ground noise. We do not disagree with the values proposed, and note their origins in the WHO Community Guidelines 1999. However, no reference is made to UAEL.



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No distinction is made between noise generated by aircraft on the ground during the course of their normal day to day operations and those generated by engines under test at the relocated engine test bay. These are noise sources that lend themselves to assessment against different criteria and which are subject to quite different forms of mitigation. We would expect the Scoping Report to identify how these distinctions will be made.

Significance criteria

Operation

- 10.5.42 The description of how noise effects, especially significant noise effects, will be determined is incomplete and confusing. Reference is made to Section 5.3 of the Scoping Report which provides a generic framework for the assessment of environmental effects and this has only been partially adopted into the noise section.

For example, Table 10-6 is a noise specific version of Table 5-3 and Table 10-5 is purported to set out the noise specific version of Table 5-5, but it does not. The Scoping Report must set out a clear methodology for assessing noise effects that takes properly into account:

- The magnitude of the change in noise exposure for the various noise sources being assessed using the relevant primary metrics $L_{Aeq,16h}$ (for daytime) and $L_{Aeq,8h}$ (for night-time) and by reference to an agreed definition of the scale of change (we have identified concerns with the values set out in Tables 10-3 and 10-4);
- The levels of noise to which the community will be exposed for the various noise sources being assessed, by reference to the relevant LOAEL, SOAEL and UAEL values using the relevant primary metrics $L_{Aeq,16h}$ (for daytime) and $L_{Aeq,8h}$ (for night-time);
- The size of the population exposed to noise at different levels from the various noise sources being assessed, and identifying the number of people highly annoyed by the particular source.

Other factors that will need to be factored into an overall determination of the significance of the effects arising from the various noise sources being assessed are:

- The implications of the N65 (daytime) and N60 (night-time) contours in terms of the number of people exposed to high, medium or low numbers of over-flights and how these might change as a result of the DCO;
- The number of people who may experience sleep disturbance from aircraft flyover noise and how this will change as a result of the DCO;
- The monetised value of the noise effects using the WebTAG analysis;
- The implications of changes to the number of overflights experienced by noise sensitive receptors exposed to noise levels below LOAEL;



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- Changes to the pattern of noise exposure during different parts of the 24-hour day, and whether any benefits currently accruing from respite from noise during the quieter parts of the day are likely to be eroded at the number of daily movements increases.

Another factor that will influence the final assessment of noise effects is the nature and extent of any sound insulation scheme that might be offered by the airport to mitigate noise effects within buildings. Further discussion of this point is set out under Section 10.8 Mitigation.

10.8 Mitigation

Operation

Air noise

10.8.5 It is suggested that, depending on the nature and extent of the impact, a number of mitigation measures that are not covered in LTN's Noise Action Plan (NAP) may be adopted. The discussion in the following chapters centre on the use of a bespoke noise envelope, even though a daytime and night-time noise envelope is already in place at Luton Airport and is set out in the NAP. This is not, therefore, a new initiative linked to the DCO and should not be presented as such.

10.8.6 It is proposed to set up Noise Envelope Design Group (NEDG) whose remit sounds like it may be 'reinventing the wheel'. Most of the provisions the group is expected to discuss and develop are already in place for the noise envelopes that are defined by Condition 10 of the current operating consent. Unless there are compelling reasons to alter the approach, we would expect most if not all of those provisions to apply to noise envelopes required for the DCO.

Noise Insulation Scheme (NIS)

We would expect the noise assessment to include an evaluation of the benefits arising from a revised NIS. The one in place at present and referred to in the NAPS was developed on the basis of Government policy which is expected to be superseded pending the results of the Aviation 2050 consultation process. In our view the Scoping Report should be proactive on this point, committing to a full evaluation of a revised scheme that conforms to the new government proposals, including:

- Establish new measures to improve noise insulation schemes for existing properties, particularly where noise exposure may increase in the short term or to mitigate against sleep disturbance;
- Extend the noise insulation policy threshold being the current 63 dB $L_{Aeq,16h}$ to 60 dB $L_{Aeq,16h}$;
- Require all airports to review the effectiveness of existing schemes. This should include how effective the insulation is and whether other factors (such as ventilation) need to be considered, and also whether levels of contribution are affecting take up;



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- For airspace changes which lead to significantly increased overflight, to set a new minimum threshold of an increase of 3 dB L_{Aeq} , which leaves a household in the 54 dB $L_{Aeq,16h}$ contour or above as a new eligibility criterion for assistance with noise insulation;
- Engaging with ICCAN and adopting any new guidance that it develops on best practice for noise insulations schemes around airports, to improve consistency across the industry.



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Part B: Additional comments

Executive Summary

Table 1: Summary of proposed scope of the assessment

Under 'Noise and vibration' no reference is made to train operations on the proposed extension to the DART line.

The 10th bullet point of paragraph 1.1.5 identifies that one element of the proposed development is an extension to the Luton Direct Air to Rail Transit (DART) to the new terminal. No assessment of noise and vibration will be required if the associated additional train movements will only give rise to effects wholly within the airport boundary. If, on the other hand, any noise sensitive receptors are at risk of being affected we would expect this element to be scoped into the study.

10.1 Introduction

- 10.1.1 Reference is made in the first paragraph to key sensitive receptors; it would be helpful at this stage to distinguish between residential and non-residential receptors and how degrees of sensitivity will apply. No reference is made to designated 'quiet areas' that may be affected by the proposals. If there are such areas within the study area, designated under the Environmental regulations (England) 2006 (as amended), it is appropriate to identify them.

10.2 Legislation, policy and guidance

Legislation

- 10.2.2 Reference is made to the Civil Aviation Act 2006, but not to the Civil Aviation Act 1982, which is still in effect, nor the later Civil Aviation Act 2012 which widened and modernised the powers available to the government to control noise at airports and also permitted airport operators to impose differential charges based on aircraft noise emission.

Some relevant UK legislation is not referred to in this section:

Airports Act 1986: giving powers to the Secretary of State (SoS) to regulate runway utilisation, allocate airport capacity and limit the number of occasions on which aircraft may land or take off.



Future LuToN: Making best use of our runway - Scoping Report

Aeroplane Noise Regulations 1999: dealing with noise certification for aircraft, referencing the noise limits issued by ICAO and restricting operations to properly certified aircraft.

Transport Act 2000: enabling the SoS to prevent or deal with environmental noise and vibration from aircraft used for civil aviation and limiting the effects of such noise, vibration, pollution or disturbance.

National planning and aviation policy

No reference is made to international policy, and the following should not be overlooked:

ICAO: The International Civil Aviation Organisation is responsible for establishing technical standards and recommended practices (SARPs). After a standard is agreed and adopted, it is put into national effect by each ICAO member state, the UK being one of these. ICAO has established a number of aircraft operating standards, aircraft noise certification and guidelines for a balanced approach to aircraft noise management.

The ICAO guidance material covered by the Balanced Approach provides contracting states with an internationally agreed but flexible approach to address aircraft noise problems at individual airports. The ICAO guidance to member states is to adopt a “balanced approach” to aircraft noise management. This balanced approach consists of four key pillars:

1. Reducing aircraft noise at source,
2. Land planning use,
3. Changes to operational procedures,
4. Restrictions on the use of the noisiest aircraft.

EU Regulation 598/2014: establishes rules and procedures with regard to the introduction of noise related operating restrictions at Union Airports within a Balanced Approach.

Guidance

Reference is made in paragraphs 10.2.21 to 10.2.23 to the Planning Practice Guidance (March 2014), but in this section it might also be helpful to acknowledge:

Professional Practice Guidance on Planning and Noise (Pro PG): published jointly by the ANC, IOA and CIEH², this document is guidance for acoustic practitioners, planners and developers with the aim of protecting home dwellers from excessive levels of noise through good design. This has relevance for new development in areas around Luton Airport that are, or may be in the future, affected by aircraft noise.

² Association of Noise Consultants (ANC), Institute of Acoustics (IOA) and Chartered Institute of Environmental health (CIEH)



Future LuToN: Making best use of our runway - Scoping Report

10.4 Baseline conditions

Data gathering and survey

- 10.4.4 It is stated that, in particular, a noise survey is designed to provide information regarding the noise exposure experienced by those living and working at the various locations potentially affected by noise. This should not be the only determinant of where noise measurements are carried out as levels at a range of noise sensitive receptors including schools, hospitals, places of worship and community centres should not be overlooked.

