



## Hertfordshire Host Authorities

---

# **HERTFORDSHIRE HOST AUTHORITIES COMMENTS ON THE APPLICANT'S RESPONSES TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS**

London Luton Airport Expansion



## Hertfordshire Host Authorities

---

# HERTFORDSHIRE HOST AUTHORITIES COMMENTS ON THE APPLICANT'S RESPONSES TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS

## London Luton Airport Expansion

TYPE OF DOCUMENT (VERSION) **PUBLIC**

PROJECT NO. 70107305

OUR REF. NO. TR020001

DATE: NOVEMBER 2023



# CONTENTS

---

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>1.1</b>	<b>PURPOSE OF THIS DOCUMENT</b>	<b>1</b>
<b>2</b>	<b>THE HERTFORDSHIRE HOST AUTHORITIES' RESPONSES TO THE APPLICANT'S RESPONSES TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS</b>	<b>2</b>

---

## TABLES

Table 2-1 – The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Air Quality and Odour [REP4-053]	2
Table 2-2 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on the Draft Development Consent Order [REP4-057]	2
Table 2-3 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Green Controlled Growth (GCG) [REP4-058]	6
Table 2-4 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on the Need Case [REP4-059]	15
Table 2-5 - The Hertfordshire Host Authorities Responses to the Applicant 's Responses to the Examining Authority's First Written Questions on Noise [REP4-060]	19
Table 2-6 - The Hertfordshire Host Authorities Responses to the Applicant 's Responses to the Examining Authority's First Written Questions on the Design [REP4-061]	26
Table 2-7 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Landscape and Visual Impacts [REP4-063]	30
Table 2-8 - The Hertfordshire Host Authorities Responses to the Applicant 's Responses to the Examining Authority's First Written Questions on Green Belt [REP4-064]	34

---



Table 2-9 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Traffic and Transportation including Surface Access [REP4-069]

40



# 1 INTRODUCTION

---

## 1.1 PURPOSE OF THIS DOCUMENT

1.1.1. This document represents a table of responses to the Applicant's Responses to the Examining Authority's First Written Questions to be submitted to Deadline 5. The responses are to the following documents:

- Applicant's response to Written Questions - Air Quality and Odour **[REP4-053]**.
- Applicant's Response to Written Questions - Draft Development Consent Order **[REP4-057]**.
- Applicant's Response to Written Questions - Green Controlled Growth (GCG) **[REP4-058]**.
- Applicant's Response to Written Questions - Need Case **[REP4-059]**.
- Applicant's Response to Written Questions - Noise **[REP4-060]**.
- Applicant's Response to Written Questions - Design **[REP4-061]**.
- Applicant's response to Written Questions - Landscape and Visual Impacts **[REP4-063]**.
- Applicant's Response to Written Questions - Green Belt **[REP4-064]**.
- Applicant's response to Written Questions - Traffic and Transportation including Surface Access **[REP4-069]**.

1.1.2. It has been prepared jointly by Dacorum Borough Council ("DBC"), North Herts Council ("NHC") and Hertfordshire County Council ("HCC"), in collaboration with their technical consultants, together as the "the Hertfordshire Host Authorities" to set out further comments considered necessary in detailing the impacts upon the local area of the Applicant's proposed London Luton Airport Expansion Project ("the Proposed Development").



## 2 THE HERTFORDSHIRE HOST AUTHORITIES' RESPONSES TO THE APPLICANT'S RESPONSES TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS

**Table 2-1 – The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Air Quality and Odour [REP4-053]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
AQ.1.6	Applicant	<p>Project for the Sustainable Development of Heathrow</p> <p>The ES [AS-028, Appendix 7.1 Air Quality Methodology rev1, Table 7.1] references use of the 'Project for the Sustainable Development of Heathrow' method for deriving fractions of primary Nitrogen Dioxide (NO<sub>2</sub>). Explain how the methodology can be accessed by the public and/ or provide a copy of the methodology.</p>	<p>The Project for the Sustainable Development of Heathrow Panel Report (Ref 6) (PSDH) was archived on 13 May 2010 on The National Archives website. The primary Nitrogen Dioxide (pNO<sub>2</sub>) fractions are provided in Table 3.3 of the report. This methodology was informed by a report from the University of Sheffield (Garcia-Naranjo &amp; Wilson 2005) (Ref 7). The Table is reproduced in Table 5.1 of a report (Ref 8) prepared by Cambridge Environmental Research Consultants (CERC) in 2007.</p>	<p>The Applicant's response does not make the details any more accessible to the public. Valid Uniform Resource Locators (URL) to the documents mentioned by the Applicant or a copy of the methodology should be provided.</p>

**Table 2-2 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on the Draft Development Consent Order [REP4-057]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
DCO.1.6	Applicant	<p><b>Article 35 – Special Category Land</b></p> <p>Provide a more detailed explanation as to why this article is necessary</p>	<p>A justification for article 35 (Special category land) is set out in <b>the Explanatory Memorandum [REP3-005]</b> at paragraphs 3.137 – 3.141, and in the <b>Statement of Reasons [AS-071]</b> at paragraph 5.3.25.</p> <p>The <b>Draft DCO [REP3-003]</b> proposes to authorise the acquisition of open space land (Wigmore Valley Park). Details of open space land subject to compulsory acquisition as well as proposed replacement land are set out in Part 5 of the <b>Book of Reference [APP-011]</b>.</p> <p>In accordance with section 131 of the Planning Act 2008, an order granting development consent is subject to special parliamentary procedure where it authorises the compulsory acquisition of open space land unless one of the exceptions set out within section 131 can be met. The Applicant proposes to rely upon the exception set out in section 131(4) relating to the provision of replacement land in exchange (i.e. land that is no less advantageous):</p> <p>“(4) This subsection applies if—</p> <p>(a) replacement land has been or will be given in exchange for the order land, and</p>	<p>The Hertfordshire Host Authorities outlined in their joint Local Impact Report <b>[REP1A-003]</b> some concerns with the drafting of article 35 (special category land) particularly around the mechanism for securing the timely replacement of open space that would be lost to the Proposed Development should development consent be granted in the terms sought.</p> <p>In relation to the drafting, while it is acknowledged that a form of this article has appeared in numerous DCOs, the Hertfordshire Host Authorities are concerned that the trigger for article 35(1) is a combination of the vesting of the land and the certification of the “<i>receipt</i>” by the relevant planning authority of the scheme for the provision of the replacement land. The drafting makes no provision for the relevant planning authority to exercise a judgement as to the adequacy of such scheme and so,</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			<p>(b) the replacement land has been or will be vested in the prospective seller and subject to the same rights, trusts and incidents as attach to the order land.”</p> <p>In accordance with section 131(4)(b), the replacement land must vest in the prospective seller (i.e. the owner of the open space land). Article 35 of the Draft DCO [REP3-003] sets out the mechanism for ensuring that the replacement land is transferred to the current owner of the open space land, and that the replacement land obtains the necessary rights/designations which the open space land is currently subject to.</p> <p>In order to assist the ExA, the Applicant has provided further explanation for each element of article 35 below:</p> <p>d. Article 35(1) makes clear that the Applicant cannot acquire the open space land until first acquiring replacement land in its own name or in the name of the owner of the open space land. The Applicant must then submit to the relevant planning authority a scheme for the provision of the replacement land and a timetable for its implementation. This control over the Applicant's acquisition of open space land is in accordance with section 131 of the Planning Act 2008 and ensures that there is a scheme in place for the provision of the replacement land.</p> <p>e. Article 35(2) confirms that following compliance with article 35(1), the open space land vests in the undertaker free from public rights (i.e. free from its status of open space). Such rights are not ordinarily registered and so this paragraph clarifies that the rights in the open space land cease to apply following its acquisition (subject to their continuance being inconsistent with the Applicant's proposed use).</p> <p>f. Article 35(3) requires the Applicant to implement the scheme certified by the relevant planning authority under article 35(1) and provides for the replacement land to vest in the owner of the open space land. This paragraph transfers the rights formerly attached to the open space land to the replacement land so the rights of the public over the replacement land are no less effective than over the open space land. This ensures compliance with the provisions of section 131 of the Planning Act 2008.</p>	<p>on the terms of article 35(1) a wholly inadequate scheme and timetable could be submitted, and the relevant planning authority could do nothing more than certify that such a scheme had been received. This is clearly unsatisfactory.</p> <p>A further issue relates to the timing of the implementation of the scheme for the provision of replacement land and the release of the special category land from the rights and interests to which it is subject. Article 35(1) and (2) tell us that once the undertaker has exercised powers of compulsory acquisition over the special category land and the relevant planning authority has certified it has been received (whether or not it is satisfactory) then the special category land is to vest in the undertaker. That is to say, the open space land is lost to those previously entitled to enjoy its use.</p> <p>Paragraph (3) then states that the undertaker is to implement the replacement land scheme and on the date the replacement land is laid out, the rights and interests that subsisted previously over the special category land are vested in the replacement land.</p> <p>This means that there is an indeterminate gap in time between the existing special category land being taken out of use by the undertaker and the vesting in the replacement land of those previously subsisting rights. While the reference in article 35(1) to a timetable for implementation may partly fill that gap, its efficacy in doing so is severely hampered by the relevant planning authority being afforded no capacity to determine the appropriateness of the replacement land scheme and its timetable.</p> <p>Setting aside the drafting issues, The Hertfordshire Host Authorities have broader concerns in relation to the provision of the</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
				<p>replacement land. For example, article 35 does not in any way deal with its long-term maintenance. The Hertfordshire Host Authorities anticipate that such matters would be addressed by way of development consent obligations (i.e., in a section 106 agreement).</p>
DCO.1.13	Applicant	<p><b>Requirement 10 – Landscape and biodiversity management plan</b></p> <p>Should (1) include the requirement for the relevant planning authority to consult with Natural England?</p>	<p>Please see the Applicant's response to Buckinghamshire Council's relevant representation [RR-0166] as detailed in the <b>Applicant's Response to Relevant Representations - Part 2A of 4 (Local Authorities) [REP1-021]</b> namely:</p> <p>'The Applicant would draw the Council's attention to the fact that the <b>Landscape and Biodiversity Management Plan (LBMP)</b> (Appendix 8.2 of the <b>ES [AS029]</b>), to be approved by the relevant planning authority, must be substantially in accordance the Outline LBMP. This Outline LBMP has been produced as part of the Environmental Impact Assessment process, and a draft was subject to consultation. The Outline LBMP will be subject to further scrutiny by the ExA and Interested Parties during the examination. The Applicant does not believe, therefore that the final LBMP requires additional consultation with other external consultees such as Natural England as the relevant local planning authority is competent to approve such a plan.'</p> <p>However, noting the Examining Authority's question, and responding to representations from Interested Parties, in the Deadline 4 version of the Draft Development Consent Order the Applicant has included new provisions at paragraphs 33-34 of Schedule 2, which allow for consultation on the requirements discharging process with certain specified bodies (including Natural England) if the discharging authority considers the relevant conditions are met.</p>	<p>The Hertfordshire Host Authorities welcome the additions to paragraphs 34 and 35 of Schedule 2 to the draft DCO, although see 'Comments on any Further Information &amp; Submissions Received by Deadline 4', for further commentary on further necessary consequential amendments needed to ensure that the additional drafting around "discretionary consultees" does not fetter the discretion of a discharging authority to consult such persons it considers to be appropriate in the circumstances.</p>
DCO.1.20	Applicant, Joint Host Authorities	<p><b>Phasing</b></p> <p>Many of the requirements refer to 'no part of the authorised development may commence until a...for the construction of that part has been submitted to...'.  In addition, mitigation of the effects of the Proposed Development are predicated on various works or measures being in place before certain operations are commenced. In order to manage the discharge of requirements and to ensure certain elements of the scheme don't come forward/ start to operate without all of the necessary works being completed, is a phasing and/ or</p>	<p>The Applicant notes that this question was directed to the Joint Host Authorities but confirms it has included substantial revised drafting in Schedule 2 to respond to the ExA's questions on phasing.</p> <p>The Applicant notes that the <b>Scheme Layout Plans [AS-072]</b> already serve as the "masterplan" for the works authorised by the Draft DCO, and therefore it is not necessary to replicate the creation of these plans. Instead, revised paragraph 5 ("Detailed design, phasing and implementation") references the Scheme Layout Plans (now certified by Schedule 9) and sets out the detailed information that would be required for an application under that paragraph to provide sufficient clarity to the relevant planning authorities as to the scope / phase of works contained in the application, and how they relate to the Scheme Layout Plans and any DCO works previously authorised. Provision has also been made regarding the programming of works, notice of the start and conclusion of</p>	<p>The Hertfordshire Host Authorities provided their answer to this question within their Response to the Examining Authority's Written Questions (ExQ1) [REP4-126] at Deadline 4. The Host Authorities welcome the Applicant's additions to requirements 5 and 35 but does have some comments in relation to the new drafting which are contained in its Comments on any Further Information &amp; Submissions Received by Deadline 4. In summary, while the additions are helpful, it is not clear as it could be how in practice, they would operate to assist the relevant planning authority to understand the undertaker's proposal to phase or</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>masterplan requirement needed? If not, why not and, if it is, provide a form of preferred drafting.</p>	<p>the phase of works, and the effect of those works on airport capacity. Provision has been made for a Register of Requirements (new paragraph 36 – see ExQ DCO 1.22 below) so that a public record of approved works is maintained. Lastly, it should be noted that existing paragraph 35 permits the relevant planning authority to request further information before discharging a requirement. It is envisaged that the detailed design discharging process would, in practice, be a collaborative exercise as between the undertaker and the relevant planning authority.</p>	<p>sequence applications to discharge pre-commencement requirements in particular.</p>
DCO.1.22	Applicant	<p>Register of requirements</p> <p>Given the number of proposed requirements that would require discharging, some of which would need to be discharged multiple times over an extended period of time, is a requirement that would require the undertaker to establish and maintain an electronic register of requirements that require further approvals needed? If not, why not? And if yes would the suggested drafting below be appropriate?</p> <p>Suggested Drafting:</p> <p>(1) The undertaker must, as soon as practicable following the making of the Order, establish and maintain in an electronic form suitable for inspection by members of the public, the joint host authorities and other interested bodies a register of those requirements contained within Part 1 of this schedule that provide for further approvals to be given by the relevant planning authority, the relevant highway authority or the Secretary of State.</p> <p>(2) The register must set out in relation to each requirement the status of the requirement in terms of whether any approval to be given by the relevant planning authority, the relevant highway authority or the Secretary of State has been applied for or given, providing an electronic link to any document containing any approved details.</p> <p>(3) The register must be maintained by the undertaker for a period of three years following the completion of the authorised development</p>	<p>The Applicant agrees to include a 'Register of requirements' requirement. The new requirement 36 has been included in the Draft DCO submitted at D4, and the requirement reads as follows:</p> <p><b>36A Register of Requirements</b></p> <p>(1) The undertaker must, as soon as practicable following the making of the Order, establish and maintain in an electronic form suitable for public inspection a register of those requirements contained within Parts 1, 2 and 4 of this schedule that provide for further approvals to be given by the relevant planning authority.</p> <p>(2) The register must set out in relation to each requirement the status of the requirement in terms of whether any approval to be given by the relevant planning authority has been applied for or given, providing an electronic link to any document containing any approved details.' The Applicant has amended the drafting proposed by the ExA to take into account that:</p> <ul style="list-style-type: none"> <li>- Part 3 (GCG) should not be included, as this has sperate publication processes;</li> <li>- reference to the Secretary of State has been removed as this is no longer relevant due to Part 3 being removed;</li> <li>- similarly reference to the "relevant highway authority" has been removed, as they do not have an approval function; and - the time limit in</li> </ul> <p>(3) has been deleted as some of the requirements are permanent operational commitments and could be varied at any point in the future under Requirement 2</p>	<p>The Hertfordshire Host Authorities provided their answer to this question within their Response to the Examining Authority's Written Questions (ExQ1) <b>[REP4-126]</b> at Deadline 4. The Host Authorities welcome the Applicant's addition of Requirement 37 and are content with the form of words proposed by the Applicant.</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
DCO.1.23	Applicant	<p><b>Operational Ground Noise</b></p> <p>At Issue Specific Hearing (ISH) 3 the Applicant stated that it intended to submit an outline operational ground noise management plan with a final plan secured by requirement. Please provide a copy of the outline plan and suggested requirement wording.</p>	The <b>Outline Ground Noise Management Plan [TR020001/APP/8.46]</b> has been submitted at Deadline 4. This is secured by new requirement 27 included in the version of the Draft DCO also submitted at Deadline 4.	The Hertfordshire Host Authorities are content with the Outline Plan.

