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8.75 Applicant's response to Written Questions - Design

Infrastructure Planning (Examination Procedure) Rules 2010

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

8.75 APPLICANT'S RESPONSE TO WRITTEN QUESTIONS - DESIGN

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Contents

Page

1 Response to Examining Authority written questions (Design) 1

References 8

Tables

Table 1.1: Responses to the Examining Authority's Written Questions (Design)

1 RESPONSE TO EXAMINING AUTHORITY WRITTEN QUESTIONS (DESIGN)

Table 1.1: Responses to the Examining Authority's Written Questions (Design)

PINS ID	Question / Response
PED.1.1	<p>Question:</p> <p>Alternatives</p> <p>Chapter 3 of the ES [AS-026] describes the approach to alternatives, where three different options were identified and each were supplemented with sub-options. 1. What consultation was undertaken on the methodology for the alternatives assessment? 2. Whilst noting that Sift Report 1 [APP-209] explains that the strategic objectives were based on the Airports Commission Appraisal Framework (April 2014), were there any other factors that informed the choice of criteria used for the alternatives assessment and was any consultation undertaken to inform the final choice? 3. In respect of Strategic Objective 5, all options are considered to 'maintain and where possible improve' the quality of life for Luton's residents and the wider population. Provide a justification for this statement.</p> <p>Response:</p> <p>1. The approach to the assessment of alternatives through the Sift Process was based on the Airports Commission Appraisal Framework (Ref 1) and related documents including, in particular, the supporting Guidance Document 02 on Sift Criteria (Ref 02). The preparation of this Guidance Document by the Airports Commission included consultation with interested parties and feedback from more than 40 stakeholders on the draft Sift Criteria set out in the earlier Guidance Document 01 (Ref 3). This consultation and stakeholder feedback has therefore influenced the development of the method for assessing alternatives at Luton. In addition, the existing airport operator was consulted in relation to the development of the Sift Criteria relating to operational matters. The Sift Reports were published as part of the non-statutory and statutory consultation periods.</p> <p>2. Whilst the objectives were based on the Airports Commission Appraisal Framework, it is important to make clear that these objectives were adapted to recognise Luton's local context and applied as a broad framework for the sift process for the airport, ensuring that all the relevant topic areas were considered. For this purpose, the strategic objectives were regrouped and re-ordered from the Airports Commission guidance Phase 1 sift criteria headings and Phase 2 appraisal modules, in order to reflect the priorities of the Applicant as an organisation,</p> <p>Alongside the Airports Commission Appraisal Framework and the guidance referenced at para. 2.2.2 of the Sift 1 Report, the approach was informed by the Applicant's emerging vision and drew on inputs from the full range of technical specialists advising on the environmental, social, economic and operational considerations.</p> <p>At Sift 2, further sub-criteria were added to reflect Luton Borough Council strategies such as the Health Inequalities Strategic Plan (2015-2020) and the Skills and Employability Strategy (2016-2020). The consideration of options was also informed by a wide range of Local Plan policies, environmental and heritage designations as well as site and access considerations as described in the Sift report Design and Access Statement Appendix B Part 2 of 4 (Chapter B3) [APP-210].</p> <p>Consultation was also undertaken to inform the final choice. As part of the Sift process, the four reasonable alternatives that performed most strongly against the sift criteria after Sift 2 were then consulted on at Non-Statutory Consultation during the summer of 2018. Following Non-Statutory Consultation and consideration of technical stakeholder and community feedback, a third round of the sift process was undertaken (Sift 3) to identify the preferred option to take forward through the design development and EIA process. The detail of the preferred option was then consulted on at Statutory consultation in 2019.</p> <p>As part of Sift 3, the Sift 1 and Sift 2 appraisals were back checked to confirm that these appraisals remain valid in light of consultation feedback and additional information arising from further technical work. A refinement to sift criteria for Sift 3 taking into account the consultation feedback was also implemented as discussed in Sift 3 Design and Access Statement Appendix B - Part 3 of 4 (Chapter B4) [APP-211] Section 4.5.</p>