Future Aircraft

- 10.4.14 Full details of the assumptions made with regard to noise benefits emerging from new generation aircraft must be presented with relevant justifications for these.
- 10.4.15 A sensitivity analysis of possible noise outcomes that depend on the noise benefit assumptions made for future aircraft types is an important part of the study. The study should include variations in the rate of uptake of new generation, low noise aircraft, including a worst case position that current generation, noisier aircraft remain a substantial part of the overall mix for all future study years. It should also allow for variations in the actual noise benefits for future variants of current generation aircraft, noting that actual operating procedures adopted at Heathrow Airport may lead to differential variations from the noise certification standards for departures and arrivals.

10.5 Assessment Methodology

Study Area

- 10.5.3 We have noted in Part A above that the scoping report would be expected to provide an indication of the extent of the study area for each of the noise sources to be assessed. We believe that the Scoping Report would be enhanced by including guidelines on how study areas for the individual noise sources will be determined. For example, the approach used for the Heathrow Airport Expansion EIA Scoping Report³ is informative:

Construction noise

- Noise from construction sites: up to 300m from any construction activity;
- Noise from construction traffic: will be studied where the increase or decrease in road traffic noise caused by changes in the volume of traffic due to DCO construction activity exceeds 1 dB $L_{Aeq,T}$ for both day and night periods;
- Vibration from construction sites: up to 100m from any construction activity.

³ <https://www.heathrowexpansion.com/documents-resources/heathrow-expansion-eia-scoping-report-vol-1/>



Future LuToN: Making best use of our runway - Scoping Report

Aircraft ground noise

- Up to 1km from the airport boundary.

Road traffic noise

- Noise from traffic on existing roads: will be studied where the increase or decrease in road traffic noise caused by changes in the volume of traffic due to DCO operational activity exceeds 1 dB $L_{Aeq,T}$ for both day and night periods;
- Noise from traffic on roads that are to be altered or newly built as part of the DCO: 600m around these roads as per the DMRB⁴.

Assessment Scenarios

- 10.5.5 It is proposed to use 2017 as the Baseline Year, but the impression given in paragraphs 10.4.2 to 10.4.6 is that much of the baseline data gathering is yet to be undertaken. Since the result of measurements will be used to calibrate the computer-based noise modelling, the choice of Baseline Year should reflect conditions as close to those currently being experienced as possible.

Operation

Additional noise metrics

- 10.5.33 A common and useful means of displaying the extent of effects of aircraft overflights is by means of Sound Exposure Level (SEL) Footprints, often at values of 80 and 90 dB(A).

Airside ground noise

- 10.5.36 There is no description of how ground noise levels for aircraft will be established, and clarification is sought on two points:
- Distinction will need to be made between noise generated by main engines and noise generated by APUs. Not only will these have different noise characteristics but they are sources at different heights above ground level, which affects propagation.
 - For new generation aircraft not yet in operation, how will noise levels from main engines at low power (sufficient only to manoeuvre the aircraft around the airfield) be determined as compared to those generated by existing, noisier variants? This is a very important issue with regard to air noise, particularly on departure when engines are operating close to maximum power, but it can also be expected to materially affect ground noise calculations.

⁴ Design Manual for Roads and Bridges (DMRB), HD213/11, Volume 11, Section 3, Part 7. The Highways Agency (revised November 2011).



Future LuToN: Making best use of our runway - Scoping Report

10.6 Potential Significant Effects

- 10.6.3 It would be helpful if this section of the report could be expanded to provide more information. The list of sources is complete but in what way and to what extent are these likely to cause significant effects? What will be the direct effects and will there be indirect effects? Importantly, it would be useful to identify whether any of the noise sources is likely to lead to health effects beyond annoyance, such as sleep disturbance, hypertension, acute myocardial infarction, cognitive impairment etc.

This level of discussion would provide very useful context on the scale of the noise effects that may arise as a result of the DCO.

 End of Section

Development Management

Central Bedfordshire Council

Priory House, Monks Walk
Chicksands, Shefford
Bedfordshire SG17 5TQ
www.centralbedfordshire.gov.uk



The Planning Inspectorate

Contact Caroline Macrdechian
Direct Dial 0300 300 5693
Email caroline.macrdechian@centralbedfordshire.gov.uk
Your Ref TR020001
Date 02 May 2019

Dear Sir/Madam,

Application No: CB/19/01087/OAC
Location: London Luton Airport, Airport Way, Luton. LU2 9LY
Proposal: Scoping consultation by Planning Inspectorate for London Luton Airport Limited (LLAL) (the Applicant) for an Order granting Development Consent for the Expansion of London Luton Airport (the Proposed Development)

I refer to your letter of 02 April 2019 regarding the above and would confirm that Central Bedfordshire Council's comments have been incorporated into a collaborative response between Hertfordshire County Council, Luton Borough Council and North Hertfordshire District Council. The response has been compiled by Vincent and Goring and was issued to PINS on 29 April 2019.

I trust this provides suitable clarification.

Yours faithfully,

Andrew Davie
Assistant Director - Development Infrastructure

Our ref: 679475.DP.16.42.12
Your ref: TR020001_000042_190401

The Planning Inspectorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

Highways England
Woodlands
Manton Lane
Bedford
MK41 7LW

29th April 2019

M1 – LONDON LUTON AIRPORT EXPANSION

Dear Sirs

Highways England is a statutory consultee on planning applications under the Town and Country Planning (Development Management Procedure) Order 2015. Highways England therefore welcomes pre-application discussion including the opportunity to provide advice on the scope of any Environmental Statement pursuant to the procedures set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

You have invited Highways England to provide comments on the scope of an Environmental Statement in respect of a Development Consent Order (DCO) application for works that will allow London Luton Airport (LTN) to expand to accommodate 32 million passengers per annum (mppa).

I have set out below both the general and specific areas of concern that Highways England would wish to see considered as part of the Environmental Statement. The comments relate specifically to matters arising from our responsibility to manage and maintain the Strategic Road Network (SRN) in England. In the case of this proposal, this relates principally to the M1, A1(M) and A5 and the connections between the SRN and Local Road Network.

Comments relating to the local road network itself should be sought from the appropriate local highway authority.

General aspects to be addressed in all cases should include:

- An assessment of transport related impacts of the development should be carried out and reported as described in Department for Communities and Local Government (DCLG) Planning Practice Guidance 'Travel plans, transport assessments and statements in decision-taking'.
- Assessment should be compliant with the requirements of Circular 02/2013 'the strategic road network and the delivery of sustainable development'.
- Environmental impact arising during construction and operational phases of the development, including traffic volume, composition or routing change and transport

infrastructure modification should be fully assessed and reported. Any environmental impact of the existing trunk road upon the development itself should also be assessed.

- Adverse changes to noise and to air quality should be particularly considered, including in relation to compliance with the European air quality limit values and/or in local authority designated Air Quality Management areas.
- No new connections are permitted to the Highways England drainage network. In the case of an existing 'permitted' connection, this can only be retained if there is no land use change.
- Development must not lead to any surface water flooding on the SRN carriageway.
- Each chapter of the Environmental Statement should set out specifically why it complies with planning policy, where this is not the case, it should be explicit what the material considerations are together with the proposed mitigation measures.
- A detailed Construction Management Plan will also be required including detailed traffic management measures during construction of any work likely to impact on the safe and efficient operation of the SRN.
- A Framework Travel Plan for the site should accompany the application. We would welcome reviewing this in advance of submission and it may be necessary to secure the measures detailed within the Travel Plan by way of a planning condition.

Location specific considerations:

- Discussions are already underway with the applicant and their appointed consultants to agree a scope of a Transport Assessment (TA). Whilst some items have been agreed, many remain outstanding at this stage. Any assessment should consider the operation of the Strategic Road Network – in this case the M1, A1 (M) and A5. Given the scale and location of the development, the M1 is likely to be significantly affected.
- The TA should demonstrate compliance with NPPF, DfT Circular 02/2013 and other industry best practice or relevant legislation.
- The application of the IEMA significance criteria, as set out in the scoping note, are not considered suitable for delimiting the scale and extent of the assessment. These were developed in 1993, and essentially dismiss any change in traffic flows lower than 10%, which given the high base flows in this area, especially on the SRN, is likely to result in the exclusion of sections of the highway network with high existing traffic flows from the ES study area. An alternative approach should be proposed. Current best practice would be to properly assess the impact on traffic delays (without implausible screening thresholds), including on public transport and non-motorised users. This should also recognise the potential for impacts on servicing and access (including parking). Most major schemes have used such an approach. The Crossrail project and High Speed 2 have both developed comprehensive scope and methodology for the assessment of traffic and transport impacts. These have also been developed for less major schemes such as Transport for London's Victoria station and Bank Station upgrade proposals. The Bank Station Scoping Report, for example, recognises the need to address issues beyond those set out in the 1993 guidance (summarised in paragraph 7.4.3 of the

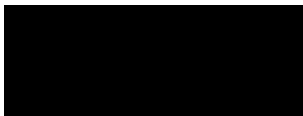
Bank Station Scoping Report). The High Speed 2 Scope and Methodology Report has a similar approach. These approaches have been consulted on extensively and can be considered current best practice

- The impact of construction traffic on the SRN should be assessed.