**Table 2-3 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Green Controlled Growth (GCG) [REP4-058]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
GCG.1.1	Applicant	<p><b>GCG – ESG/ GCG process</b></p> <p>Given the importance of the GCG framework [REP3-017] and the ESG for the control of future noise, explain why the ESG should not be set up from, or even before, the point of serving notice under Article 45 of the DCO submitted at D3 [REP3-003].</p>	<p>The Applicant does not believe it is necessary for the ESG to be established at the point at which notice under Article 44(1) is served as the processes undertaken by the ESG are not triggered until submission of the first Monitoring Report. In addition, establishment of the ESG requires actions to be undertaken by third parties which the Applicant does not have direct control over. As set out in the <b>Applicant's Response to Issue Specific Hearing 1 Actions 20, 21, 24 and 26 and Issue Specific Hearing 2 Action 28: Slot Management [TR020001/APP/8.86]</b>. Notwithstanding this, the Applicant is considering changes to the <b>Draft Development Consent Order [REP3-003]</b> to be made at Deadline 5 that would require the ESG to be established as soon as is reasonably practicable.</p> <p>In respect of the processes undertaken by the ESG, Section 2.4 of the <b>Green Controlled Growth Explanatory Note [REP3-015]</b> sets out the proposals for independent scrutiny and review of the GCG process, including the role of the ESG. Paragraph 2.4.2 sets out the powers of the ESG, enshrined in the Terms of Reference included within the <b>Green Controlled Growth Framework Appendix A Draft ESG REP3-019</b>. These are:</p> <ol style="list-style-type: none"> <li>Providing commentary on periodic Monitoring Reports produced by the airport operator (see Section 2.3) following reviews by the relevant Technical Panels;</li> <li>Approving or refusing Level 2 Plans or Mitigation Plans put forward as required by the airport operator if any GCG environmental effect has exceeded a Level 2 Threshold or Limit respectively (see Section 2.2);</li> <li>Where the airport operator can demonstrate that this is the case, certifying that an exceedance of a Level 2 Threshold or Limit is due to circumstances beyond the operator's control;</li> <li>Forum for consideration of statutory enforcement representations;</li> </ol>	It would appear most sensible for the ESG and Technical Panels to be set up as soon as is reasonably practicable, as is mooted by the Applicant. The Hertfordshire Host Authorities support every effort being made to have these forums in place at the earliest opportunity, or at least efforts made to contact likely required parties to make them aware of possible commitments and / or for the Applicant / Airport Operator to have received fee proposals from likely relevant parties.



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			<p>e. Mutually agreeing to modifications to the Terms of Reference included at Appendices A and B and Monitoring Plans included at Appendices C to F of the <b>Green Controlled Growth Framework [REP3-017]</b> and;</p> <p>f. Approving or refusing applications by the airport operator to modify timescales within the GCG process, or Level 1 Thresholds, Level 2 Thresholds or Limits, as allowed for under Paragraph 25 of Schedule 2 to the <b>Draft Development Consent Order [REP3-003]</b>.</p> <p>The ESG Terms of Reference set out in more detail how the ESG would exercise these powers (Section A4, 'Operating Powers'). Crucially, all of the routine procedures that the ESG is required to undertake are triggered by the submission of a Monitoring Report by the airport operator. Where the ESG is required to undertake other more ad hoc procedures, for example taking action in relation to a potential breach of the DCO or in response to a periodic review of GCG by the airport operator, these could not be triggered until after submission of the first Monitoring Report. In this context, the requirement for the ESG to be established a minimum of 56 days ahead of the planned submission of the first Monitoring Report by the airport operator is appropriate. Were the ESG to be established on or before the point which notice is served under Article 44(1) of the draft DCO, it would not be required to undertake any actions until the point that the first Monitoring Report is submitted</p>	
GCG.1.2	Applicant	<p><b>GCG – Fixed noise monitoring</b></p> <p>[REP3-023, Appendix C, paragraphs C4.2.2 and C4.2.3] state that as the airport expands, the airport operator will review and, if necessary, improve the noise monitoring stations in line with 'ISO 20906:2009 - Acoustics — Unattended monitoring of aircraft sound in the vicinity of airports' and will consult/ agree on locations for additional permanent noise monitors on departure routes. Confirm what the trigger for reviewing existing noise monitoring would be, how it would be determined whether new monitoring was 'necessary' and the provisional programme for agreeing locations for additional permanent noise monitors.</p>	<p>The airport operator's current noise monitoring terminals provide sufficient information to be able to accurately calibrate the noise modelling and comply with the modelling requirements of the Civil Aviation Authority's CAP2091 (Ref 1). Triggers for reviewing existing noise monitoring terminals are therefore likely to be, but would not be limited to:</p> <ul style="list-style-type: none"> <li>• Updates to the CAA CAP2091 guidance, or publication of further noise modelling or noise monitoring guidance from the CAA</li> <li>• If the CAP2091 noise modelling category for London Luton Airport were to change to a category that requires additional noise monitors to be installed</li> <li>• An implemented airspace change which moves flightpaths such that the existing noise monitoring terminals were no longer relevant</li> <li>• Ongoing review of the noise monitoring terminals as part of the Noise and Track Subcommittee</li> <li>• Ongoing review of the noise monitoring terminals as part of any update to Noise Action Plans</li> </ul> <p>The principle criteria for the requirement for new noise monitoring terminals as part of such a review would be if they were required to meet</p>	<p>The Applicant states in the above response that the principal criteria are to meet the minimum standards as set out in CAP2091. The modelling requirements of CAP2091 are based on total population counts around an airport within certain day and night contours, except for designated airports which have stricter requirements.</p> <p>London Luton Airport currently falls into Category C and would need an increase of over 100,000 people into the LOAEL before even being above the recommended minimum Threshold for Category B, as can be seen in Table 4.1 below, taken from CAP2091. The same magnitude of increase would be true for the night-time as well. It is only within Category B and above that noise monitoring is strictly required. The commitment to review and, if necessary, improve the noise monitoring stations by the Applicant therefore appears to be immaterial.</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																														
			<p>the minimum standards of noise monitoring terminals with respect to validation of aircraft noise modelling as per CAP2091.</p> <p>With regards to the provisional programmes, should any of the reviews described above result in the identification of additional noise monitoring terminals it is worth noting the following:</p> <ul style="list-style-type: none"> <li>• flight paths generally overfly the least populated areas where possible, therefore the best places for noise monitors are usually in rural locations and fields;</li> <li>• landowner consent must be sought for access and permission to install noise monitors on private land and contract negotiations can be time consuming;</li> <li>• fixed noise monitors require a continuous power source, which usually requires digging up some of the land to install the cabling, the timing of which can be affected by crop harvesting given monitors are frequently installed in fields; and</li> <li>• installation also requires concreting the equipment into the ground (to ensure it is fixed and theft resistant).</li> </ul> <p>For the additional noise monitoring terminals that are already committed to in paragraph C4.2.3 of the <b>Green Controlled Growth Framework Appendix C Aircraft Noise Monitoring Plan [REP3-023]</b> it would not be proportionate to seek to install these before the conclusion of the current ongoing airspace change proposal. Given the process for securing a new monitoring terminal location described above, any new terminals may only be in place for a very short amount of time (between the DCO being implemented, and the process described above being completed) before needing to be moved again once the airspace change process is concluded. It is therefore proposed that the location of these new monitoring terminals would be discussed with the Noise and Track Subcommittee and agreed with the GCG Noise Technical Panel in line with the program for the airspace change and that all reasonably practicable efforts will be made (subject to achieving landowner consent) to install these new monitors within 18 months of the conclusion of the airspace change process.</p> <p>Updates to the <b>Green Controlled Growth Framework Appendix C Aircraft Noise Monitoring Plan [REP3-023]</b> will be made at Deadline 5 to clarify these points</p>	<p>Table 4.1: Thresholds for noise modelling Categories, average summer day, population exposed to 51 dB L<sub>Aeq,16h</sub> or above.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Lower threshold</th> <th>Recommended minimum threshold</th> <th>Mandated minimum threshold</th> <th>Maximum threshold</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> <td>400,000</td> <td>500,000</td> <td>none</td> </tr> <tr> <td>B</td> <td>0</td> <td>160,000</td> <td>200,000</td> <td>500,000</td> </tr> <tr> <td>C</td> <td>0</td> <td>20,000</td> <td>25,000</td> <td>200,000</td> </tr> <tr> <td>D</td> <td>0</td> <td>1,600</td> <td>2,000</td> <td>25,000</td> </tr> <tr> <td>E</td> <td>0</td> <td>0</td> <td>0</td> <td>2,000</td> </tr> </tbody> </table>	Category	Lower threshold	Recommended minimum threshold	Mandated minimum threshold	Maximum threshold	A	0	400,000	500,000	none	B	0	160,000	200,000	500,000	C	0	20,000	25,000	200,000	D	0	1,600	2,000	25,000	E	0	0	0	2,000
Category	Lower threshold	Recommended minimum threshold	Mandated minimum threshold	Maximum threshold																														
A	0	400,000	500,000	none																														
B	0	160,000	200,000	500,000																														
C	0	20,000	25,000	200,000																														
D	0	1,600	2,000	25,000																														
E	0	0	0	2,000																														
GCG.1.3	Applicant	<p><b>GCG – controls on early/ late flights</b></p> <p>The ExA welcomes the Applicant's proposal in Noise Envelope – improvements and worked example [REP2-032], that early/late running flights would not be dispensed from the noise contour calculations. Can the</p>	<p>Clearly, by their nature, late running flights are difficult to control as the external factors that cause these can be varied, such as air traffic control delays, aircraft having technical issues, weather and other operational factors. It needs to be borne in mind that failing to accommodate such delayed movements would lead to substantial inconvenience to passengers, e.g., through aircraft having to divert to an alternative airport,</p>	<p>Early / late running flights are not dispensable under the Government's dispensation guidelines. This is clearly stated within the consultation outcome of the Night</p>																														



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		Applicant explain what measures would be taken to avoid or minimise late running flights?	<p>or major operational disruption if an aircraft was unable to return to its operating base at the airport and so was unable to undertake the following day's flights.</p> <p>The use of a 5% allowance on top of the expected scheduled movements in the night period, as indicated in Para 6.6.61 of the Need Case Revision 1 [AS-125] is based on historic data from the airport when operating normal patterns of traffic (i.e. before COVID disruption). This data shows late running flights made up between 1% and 5% of movements in the night periods and therefore the choice of 5% was selected to provide for the likely worst-case scenario given that most years operate below this. If a lower (than 5%) delay factor had been included, this would have allowed the Applicant to increase the number of scheduled movements in the night periods and the night noise contour assessments would have given a similar answer. However, as there is less ability to control late running flights the use of a lower delay factor was not deemed sensible by the Applicant. In light of this, there are no measures that can feasibly be taken, but protection is added by the inclusion of the aforementioned 5% as part of the overall process.</p>	<p>Flight Restrictions<sup>1</sup>, updated on 27 March 2023, and in any event only apply to the movement limits and Quota Counts (QC) of the three designated airports. London Luton Airport is not designated, nor is the Applicant proposing either of the relevant controls. Dispensation of early and late running flights is therefore clearly not an option available to the Applicant.</p> <p>The same consultation response also states in its 'Summary of findings' section, "<i>There was a trend observed at all 3 airports of dispensations being applied for airspace capacity related delays which did not have an underpinning causation that clearly met the government's dispensation criteria. The government wrote to each designated airport in 2018 to state that airspace capacity related delays, without an underlying cause that is exceptional and falls within a specified circumstance, are not dispensable. In response, airports and airlines have taken steps to reduce the risk of unscheduled capacity related night movements occurring, and therefore reversing this trend.</i>" [our emphasis]. Rather than the Applicant simply stating that late running flights are difficult to control, efforts should be made to investigate how Heathrow, Gatwick and Stansted have been reducing early and late running movements and seek to implement positive change.</p>
GCG.1.7	Applicant	<p><b>Noise Action Plan (NAP)</b></p> <p>At ISH3 on noise and vibration, the Applicant stated that the operator's quarterly monitoring reports contained a host of information considered relevant to the community that</p>	The <b>Aircraft Noise Monitoring Plan [REP3-023]</b> was updated at Deadline 3 to secure the ongoing requirement for quarterly monitoring in line with the current consent that was relevant at the time of submission (see Paragraph C7.1.1). The updated reporting requirements in the current consent as a result of the approval of the application to grow to 19mppa (APP/B0230/V/22/3296455) will be considered by the Applicant	The Hertfordshire Host Authorities await the Applicant's Deadline 5 submission with details of proposed updated monitoring and reporting requirements and will scrutinise these once provided by the Applicant.

<sup>1</sup> <https://www.gov.uk/government/consultations/night-flight-restrictions-at-heathrow-gatwick-and-stansted-airports-between-2022-and-2024-plus-future-night-flight-policy/night-flight-restrictions#revising-our-night-flight-dispensation-guidance-1>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>have been developed over time and that there is no expectation that these would change. However, the Applicant also explained that the NAP would be updated to take account of GCG controls replacing any current planning related commitments. Can the Applicant explain whether quarterly reporting would be retained and how the various reporting requirements would be retained if these were not explicitly referenced in the GCG framework or secured by the DCO?</p>	<p>and updates to the monitoring requirements will be made at Deadline 5 to retain these as considered appropriate.</p>	
GCG.1.10	Applicant	<p><b>GCG framework [REP3-017] and GCG Appendix D – Air Quality Monitoring Plan [REP3-025] – Automatic Number Plate Recognition (ANPR) reference / proportional contribution</b></p> <p>Reference to use of ANPR has been removed as a means of demonstrating the proportional contribution made by the airport. Instead, Appendix D suggests that an indicative approach to further analysis could include consideration of an emissions inventory and publicly available background/ regional air quality data in order to understand changes in airport-related traffic flows. Expand on your response in the ISH5 post hearing submission as to why ANPR is no longer considered an appropriate basis for monitoring given that it has potential to provide detailed information on traffic flows /origins for cars parking at the airport. In the absence of ANPR data, provide a detailed explanation of the specific data sets and methods that could be used to determine the airport's proportional contribution.</p>	<p>The Applicant wishes to clarify the position stated with regards to ANPR, further to the <b>Applicant's Post Hearing Submission - Issue Specific Hearing 5 (ISH5) [REP3-052]</b>. Paragraph 7.1.37 of the post hearing submission was not intended to state that ANPR will not be used at all; rather, that it is only one potential method that might be used, depending on the nature of any future exceedance. ANPR surveys can still be commissioned using a third-party traffic survey contractor if required, but it is not the intention of the Applicant to establish an ANPR monitoring network from the outset.</p> <p>The amendments made at Deadline 3 to the <b>Green Controlled Growth Framework [REP3-017] and Green Controlled Growth Explanatory Note [REP3-015]</b> were similarly intended to clarify the need for future flexibility, to reflect the long term nature of the Proposed Development, and that new and as yet unknown monitoring methods and practices may be available over the course of the next 20 years while the Proposed Development is delivered. Thus, the reference in paragraph 3.3.20 of the Explanatory Note to the "commissioning of additional traffic surveys in order to understand changes in airport-related traffic flows" was intended to be construed as including ANPR as just one potential type of future traffic survey.</p> <p>This approach mirrors the most similar precedent for the ongoing monitoring and management of air quality for a Nationally Significant Infrastructure Project used by the Silvertown Tunnel. Requirement 7 of The Silvertown Tunnel Order 2018 secures compliance with the 'Monitoring and mitigation strategy', which includes air quality impacts. The Monitoring &amp; Mitigation Strategy certified under Schedule 14 is similarly non-prescriptive around how future assessments of that scheme's specific impact will be determined, with respect to the air quality monitoring data that is inclusive of non-scheme impacts:</p> <p><i>" TfL will therefore appoint an independent air quality expert to review the air quality monitoring data set in the annual monitoring reports.... In coming to a view on the air quality impacts of the Scheme, consideration</i></p>	<p>The Hertfordshire Host Authorities note that the Applicant refers to further amendments to the wording in this regard within the GCG Framework will be considered to improve the clarity of the intended requirements. The Hertfordshire Host Authorities welcome this approach.</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			<p><i>will therefore need to be given to other data sources including London wide local authority monitoring data, traffic flows, composition or speeds as well as outputs from strategic and local traffic modelling and/or air quality modelling.</i></p> <p>See Section 4.4 of the Silvertown Tunnel Monitoring &amp; Mitigation Strategy (Ref 2) for further details.</p> <p>To expand upon the revised text included at Deadline 3 in paragraph 3.3.20 of Green Controlled Growth Explanatory Note [REP3-015] and reflected in paragraph D2.3.11 of the Green Controlled Growth Framework Appendix D Air Quality Monitoring Plan [REP3-025], the Applicant envisages that there are a range of options that could be used to determine the airport's contribution to the exceedance of a Level 2 Threshold or Limit at an in scope location. These potential analysis methods reflect current best-practice air quality monitoring and analysis techniques, but it is not the intention for the GCG Framework to mandate any of these steps specifically, in order to preserve the necessary flexibility required, including as technology and techniques may change in the future.</p> <p>Indicatively, this could include: engaging with the relevant local authority to understand local air quality trends elsewhere, or to identify location-specific factors (e.g. roadworks or new developments) or regional factors. More detailed analysis could be undertaken if required using post processing software (such as the 'openair' package) to provide more information on likely sources or compiling an updated emissions inventory for airport activities to understand changes from that forecast in the ES. Where the likely source of any breach cannot be identified from these methods, ANPR could then be used to understand potential changes in emissions from airport-related traffic. Ultimately, more in-depth calculations could still then be needed, potentially including air quality modelling, to determine the exact contribution from the airport.</p> <p>The GCG Framework is intended to provide certainty of the outcome in this scenario – i.e. a determination as to whether the airport is or isn't the cause of an exceedance and therefore whether a Level 2 Plan or Mitigation Plan is or isn't required. To achieve this, whatever methodology is utilised must therefore be able to provide the necessary evidence to the Environmental Scrutiny Group for this determination to take place but will most likely vary depending on the exact nature of the exceedance. Further amendments to the wording in this regard within the GCG Framework will be considered to improve the clarity of the intended requirements.</p>	
GCG.1.11	Applicant	<b>GCG framework – Revision of limits and thresholds in light of changing legal limits</b>	Please see response to Issue Specific Hearing 5 (ISH5) Action 18 provided in <b>Applicant's Response to the Examining Authority's Deadline 4 Hearing Actions [TR020001/APP/8.84]</b> with regards to the	The Hertfordshire Host Authorities note the explanation given in the Applicant's Response to the Examining Authority's