PINS ID	Question / Response
	<p>3. The approach taken to Strategic Objective 5 in the Sift process recognises the need to balance the benefits of the project particularly in terms of employment creation against the adverse impacts including noise and air quality.</p> <p>At Sift 2, Strategic Objective 5 was “to maintain and where possible improve the quality of life for Luton’s residents and the wider population” and six further sub-criteria were included as set out in Table 3.1 in the Design and Access Statement Appendix B Part 2 of 4 (Chapter B3) [APP-210]. The assessment of these sub-criteria is set out in Table 5.6 of the Sift 2 report.</p> <p>Based on that assessment the overall appraisal for S6 was Slight Beneficial. The overall summary for the appraisal of this Strategic Objective was “Given the need to balance the beneficial impacts of access to employment (with an estimated 16,000 new jobs created across the three counties) with the externalities highlighted above, and assuming that each option is delivered in line with employment strategies to maximise the benefits, all four option families are therefore appraised as Slight Beneficial”.</p>
PED.1.2	<p>Question:</p> <p>Masterplan</p> <p>It is noted that the Design and Access Statement [AS-049] explains that a masterplan was presented as part of the consultation process for the Proposed Development. Policy LLP6B in Luton Local Plan 2011- 2031 sets criteria to be met for airport expansion proposals, where applicable/ appropriate having regard to the nature and scale of such proposals. Part iii) is where proposals are in accordance with an up-to-date Airport Master Plan published by the operators of London Luton Airport and adopted by Luton Borough Council.</p> <ol style="list-style-type: none"> 1. Are the proposals in accordance with an up-to-date Airport Master Plan published by the operators of London Luton Airport which has been adopted by Luton Borough Council? If yes, please submit details. 2. If no, should there be a requirement added to the draft DCO for a detailed masterplan to be developed post-consent to set out in more detail how the Proposed Development would be delivered, including phasing of works? <p>[The Applicant notes that question 2 of the below Written Question is directed to Luton Borough Council and All Local Authorities, however the Applicant considers that a response from the Applicant will help provide further clarification]</p> <p>Response:</p> <ol style="list-style-type: none"> 1. The requirements for airports to prepare Masterplans arose in the Aviation White Paper of 2003 entitled ‘The future of Air Transport’ (Ref 4) (this document is now withdrawn). The White Paper set out a strategic framework to improve airport capacity in the United Kingdom over the next 30 years. It set out policies which guided decisions on future planning applications and against which public bodies, airport operators and airlines could plan ahead. The document set out the need for airports to develop Masterplans and that they should be updated every seven years. The Airport operator, LLAOL, published a Masterplan in September 2012. It included proposals for expansion of the Airport to 18 million passengers per annum (mppa). (This level of throughput was achieved in 2019). In 2020 the airport operator consulted upon a new Masterplan, which was formally submitted with the 19mppa application in January 2021. This Masterplan was a re-working of the 2012 Masterplan to accommodate the proposed uplift from 18 to 19 mppa. In 2017 the Applicant launched their ‘Vision for Sustainable Growth 2020-2050’ which assessed Luton Airport’s potential growth of up to 36-38 mppa, or in the region of 240,000 aircraft movements per year (which is in line with the assessment in the Aviation White Paper from 2003). The stated aim of the Vision included: <p>“To make the best use of the existing runway at LTN to provide the maximum benefit to the local and sub-regional economy; to deliver good levels of service; and to actively manage environmental impacts at the local and wider levels in line with our commitment to responsible and sustainable development.”</p> <p>With the publication of the Vision, the Applicant set out its plan for the long-term future of the Airport to ensure the regional economy could enjoy the benefits of this expected growth as it is the Applicant’s responsibility to deliver this growth, cognisant that the existing concession for the operator (LLAOL) will expire in 2031.</p>