The scope of the necessary Environmental Assessment will need to be informed by the outcomes of the associated Transport Assessment work which is as yet incomplete. Should it transpire that the scope of the ES needs to be extended due to the emerging conclusions of the TA, for example, then it may be necessary to re-visit and re-consult on the ES.

Highway England's comments imply no pre-determined view as to the acceptability of the proposed development in traffic, environmental or highway terms. Should the applicant wish to discuss the merits of the proposal in terms of the likely impact on the SRN please contact me.

Yours truly,



Penny Mould
Asset Manager (Planning) Beds, Bucks and Herts



Historic England

Sir or Madam
Planning Inspectorate
Temple Quay House
Temple Quay
BRISTOL
BS1 6PN

Direct Dial: 01223 582738

Our ref: PL00572118

29 April 2019

Dear Sir or Madam

Application by London Luton Airport Limited (LLAL) for an Order granting Development Consent for the expansion of London Luton Airport

Thank you for sending Historic England the scoping consultation on the application by London Luton Airport Limited (LLAL) for an Order granting Development Consent for the expansion of London Luton Airport. This would increase the capacity of the airport to 32 million passengers per annum. The work required to achieve the increased capacity would include an extended airfield platform, new terminal, additional taxiways and aprons, car parking, new airfield and landside facilities, surface access, water management and landscaping.

There are a number of designated and undesignated assets within the vicinity of the airport. These include the highly designated sites at Someries Castle and Luton Hoo. Someries Castle is a medieval magnate's residence which lies just to the south of the airport. The chapel and gatehouse survive as upstanding remains together with other buried remains of both the buildings and formal gardens. These provide valuable evidence of houses of this type. The Castle is one of the earliest brick buildings in the country and is an important for illustrating construction techniques. It is a scheduled monument. To the south and south west of the airport lies the historic estate of Luton Hoo, comprising mid-eighteenth century parkland designed by Lancelot 'Capability' Brown with formal twentieth century gardens with a mansion at its heart with major phases of work dating from the same periods and numerous ancillary buildings. The landscape is grade II* and the mansion, grade I. Many of the ancillary buildings are also designated. In addition there are a number of conservation areas within Luton.

The proposed scope of the assessment to be undertaken in the Environmental Statement includes Cultural Heritage as a topic. The summary includes an overview of relevant legislation, policy and guidance. This includes reference to the Good Practice Advice in Planning Note 3 - The Setting of Heritage Assets. This provides general advice on understanding setting and its contribution to significance and a suggested staged approach to taking decisions on setting. This is particularly pertinent in assessing the potential impact of the proposals on the setting and significance of the surrounding heritage assets.



24 BROOKLANDS AVENUE, CAMBRIDGE, CB2 8BU

Telephone 01223 582749
HistoricEngland.org.uk



Historic England is subject to both the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Any Information held by the organisation can be requested for release under this legislation.



The heritage assets that would potentially be affected by the development within the study area are listed. An extended study area is also proposed and we would welcome the opportunity to comment on this in due course.

The proposed methodology uses standardised EIA matrices. While these are useful tools, we consider the analysis of setting (and the impact upon it) as a matter of qualitative and expert judgement which cannot be achieved solely by use of systematic matrices or scoring systems. Historic England therefore recommends that, if used, these matrices should be seen primarily as material supporting a clearly expressed and non-technical narrative argument within the cultural heritage chapter. We note that it is proposed to use professional judgement to inform this aspect of the assessment and would stress the importance of this. The EIA should use the concepts of benefit, harm and loss (as set out in the National Planning Policy Framework) to set out 'what matters and why' in terms of the heritage assets' significance and setting, together with the effects of the development upon them.

It is important that the assessment is designed to ensure that all impacts are fully understood. The Cultural Heritage chapter is grouped with other inter related topics which include Landscape and Visual. We would welcome the opportunity to comment on proposed viewpoints to inform the cultural heritage assessment. We also recommend reference is made within the cultural heritage chapter to environmental impacts including noise and lighting with appropriate cross references to these chapters.

We would be pleased to provide further advice to the applicant as the scheme is developed.

Yours sincerely,



Clare Campbell
Principal Inspector of Historic Buildings and Areas
clare.campbell@HistoricEngland.org.uk

cc:

CEMHD Policy - Land Use Planning
NSIP Consultations
Building 1.2, Redgrave Court
Merton Road, Bootle
Merseyside, L20 7HS

Your ref: TR020001
Our ref: 4.2.1.6586

HSE email: NSIP.applications@hse.gov.uk

FAO Major Casework Directorate
The Planning Inspectorate
Temple Quay House
Temple Quay,
Bristol
BS1 6PN

Dear Major Casework Team

29 April 2019

**PROPOSED LUTN – EXPANSION OF LONDON LUTON AIRPORT (the project)
PROPOSAL BY LLAL (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as amended) – Regulations 10 and 11**

Thank you for your letter of 1st April 2019 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records there is one major accident hazard pipeline within the proposed application boundary of the Expansion of London Luton Airport for this nationally significant infrastructure project.

This is based on the current configuration for the red line area as illustrated in, for example, Figure 2.3: LLAL Proposed and Consented Airport Infrastructure (Drawing reference: LADCO-3B-ARP-00-00-DR-YE-0004), of the environmental impact assessment scoping report volume 2 figures March 2019.

The major accident hazard pipeline is:

HSE Reference No.	TRANSCO Index No.	Pipeline Operator	Pipeline/Location Name
7527	1786	Cadent Gas Ltd	Vauxhall motors spur (1TOE)

Would Hazardous Substances Consent be needed?

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) may require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others, for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015.

Hazardous Substances Consent would be required if the site is intending to store or use any of the Named Hazardous Substances or Categories of Substances and Preparations at or above the controlled quantities set out in schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 An Annex on the Planning Inspectorate's website - [Annex G – The Health and Safety Executive](#). This document includes consideration of risk assessments on page 3

Explosives sites

There is a licensed site in the vicinity of that part of the development around J10 of the M1. The nature of the development is such that we do not expect there to be significant interaction.

Electrical Safety

No comment, from a planning perspective.

Please send any further electronic communication on this project directly to the HSE's designated e-mail account for NSIP applications. Alternatively any hard copy correspondence should be sent to:

Mr Dave Adams (MHPD)
NSIP Consultations
1.2 Redgrave Court
Merton Road
Bootle, Merseyside
L20 7HS

Yours sincerely,



Dave Adams
CEMHD4 Policy

From: David.Hughes@harrow.gov.uk
To: [Luton Airport](#)
Subject: Application by London Luton Airport Limited (LLAL) for an Order granting Development Consent for the Expansion of London Luton Airport - scoping consultation
Date: 16 April 2019 15:31:14
Attachments: [image001.gif](#)

Dear The Planning Inspectorate (Major Casework Directorate),

Thank you for consulting Harrow Council in relation to London Luton Airport Limited's (LLAL) request for a Scoping Opinion as to the information to be provided in an Environment Statement (ES) assessing the proposed expansion of London Luton Airport.

At present the London Borough of Harrow is not significantly impacted upon by London Luton flightpaths, nor impacts from the airport generally (i.e. transport). However, with the proposed increase from the current cap of 18 million passengers per annum to 32 million passengers per annum it is almost inevitable that there will be an increase in a range of impacts of the airport, including noise from additional flights arriving and departing the airport (from 135,500 annual air transport movements in 2017 to 212,500 by 2038). We are also aware of the potential for flightpaths to change in the future, particularly as a part of the Government's ongoing process of modernising UK airspace and / or necessitated by proposals being progressed by other airports in the South-East (such as Heathrow).