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>Explain the circumstances in which it would be acceptable for the operational controls under the GCG framework [REP3-017] not to align with new UK legal limits (or interim targets) as stated in <b>paragraph 4.4.2</b> and why new pollutants should be excluded from consideration as stated in <b>paragraph 4.4.1</b></p>	<p>need for the alignment of GCG Limits with new UK legal limits. As set out in that paper, the key distinction is whether any future changes to legislation must automatically be transposed into GCG, such that they would automatically be linked to controls on growth of the airport, rather than the need to comply with any new legislative requirements independently from GCG. Environmental assessments and consenting decisions (based on the findings of those assessments) can only be made against current and known future legislation and policy. It is not reasonable for requirements to be imposed where they would prevent the implementation of a planning consent (such as one that would require future legislation to be automatically transposed into GCG).</p> <p>Regarding the exclusion of new pollutants from GCG in future, and further to the response to ISH5 Action 16, the basis of the GGC air quality Limits is the findings of Air Quality Assessment reported in the <b>Environmental Statement Chapter 7 Air Quality Revision 1 [AS-076]</b>. The following pollutants were considered within the assessment; nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), oxides of nitrogen (NO<sub>x</sub>) and ammonia (NH<sub>3</sub>), with all other pollutants screened out as they are not likely to cause exceedances of their respective standards as demonstrated by local monitoring and the work carried out by the local authority, and agreed through EIA Scoping and engagement summarised in the Section 7.4 [of Chapter 7]. Of the pollutants scoped in, NO<sub>x</sub> and NH<sub>3</sub> were only included on the basis of their potential impacts on vegetation and ecosystems rather than human health, and no significant effects are predicted at ecological sites. The remaining three pollutants are therefore the ones most relevant to human health, which were consequently assessed and included as GCG air quality Limits.</p> <p>In circumstances where new UK legal limits are introduced or new pollutants brought into the legal framework it is not considered proportionate to bring those into GCG as it would require a significant re-assessment of the work carried out for the Environmental Impact Assessment (EIA) to provide the necessary evidence base. To undertake such an assessment again in the future (essentially needing to repeat the EIA) would in the Applicant's view be disproportionate and unnecessary, for the reasons set out in the response to ISH5 Action 18.</p> <p>However, without prejudice to the position set out in the response to ISH5 Action 18, as part of the mandatory review process committed to by the Applicant where new legal limits are published, consideration will be given to the need for additional measures to be included within the Operational Air Quality Plan (i.e. outside of GCG). This could, if deemed appropriate, include measures relating to other pollutants in addition to NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. The Applicant is willing to make changes to the <b>Green Controlled Growth Framework [REP3-017]</b> to reflect these</p>	<p>Deadline 4 Hearing Actions <b>[REP4-070]</b>. It is suggested that the explanation in the Green Controlled Growth Framework <b>[REP3-017]</b> is amended to more clearly reflect this.</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			requirements as part of the review process, subject to further engagement on the changes with relevant stakeholders.	
GCG.1.12	Applicant, Joint Host Authorities	<p><b>GCG Appendix A – Draft ESG Terms of Reference [REP3-019]</b></p> <p><b>Applicant:</b> Explain why the threshold for ESG being quorate in paragraph A2.2.1 has been revised from “where the independent chair and independent aviation specialist (or a substitute agreed as per paragraph A2.1.12) and at least 50% of other representatives are present” to “where the independent chair, independent aviation specialist and slot allocation expert (or a substitute agreed as per paragraph A2.1.12) are present”.</p> <p><b>Joint Host Authorities:</b> Is this change acceptable and if not, why not?</p>	<p>Following submission of the application for development consent, a critical review of the Terms of Reference for both the Environmental Scrutiny Group and Technical Panels included at <b>Green Controlled Growth Framework Appendix A Draft ESG Terms of Reference [REP3-019]</b> and <b>Green Controlled Growth Framework Appendix B ESG Technical Panels Draft Terms of Reference [REP3-021]</b> was carried out to ensure that the functioning of GCG could not be frustrated or otherwise unintentionally hindered by any party to the process. This review identified a risk that local authorities could nominate an officer to represent them on the ESG and Technical Panels, but that if these local authority representatives subsequently did not attend meetings of the ESG or Technical Panels they would not be quorate and the GCG process could not be moved forward. The changes made at Deadline 3 were therefore only to ensure the future functioning of the GCG process in this (unlikely) scenario, with the intention that the operation of ESG and the Technical Panels would still be independent from the airport and would be in accordance with the operating principles of GCG.</p> <p>However, the Applicant understands the potential concerns around the changes made to this wording and is engaging with the Host Authorities on this matter, with a view to agreeing further changes through the Statement of Common Ground process to be made to the Terms of Reference at Deadline 5. The changes will reintroduce a minimum number of local authority representatives to be present for the ESG and Technical Panels to be quorate.</p>	The Hertfordshire Host Authorities note that the Applicant understands the potential concerns around the changes made to this wording and is engaging with the Host Authorities on this matter, with a view to agreeing further changes. The Hertfordshire Host Authorities welcome this further engagement and for further changes to be agreed.
GCG.1.13	Applicant, Joint Host Authorities	<p><b>GCG Framework Appendix B – Draft Technical Panels Terms of Reference [REP3-021]</b></p> <p><b>Applicant:</b> Explain why the threshold for a technical panel being quorate in paragraph B2.2.1 has been revised from “where the independent technical expert and at least 50% of any other approved representatives (as per Paragraph B2.1.7) are present” to “where the independent technical expert is present.”</p> <p><b>Joint Host Authorities:</b> Is this change acceptable and if not, why, not?</p>	Please see the response to GCG.1.12.	The Hertfordshire Host Authorities note that the Applicant understands the potential concerns around the changes made to this wording and is engaging with the Host Authorities on this matter, with a view to agreeing further changes. The Hertfordshire Host Authorities welcome this further engagement and for further changes to be agreed.
GCG.1.15	Applicant, Joint Host Authorities	<p><b>GCG Framework Appendix B – Draft Technical Panels Terms of Reference [REP3-021]</b></p>	The Applicant would note that this is not a change, and that this drafting has been in the <b>GCG Framework Appendix B ESG Technical Panels Draft Terms of Reference [REP3-021]</b> since submission of the application for development consent.	The Hertfordshire Host Authorities note the Applicant's explanation that for example, if all members of a Technical Panel are satisfied that monitoring results reported to it do not



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
[GCG1.14 not included by ExA]		<p><b>Applicant:</b> Explain why meetings of the Technical Panel would only be at the discretion of the technical expert as set out in B2.5.1.</p> <p><b>Joint Host Authorities:</b> Is this change acceptable and if not, why not?</p>	<p>This drafting has been put forward to recognise the fact that there may not always be a requirement for a Technical Panel to meet and that, where this is the case, there should be no obligation secured via the DCO to do so. For example, if all members of a Technical Panel are satisfied that monitoring results reported to it do not give rise to any issues and have not triggered any requirements linked to a Level 2 Threshold or Limit, they are able to respond to the airport operator and ESG on that basis in writing without a requirement to formally meet, as per the process set out in Section B4.3 of the Terms of Reference.</p> <p>As set out in Paragraph B2.5.1, any member of a Technical Panel may request that a meeting takes place where they feel this is necessary, but ultimately this will be at the discretion of the technical expert in their role as chair of the relevant Technical Panel</p>	<p>give rise to any issues and have not triggered any requirements linked to a Level 2 Threshold or Limit, they are able to respond to the Airport Operator and ESG on that basis in writing without a requirement to formally meet. However, the Hertfordshire Host Authorities consider that in the opposite, where all members are not agreed, it should not be solely for the Technical Expert to determines whether a Technical Panel should be called.</p>

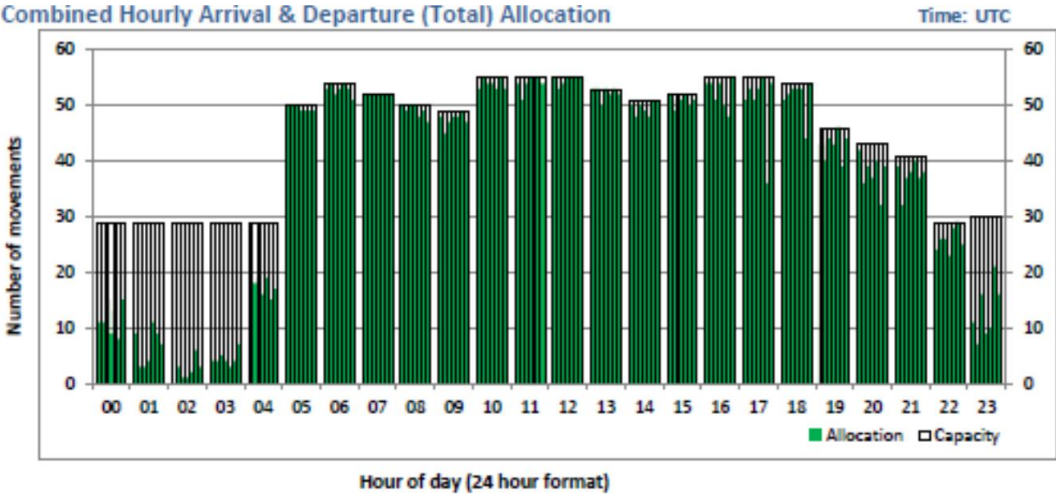




**Table 2-4 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on the Need Case [REP4-059]**

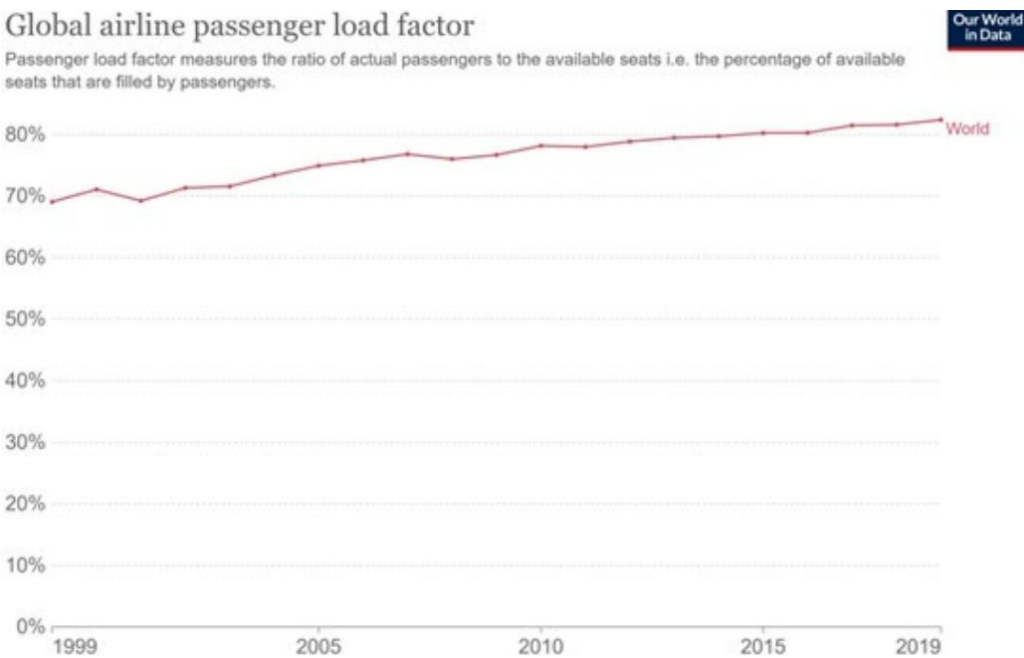
PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																																																
NE.1.3	Applicant	<p><b>Existing Airport Capacity in the South East</b></p> <p>The Rule 6 letter [PD-007, Annex F, Section 13] requested information relating to flight and passenger information. In addition to the information requested in the bullet points, it was also requested that information containing the current caps on passenger and/ or aircraft movement at Heathrow, Gatwick, Stansted, London City and Southend Airports and the total number of passengers and/ or aircraft movements to each of these airports in the year 2019 be submitted, along with any changes to restrictions that have taken place since 2019. This is to allow for better understanding of the current situation regarding capacity and current restrictions attached to airports located in the south east of England. The ExA notes the submission in [REP1-016] which contains the requested information relating to London Luton Airport but this does not contain the information relating to other south east airports.</p>	<p>The current capacity caps at the other London airports and their throughput in 2019 are set out in the table below:</p> <table border="1" data-bbox="1047 485 2000 1199"> <thead> <tr> <th rowspan="2">Airport</th> <th colspan="2">Current Annual Limits</th> <th colspan="2">Revised Annual Limits</th> <th colspan="2">Utilisation 2019</th> </tr> <tr> <th>Passengers</th> <th>Aircraft Movements</th> <th>Passengers</th> <th>Aircraft Movements</th> <th>Passengers</th> <th>Aircraft Movements</th> </tr> </thead> <tbody> <tr> <td>Heathrow</td> <td>n.a.</td> <td>480,000</td> <td>n.a.</td> <td>n.a.</td> <td>80,890,031</td> <td>478,059<sup>1</sup></td> </tr> <tr> <td>Gatwick</td> <td>n.a.</td> <td>n.a.</td> <td>n.a.</td> <td>n.a.</td> <td>46,576,473</td> <td>284,987</td> </tr> <tr> <td>Stansted</td> <td>35 mppa</td> <td>265,000 air transport movements, of which no more than 243,500 can be passenger air transport movements and no more than 20,500 can be cargo air transport movements</td> <td>43 mppa</td> <td>274,000 aircraft movements, of which no more than 16,000 can be cargo air transport movements</td> <td>28,124,292</td> <td>199,925</td> </tr> <tr> <td>London City</td> <td>6.5 mppa</td> <td>111,000 aircraft movements</td> <td>n.a.</td> <td>n.a.</td> <td>5,122,271</td> <td>84,260</td> </tr> <tr> <td>Southend</td> <td>n.a.</td> <td>53,300 aircraft movements</td> <td>n.a.</td> <td>n.a.</td> <td>2,035,535</td> <td>36,327</td> </tr> </tbody> </table> <p>It is important to note that where an airport does not have a planning cap, this does not mean that capacity is unconstrained as there will also be physical limitations on the capacity available with the existing infrastructure. Because an airport does not have a planning cap in place does not mean that it has unlimited capacity to expand without seeking further planning consent.</p> <p>In the case of <b>Heathrow</b>, it is evident that there was limited spare capacity in 2019.</p> <p>In the case of <b>Gatwick</b>, it has a current declared runway capacity of up to 55 aircraft movements per hour based on its current infrastructure. In 2019, according to Airport Coordination Ltd in the Start of Season report for summer 2019, the airport had very limited spare capacity available on a regular basis throughout the week as shown in the chart below (each individual green bar reflects the stated hour on days Monday through Sunday). The airport also has night movement constraints in place. Overall, the scope for growth with the existing infrastructure is highly limited. Gatwick has applied for development consent to bring its northern standby runway into permanent use to overcome these constraints.</p>	Airport	Current Annual Limits		Revised Annual Limits		Utilisation 2019		Passengers	Aircraft Movements	Passengers	Aircraft Movements	Passengers	Aircraft Movements	Heathrow	n.a.	480,000	n.a.	n.a.	80,890,031	478,059 <sup>1</sup>	Gatwick	n.a.	n.a.	n.a.	n.a.	46,576,473	284,987	Stansted	35 mppa	265,000 air transport movements, of which no more than 243,500 can be passenger air transport movements and no more than 20,500 can be cargo air transport movements	43 mppa	274,000 aircraft movements, of which no more than 16,000 can be cargo air transport movements	28,124,292	199,925	London City	6.5 mppa	111,000 aircraft movements	n.a.	n.a.	5,122,271	84,260	Southend	n.a.	53,300 aircraft movements	n.a.	n.a.	2,035,535	36,327	<p>The Applicant's response states that increases in passenger load factor account for a substantial proportion of the growth in passengers per movement at Heathrow and Gatwick. Analysis of Civil Aviation Authority (CAA) Airline Statistics for 2009 and 2019 indicates that for UK aircraft operators, just under half of the growth in this key parameter resulted from higher seat load factors (increasing by 9.0% over the period from 75.5% to 82.3%) and just over half came from increases in the average number of seats per flight (increasing by 9.8% from 145.8 to 160.1). UK registered airlines carry about half of the passengers at UK airports.</p> <p>While the increase in passenger load factors cannot continue indefinitely, a similar limit on average seats per flight is much further away. Gatwick Airport is clearly of the view that there is considerable scope to further increase its average passengers per movement as set out in the Hertfordshire Host Authorities ISH2 post-hearing submission [REP3-093] at Deadline 3.</p>
Airport	Current Annual Limits		Revised Annual Limits		Utilisation 2019																																															
	Passengers	Aircraft Movements	Passengers	Aircraft Movements	Passengers	Aircraft Movements																																														
Heathrow	n.a.	480,000	n.a.	n.a.	80,890,031	478,059 <sup>1</sup>																																														
Gatwick	n.a.	n.a.	n.a.	n.a.	46,576,473	284,987																																														
Stansted	35 mppa	265,000 air transport movements, of which no more than 243,500 can be passenger air transport movements and no more than 20,500 can be cargo air transport movements	43 mppa	274,000 aircraft movements, of which no more than 16,000 can be cargo air transport movements	28,124,292	199,925																																														
London City	6.5 mppa	111,000 aircraft movements	n.a.	n.a.	5,122,271	84,260																																														
Southend	n.a.	53,300 aircraft movements	n.a.	n.a.	2,035,535	36,327																																														