PINS ID	Question / Response
	<p>The Vision led to the commencement of preparations for the application for development consent and the development of a new Masterplan for the Airport, recognising that LLAOL's Masterplan was limited to 18mppa and the concession end date. The launch of the Applicant's Vision was contemporaneous with the LBC Local Plan 2011-2031 which was published in November 2017.</p> <p>For the above reasons, the Applicant, as the airport owner, has taken on responsibility for the longer-term Masterplan rather than the operator. As such the Applicant's Masterplan supersedes the operator's Masterplan.</p> <p>It is clear that the Local Plan and Policy LLP6 specifically did not envisage an expansion of the scale now proposed and could not have meaningfully or reasonably attempted to anticipate that with a Masterplan option for 32mppa, the development of which also goes well beyond the plan period to 2031. Rather, the iterative Masterplan development process undertaken by the Applicant, including a SIFT process and multiple rounds of statutory consultation that has led to the current version is the most appropriate and robust way to develop the long-term Masterplan. Indeed, LBC officers have advised if the application for development consent were to be approved, the Applicant's Masterplan would be automatically "adopted" by the Council for the purposes of the application of Policy LLP6 in the determination of future planning applications made under the Town and Country Planning Act, and that this would not require any formal adoption process.</p> <p>Accordingly, it is considered that Policy LLP6B(iii) is neither relevant nor important in the determination of the application for development consent and that no weight should be placed on any non-compliance with that specific aspect of the policy in the planning balance.</p> <p>2. The illustrative Masterplan and associated supporting documents submitted with the application provide details significantly beyond the level of information that would be typically provided in an Airport Masterplan. Furthermore, it is the intention to "certify" the scheme layout plans in the DCO to allow the progressive discharge of "parts" of the scheme as identified and described against the Masterplan to which they are drawn from. Therefore, it is not considered that there should be a requirement for a more detailed Masterplan to be developed post-consent.</p>
PED.1.3	<p>Question:</p> <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> <ol style="list-style-type: none"> 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. 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., and include these within Work No. 4e in the draft DCO. 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>Response: 1. and 2. The Battery Storage is part of Work No 4e as shown within Work Plans (Part 4 of 6) Revision 1 [AS-015] and an indicative layout is shown in General Arrangement Drawings Part 2 of 3 Revision 1 [AS-019]. 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> <ol style="list-style-type: none"> a. solar power storage containers;

PINS ID	Question / Response
	<ul style="list-style-type: none"> b. drainage and foul infrastructure; c. firefighting facilities d. lighting; e. vehicle and pedestrian access routes, parking areas; f. security fencing, gates and monitoring systems; and g. ancillary buildings. <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 Environmental Statement Chapter 4 The Proposed Development Revision 1 [AS-074] 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 Energy Strategy [APP-050] 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 [REP3-007]. A 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 [APP-050]).</p>
PED.1.4	<p>Question:</p> <p>Airport Operational Road (Work No. 6c(03))</p> <p>The indicative scheme layout plan for Phase 2 [AS-072] and works plans [AS-017, Page 16] illustrates a road proposed to the south of proposed car park P10 traversing the raised land levels and connecting to a road within the main airport grounds (Work No. 6c(03)). A similar road is also proposed as part of Phase 2a (Work No. 6c(02)). Based on the information contained on the indicative airfield fencing layout in [AS-019], it appears this access road is to provide access between the main airport site and the fuel storage facility (Work No. 4c(01)).</p> <ol style="list-style-type: none"> 1. Explain if this is correct and whether the road is required to supply fuel to Terminal 1 (based on comments in the Design and Access Statement [AS-124, paragraph 5.22.10]). 2. If so, explain why this route has been chosen given the need for tankers to navigate around proposed terminal 2. 3. Explain why provision has not been made for the proposed access road (Work No. 6c(03)) to connect to the airfield access road upgrade (Work No. 2c(04)) further to the east of the Engine Run Up Bay (ERUB) (Work No. 2q), which would reduce the extent of new road infrastructure and potentially the visual impact of an access road constructed onto the raised landform. <p>Response:</p> <ol style="list-style-type: none"> 1. Yes, this is correct. This road is an emergency road to connect the main airport site with the fuel storage facility and was requested as part of discussions with the fire service to enable quick access from the airfield in an emergency. This road is not for general use and should only be used in emergency situations. It will not be used to transport fuel to Terminal 1. 2. Refer to point 1.

PINS ID	Question / Response
	<p>3. Provision has not been made for the proposed access road (Work No. 6c(03)) to connect to the airfield access road upgrade (Work No. 2c(04)) further to the east of the Engine Run Up Bay (ERUB) (Work No. 2q) due to the earthworks slopes in the area. The road needs to be usable in all weather conditions and the extra distance in the road length is required to maintain a suitable road gradient.</p>
PED.1.5	<p>Question:</p> <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 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"> 1. what processes the Council currently has when assessing the design suitability of large-scale development; and 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. <p>[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]</p> <p>Response: Part 2 of 1.5 only -</p> <ol style="list-style-type: none"> 2. The Applicant believes that good design will be ensured at the detailed design stage using the provisions established within the DCO. These include: <ol style="list-style-type: none"> 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. b. The parameters set out in the Design Principles document which is a securing document under the DCO. c. The principles set out in the Strategic Landscape Masterplan Report which are referenced in the Design Principles document. d. The proposals included in the Landscape and Biodiversity Management Plan which are also referenced in the Design Principles document. 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. <p>This is a well-established process that has been followed in many other DCOs and is also appropriate in this case.</p> <p>If there are concerns about particular elements of the detailed design then this could be addressed through refinement to the Design Principles.</p> <p>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>