At present however, Harrow has no specific comments to make with respect to the request for scoping opinion. We would however make the following general comments as to the nature of the information that should be provided in the ES:

- a) We would expect that the assessment is undertaken in accordance with the relevant International, European and UK requirements, including the Airports National Policy Statement (where applicable).
- b) It is noted that the material submitted by the airport acknowledges the ongoing airspace change process being undertaken for the airspace over London and that NATS has indicated that Luton Airport may be a significant beneficiary of the airspace re-design (i.e. reduced 55dB noise contour). As these changes are not due to be implemented until 2024-2026, the applicant's material indicates that the noise / air quality elements of the ES will be based on current flight paths but where possible, consideration will be given to the emerging flight path designs. Whilst the use of the emerging flight paths is encouraged (i.e. using the best available data at the time), these will only be indicative flight paths and will not be final (and will be subject to its own consultation and adoption process). The ES should therefore use both current and indicative proposed flightpaths and clearly articulate the impacts of the worse-case scenario (compared to present) as the basis of assessing the impact of the proposed expansion / increased number of flights.
- c) Material in the ES should be presented in a way that clearly indicates the current impacts of the airport as well as those resulting from the proposed expansion (and any indicative flight path changes, if available). The material should allow for a fine grain of interrogation, so that individual property owners as well as community groups / local authorities can determine the impact of the proposals on their locality (including understanding the degree of any change from the current situation).

We look forward to being further consulted as a statutory consultee as the DCO application progresses.

Should you have any queries, please do not hesitate to contact the undersigned.

Kind regards,
David Hughes

David Hughes

Planning Policy Manager

London Borough of Harrow

Civic Centre, Station Road Harrow HA1 2XF

Email: David.Hughes@harrow.gov.uk

Tel: 020-8736-6082

Any planning advice provided by officers of the Local Planning Authority to members of the public, either orally or in writing, in the course of their duties is offered in good faith, based on the available information and evidence. Such views are the personal opinion of that Officer and not a formal decision of, nor binding upon, the Local Planning Authority. The Local Planning Authority will only be bound where a formal application is submitted and a formal decision is issued in writing.

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Reply to Elizabeth Verdegem
Call 01908 252462
E-mail elizabeth.verdegem@milton-keynes.gov.uk

Our Ref 19/00872/CONS
Your Ref TR020001_000042_190401
Date 29 April 2019

Dear Sir/Madam,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by London Luton Airport Limited (LLAL) (the Applicant) for an Order granting Development Consent for the Expansion of London Luton Airport (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

I write regarding the above consultation request dated 1 April 2019.

Milton Keynes Council, as an adjoining Local Planning Authority, have considered the information provided within the Environmental Impact Assessment Scoping Report by London Luton Airport Limited, dated March 2019, and **do not have any comments to make.**


Our primary concerns regarding the increase in capacity at the airport will relate to the wider impact on the surrounding highway network, in particular the M1 motorway corridor, the resulting increase in traffic, and the associated environmental impacts. It would appear that the requirement to consider these impacts, as part of the Environmental Statement, has been included within the Scoping Report, and Milton Keynes Council would expect this information to be submitted as part of the forthcoming planning application.

Milton Keynes Council request to be consulted when the planning application is submitted.

Yours faithfully,

Elizabeth Verdegem
Senior Planning Officer – Development Management

Counter signed by:



Paul Keen
Deputy Development Management Manager
For and on behalf of the Council

Land and Acquisitions

Anne Holdsworth
DCO Liaison Officer
Network Management
anne.holdsworth@nationalgrid.com
Direct tel: +44 (0)7960175682

SUBMITTED ELECTRONICALLY:
lutonairport@planninginspectorate.gov.uk

www.nationalgrid.com

16 April 2019

Dear Sir/Madam

APPLICATION BY LONDON LUTON AIRPORT LIMITED (LLAL) (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE EXPANSION OF LONDON LUTON AIRPORT (THE PROPOSED DEVELOPMENT)

SCOPING CONSULTATION

This is a response on behalf of National Grid Electricity Transmission PLC (NGET) and National Grid Gas PLC (NGG). I refer to your consultation letter dated 1st April 2019 regarding the proposed Order.

National Grid infrastructure within / in close proximity to the order boundary:

Electricity Transmission

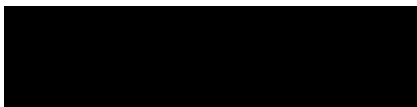
National Grid Electricity Transmission has no apparatus within or in close proximity to the proposed order limits.

Gas Transmission

National Grid Gas has no apparatus within or in close proximity to the proposed order limits.

If you require any further information please do not hesitate to contact me.

Yours faithfully



Anne Holdsworth
DCO Liaison Officer, Land and Acquisitions



NATS Safeguarding Office

4000 Parkway
Whiteley
Fareham PO15 7FL

T: 01489 444687

E: natssafeguarding@nats.co.uk

W: www.nats.aero/windfarms

Luton Expansion Team
Planning Inspectorate

12th April 2019

NATS Ref: **SG27864**

Sent via email: lutonairport@planninginspectorate.gov.uk

Dear Sirs,

Scoping request for expansion of London Luton Airport

I refer to the application quoted above.

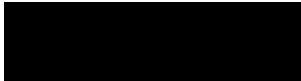
The proposed development has the potential to affect NATS En Route's infrastructure located at Luton Airport and its provision of en-route air traffic services.

The details of the proposed development are currently insufficient for NATS to make a formal representation. However, NATS will be happy to collaborate with the relevant stakeholders in order to review further information as it becomes available.

NATS will also be willing to work with all interested parties in order to understand the impact and identify any solutions that may be required.

I trust NATS's position is clear, but should there be any further requests or queries, do not hesitate to contact us.

Yours faithfully



Mr Sacha Rossi

For and on behalf of NATS En-Route plc



Public Health
England

Environmental Hazards and
Emergencies Department
Centre for Radiation, Chemical and
Environmental Hazards (CRCE)
Seaton House
City Link
London Road
Nottingham
NG2 4LA

nsipconsultations@phe.gov.uk

www.gov.uk/phe

Your Ref: TR020001/000042/190401

Our Ref: 49912

The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol BS1 6PN

29th April 2019

Dear Sir/Madam,

**Re: Scoping Consultation
Application for an Order Granting Development Consent for the proposed
London Luton Airport**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Advice offered by PHE is impartial and independent.

Please note that we have replied to earlier consultations as listed below and this response should be read in conjunction with that earlier correspondence:

Non Statutory Pre-Consultation: 31st August 2018

PHE exists to protect and improve the nation's health and wellbeing, and reduce health inequalities; these two organisational aims are reflected in the way we review and respond to Nationally Significant Infrastructure Project (NSIP) applications.

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects.

This project sits within the remit of the draft Airports National Policy Statement (NPS), which specifically refers to the need to assess the likely significant effects of

the project on health in Section 4 (paragraphs 4.66–4.69). The NPS indicates that airport infrastructure development proposals can have both beneficial and adverse impacts on health (para 4.66) and that the scale of development may have indirect impacts on health through a range of determinants (para 4.67). It also notes that more than one development may affect people simultaneously; as such, cumulative impacts on health should be given due consideration (para 4.69).

Environmental Public Health

We have assessed the submitted documentation and wish to make the following comments:

1. We are generally satisfied with the proposed methodology. We would expect to see that the detailed quantitative and cumulative assessments proposed are undertaken and provided in the final Environmental Statement (ES).
2. At this stage of the consultation, there is a level of uncertainty about the overall scope of the development. In light of this, further consideration may be needed on the intention to screen out certain aspects from further assessment. The complex nature of the proposed project and the associated development will require careful consideration of all the combined elements. Specific elements such as air quality or noise should not be considered in isolation, to ensure that any mitigation measures proposed for one aspect do not cause adverse impacts or unintended consequences for another.
3. We have provided specific comments on noise in Appendix A.
4. We would like to draw your attention to the [International Health Regulations 2005](#) which states that the airport operator should review their provisions to ensure that adequate space and facilities are available to safely disembark, cohort and assess passengers in the event of a public health incident. This could be a situation such as passengers thought to be suffering from an infectious disease or a Chemical, Biological, Radiological and Nuclear defense (CBRN) incident. We recommend the airport operator considers the requirements in the core capacity document and spreadsheet published by the World Health Organization (WHO) which can be found here: <https://www.who.int/ihr/publications/PoE/en/> . Furthermore the airport operator should ensure that there is a regularly tested and reviewed Public Health Emergency Contingency Plan in place and that in the event of an incident all staff are aware of the need for prompt communication with the [PHE East of England](#).

Health and Wellbeing

This section of PHE's scoping response, identifies the wider determinants of health and wellbeing we expect the ES to address, to demonstrate whether they are likely to give rise to significant effects. PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived

from an analysis of the wider determinants of health mentioned in the National Policy Statements. The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Having considered the submitted scoping report PHE wish to make the following specific comments and recommendations:

Methodology

Temporal scope and reporting

The scale and nature of the proposed development results in the need for very clear reporting on the temporal impacts and effects on the local population. In this context “temporary” impacts can extend over long periods. The scoping report does not define the temporal scope of impacts.