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			<p><b>Combined Hourly Arrival &amp; Departure (Total) Allocation</b></p>  <p><b>Stansted</b> currently has spare capacity but by August 2023 was handling more passengers than in the equivalent month in 2019 indicating strong growth.</p> <p><b>London City</b> has applied to increase its passenger cap to 9 mppa and this is subject to a planning appeal.</p> <p>Although <b>Southend</b> has spare aircraft movement capacity, its market is localised and would not provide an alternative to London Luton Airport for passengers in the latter's catchment area (see page 5 of <b>REP1-022</b>).</p> <p>The demand forecasts for the application for development consent have considered available capacity at these other airports as set out at paragraph 6.3.21 of the Need Case [AS-125]. Heathrow and Gatwick are assumed to be constrained in the first instance at the longer term capacities assumed by the Department for Transport in UK Aviation Forecasts 2017, Table 22. The impact of increases in runway capacity at both Heathrow and Gatwick have been expressly tested as set out in Section 6 of the Need Case.</p>	
NE.1.4	Applicant, Chris Smith Aviation	<p><b>Airport Capacity in the South East</b></p> <p>Based on the information in the report by Chris Smith Aviation Consultancy Limited [REP2-057, Table 3.3], it is understood that neither Heathrow nor Gatwick have passenger cap restrictions although Heathrow is subject to a restriction of 480,000 Air Traffic Movements (ATM) and Gatwick 283,000. Stansted has obtained</p>	<p>As set out in response to NE.1.6 both Heathrow and Gatwick have very limited capacity for growth in aircraft movements. As stated in that response, Gatwick does not currently have a planning cap on the annual number of aircraft movements that it can handle but the Department for Transport has previously assumed 290,000/291,000 movements as an annual ceiling on the number of aircraft movements (Ref 3) but the achievability of this would depend on the airlines being willing to take up the remaining slots at less popular times of day and/or increase their operations during the winter months.</p> <p>In terms of the contention made by CSACL [REP2-057] that Heathrow and Gatwick could grow above the capacities assumed in the modelling for the DCO forecasts, even if constrained by their existing runway capacity, through growth in the number of passengers per passenger air transport movement, there are two key points:</p> <ol style="list-style-type: none"> <li>1. The growth in passengers per passenger air transport movement cited in Table 3.1 of <b>REP2-057</b> is partly a reflection of increases in load factor as well as aircraft size. Over the same 20 year period, airline load factors grew by 8.7% per annum as shown in Figure 1.1</li> </ol>	The Applicant's response states that increases in passenger load factor account for a substantial proportion of the growth in passengers per movement at Heathrow and Gatwick. Analysis of CAA Airline Statistics for 2009 and 2019 indicates that for UK aircraft operators, just under half of the growth in this key parameter resulted from higher seat load factors (increasing by 9.0% over the period from 75.5% to 82.3%) and just over half came from increases in





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>permission for a further 8MPPA. Passengers per ATM in 2019 at Heathrow and Gatwick were 168.6 and 164.7 respectively (Luton was 165). In the absence of a passenger cap at Heathrow and Gatwick, to what extent can spare capacity in the London airspace be currently met at these airports by the number of passengers per ATM increasing?</p>	<p>below. This load factor growth accounts for a substantial proportion of the growth in passengers per movement at airports.</p>  <p>Figure 1.1: Load Factor Growth</p> <p>2. As highlighted in paragraph 6.6.14 of the Need Case [AS-125], ultimately there is a ceiling on load factors due to asymmetries in demand at any point in time and seasonal variations. Low cost carriers, such as those that provide the majority of flights at London Luton Airport, tend to operate with higher load factors than full service airlines, such as British Airways, that are dominant at Heathrow and play a more substantive role at Gatwick. The latter carriers tend to operate with lower load factors. This is partly due to offering multiple classes of travel and also because of the greater proportion of fully flexible tickets that are sold, enabling passengers to switch between flights, meaning that some spare capacity has to be left to accommodate such passengers.</p> <p>It is highly unlikely that load factors could feasibly continue to grow at the pace seen over the period 1999-2019. Hence, this reduces the ongoing scope for growth through increasing passengers per passenger aircraft movement. The Applicant considers that the same trend in increase in passengers per aircraft movement applying at London Luton Airport (<b>Need Case [AS-125]</b>, paragraph 6.6.16) would be most likely to apply at the other two airports as well, i.e. an initial rate of 1% per annum to the mid-2020s, reflecting ongoing transition of the short haul fleet to larger new generation variants, declining to 0.25% per annum. On this basis, the long term capacity of Heathrow would be 90 mppa as assumed in the Need Case but there could be some scope for Gatwick to grow further to handle up to 53.5 mppa on a single runway by 2050, (51 mppa at 2030 and 52 mppa at 2040).</p>	<p>the average number of seats per flight (increasing by 9.8% from 145.8 to 160.1). UK registered airlines carry about half of the passengers at UK airports.</p> <p>While the increase in passenger load factors cannot continue indefinitely, a similar limit on average seats per flight is much further away. Gatwick Airport is clearly of the view that there is considerable scope to further increase its average passengers per movement as set out in the Hertfordshire Host Authorities ISH2 post-hearing submission <b>[REP3-093]</b> at Deadline 3.</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			<p>Even if the latent capacity at Gatwick, with a single runway, were to be marginally greater than assumed in the demand forecasts, this would make no material difference to the forecast for the airport. Using Figure 6.3 of the Need Case [AS-125] as the basis, even if all of the increase in passengers at Gatwick were to be taken from London Luton Airport, this would mean latent unconstrained demand at the airport of c.31 mppa in 2030, which is in excess of the assessed Phase 1 capacity of 21.5-23 mppa, and c.29.5 mppa in 2043, which lies within the range between the Core Planning Case and the Slower Growth Case, as set out in Table 6.5 of the Need Case. Hence, any reasonable change to the assumption about capacity at Gatwick would make no material difference to the case for the Proposed Development as assessed.</p> <p>In any event, even if there was spare capacity at other airports, a key principle underpinning the policy support for airports making best use of their runways is competition and the benefits to consumers of a competitive aviation sector. Policy recognises that airports will compete to attract airlines and passengers, and it is not a feature of policy that other airports must be fully used before consent is granted for growth at another airport, as each airport is recognised to meet the needs of its own market. This was made clear in the decision on the Manston Airport DCO (Ref 4). At paragraph 37, it is stated that:</p> <p><i>“The Secretary of State agrees with the Applicant that the ANPS does not provide an explanation of ‘sufficient need’. He also agrees that the MBU policy, which is relevant to this Application, does not require making best use developments to demonstrate a need for their proposals to intensify use of an existing runway or for any associated Air Traffic Movements (“ATMs”). The Secretary of State notes, however, that the MBU policy states that a decision-maker, in taking a decision on an application, must take careful account of all relevant considerations, particularly economic and environmental impacts and proposed mitigations (MBU paragraph 1.29). The Secretary of State considers that the benefits expected from a proposed development would materialise if there is a need for that development. Therefore, in order to assess whether the expected economic benefits will outweigh the expected environmental and other impacts from this Development, the Secretary of State has considered need in the context of identifying the likely usage of the Development from the evidence submitted in the Examining Authority’s Report, the Independent Assessor’s Report and the representations submitted by Interested Parties during the redetermination process.</i></p> <p>The decision goes on to provide further clarification at paragraph 47:</p> <p><i>“The MBU policy is clear that it does not prejudice the decision of the relevant planning authority which must take into consideration all relevant matters, in particular the economic and environmental impacts that are expected as a result of a development and proposed mitigations (MBU paragraph 129). The MBU policy does not limit the number of MBU airport developments that might be granted and does not include a cap on any associated increase in ATMs as a result of intensifying use at MBU developments.”</i></p> <p>It is clear that the existence, or potential existence, of spare capacity at other airports, is not, of itself, a reason for refusal of an MBU application and that each proposal should be judged on its merits having regard to the need for the development, by reference to the demand that it is expected to attract, and its local environmental impacts. Constraining capacity at one airport until it</p>	



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			is 'needed' because all others serving the area are full would not be consistent with ensuring a functioning competitive market. The consequences of such an approach would be higher fares and restricted services available to passengers, contrary to the clearly stated Government objective set out in the Executive Summary (page 6) to Flightpath to the Future (Ref 5), the use of airport capacity delivers "better outcomes for passengers, such as contributing to lower fares, more destinations and more service innovation by airlines." This would not be achieved by an approach that required all airports to be full before new capacity was approved.	

**Table 2-5 - The Hertfordshire Host Authorities Responses to the Applicant 's Responses to the Examining Authority's First Written Questions on Noise [REP4-060]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
NO.1.8	Applicant	<p>2013 baseline comparison</p> <p>Paragraph 5.58 of the Airports National Policy Statement (ANPS) requires that "The noise mitigation measures should ensure the impact of aircraft noise is limited and, where possible, reduced compared to the 2013 baseline assessed by the Airports Commission".</p> <p>Acknowledging that the Airports Commission focussed specifically on Heathrow, expand on the response in ISH3 post hearing submission [REP3-050] explaining how the Proposed Development otherwise meets this policy requirement.</p> <p>You may wish to link the answer to this question with the answer to question NO.1.9.</p>	<p>The overall aviation noise objective from the Aviation Policy Framework (Ref 3) through to the Overarching Aviation Noise Policy Statement (OANPS, Ref 4) is to limit, and where possible reduce, the total adverse impacts on health and quality of life from aviation noise. The evolution of this objective is described in Section 2 and how the Proposed Development complies with this objective is summarised in Section 3 of <b>Commentary on the Overarching Aviation Noise Policy [REP1-012]</b>. It is important to note that the OANPS confirms the government's policy that "We consider that "limit, and where possible reduce" remains appropriate wording. An overall reduction in total adverse effects is desirable, but in the context of sustainable growth an increase in total adverse effects may be offset by an increase in economic and consumer benefits. In circumstances where there is an increase in total adverse effects, "limit" would mean to mitigate and minimise adverse effects, in line with the Noise Policy Statement for England." (NPSE).</p> <p>As described in the <b>Planning Statement [AS-122]</b>, the embedded noise management measures as secured by the Noise Envelope within the <b>Green Controlled Growth Framework [REP3-017]</b> have been developed so that, in combination with the compensatory mitigation measures for the Proposed Development (<b>Draft Compensation Policies Measures and Community First [REP2-005]</b>), they meet the NPSE and the aviation policy objective to limit, and where possible reduce, the total adverse impacts on health and quality of life from aviation noise.</p> <p>Whilst the Airports National Policy Statement (ANPS, Ref 5) has no effect for the Proposed Development and paragraph 5.58 of the ANPS is specific to Heathrow and the Airports Commission, the ANPS is an important and relevant consideration (as confirmed in paragraph 1.12 of the ANPS) and paragraph 5.58 provides clarity that the aviation policy objective should be tested, at least in part, in relation to a historic baseline. The footnote to ANPS paragraph 5.58 (footnote 155) clarifies that the 2013 baseline for this test is defined by the 54dBLAeq,16h daytime contour.</p> <p>As the 2013 baseline is specific to Heathrow and the Airports Commission, it is considered that the 2019 baseline used in the Environmental Statement is the appropriate historic baseline to use. This is why, for aircraft air and ground noise, the assessment compares the Do-Something scenario in each year to the 2019 Actuals baseline (or the 2019 Consented baseline in the sensitivity test).</p>	<p>The Applicant has not answered the question, which clearly asks how the Proposed Development meets the policy requirement of ensuring the impact of aircraft noise is limited and, where possible, reduced compared to a historic baseline.</p> <p>The Applicant instead draws reference to the OANPS and does not acknowledge that this is not the only aviation noise policy in effect, as it does not annul or supersede Aviation Policy Framework 2013 (APF), UK Airspace Policy 2017 consultation (UKAP) nor the Airport National Policy Statement 2018 (ANPS).</p> <p>The Applicant sets out in their response that there is a reduction offered in the daytime, but no reduction in the night-time. While the ANPS does reference the reduction applying to the 54 dB LAeq,16hour contour (daytime), ANPS is also clear that a 6.5-hour night-time flight ban is also expected [section 5.62, ANPS 2018].</p> <p>The Applicant is not proposing a comparable night-time mitigation</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																																																
			<p>The results of this comparison are presented in Table 12.7, 12.9 and 12.10 of Appendix 16.1 of the Environmental Statement [AS-096] and (together with the tables in Section 7.9 of the same appendix), show that for the daytime 54dBLAeq,16h contour:</p> <ul style="list-style-type: none"> <li>a. by comparison to the 2019 Actuals baseline, the adverse impacts on health and quality of life from aviation noise are limited and reduced for all assessment phases;</li> <li>b. by comparison to the 2019 Consented baseline, the adverse impacts on health and quality of life from aviation noise are limited and reduced for all assessment phases;</li> <li>c. by comparison to 2016 actuals (see response to NO.1.9), the adverse impacts on health and quality of life from aviation noise are limited and reduced for all assessment phases.</li> </ul> <p>Though the 2013 baseline test in the ANPS is defined only in terms of daytime, a comparison for night-time has also been undertaken and shows that for the night-time LOAEL (45dBLAeq,Bh) and SOAEL (55dBLAeq,Bh) contours:</p> <ul style="list-style-type: none"> <li>a. by comparison to the 2019 Actuals baseline, the adverse impacts on health and quality of life from aviation noise are limited and reduced for all assessment phases;</li> <li>b. by comparison to the 2019 Consented baseline, the adverse impacts on health and quality of life from aviation noise are limited and reduced for assessment phase 2a;</li> <li>d. by comparison to the 2019 Consented baseline, the adverse impacts on health and quality of life from aviation noise are limited, but not reduced , for assessment phase 1 and 2b;</li> <li>e. by comparison to 2016 actuals (see response to NO.1.9), the adverse impacts on health and quality of life from aviation noise are limited and reduced for assessment phase 2a;</li> <li>f. by comparison to 2016 actuals (see response to NO.1 .9), the adverse impacts on health and quality of life from aviation noise are limited, but not reduced, for assessment phase 1 and 2b.</li> </ul> <p>Data for the above comparisons are summarised in the table below.</p> <table border="1" data-bbox="1032 1276 2148 1465"> <thead> <tr> <th rowspan="2">Noise contour</th> <th colspan="6">Population</th> </tr> <tr> <th>2016 Actuals</th> <th>2019 Consented</th> <th>2019 Actuals</th> <th>2027 DS</th> <th>2039 DS</th> <th>2043 DS</th> </tr> </thead> <tbody> <tr> <td colspan="7"><b>Daytime</b></td> </tr> <tr> <td>54dBLAeq,16h</td> <td>18,300</td> <td>19,050</td> <td>21,650</td> <td>15,500</td> <td>13,850</td> <td>16,500</td> </tr> <tr> <td colspan="7"><b>Night-time</b></td> </tr> <tr> <td>45dBLAeq,8h</td> <td>55,050</td> <td>55,150</td> <td>67,800</td> <td>55,850</td> <td>54,950</td> <td>62,800</td> </tr> <tr> <td>55dBLAeq,8h</td> <td>3,100</td> <td>3,100</td> <td>4,950</td> <td>3,800</td> <td>2,600</td> <td>3,250</td> </tr> </tbody> </table> <p>With respect to the night-time adverse effects, as noted in the <b>Planning Statement [AS-122]</b> and <b>Commentary on the Overarching Aviation Noise Policy [REP1-012]</b>, the noise insulation scheme, with its night-time eligibility, will avoid all significant effects on health and quality of life during the night-time. Furthermore, in line with the principles of the OANPS, the total adverse effects of noise are counterbalanced by the increased economic and consumer benefits delivered by the Proposed Development.</p>	Noise contour	Population						2016 Actuals	2019 Consented	2019 Actuals	2027 DS	2039 DS	2043 DS	<b>Daytime</b>							54dBLAeq,16h	18,300	19,050	21,650	15,500	13,850	16,500	<b>Night-time</b>							45dBLAeq,8h	55,050	55,150	67,800	55,850	54,950	62,800	55dBLAeq,8h	3,100	3,100	4,950	3,800	2,600	3,250	<p>measure, and therefore it is important that noise reduction in the night-time is also considered. As recognised in APF in section 3.34, noise from night flights has a higher cost on local communities.</p> <p>The policy requirement of APF to “<i>limit and where possible reduce the number of people in the UK significantly affected by aircraft noise</i>” is also still in effect, from which the wording of the ANPS follows.</p> <p>As can be seen in the table provided within the Applicant's response, where policy requires that “<i>The noise mitigation measures should ensure the impact of aircraft noise is limited and, where possible, reduced compared to the 2013 baseline assessed by the Airports Commission</i>” cannot be considered to be met, due to the night-time increases (when using an appropriate historic baseline, rather than necessarily the 2013 baseline). The Hertfordshire Host Authorities wish to emphasise that the 2019 actual baseline used by the Applicant is not considered appropriate as it reflects a level of operations that breached an extant noise condition.</p>
Noise contour	Population																																																			
	2016 Actuals	2019 Consented	2019 Actuals	2027 DS	2039 DS	2043 DS																																														
<b>Daytime</b>																																																				
54dBLAeq,16h	18,300	19,050	21,650	15,500	13,850	16,500																																														
<b>Night-time</b>																																																				
45dBLAeq,8h	55,050	55,150	67,800	55,850	54,950	62,800																																														
55dBLAeq,8h	3,100	3,100	4,950	3,800	2,600	3,250																																														
NO.1.9	Applicant	2019 actuals baseline ES Chapter 16 [REP1-003, paragraph 16.9.8]	The 2016 actuals fleet has been modelled in AEDT following the modelling methodology described in Appendix 16.1 of the <b>ES [AS-096]</b> and population analysis of noise contours is provided in the tables below.	The Applicant states that the 2016 baseline is similar to the 2019 Consented baseline, which is not disputed, nor surprising. The step																																																