PINS ID	Question / Response
PED.1.6	<p>Question:</p> <p>Earthworks</p> <ol style="list-style-type: none"> 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? 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. 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? The Design and Access Statement [AS-124, paragraph 5.6.4] explains that an estimated 3.7 million m³ 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 where not available on site”. Can you: <ol style="list-style-type: none"> Clarify in cubic metres how much ‘some imported granular material’ involves. 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 3,119,000m³ and the volume of fill amounts to approximately 3,586,000m³. Please clarify where the additional 467,000m³ 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>Response:</p> <ol style="list-style-type: none"> 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). 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 Environmental Statement Strategic Landscape Masterplan [APP-172] 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. Environmental Statement Appendix 14.4 Detailed Landscape Assessment revision 1 [AS-086] 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, retaining walls may be considered. <p>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.</p> <ol style="list-style-type: none"> <ol style="list-style-type: none"> Imported granular material volume equates to 543,000m³ (shown as materials (imported) in Table 4.2 of Environmental Statement Appendix 4.1 Construction Method Statement and Programme Report Revision 1 [AS-082]) The volumes used with assessments in the ES align with the volumes reported within: <ul style="list-style-type: none"> The Construction Method Statement and Programme Report [AS-082] Tables 4.2, 4.3, 5.2, and 6.2 and associated insets. The Design and Access Statement Volume II Revision 1 [AS-124] Table 5.1 Quantities reported in Chapter 19 of the ES.

PINS ID	Question / Response
	<p>It should be noted that the estimated 3.7 million m³ of material relates to the total of the excavated and imported material required for the development (rather than 3.7 million m³ of excavated material) and this typo is acknowledged.</p> <p>The volumes within Figures 4.11 to 4.15 of the Environmental Statement Chapter 4 The Proposed Development Figure 4.1 - 4.15 Revision 1 [AS-042] 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>
PED.1.7	<p>Question:</p> <p>Airport operations and maintenance building (Work No. 3i).</p> <p>The Indicative plans in General Arrangement Drawing 1 of 3 [AS-018] and parameters in the draft DCO seek a maximum height of 15.2m for Work No. 3i. Noting the description of these works in paragraph 5.11 of the Design and Access Statement [AS-124], please explain what functions justify the proposed building to require this height.</p> <p>Further to Action Point 33 in ISH6 [EV11-009], please also include this element of the Proposed Development when explaining how the designed siting and height has had regard to the requirements of Luton Borough Council Policy LLP6 part F(ii).</p> <p>Response:</p> <p>The airport operations and maintenance building (Work no. 3i) comprises of a range of facilities, including a high bay workshop designed to accommodate the maintenance of ground service equipment (approx. 7.5m in height). The building also includes a 2-storey training, welfare and office area for staff and operations (approx. 7.5m in height). The high bay workshop and 2-storey training, welfare and office space together requires a total height of circa 15m.</p> <p>The Airport operations and maintenance building (work 3i) will be addressed in the response to Action Point (33) from ISH6 held 29 September 2023 [EV11-009] at DL5.</p>

REFERENCES

Ref 1: Airports Commission Appraisal Framework, The Airport Commission, April 2014

Ref 2: Guidance Document 02: Long Term Capacity Options: Sift Criteria, The Airports Commission, May 2013

Ref 3: Guidance Document 01: Submitting Evidence and Proposals to the Airports Commission, The Airports Commission, February 2013

Ref 4: The Future of Air Transport, Department for Transport, December 2003

Ref 5: Advice Note Nine: Rochdale Envelope, The Planning Inspectorate, July 2018

Ref 6: Certification Specifications and Guidance Material for Aerodrome Design (CS-ADR-DSN), Issue 6, March 2022