Recommendation

The reporting within the Preliminary Environmental Information Report (PEIR) should use the clear definitions of temporary timescales, rather than generic temporary or permanent temporal descriptions to ensure a consistent, transparent and accurate approach to the report. Temporary timescales could be sub-divided into weeks, months or number of years.

In combination & Cumulative effects reporting

The local community will experience impacts from a range of factors due to this and other local developments over an extended period. The range of impacts over such a long period may result in minor effects gaining increased significance to local communities and the vulnerable population within.

Recommendation

The PEIR should report effects at community level in order to assist the identification of the overall potential effects across a range of impacts. These community level reports will also aid local communities to engage with consultations by providing relevant and accessible information.

Population and human health

The scoping report does not identify any aspects to be scoped out of the assessment for population and human health. The list of wider determinants to be scoped into the ES, by the applicant, are very broad descriptions and each will contain an important range of potential impacts on health and wellbeing.

Table 1 lists the wider determinants, as a minimum, that should be scoped into an assessment of effects on population and human health under the broad descriptions identified within the scoping report.

Table 1 – Health and wellbeing wider determinants

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
Wider determinants of health and wellbeing			
<ul style="list-style-type: none"> - Access to local public and key services and facilities - Access to good-quality affordable housing - Access to healthy affordable food - Access to the natural environment - Access to the natural environment within the urban environment - Access to leisure, recreation and physical activity opportunities within the urban and natural environments 	<ul style="list-style-type: none"> - Accessibility - Access to/by public transport - Opportunities for/access by cycling and walking - Links between communities - Community severance - Connections to jobs - Connections to services, facilities and leisure opportunities 	<ul style="list-style-type: none"> - Employment opportunities including training opportunities - Local business activity - Regeneration - Tourism and leisure industries - Community/social cohesion and access to social networks - Community engagement 	<ul style="list-style-type: none"> - Land use in urban and/or rural settings - Quality of urban and natural environments

Should the applicant wish to scope out any of these determinants the PEIR must provide adequate justification in accordance with the Planning Inspectorate Advice Note Seven (Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements).

Definition of health

The scoping report does not define health but does make reference to many wider determinants and the inclusion of mental health. It is useful to be clear and provide a definition of health.

Although the scoping report mentions health and a mental health assessment it provides no further detail. It is important that mental health has parity of esteem with physical health and wellbeing. Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. A scheme of this scale and nature has impacts on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

Recommendation

We would recommend the use of the broad definition of health proposed by the WHO and we welcome a specific reference to mental health.

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the effects on mental health, including suicide, is required.

The PEIR should reference the methodology used to complete assessments for the effects on mental health and wellbeing. The Mental Well-being Impact Assessment (MWIA), is mentioned within the report and could be used as a methodology.

Vulnerable populations

An approach to the identification of vulnerable populations has been provided but does not make links to the list of protected characteristics within an Equality Impact Assessment (EqIA). The impacts on health and wellbeing and health inequalities of the scheme may have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. The ES and any EqIA should not be completely separated.

Recommendation

The assessments and findings of the ES and any EqIA should be cross referenced between the two documents, particularly to ensure the comprehensive assessment of potential impacts for health and inequalities and where resulting mitigation measures are mutually supportive.

Flooding

The scoping report proposes to scope out health effects from flooding, due to the risk of flooding being deemed as not significant. We are content with this approach but it should be scoped back in should the flooding risk be increased. Flooding can have a significant effect on health, in particular mental health and wellbeing.

Recommendation

Should the risk of flooding change during the course of the ES development health effects must be scoped in and assessed.

Physical activity and active travel / access to open space

The scoping report identifies how non-motorised user (NMU) will be impacted through the loss or change in formal Public Rights of Way (PRoW), open space and the existing road network. Active travel forms an important part in helping to promote healthy weight environments and as such it is important that any changes have a positive long term impact where possible. Changes to NMU routes have the potential to impact on usage, create displacement to other routes and potentially lead to increased road traffic collisions.

A scheme of this scale and nature can also provide opportunities to enhance the existing infrastructure that supports active travel and we expect the proposal to contribute to improved provision for active travel and physical activity.

The scoping report makes inconsistent reference to cycling within the assessment scope.

It is important to ensure that any impact on tranquillity in open spaces is considered.

Recommendations

The overall risk to NMU and impact on active travel should be considered on a case-by-case basis, taking into account, the number and type of users and the effect that the temporary traffic management system will have on their journey and safety.

Any traffic counts and assessment should also, as far as reasonably practicable, identify informal routes used by NMU or potential routes used due to displacement.

The final ES should identify the temporary traffic management system design principles or standards that will be maintained with specific reference to NMU. This may be incorporated within the Code of Construction Practice (CoCP).

The scheme should continue to identify any additional opportunities to contribute to improved infrastructure provision for active travel and physical activity.

Housing affordability and supply

The Scoping Report identifies the potential for temporary and permanent land take in order to achieve the construction and operational phase. Loss of homes may attract compensation, but existing compensation schemes only consider property owners. Compensation schemes may not address the impact on the loss of homes on the tenants of these properties, who may often have poor health or be considered vulnerable.

The presence of significant numbers of workers could foreseeably have an impact on the local availability of affordable housing, particularly that of short term tenancies, for certain communities.

Recommendation

The PEIR should identify the number of workers and whether these are likely to be from within the existing population or new to area.

Demand for temporary accommodation by the construction work force should be identified and an assessment made regarding the impact on local housing supply and affordability, particularly in relation to homelessness provision of short term housing supply. Given the number of other large developments the cumulative impact on housing provision should be assessed.

The impact of the development on the tenants of social or private rented sector housing should be considered within the PEIR where appropriate, which should identify the scale and nature of impact and address and specific mitigation measures.

Monitoring

PHE expects an assessment to include consideration of the need for monitoring. It may be appropriate to undertake monitoring where:

- Critical assumptions have been made.
- There is uncertainty about whether negative impacts are likely to occur as it may be appropriate to include planned monitoring measures to track whether impacts do occur.
- There is uncertainty about the potential success of mitigation measures.
- It is necessary to track the nature of the impact and provide useful and timely feedback that would allow action to be taken.

Recommendation

The need for monitoring should be assessed and reported within the PEIR.

Yours faithfully

For and on behalf of Public Health England

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix A: Detailed noise-specific comments

Stakeholder engagement

PHE welcomes the convening of the Noise Working Group and Noise Envelope Design Group - including representatives from local authorities and local communities - and the applicant's commitment to consult the Independent Commission on Civil Aviation Noise (ICCAN) (c.f. Scoping Report 10.3).

PHE encourages the scheme promoter to use effective methods to communicate changes in the acoustic environment as a result of the proposed development to local communities. For example, immersive sound demonstrations can help make noise and visual impacts intuitive to understand and accessible to a wider demographic, and have been used in major road and rail infrastructure projects such as High Speed 2 (HS2) and the planned upgrades to the A303.

PHE expects relevant sections of the ES to explain how stakeholder responses in relation to noise have influenced the development of the proposal, including any mitigation measures. In addition, the applicant should propose a suitable strategy to disseminate the findings of the Environmental Impact Assessment (EIA) regarding the effects of noise on health to stakeholders, including communities which may experience a change in their local noise environment as a result of the scheme.

Health Outcomes and Significance of Impacts

PHE expects proper consideration to be given to the potential effects on human health due to changes in environmental noise arising from construction and operational phases of the proposed development. PHE notes the applicant's commitment to quantify noise impacts on health in terms of Disability Adjusted Life Years (DALYs) following the methodology laid out by the IGCBN [1]. This is expected to include the specific outcomes of annoyance, sleep disturbance, acute myocardial infarction, stroke and dementia (c.f. 15.5.22). PHE recommends that the number of people affected is also reported.

PHE recommends that the definition of significance of noise impacts is discussed and agreed with relevant stakeholders, including the Noise Working Group, Noise Envelope Design Group, and ICCAN. PHE recommends that disagreement amongst stakeholders on the methodology of defining significance is acknowledged, and could be used to inform additional sensitivity analyses.

In paragraph 10.2.35, the applicant states that "*the new World Health Organization Guidelines are currently not considered directly applicable to the assessment*". Two reasons for this are given: a recommendation in the WHO Environmental Noise Guidelines 2018 (ENG) to use data derived in a local context where possible, and the availability of the UK-specific evidence in the Civil Aviation Authorities Survey of Noise Attitudes (SoNA2014). However the applicant should note that the statement in the ENG, and published data from SONA are only relevant to annoyance. PHE recommends that the applicant considers the evidence in the ENG (and the accompanying systematic reviews) when assessing other health outcomes, including sleep disturbance and cardiovascular health outcomes.