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																																		
		<p>explains that the 2019 actuals baseline determines the number of properties last experiencing significant adverse effects on health and quality of life. This is used for comparison purposes against future scenarios. Explain how the figures for changes in total population exposure would differ if the last year of noise contour compliant operation 2016 were adopted as a comparator rather than the 2019 actuals or consented baseline datasets</p>	<table border="1" data-bbox="1050 373 1852 701"> <thead> <tr> <th>Daytime L<sub>Aeq,16h</sub> dB Noise Contour</th> <th>2016 Actuals Population</th> </tr> </thead> <tbody> <tr><td>51</td><td>36,400</td></tr> <tr><td>54</td><td>18,300</td></tr> <tr><td>57</td><td>10,400</td></tr> <tr><td>60</td><td>4,200</td></tr> <tr><td>63</td><td>1,250</td></tr> <tr><td>66</td><td>0</td></tr> <tr><td>69</td><td>0</td></tr> </tbody> </table> <table border="1" data-bbox="1050 739 1852 1104"> <thead> <tr> <th>Night-time L<sub>Aeq,8h</sub> dB Noise Contour</th> <th>2016 Actuals Population</th> </tr> </thead> <tbody> <tr><td>45</td><td>55,050</td></tr> <tr><td>48</td><td>20,750</td></tr> <tr><td>51</td><td>10,850</td></tr> <tr><td>54</td><td>4,650</td></tr> <tr><td>55</td><td>3,100</td></tr> <tr><td>57</td><td>1,500</td></tr> <tr><td>60</td><td>0</td></tr> <tr><td>63</td><td>0</td></tr> </tbody> </table> <p>A summary of population within the assessment Phase 1 2027 Lowest Observed Adverse Effect Level (LOAEL), Significant Observed Adverse Effect Level (SOAEL) and Unacceptable Adverse Effect Level (UAEL) contours is provided in table below for the 2016 Actuals Baseline, Do-Minimum (OM) and Do-Something (OS) scenarios. The figures are comparable with 2019 Consented baseline population analysis in Table 12.7 of <b>Appendix 16.1 of the Environmental Statement [AS-096]</b> with the only identified difference being:</p> <ul style="list-style-type: none"> <li>a. 100 fewer people being no longer above the daytime LOAEL by comparison to 2016 actuals; and</li> <li>g. 100 additional people being newly exposed to noise levels above night-time LOAEL by comparison to 2016 actuals.</li> </ul> <p>No change in population exposed to noise levels above SOAEL or UAEL are identified. Cells where there are differences compared to Table 12.7 of <b>Appendix 16.1 of the Environmental Statement [AS-096]</b> are highlighted and the equivalent number from Table 12.7 is included in brackets.</p>	Daytime L <sub>Aeq,16h</sub> dB Noise Contour	2016 Actuals Population	51	36,400	54	18,300	57	10,400	60	4,200	63	1,250	66	0	69	0	Night-time L <sub>Aeq,8h</sub> dB Noise Contour	2016 Actuals Population	45	55,050	48	20,750	51	10,850	54	4,650	55	3,100	57	1,500	60	0	63	0	<p>that the Applicant does not take is to compare the 2016 baseline to the 2019 Actuals, which would show a smaller reduction in noise levels over time in the daytime, and no noise reduction over time at night-time, as per NO.1.8.</p> <p>While the assessment of significant effects would largely remain unchanged, claims of noise reduction as set out in Chapter 16 would be different and as stated in NO.1.8, not be considered compliant with aviation noise policy.</p>
Daytime L <sub>Aeq,16h</sub> dB Noise Contour	2016 Actuals Population																																					
51	36,400																																					
54	18,300																																					
57	10,400																																					
60	4,200																																					
63	1,250																																					
66	0																																					
69	0																																					
Night-time L <sub>Aeq,8h</sub> dB Noise Contour	2016 Actuals Population																																					
45	55,050																																					
48	20,750																																					
51	10,850																																					
54	4,650																																					
55	3,100																																					
57	1,500																																					
60	0																																					
63	0																																					



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																																																																								
			<table border="1" data-bbox="1032 363 2003 1333"> <thead> <tr> <th colspan="6">Total Population</th> </tr> <tr> <th>Noise exposure</th> <th>2016 Actuals</th> <th>2027 DM</th> <th>2027 DS</th> <th>Change DS – 2016 Actuals</th> <th>Change DS - DM</th> </tr> </thead> <tbody> <tr> <td colspan="6"><b>Daytime</b></td> </tr> <tr> <td>Above LOAEL and below SOAEL</td> <td>35,150</td> <td>25,000</td> <td>31,600</td> <td>-3,550 (-3,650)</td> <td>6,600</td> </tr> <tr> <td>Above SOAEL and below UAEL</td> <td>1,250</td> <td>50</td> <td>450</td> <td>-800</td> <td>400</td> </tr> <tr> <td>Newly above the SOAEL in DS compared to the 2016 Actuals Baseline</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> </tr> <tr> <td>Above UAEL</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td colspan="6"><b>Night-time</b></td> </tr> <tr> <td>Above LOAEL and below SOAEL</td> <td>51,950</td> <td>38,350</td> <td>52,050</td> <td>100 (0)</td> <td>13,700</td> </tr> <tr> <td>Above SOAEL and below UAEL</td> <td>3,100</td> <td>2,100</td> <td>3,800</td> <td>700</td> <td>1,700</td> </tr> <tr> <td>Newly above the SOAEL in DS compared to the 2016 Actuals Baseline</td> <td></td> <td></td> <td>700</td> <td></td> <td></td> </tr> <tr> <td>Above UAEL</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p data-bbox="1032 1381 2338 1522">A summary of population within the Phase 2a 2039 LOAEL, SOAEL and UAEL contours is provided in table below for the 2016 Actuals baseline, OM and OS scenarios. The figures are comparable with 2019 Consented baseline population analysis in Table 12.9 of <b>Appendix 16.1 of the Environmental Statement [AS-096]</b> with the only identified difference being:</p> <ul data-bbox="1121 1535 2338 1690" style="list-style-type: none"> <li>a. 100 fewer people being no longer above the daytime LOAEL by comparison to 2016 actuals; and</li> <li>h. 100 additional people being newly exposed to noise levels above night-time LOAEL by comparison to 2016 actuals.</li> </ul> <p data-bbox="1032 1703 2338 1797">No change in population exposed to noise levels above SOAEL or UAEL are identified. Cells where there are differences compared to Table 12.7 of Appendix 16.1 of the Environmental Statement [AS-096] are highlighted and the equivalent number from Table 12.7 is included in brackets.</p>	Total Population						Noise exposure	2016 Actuals	2027 DM	2027 DS	Change DS – 2016 Actuals	Change DS - DM	<b>Daytime</b>						Above LOAEL and below SOAEL	35,150	25,000	31,600	-3,550 (-3,650)	6,600	Above SOAEL and below UAEL	1,250	50	450	-800	400	Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0			Above UAEL	0	0	0	0	0	<b>Night-time</b>						Above LOAEL and below SOAEL	51,950	38,350	52,050	100 (0)	13,700	Above SOAEL and below UAEL	3,100	2,100	3,800	700	1,700	Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			700			Above UAEL	0	0	0	0	0	
Total Population																																																																												
Noise exposure	2016 Actuals	2027 DM	2027 DS	Change DS – 2016 Actuals	Change DS - DM																																																																							
<b>Daytime</b>																																																																												
Above LOAEL and below SOAEL	35,150	25,000	31,600	-3,550 (-3,650)	6,600																																																																							
Above SOAEL and below UAEL	1,250	50	450	-800	400																																																																							
Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0																																																																									
Above UAEL	0	0	0	0	0																																																																							
<b>Night-time</b>																																																																												
Above LOAEL and below SOAEL	51,950	38,350	52,050	100 (0)	13,700																																																																							
Above SOAEL and below UAEL	3,100	2,100	3,800	700	1,700																																																																							
Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			700																																																																									
Above UAEL	0	0	0	0	0																																																																							





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																																																																							
			<table border="1" data-bbox="1041 373 2012 1346"> <thead> <tr> <th rowspan="2">Noise exposure</th> <th colspan="5">Total Population</th> </tr> <tr> <th>2016 Actuals</th> <th>2039 DM</th> <th>2039 DS</th> <th>Change DS – 2016 Actuals</th> <th>Change DS - DM</th> </tr> </thead> <tbody> <tr> <td colspan="6"><b>Daytime</b></td> </tr> <tr> <td>Above LOAEL and below SOAEL</td> <td>35,150</td> <td>20,100</td> <td>30,800</td> <td>-4,350 (-4,450)</td> <td>10,700</td> </tr> <tr> <td>Above SOAEL and below UAEL</td> <td>1,250</td> <td>0</td> <td>200</td> <td>-1,050</td> <td>200</td> </tr> <tr> <td>Newly above the SOAEL in DS compared to the 2016 Actuals Baseline</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> </tr> <tr> <td>Above UAEL</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td colspan="6"><b>Night-time</b></td> </tr> <tr> <td>Above LOAEL and below SOAEL</td> <td>51,950</td> <td>32,850</td> <td>52,350</td> <td>400 (300)</td> <td>19,500</td> </tr> <tr> <td>Above SOAEL and below UAEL</td> <td>3,100</td> <td>1,500</td> <td>2,600</td> <td>-500</td> <td>1,100</td> </tr> <tr> <td>Newly above the SOAEL in DS compared to the 2016 Actuals Baseline</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> </tr> <tr> <td>Above UAEL</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p data-bbox="1032 1381 2347 1520">A summary of population within the Phase 2b 2043 LOAEL, SOAEL and UAEL contours is provided in table below for the 2016 Actuals baseline, OM and OS scenarios. The figures are comparable with 2019 Consented baseline population analysis in Table 12.10 of <b>Appendix 16.1 of the Environmental Statement [AS-096]</b> with the only identified difference being:</p> <ul data-bbox="1121 1535 2297 1686" style="list-style-type: none"> <li>a. 100 additional people being newly exposed to noise levels above daytime LOAEL by comparison to 2016 actuals; and</li> <li>i. 100 additional people being newly exposed to noise levels above night-time LOAEL by comparison to 2016 actuals.</li> </ul> <p data-bbox="1032 1703 2338 1799">No change in population exposed to noise levels above SOAEL or UAEL are identified. Cells where there are differences compared to Table 12.7 of Appendix 16.1 of the <b>Environmental Statement [AS-096]</b> are highlighted and the equivalent number from Table 12.7 is included in brackets.</p>	Noise exposure	Total Population					2016 Actuals	2039 DM	2039 DS	Change DS – 2016 Actuals	Change DS - DM	<b>Daytime</b>						Above LOAEL and below SOAEL	35,150	20,100	30,800	-4,350 (-4,450)	10,700	Above SOAEL and below UAEL	1,250	0	200	-1,050	200	Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0			Above UAEL	0	0	0	0	0	<b>Night-time</b>						Above LOAEL and below SOAEL	51,950	32,850	52,350	400 (300)	19,500	Above SOAEL and below UAEL	3,100	1,500	2,600	-500	1,100	Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0			Above UAEL	0	0	0	0	0	
Noise exposure	Total Population																																																																										
	2016 Actuals	2039 DM	2039 DS	Change DS – 2016 Actuals	Change DS - DM																																																																						
<b>Daytime</b>																																																																											
Above LOAEL and below SOAEL	35,150	20,100	30,800	-4,350 (-4,450)	10,700																																																																						
Above SOAEL and below UAEL	1,250	0	200	-1,050	200																																																																						
Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0																																																																								
Above UAEL	0	0	0	0	0																																																																						
<b>Night-time</b>																																																																											
Above LOAEL and below SOAEL	51,950	32,850	52,350	400 (300)	19,500																																																																						
Above SOAEL and below UAEL	3,100	1,500	2,600	-500	1,100																																																																						
Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0																																																																								
Above UAEL	0	0	0	0	0																																																																						



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response																																																																							
			<table border="1"> <thead> <tr> <th rowspan="2">Noise exposure</th> <th colspan="5">Total Population</th> </tr> <tr> <th>2016 Actuals</th> <th>2043 DM</th> <th>2043 DS</th> <th>Change DS – 2016 Actuals</th> <th>Change DS - DM</th> </tr> </thead> <tbody> <tr> <td colspan="6"><b>Daytime</b></td> </tr> <tr> <td>Above LOAEL and below SOAEL</td> <td>35,150</td> <td>19,950</td> <td>38,250</td> <td>3,100 (3,000)</td> <td>18,300</td> </tr> <tr> <td>Above SOAEL and below UAEL</td> <td>1,250</td> <td>0</td> <td>500</td> <td>-750</td> <td>500</td> </tr> <tr> <td>Newly above the SOAEL in DS compared to the 2016 Actuals Baseline</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> </tr> <tr> <td>Above UAEL</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td colspan="6"><b>Night-time</b></td> </tr> <tr> <td>Above LOAEL and below SOAEL</td> <td>51,950</td> <td>32,400</td> <td>59,550</td> <td>7,600 (7,500)</td> <td>27,150</td> </tr> <tr> <td>Above SOAEL and below UAEL</td> <td>3,100</td> <td>1,350</td> <td>3,250</td> <td>150</td> <td>1,900</td> </tr> <tr> <td>Newly above the SOAEL in DS compared to the 2016 Actuals Baseline</td> <td></td> <td></td> <td>150</td> <td></td> <td></td> </tr> <tr> <td>Above UAEL</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>	Noise exposure	Total Population					2016 Actuals	2043 DM	2043 DS	Change DS – 2016 Actuals	Change DS - DM	<b>Daytime</b>						Above LOAEL and below SOAEL	35,150	19,950	38,250	3,100 (3,000)	18,300	Above SOAEL and below UAEL	1,250	0	500	-750	500	Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0			Above UAEL	0	0	0	0	0	<b>Night-time</b>						Above LOAEL and below SOAEL	51,950	32,400	59,550	7,600 (7,500)	27,150	Above SOAEL and below UAEL	3,100	1,350	3,250	150	1,900	Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			150			Above UAEL	0	0	0	0	0	
Noise exposure	Total Population																																																																										
	2016 Actuals	2043 DM	2043 DS	Change DS – 2016 Actuals	Change DS - DM																																																																						
<b>Daytime</b>																																																																											
Above LOAEL and below SOAEL	35,150	19,950	38,250	3,100 (3,000)	18,300																																																																						
Above SOAEL and below UAEL	1,250	0	500	-750	500																																																																						
Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			0																																																																								
Above UAEL	0	0	0	0	0																																																																						
<b>Night-time</b>																																																																											
Above LOAEL and below SOAEL	51,950	32,400	59,550	7,600 (7,500)	27,150																																																																						
Above SOAEL and below UAEL	3,100	1,350	3,250	150	1,900																																																																						
Newly above the SOAEL in DS compared to the 2016 Actuals Baseline			150																																																																								
Above UAEL	0	0	0	0	0																																																																						
NO.1.13	Applicant	<p>Future fleetmix assumptions – next gen</p> <p>With reference to CAP1766 'Emerging Aircraft Technologies and their potential noise impact', explain why an assumption of next generation noise levels being less than or the same as new generation aircraft is robust.</p>	<p>CAP1766 'Emerging Aircraft Technologies and their potential noise impact' (Ref 6) was one of the Civil Aviation Authority publications linked to the Department for Transport's aviation strategy consultations (Ref 7), along with CAP1731 Aviation Strategy: Noise Forecast and Analyses (Ref 8). CAP1766 provides high level commentary on noise implications of emerging aircraft technologies such as electric aircraft, supersonic aircraft, unmanned aircraft systems and spacecraft. Of these technologies, only electric aircraft are likely to have the potential for use at London Luton Airport in significant numbers. Whilst the report notes that there is a risk of potential adverse noise impacts of electric aircraft (which could vary with noise levels potentially reduced on departure but increased on arrival), no definitive statements are made and the uncertainties are noted.</p> <p>Published around the same time and as part of the same aviation strategy consultations, CAP1731 Aviation Strategy: Noise Forecast and Analyses provides forecast noise modelling out to 2050, with consideration of the noise impacts of future aircraft types. For these long-term forecasts, the Civil Aviation Authority assumed either a 0.1 dB or 0.3dB per year reduction due to future aircraft types, based on a review of novel aircraft noise technology by the International Civil Aviation Organization</p>	<p>The Applicant's use of assuming that aircraft noise levels are no quieter in the future does not bring about sufficient constraint in the future, should new aircraft actually be quieter than existing.</p> <p>Should quieter aircraft enter the market, there may not be sufficient incentivisation for airlines to operate these aircraft from London Luton Airport, as there is no reduction in the size of the noise contour limit in future years. In this situation, there could therefore be noise benefits</p>																																																																							



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			<p>(Ref 9). This assumption is consistent with the assumptions applied in the sensitivity test for next-generation aircraft presented in Section 12.6 of <b>Appendix 16.1 of the Environmental Statement [AS-096]</b>. Assumptions on reductions in noise from next-generation aircraft are only employed in a sensitivity test.</p> <p>For the reasons described above, it is therefore considered that the assumption that next-generation aircraft are no louder than new-generation aircraft is considered robust and a reasonable worst-case, as the assumption means that Noise Envelope Limits are set to be equivalent to those of new-generation aircraft in any case.</p>	<p>that are not being shared with the local community, as the constraints placed on London Luton Airport are insufficient. This response links in with those concerning GCG below.</p>
NO.1.22	Applicant	<p>Airline orders</p> <p>In response to Action Point 21 for ISH3 [REP3-050, Table 1.1], the Applicant provided three figures extracted from airline presentations. No explanation is provided as to which aircraft would be based at Luton or how the information provided has informed the development of the future fleet forecasts. The ExA requests that the Applicant provide a detailed explanation of how this information has informed the future forecast and confirmation from the airlines that the future fleet forecasts are representative of the proposed airline operations.</p>	<p>The Applicant cannot be certain of the rate at which key airlines will base their new aircraft at London Luton Airport. However, all three of the largest airlines are already operating new aircraft at the airport and expected to continue to deploy more of their fleet to Luton.</p> <p>In the case of Wizz Air, the airline has already confirmed that the base at Luton will be 100% new generation by 2025 (see Appendix B) and, since the airline will be at nearly 100% new generation by 2027 (as per the information provided in REP3-050, Figure 1 ), the Applicant has a high degree of confidence that this major operator will be all new generation in the near future at Luton when accounting for some inbound services from other bases in addition to the based operations.</p> <p>Following the submission of REP3-050, easyJet has also announced a further order for 157 new generation aircraft on top of those already ordered, and options to place another 100 on firm order above this (see Appendix C).</p> <p>Ultimately, airlines will continue to replace their older aircraft because there is an economic imperative to do so in order to reduce their own operating costs and meet sustainability targets, as older aircraft burn more fuel and become increasingly expensive to maintain. Therefore, not updating fleets makes airlines uncompetitive, particularly in the low fares airline sector that makes up the vast majority of operations at the airport. Low fares airlines will typically replace older aircraft at an earlier stage than other airlines due to the importance placed on keeping in costs down within the business and this can be seen historical! as airlines, such as Ryanair and EasyJet, are already on their second generation of aircraft and now introducing their third generation each (having retired all their first generation aircraft some years ago). This pattern can be seen in the large numbers of new generation aircraft on order by low fares airlines in Europe and globally.</p> <p>The Applicant's approach to future fleet forecasts has, therefore, been based on specific known factors (such as Wizz Air's 100% new generation fleet by 2027) as well as expectations of how other aircraft on order by the airlines may be deployed, which have been considered taking into account factors such as the typical retirement timescales of airlines (10-20 years for most low fares airlines) and general industry trends, orders and announcements. The fleet mixes adopted for assessment were presented to the Noise Envelope Design Group, which included airline representatives and, in specific consultations with the airlines, the information has been shared with them. This has given the Applicant confidence that the overall rate of fleet replacement assumed in the forecasts is robust.</p> <p>The rate of fleet transition in the early years is broadly consistent with those presented at the Bristol Airport Inquiry (69% new generation by 2030) and accepted as reasonable by the Planning Inspectorate in that case as being "generally sound" (Appeal Decision APP/O0121/W/20/3259234, Page 37, Para 224).</p>	<p>The first two sentences of the last paragraph (starting 'The Applicant believes' and ending 'through Green Controlled Growth') is ultimately the same argument that was made for the 2013 application, and that scenario resulted in noise breaches occurring. See response to Applicant's response to Issue Specific Hearing 1 Actions 20, 21, 24 and 26 and Issue Specific Hearing 3 Action 28: Green Controlled Growth - Transition Period and Slot Allocation Process [REP4-072] within Hertfordshire Host Authorities' comments on any further information / submissions received by Deadline 4.</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			The Applicant believes that the fleet mix presented is reasonable and notes that there has been no substantive challenge to this from any other parties. Ultimately, if the rate of deployment of new generation aircraft is slower than projected at London Luton Airport then the airport will not be able to grow by virtue of the Limits being put in place through Green Controlled Growth (GCG). In order to take advantage of the scope to grow, the airlines will have a motivation to deploy newer types at the airport in order to meet the stringent limits which are being proposed. The principles that growth would be controlled by environmental limits if the fleet mix was not in line with forecasts was confirmed by the Planning Inspectorate at the Bristol Airport Inquiry (Appeal Decision APP/D0121/W/20/3259234, Page 49, Para 288).	

**Table 2-6 - The Hertfordshire Host Authorities Responses to the Applicant 's Responses to the Examining Authority's First Written Questions on the Design [REP4-061]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
PED.1.3	Applicant	<p>Solar Energy Battery Storage (Work No. 4e)</p> <p>The parameters of the authorised development in Requirement 6 set a maximum height of 7.2m which, based on the indicative solar battery storage elevations drawing in General Arrangement Drawings Part 2 of 3 [AS-019], appears to be required to accommodate a building.</p> <p>1. Explain what this building is and why it has not been included in the list of works under Work No. 4e in the draft DCO.</p> <p>2. Clarify the extent of works required for the solar energy battery storage facility, such as battery storage containers, earthworks, any landscaping, boundary treatment etc.,</p>	<p>1. and 2. The Battery Storage is part of Work No 4e as shown within Work Plans (Part 4 of 6) Revision 1 <b>[AS-015]</b> and an indicative layout is shown in General Arrangement Drawings Part 2 of 3 Revision 1 <b>[AS-019]</b>. The Solar Battery Storage facility will be constructed to collect the energy created by the photovoltaic panels located in car park canopies and roofs and connect it into the airport network. Work No. 4e would be composed of the following elements, which have been added to the draft DCO submitted at Deadline 4:</p> <ul style="list-style-type: none"> <li>a. solar power storage containers;</li> <li>b. drainage and foul infrastructure;</li> <li>c. firefighting facilities</li> <li>d. lighting;</li> <li>e. vehicle and pedestrian access routes, parking areas;</li> <li>f. security fencing, gates and monitoring systems; and</li> <li>g. ancillary buildings.</li> </ul> <p>2. The solar energy battery storage forms part of the Proposed Development and the assessment as it is included in the description documented in <b>Environmental Statement Chapter 4 The Proposed Development Revision 1 [AS-074]</b> and is therefore intended to be delivered. The text in Table 3.4 refers to flexibility to incorporate battery storage in the future, should on site generation or the developed energy strategy require it.</p> <p>The ES is based on 'reasonable worst case' approach as recommended by PINS Advice Note Nine (Ref 5); providing sufficient detail to enable a proper assessment of the likely significant environmental effects of the Proposed Development, whilst seeking flexibility about the detailed design of some elements of the Proposed Development. The <b>Energy Strategy [APP-050]</b> outlines the assumptions on electricity storage, including the battery storage area proposed as Work No. 4e, in generating the energy use profiles used in the greenhouse gas assessment <b>[REP3-007]</b>. A</p>	The Applicant to confirm if this aspect of the Proposed Development was included in the Landscape and Visual Impact Assessment (LVIA) (Environmental Statement Chapter 14 Landscape and Visual Revision 1 <b>[AS-079]</b> ).



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>and include these within Work No. 4e in the draft DCO.</p> <p>3. Under Greenhouse Gases in Table 3.4 in Chapter 3 of the ES [AS-026], criterion f. (page 42) states the design has 'flexibility' to allow for battery storage. Does this mean that the battery storage facility may not be implemented? If not, has the possibility of not implementing the battery storage facility been accounted for in the assessments in the ES, such as on greenhouse emissions and air quality?</p>	<p>conservative estimate has been used based on battery storage in the Proposed Development to give a reasonable worst case in emissions from energy use, the document also acknowledges the potential opportunity to increase storage on site when exploring further renewable energy options outside on the DCO (Executive Summary <b>[APP-050]</b>)</p>	
PED.1.5	Applicant, Luton Borough Council	<p>Design review Paragraph 133 of the National Planning Policy Framework (NPPF) states local planning authorities should ensure that they have access to, and make appropriate use of, tools and processes for assessing and improving the design of development. Paragraph 133 goes on to state that in assessing applications, local planning authorities should have regard to the outcome from these processes, including any recommendations made by design review panels. Given the proposed size and scale of development</p>	<p><b>[The Applicant notes that this question is directed to Luton Borough Council, however the Applicant considers that a response from the Applicant will help provide further clarification]</b></p> <p><b>Response:</b> Part 2 of 1.5 only –</p> <p>2. The Applicant believes that good design will be ensured at the detailed design stage using the provisions established within the DCO. These include:</p> <ul style="list-style-type: none"> <li>a. The provisions of Requirement 5, which have been substantially strengthened in the draft DCO submitted at deadline 4, which provide for submissions to the LPA for approval.</li> <li>b. The parameters set out in the Design Principles document which is a securing document under the DCO.</li> <li>c. The principles set out in the Strategic Landscape Masterplan Report which are referenced in the Design Principles document.</li> <li>d. The proposals included in the Landscape and Biodiversity Management Plan which are also referenced in the Design Principles document.</li> <li>e. Further supporting design materials submitted as part of the detailed applications such as Design and Access Statements or similar explaining the development of design and general accordance with the Design Principles.</li> </ul> <p>This is a well-established process that has been followed in many other DCOs and is also appropriate in this case.</p>	<p>In relation to landscape and visual (and carbon emissions), criteria it is acknowledged that all of the options would have a comparable impact (large adverse) as set out in the Environmental Statement Chapter 3 Alternatives and Design Evolution Revision 1 <b>[AS-026]</b> para 3.2.22. In light of this acknowledgement, it would be expected that a design strategy which included a comprehensive approach towards the appropriate integration of this large-scale development into the host landscape would be included in relevant application documents. However, the measures set out in Table 3.4: Summary of embedded measures within the Environmental Statement Chapter 3 Alternatives and Design Evolution Revision 1 <b>[AS-026]</b> para. 3.5.5 Landscape and Visual are limited to:</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>and the extent of post approval consents that will be required by Requirement 5 of the draft DCO to authorise detailed aspects of the development, please explain:</p> <ol style="list-style-type: none"> <li>1. what processes the Council currently has when assessing the design suitability of large-scale development; and</li> <li>2. whether it would be appropriate for any post consent approval process to be subject to a design review process that would be carried out by an independent design review panel to ensure that the highest standards of design are secured.</li> </ol>	<p>If there are concerns about particular elements of the detailed design then this could be addressed through refinement to the Design Principles. The Applicant and its design team would also keep the detailed design of the Proposed Development under review as it evolves and, should a need for further independent design advice or review arise, will consider how best to secure that input.</p> <p>This approach to taking independent design advice is consistent with the ANPS policy which supports design advice rather than review for aviation projects.</p>	<p><i>h) The visual impact of the proposed buildings would be reduced through the use of muted surface finishes on proposed building elevations and where feasible, airfield equipment. and;</i></p> <p><i>i) Further planting for landscape restoration and screening purposes.</i></p> <p>Neither of which provides the comprehensive approach, relating to the integration of large scale-built form, which is required.</p>
PED.1.6	Applicant	<p>Earthworks</p> <p>1. The Design and Access Statement [AS-049, paragraph 2.4.26] states significant earthworks would be required to construct an earth platform to support the airport expansion, as the airfield would need to be at similar levels to the existing runway to comply with the relevant international standards and interface with the proposed terminal building. Explain what international standards are being referred to?</p>	<ol style="list-style-type: none"> <li>1. The airport layout design conforms to the requirements set out in the relevant design standards and regulations namely European Union Aviation Safety Agency (EASA) (Guidance Material for Aerodromes Design CS-ADR-DSN) (Ref 6).</li> <li>2. The Landscape Character Areas (LCAs) that surround the development site have and will inform the landscape proposals associated with the development, which will be subject to detailed design. The illustrative proposals contained within the <b>Environmental Statement Strategic Landscape Masterplan [APP-172]</b> have been informed by the guidelines for managing landscape change in the various Landscape Character Areas, these typically inform broad landscape principles with regards hedgerows, woodland planting and management (LBLCA 14 Luton Airport, HLCA Area 200 – Peters Green Plateau and HLCA Area 201 Kimpton and Whiteway Bottom). Landscape proposals will be cognisant of the existing landscape typologies and will be informed by these characteristics. The LCAs identify the existing landforms associated with the Airport. <b>Environmental Statement Appendix 14.4 Detailed Landscape Assessment revision 1 [AS-086]</b> provides further commentary on the effect on LCAs. The proposed landform and land take has been made based on an earthwork solution, with slopes based on typically achievable gradients. Therefore, the preferred approach will be an earthwork solution. However, other options may be considered where the default earthworks solution is not possible and this could include, for example, reinforced soil, soil nailing, stabilisation etc. Where these are not suitable,</li> </ol>	<p>The Hertfordshire Host Authorities agree that the approach to landform design should be informed by the prevailing landscape character which includes analysis of existing characterisation studies. Can the Applicant explain to the ExA which specific aspects of local landform character will be used to inform the landform design and how this relates to other aspects of the landscape design. Can the Applicant also explain to the ExA how landform design has been considered in relation to the siting of large scale-built development and the evolution of the master planning process more generally.</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>2. Explain what regard has been had to the landscape character assessments referred to in Chapter 14 of the ES [AS-079, paragraph 14.7.5] in considering the design approach to the proposed landform.</p> <p>3. Under Chapter 3 of the ES [AS-026, Table 3.4, criterion b] states where it is not possible to mitigate the risk of slope failure on-site (as part of the earthworks design and gradient of slopes), an engineered solution would be provided. Explain further what the design approach of the engineered solution would be and whether this has been factored into the findings in the Landscape and Visual Impact Assessment and if not, why not?</p> <p>4. The Design and Access Statement [AS-124, paragraph 5.6.4] explains that an estimated 3.7 million m<sup>3</sup> of material would need to be excavated from a variety of locations within the site to provide the required platform, albeit it does go on to state that "some imported granular materials will be required for specific engineered fill</p>	<p>retaining walls may be considered. These options have not been factored into the findings in the Landscape and Visual Impact Assessment as this is not the preferred solution, and alternative solutions will only be considered during detailed design. 3.</p> <p>3. a. Imported granular material volume equates to 543,000m<sup>3</sup> (shown as materials (imported) in Table 4.2 of <b>Environmental Statement Appendix 4.1 Construction Method Statement and Programme Report Revision 1 [AS-082]</b>)</p> <p>4. b. The volumes used with assessments in the ES align with the volumes reported within:</p> <ul style="list-style-type: none"> <li>• The <b>Construction Method Statement and Programme Report [AS-082]</b> Tables 4.2, 4.3, 5.2, and 6.2 and associated insets.</li> <li>• The <b>Design and Access Statement Volume II Revision 1 [AS-124]</b> Table 5.1</li> <li>• Quantities reported in Chapter 19 of the ES.</li> </ul> <p>It should be noted that the estimated 3.7 million m<sup>3</sup> of material relates to the total of the excavated and imported material required for the development (rather than 3.7 million m<sup>3</sup> of excavated material) and this typo is acknowledged. The volumes within Figures 4.11 to 4.15 of the <b>Environmental Statement Chapter 4 The Proposed Development Figure 4.1 - 4.15 Revision 1 [AS-042]</b> do not align with the volumes quoted in the above reports because they are designed to show cut/fill contours required for the development and show change in landform, not the total material volumes moved. Therefore, they are not the same numbers and are for different purposes, not inconsistent or in error. Stockpiles were not included within these volumes, nor were imported materials or exported materials. There are also volumes which represent loss on compaction which are not represented in these drawings. It should be noted that these figures are illustrative and were primarily designed to show how the landform changes with approximate cut/fill within the development areas for each Assessment Phase.</p>	



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>where not available on site". Can you:</p> <p>a. Clarify in cubic metres how much 'some imported granular material' involves.</p> <p>b. Notwithstanding the above question, using the approximate volumes in Figures 4.11 to 4.15 of ES Chapter 4 [AS-042], the volume of cut material amounts to approximately 3,119,000m<sup>3</sup> and the volume of fill amounts to approximately 3,586,000m<sup>3</sup>. Please clarify where the additional 467,000m<sup>3</sup> would be imported from and if from off-site locations, where this would be from and whether this has been factored into the assessments in the ES.</p>		

**Table 2-7 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Landscape and Visual Impacts [REP4-063]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
PED.1.18	Applicant	Significance of Effect Methodology Chapter 14 of the ES [AS-079, Table 14.1] provides a matrix for determining the significance of effect. In respect of sensitivity of receptor, the table	1. The Applicant assumes that the ExA are referring to Table 14.7 rather than Table 14.1 of the ES. Paragraph 14.5.19 of <b>Chapter 14 of the ES [AS-079]</b> states that the significance of a landscape or visual effect is summarised through professional judgement, combining the sensitivity of the receptor with the magnitude of impact. As noted by the ExA, visitors to Wigmore Valley Park are considered to be of medium to high sensitivity which is derived from a combination of visual susceptibility (assessed to be 'high' in this instance) and visual value (assessed to be 'medium' in this instance). The magnitude of impact on this receptor is assessed to be medium adverse during the construction stage. Applying the criteria in Table 14.7 results in a moderate adverse	Please note that the contents list of Chapter 14 of the Environmental Statement Chapter 14 Landscape and Visual Revision 1 <b>[AS-079]</b> , refers to table 14.7 as ' <i>Qualitative sensitivity analysis</i> '.