In paragraph 10.5.16 the applicant states that the Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adversed Effect Level (SOAEL) have been defined based on the WHO Guidelines for Community Noise and WHO Night Noise Guidelines. PHE recommends that the applicant also considers the WHO ENG, which is underpinned by more recent, and better quality scientific evidence. For example, the applicant states that the daytime SOAEL of 63dB $L_{Aeq,16hr}$ is based on the onset of cardiovascular health effects. The WHO ENG concluded that a relevant risk increase for the incidence of ischaemic heart disease from exposure to aircraft noise occurs at 53dB L_{den} . A recent nationwide scale cohort study from Switzerland found that risks of cardiovascular mortality due to transportation noise started to increase from as low as 40dB L_{den} [10].

The applicant may wish to carry out sensitivity analyses using different exposure response relationships set out in publications by the WHO [2, 3] as well as the growing evidence relating to a “change effect” for any newly overflown communities [4, 5].

Regarding sleep disturbance, PHE recommends that the assessment is carried out both in terms of number of noise induced awakenings¹ and the number of people highly sleep disturbed [11]. For the former it may be helpful to carry out separate assessments for windows open and windows closed scenarios, in order to better understand any seasonal variation in impacts.

PHE recommends that overall assessments of significance are based on impacts on health and quality of life, and not around noise exposure per se (in line with the Noise Policy Statement for England, NPSE). Furthermore, PHE expects significance assessments to reflect both the severity of the health outcome and the size of the population affected. Other considerations that can be taken into account are:

- i. The existing noise exposure of affected communities – in particular any designated Noise Important Areas in proximity to the scheme. These are areas with the highest levels of noise exposure at a national level, and require very careful consideration in terms of opportunities for improvement of health and quality of life through noise management;
- ii. In-combination and cumulative exposure to other environmental risk factors, including other sources of noise and air pollution; and
- iii. Local health needs, sensitivities and objectives.

Mitigation measures

PHE expects decisions about noise mitigation measures to be underpinned by good quality evidence, in particular whether mitigation measures are proven to reduce adverse impacts on health and quality of life. For interventions where evidence is weak or lacking, PHE expects a proposed strategy for monitoring and evaluating their effectiveness during construction and operation of the proposed development. With regards to operational noise from road and air traffic, PHE expects to see consideration of a broad range of measures, such as fleet management, flight-path

¹ These are polysomnography-measured cortical awakenings rather than conscious awakenings.

design, respite, traffic management, low-noise road surfaces, acoustic barriers, quiet facades and noise insulation schemes. PHE expects any proposed noise insulation schemes to take a holistic approach which achieves a healthy indoor environment, taking into consideration noise, ventilation, overheating risk, indoor air quality and occupants' desire to have windows open. It should be noted that there is at present insufficient good quality evidence as to whether insulation schemes are effective at reducing annoyance and self-reported sleep disturbance [6], and initiatives to evaluate the effectiveness of noise insulation on improved physical and psychological health outcomes are strongly encouraged.

PHE notes that a Construction Environmental Management Plan (CEMP) will be developed and implemented by the contractor, in part to mitigate the adverse impact of construction noise (c.f. 3.6.8). PHE recommends that the CEMP includes a detailed programme of construction which highlights the times and durations of particularly noisy works and proposed noise mitigation measures. PHE recommends that the applicant develops a strategy for actively communicating key elements of the CEMP to local communities.

Green spaces and private amenity spaces

PHE expects development proposals to take into consideration the evidence which suggests that quiet areas can have both a direct beneficial health effect and can also help restore or compensate for the adverse health effects of noise in the residential environment [7-9]. Research from the Netherlands suggests that people living in noisy areas appear to have a greater need for areas offering quiet than people not exposed to noise at home [7].

Noise insulation schemes do not protect amenity spaces such as private gardens or community green spaces from increased noise exposure. It is acknowledged that the proposed development will result in the loss of open space (c.f. 3.4.10). PHE expects consideration to be given to the importance of green spaces as well as opportunities to create new tranquil public spaces which are easily accessible to those communities exposed to increased noise from the scheme. These spaces should be of a high design quality and have a sustainable long-term management strategy in place.

Finalisation of flight paths

PHE acknowledges that for aviation noise, noise modelling may be based on indicative, rather than finalised flightpaths. PHE expects the applicant to agree a strategy with relevant stakeholders to address this issue, and additional assessment may be necessary during the finalisation of flightpaths if consent is granted, to assess and mitigate the full scale and distribution of localised impacts.

References:

- [1] [Defra/Interdepartmental Group on Costs and Benefits Noise Subject Group, 2014](#)
- [2] [WHO Environmental Noise Guidelines for the European Region, 2018](#)
- [3] [WHO Burden of Disease from Environmental Noise, 2012](#)

- [4] Breugelmans et al. 2007. Longitudinal effects of a sudden change in aircraft noise exposure on annoyance and sleep disturbance around Amsterdam airport. In proceedings of the ICA, Madrid, Spain, 2-7 September 2007.
- [5] Brink 2008, Annoyance responses to stable and changing aircraft noise exposure, J. Acoust. Soc. Am 124(5) November 2008, 2930-2941.
- [6] Lex Brown and Van Kamp. WHO Environmental Noise Guidelines for the European Region: A Systematic Review of Transport Noise Interventions and Their Impacts on Health. Int. J. Environ. Res. Public Health 2017, 14(8), 873.
- [7] Quiet Areas and Health, Health Council of the Netherlands Publication no. 2006/12, 2006.
- [8] LIFE09 ENV/NL/000423, QSIDE - The positive effects of quiet façades and quiet urban areas on traffic noise annoyance and sleep disturbance, 2013
- [9] COST TD0804, Soundscape of European Cities and Landscapes, 2013
- [10] Héritier H, et al., Transportation noise exposure and cardiovascular mortality: a nationwide cohort study from Switzerland. European Journal of Epidemiology, In press: p. 1-9.
- [11] Basner M. and McGuire S. WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Effects on Sleep. Int. J. Environ. Res. Public Health 2018, 15, 519



Expansion of London Luton Airport – proposed development by London Luton Airport Limited (LLAL)

Royal Mail Group Limited comments on information to be provided in applicant's Environmental Statement

Introduction

Reference the letter from PINS to Royal Mail dated 1 April 2019 requesting Royal Mail's comments on the information that should be provided in LLAL's Environmental Statement.

Royal Mail's consultants BNP Paribas Real Estate have reviewed the applicant's Scoping Report dated March 2019, scrutinising the proposed development and its potential impacts on Royal Mail's business interests.

A representation was made by Royal Mail to LLAL's Non-Statutory Consultation in August 2018 flagging (having regard to the likely extent and duration of construction works and the magnitude of anticipated growth in passenger numbers) that there is a real risk that the project will compromise Royal Mail's operations through impact upon the local transport network. However, it is noted that section 7.3 of the Scoping Report (Stakeholder engagement and consultation) does not refer to Royal Mail's consultation response or consultations with any other major statutory road users. Accordingly, some of the content of Royal Mail's August 2018 consultation response is repeated below and Royal Mail requests confirmation from LLAL that this information will be taken into account by LLAL when progressing its Environmental Statement.

Royal Mail– relevant information

Under section 35 of the Postal Services Act 2011 (the "Act"), Royal Mail has been designated by Ofcom (the independent communications regulator) as a provider of the Universal Postal Service.

Royal Mail is the only such provider in the United Kingdom. Its services are regulated by the Communications Industry Regulator, Ofcom.

In respect of its postal services functions, section 29 of the Act provides that Ofcom's primary regulatory duty is to secure the provision of the Universal Postal Service. Ofcom discharges this duty by imposing regulatory conditions on Royal Mail, requiring it to provide the Universal Postal Service.

By sections 30 and 31 of the Act (read with sections 32 and 33) there is a set of minimum standards for Universal Service Providers, which Ofcom must secure. The conditions imposed by Ofcom reflect those standards. There is, in effect, a statutory obligation on Royal Mail to provide at least one collection from letterboxes and post offices six days a week and one delivery of letters to all 29 million homes and businesses in the UK six days a week (five days a week for parcels). Royal Mail must also provide a range of "end to end" services meeting users' needs, e.g. First Class, Second Class, Special Delivery by 1 pm, International and Redirections services.

Royal Mail is under some of the highest specification performance obligations for quality of service in Europe. Its performance of the Universal Service Provider obligations is in the public interest and should not be affected detrimentally by any statutorily authorised project.

Royal Mail's postal sorting and delivery operations rely heavily on road communications. Royal Mail's ability to provide efficient mail collection, sorting and delivery to the public is sensitive to changes in the capacity of the highway network.