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>identifies low, medium and high. Taking the findings in paragraph 14.9.27 of ES Chapter 14 [AS-079] as an example, it states visitors to Wigmore Valley Park are considered to be of medium to high sensitivity, which is assumed to have been arrived at by combining visual susceptibility and visual value.</p> <p>1. Explain clearly how Table 14.7 is used to determine significance of effect.</p> <p>2. Should sensitivity of receptors in Table 14.7 be expanded to include matrices for medium-high or low-medium so that it is clear how the significance of effect has been determined?</p>	<p>significance of effect on this receptor during the construction stage. Applying the same criteria in Table 14.7 could result in a moderate/major adverse significance of effect on this receptor. In determining the significance of effect on this (and all other landscape and visual receptors), professional judgement has been used, based on several factors which contribute to sensitivity and magnitude as described in the detailed landscape and visual assessments set out in ES Appendices 14.4 [AS-139] and 14.5 [AS-086].</p> <p>2. The LVIA and LVIA methodology is intended to be accessible notwithstanding the number of tables and receptors. With the example cited above the effect is Moderate adverse which is Significant. The conclusions reached reflects the LVIA methodology and various tables within the document. It is not considered necessary to include additional categories that may add further confusion.</p>	<p>The Hertfordshire Host Authorities have previously noted that the LVIA methodology does not set out how value and susceptibility are combined to determine overall sensitivity, and this is a weakness.</p> <p>However, in relation to point 2, the Hertfordshire Host Authorities do not consider that further categories are required or would be helpful. The Applicants explanation that high susceptibility with medium magnitude results in a medium to high sensitivity seems reasonable (although there should be a methodology which explains this).</p>
PED.1.22	Natural England Applicant	<p>Chilterns Area of Outstanding Natural Beauty (AONB)</p> <p>Please provide an update on the review of the Applicant's methodology for the assessment of the effects on the special qualities of the Chilterns AONB</p>	<p>The methodology for the assessment of the effects on the special qualities of the Chilterns AONB was updated after receiving initial comments from Natural England in August 2023. The first draft of the assessment was circulated on 23 October 2023 to consultees that requested inclusion, including Natural England, the Chilterns Conservation Board, Luton Borough Council, the Hertfordshire Councils representatives and Central Bedfordshire Council. Buckinghamshire Council declined engagement when asked by the ExA at Issue Specific Hearing 6. A meeting to discuss the draft report was arranged for 30 October 2023, and comments requested by Friday 3 November.</p>	<p>The Hertfordshire Host Authorities attended the meeting on 30 October 2023 and have provided a response to the draft Chilterns AONB Special Qualities Assessment on the 3 November 2023.</p>
PED.1.23	All Local Authorities, Natural England, The Chiltern Society and Chilterns	<p>Chilterns AONB Sensitivity Test [APP-107] Applicant: Paragraph 2.4.2 states that extension to the boundary of the Chilterns</p>	<p>The text cited above relates to the Visual Assessment only. The preceding section 2.3 of the Chilterns AONB Sensitivity Test [APP-107] discusses Landscape Assessment and concludes that these changes would further increase the judgement on magnitude of impact in Assessment Phase 2a for the aesthetic and perceptual characteristics of the landscape within the Chilterns AONB landscape receptor from very low to low, which would in turn increase the significance of effect on</p>	<p>The Hertfordshire Host Authorities do not agree that visual receptor sensitivity would be unaffected as set out in Hertfordshire Host Authorities' Response to the ExA's</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
	Conservation Board, Applicant	<p>AONB would neither change the judgements of magnitude of impact resulting from the Proposed Development nor those on the sensitivity of a visual receptor. This is because judgements on sensitivity are a product of the activity one is performing when experiencing a view, which would not be altered by the future designation of this land.</p> <p>Please explain further the rationale for this statement, given that introducing a statutory landscape designation would likely increase the value of the receptor and its susceptibility to change.</p> <p>All Local Authorities, Natural England, The Chiltern Society and Chilterns Conservation Board: Are parties in agreement with the findings in the Sensitivity Assessment? If not, why not?</p>	this landscape receptor assessed and recorded in Section 14.9 in Chapter 14 of the ES [AS-079] in this period from minor adverse to moderate adverse, which is significant.	<p>Written Questions (ExQ1) [REP4-126] at Deadline 4</p> <p>Paragraph 6.37 of Guidelines for Landscape and Visual Impact Assessment Third edition states:</p> <p><i>“Judgements should also be made about the value attached to the views experienced. This should take account of:</i></p> <ul style="list-style-type: none"> <li><i>• recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations.”</i></li> </ul> <p>The Hertfordshire Host Authorities maintain the position that extension of the AONB boundary would tend to increase the sensitivity of the landscape and visual receptors within it, but that a sensitivity assessment should be carried out for individual receptors to accurately determine sensitivity.</p>
PED.1.25	Applicant	<p><b>Landscape Proposals</b></p> <p>The Design and Access Statement [AS-049, Paragraph 3.3.7] states that the landscape proposals support the sustainability aspirations of the airport by promoting solutions that:</p>	The strategic design considerations are developed to specify the key design aims, objectives and requirements needed to achieve the Vision and the Strategic Objectives as set out in Section 3 of the Design Access Statement Volume I [AS-049]. These are listed under five headings, but are closely interlinked to create a comprehensive approach. The proposed landscape mitigation areas illustrated in the Strategic Landscape Masterplan [APP-172] will fulfil the landscape strategic considerations, and Requirement 9 of the dDCO [REP3-003] secures the landscape design to be developed in accordance with the principles set out in the Design Principles [TR020001/APP/7.09]. For instance, the proposals create increased biodiversity value for both new and existing habitats by incorporating meadow grasslands, created and enhanced woodlands, new and restored hedgerows, a cluster of small wildlife ponds and a range of bat and bird boxes to nurture the	The Applicants response does not provide the level of information required to satisfy the Hertfordshire Host Authorities that these sustainability aspirations are met. Although the question relates to 'landscape proposals' the response requires the input from a range of relevant topic leads to provide the required detail.





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		a. nurture wildlife; b. conserve water and energy; c. reduce soil and water pollution; d. reduce construction waste; and e. decrease surface water run-off  Explain further how the landscape proposals support the aspirations listed.	<p>wildlife. The landscape proposals also introduce location appropriate species within the planting strategy, including native species. reducing maintenance requirements. contributing to the conservation of water and energy. Similarly, the landscape proposals conserve water by incorporating a balanced hard and soft landscape to enable natural water infiltration to support the overall water management objectives. Further information is provided in Biodiversity Net Gain Report [APP-067]. The landscape strategic considerations are safeguarded within the overall Proposed Development through the Design Principles [TR020001/APP/7.09] and Environmental Statement Chapter 3 [AS-026], embedding these considerations into design principles and mitigation measures. For example, the Proposed Development has been designed, as far as possible, to avoid effects related to waste and resources through option identification, appraisal, selection and refinement as detailed in ES Chapter 19 Waste and Resources [AS-081]. Furthermore, the Biosecurity strategy described in the Landscape and Biodiversity Management Plan [AS-029] explains what measures are taken to reduce the risk of soil and water pollution. The sustainability design principles listed in the Design Principles [TR020001/APP/7.09] also establish a number of sustainability principles which the future detailed design would comply with, to ensure the established landscape strategic design considerations are achieved.</p>	
PED.1.27	Applicant	<p><b>Solar Energy Generation</b></p> <p>The Proposed Development includes the installation of solar photovoltaic (PV) panels and canopies to support PV panels attached to the roof of proposed buildings (New Terminal 2 building and car parks P1, P5, P9 and P12) and constructed within surface car parks (P2, P10 and P11). In the absence of any reference, clarify if the findings in Appendices 14.4 [AS-086] and 14.5 [AS-139] of the ES has included consideration of the effects of solar energy generation for both landscape and visual impacts?</p>	<p>The assessment of the landscape and visual effects of the Proposed Development, as set out in Appendices 14.4 [AS-086] and 14.5 [AS-139] of the ES, has considered the installation of solar photovoltaic (PV) panels and canopies to support PV panels attached to the roof of proposed buildings, and constructed within surface car parks. Whilst these structures are not explicitly referenced in the assessments, they have been taken into account in the descriptions and judgements made in relation to magnitude of impact, and factored into the 3D development parameters model used to produce the photomontages included in ES Appendix 14.7 [REP3-009 to REP3-014]</p>	<p>There does not appear to be a coordinated response between the LVIA, Chapter 14 of the Environmental Statement Chapter 14 Landscape and Visual Revision 1 [AS-079], and the Glint and Glare Assessment [REP4-041]. Notably, the Glint and Glare Assessment [REP4-041] does not consider many of the receptors identified in the LVIA. The Hertfordshire Host Authorities request that the Applicant provides the ExA with more details of how glint and glare particularly from solar energy generation has been factored into the assessment of landscape and visual effects.</p>
PED.1.31	Applicant	Unacceptable levels of harm	The Applicant acknowledges that the wording in 8.9.31 is not as helpful or clear as it could be and the Planning Statement can be amended to read as follows: "8.9.31 It is evident that whilst that will	The Hertfordshire Host Authorities disagree that, " <i>In most instances,</i>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		Chapter 8 of the Planning Statement [AS-122, paragraph 8.9.31] states 'it is evident that whilst that will be an adverse impact on the surrounding landscape (including the Chilterns AONB) and visual impact caused by the Proposed Development, in most instances this will not amount to unacceptable levels of harm'. Describe the instances where unacceptable levels of harm would arise.	be an adverse impact on the surrounding landscape (including the Chilterns AONB) and visual impact caused by the Proposed Development. In most instances, these impacts can be adequately mitigated but, in some instances, there will be residual adverse impacts resulting in harm which needs to be weighed in the planning balance (such as the parkland of Wigmore Valley Park). This harm is tempered by other instances where current landscape and visual impacts are improved (such as the network of PRoW east of Luton). 8.9.32 The Proposed Development is therefore in accordance with the relevant landscape and visual impact planning policies taken as a whole, noting that there are some adverse and beneficial effects. With mitigation measures incorporated into the design where possible, this matter should be accorded only limited negative weight in the planning balance." NB. Paragraph 8.9.32 is unchanged but is included above for context and to show that the amendment to the wording of 8.9.31 has no effect on the conclusion on this issue.	these (landscape and visual) impacts can be adequately mitigated" and maintains fundamental concerns regarding the visual impact of the introduction of large-scale built development and potential impacts on the Special Qualities of the Chilterns AONB.

**Table 2-8 - The Hertfordshire Host Authorities Responses to the Applicant 's Responses to the Examining Authority's First Written Questions on Green Belt [REP4-064]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
PED.1.34	Applicant	<b>Green Belt Assessment</b> The Planning Statement [APP-196, Appendix B, paragraph B6.1.3] concludes in respect of the elements that constitute inappropriate development that "In both of these cases, it has been demonstrated that the identified harm to the Green Belt that would result from these elements is clearly outweighed by the benefits they would deliver and that very special circumstances exist". Explain where	It is noted that 'benefits' is not a direct consideration stated in the NPPF. Paragraph 148 of the NPPF states: <i>"Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations."</i> In this context, where it was stated in the Planning Statement [APP-196] that the harm from these elements <i>is clearly outweighed by the benefits</i> , this could also read as "the harm from these elements is clearly outweighed by other considerations, namely, the identified benefits they would deliver".	It is agreed that benefits can be part of the considerations that may outweigh potential harm to the Green Belt by reason of inappropriateness. The Hertfordshire Host Authorities had also been seeking clear justification for the inappropriate development, and which would include justification for the need for the works in that location in the Green Belt, and the absence of suitable alternatives outside of the Green Belt, and which it is noted is addressed in the Applicant's Response to Written Questions [REP4-064], which would be a significant consideration, in conjunction with the benefits.



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		'benefits' is a consideration under the relevant policies of the NPPF.		
PED.1.35	Applicant	<p><b>Work No 5b (02) - Replacement Open Space</b></p> <p>The Planning Statement [APP-196, Appendix B, paragraph B1.1.6] does not consider the replacement open space in the Green Belt Assessment because there are no physical works associated with it. However, the Strategic Landscape Masterplan [APP-172] and Work No. 5b (02) in the draft DCO [REP3-003] identifies hard landscaping and footpaths, installation of street furniture, earthworks and the erection of boundary treatments that would constitute physical works.</p> <p>Given that the proposed replacement open space would involve a material change in the use of land and the works outlined above, discuss whether it would preserve openness and why it would not conflict with the purposes of including land within the green belt, as required by paragraph 150 of the NPPF.</p>	<p>The term physical works at paragraph B1.1.6 in the Green Belt Assessment [APP-196] was directed towards buildings and the Applicant acknowledges that the terminology could have been clearer. It is agreed that the hard landscaping and footpaths, installation of street furniture, earthworks and the erection of boundary treatments would constitute physical works and that consideration needs to be given to NPPF paragraph 150.</p> <p>The proposed replacement open space would remain inherently open, both in close and long-distance views and would continue to clearly link to the wider Green Belt both visually and spatially, maintaining the sense of separation between settlements. In this context, the proposed physical works are very limited in nature, complementing and reinforcing the nature and character of the space as open parkland. None of these physical works would present any continuous massing across the Site akin to a building and would not have any significant urbanising effect. Accordingly, it is considered that the material change of use to open space and the associated physical works would preserve the openness of the Green Belt, both spatially and visually.</p> <p>The proposed change of use to open space and the associated physical works are considered against the five purposes of including land within the Green Belt set out below:</p> <p><i>a. to check the unrestricted sprawl of large built-up areas</i></p> <p>The proposed change of use to public open space would likely place an even greater impediment to potential future urban sprawl than the existing agricultural use.</p> <p><i>b. to prevent neighbouring towns merging into one another;</i></p> <p>The change of use to open space and the associated physical works will not lead to the merging of any towns into one another. Rather, it would reinforce the sense of separation between Luton and neighbouring settlements to the east, including Breachwood Green.</p> <p><i>c. to assist in safeguarding the countryside from encroachment;</i></p> <p>The proposed change of use to public open space would safeguard the countryside from urban encroachment.</p> <p><i>d. to preserve the setting and special character of historic towns;</i></p> <p>The change of use to open space and the associated physical works will not impact upon the setting and special character of any historic towns.</p> <p><i>e. to assist in urban regeneration, by encouraging the recycling of derelict and other urban land</i></p> <p>It is not considered that this criterion is directly relevant to the change of use to open space and the associated physical works.</p> <p>Having regard to the above, it is considered that proposed change of use and associated physical works would preserve openness and would not conflict with the purposes of including land within</p>	<p>The Applicant has appeared to address each individual element in relation to individual local authority Green Belt designation. The Hertfordshire Host Authorities advise that the cumulative effects of all developments proposed for the Green Belt on the combined Green Belt area should be determined as it is likely that there would be negative effects particularly in relation to the introduction of structures which would have an urbanising influence and diminish the visual sense of openness.</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
			the Green Belt and should be considered to be "not inappropriate" development in accordance with the NPPF.	
PED.1.36	Applicant	<p><b>Work No 2a (02) - Surface Movement Radar</b></p> <p>The conclusion that this would comprise inappropriate development in the Green Belt is noted [APP-196, paragraph B3.1.5] but that very special circumstances apply. In these circumstances, it must be demonstrated that the potential harm to the Green Belt is clearly outweighed by other considerations.</p> <p>1. Explain how a steel lattice support tower with a maximum height of 14.3m can be considered an open structure with limited harm to the visual openness of the Green Belt and how this work would cause 'negligible' harm to the Green Belt.</p> <p>2. Confirm if the red 'construction light' on the top would be a permanent feature and the character of this. If so, what would be the effect on the openness of the Green Belt from the light?</p> <p>3. The assessment of harm to the Green Belt from Work No. 2a (02) should include all works</p>	<p>1. The open lattice structure was selected rather than a solid structure so as to limit impact on sight lines for an observer south of the airport. It is a similar approach to the use of chain link fence for the airport's security fence (which in places is contiguous to the Green Belt boundary) rather than a solid barrier. The assessed level of harm to the openness of the Green Belt as negligible is heavily informed by its context and the character of the Green Belt in that particular location as it is already heavily dominated and influenced by airport infrastructure. However, even if the harm was considered to be limited (as opposed to negligible), the Applicant considers that harm would still be clearly and demonstrably outweighed by other considerations, namely the essential safety benefits the SMR tower would deliver as set out in the Green Belt Assessment [APP-196].</p> <p>2. The proposed red light would be a permanent low intensity omni-directional proprietary fitting. It is not for construction purposes (as described in the <b>Green Belt Assessment [APP-196]</b>) but to highlight the location of the mast to pilots, particularly at night time and in periods of low visibility. The specification is required as it is included in International Civil Aviation Organisation (ICAO) publication Annex 14 (Ref 1) and equivalent UK Civil Aviation Authority (CAA) guidance (UK Certification Specification &amp; Guidance Material for Aerodrome Design (Ref 2). The light will be seen in the context of other airport lighting and would cause negligible harm to the Green Belt.</p> <p>3. The introduction of any structures would both spatially and visually affect the openness of the Green Belt. The fundamental aim of the Green Belt is to prevent urban sprawl and keep land open. The proposed SMR radar, together with the associated works (including the access road, security fencing and power and communication cable connections) on the very edge of the Green Belt would not encourage urban sprawl, nor impact the use of the land in any other way. The open nature of these works would still afford views through and they would not appear as solid massing. Rather, they would visually be assimilated into the adjacent airport infrastructure and would be perceived as part of the overall airport including existing functions.</p> <p>4. The requirements regarding the height and location of the proposed SMR are introduced in the <b>Green Belt Assessment [APP-196]</b>, paragraphs 3.1.5 and 3.1.6 and expanded here. In terms of location, the effective operation of an aerodrome may be considerably influenced by natural features and man-made constructions inside and outside its boundary. These may result in limitations on the distance available for take-off and landing and on the range of meteorological conditions in which take-off and landing can be undertaken. For these reasons, certain areas of the local airspace must be regarded as integral parts of the aerodrome environment. The degree of freedom from obstacles in these areas is as important in the granting and retention of a CAA aerodrome licence/certificate as the more obvious physical requirements of the runways and their associated runway strips.</p> <p>The method of assessing the significance of any existing or proposed object within the aerodrome boundary or in the vicinity of the aerodrome is to establish defined obstacle limitation surfaces (OLS) particular to a runway and its intended use. The characteristics of the OLS are defined in ICAO publication Annex 14 Vol 11 (and UK CAA equivalent guidance - UK Certification Specification &amp; Guidance Material for Aerodrome Design2) which also describes the action to be</p>	Refer to Hertfordshire Host Authorities responses to PED.1.34 and PED.1.35 above.