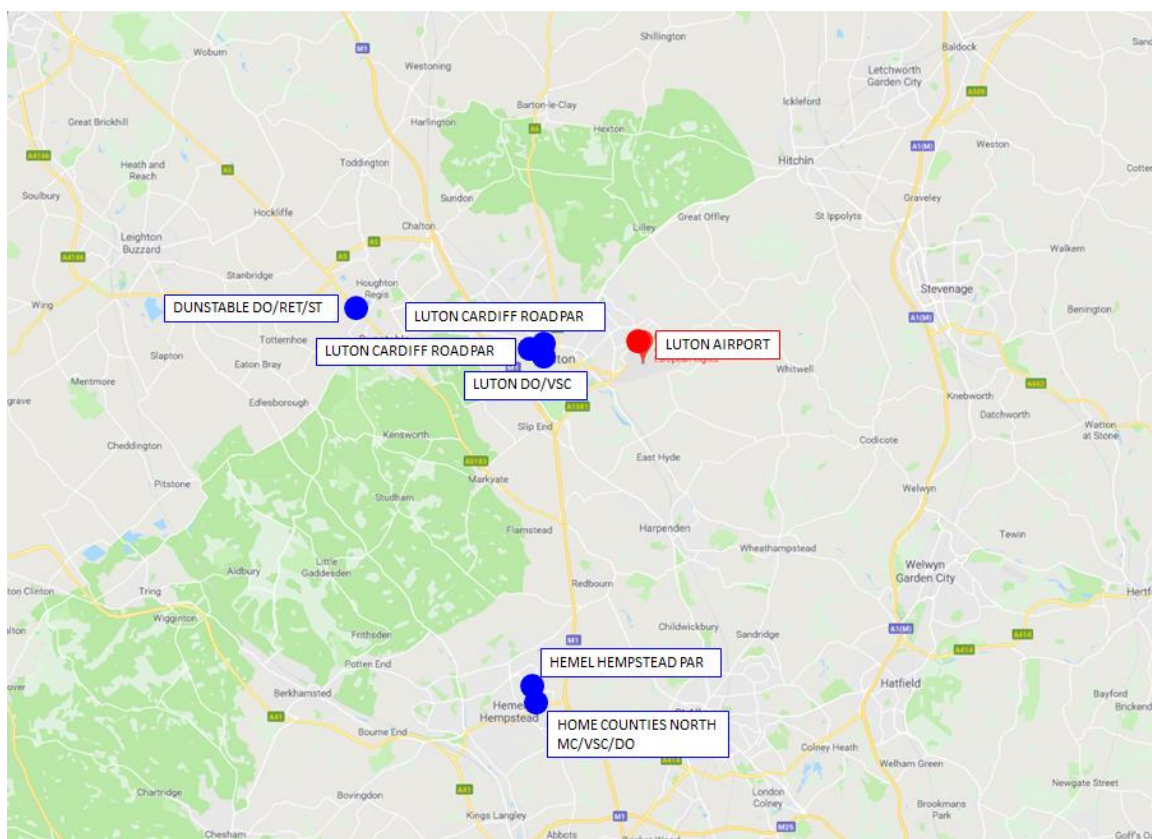


Royal Mail is a major road user nationally. Disruption to the highway network and traffic delays can have direct consequences on Royal Mail's operations, its ability to meet the Universal Service Obligation and comply with the regulatory regime for postal services thereby presenting a significant risk to Royal Mail's business.

Potential impacts of the scheme on Royal Mail

Royal Mail own or have an interest in a number of properties which are in the vicinity of LLAL's proposed Luton Airport expansion, the operations run from which have potential to be affected by the proposals:

Site Name.	Address	Distance from project location in miles
LUTON DELIVERY OFFICE	9-11 DUNSTABLE RD LU1 1AA	3.1
LUTON CARDIFF ROAD PARKING	CARDIFF GROVE LU1 1PP	3.1
LUTON DALLOW ROAD PARKING	2A DALLOW ROAD LU1 1LY	3.3
DUNSTABLE DELIVERY OFFICE	59 HIGH ST NORTH LU6 1JH	7.9
HOME COUNTIES NORTH MAIL CENTRE	MAYLANDS AVE HP2 7XX	11.3
HEMPEL HEMPSTED PARKING	SWALLOWDALE LANE HP2 7EA	11.3



Royal Mail's network of operations in the Luton area links all of the above properties and because of that they are all vulnerable to changes in capacity with in the surrounding highway network. However, out of the operational properties that are listed above, Luton Delivery Office is likely to be



most prone to disruption by the expansion of Luton Airport. Luton Delivery Office deliver and collect from Luton Airport.

Luton Mail Centre

We set out below relevant details of Luton Mail Centre and its operation:

Tenure: Freehold

Operational Role: Delivery and collection of mail within the LU 1, 2, 3 and 4 postcode areas.

Staff: Approximately 225.

Shift times: 04:30 – 14:30

05:30 – 13:30

08:00 – 16:00

10:30 – 18:30

11:30 – 19:30

12:30 – 20:30

13:00 – 21:00

Usual Operating Hours: 24 hrs per day, 365 days per year.

Traffic Generation: There are currently approximately 280 operational vehicle movements per day, in and out, comprising 12 articulated lorries, 12 no. 7.5t lorries and 267 small vehicles. Overtime, admin staff and other shift patterns can result in other movements.

Owing to the Delivery Office's hours of operation approximately 30% of staff at Luton Delivery Office use a private vehicle to travel to and from work. The remaining circa 70% use Royal Mail vehicles to travel to and from work.

We would draw your attention to the following particular concerns and requirements:

- Road access to and from Luton Delivery Office is primarily via Cardiff Grove with the large numbers of vehicles and staff, unconstrained access between the Delivery Office and the surrounding highway network is needed at all times.
- Shift changeover times are very busy:
- Some staff travel up to an hour and a half to get to work.
- Royal Mail lease overflow parking at Dallow Road and Cardiff Road as not enough parking spaces in the Yard.

Continuity of operations at Luton Delivery Office and connectivity with Royal Mail's operational network is vital to the performance of Royal Mail's universal postal service functions. Any compromise of the existing operation, including the ability of staff to get to and from work without significant delay, will have impacts on the service and potential fines on Royal Mail.



In exercising its statutory duties, Royal Mail vehicles use all of the adjacent local roads on a daily basis. Any additional congestion on these roads during the construction phase has the potential to significantly disrupt Royal Mail's operations.

Royal Mail therefore wishes to ensure the protection of its future ability to provide an efficient mail sorting and delivery service to the public in accordance with its statutory obligations which may be adversely affected by the construction and operation of this proposed scheme.

Royal Mail's comments on information that should be provided in LLAL's Environmental Statement

Royal Mail asks that LLAL notes the above and addresses the following comments / requests:

1. Royal Mail requests that the ES includes information on the needs of major road users (such as Royal Mail) and acknowledges the requirement to ensure that major road users are not disrupted though full consultation at the appropriate time in the DCO and development process.
2. The ES should include detailed information on the construction traffic mitigation measures that are proposed to be implemented, including a draft Construction Traffic Management Plan (CTMP).
3. Royal Mail requests that it is fully pre-consulted by LLAL on any proposed road closures / diversions/ alternative access arrangements, hours of working and the content of the CTMP. The ES should acknowledge the need for this consultation with Royal Mail and other relevant local businesses / occupiers.

Royal Mail is able to supply the applicant with information on its road usage / trips if required.

Should PINS or LLAL have any queries in relation to the above then in the first instance please contact Holly Trotman (holly.trotman@royalmail.com) of Royal Mail's Legal Services Team or Daniel Parry-Jones (daniel.parry-jones@bnpparibas.com) of BNP Paribas Real Estate.

The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our Ref: 5/2019/0923
Your Ref: TR020001_000042_190401
E-mail: planning@stalbans.gov.uk
Fax No: 01727 845658
Date: 26 April 2019

Dear Sir/Madam,

**Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017.**

**Application by London Luton Airport Limited (LLAL) for an Order granting
Development Consent for the Expansion of London Luton Airport.**

Scoping consultation response.

Further to your consultation letter of 1st April 2019 St Albans City & District Council has considered the submitted Scoping report by London Luton Airport Ltd and has the following comments to make about the information to be provided within the Environmental Statement (ES).

Structure of the ES

It is noted that the Environmental Statement would cover a number of technical assessments in 5 main 'topic groups' under the broad headings of:-

1. Air Quality; Traffic & Transport; Climate Change; Greenhouse gases; Noise and vibration
2. Soils & Geology; Water Resources; and Waste and resources
3. Economics & Employment; Health & Community
4. Agricultural Land and farming; Biodiversity; Landscape and Visual effects; and Cultural Heritage
5. Major accidents and disasters

St Albans City & District Council agrees with the proposed structure of the various topic chapters, as set out at paragraph 1.5 of the Scoping report, and notes that the 'in-combination' and cumulative effects of the various technical matters will also be considered through the ES. This is considered to be essential to fully inform the development process.

Contents of the ES

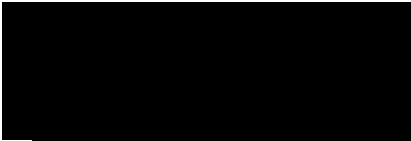
In respect of the proposed individual topics, the Council agrees with the scope of the information to be provided within the ES subject to the following additional comments:-

- The Council considers that the Traffic and Transport chapter should include a detailed assessment of the impact of the proposals on traffic congestion on the A1081; A5183 and the B653 into Luton from within the St Albans City & District area. These principle routes already suffer significant congestion and, whilst some improvements to the A1081 have already been identified in the Scoping report, it is considered that detailed monitoring and assessment of all three routes through the ES and separate Transport Assessment is required.
- St Albans City & District Council considers that surface access is a key issue in the consideration of the proposals. Out of the five main London airports, Luton currently has the lowest proportion of passengers using public transport but it is noted that Transport and Traffic assessments referenced in the Scoping report are based on a 45% modal shift to the use of public transport. The predicted increase in the use of public transport (from 23% to 45%) is, of course, welcomed but that increase will depend upon significant improvements being made to the availability of appropriate and convenient public transport access to the airport.
- The existing Midlands Mainline has capacity and congested issues and therefore the ES needs to consider, in addition to the proposals to extend the Luton DART, the additional mitigation measures that will be needed on the existing railway, and other public transport infrastructure, to ensure that the predicted increase in public transport trips up to 45% can realistically be achieved.
- The program of surface access infrastructure development should be effectively tied to stages of the proposed development.
- In respect of transport modelling it is noted that significant areas of uncertainty remain. Further sensitivity testing will be needed for new site allocations coming forward in Local/District Plans in the surrounding area, and the ES will need to be reviewed and updated accordingly.
- In respect of the Noise and Vibration chapter, the Council notes that the geographical area for noise assessment and monitoring will be agreed in consultation with the established Noise Working Group [NWG] which includes a representative from St Albans City & District Council. This approach is agreed and will require regular on-going meetings of the NWG.
- The ES should consider all aspects of daytime and night time noise impacts, both from additional aircraft movements and also from additional road traffic noise, including those roads referred to above together with the new proposed road infrastructure.

- The ES should include an assessment of sustainable drainage systems suitable for the proposed development. Whilst it is noted that a separate Drainage Strategy is to be prepared, the ES should consider any impacts arising on the landscape and visual effects of the development through the ES Landscaping chapter.

I hope these comments are of assistance and if you have any queries please contact Mrs. Alison Young on 01920 449015.

Yours faithfully



Tracy Harvey
Head of Planning and Building Control

From: [Carr Richard](#)
To: [Luton Airport](#)
Cc: [Ratnayaka Shamal](#); [Lyndon Fothergill](#); ["Jorn Peters"](#); ["tim.aldham@london.gov.uk"](mailto:tim.aldham@london.gov.uk)
Subject: LUTN – Expansion of London Luton Airport – EIA Scoping Notification and Consultation
Date: 28 April 2019 10:04:05

Thank you for consulting Transport for London (TfL). Although we don't have any detailed comments to make on the EIA scoping report we will wish to review the planning application and the surface access strategy when they are submitted

Best wishes
Richard Carr

Richard Carr | Principal Planner (Spatial Planning)

TfL Planning, Transport for London

E: richardcarr@tfl.gov.uk

A: 9th Floor, 5 Endeavour Square, E20, Westfield Avenue, E20 1JN

I work part time and so there may be a short delay in responding to emails

We have recently made changes to our pre-application service and charges, and introduced a new Initial Screening process. For more information please visit: <https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-applications/pre-application-services>

From: Spatial Planning
Sent: 02 April 2019 12:13
To: Carr Richard
Subject: FW: LUTN – Expansion of London Luton Airport – EIA Scoping Notification and Consultation

From: Luton Airport [<mailto:Lutonairport@planninginspectorate.gov.uk>]
Sent: 01 April 2019 12:09
Subject: LUTN – Expansion of London Luton Airport – EIA Scoping Notification and Consultation

Dear Sir/Madam

Please see attached correspondence on the proposed Expansion of London Luton Airport.

Please note the deadline for consultation responses is **29 April 2019** and is a statutory requirement that cannot be extended.

Kind regards,

Major Casework Directorate

The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

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**WELWYN
HATFIELD**

Colin Haigh
Head of Planning

Reply to: address as below
Date: 29 April 2019
Email: c.haigh@welhat.gov.uk

Major Casework Directive
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Bristol
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Dear sir/madam

London Luton Airport Ltd – Development Consent Order – EIA Scoping Report

Thank you for the opportunity to comment on the above document.

Planning comments

The western edge of Welwyn Hatfield Borough is approximately 5 miles from Luton Airport and the airport is accessible from the borough via the A1(M) and B653 Lower Luton Road.

The Council is therefore interested in the development consent order and EIA scoping report in respect of a number of matters – traffic and transport; climate change; air quality; greenhouse gases; noise; economics and employment; and cultural heritage.

The Council would like to see the DCO give very strong consideration to access to the airport via means other than the private car. There are no direct rail connections between Hertfordshire and Luton. The main public transport option is via bus from Hitchin and Stevenage. Effort should be made to ensure good interchange arrangements so that workers and customers can contemplate a combination of rail and bus services as a valid travel option. This should include real-time information, covered waiting areas and sufficient space for luggage. Services should be designed to correlate with shift patterns and busy flight times (plus the appropriate buffer for check-in and collecting luggage).

The Council would not wish to see the proposed development have an increased impact on the borough in terms of climate change, air quality, greenhouses gases or noise, and would ideally like to see existing impacts mitigated wherever possible. I am aware that LLAL is engaging with local councils, local parish councils, community groups and local residents to establish principles for new flight paths and design envelopes, which is to be welcomed. This includes interaction with Heathrow Airport to ensure that their design envelopes do not force Luton Airport aircraft to take-off and land at a shallower angle than would otherwise be desirable and/or have to contemplate stacking arrangements.

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In particular respect of noise there are a number of significant heritage assets within the borough, notably Bocket Hall and grounds and Hatfield House and Park, the Old Palace and St Etheldreda's Church which are all Grade I listed buildings, that should definitely be taken into account when considering flight paths and design envelopes.

The Council anticipates that Luton Airport is beneficial for local businesses, some of which are likely to be based in our borough. I note for example that Para 14.4.10 judges that 23% of gross wages accrue to employees who are resident in Hertfordshire. The economic opportunities afforded by the proposed development are therefore welcomed.

Environmental Health comments

There are two issues of relevance to Environmental Health – noise from an increase in road and air traffic and air quality.

Noise from increase in road and air traffic

Due to the distance from the boundary of the Welwyn Hatfield District border, overall concerns are low in relation to activities on site.

The main concern is regarding the increase in road and air traffic, and the potential impact that this may have in terms of noise on residents of the Welwyn Hatfield.

We would like to see the how, if at all, roads in the district will be affected and in turn, how much the associated noise levels are expected to raise due to road and air traffic.

Some properties are already effected by high road traffic noise levels, and there is the potential for these to raise or for overall noise levels in these areas to raise due to cumulative impacts of additional air craft noise, which will then have a negative impact on the health of residents.

Mention is made of the potential for air craft technology to improve, thus reducing noise levels from each aircraft, which over the course of the development may result in lesser overall impacts.

In any case, as per the scoping report, we would expect to see a link in with the HIA for the potential for the impact of noise on health from this proposed development.

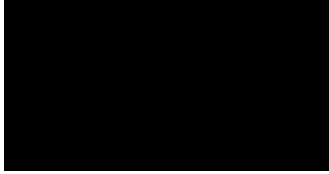
Air Quality

Air quality concerns are similar to those associated with noise, due to the distance from the Welwyn Hatfield district boundary. Information we would like to see, is regarding the impact on traffic for the major routes, these being the A414, A1M etc that come into the borough.

Conclusion

Other subject areas normally of concern to Environmental Health such as contaminated land, are not being raised, due to the very unlikely impact that these issues will have on the Welwyn Hatfield borough, and is best left to the local authorities closer to comment on these aspects of the proposed expansion. However, if there is the potential for an impact, such as on private water supplies in this area, then we would like to be notified of this.

Yours sincerely



Colin Haigh
Head of Planning