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>associated with the radar, including the access road, security fencing and power and communication cable connections. The assessment that the works 'would be seen in the context of, and as part of the existing airport' and that they are open structures [APP-196, B3.1.8] is noted. Please provide a more detailed assessment of the effect of the harm from the proposals on the openness of the Green Belt.</p> <p>4. The discussion of why the radar must be located in this position is noted [APP-196, paragraph B3.1.7]. Given that the proposed location is in proximity to the Green Belt boundary, explain why it is not possible to move it the short distance beyond the boundary.</p>	<p>taken in respect of objects which infringe them. When a surface is infringed additional safety measures may be required by the CAA.</p> <p>In terms of the specific location of the proposed location of the SMR the critical OLS is the Transitional Surface which is a sloping surface with its origin coincident with ground level 140m from the runway centre-line and which is measured in the vertical plane above the horizontal, and normal to, the centreline of each runway and with a slope is 14.3% (1:7). A visual representation of the OLS and the SMR can be seen in General Arrangement Part 1 of 3 [AS-018] Drawing Number LLADCO-3C-ACM-AIRMSC-DR-CE-0001. This restricts any practical options to locate the mast on the south side of the runway (which provides the optimal line of sight) within the aerodrome boundary as the fence line is 165m from the runway centreline. Therefore, even if the mast was located on the fence line (which as noted is contiguous to the Green Belt boundary), due to the limiting factor of the slope of the transitional surface the maximum permissible mast height would be only approximately 3.5m. As noted in the <b>Green Belt Assessment [APP-169]</b> the radar works on the principal of line of sight so if close to the ground it would not function, for example, aircraft parked on the proposed stands alongside the pier would not be observed.</p> <p>Therefore, the mast needs to be located at a greater distance from the runway and outside the fence line (and therefore within the Green Belt) to attain a greater height. The selected location was as far south within the Applicant's land ownership to achieve the greatest height whilst not penetrating the Transitional Surface, and also to be greater than 150m from the nearest domestic property, this was then modelled to confirm the line of sight to all aircraft parking positions at Terminal 2.</p>	
PED.1.37	Applicant	<p><b>Work No 4c (02) - Fuel Pipeline and associated works</b></p> <p>The conclusion that this would comprise inappropriate development in the Green Belt is noted [APP-196, Appendix B, B4.1.6] but that very special circumstances apply. In these circumstances, it must be demonstrated</p>	<p>1. The introduction of any structures would both spatially and visually affect the openness of the Green Belt. The fundamental aim of the Green Belt is to prevent urban sprawl and keep land open. The proposed AGI in an essentially secluded and undeveloped area of the Green Belt would not encourage urban sprawl, nor impact the use of the land in any other way. The AGI would be completely screened to the east and south due to the presence of adjacent existing mature and extensive woodland. The proposal would be visible, at distance, from some locations along Winch Hill Road but it is noted that this is an undulating right of way with extensive existing hedgerows. The proposal would also be visible from a Public Right of Way to the north which is approximately 500m from the proposal at its closest point. Given the open nature of the AGI, and that it would only be seen from any public viewpoints at distance and against the immediate backdrop of the existing woodland blocks which would further reduce its visibility and prominence, it is considered that it would have limited harm on the openness of the Green Belt,</p>	Refer to Hertfordshire Host Authorities responses to PED.1.34 and PED.1.35 above.



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>that the potential harm to the Green Belt is clearly outweighed by other considerations.</p> <p>Work No. 4c (02) also comprises earthworks, monitoring systems, fuel pumps, landscaping, security fencing, lighting gates and a vehicle access track from highway to provide access, parking and loading area (approximately 460m<sup>2</sup> hardstanding). Some equipment would be up to 4.2m in height.</p> <p>1. It is noted that because the Above Ground Installation (AGI) and fencing would be open structures and there would be a low degree of activity, the harm would be limited [APP-196, paragraph B4.1.8]. Please provide a more detailed assessment of the effect of the harm from the proposals on the openness of the Green Belt, including all elements of the proposal.</p> <p>2. Signpost the drawing illustrating where the existing fuel pipeline runs and confirm that it is only located within the Green Belt. If the existing pipeline runs outside the Green Belt, provide an explanation of why the</p>	<p>2. The location of the existing fuel pipeline has been redacted from the Application drawings for security reasons. The Applicant confirms that the existing fuel pipeline is entirely within the Green Belt over a distance of at least 3Km to the north and 3Km to the south of the proposed connection point.</p> <p>3. The term "local transport infrastructure" is not defined in the NPPF but its meaning has been considered in detail by various Inspectors including in appeal ref. APP/W0530/W/18/3210008 where it is considered to mean <i>"transport infrastructure which is delivered to meet a public need within a local area, as distinct from infrastructure to serve the future needs of a new single private development"</i>.</p> <p>As set out in the Green Belt Assessment, the primary purpose of the fuel pipeline connection is to achieve a reduction in environmental impacts, relating to greenhouse gas emissions, air quality, noise, and traffic congestion associated with reducing road vehicle movement. These environmental improvements would all be public benefits realised within the local area and therefore, it is considered that the fuel pipeline works meet the description of "local transport infrastructure". Regardless, the works also meet the description of "engineering operation" and therefore, NPPF paragraph 150b would apply, even if 150c did not and the outcome would be the same.</p> <p>The proposed track will follow the existing contours and will not require any significant earthworks. The alignment has been selected to minimise impact on openness: it utilises an existing field access junction from Winch Hill Road which follows an east-west alignment between two existing agricultural buildings which provide screening. It then turns southwards along the edge of a field, adjacent to an intermittent line of trees which provide screening. It then turns eastwards and cuts across the southern portion of same field to the above ground installation, in close proximity to a mature area of woodland. The proposed track will be a hardcore single track with a concrete turning head adjacent to the AGI. Access will be required periodically for maintenance with an estimated twelve visits a year. Accordingly, the access road is considered to be "not inappropriate" in the Green Belt as it would preserve its openness and does not conflict with the purposes of including land within it.</p> <p>It is noted that, even if the access road is considered to be inappropriate development in the Green Belt and were to be assessed as such alongside the AGI works, the conclusions of the Green Belt Assessment would remain unchanged as the aforementioned benefits these works would deliver are a consideration which clearly and demonstrably outweigh the limited harm they would have on the Green Belt, and therefore very special circumstances exist.</p>	



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>AGI could not be located at this location.</p> <p>3. Explain how the access track can be considered 'local transport infrastructure' and how it would preserve openness even if built at grade, noting changes in land topography.</p>		
PED.1.38	Applicant	<p><b>Infiltration basin (part of Work 4v)</b></p> <p>It is noted that the infiltration basin has been considered an 'engineering operation' that would preserve openness and would therefore not be inappropriate development for the purposes of paragraph 150 of the NPPF [APP-196, paragraph, B4.2.3].</p> <p>1. Describe in detail extent of changes to landform required to install the basin, and the likely timescale needed for the landscape to restore following implementation.</p> <p>2. Confirm that there would be no above ground elements to this element of the proposal.</p>	<p>1. The Applicant believes that the Infiltration Basin referred to is Work No. 5(c)02 (not Work No. 4v) as included within the <b>Green Belt Assessment [APP- 196]</b> and will answer the question based on this assumption. This infiltration basin is proposed to be located underground to the southeast of the airport, within the Green Belt. It would comprise a 75,000m<sup>3</sup> tank and would contain uncontaminated surface water discharged from the airside and landside areas. The <b>Drainage Design Statement [APP-137]</b> refers to this infiltration basin as Tank 2 and illustrative details of the tank are shown on drawing <b>LLADCO-3C-CAP-INF-DRN-DR-CE-5510</b> with <b>Appendix B [APP-137]</b>. The <b>Construction Method Statement and Programme Report [AS-082] section 5.3.100-102</b> describes the installation method which would require the topsoil to be stripped and stockpiled for reuse, the ground excavated, the components lifted in and backfilled before replacing the topsoil restoring the landform to its original status. The location of this infiltration basin has been driven by topography and geology requirements. Following construction of the infiltration basin, the landscape would be restored to reinstate the existing shape of the valley. The likely timescales needed for the landscape (calcareous grass) to establish is 3 years as referenced in the Section 5.7.15 of the <b>Landscape and Biodiversity Management Plan [AS-029]</b>.</p> <p>2. The Applicant can confirm that there are no above ground elements proposed but note there will be access chamber covers as a surface feature.</p>	Refer to Hertfordshire Host Authorities responses to PED.1.34 and PED.1.35 above.





**Table 2-9 - The Hertfordshire Host Authorities Responses to the Applicant's Responses to the Examining Authority's First Written Questions on Traffic and Transportation including Surface Access [REP4-069]**

PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
TT.1.2	Applicant	<p><b>Cumulative Impacts</b></p> <p>In Written Representation [REP1-160] Stop Luton Airport Expansion raise a concern about the potential impact of Luton Town Football Club (LTFC) in light of the fact that they have planning permission for a new stadium which could hold up to 23,000 people. The Applicant's response to Stop Luton Airport Expansion's Written Representation stated that the modelling exercise focuses on the typical weekday AM and PM peak periods, which would not include activity associated with the football club. In addition, the planning permission associated with LTFC includes various forms of highway improvements, which the football club would be required to provide in order to mitigate the effects of traffic associated with the stadium relocation. Does the Applicant have any details of these highway improvements and if there would be any cumulative effects with the proposed airport related highway works?</p> <p>Does the Applicant have any information as to how this potential influx of people on a weekend would affect public transport capacity for those passengers and staff</p>	<p>The details of the proposed highway mitigation forming part of the Power Court (Luton FC) planning application can be seen on drawing number 32444/1001/SK014, within Transport Assessment Appendix 4.1G 'Off-site Corridor and Junction Layout' of the Power Court application (ref: 16/01400/OUTEIA). The proposed improvements along St. Mary's Road forming part of the Power Court application would narrow St. Mary's Road to one lane in either direction on the approach to the gyratory junction between Windmill Road, St. Mary's Road and Crawley Green Road.</p> <p>The Power Court application has been included within the London Luton Airport <b>Transport Assessment Appendices - Part 2 of 3 (Appendix F) [APP-201]</b> uncertainty log as 'near certain' and therefore was included within the modelling undertaken for the DCO.</p> <p>As part of the application for development consent, improvements are proposed to the gyratory junction between Windmill Road, St. Mary's Road and Crawley Green Road which would improve the capacity of the gyratory for all vehicles. The improvements comprise widening to the circulatory carriageway, and capacity improvements to Windmill Road and St. Mary's Road arms. These amendments would not compromise the Power Court works.</p> <p>The Applicant does not have information on weekend public transport capacity associated with Luton Town FC match-day activity, beyond what is set out within the Power Court Transport Assessment (Appendix 4.1). This indicates that for each bus service there would be 9 additional passengers in the pre-match hour period, and 12 additional passengers in the post-match hour period. It is not anticipated that these volumes of bus passengers would have a significant impact on airport-related bus travel. The Power Court application also undertook rail passenger occupancy surveys on a weekend period, noting passenger levels and overall occupancy at all stations between Flitwick to Harpenden. The surveys concluded that for southbound services a maximum of 67% occupancy was observed between Luton Airport Parkway and Harpenden. For northbound services, maximum occupancy figures of 17% were surveyed between any of the stations from Harpenden and Flitwick.</p> <p>For the DCO application, the rail capacity analysis was focussed on the weekday peak periods as this is when background demand is highest. The level of hourly rail demand created by the airport is easily accommodated on the services provided from Thameslink and East Midlands Rail and as background demand at weekends is significantly lower than weekdays, there should be no cumulative concerns. The same is true of bus services in the vicinity of the airport at weekends when there may be events at the proposed Luton Town FC stadium.</p>	<p>Noted. The modelling for the Proposed Development relates to a weekday peak period where the traffic flows are generally at their highest. The greatest impact for the football stadium is on a weekend, no modelling for London Luton Airport has been done to be able to assess this impact.</p>





PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		travelling to and from the airport on a weekend. If yes please signpost where this can be found and if no, why not and how might this affect the current conclusions?		
TT.1.6	Applicant	<p><b>Traffic</b></p> <p>A significant number of Relevant Representations raised a concern about the increase in traffic that would be generated by the proposed expansion. Transport for London [RR1543] stated 'The Proposed Development should not be dependent on any increase in car trips or car parking and the Applicant needs to set out a concrete package of measures to ensure this'. The ANPS states 'Heathrow Airport has committed to ensuring its landside airport-related traffic is no greater than today.' While this is not necessarily a requirement for this application, can the Applicant explain what they are doing to achieve a similar outcome?</p>	<p>The Applicant cannot comment on the proposals or commitments made by other airports in their own applications for expansion which were made under different circumstances and conditional to that applicant. There is no obligation on airport (or other) developments to result in no net increase in traffic, only that any impacts where identified are mitigated. The ANPS "sets out Government policy on expanding airport capacity in the South East of England, in particular by developing a Northwest Runway at Heathrow Airport" (Ref 1). Any application for a new Northwest Runway development at Heathrow will be considered under the ANPS and specifically that "Other Government policy on airport capacity has been set out in the Aviation Policy Framework, published in 2013". It is therefore unclear the relevance to the application of the statement from TfL on the applicant to achieve a similar outcome as Heathrow. It should be noted that the ANPS does not place a requirement on Heathrow to secure 'no more traffic' it is a voluntary commitment from Heathrow and would be dependent on the construction of three new rail lines, none of which are being delivered directly by Heathrow (Crossrail, Western Rail, Southern Rail).</p> <p>The Surface Access Strategy and Framework Travel Plan set out the measures the Applicant proposes to increase sustainable travel mode share at the airport for both passengers and staff. These will reduce the number of vehicles travelling to the airport allowing the airport to appropriately develop and refine the strategy over the period of airport development. It is also noted that passengers parking at the airport have a lower impact on vehicle trips than those using "kiss and fly" or "taxi and private hire". If additional parking was not provided this could result in an increase in vehicle trips rather than a reduction as those from areas with low public transport availability, choose alternative vehicle options over public transport.</p>	<p>The Applicant states in their response that "...increase(ing the) sustainable travel mode share ..." "...will reduce the number of vehicles travelling to the airport..."</p> <p>This is not correct, the numbers travelling by vehicles is also increasing as the metric being used in the Framework Travel Plan (FTP) is % mode share.</p> <p>"passengers parking at the airport have a lower impact on vehicle trips than those using "kiss and fly" or "taxi and private hire"" – this should be substantiated.</p> <p>"If additional parking was not provided this could result in an increase in vehicle trips rather than a reduction as those from areas with low public transport availability choose alternative vehicle options over public transport." – this needs substantiating, particularly in regard to the fact that the Applicant has not proposed any specific public transport (coach / bus) service improvements from the east or south.</p>
TT.1.7	Applicant	<p><b>GCG</b></p> <p>The Applicant states in their response to Transport for London [REP1-024] that the mode share targets identified in the Framework Travel Plan would be more ambitious than those set out in the Green Controlled Growth Framework. Please can the Applicant clarify by signposting to the relevant</p>	<p>The <b>Framework Travel Plan [AS-131]</b> does not set out the values of the mode share Targets (as distinct from the mode share Limits contained within the <b>Green Controlled Growth Framework [REP3-017]</b>). Section 4.1 of the Framework Travel Plan instead sets out how future Targets will be set, reviewed and updated as part of the production and ongoing monitoring of each future iteration of the Travel Plan. Specifically, paragraph 4.1.4(a) captures the requirement for the setting of more ambitious Targets ("Targets should strive to achieve higher levels of sustainable transport mode share than the Limits").</p> <p>It is not considered appropriate to set specific mode share Targets for the first Travel Plan at this stage, due the significant variation in recent mode share trends as a result of the COVID-19 pandemic, and potential time-lag until those Targets would come into force, which could render them out-of-date (i.e. Targets set now might not be reflective</p>	<p>In order to be reflective of the traffic assessment that has been carried out for the planning application, the travel plan targets should be set to ensure they achieve at least the level that has been assumed in the Transport Assessment, rather than being set solely around a new baseline.</p>



PINS ID	Addressed To	Question	Applicant's Response to the Written Question	Hertfordshire Host Authorities Response to the Applicant's Response
		<p>section within the Framework Travel Plan or provide detail as to the value of these more ambitious mode share targets.</p>	<p>of mode share levels by the time the examination has been concluded, the application for development consent granted, and the DCO subsequently implemented through the serving of notice under Article 44 of the <b>Draft DCO [REP3-003]</b>.</p> <p>Instead, as described in Section 4.1 of the Framework Travel Plan, the development of each Travel Plan must consider up-to-date baseline information to inform the setting of the Targets, which can be no lower than the GCG Limits (and strive to be more ambitious). The values of those Targets will need to be approved by the relevant planning authority, following consultation with the relevant highway authority on matters related to its function, as part of the process to discharge Requirement 30 of the DCO and approve each Travel Plan.</p>	